



Land Management
(Region 3)

REFERENCE: 16/3/1/1/D2/50/0060/12
ENQUIRIES: Shireen Pullen
DATE OF ISSUE: 2014-03-14

The Municipal Manager
George Municipality
Private Bag 19
GEORGE
6530

received
14 March 2014

Attention: Mr. S. Erasmus

Tel: (044) 801 9111
Fax: (044) 873 3377

Dear Sir

CORRECTION NOTICE FOR THE ENVIRONMENTAL AUTHORISATION ("EA") ISSUED ON 4 MARCH 2014 FOR THE THEMBALETHU HOUSING AREAS 8 A&B AND THEMBALETHU BULK SERVICES

1. Please be informed that in terms of Section 47A(1)(b) of the National Environmental Management Act, 1998 (Act no. 107 of 1998, as amended) the description of the approved development on page 7 under Section B of the EA is hereby corrected to read as follows:

"The applicant is herein authorised to undertake the following alternatives related to the listed activities:

Formalisation of Area 8A&B (Erf 4056 & Erf 4055):

This authorization is only for the formalisation of 186 erven within Area 8A (Erf 4056) and 8B (Erf 4055) in Thembaletu appropriate to the Draft Subdivisional Plan for Areas 8A&B Alternative 1 – Preferred done by Delplan and dated January 2013. It entails the following:

- 181 residential erven;
- an erf for the existing Telkom tower;
- an erf for the existing crèche and church;
- an erf for the existing corner shop,

4th Floor, York Park Building,
93 York Street, George, 6529
tel: +27 44 805 8600 fax: +27 44 874 2423

Private Bag X6509, George, 6530

www.westerncape.gov.za/eadp

- two areas of public open space (one as a thoroughfare between two blocks of erven and one large area designated over the dam area).
- Internal road, water, sewerage, electrical and stormwater services/infrastructure.

Upgrade of Bulk Sewer Infrastructure:

Approximate to Plan No: 108429 GE 400 Rev 1, dated 13 November 2013, including:

- New bulk gravity and rising mains totalling a distance of approximately 12km to service for UISP Areas 1, 2, 3, 5, 6A&B, 7 and 8A,B &C;
- Upgrade of Pacaltsdorp No. 1 Pumpstation and Thembalethu No. 6 Pumpstation;
- Decommissioning of Thembalethu Pumpstations No. 3, 4 & 5 and associated rising main sewer lines; and
- Five pipe bridges over the Schaapkop River, as well as several stream / tributary crossings as detailed and defined by the Water Use License Application.

Installation of Bulk Electrical Powerline:

A 66kV overhead powerline, aligned from Kraaibosch area, south-east of Thembalethu Areas 4A and 4C to link to the authorised 66kV powerline running along the northern edge of Pacaltsdorp to the Protea Substation. This powerline is to cross over the Schaapkop River in two places."

2. Condition 5 of the EA must also be corrected to read as follows:

"This authorization is only for the formalisation of 186 erven within Area 8A (Erf 4056) and 8B (Erf 4055), the upgrade of bulk sewer infrastructure and the construction of a powerline. The proposed development will comprise of the following:

5.1 Formalisation of Area 8A&B (Erf 4056 & Erf 4055):

The proposed formalisation will take place in accordance with the Draft Subdivisional Plan for Areas 8A&B and with the preferred lay-out done by Delplan and dated January 2013. It entails the following:

- 5.1.1 181 residential erven;
- 5.1.2 an erf for the existing Telkom tower;
- 5.1.3 an erf for the existing crèche and church;
- 5.1.4 an erf for the existing corner shop,
- 5.1.5 two areas of public open space (one as a thoroughfare between two blocks of erven and one large area designated over the dam area).
- 5.1.6 Internal road, water, sewerage, electrical and stormwater services/infrastructure.

5.2 Upgrade of Bulk Sewer Infrastructure:

Approximate to Plan No: 108429 GE 400 Rev I, dated 13 November 2013, including:

- 5.2.1 New bulk gravity and rising mains totalling a distance of approximately 12km to service for UISP Areas 1, 2, 3, 5, 6A&B, 7 and 8A,B &C;
- 5.2.2 Upgrade of Pacaltsdorp No. 1 Pumpstation and Thembaletu No. 6 Pumpstation;
- 5.2.3 Decommissioning of Thembaletu Pumpstations No. 3, 4 & 5 and associated rising main sewer lines; and
- 5.2.4 Five pipe bridges over the Schaapkop River, as well as several stream / tributary crossings as detailed and defined by the Water Use License Application.

5.3 Installation of Bulk Electrical Powerline:

A 66kV overhead powerline, aligned from Kraaibosch area, south-east of Thembaletu Areas 4A and 4C to link to the authorised 66kV powerline running along the northern edge of Pacaltsdorp to the Protea Substation. This powerline is to cross over the Schaapkop River in two places."

- 3. Please ensure that reference is made to this correction notice in all future correspondence and that the notice is at all times attached to the environmental authorisation when distributed.
- 4. The Department apologise for any inconvenience caused.

Yours Faithfully



MR. KOBUS MUNRO

DIRECTOR: LAND MANAGEMENT (REGION 3)

DATE OF NOTICE: 14 March 2014

Copied to: Ms Siân Holder (Cape EAPrac)

Fax: (044) 874 0432



DIRECTORATE: LAND MANAGEMENT
REGION 3

EIA REFERENCE: 16/3/1/1/D2/50/0060/12
NEAS EIA REFERENCE: WCP/EIA/0001610/2014
EXEMPTION REFERENCE: 16/3/1/4/D2/50/0029/13
NEAS EXEMPTION REFERENCE: WCP/EIA/0001114/2012
ENQUIRIES: Shireen Pullen
DATE OF ISSUE: 2014-03-04



The Municipal Manager
George Municipality
Private Bag 19
GEORGE
6530

Attention: Mr. S. Erasmus

Tel: (044) 801 9111
Fax: (044) 873 3377

Dear Sir

APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND EXEMPTION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2010: THE PROPOSED THEMBALETHU HOUSING AREAS 8 A&B AND THEMBALETHU BULK SERVICES

With reference to your application for the abovementioned, find below the outcome with respect to this application.

ENVIRONMENTAL AUTHORISATION AND EXEMPTION

DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2010, ("NEMA EIA Regulations") the competent authority herewith **grants environmental authorisation and exemption** to the applicant to undertake the list of activities specified in section B below with respect to the preferred alternative described in the Final Basic Assessment Report ("final BAR") dated 25 November 2013.

The applicant is herewith exempted from the following provisions of the NEMA EIA Regulations:

Regulation 10(2)(d) of Government Notice No. R.543, which reads as follows:

10(2) *The applicant must, in writing, within 12 days of the date of the decision of the application*

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tel: +27 44 805 8600 fax: +27 44 874 2423 www.westerncape.gov.za/eadp

(d) publish a notice –

(i) informing interested and affected parties of the decision;

(ii) informing interested and affected parties where the decision can be accessed; and

(iii) drawing the attention of interested and affected parties to the fact that an appeal may be lodged against the decision in terms of Chapter 7 of these Regulations, if such appeal is available under the circumstances of the decision,

in the newspapers contemplated in regulation 54(2)(c) and (d) and which newspaper was used for the placing of advertisements as part of the public participation process.

The granting of this environmental authorisation and exemption (hereinafter referred to as the "environmental authorization") is subject to compliance with the conditions set out in section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

The Municipal Manager
George Municipality
% Mr. S. Erasmus
Private Bag 19
GEORGE
6530

Tel: (044) 801 9111

Fax: (044) 873 3377

The abovementioned Municipality is the holder of this environmental authorisation and is hereinafter referred to as "the applicant".

B. LIST OF ACTIVITIES AUTHORISED

Government Notice No. R544 of 18 June 2010 –

Activity Number: 9

Activity Description:

The construction of facilities or infrastructure exceeding 1000 meters in length for the bulk transportation of water, sewage or storm water -

(i) with an internal diameter of 0,36 meters or more; or

(ii) with a peak throughput of 120 liters per second or more,

excluding where:

a. such facilities or infrastructure are for bulk transportation of water, sewage or storm water or storm water drainage inside a road reserve; or

b. where such construction will occur within urban areas but further than 32 metres from a watercourse, measured from the edge of the watercourse.

Activity Number: 11

Activity Description:

The construction of:

- (i) canals;
- (ii) channels;
- (iii) bridges;
- (iv) dams;
- (v) weirs;
- (vi) bulk storm water outlet structures;
- (vii) marinas;
- (viii) jetties exceeding 50 square meters in size;
- (ix) slipways exceeding 50 square meters in size;
- (x) buildings exceeding 50 square meters in size; or
- (xi) infrastructure or structures covering 50 square meters or more

Where such construction occurs within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.

Activity Number: 18

Activity Description:

The infilling or depositing of any material of more than 5 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock from

- (i) a watercourse;
- (ii) the sea;
- (iii) the seashore;
- (iv) the littoral active zone, an estuary or a distance of 100 meters inland of the high-water mark of the sea or an estuary, whichever distance is the greater- but excluding where such infilling, depositing, dredging, excavation, removal or moving:
 - (i) is for maintenance purposes undertaken in accordance with a management plan agreed to by the relevant environmental authority; or
 - (ii) occurs behind the development setback line.

Activity Number: 23

Activity Description:

The transformation of undeveloped, vacant or derelict land to –

- (i) residential, retail, commercial, recreational, industrial or institutional use, inside an urban area, and where the total area to be transformed is 5 hectares or more, but less than 20 hectares, or
- (ii) residential, retail, commercial, recreational, industrial or institutional use, outside an urban area and where the total area to be transformed is bigger than 1 hectare but less than 20 hectares; -

except where such transformation takes place for

- (i) linear activities;
- (ii) for purposes of agriculture or afforestation, in which case Activity 16 of Notice No. R. 545 applies.

Activity Number: 37

Activity Description:

The expansion of facilities or infrastructure for the bulk transportation of water, sewage or storm water where:

- (a) the facility or infrastructure is expanded by more than 1000 meters in length; or
- (b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more—

excluding where such expansion:

- (i) relates to transportation of water, sewage or storm water within a road reserve; or
- (ii) where such expansion will occur within urban areas but further than 32 meters from a watercourse, measured from the edge of the watercourse.

Activity Number: 40

Activity Description:

"The expansion of

- (i) jetties by more than 50 square metres;
- (ii) slipways by more than 50 square metres; or
- (iii) buildings by more than 50 square metres
- (iv) Infrastructure by more than 50 square metres

within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, but excluding where such expansion will occur behind the development setback line";

Activity Number: 56

Activity Description:

"Phased activities for all activities listed in this Schedule, which commenced on or after the effective date of this Schedule, where any one phase of the activity may be below a threshold but where a combination of the phases, including expansions or extensions, will exceed a specified threshold; -

excluding the following activities listed in this Schedule:

2;

11(i)-(vii);

16(i)-(iv);

17;

19;

20;

22(i) & 22(iii);

25;

26;

27(iii) & (iv);

28;

39;

45(i)-(iv) & (vii)-(xv);

50;

51;

53; and

54".

Government Notice No. R546 of 18 June 2010—

Activity Number: 4

Activity Description:

The construction of a road wider than 4 metres with a reserve less than 13, 5 meters.

(d) In Western Cape:

- i. In an estuary;
- ii. All areas outside urban areas;
- iii. In urban areas:
 - (aa) Areas zoned for use as public open space within urban areas; and
 - (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose.

Activity Number: 13

Activity Description:

The clearance of an area of 1 hectare or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation, except where such removal of vegetation is required for:

- (1) the undertaking of a process or activity included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), in which case the activity is regarded to be excluded from this list.
- (2) the undertaking of a linear activity falling below the thresholds mentioned in Listing Notice 1 in terms of GN No 544 of 2010.

d) In the Western Cape

- i. In an estuary;
- ii. Outside urban areas, the following:
 - (aa) A protected area identified in terms of NEMPAA, excluding conservancies;
 - (bb) National Protected Area Expansion Strategy Focus areas;
 - (cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;
 - (dd) Sites or areas identified in terms of an International Convention;
 - (ee) Core areas in biosphere reserves;
 - (ff) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;
 - (gg) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined.
- iii. In urban areas, the following:
 - (aa) Areas zoned for use as public open space;
 - (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose;
 - (cc) Areas seawards of the development setback line;

(dd) Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined.

Activity 16

The construction of:

- (i) jetties exceeding 10 square meters in size;
- (ii) slipways exceeding 10 square meters in size;
- (iii) buildings with a footprint exceeding 10 square meters in size; or
- (iv) infrastructure covering 10 square meters or more

where such construction occurs within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line

(d) In Western Cape:

- i. All watercourses;
- ii. In an estuary;
- iii. Outside urban areas, in:
 - (aa) A protected area identified in terms of NEMPAA, excluding conservancies;
 - (bb) National Protected Area Expansion Strategy Focus areas;
 - (cc) World Heritage Sites;
 - (dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;
 - (ee) Sites or areas identified in terms of an International Convention;
 - (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;
 - (gg) Core areas in biosphere reserves;
 - (hh) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;
 - (ii) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined.
- iv. Inside urban areas:
 - (aa) Areas zoned for use as public open space;
 - (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose;
 - (cc) Areas seawards of the development setback line or within 100 metres of the high water mark where no setback line.

Activity Number: 24

Activity Description:

The expansion of

- (a) jetties where the jetty will be expanded by 10 square meters in size or more;
- (b) slipways where the slipway will be expanded by 10 square meters or more;

- (c) buildings where the buildings will be expanded by 10 square meters or more in size; or
- (d) infrastructure where the infrastructure will be expanded by 10 square meters or more

where such construction occurs within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.

- i. In an estuary;
- ii. All watercourses;
- iii. Outside urban areas, in:
 - (aa) A protected area identified in terms of NEMPAA, excluding conservancies;
 - (bb) National Protected Area Expansion Strategy Focus areas;
 - (cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;
 - (dd) Sites or areas identified in terms of an International Convention;
 - (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;
 - (ff) Core areas in biosphere reserves;
 - (gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;
 - (hh) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined.
- iv. Inside urban areas:
 - (aa) Areas zoned for use as public open space;
 - (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose.

Activity Number: 26

Activity Description:

Phased activities for all activities listed in this Schedule and as it applies to a specific geographical area, which commenced on or after the effective date of this Schedule, where any phase of the activity may be below a threshold but where a combination of the phases, including expansions or extensions, will exceed a specified threshold.

All the areas as identified for the specific activities listed in this schedule.

The abovementioned list is hereinafter referred to as "the listed activities".

The applicant is herein authorised to undertake the following alternative related to the listed activities:

This authorization is only for the formalization of 186 erven within Area 8A(erf 4056) and 8B (erf 4055) in Thembaletu approximate to the Draft subdivisional Plan for Areas 8A&B Alternative 1:-Preferred done by Delplan and dated January 2013. It entails the following:

- 181 residential erven;
- an erf for the existing Telkom tower;
- an erf for the existing crèche and church;
- an erf for the existing corner shop,
- two areas of public open space (one as a thoroughfare between two blocks of erven and one large area designated over the dam area).
- The proposal also entails the upgrade of the bulk services approximate to Plan No: 108429 GE 400 Rev 1 dated 13 November 2013 including:
 - New bulk gravity and rising mains totaling a distance of approximately 8km, mainly to provide service for UISP Areas 1, 5, 6A, 6B and 2.
 - Upgrade to the Pacaltsdorp No.1 Sewer Pump Station as well as the Thembaletu No. 6 Sewer Pump Station.
 - decommissioning of Pumpstations 3 and 5 and installation of associated rising main sewer lines.
 - Several pipe bridges over the Schaapkop River or tributaries

C. PROPERTY DESCRIPTION AND LOCATION

The listed activities will take place on Erf 4056 (8A) and Erf 4055 (8B) Tyolora, which is located within the Thembaletu suburb, 3km south of the N2 national road.

The proposed bulk sewerage pipelines and associated infrastructure will be aligned predominantly on the edge of the Thembaletu residential settlement, along the edge and within the Schaapkop River valley to the south, which separates Thembaletu from Pacaltsdorp.

Co-ordinates:

POINTS ON SITE	LATITUDE	LONGITUDE
Revised starting point of the activity	34° 00' 51.76"S	22° 29' 39.95"E
Middle point of the activity	34° 00' 40.48"S	22° 28' 26.16"E
End-point of the activity	33° 59' 48.39"S	22° 27' 56.11"E
Area 8 A & B	34° 00' 46.81"S	22° 29' 30.41"E
River Crossing 1	34° 00' 46.57"S	22° 28' 58.87"E
River Crossing 2	34° 01' 10.97"S	22° 27' 46.10"E

hereinafter referred to as "the site".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Cape EAPrac (Pty) Ltd.
 c/o Ms. S. Holder
 PO Box 2070
GEORGE
 6530

Tel: (044) 874 0365
 Fax: (044) 874 0432

E. CONDITIONS OF AUTHORISATION

1. This environmental authorisation is valid for a period of **five years** from the date of issue. The holder must commence with all the listed activities within

the said period or this environmental authorisation lapses and a new application for environmental authorisation must be submitted to the competent authority, unless the holder has lodged a valid application for the amendment of the validity period of this environmental authorisation, before the expiry of this environmental authorisation. In such instances, the validity period will be automatically extended ("the period of administrative extension") from the day before this environmental authorisation would otherwise have lapsed, until the amendment application for the extension of the validity period is decided. The listed activities, including site preparation, may not commence during the period of administrative extension.

2. The listed activities, including site preparation, may not commence within 20 (twenty) calendar days of the date of issue of this environmental authorisation. In the event that an appeal notice and subsequent appeal is lodged with the competent authority, the effect of this environmental authorisation may be suspended until such time as the appeal is decided.
3. The applicant must in writing, within 12 (twelve) calendar days of the date of this decision and in accordance with regulation 10(2)–
 - 3.1 notify all registered interested and affected parties of –
 - 3.1.1 the outcome of the application;
 - 3.1.2 the reasons for the decision as included in Annexure 1;
 - 3.1.3 the date of the decision; and
 - 3.1.4 the date of issue of the decision;
 - 3.2 draw the attention of all registered interested and affected parties to the fact that an appeal may be lodged against the decision in terms of Chapter 7 of the Environmental Impact Assessment Amendment Regulations, 2010 detailed in section F below; and
 - 3.3 draw the attention of all registered interested and affected parties to the manner in which they may access the decision.
4. Seven calendar days notice, in writing, must be given to the competent authority before commencement of construction activities.
 - 4.1. The notice must make clear reference to the site details and EIA Reference number given above.
 - 4.2. The notice must also include proof of compliance with the following conditions described herein:

Conditions: 2, 3, 9, 12 and 18
5. This authorization is only for the formalization of 186 erven within Area 8A (erf 4056) and 8B(erf 4055) in Thembaletu approximate to the Draft subdivisional Plan for Areas 8A&B Alternative 1:-Preferred done by Delplan and dated January 2013. It entails the following:
 - 5.1 181 residential erven;

- 5.2 an erf for the existing Telkom tower;
- 5.3 an erf for the existing crèche and church;
- 5.4 an erf for the existing corner shop,
- 5.5 two areas of public open space (one as a thoroughfare between two blocks of erven and one large area designated over the dam area).
- 5.6 The preferred alternative also includes the upgrade of the bulk services approximate to Plan No: 108429 GE 400 Rev 1, 13/11/13 (option 3) including:
 - 5.6.1 New bulk gravity and rising mains totalling a distance of approximately 8km, mainly to provide service for UISP Areas 1, 5, 6A, 6B and 2.
 - 5.6.2 Upgrade to the Pacaltsdorp No.1 Sewer Pump Station as well as the Thembalethu No. 6 Sewer Pump Station.
 - 5.6.3 Decommissioning of Pumpstations 3 and 5 and installation of associated rising main sewer lines.
 - 5.6.4 Several pipe bridges over the Schaapkop River or tributaries.
6. The holder is responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.
7. Any changes to, or deviations from the scope of the description set out in section B above must be accepted or approved, in writing, by the competent authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the competent authority may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.
8. The applicant must notify the competent authority in writing, within 24 hours thereof if any condition herein stipulated is not being complied with.
9. The draft Environmental Management Programme ("EMP") submitted as part of the application for environmental authorisation must:
 - 9.1. be amended to:
 - 9.1.1. incorporate the conditions of authorisation given in this Environmental Authorisation;
 - 9.1.2. include the removal of alien vegetation to co-incide with the end of the construction phase;
 - 9.1.3. The development of a long-term alien management plan after completion of the project which must include follow up removal of invasive alien vegetation and removal of any rubble at least twice a year for a period of not less than 10 years after construction;
 - 9.1.4. incorporate measures pertaining to the identification and allocation of environmental management roles, responsibilities and accountability, including timeframes for the implementation of the EMP;

- 9.1.5. make provision for the compilation of method statements that are to the satisfaction of the appointed Environmental Control Officer ("ECO");
- 9.1.6. be submitted to the Directorate: Land Management (Region 3) for consideration at least three weeks prior to the commencement of construction activities;
- 9.2. be approved by the Department before the commencement of any construction activities and
- 9.3. meet the requirements outlined in Section 24N (2) & (3) of the National Environmental Management Act, 1998 (Act no 107 of 1998, as amended) ("NEMA") and regulation 34 of the Environmental Impact Assessment Regulations 2010;

An application for amendment to the EMP must be submitted to the competent authority if any further amendments are to be made to the EMP, other than those mentioned above and approved by the competent authority, and this may only be implemented once the amended EMP has been authorised by the competent authority.

10. The applicant must compile and submit an Environmental Audit Report six months after commencement of construction and thereafter annually with the last report within 12 months after completion of construction activities. Such audit report must indicate the date on which construction activities were commenced with and when it was completed and detail compliance with the mitigation/rehabilitation measures and recommendations referred to in the EMP and conditions of this Environmental Authorisation.
11. Disturbance through the sensitive forest areas must be limited and this area must be demarcated with shade cloth "walling" above and below the work area.
12. A clearly demarcated working footprint must be established, prior to construction activities commencing and all areas outside the demarcated area must be treated as no-go areas.
13. A copy of the environmental authorisation and the EMP must be kept at the site where the listed activities will be undertaken. Access to the site referred to in section C above must be granted and, the environmental authorisation and EMP must be produced to any authorised official representing the competent authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein. The environmental authorisation and EMP must also be made available for inspection by any employee or agent of the applicant who works or undertakes work at the site.
14. The applicant must submit an application for amendment of the environmental authorisation to the competent authority where any detail with respect to the environmental authorisation must be amended, added, substituted, corrected, removed or updated. Further, the rights granted by this environmental authorisation are personal rights (i.e. not attached to a

property, but granted to a natural or juristic person). As such, only the holder may undertake the activities authorised by the competent authority. Permission to transfer the rights and obligations contained herein must be applied for in the following manner:

14.1 The applicant must submit an originally signed and dated application for amendment of the environmental authorisation to the competent authority stating that he/she wishes the rights and obligations contained herein to be transferred, and including (a) confirmation that the environmental authorisation is still in force (i.e. that the validity period has not yet expired or the activity/ies was/were lawfully commenced with); (b) the contact details of the person who will be the new holder; (c) the reasons for the transfer; (d) an originally signed letter from the proposed new holder acknowledging the rights and obligations contained in the environmental authorisation and indicating that he/she has the ability to implement the mitigation and management measures and to comply with the stipulated conditions.

14.2 The competent authority will issue an amendment to the new holder either by way of a new environmental authorisation or an addendum to the existing environmental authorisation if the transfer is found to be appropriate.

15. Non-compliance with a condition of this environmental authorisation or EMP may result in suspension of this environmental authorisation and may render the holder liable for criminal prosecution.
16. Notwithstanding this environmental authorisation, the holder must comply with any other statutory requirements that may be applicable to the undertaking of the listed activities.
17. The holder must appoint a suitably experienced environmental control officer ("ECO") for the construction phase of implementation before commencement of any land clearing or construction activities to ensure compliance with the EMP and the conditions contained herein.
18. An integrated waste management approach, which is based on waste minimisation and incorporates reduction, recycling, re-use and disposal, where appropriate, must be employed. Any solid waste must be disposed of at a landfill licensed in terms of the applicable legislation.
19. No surface or ground water may be polluted due to any actions on the site. The applicable requirements with respect to relevant legislation pertaining to water must be met.
20. The applicable requirements with respect to relevant legislation pertaining to cutting, damaging, disturbing or destroying protected trees or trees from a natural forest must be adhered to.
21. The applicable requirements with respect to relevant legislation pertaining to occupational health and safety must be adhered to.

22. Should any heritage remains be exposed during excavations or any actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape (in accordance with the applicable legislation). Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape. Heritage remains include: archaeological remains (including fossil bones and fossil shells); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features; rock art and rock engravings; shipwrecks; and graves or unmarked human burials.
23. A qualified archaeologist must be contracted where necessary (at the expense of the applicant and in consultation with the relevant authority) to remove any human remains in accordance with the requirements of the relevant authority.

F. APPEALS

Appeals must comply with the provisions contained in Chapter 7 of the NEMA EIA Regulations.

1. An appellant must –

- 1.1. submit a notice of intention to appeal to the Minister, within 20 (twenty) calendar days of the date of the decision;
- 1.2. submit the appeal within 30 (thirty) calendar days after the lapsing of the 20 (twenty) calendar days contemplated in regulation 60(1), for the submission of the notice of intention to appeal; and
- 1.3. within 10 (ten) calendar days of having lodged the notice of intention to appeal, provide each person and organ of state registered as an interested and affected party in respect of the application, or the applicant, with –
 - 1.3.1. a copy of the notice of intention to appeal form; and
 - 1.3.2. a notice indicating where and for what period the appeal submission will be made available for inspection by such person, organ of state, or applicant, on the day of lodging it with the Minister, and that a responding statement may be made on the appeal within 30 (thirty) calendar days from the date the appeal submission was lodged with the Minister.
2. A person, organ of state or applicant who submits a responding or answering statement in terms of regulation 63 must within 10 (ten) calendar days of having submitted the responding or answering statement, serve a copy of the statement on the other party.
3. All notice of intention to appeal and appeal forms must be submitted by means of one of the following methods:

By post: Western Cape Ministry of Local Government, Environmental Affairs and Development Planning
Private Bag X9186
CAPE TOWN

8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr J. de Villiers Tel: (021) 483 3721
Room 809
8th Floor Utilitas Building,
1 Dorp Street, Cape Town, 8001

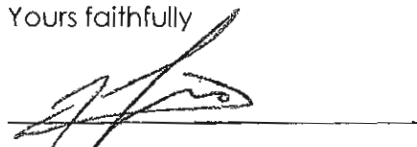
- 4. A prescribed notice of intention to appeal form and appeal form as well as assistance regarding the appeal processes is obtainable from the office of the Minister at: Tel. (021) 483 3721, E-mail Jaap.DeVilliers@westerncape.gov.za or URL <http://www.westerncape.gov.za/eadp>

G. DISCLAIMER

The Western Cape Government, the Local Authority, committees or any other public authority or organisation appointed in terms of the conditions of this environmental authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Your interest in the future of our environment is appreciated.

Yours faithfully



KOBUS MUNRO
DIRECTOR: LAND MANAGEMENT (REGION 3)

DATE OF DECISION:

4.3.2014

Copied to:

Ms Siôn Holder (Cape EAPrac)

Fax: (044) 874 0432

FOR OFFICIAL USE ONLY:	
EIA REFERENCE:	16/3/1/1/D2/50/0060/12
NEAS EIA REFERENCE:	WCP/EIA/0001610/2014
EXEMPTION REFERENCE:	16/3/1/4/D2/50/0029/13
NEAS EXEMPTION REFERENCE:	WCP/EIA/0001114/2012

ANNEXURE 1: REASONS FOR THE DECISION

In reaching its decision, the competent authority, *inter alia*, considered the following:

- a) The information contained in the application form dated 13 November 2013; the Basic Assessment Report (BAR) received by the competent authority on 27 November 2013 and the EMP submitted together with the BAR on 27 November 2013;
- b) Relevant information contained in the Departmental information base, including, the Guidelines on Public Participation, Alternatives and Exemptions (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- d) The comments received from interested and affected parties and the responses provided thereon, as included in the BAR dated 25 November 2013.
- e) The sense of balance of the negative and positive impacts and proposed mitigation measures; and

A site visit was conducted on 11 February 2014 attended by Ms. S. Holder from Cape EA Prac, Mr. Danie Swanepoel from this Department and Mr. A. Molendorf from Aurecon.

All information presented to the competent authority was taken into account in the consideration of the application for environmental authorisation. A summary of the issues which, according to the competent authority, were the most significant reasons for the decision is set out below.

1. Exemption

Exemption from regulation 10(2)(d) was granted due to the small number of comments received during the public participation process. All registered interested and affected parties ("I&AP's) were notified of the exemption application, as required. No significant concerns were raised by I&APs in this regard.

As such, the exemption application was regarded as appropriate by the competent authority in this instance based on the adequate public participation process and the limited number of comments submitted with respect to the application.

2. Public Participation

The public participation process included:

- Identification of and engagement with interested and affected parties;
- Site Notices in English, Afrikaans and Xhosa were placed at the gate on Area 8 and along the main sewer alignment routes (visible to the public) on 10 and 11 February 2013 and 13 and 26 March 2013;

- Initial Notification Letters were sent on 10 and 11 February 2013 (in English and Xhosa), explaining the project, environmental process and the opportunity to register as Interested & Affected Parties (I&APs) were hand delivered by the EAP and Community Liaison Officer (CLO) to occupiers of Area 8 and directly adjacent neighbours of Area 8;
- Notifications sent to Ward Councillors, Stakeholders, State Departments & Organs of State detailing proposal and process on 18 February 2013;
- Hard copies of the Draft Basic Assessment Report (DBAR) were placed at the George Municipal offices (Planning Department, Progress Street) and Thusong Service Centre (located in Jeriko Street, Thembaletu), for a review & comment period of 40-days. The DBAR has also been made available on the Cape EAPrac website: www.cape-eaprac.co.za/active on 2 October 2013;
- Hard copies of this Final Basic Assessment Report (FBAR) have been placed at the George Municipal offices (Planning Department, Progress Street) and Thusong Service Centre (located in Jeriko Street, Thembaletu), for review & comment period of 21-days. The DBAR has also been made available on the Cape EAPrac website: www.cape-eaprac.co.za/active on 25 November 2013
- A newspaper advertisement was placed in the George Herald dated 31 January 2013.

No objections were received from I&APs and all the concerns raised by interested and affected parties were responded to and adequately addressed during the public participation process. Specific management and mitigation measures have been considered in this environmental authorization and in the EMP to adequately address the concerns raised. CapeNature submitted their support for the development of Areas 8 A&B, but does not support the encroachment of development into the remaining Afro Temperate forest patched and fynbos. The Department of Health did not have any objection to the proposed development. The Department of Agriculture, Forestry and Fisheries supports the development proposal subject to mitigation measures that includes amongst others that trenches in the forest must be hand-dug to disturb the forest as little as possible. This is unfortunately not possible, and mitigation measures such as strict demarcation with shade cloth "walling" above and below the area is included in the EMP.

This Department concurs with the environmental assessment practitioner's responses to the issues raised during the public participation process and has included appropriate conditions in this environmental authorization and in the EMP.

3. Alternatives

3.1 Development Lay-out Alternatives

Two possible layouts have been designed for the combined Area 8 (Erf 4056 & 4055) property, being:

3.1.1 Lay-out Alternative 1 (Preferred Lay-out) to be read together with the preferred sewer alignment alternative

This lay-out is proposed within 32 meters of the small dam on Area 8b. This layout proposes the formalisation of 186 erven, which include the following:

- 181 residential erven;

- an erf for the existing Telkom tower;
- an erf for the existing crèche and church;
- an erf for the existing corner shop,
- two areas of public open space (one as a thoroughfare between two blocks of erven and one large area designated over the dam area).
- Internal road, water, sewerage, electrical and stormwater services/infrastructure.

The findings of the ecological assessment of the dam revealed that it is not sensitive to disturbance and that the area would be acceptable for infill. Furthermore, the community wants the dam removed for safety reasons and therefore the proposal to reshape the dam area to allow for the removal of deep standing water and creation of an effective stormwater system within this area of open space. According to the BAR the formalisation of a stormwater channel will allow for the continued management of run-off from the property towards the tributary and river valley to the east.

3.1.2 Lay-out Alternative 2

According to the BAR this layout was design to restrict encroachment of erven into the 32m buffer of the small dam, with the partial overlap of six erven and a portion of an access road into this buffer. This layout proposes the formalisation of 173 residential erven; with the Telkom, crèche / church, corner shop erven and two public open space areas as described in the above layout. The proposal to retain the small dam as it is currently is included in this development proposal. Comment in this regard has been sought from the Department of Water Affairs. Considering the reduced number of residential erven, as well as the low ecological sensitivity and safety risk associated with the small dam, this alternative is not considered to be a desirable option.

3.2 Bulk Sewer Infrastructure Alternatives

Various other sewer infrastructure proposals/alternatives were investigated to solve some of the sewer service difficulties and demands. The proposed bulk sewer infrastructure, involves approximately 12km of sewer pipeline, the upgrade and decommissioning of sewer pumpstations, five (5) river crossings and several stream / tributary crossings, within the Schaapkop River Valley.

Activity Need and Desirability

It is submitted in the BAR that the existing Thembaletu bulk sewer system is overloaded, with blockages and leaks resulting in pollution and sewage spillage into the Schaapkop River, which is a common occurrence. In addition, the BAR further states that the lack of proper sewerage reticulation in the new and proposed formal extensions of Thembaletu UISP (over 4939 erven) and proposed Syferfontein Housing Project (7700 erven) would aggravate the current situation and generate a range of additional, environmental and health problems. The proposed development has been designed to rectify several of the constraints / problems experienced by the current system, while providing the necessary capacity to handle the new and proposed housing developments proposed for the area.

According to the BAR there is currently a need for the George Municipality to intervene as a matter of urgency in order to relieve the lack of services in the informal settlements and to prevent potential community unrest. The development proposal is thus not to create a new township, but rather to upgrade / formalise the in situ / existing informal settlement

area, as well as to provide the necessary internal bulk services required for the on-going formalisation of erven throughout Thembaletu.

The currently sewerage reticulation system for Thembaletu includes the following:
From pumpstation 4 sewage is piped through the township to pumpstation 3 and then to pumpstation 5, which pumps the sewage over River crossing 4 to the Outeniqua Waste Water Treatment Works.

The current proposal is to replace this system with new gravity lines on the edge of Thembaletu, that will feed into the Pacaltsdorp pumpstation 1 (which must be upgraded) and pumpstation 6 (which will also be upgraded). From pumpstation 6 the existing rising main will be augmented by a new rising main over the existing bridge crossing 1 over the Schaapkop River to the existing 800/700mm diameter bulk sewer gravity line that feeds pumpstation 1. This will result in the decommissioning of three existing pumpstations (3, 4 & 5) and the upgrading of two pumpstations (1 & 6)

Several infrastructure alternatives were considered, but most have been rejected by the Municipality due to higher cost (higher energy requirements and more pumpstations to maintain. These include the following:

3.2.1 Upgrading of Thembaletu Pumpstation No.3 and existing 200mm diameter rising main

This alternative was considered, since pumpstation 3 and associated 200mm-diameter rising main are currently at or over their design capacity, as well as its potential to open up an additional 700 erven (in Areas 3, 7 & 8) for development in the next housing phases. This alternative was decided against as it was not as financially effective as the preferred alternative.

3.2.2 Upgrading of pumpstation 3 and assisting the existing Rising Main from Pumpstation No.3 to the WWTW Alternatives

3.2.2.1 Alternative 1

A 3.8km-long, 250mm-diameter PVC-u rising main aligned to intersect the least existing services (water, sewer, stormwater, electrical and Telkom cables, roads and sidewalks) and high points (dark blue dotted line running approx. parallel to yellow line on drawing 108429GE 40D Rev.F). Due to the relatively high pumping head (powerful pumps) required for this line and the need to for an additional River Crossing No.4 (see below), this option was considered costly.

3.2.2.2 Alternative 2

Linked to the upgrade of Thembaletu Pumpstation No.5, this would require a 315mm-diameter rising main from Pumpstation No.3 to a point connecting to the proposed 350-400mm-diameter bulk gravity sewer proposed to drain Areas 5, 6A & 6B (orange dotted line below Old 'All-Brick' Works on drawing 108429GE 400 Rev.F). Although this option would be economical to operate, it would require a larger diameter bulk gravity line around Areas 5, 6A&B (to accommodate the increased flow), and the upgrade of Pumpstation 3.

Preferred option to be read together with the preferred sewer alignment alternative (Drawing 108429GE 400 Rev. I)

The preferred alternative includes two alternatives with two gravity lines, draining east and west of the 'All-Brick' property: **Orange line:** 200mm diameter line draining to the west of the 'All-Brick' property to link to the red gravity line, south of Area 6B; and **Blue line:** 250mm diameter line draining to the east of 'All-Brick' property along the same alignment of an existing sewer line to link to Option 1 (at the decommissioned Pumpstation No.3).

3.2.3 Upgrade of Pumpstation No.5

This alternative requires the demolition of the existing pumpstation building and that it be re-built at a position lower down the slope to allow the upgraded northern bulk sewer (draining Area 1) to gravitate to the new pumpstation. The upgrade would increase the flow-capacity from 15l/s to 180l/s, and entail a new inlet works, a new pumpstation building, new pumps and mechanical screens, a back-up generator and associated electrical reticulation upgrades, as well as some gabion works, a new access road, a telemetry system and a new fence.

3.2.4 River Crossing No.4 (In accordance with Drawing: 108429 REV 402 Rev C done by Aurecon)

This alternative entails the construction of a 50m concrete pipe-bridge across the Schaapkop River to accommodate a 450mm-diameter rising main servicing flows from Pumpstations 3 & 5 to the WWTW.

The option of re-aligning option 3 bulk gravity line from Area 8 to pumpstation 6 to avoid the remnant indigenous forest as recommended by the ecological specialist has been included in the revised activity proposal.

3.6 "No-Go" Alternative

The no-go alternative would result in Area 8A&B not being formalised and the bulk sewer infrastructure required for the greater Thembaletu UISP Housing Project not being built, which would give rise to a number of negative socio-economic, environmental and health impacts. The existing system is overloaded and blockages with sewage spills into the Schaapkop River is currently a common occurrence. The additional pressure on this existing system which the new extensions of Thembaletu are to create (i.e. UISP Areas 7 to 8) would not only aggravate the existing situation and the resultant pollution to this watercourse, but generate a range of environmental and health problems.

The no-go alternative is thus not considered desirable from both social and environmental perspectives (i.e. erosion, pollution and health & safety risks) and the proposed development can be viewed in a positive light when compared to the no-go alternative.

4. Impact Assessment and Mitigation Measures

4.1. Regional/ Planning Context

The proposed site (Erven 4056 and 4055, Tyolora) are registered in the name of George Municipality and are being utilised as an informal settlement at present. The site is currently zoned "Institutional I" (place of instruction) and will have to be rezoned to "Subdivisional Area" to allow for the establishment of infill development. According to the BAR the Western Cape Department of Education confirmed in writing that they do not

require the properties for educational purposes and consequently the land use has been transferred to George Municipality.

George is considered in the Provincial Spatial Development Framework ("PSDF") to be an area for high priority fixed investment urban settlement, with the formalisation of erven and provision of basic services to existing settlements. The Thembalethu settlement is one such area of focus.

The George Spatial Development Framework ("George SDF") includes this area within the urban edge. Infill development and densification is highly recommended in the document. The proposed development of Area 8A and 8B is infill development and therefore adheres to the principles for densification as described in the Western Cape Provincial Spatial Development Framework (WCPSDF)(June 2009), as well as the Draft George Spatial Development Framework. Existing services are utilised and additional costs for the upgrading of services are minimised.

The formalisation / upgrade of informal settlements (UIS) and provision of basic services are highlighted as a priority in the George Integrated Development Plan ("George IDP"). Thus this UIS Project aligns with the IDP forward planning into the future.

The Draft Thembalethu Spatial Development Plan ("TSDP") was compiled as a component of the Draft George SDF. This plan is being revised at present so that it can be approved as a local structure plan. This plan shows that the future growth and development of housing within Thembalethu must be managed through strategic infill and densification. Area 8A and 8B is indicated as a special area for re-development.

4.2. Services/ Bulk Infrastructure Internal Services for Area 8

The internal water, sewerage and stormwater reticulation networks will link to the existing Municipal services. Provision for effective stormwater drainage will be made by means of a combination of underground pipes and concrete lined V-drains running parallel to the roadways and discharging into the existing stormwater outlets surrounding Area 8 A&B. Energy dissipaters will be placed strategically to avoid erosion and additional runoff into the water courses, as well as litter traps to avoid this type of pollution entering these systems.

The old farm dam will be transformed to serve as an effective stormwater retention pond. A conventional stormwater network of catchpits, manholes and headwalls will convey stormwater generated on Area 8 into this retention pond, after which the stormwater will flow through an outlet pipe, discharging stormwater into the adjacent tributary via a stormwater outlet and silt retention structure, into the tributary to the east.

The services lay-out for Area 8 include a network of 10m wide internal roads, which gain access via the following three access points:

- off the existing Lingelethu Street (western property boundary),
- off the existing Makhaza Street (eastern property boundary), and
- via an existing road of 8m between existing erven 3810 & 3812 (northern property boundary).

Internal and linking electricity, water, sewerage and stormwater services will be aligned with the road network / road reserve as far as possible.

The solid waste generated by the current and future occupants of Area 8 will be picked up by the George Municipality and disposed of at a licenced Solid Waste Management/ Disposal Facility on a weekly basis.

4.3. Cumulative

Phase 8 A&B: The cumulative loss of currently intact habitat within listed vegetation types may impact the countries' ability to meet its conservation targets. The site is located within the Garden Route Granite Renosterveld vegetation type, which is listed as Endangered under the National List of Threatened Ecosystems and any further loss of this vegetation type would be considered highly undesirable. The extent of intact habitat at the site is however low and the amount of habitat that would be lost within these areas would be similarly low. In addition, the fragmentation of the surrounding landscape and the high anthropogenic impact in the area suggests that the long-term viability of the remnant patches is probably compromised.

Upgrade of bulk sewer services: Transformation within Critical Biodiversity Areas ("CBAs") and Ecological Support Areas ("ESAs") would potentially disrupt the functioning of the CBAs or result in biodiversity loss. In addition, the presence of the sewer line with access track will increase the fragmentation of habitat and increase access to a significant area of currently inaccessible areas which may have negative consequences for biodiversity in these areas due to increased levels of hunting or plant collection. The area is already highly fragmented and impacted and the sewer line will fragment the major unfragmented portion of the site.

However, the loss of biodiversity and a functioning ecosystem must be weighed up against the need to provide sewerage services. The lack of sewerage services will result in the pollution and potential health risk.

4.4. Biophysical Impacts

Upgrade of bulk sewer services: According to the BAR the site contains fynbos in proximity to the Old Brick Works and Afrotemperate Forest patches within the Schaapkop River valley. Although these areas are considered sensitive and retain significant biodiversity, the long-term viability and persistence of these areas is uncertain due to the high alien plant invasion pressure, as well as anthropogenic impacts such as hunting, livestock grazing and collection of plants for traditional medicine.

The forest patch area near Thembaletu No.6 Pump Station is considered to be most sensitive. The construction of the sewer access track will facilitate access to this area which currently represents relatively safe refuge for fauna and flora. A section of gravity pipeline has been re-aligned to avoid the sensitive indigenous forest patches in proximity to Pumpstation No. 6. However, the sewer line from Area 3 cannot be realigned to avoid the forest area, but it will be located high up on the slope as far as possible to minimise disturbance of the forest.

Phase 8 A&B: The small dam on Area 8 was found to be highly disturbed and thus not sensitive from an ecological perspective. Based on this assessment and the community's wish to have the dam removed due to safety risks associated with it (drowning), the preferred alternative thus included the option to maintain an area of open space around the dam site, remove deep standing water and formalise the dam into a functional stormwater management system. Some of the mitigation measures recommended

include a focus on avoidance of sensitive areas where possible and reducing the development footprint as far as possible, as well as ensuring that the construction approach results in a robust end result, which resists impacts such as erosion, since the long-term maintenance of the access tracks by the municipality is unlikely.

4.5. Biodiversity

The entire Schaapkop River and associated tributaries, to be traversed by the Bulk Sewer & Electrical infrastructure, is designated as a Critical Biodiversity Area ("CBA") and Ecological Biodiversity Area ("ESA"). Transformation within the ESA would potentially disrupt the functioning of the CBA and result in biodiversity loss.

The site is characterized by a few sensitive areas, which include CBA and Endangered Garden Route Granite fynbos and protected Afrotropical Forest patches. Although these areas are considered sensitive and retain significant biodiversity, the long-term viability and persistence of these areas is uncertain due to the high alien plant invasion pressure as well as anthropogenic impacts such as hunting, livestock grazing and collection of plants for traditional medicine.

The most sensitive area is forest patch near to the Thembolethu No.6 Pump Station. The construction of the sewer access track will facilitate access to this area, which currently represents a relatively safe refuge for fauna and flora. The report by Simon Todd Consulting recommends that an alternative alignment for the sewer line must be investigated, which avoids a greater portion of the forest, or if this isn't possible, building the line without the access track. The applicant proposes to use excavators, which disturb 5 meters during turning movements of the boom and bucket. Manual labour is impractical as the manhole rigs weigh 850kg each. The disturbance area will be rehabilitated to a maintenance access of 3,5 meters wide.

4.6. Visual / Sense of Place

According to the BAR the proposed development will have a positive local medium-term impact on the surrounding environment since it will result in the rehabilitation of some severely eroded sites, including pump stations along the routes.

4.7. Heritage

The heritage specialist indicates in his recommendations that the proposal constitutes infill development and that no heritage resources would be impacted through future development of the site and that no further heritage-related studies would therefore be necessary. Heritage Western Cape (HWC) as the competent authority in terms of the National Heritage Resources Act also confirmed in their final comment dated 26 June 2013, that no further processes in terms of Section 38 of the NHRA apply to the proposed development.

4.8. Socio-economic

According to the BAR the socio-economic impacts of the project, other than the employment opportunities to be created during construction and operation, include the provision of secure tenure on erven and access to basic services for the current informal residents or Areas 8A&B specifically. The BAR further submits that the provision of the bulk services component of this development proposal is to support the Upgrade of Informal Settlements Plan (UISP) for the greater Thembolethu area (Areas 1-8), and the socio-economic benefits of secure erven tenure and access to basic services associated with this.

4.9 Impact Assessment and significance

Overall, the impacts of the development of the bulk sewer infrastructure at Tembalethu are likely to be of local extent, moderate to low intensity and of overall low significance.

National Environmental Management Act Principles

The National Environmental Management Principles (set out in section 2 of the NEMA, which apply to the actions of all organs of state, serve as guidelines by reference to which any organ of state must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), *inter alia*, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between organs of state through conflict resolution procedures; and
- the selection of the best practicable environmental option.

The development will result in both negative and positive impacts.

Negative Impacts:

This includes the disturbance of fynbos vegetation, disturbance of Afromontane forest and the transformation within the ESAs, which can potentially disrupt the functioning of the CBAs or result in biodiversity loss. In addition hereto, the presence of the sewer line with access tracks will increase the fragmentation of habitat and increase access to a significant area of currently inaccessible areas, which may have a negative effect on biodiversity in these areas due to increased levels of hunting or plant collection.

Notwithstanding the afore-mentioned, the negative impacts can partially be mitigated to low and very low levels by minimising the development footprint as far as possible and avoiding the creation of access tracks. The pipeline was also aligned as a mitigation measure to run on the edge of the Tembalethu settlement, along the edge and within the Schaapkop River valley to the south, separating Tembalethu from Pacaltsdorp.

Positive impacts:

The proposed development will result in the removal of the small dam on Area 8, which poses a safety risk. This dam will be formalised into a functional stormwater management system, which will in turn assist with the stormwater management in the area. Another positive impact of the proposed development is the alleviation of housing needs as the proposal includes the formalisation of informal housing in Areas 8A and B. The existing sewage system is overloaded and blockages with sewage spills into the Schaapkop River are currently a common occurrence and the approval of the proposed development will also eliminate this. This Department is therefore of the opinion that the positive impacts of

the proposed development largely outweighs the negative impacts and that the negative impacts can be mitigated to an acceptable level.

In view of the above, the NEMA principles, compliance with the conditions stipulated in this environmental authorisation, and compliance with the EMP, the competent authority is satisfied that the proposed listed activities will not conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activities can be mitigated to acceptable levels.

-----END-----



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

WESTERN CAPE REGION
PRIVATE BAG X16, SANLAMHOF, 7532

Tel.: 021 941 6295, Fax: 086 579 4133, E-mail: Nthungenin@dwa.gov.za

Enquiry: N. Nthungeni
File number: 27/2/1/K330/113/6

George Local Municipality – Thembaletu Bulk Sewer System
P O Box 19
George
6573

Dear Sir/Madam

APPLICATION FOR WATER USE LICENSE APPLICATION IN TERMS OF SECTION 40 AND 41 OF THE NATIONAL WATER ACT, 1998 (ACT 36 OF 1998: IMPEDING OR DIVERTING THE FLOW OF WATER IN A WATERCOURSE: VARIOUS PROPERTIES

Your Water Use License Application has reference.

Attached please find the original Water Use License number 16/K30C/CI/2723 dated 15 December 2014 that was issued with regard to the above-mentioned application.

Please ensure that all conditions within the License are adhered to.

Water use charges or levies will be imposed from time to time by responsibly authority or the Department in terms of the Raw Water pricing Strategy as published.

If you need further information, you are welcome to contact this office.

Yours faithfully

WESTERN CAPE: HEAD OF PROVINCIAL OPERATIONS
DATE: 19 January 2015



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Private Bag X313, Pretoria, 0001, Sedibeng Building, 185 Francis Baard Street, Pretoria,
Tel: (012) 336-7500 Fax: (012) 323-4472 / (012) 326-2715

LICENCE IN TERMS OF CHAPTER 4 OF THE NATIONAL WATER ACT, 1998 (ACT NO. 36 OF 1998) (THE ACT)

I, **Anil Bijman Singh**, in my capacity as Director-General (Acting) in the Department of Water and Sanitation acting under authority of the powers delegated to me by the Minister of Water and Sanitation, hereby authorize the following water uses in respect of this licence.

SIGNED:

DATE: 15/12/14

LICENCE NO: 16/K30C/CI/2723
FILE NO: 27/2/1/K330/113/6

1. **Licensee:** **George Local Municipality: Thembaletu Bulk Sewer System**
P.O Box 19
GEORGE
6573
2. **Water Uses:**
 - 2.1 Section 21(c) of the Act: Impeding or diverting the flow of water in a watercourse, subject to the conditions set out in Appendices I and II.
 - 2.2 Section 21(i) of the Act: Altering the bed, banks course or characteristics of a watercourse, subject to the conditions set out in Appendices I and II
3. **Properties in respect of which this licence is issued.**
 - 3.1 Farm 7197/4 Tyolora
 - 3.2 Farm 7197/9, Tyolora
 - 3.2 Erf 3879, Tyolora
 - 3.3 Erf 5006, Tyolora
 - 3.4 Erf 3274, Tyolora
 - 3.5 Farm 7197/40 Tyolora

- 3.6 Farm 7197/50, Tyolora
- 3.7 Farm 7197/58 Tyolora
- 3.9 Portion 11 of the farm Sandkraal No. 197
- 3.10 Farm 7197/4 Tyolora

4. Registered owner of the Properties

Table 1: Registered owner of properties

Property Description	Title Deed No.	Property Owner	Coordinates
Farm 7197/40, Tyolora	T69142/07	George Municipality	34° 0'29.10"S 22°28'28.50"E
Erf 3274, Tyolora	T69142/07	George Municipality	34° 0'35.75"S 22°29'7.99"E
Farm 197/11, Sandkraal	T45867/89	George Municipality	34° 0'39.60"S 22°27'52.08"E
Farm 7197/9, Tyolora			34° 0'37.58"S 22°28'3.38"E
Farm 7197, Tyolora	T19564/99	George Municipality	34° 0'10.62"S 22°28'13.06"E
Farm 7197/4, Tyolora			34° 0'35.75"S 22°29'7.99"E
Farm 7197/50, Tyolora			34° 0'35.75"S 22°29'7.99"E
Farm 7197/58, Tyolora			34° 0'41.14"S 22°29'19.68"E
Erf 3879, Tyolora			34° 1'21.24"S 22°29'15.51"E
Erf 5006, Tyolora			34° 0'44.03"S 22°28'17.46"E

5. Licence and Review Period

- 5.1 This licence is valid for a period of twenty (20) years from the date of issuance and as provided for under Section 49 of the Act, it may be reviewed in every five (5) years after issuance.

6. Definitions

"Any word or term defined under the Act shall have the same meaning as defined in the Act, unless otherwise specifically stated."

"Provincial Head" The Provincial Head" means the Head of Western Cape Provincial Operations, Department of Water and Sanitation, Private Bag X16; Sanlamhof, 7532

7. Description of activity

LICENCE NO: 16/K30C/CI/2723
FILE NO: 27/2/1/K330/103/1

The water uses authorised for construction of sewer pipelines consist of impeding or diverting the flow of water and altering the bed, banks, course or characteristics of Schaapkop River and its tributaries during the the construction of the sewer pipeline. The sewer pipeline will be situated within the Breede-Gouritz Water Management Area, in quaternary catchment K30C.

APPENDIX I

General conditions for the licence

1. This licence is subject to all applicable provisions of the National Water Act, 1998 (Act 36 of 1998).
2. The responsibility for complying with the provisions of the licence is vested in the Licensee and not any other person or body.
3. The Licensee must immediately inform the Provincial Head of any change of name, address, premises and/or legal status.
4. If the property/ies in respect of which this licence is issued is subdivided or consolidated, the Licensee must provide full details of all changes in respect of the properties to the Provincial Head within 60 days of the said change taking place.
5. If a Water User Association is established in the area to manage the resource, membership of the Licensee to the Association is compulsory. Rules, regulations and water management stipulation of such association must be adhered to.
6. The Licensee must be responsible for any water use charges and/or levies imposed by a Responsible Authority.
7. While effect must be given to the Reserve as determined in terms of the Act, where a lower confidence determination of the Reserve has been used in issuance of this licence, the licence conditions may be amended should a higher confidence reserve be conducted.
8. The licence shall not be construed as exempting the Licensee from compliance with the provisions of any other applicable Act, Ordinance, Regulation or By-law.
9. The licence and amendment of this licence are also subject to all the applicable procedural requirements and other provisions of the Act, as amended from time to time.
10. The Licensee must conduct an annual internal audit on compliance with the conditions of this licence. A report on the audit shall be submitted to the Provincial Head within one month of the finalization of the audit.
11. The Licensee must appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. Both these audits may be subjected to external audit.
12. If the water use authorised in this licence is not exercised within 3 years of the date of issuance of the licence, the authorization will be withdrawn. Upon commencement of the water use, the Licensee must inform the Relevant Authority in writing.
13. Notices prohibiting unauthorized persons from entering water use premises must be displayed.
14. The Department accepts no liability for any damage, loss or inconvenience, of whatever nature, suffered as a result of amongst other things:
 - 14.1 Inundation of flood;

- 14.2 Any *force majeure* event;
- 14.3 Siltation of the river or dam basin; and
- 14.4 Required Reserve releases.

APPENDIX II

Section 21(c) of the Act: Impeding or diverting the flow of water in a watercourse
and/or

Section 21(i) of the Act: Altering the bed, banks, course or characteristic of a watercourse

1. GENERAL

1.1 This licence authorises George Local Municipality for the construction of a sewer pipelines within Schaapkop River and its tributaries for the Section 21(c) and (i) water use activities, for the Thembalethu bulk sewer infrastructure as set out in Table 2.

Table 2: Water use activities

River Crossing No.	Name of the water resources	Property Description (Farm/Erf Number)	Coordinates	Purpose
1	Tributary of Schaapkop River	Farm 7197 Tyolora	34° 0'10.62"S 22°28'13.06"E	Sewage pipeline river crossing
2	Tributary of Schaapkop River	Farm 7197/4 Tyolora	34° 0'22.92"S 22°28'7.49"E	Sewage pipeline river crossing
3	Tributary of Schaapkop River	Farm 7197/4 Tyolora	34° 0'30.96"S 22°28'4.15"E	Sewage pipeline river crossing
4	Tributary of Schaapkop River	Farm 7197/9 Tyolora	34° 0'37.58"S 22°28'3.38"E	Sewage pipeline river crossing
5	Tributary of Schaapkop River	Erf 5006 Tyolora	34° 0'43.13"S 22°28'10.41"E	Sewage pipeline river crossing
6	Tributary of Schaapkop River	Erf 5006 Tyolora	34° 0'44.03"S 22°28'17.46"E	Sewage pipeline river crossing
7	Tributary of Schaapkop River	Farm 7197/40 Tyolora	34° 0'29.10"S 22°28'28.50"E	Sewage pipeline river crossing
8	Tributary of Schaapkop River	Farm 7197/50 Tyolora	34° 0'27.09"S 22°29'1.20"E	Sewage pipeline river crossing
9	Tributary of Schaapkop River	Erf 3274 Tyolora	34° 0'35.75"S 22°29'7.99"E	Sewage pipeline river crossing
10	Tributary of Schaapkop River	Farm 7197/58 Tyolora	34° 0'41.14"S 22°29'19.68"E	Sewage pipeline river crossing
11	Schaapkop River	Erf 3879 Tyolora	34° 1'21.24"S 22°29'15.51"E	Sewage pipeline river crossing
12	Schaapkop River	Portion 11 of the farm Sandkraal No. 197	34° 0'39.60"S 22°27'52.08"E	Sewage pipeline river crossing
13	Tributary of Schaapkop River	Portion 11 of the farm Sandkraal No. 197	34° 0'32.12"S 22°27'43.37"E	Sewage pipeline river crossing
14	Tributary of Schaapkop River	Farm 7197/9 Tyolora	34° 0'16.57"S 22°27'58.09"E	Sewage pipeline river crossing
15	Tributary of Schaapkop River	Erf 3879 Tyolora	34° 1'17.42"S 22°29'22.20"E	Sewage pipeline river crossing
16	Schaapkop River	Farm 7197/9 Tyolora	34° 0'42.30"S 22°27'54.69"E	Sewage pipeline river crossing

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- 1.2 The Licensee must carry out and complete all the activities listed under condition 1.1 according to the following:
 - 1.2.1. Reports submitted to the Department or the Responsible Authority, specifically:
 - 1.2.1.1. Water Use Licence Application (WULA) report compiled by Water & Wastes Utilisation Solution, November 2013.
 - 1.2.1.2. The conceptual drawings included in appendix E of the WULA report designed by Aurecon, October 2013
 - 1.2.1.3. Technical Report for Bulk Services compiled by Aurecon, August 2013.
 - 1.2.1.4. Draft Basic Assessment Report for upgrade of informal settlements project (UISP) – area 8a&b & bulk services on Erf 4056 & 4055 (Area 8A&B) compiled by Cape EAPrac Environmental Assessment Practitioners, September
 - 1.2.1.5. Ecological Assessment Report compiled by Simon Todd Consulting, September 2013.
 - 1.2.2. Reserve determination, dated June 2012;
 - 1.2.3. Environmental Authorisation; 4 March 2014 ;
 - 1.2.4. Conditions of this licence; and
 - 1.2.5. Any other written direction issued by the Provincial Head in relation to this licence.
- 1.3 No activity must take place within the 1:100 year flood line or the delineated riparian habitat, whichever is the greatest, or within 500 m radius from the boundary of any wetland unless authorised by this licence.
- 1.4 The conditions of the authorisation must be brought to the attention of all persons (employees, sub-consultants, contractors etc.) associated with the undertaking of these activities and the Licensee must take such measures that are necessary to bind such persons to the conditions of this licence.
- 1.5 If the Licensee is not the end user/beneficiary of the water use related infrastructure and will not be responsible for long term maintenance and management of the infrastructure, the Licensee must provide a programme for hand over to the successor-in-title including a brief management /maintenance plan and the agreement for infrastructure along with allocation of responsibilities, within three (3) months of the date of issuance of this licence.
- 1.6 A copy of the water use licence and reports set out under condition 1.2. must be on site at all times.
- 1.7 A suitably qualified person(s), appointed by the Licensee, and approved in writing by the Provincial Head, must be responsible for ensuring that the activities are undertaken in compliance with the specifications as set out in reports submitted to the Department and the conditions of this licence.

2. FURTHER STUDIES AND INFORMATION REQUIREMENTS

- 2.1 The current ecological status should not change as the result of the authorised activity and the pipeline crossing the watercourse should not have any joining parts.

- 2.2 A rehabilitation, mitigation and maintenance plan including its associated method statement should be submitted for approval prior commencement to the Provincial Head.
- 2.2 The Licensee shall submit in writing under reference 27/2/1/K330/113/6 a complete set of construction drawings of the river crossing for approval prior construction.
- 2.3 The Licensee shall within 30 days after completion of the activities inform the Provincial Head in writing and this shall be accompanied by a signature of approval of the registered professional engineer that the construction was done according to the construction drawings.
- 2.4 The Licensee shall submit an operation and maintenance manual with special reference to:
- i. The operation of the scour valves in order to prevent pollution to the Schaapkop River and its tributaries.
 - ii. The management of culverts to be kept clean in order to prevent debris build up and blockages.

3. PROTECTIVE MEASURES

3.1 Storm Water Management

- 3.1.1. Storm water management practices must be constructed, operated and maintained in a sustainable manner throughout the project and for the water use activities set out in condition 1.1 and must include but are not limited to the following:
- 3.1.1.1. Increased runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that storm water does not lead to bank instability and excessive levels of silt entering the watercourse(s);
 - 3.1.1.2. The velocity of storm water discharges must be attenuated and the banks of the watercourses protected; and
 - 3.1.1.3. Sheet runoff from paved surfaces and access roads need to be curtailed.

3.2 Structures, Construction Plant and Materials

- 3.2.1. The necessary erosion prevention measures must be employed to ensure the sustainability of all structures.
- 3.2.2. The height, width and length of structures must be limited to the minimum dimension necessary to accomplish the intended function.
- 3.2.3. Structures must not be damaged by floods exceeding the magnitude of floods occurring on average once in every 100 years.
- 3.2.4. Structures must be non-erosive, structurally stable and must not induce any flooding or safety hazard.
- 3.2.5. Structures must be inspected regularly for accumulation of debris, blockage, erosion of abutments and overflow areas - debris must be removed and damages must be repaired and reinforced immediately.

- 3.2.6. The construction camp, plant and material stockpiles must be located outside the extent of the watercourse(s) and must be recovered and removed one (1) month after construction has been completed.
- 3.2.7. During construction erosion berms should be installed to prevent gully formation, according to the slope.
- 3.2.8. All areas affected by construction should be rehabilitated upon completion of the construction phase of the development. Areas should be reseeded with indigenous vegetation species as required, and the use of seednets is recommended to prevent erosion.
- 3.2.9. During the construction phase no vehicles shall be allowed to indiscriminately drive through any wetland areas.
- 3.2.10. No construction is allowed within the 1:100 year flood line and/or delineated riparian habitat, whichever is the greatest, or within 500 m radius from the boundary of any wetland unless authorised in this license.
- 3.2.11 The length of solid pipe (no joints) across the riparian area and/or 1:100 year flood line (whichever is the greatest) to avoid spillages into the watercourse.
- 3.2.12 The pipe will be elevated over the riparian area and/or 1:100 year flood line (whichever is the greatest) in relation to the other sections of the adjoining pipeline to facilitate no return flow to the watercourse in the event of a spill.
- 3.2.13 The pipe has to be raised over the riparian area and/or 1:100 year flood line (whichever is the greatest) above the maximum flood level to avoid obstruction and damage.
- 3.2.14 No structures to be placed within the 1:100 year flood line and/or the delineated riparian areas unless authorised in this license.
- 3.2.15 The structure of sewer pipeline crossing the watercourse(s) must be non-erosive, structurally stable and may not induce any flooding. Accumulation of debris, blockage, erosion of abutments and overflow must be inspected regularly and damaged areas must be repaired immediately.
- 3.2.16 Once the installation of the pipe has been completed, all construction material e.g. excess plastic will be removed, and the banks of the stream in the position of the bridge will be stabilized and rehabilitated.
- 3.2.17 The manholes or pump stations for the pipeline should be placed at least 30 m away from the river to ensure that no spillages occur into the river should there be a problem with the pipeline.
- 3.2.18 Where the pipeline is closest to the river (that is approximately 10m from the river), the manholes should be sealed as far as possible to minimize spills from these manholes that may occur as a result of pipeline blockages.
- 3.2.19 All manholes within the 1:100 year flood line or delineated riparian habitat, whichever is the greatest, must be capsulated in concrete to hold a pre-determined capacity to avoid spillage into the river.

3.2.20 The proposed pipeline must be constructed in such a way so as to allow any spills from the pipeline to be quickly observed and repaired.

3.2.21 The pipeline should be regularly monitored and maintained to ensure that any problems with the pipeline are rectified before it can impact on the Schaapkop river and its tributaries.

3.3 Water Quality

3.3.1 The Licensee shall sample the water quality weekly (during construction) and monthly (operation) for the mentioned variables (Table 2) at monitoring points both upstream and downstream of the activities and report to the Provincial Head within thirty (30) days after the results of each sampling event is received:

Table 3: Water quality parameters relevant for sampling.

Variable	Limit
Flow (l/s)	Not applicable
Temperature (°C)	<10% variation
pH	6.0 – 8.5
Electrical conductivity (EC) (mS/m)	<50
Suspended solids (SS) (mg/l)	<25
Dissolved oxygen (mg/l)	≥6
Turbidity (NTU)	<3
Secchi disk depth (m)	≥1 meter
Alkalinity (mg CaCO ₃ /l)	<100
PO ₄ (mg/l)	<0.5
NO ₃ /NO ₂ (as N) (mg/l)	<6
BTEX, TPH (mg/l)	<1
Faecal coliforms (counts/100ml)	<130

The variables may be amended on discretion of the Responsible Authority. Only an accredited (SANS 17025) laboratory to be used for analysis.

3.3.2 Monitoring must continue for three (3) years after the cessation of the activities listed in condition 1.1.

3.3.3 Monitoring must be undertaken as set out in section 5.

3.3.4 Activities that lead to elevated levels of turbidity of any watercourse(s) must be prevented, reduced, or otherwise remediated. Activities must be scheduled to take place during the dry seasons when flows are lowest where reasonably possible. If this is not possible and if management measures have not been provided for in the reports submitted to the Provincial Head, the Licensee must submit such to the Provincial Head for written approval before these activities commence. Natural in stream hydrology is to be used to determine which months constitute the low flow months.

3.3.5 The Licensee must ensure that the quality of the water to downstream water users does not decrease because of the of the water use activities listed under condition 1.1.

3.3.6 A qualified person must be appointed to assess the quality of water both upstream and downstream of the activities prior to commencement of construction.

- 3.3.7 Pollution of and disposal/spillage of any material into the watercourse must be prevented, reduced, or otherwise remediated through proper operation, maintenance and effective protective measures.
- 3.3.8 Vehicles and other machinery must be serviced well above the 1:100 year flood line or delineated riparian habitat, whichever is the greatest. Oils and other potential pollutants must be disposed off at an appropriate licensed site, with the necessary agreement from the owner of such a site.
- 3.3.9 Any hazardous substances must be handled according to the relevant legislation relating to transport, storage and use of the substance.
- 3.3.10 All reagent storage tanks and reaction units must be supplied with a bunded area built to the capacity of the facility and provided with sumps and pumps return the spilled material back into the system. The system must be maintained in a state of good repair and standby pumps must be provided.

3.4 Flow

- 3.4.1 The Licensee must determine flood lines (1:50 and 1:100 year) prior to construction to ensure risks are adequately managed. Flood lines must be clearly indicated on the site plan(s).
- 3.4.2 The activities must be conducted in a manner that does not negatively affect catchment yield, hydrology and hydraulics. The Licensee must ensure that the overall magnitude and frequency of flow in the watercourse(s) does not decrease, other than for natural evaporative losses and authorised attenuation volumes.
- 3.4.3 Appropriate design and mitigation measures must be developed to minimise impacts on the natural flow regime of the watercourse i.e. through placement of structures/supports and to minimise turbulent flow in the watercourse.
- ✓ 3.4.4 Structures to be designed in a way to prevent the damming of stream/river water and not impact on the flow of the water, during the construction and operational phases of all developments.
- 3.4.5 The development may not impede natural drainage lines.
- 3.4.6 The diversion structures may not restrict river flows by reducing the overall river width or obstructing river flow.

3.5 Riparian and In-stream Habitat (Vegetation and Morphology)

- ✓ 3.5.1 Activities (including spill clean-up) must start up-stream and proceed into a down-stream direction, so that the recovery processes can start immediately, without further disturbance from upstream works.
- ✓ 3.5.2 Operation and storage of equipment must not take place within the 1:100 year flood line or delineated riparian habitat, whichever is the greatest unless authorised in this license.
- ✓ 3.5.3 Activities must not occur in sensitive riffle habitats.

- ✓ 3.5.4 Indigenous riparian vegetation, including dead trees, outside the limits of disturbance indicated in the site plans must not be removed from the area.
- ✓ 3.5.5 Alien and invader vegetation must not be allowed to further colonise the area, and all new alien vegetation recruitment must be sustainably eradicated or controlled.
- ✓ 3.5.6 Existing vegetation composition must be maintained or improved by maintaining the natural variability in flow fluctuations. Rehabilitated areas shall have a vegetation basal cover of at least 15% at all times.
- ✓ 3.5.7 Recruitment and maintaining of a range of size classes of dominant riparian species in perennial channels must be stimulated.
- ✓ 3.5.8 Encroachment of additional exotic species and terrestrial species in riparian zones must be discouraged.
- ✓ 3.5.9 Accumulation of woody debris on terraces by periodic flooding must be discouraged.
- ✓ 3.5.10 Existing flood terraces and deposition of sediments on these terraces to ensure optimum growth, spread and recruitment of these species must be maintained.
- ✓ 3.5.11 All reasonable steps must be taken to minimise noise and mechanical vibrations in the vicinity of the watercourses.
- ✓ 3.5.12 The necessary erosion prevention mechanisms must be employed to ensure the sustainability of all structures and activities and to prevent in-stream sedimentation.
- ✓ 3.5.13 Soils that have become compacted through the water use activities must be loosened to an appropriate depth to allow seed germination.
- 3.5.14 Slope/bank stabilisation measures must be implemented with a 1:3 ratio or flatter and vegetated with indigenous vegetation immediately after the shaping.
- 3.5.15 Stockpiling of removed soil and sand must be stored outside of the 1:100 flood line or delineated riparian habitat, whichever is the greater, to prevent being washed into the river and must be covered to prevent wind and rain erosion.
- 3.5.16 The indiscriminate use of machinery within the instream and riparian habitat will lead to compaction of soils and vegetation and must therefore be strictly controlled.
- 3.5.17 The overall macro-channel structures and mosaic of cobbles and gravels must be maintained by ensuring a balance (equilibrium) between sediment deposition and sediment conveyance maintained. A natural flooding and sedimentation regime must thus be ensured as far as reasonably possible.
- 3.5.18 As much indigenous vegetation growth as possible should be promoted within the proposed development area in order to protect soil and to reduce the percentage of the surface area which is paved.
- 3.5.19 Run-off from paved surfaces should be slowed down by the strategic placement of berms.

3.6 Biota

- 3.6.1 The Licensee must take all reasonable steps to allow movement of aquatic species, including migratory species.
- 3.6.2 All reasonable steps must be taken not to disturb the breeding, nesting and/or feeding habitats and natural movement patterns of aquatic biota.
- 3.6.3 The current level of diversity of biotopes and communities of animals, plants and microorganisms must be maintained.

4 REHABILITATION AND MANAGEMENT

- 4.1 The Licensee must embark on a systematic long-term rehabilitation programme to restore the watercourse(s) to environmentally acceptable and sustainable conditions after completion of the activities, which must include, but not be limited to the rehabilitation of disturbed and degraded riparian areas to restore and upgrade the riparian habitat integrity to sustain a bio-diverse riparian ecosystem.
- 4.2 All disturbed areas must be re-vegetated with an indigenous seed mix in consultation with an indigenous plant expert, ensuring that during rehabilitation only indigenous shrubs, trees and grasses are used in restoring the biodiversity.
- 4.3 An active campaign for controlling invasive species must be implemented within disturbed zones to ensure that it does not become a conduit for the propagation and spread of invasive exotic plants.
- 4.4 Rehabilitation must be concurrent with construction.
- 4.5 Topsoil must be stripped and redistributed.
- 4.6 Compacted and disturbed areas must be shaped to natural forms and to follow the original contour. In general cut and fill slopes and other disturbed areas must not exceed 1:3 (v:h) ratio, it must be protected, vegetated, ripped and scarified parallel with the contour.
- 4.7 The Provincial Head must sign a release form indicating that rehabilitation was done satisfactory according to specifications as per this license.
- 4.8 A photographic record must be kept as follows and submitted with reports as set out in section 5:
 - 4.8.1 Dated photographs of all the sites to be impacted before construction commences;
 - 4.8.2 Dated photographs of all the sites during construction on a monthly basis; and
 - 4.8.3 Dated photographs of all the sites after completion of construction, seasonally.
- 4.9 Rehabilitation structures must be inspected regularly for the accumulation of debris, blockages instabilities and erosion with concomitant remedial and maintenance actions.

5 MONITORING AND REPORTING

- 5.1 The Provincial Head must be notified in writing one week prior to commencement of the licensed activity and again upon completion of the activity.
- 5.2 A comprehensive and appropriate environmental assessment and monitoring programme (including bio-monitoring) to determine the impact, change, deterioration and improvement of the aquatic system associated with the activities listed under condition 1.1 as well as compliance to these water use licence conditions must be developed and submitted to the Provincial Head for written approval before commencement and must subsequently be implemented as directed.
- 5.3 Six (6) monthly monitoring reports must be submitted to the Provincial Head until otherwise agreed in writing with the Provincial Head: Western Cape Region.
- 5.4 A qualified and responsible scientist must be retained by the Licensee who must give effect to the various licence conditions and to ensure compliance thereof pertaining to all activities impeding and/or diverting flow of watercourses as well as alterations to watercourses on the properties as set out in condition 1.1.
- 5.5 The audit reports must include but are not limited to:
- 5.5.1 Reporting in respect of the monitoring programme referred to in condition <5.2>;
 - 5.5.2 A record of implementation of all mitigation measures including a record of corrective actions; and
 - 5.5.3 Compensation measures for damage where mitigation measures have failed to adequately protect the in-stream and riparian habitat or any other characteristic of the watercourses.
- 5.6 The Licensee must apply in writing to the Provincial Head for alternative reporting arrangements for which written approval must be provided.
- 5.7 Monitoring must continue throughout the operation of the sewer pipeline and for the activities listed in condition 1.1.

6 OTHER WATER USERS

- 6.1 The Licensee must attempt to prevent adverse affect on other water users. All complaints must be investigated by a suitable qualified person and if investigations prove that the Licensee has impaired the rights of other water users, the Licensee must initiate suitable compensative measures.

7. POLLUTION PREVENTION, INCIDENTS AND MALFUNCTIONS

- 7.1 Pollution incidents shall be dealt with in accordance with Section 19 and 20 of the Act.
- 7.2 Any incident that may cause pollution of any water resource shall immediately be reported to the Responsible Authority.

- 7.3 if surface and/or groundwater pollution has occurred or may possibly occur, the Licensee must conduct, and/or appoint specialists to conduct the necessary investigations and implement additional monitoring, pollution prevention and remediation measures to the satisfaction of the Responsible Authority.
- 7.4 The Licensee shall keep all records relating to the compliance or non-compliance with the conditions of this licence in good order. Such records shall be made available to the Provincial Head within 14 (fourteen) days of receipt of a written request by the Department for such records.
- 7.5 The Licensee shall keep an incident report and complaints register, which must be made available to any external auditors and the Department.

8 BUDGETARY PROVISIONS

- 8.1 The water user must ensure that there is a budget sufficient to complete and maintain the water use and for successful implementation of the rehabilitation programme as set out in this licence.
- 8.2 The Department may at any stage of the process request proof of budgetary provisions for rehabilitation and closure of project.

[END OF LICENCE]



REFERENCE: 16/3/1/1/D2/50/0060/12
ENQUIRIES: Shireen Pullen
DATE OF ISSUE: 17 November 2021

The Municipal Manager
George Municipality
Private Bag 19
GEORGE
6530

Attention: Ms. L. Mooiman

Tel: (044) 801 9111
Email: lc mooiman@george.gov.za

Dear Madam

ACCEPTANCE OF THE UPDATED ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr) FOR THEMBALETHU BULK SERVICES, GEORGE

1. The above-mentioned document received by the Directorate: Development Management (Region 3) hereinafter referred to a "this Directorate" on 18 October 2021 refers.
2. Based on the review of the content of the updated EMPr and by virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 (as amended), the competent authority herewith approves the amended EMPr.
3. In addition to the above, please be reminded that the EMPr is a working document and can be amended at times to address certain changes (if any) that may be required, provided that the outcomes of the EMPr are still the same and remains relevant.
4. Currently, the EMPr contains an updated Site Development Plan (SDP) and not the SDP referred to in the Environmental Authorisation (EA). In the new updated plan, the pipeline follows the contours slightly up the stream valley, instead of straight across, as indicated on the approved SDP. This section of pipeline was re-aligned to the top of the valley slope to avoid traversing the remaining Afrotropical Forest patches located within this section of the Schaapkop River Valley. It is hereby confirmed that no application for amendment is required as this slight change in the routing is considered to still be approximate to the site development plan approved as part of the development.
5. A compliance monitoring inspection will be undertaken after commencement of construction activities, in order to determine compliance with the Environmental Authorisation issued on 6 April 2021.

6. Your attention is further drawn to the audit requirements of the aforementioned Environmental Authorisation. Please note that in light of the recent official feedback received from the Chief Director: Development Planning regarding environmental audits, neither the Environmental Assessment Practitioner (EAP) or the Environmental Control Officer (ECO) can undertake an audit nor a person from the same company as the EAP or ECO, as it would represent a circumstance that may compromise the objectivity of the audit. Therefore, all audits to be conducted must be done by an independent auditor (not the EAP/ECO).
7. Please note that it is an offence in terms of Section 49A of the NEMA to fail to comply with the provisions of an Environmental authorisation. Failure to comply with the requirements of Section 24F of the NEMA shall result in the matter being referred to the Environmental Compliance and Enforcement Directorate of this Department. A person convicted of an offence in terms of the above is liable to a fine not exceeding R10 million or to imprisonment for a period not exceeding 10 years, or to both such fine and imprisonment.
8. Kindly quote the abovementioned reference number in any future correspondence in respect of the abovementioned development.
9. This Department reserves the right to revise initial comments and request further information from you based on any new or revised information received.

Yours faithfully

Malcolm
Fredericks

pp _____

Digitally signed by Malcolm
Fredericks
Date: 2021.11.16 16:07:01
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HEAD OF COMPONENT: ENVIRONMENTAL: IMPACT MANAGEMENT SERVICES
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

Copies to:

Ms Siân Holder
Mr. A. Molendorf

Cape EAPrac
George Municipality

Email: sian@cape-eaprac.co.za
Email: avmolendorff@george.gov.za