

BASIC ASSESSMENT REPORT



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Department:
Environment & Nature Conservation
NORTHERN CAPE PROVINCE
REPUBLIC OF SOUTH AFRICA

Private Bag X6102, Kimberley, 8300, Metlife Towers, T-Floor, Tel: 053 807 7300, Fax: 053 807 7328

Project applicant:	The Department of Co-operative Governance, Human Settlements and Traditional Affairs Northern Cape (CoGHSTA)		
Business reg. no. /ID. no.:	N/A		
Contact person:	T. Molefe		
Postal address:	The Provincial Manager NHBC Sanlam Building Kimberley 8301		
Telephone:	(053) 830 9514	Cell:	
E-mail:	tmolefe@ncpg.gov.za	Fax:	(053) 830 8016

Prepared by:

Environmental Assessment Practitioner/Firm:	Guillaume Nel Environmental Consultants (GNEC)		
Business reg. no. /ID. no.:	2007/189057/23		
Contact person:	Cahlan Williams		
Postal address:	45 Fabriek Street Paarl 7646	P.O Box 2636 Paarl 7620	
Telephone:	(021) 870 1874	Cell:	074 044 0330
E-mail:	cahlan@gnec.co.za	Fax:	(021) 870 1873

(For official use only)

File Reference Number:

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Application Number:

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Date Received:

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Basic Assessment Report in terms of the Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
2. This report format is current as of **08 December 2014**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
3. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
4. Where applicable **tick** the boxes that are applicable in the report.
5. An incomplete report may be returned to the applicant for revision.
6. The use of “not applicable” in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
8. No faxed or e-mailed reports will be accepted.
9. The signature of the EAP on the report must be an original signature.
10. The report must be compiled by an independent environmental assessment practitioner.
11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?

YES NO

If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

1. ACTIVITY DESCRIPTION

a) Describe the project associated with the listed activities applied for

1. INTRODUCTION

The Department of The Department of Co-operative Governance, Human Settlements and Traditional Affairs Northern Cape hereafter CoGHSTA, is proposing to facilitate the development of the Wrenchville Phase 2 Low-Cost Housing Development (Project number : A6100009) on the Remainder of Erf 1 in Kuruman, Ga-Segonyana Local Municipality and John Taolo Gaetsewe District Municipality (JTGDM), Northern Cape.

The Ga-Segonyana Local Municipality originated as a cross boundary-municipality between the North-West and the Northern Cape Provinces. It was established in the year 2000 through the amalgamation of the Kuruman and Mothibstad Municipalities and includes sections of Bophirima District Municipality. There are 33 residential areas divided into thirteen (13) wards, Wrenchville is located within ward 13. Approximately 80% of the population stays in rural villages. These are also administered through a traditional authority system with two senior Traditional leaders, chiefs and headman.

Kuruman is the main town in the area and is known as the "Oasis of the Kalahari". Kuruman is situated on the Namaquari route, forming part of the main route between the Gauteng, Namibia and Cape Town.

The proposed development will consist of approximately 200 units, with all design criteria on the "Guidelines of Human Settlements and Planning and Design", the National Buildings Regulations (SABS 0400), the Code of Practice: Water Supply and Drainage for Buildings (Part 1 & 2) (SABS 0252), SANS 1936-3: Development of dolomite land and will comply with the standards of the Civil Engineering Departments of the Ga-Segonyana Local Municipality where applicable. All funding will be made available by CoGHSTA.

Access to the concerned property will be taken off the existing Buitekant street within the existing residential neighbourhood of Wrenchville, located approximately 150m from the proposed development. Additionally, the proposed Wrenchville Phase 2 Low-Cost Housing Development will consist of numerous smaller internal roads. The total extent of the concerned property is approximately 10ha.

The proposed Wrenchville Phase 2 Low-Cost Housing Development is **needed to alleviate** the current housing shortage/backlog in the area.

2. DESCRIPTION OF THE ENVIRONMENT

a. **Climate:**

Located in a semi- arid part of South Africa, the area receives summer and autumn rainfall with very dry winters. The rainfall in this area is highly unpredictable and the mean annual rainfall in the area is approximately 353.00 mm with the mean annual temperature at 17,6°C. Frost is frequent during the winter. The coldest month of the year is July, averaging 9,6°C and the warmest month is January with an average temperature of 24,4°C.

b. **Topography:**

The majority of the property is situated approximately 1300m above mean sea level and is relatively flat. Elevation does not vary much with only the northern portion of the property gently sloping down towards a riparian corridor situated along the northern edge of the property. Therefore aspect does not have any influence on the vegetation on the concerned property. The landscape of the concerned property is dominated by Kuruman Thornveld vegetation but is in a **poor condition** due to numerous excavations, informal dumping and footpaths.

c. Vegetation:

Jan Briers was appointed by GNEC to conduct a botanical investigation pertaining to the Wrenchville phase 2 Low-Cost housing development. The vegetation type in the area is dominated by the Savana Biome which is the largest Biome in Southern Africa. According to Mucina and Rutherford (2006) the concerned property comprises of natural Kuruman Thornveld and is considered as **Least Threatened** as only 2% of the vegetation type has been disturbed.

A portion of the northern and eastern tip of the site has been mined in the past. The occurrence of gravel mining is observed in a portion of the site situated just north of the Wrenchville Phase 1 development (school). The eastern tip of the area falls in an area where red sand has been removed. Rubble has been dumped over approximately 20% of the site. The site is disturbed and livestock grazed over the area. The dominance of grass such as *Rhynchelytrum repens*, *Aristida concasta*, *Enneapogon cenchroides* and the presence of weedy species such as *Tagetes*, *Rumex* and *Zinnea* in the area provides proof thereof.

The area is a mosaic of grasslands and thickets. Sixty seven (67) plant species were identified, of which four (4) species were weedy and the rest all classified as Least Concern (LC). *Wachelia (Acacia) eriobola* (camel thorn) trees are scattered over the site, but the dense and larger *Wachelia (Acacia) erioloba* trees fall outside of the development site. The number of *Wachelia (Acacia) erioloba* that will have to be removed, falls well within the acceptable limits. Where the removal of Camel Thorn trees will be necessary a permit will have to be required from the Department of Agriculture, Fisheries and Forestry (DAFF), since these trees are protected under the National Forests Act, 1998 (Act No. 84 of 1998).

The Kuruman Thornveld on the Remainder of Erf 1 is Least Threatened and in a poor state due to excavation and informal dumping. **No** plant species of conservation concern (**Red List Species**) were found on the concerned property.

d. Aquatics:

Dietmar de Klerk from DDK Consulting was appointed by GNEC to undertake a Filed verification and conduct an Aquatic constraints analysis pertaining to the Wrenchville Phase 2 Low-Cost housing Development. A semi-natural stream channel with an associated riparian zone is located to the north of the proposed development area. The Kuruman Formal Landfill is located at the lower end of the river reach, upstream of Buitekant Street. The stream channel has visible signs of **severe disturbances** and informal dumping.

Certain sections of the semi- natural stream has been excavated several metres below the original stream channel surface. Excavations has progressed to such an extent that no definitive stream is evident. Furthermore a sand quarry is situated in the north eastern corner of the proposed development area, within the stream channel Riparian Area. The concerned area is not inundated with water at regular intervals or for prolonged periods of time to form Hydromorphic Soils (wetland conditions), therefore no additional wetland conditions were identified within the development area.

Currently the Draft Layout for the proposed Wrenchville Phase 2 Low-Income Housing Development, makes provision for all proposed housing units, to fall outside the 1:100 year flood-line Delineation of the semi-natural stream running along the northern boundary of the concerned property. The watercourse running along the northern boundary of the proposed development which includes the entire riparian zone and

1:100 year flood-line delineation is considered to be “undevelopable”.

Currently, the **only** structures proposed within this area, is the required **Bulk Sewer Pipeline** to service the proposed development. The Bulk Sewer Pipeline is proposed to be located below the 1:100 year Floodline of the concerned Non-Perennial Watercourse situated north of the proposed development, whilst the associated manholes are to be constructed above the 1:100 year Floodline Delineation.

Based on the Site Inspection undertaken on 06 April 2019, consideration was given to General Notice 509 of 2016 for Section 21(c) or 21(i) Water Use Activities, as listed in the National Water Act, 1998 (Act No. 36 of 1998) pertaining to the proposed Wrenchville Phase 2 Low-Cost Housing Development. The location of the proposed Bulk Sewer Pipeline within the Riparian Area / defined 1:100 year Floodline Delineation of the concerned Non-Perennial Watercourse, constitutes the compilation of a DWS Risk Assessment Matrix contained in the Aquatic Constraints Analysis which can be found in Addendum D in this document. The submission of a Water Use License Application (WULA) in terms of Section 21(c) and 21(i) of the National Water Act, 1998 (Act No. 36 of 1998) is hence **applicable** to the current development proposal. Additionally, should the current design proposal change in any way and additional structures be proposed within the 1:100 year Floodline Delineation, then the impacts of these structures on the surrounding Water Resources will have to be evaluated and included in the compiled Risk Assessment Matrix.

The freshwater specialist found that **no** significant impacts on existing Aquatic Ecosystems are expected as a result of the proposed Wrenchville Phase 2 Low-Cost Housing Development Kuruman, Northern Cape Province.

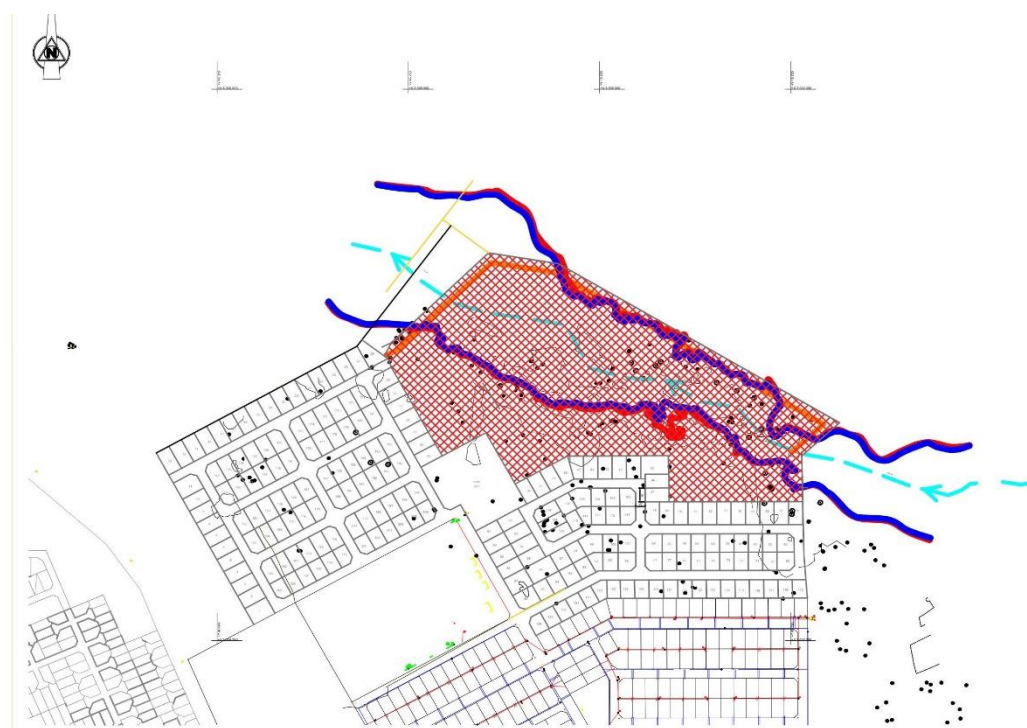


Figure 1: The 1:100 Year Floodline (solid blue line) of Semi-natural stream (dashed light blue line)

e. Geology and soil:

Campbell Group Dolomite is visible on the surface on a small portion of the site situated west of the Wrenchville school currently under construction (Wrenchville Phase 1). Further west it is covered by windblown sand that is a 1-3m deep layer. North of the Wrenchville Phase 1 development it is covered with a layer of a sediment, a mixture of sand and a banded Iron Stone, of up to 2m deep. The soils are generally

described as red well drained sandy soils with high base status.

3. **BULK SERVICES**

a. **Water**

The water supply in the surrounding Wrenchville area seems to be insufficient and will have to be upgraded. The internal reticulation system will comply with the minimum requirements of the Ga-Segonyana Municipality Engineering Department. The internal distribution network will consist of primarily HDPE PE100 PN 12.5 (110 mm diameter to 160 mm diameter) pipe with individual erf connections. Pipes will be installed according to SANS 1200 and SANS 1936 with a minimum cover of 800mm above pipes not constructed within roadways or erven, and a 1000mm for pipes constructed within roadways.

b. **Sewerage**

Currently there is no bulk sewerage on the perimeter of the proposed development's location, but it is proposed to tie- into a proposed new sewer outfall that will form part of the bulk services investigation for the development. The current proposal is to install a Bulk Sewer Pipeline that will run north of the proposed development's location above the 1:50 year flood-line but below the 1:100 year flood-line of the Non-Perennial Watercourse. The proposed manholes will however be located above the 1:100 year flood-line. The proposed bulk sewer will pass underneath Buitekant Street through an existing culvert, run alongside the Kuruman River in a southern direction and finally connect to the existing pump station situated next to the Kuruman River adjacent to the bridge crossing on Buitekant Street.

Additionally, two layout alternatives for the bulk sewer is proposed. Currently, as depicted in figure 3 below, the indicated yellow route diversion is the preferred alternative due to the fact that the purple route entails excavations of 6m deep in areas containing bedrock. However the yellow line diversion will need to pass through the existing Municipal Waste Processing Facility located north-west of the proposed development. The feasibility of this route is still being investigated. The internal sewer reticulation system will comply with



Figure 2: Proposed Bulk Sewer Pipelines Layout.

the minimum requirements of the Ga-Segonyana Municipality’s Engineering Department and SANS 1936. A new sewerage system consisting of 160 mm diameter HDPE PE 100 PN 12.5 pipes are proposed with individual Erf connections also to be supplied.

c. Stormwater

The level B housing subsidy provided by CoGHSTA for the proposed development allows for aboveground reticulation only, with no allowance for underground stormwater reticulation. Therefore all stormwater originating from the proposed development will be drained overland via the insitu roadside drains toward the non-perennial watercourse situated north of the proposed development where no proposed housing units are situated within the 1:100 year flood-line of this non-perennial watercourse.

d. Access and Roadways

The structural design of all pavement layers should provide a lifespan of at least 20 years. Structural designs of layers will be in accordance with TRH4, the “Red Book” requirements and the envisaged traffic. Ga-Segonyana Local Municipality requires a 10m wide road reserve with a 5m gravel top width. Keeping with the urban philosophy, the bell mouth radii will be kept at a minimum/ small as possible to accommodate as many new proposed houses as possible. The radii vary between 10m and 8m. The 10m radii where needed, were provided to accommodate refuse and fire trucks.

e. Electricity

No provisions for electricity are made, as the electrification of the proposed development does not form part of the scope of services or the current Level B Housing Subsidy.

b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN 734, 735 and 736	Description of project activity
Listed Activity as described in National Environmental Management Act, Government Notice Number 983 of 2014:	
<p>Activity 10 The development and related operation of infrastructure exceeding 1 000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes – (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more excluding where— (a) such infrastructure is for the bulk</p>	<p>The current proposal is to install a Bulk Sewer Pipeline that will run north of the proposed development’s location above the 1:50 year flood-line but below the 1:100 year flood-line of the Non-Perennial Watercourse. The proposed manholes will however be located above the 1:100 year flood-line. The proposed bulk sewer will pass underneath Buitekant Street through an existing culvert, run alongside the Kuruman River in a southern direction and finally connect to the existing pump station situated next to the Kuruman River adjacent to the bridge crossing</p>

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<p>transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve or railway line reserve; or (b) where such development will occur within an urban area.</p>	<p>on Buitekant Street. The proposed bulk sewer pipeline will be approximately 2 000 m in length.</p>
<p>Activity 12 The development of— (i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or (ii) infrastructure or structures with a physical footprint of 100 square metres or more;</p> <p>where such development occurs –</p> <p>(a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; — excluding— (aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies; (dd) where such development occurs within an urban area; (ee) where such development occurs within existing roads, road reserves or railway line reserves; or (ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.</p>	<p>Related to the proposed bulk sewer pipeline.</p>
<p>Activity 19 The infilling or depositing of any material of more than [5] 10 cubic metres into, or the dredging, excavation, removal or moving of</p>	<p>Related to the proposed bulk sewer pipeline.</p>

<p>soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse; but excluding where such infilling, depositing, dredging, excavation, removal or moving— (a) will occur behind a development setback; (b) is for maintenance purposes undertaken in accordance with a maintenance management plan; (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies; (d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or (e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies</p>	
<p>Activity 27 The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for: (i) The undertaking of a linear activity. (ii) Maintenance purposes undertaken in accordance with a maintenance management plan.</p>	<p>The clearance of more than 1 ha or but less than 20 ha is required for the proposed development site. Wrenchville Phase 2 Low-Cost Housing Development Kuruman, is approximately 10ha in extent.</p>

2. FEASIBLE AND REASONABLE ALTERNATIVES

“**alternatives**”, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this application as required by Appendix 1 (3)(h), Regulation 2014. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed.

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The determination of whether site or activity (including different processes, etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the, competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

a) Site alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
<p>The proposed development is situated within the John Taola Gaetsewe District, Ga- Segonyana Local Municipality. The total extent of the property is approximately 10 ha and is located approximately 3.5 Km North-East from the town centre of Kuruman along Buitenkant Street.</p> <p>The Applicant CoGHSTA is proposing to facilitate the development of the Wrenchville Phase 2 Low-Cost housing development on the Remainder of Erf 1, Kuruman, Northern Cape Province, in order to alleviate the current housing shortage within the Ga-Segonayana Municipality.</p> <p>Alternative 1 (preferred alternative) makes provision for all housing units (approximately 200) to fall outside of the 1:100 year flood-line and the riparian zone associated with the semi natural stream located along the northern boundary of the proposed Wrenchville Phase 2 Low-Cost housing development.</p>	27° 26'' 27.91' S	23° 27'' 36.99' E
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
N/A. There are no viable alternative sites currently earmarked by CoGHSTA for the proposed development.	N/A	N/A
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)
N/A	N/A	N/A

In the case of linear activities:

Alternative:

Alternative S1 (preferred)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

Alternative S2 (if any)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

Alternative S3 (if any)

- Starting point of the activity

Latitude (S):

Longitude (E):

27° 26' 25.66''	23° 27' 45.48''
27° 26' 16.24''	23° 27' 21.17''
27° 26' 26.43''	23° 26' 53.14''

27° 26' 25.66''	23° 27' 45.48''
27° 26' 19.82''	23° 27' 20.15''
27° 26' 26.43''	23° 26' 53.14''

N/A	N/A
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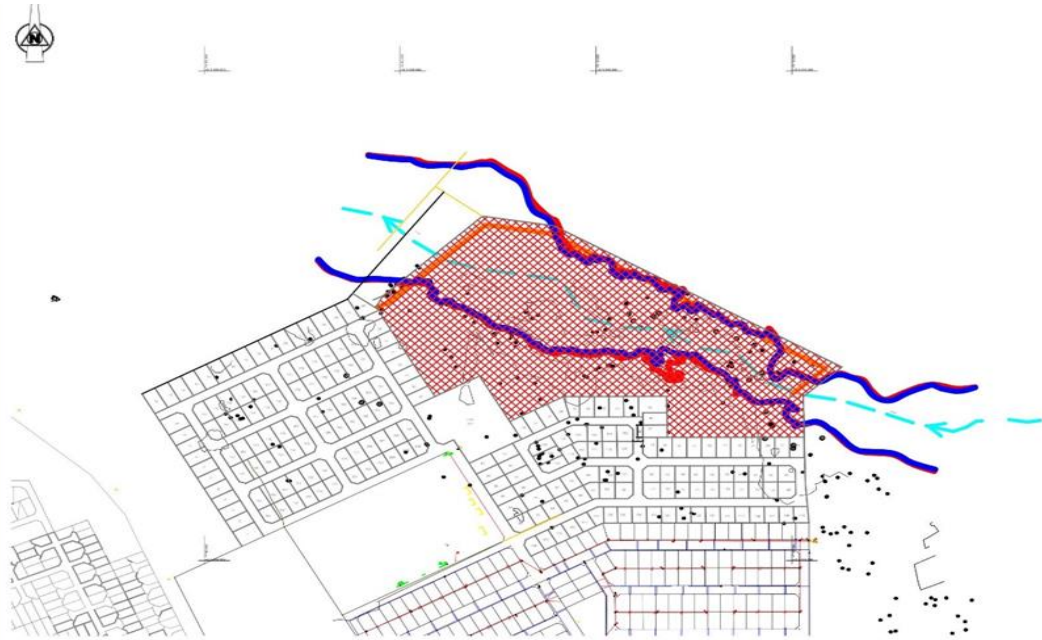
- Middle/Additional point of the activity
- End point of the activity

N/A	N/A
N/A	N/A


For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A of this form.

b) Lay-out alternatives

Alternative 1 (Preferred)		
Description	Lat (DDMMSS)	Long (DDMMSS)
<p>The proposed development is situated within the John Taola Gaetsewe District, Ga-Segonyana Local Municipality. The total extent of the property is approximately 10 ha and is located approximately 3.5 Km North-East from the town centre of Kuruman along Buitekant Street.</p> <p>The Applicant CoGHSTA is proposing to facilitate the development of the Wrenchville Phase 2 Low-Cost housing development on the Remainder of Erf 1, Kuruman, Northern Cape Province, in order to alleviate the current housing backlog within the Ga-Segonayana Municipality.</p> <p>Alternative 1 (preferred alternative) is approximately 10 ha and makes provision for all proposed housing units (approximately 200) to fall outside of the 1:100 year flood-line and the riparian zone associated with the semi natural stream located along the northern boundary of the proposed Wrenchville Phase 2 Low-Cost housing development.</p> <p>Alternative 1 (preferred) is the most feasible as it will not require a substantial amount of earthworks due to the fact the development footprint falls outside the heavily degraded and excavated 1:100 year flood-line and riparian zone of the semi-natural stream.</p> <div style="text-align: center;">  </div> <p>Figure 3: Preferred Layout Alternative</p>		

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Alternative 2 (Not Preferred)		
Description	Lat (DDMMSS)	Long (DDMMSS)
<p>Alternative 2 (not preferred) would be approximately 25 ha. This layout offers more residential development opportunity, however, this alternative will trigger Activity 15 in the Environmental Impact Assessment Regulations Listing Notice 2 of 2014, published under Government Notice No. 984 which will require a full EIA and Scoping process.</p> <p>Additionally, the severe extent of the dumping activities, will also result in significant financial expenditure to clean up and remove the rubble from the concerned property. The severely degraded and excavated nature of the area situated within the semi natural stream (dashed blue line in figure 4 below) will cause developmental constraints.</p> <p>Development within the 1:100 year flood-line delineation of the watercourse will also require a Water Use License, over and above the current legal obligation of the development, placing additional time and financial constraints on the development process.</p>	27°26' 27.91' S	23°27' 36.99' E
 <p style="text-align: center;">Figure 4: Alternative 2 (not preferred alternative)</p>		

Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)
N/A	N/A	N/A

c) Technology alternatives

Alternative 1 (preferred alternative)
The current proposal is to install a Bulk Sewer Pipeline that will run north of the proposed development's location above the 1:50 year flood-line but below the 1:100 year flood-line of the Non-Perennial Watercourse. The proposed manholes will however be located above the 1:100 year flood-line. Two layouts for the bulk sewer is proposed. Currently, as depicted in figure 2 on page 6 , the indicated yellow route diversion is the preferred alternative due to the fact that there will be less excavation which will have less developmental and financial constraints. Less excavation is also favorable due to the fact that development will occur on dolomite land although the dolomite where development will occur is categorized as Less Severe .
Alternative 2
Alternative 2 (not preferred) is due to the fact that it will have excavations of up to 6m in areas containing bedrock. Therefore, this alternative is not preferred as it might cause developmental and financial constraints.
Alternative 3
N/A

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Alternative 1 (preferred alternative)		
N/A		
Alternative 2		
N/A		
Alternative 3		
N/A		

e) No-go alternative

Should the activity not be approved the concerned property will remain in its poor state with numerous excavations, informal footpaths and dumping. The no-go alternative will bring about further degradation of the concerned property.

The proposed development is of utmost importance and is required to address the current housing backlog in the area. The proposed Wrenchville Phase 2 Low-Cost Housing development will improve the quality of life of the surrounding community. Direct temporary employment opportunities will be added to the market during the construction phase of the development.

Indirect employment opportunities might be created through upkeep and the maintenance of houses. The proposed Wrenchville Phase 2 Low-Cost housing development will thus have a **positive** socio-economic impact.

3. PHYSICAL SIZE OF THE ACTIVITY

a) Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative:

Alternative A1¹ (preferred activity alternative)
 Alternative A2 (if any)
 Alternative A3 (if any)

Size of the activity:

Approx. 10 ha
Approx. 25 ha
N/A

or, for linear activities:

Alternative:

Alternative A1 (preferred activity alternative)
 Alternative A2 (if any)
 Alternative A3 (if any)

Length of the activity:

Approx. 1.85 m
Approx 1.95 m
N/A

b) Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:

Alternative A1 (preferred activity alternative)
 Alternative A2 (if any)
 Alternative A3 (if any)

Size of the site/servitude:

N/A
N/A
N/A

4. SITE ACCESS

Does ready access to the site exist?

If NO, what is the distance over which a new access road will be built

YES	NO
Unknown m ³	

Describe the type of access road planned:

N/A

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

5. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

¹ "Alternative A.." refer to activity, process, technology or other alternatives.

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s);
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection).

6. LAYOUT/ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

The site or route plans must indicate the following:

- the property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites;
- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

7. SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;
- the 1:100 year flood line (where available or where it is required by DWS);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

8. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to

this report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

10. ACTIVITY MOTIVATION

Motivate and explain the need and desirability of the activity (including demand for the activity):

1. Is the activity permitted in terms of the property's existing land use rights?	YES	<input type="radio"/> NO	Please explain
The site is the original land from the town's establishment from which all other erven was subdivided.			
2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES	<input type="radio"/> NO	Please explain
The Goals and Objectives of the Provincial Spatial Development Framework relates to sustainability and sustainable development are premised on the National Directives put forward in the National Framework on Sustainable Development (DEA, 2008) and the National Strategy for sustainable development and Action Plan 2011-2014 (NSSD) (DEA, 2011). The proposed development will enhance social and economic development.			
(b) Urban edge / Edge of Built environment for the area	YES	<input type="radio"/> NO	Please explain
The Urban edge is currently undetermined.			
(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	<input type="radio"/> YES	NO	Please explain
The IDP and SDF related initiatives are by default required to be integrated into the Local Municipality planning tools and given their National significance are seen to override/ form part of the local planning. It is however noted that the approval of the proposed Wrenchville Phase 2 Low-Cost Housing development will create temporary employment opportunities and improve the livelihoods of the local community.			
(d) Approved Structure Plan of the Municipality	YES	<input type="radio"/> NO	Please explain
N/A. The proposed development will have minimal impacts on Municipal structures as the Remainder of Erf 1 is currently vacant and approximately 150 m away from the existing residential development of Wrenchville.			

BASIC ASSESSMENT REPORT

<p>(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)</p>	YES	NO	Please explain
<p>According to the botanical investigation conducted on the concerned property ,the property is not considered to be ecologically sensitive. The Remainder of Erf 1 supports Kuruman Thornveld with signs of severe disturbances in the form of numerous informal footpaths and excavations for informal dumping.</p> <p>Kuruman Thornveld is categorised as least threatened according to Mucina and Rutherford (2006). No plant species of conservation concern (Red List Species) were found on the concerned property.</p>			
<p>(f) Any other Plans (e.g. Guide Plan)</p>	YES	NO	Please explain
<p>N/A</p>			
<p>3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?</p>	YES	NO	Please explain
<p>The Integrated Development Plan (IDP) of the Ga- Segonyana Municipality (2019-2020) states that the housing backlogs must be addressed. Specific criteria for housing projects are:</p> <ul style="list-style-type: none"> • Formalization of existing townships; • New projects outlined and prepared for further development. This will at least provide for large scale mixed mode development in Kuruman that addresses the future needs of mining companies and commercial backlog. <p>The proposed Wrenchville Phase 2 Low-Cost Housing development on the Remainder of Erf 1, Kuruman will improve the quality of life of the existing community.</p>			
<p>4. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)</p>	YES	NO	Please explain
<p>The proposed development is of utmost importance and is required to address the current housing backlog/shortage in the area. The proposed Wrenchville Phase 2 Low-Cost Housing development will improve the quality of life of the surrounding community and create temporary employment opportunities.</p> <p>The mining industry is one of the main contributors to economic growth in the Northern Cape province. This development will improve the livelihoods of the workforce in the area, therefore this development will bring about positive socio-economic impacts.</p>			

BASIC ASSESSMENT REPORT

<p>5. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)</p>	YES	NO	Please explain
<p>Currently there is no bulk sewerage on the perimeter of the proposed development's location, but it is proposed to tie- into a proposed new sewer outfall that will form part of the bulk services investigation for the development.</p>			
<p>6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)</p>	YES	NO	Please explain
<p>All funds will be made available by the CoGHSTA.</p>			
<p>7. Is this project part of a national programme to address an issue of national concern or importance?</p>	YES	NO	Please explain
<p>It is well documented that there is lack of housing in South Africa. The proposed Wrenchville Phase 2 Low-Cost Housing development will bring much needed relief in an area in desperate need of housing.</p>			
<p>8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)</p>	YES	NO	Please explain
<p>The proposed Wrenchville Phase 2 Low-Cost Housing development on the Remainder of Erf 1 will be in line with the existing land uses as the proposed development will be bordered by existing residential communities to the west and south of the concerned property.</p>			
<p>9. Is the development the best practicable environmental option for this land/site?</p>	YES	NO	Please explain
<p>The proposed development is situated in close proximity to existing residential communities and Phase 1 of the Wrenchville development which consists of a school, thus limiting negative environmental impacts.</p>			
<p>10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?</p>	YES	NO	Please explain
<p>There are minimal negative environmental impacts associated with this development. There is a semi-natural stream with a riparian zone running at the northern boundary of the development. However the stream channel has been severely disturbed with numerous excavations and footpaths associated with informal dumping.</p>			

BASIC ASSESSMENT REPORT

11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES	NO	Please explain
<p>Development of the town is inevitable as the population grows and the need for affordable housing increases as well as addressing the current housing backlog in the area. However the client (CoGHSTA) have been meticulous as to where the expansion of the town occurs, with emphasis on the existing town's infrastructure and consolidation of the town and its resources/services, as well as the environmental aspects and thus can be seen as setting a precedent for the future expansion of Kuruman. The proposed development is also Phase 2 of which Phase 1 is the school located to the south of the development.</p>			
12. Will any person's rights be negatively affected by the proposed activity/ies?	YES	NO	Please explain
<p>No person's rights are expected to be negatively affected by the proposed development. The activity is expected to have a general positive impact on the residents of Wrenchville, Kuruman.</p>			
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES	NO	Please explain
<p>The urban edge is currently undetermined.</p>			
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES	NO	Please explain
<p>The proposed development will not directly contribute to the 17 SIP's, but the local community will benefit through an increase in social development stemming from the proposed development.</p>			
15. What will the benefits be to society in general and to the local communities?	Please explain		
<p>The proposed Wrenchville Phase 2 Low-Cost Housing development will have positive direct and indirect impacts on the community, such as safety and security and the improvement of quality of life and health. An improved quality of life and health will bring about a more productive work force, boosting the economy.</p> <p>The proposed development will also provide much needed additional housing opportunities which is a local, provincial and national need.</p> <p>Direct temporary employment opportunities will be added to the market during the construction phase of the development. Indirect employment opportunities might be created through upkeep and the maintenance of houses. The proposed Wrenchville Phase 2 Low-Cost housing development will thus have a positive socio-economic impact.</p>			
16. Any other need and desirability considerations related to the proposed activity?	Please explain		
<p>The activity will provide much needed additional housing opportunities and by providing employment opportunities during the construction phase of the development.</p>			

17. How does the project fit into the National Development Plan for 2030?	Please explain
<p>The National Development Plan 2030 states that housing strategies and more compact urban development to help people access public spaces and facilities, state agencies, and work and business opportunities should be promoted.</p> <p>The proposed Wrenchville Phase 2 Low-Cost Housing development is in line with the National Development Plan 2030 due to the fact that it will be situated only approximately 3.5km from the town centre of Kuruman, making it accessible for the residents of the proposed development. Furthermore, the proposed development is situated approximately 150m from the existing residential area of Wrencvhille therefore it can be characterised as a compact urban development.</p>	
18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.	
<p>The Impact Assessment process conforms to the principles of Integrated Environmental Management (IEM). The process attempts to identify all potential impacts as well as identify practical means by which the developer can develop the necessary mitigation measures to manage these impacts. The EIA process is structured in a way to identify environmental risks, lessen community conflict by actively promoting public participation, propose the means to minimise adverse environmental affects and inform all relevant government decision makers.</p> <p>The impact assessment will ensure that all environmental assessments are integrated into all aspects of the proposed project’s life cycle, construction/operation and decommissioning. The EIA process identified all possible impacts. These impacts were evaluated to determine the actual impact on the environment. The triple bottom approach was taken whereby the socio, economic and environmental impacts were assessed. This also ensured that Section 2(3) of NEMA was adhered to.</p> <p>Section 2(4) of NEMA was further taken into consideration to ensure that ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied.</p> <p>The development will be constructed in such a way as to ensure that pollution and degradation is avoided by the enforcing of the attached EMP.</p> <p>It is not foreseen that National and Cultural heritage will be disturbed by the proposed development.</p> <p>Waste will be minimized by the implementation of the attached Waste Minimization plan which forms part of the project EMP.</p> <p>Cultural impacts were assessed in an application submitted to the South African Heritage Resources Agency.</p> <p>Although few, the alternatives were also assessed as required by Section 23 (2) (b).</p> <p>A full public participation in accordance with Regulations 41 – 44 of the Environmental Impact Assessment (“EIA”) Regulations, 2014 (as amended) is being undertaken as part of this assessment.</p>	

19. Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.

The EIA process identified all possible impacts. These impacts were evaluated to determine the actual impact on the environment. The triple bottom approach was taken whereby socio, economic and environmental impacts were assessed. This also ensured that Section 2(3) of NEMA was adhered to.

Section 2(4) of NEMA was further taken into consideration to ensure that ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied.

The proposed development will be conducted in such a way as to ensure that pollution and degradation is avoided by enforcing the attached EMP.

It is not foreseen that any National or Cultural heritage will be disturbed by the proposed development.

Waste will be minimized by the implementation of the attached Waste Minimization plan which forms part of the project EMP.

Cultural impacts were assessed in an application submitted to the South African Heritage Resources Agency.

Although few, the alternatives were also assessed as required by Section 23(2)b.

A full public participation in accordance with Regulations 41 – 44 of the Environmental Impact Assessment (“EIA”) Regulations, 2014 (as amended) is being undertaken as part of this assessment.

11. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
In Terms Of The National Environmental Management Act, 1998 (Act No.107 Of 1998)	Project Requires Environmental Authorisation	Northern Cape Department Environment and Nature Conservation (DENC)	Pending
In Terms Of Section 38 Of The National Heritage Resources Act (Act 25 Of 1999)	Project Requires Record of Decision	South African Heritage Resources Agency (SAHRA)	Pending
In Terms of Section 21(c) and 21(i) of the National Water Act, 1998 (Act No. 36 of 1998)	Project Requires a Water Use Licence	Department of Water and Sanitation	Pending

12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

YES	NO
-----	----

If YES, what estimated quantity will be produced per month?

Unknown m ³	
------------------------	--

How will the construction solid waste be disposed of (describe)?

All construction solid waste will be removed from the site with large loading vehicles.

Where will the construction solid waste be disposed of (describe)?

Solid waste stemming from construction will be consolidated on site and removed as often as possible to the nearest registered landfill site.

Will the activity produce solid waste during its operational phase?

YES	NO
-----	----

If YES, what estimated quantity will be produced per month?

m ³	
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How will the solid waste be disposed of (describe)?

The solid waste removal will be disposed of in the Municipal Waste Stream.

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

Kuruman Landfill site.

Where will the solid waste be disposed of if it does not feed into a municipal waste stream (describe)?

N/A

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the NEM:WA?

YES	NO
-----	----

If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

Is the activity that is being applied for a solid waste handling or treatment facility?

YES	NO
-----	----

If YES, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

YES	NO
-----	----

If YES, what estimated quantity will be produced per month?

N/A	
-----	--

BASIC ASSESSMENT REPORT

Will the activity produce any effluent that will be treated and/or disposed of on site?

YES	NO
-----	----

If YES, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Will the activity produce effluent that will be treated and/or disposed of at another facility?

YES	NO
-----	----

If YES, provide the particulars of the facility:

Facility name:	N/A		
Contact person:	N/A		
Postal address:	N/A		
Postal code:	N/A		
Telephone:	N/A	Cell:	N/A
E-mail:	N/A	Fax:	N/A

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

N/A

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other than exhaust emissions and dust associated with construction phase activities?

YES	NO
-----	----

If YES, is it controlled by any legislation of any sphere of government?

YES	NO
-----	----

If YES, the applicant must consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If NO, describe the emissions in terms of type and concentration:

Dust emissions during the construction phase primarily from vehicles on access roads, will occur but this is deemed not significant.
--

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?

YES	NO
-----	----

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?

YES	NO
-----	----

If YES, is it controlled by any legislation of any sphere of government?

YES	NO
-----	----

Describe the noise in terms of type and level:

Noise will be generated from construction vehicles however this will be confined to the construction phase and during business hours only.
--

13. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es):

Municipal	Water board	Groundwater	River, stream, dam or lake	Other	The activity will not use water
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If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

N/A

Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs?

YES	NO
------------	----

If YES, please provide proof that the application has been submitted to the Department of Water Affairs.

Will be done once more detail pertaining to the bulk sewer pipeline becomes available.

14. ENERGY EFFICIENCY

Describe the design measures, if any, which have been taken to ensure that the activity is energy efficient:

N/A

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

N/A

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

- For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section B and indicate the area, which is covered by each copy No. on the Site Plan.

Section B Copy No. (e.g. A):

- Paragraphs 1 - 6 below must be completed for each alternative.

- Has a specialist been consulted to assist with the completion of this section?

YES	NO
-----	----

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property description/physical address:

Province	Northern Cape
District Municipality	John Taolo Gaetsewe District Municipality
Local Municipality	Ga- Segonyana Local Municipality
Ward Number(s)	13
Farm name and number	Remainder Erf 1
Portion number	N/A
SG Code	N/A

Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.

Current land-use zoning as per local municipality IDP/records:

The site is the original land from the town's establishment from which all other erven was subdivided. The site is currently vacant and the earthworks pertaining to the Wrenchville Phase 1 (School) development have started. Land use is currently undetermined.

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

Is a change of land-use or a consent use application required?

YES	NO
-----	----

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S2 (if any):

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S3 (if any):

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

2.1 Ridgeline	<input type="checkbox"/>	2.4 Closed valley	<input type="checkbox"/>	2.7 Undulating plain / low hills	<input checked="" type="checkbox"/>
2.2 Plateau	<input type="checkbox"/>	2.5 Open valley	<input type="checkbox"/>	2.8 Dune	<input type="checkbox"/>
2.3 Side slope of hill/mountain	<input type="checkbox"/>	2.6 Plain	<input checked="" type="checkbox"/>	2.9 Seafront	<input type="checkbox"/>
2.10 At sea	<input type="checkbox"/>				

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following?

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):	
	YES	NO	YES	NO	YES	NO
Shallow water table (less than 1.5m deep)	YES	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO	YES	NO	YES	NO
An area sensitive to erosion	YES	NO	YES	NO	YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted.

4. GROUNDCOVER

Indicate the types of groundcover present on the site. The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Natural veld - poor condition^E	Natural veld with scattered aliens^E	Natural veld with heavy alien infestation^E	Veld dominated by alien species^E	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an “E” is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn’t have the necessary expertise.

5. SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites?

Perennial River	YES	NO	UNSURE
Non-Perennial River	YES	NO	UNSURE
Permanent Wetland	YES	NO	UNSURE
Seasonal Wetland	YES	NO	UNSURE
Artificial Wetland	YES	NO	UNSURE
Estuarine / Lagoonal wetland	YES	NO	UNSURE

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

A semi-natural stream channel with an associated riparian area is located to the north of the proposed development area. The Kuruman Formal Landfill is located at the lower end of river reach, upstream of Buitekant Street. The stream channel has visible signs of severe disturbances and informal dumping.

Certain sections of the semi- natural stream has been excavated several metres below the original stream channel surface. Excavations has progressed to such an extent that no definitive stream is evident. The concerned area is not inundated with water at regular intervals or for prolonged periods of time to form Hydromorphic Soils (wetland conditions), therefore no additional wetland conditions were identified within the development area.

No significant impacts on existing Aquatic Ecosystems are expected as a result of the proposed Wrenchville Low-Income Housing Development Kuruman, Northern Cape Province.

6. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

Natural area	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station ^H
Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential ^A	Church	Agriculture
Retail commercial & warehousing	Old age home	River, stream or wetland
Light industrial	Sewage treatment plant ^A	Nature conservation area
Medium industrial ^{AN}	Train station or shunting yard ^N	Mountain, koppie or ridge
Heavy industrial ^{AN}	Railway line ^N	Museum
Power station	Major road (4 lanes or more) ^N	Historical building
Office/consulting room	Airport ^N	Protected Area
Military or police base/station/compound	Harbour	Graveyard
Spoil heap or slimes dam ^A	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (describe)

If any of the boxes marked with an "N" are ticked, how this impact will / be impacted upon by the proposed activity? Specify and explain:

N/A

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

N/A

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

N/A

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	YES	NO
Core area of a protected area?	YES	NO
Buffer area of a protected area?	YES	NO
Planned expansion area of an existing protected area?	YES	NO
Existing offset area associated with a previous Environmental Authorisation?	YES	NO
Buffer area of the SKA?	YES	NO

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A.

7. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the site? If YES, explain:

YES	NO
Uncertain	

N/A

If uncertain, conduct a specialist investigation by a recognised specialist in the field (archaeology or palaeontology) to establish whether there is such a feature(s) present on or close to the site. Briefly explain the findings of the specialist:

N/A

Will any building or structure older than 60 years be affected in any way?

YES	NO
YES	NO

Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

8. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

According to Census 2011 data the Ga-Segonyana Local Municipality has a population of 93 651. There was a 3,3% population growth between 2001 – 2011. In 2011 over 33% of the population was unemployed with a dependency ratio of 58%.

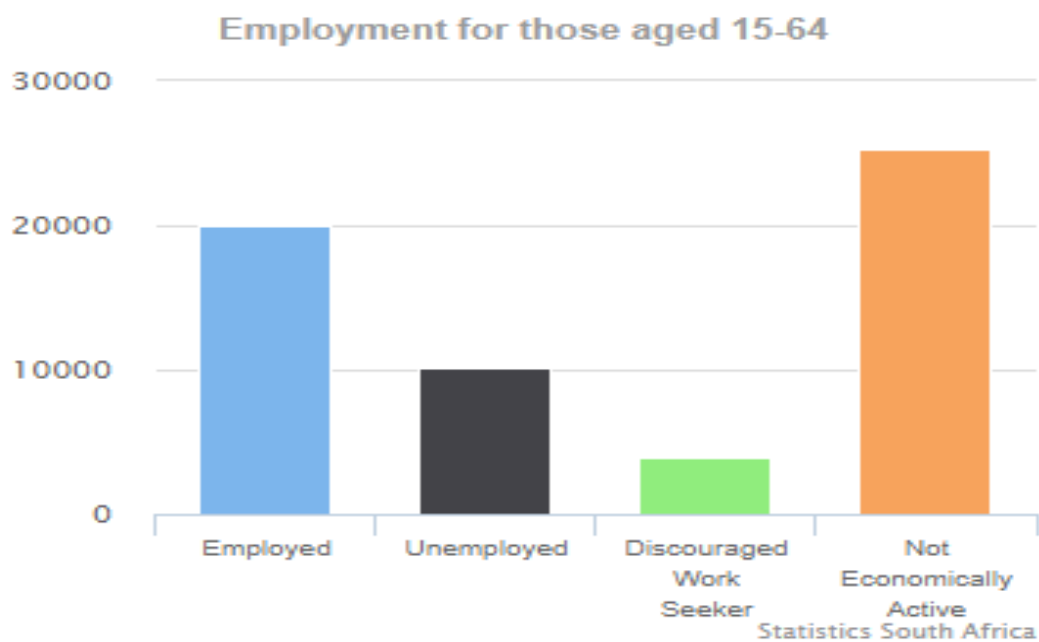


Figure 3: Level of Unemployment (StatsSA, Census, 2011).

Economic profile of local municipality:

The economy of the Ga-Segonyana Local Municipality is reliant on the mining, agricultural, tourism and commercial sector in and around Kuruman. Census 2011 data suggests that the mining industry makes up the highest share of the Gross Value Added (GVA) and employment market.

Ga- Segonyana is part of the Gamara Corridor, which has one of the richest and most sought after iron ore, manganese, diamond and lime resources in the world produced by various mining companies such as Khumba Iron Ore and BHP Billiton as stated by Housing Market Overview Human Settlements Mining Town Intervention (2008 -2013). The tourist attractions in the area includes the Kuruman Eye, the Kuruman Moffat Mission Station and the Wonderwerk Caves, the Kgalagadi Transfrontier Park is also situated in this region.

Level of education:

The level of education in the Ga-Segonyana Local Municipality is depicted in Figure 4 (below).

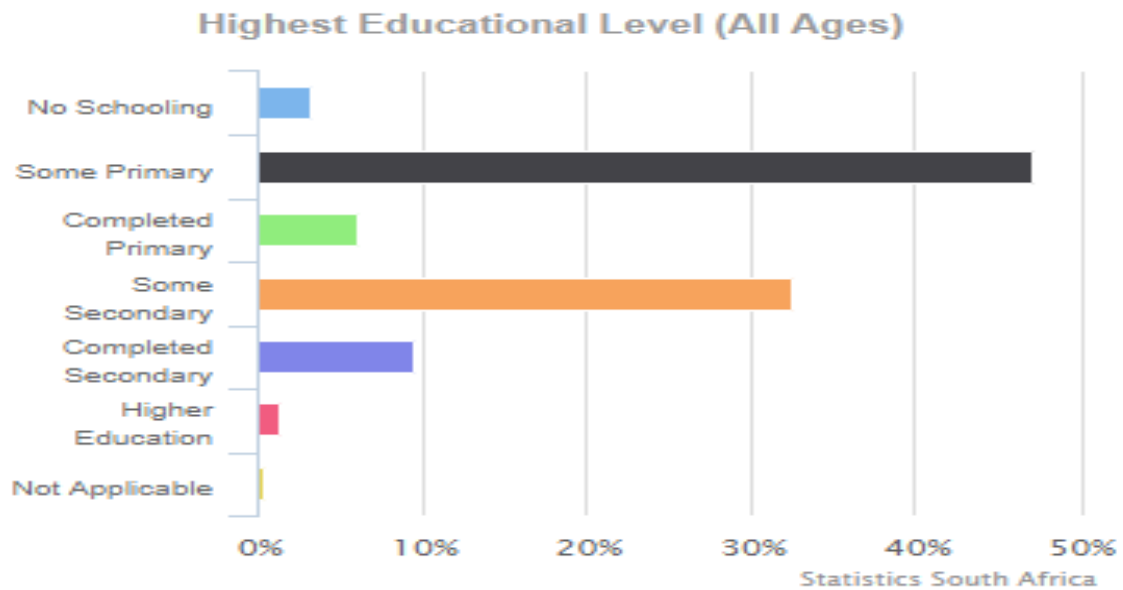


Figure 4: Level of Education (StatsSA, Census, 2011).

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?

Not Known at this stage.

What is the expected yearly income that will be generated by or as a result of the activity?

Not known at this stage.

Will the activity contribute to service infrastructure?

YES	NO
-----	----

Is the activity a public amenity?

YES	NO
-----	----

How many new employment opportunities will be created in the development and construction phase of the activity/ies?

Not Known at this stage

What is the expected value of the employment opportunities during the development and construction phase?

Not known at this stage

What percentage of this will accrue to previously disadvantaged individuals?

Not Known at this stage %

How many permanent new employment opportunities will be created during the operational phase of the activity?

Not Known at this stage

What is the expected current value of the employment opportunities during the first 10 years?	Not Known at this stage
What percentage of this will accrue to previously disadvantaged individuals?	Not known at this stage %

9. BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult <http://bgis.sanbi.org> or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

a) **Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)**

Systematic Biodiversity Planning Category				If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	No Natural Area Remaining (NNR)	N/A

b) **Indicate and describe the habitat condition on site**

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	50%	The area of the of the proposed Wrenchville Phase 2 Low-Cost Housing development falls within the vegetation type known as Kuruman Thornveld vegetation. This vegetation type is considered to be Least Threatened (LC) as only 2% of this vegetation type has been disturbed in addition to supporting a low number of threatened species.
Near Natural (includes areas with low to moderate level of alien invasive plants)	%	
Degraded (includes areas heavily invaded by alien plants)	40%	Excavations associated with informal dumping and the mining of gravel has taken place in a portion situated just north of the Wrenchville Phase 1 (school) development. The eastern tip of the site falls in an area where sand has been removed recently.

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Transformed (includes cultivation, dams, urban, plantation, roads, etc)	10%	The site is disturbed and livestock grazed over the area bringing about the dominance of grass such as <i>Rhynchelytrum repens</i> , <i>Aristida concasta</i> , <i>Enneapogon cenchroides</i> and the presence of weedy species such as <i>Tagets</i> , <i>Rumex</i> and <i>Zinnea</i> in the area provides proof thereof.
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c) Complete the table to indicate:

- (i) the type of vegetation, including its ecosystem status, present on the site; and
- (ii) whether an aquatic ecosystem is present on site.

Terrestrial Ecosystems		Aquatic Ecosystems								
Ecosystem threat status as per the National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	Critical	Wetland (including rivers, depressions, channelled and unchanneled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline			
	Endangered									
	Vulnerable									
	Least Threatened	YES	NO	UNSURE	YES	NO	YES	NO		

- d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

Vegetation Type

The concerned property comprises of natural Kuruman Thornveld vegetation and is considered as **Least Threatened (LC)** (Mucina & Rutherford, 2006) as only 2% of the vegetation type has been disturbed. The area is a mosaic of grasslands and thickets. The Kuruman Thornveld on the Remainder of Erf 1 is Least Threatened (LC) and in a **poor state** due to excavation and informal dumping.

The area is a mosaic of grasslands and thickets. Sixty seven (67) plant species were identified, of which four (4) species were weedy and the rest all classified as Least Concern (LC). *Wachelia (Acacia) eriobola* (Camel Thorn) trees are scattered over the site, but the dense and larger *Wachelia (Acacia) eriobola* trees fall outside of the development site. The number of *Wachelia (Acacia) eriobola* that will have to be removed, falls well within the acceptable limits.

Where the removal of Camel Thorn trees will be necessary a permit will have to be required from the Department of Agriculture, Fisheries and Forestry (DAFF), since these trees are protected under the National Forests Act, 1998 (Act No. 84 of 1998). **No** plant species of conservation concern (**Red List Species**) were found on the concerned property.

Aquatic Ecosystem

A semi natural stream with an associated riparian zone is located along the northern boundary of the concerned property. The Kuruman Formal Landfill site is located at the lower end of the river reach, upstream of Buitekant Street. The watercourse then flows through two 2.4m x 1.8m box culverts underneath Buitekant Street. The stream channel has visible signs of severe disturbance and informal dumping, to such an extent that **no definitive stream channel** is evident. Furthermore a sand quarry is situated in the north eastern corner of the proposed development area, within the stream channel Riparian Area.

The concerned area is not inundated with water at regular or prolonged periods of time to form Hydromorphic soils (wetland conditions).

Therefore no additional wetland conditions were identified within the development area. Currently the Draft Layout for the proposed Wrenchville Phase 2 Low-Income Housing Development, makes provision for all housing units of the development, to fall outside the 1:100 year Floodline Delineation of the semi-natural stream running along the northern boundary of the concerned property.

No significant impacts on existing Aquatic Ecosystems are expected as a result of the proposed Wrenchville Phase 2 Low-Cost Housing Development Kuruman, Northern Cape Province.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	Kalahari Bulletin	
Date published	18 July 2019	
Site notice position	Latitude	Longitude
Date placed	18 July 2019	

Include proof of the placement of the relevant advertisements and notices in Appendix E1.

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 733.

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 733

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
T. Molefe	Applicant (The Department of Co-Operative Governance Human Settlements and Traditional Affairs)	Tel: (053) 830 9514 Email: tmolefe@ncpg.gov.za
Ambrose Keetile	Kuruman Landfill (Waste Removal Manager)	Cell: 076 675 0924

Include proof that the key stakeholder received written notification of the proposed activities as Appendix E2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
N/A. This section will be updated after the 1 st Public Participation Period. (18 July 2019 - 21 August 2019).	N/A.

4. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to the Final BAR as Appendix E3.

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	Contact person (Title, Name and Surname)	Tel No	Fax No	e-mail	Postal address
Northern Cape Department of Environment And Nature Conservation	Ms. Naomi Mokonopi	053 773 1239		mokonopin@gmail.com	1279 Gaobepe Street Mothibistad 8474
John Taolo Gaetsewe District Municipality	Mr. John Swart	053 712 8700		swartj@taologaetsewe.gov.za	PO Box 1480 Kuruman 8460
Ga-Segonyana Local Municipality	Mr. Obakeng Monchusi	053 712 9384		otmonchusi@gmail.com	Cnr Voortreker & School Street Kuruman 8460

Include proof that the Authorities and Organs of State received written notification of the proposed activities as appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

6. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub-regulation to the extent and in the manner as may be agreed to by the competent authority.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as appendix E5.

Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

Activity	Impact summary	Significance	Proposed mitigation
Alternative 1 (preferred alternative)			
	<p><u>Direct impacts:</u></p> <p><u>Noise Impacts:</u> Temporary during construction phase.</p> <p><u>Visual Impacts:</u> Concerned property is currently an open field.</p> <p><u>Cultural/Heritage Impacts:</u> Undeveloped land.</p> <p><u>Biological Impacts:</u> Clearance of vegetation, close proximity of semi-natural stream.</p> <p><u>Socio- economic Impacts:</u> Provision of Low-Cost housing for community.</p>	<p><u>Noise Impacts:</u> Low</p> <p><u>Visual Impacts:</u> Low</p> <p><u>Cultural/Heritage Impacts:</u> Low</p> <p><u>Biological Impacts:</u> Low</p> <p><u>Socio-economic Impacts:</u> High; Positive</p>	<p><u>Noise Impacts:</u> Noise impacts will be restricted to the construction phase only and will only be temporary and restricted to business hours only. Therefore, no mitigation measures will be required.</p> <p><u>Visual Impacts:</u> It is not anticipated that there will be any visual impacts as the proposed development is surrounded by existing residential areas to the west and to the south of the proposed development site. Therefore, no mitigation measures will be required.</p> <p><u>Cultural Impacts:</u> It is not anticipated that the proposed development will have any negative impacts on any cultural or heritage related resources as no artefacts of historical or archaeological significance is expected on</p>

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
			<p>the site. Trees located within the proposed development site are not older than 60 years. Severe excavations and the commencement of Phase 1 have altered the proposed development site. Therefore, no mitigation measures are considered.</p> <p><u>Biological Impacts:</u> The concerned property comprises of natural Kuruman Thornveld and is considered as Least Threatened (LC) as only 2% of the vegetation type has been disturbed. However, it is in a poor condition due to numerous excavations and informal dumping. A semi-natural stream channel with an associated riparian zone is located to the north of the proposed development area. Certain sections of the semi-natural stream has been excavated several metres below the original stream channel surface. Excavations has progressed to such an extent that no definitive stream is evident. The concerned property has already been severely disturbed therefore, no mitigation measures are considered.</p> <p><u>Socio-economic Impacts:</u> The proposed Wrenchville Phase 2 Low-Cost Housing development will improve the quality of life of the surrounding community and create temporary employment opportunities. Direct temporary</p>

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
			<p>employment opportunities will be added to the market during the construction phase of the development. Indirect employment opportunities might be created through upkeep and the maintenance of houses.</p> <p>The mining industry is one of the main contributors to economic growth in the Northern Cape province. This development will improve the livelihoods of the workforce in the area, therefore this development will bring about positive socio-economic impacts. Due to the positive socio-economic impacts no mitigation measures are considered.</p>
	<p>Indirect impacts: No significant negative impacts are expected.</p>	N/A	N/A
	<p>Cumulative impacts: No significant negative cumulative impacts are expected.</p>	N/A	N/A
Alternative 2			
	<p>Direct impacts: <u>Noise Impacts;</u> Temporary during construction phase. <u>Visual Impacts;</u> Concerned property is currently an open field. <u>Cultural/Heritage Impacts;</u> Undeveloped land. <u>Biological Impacts;</u> Clearance of vegetation, close proximity of semi-natural stream. <u>Socio- economic Impacts;</u> Provision of Low-Cost housing for community.</p>	<p><u>Noise Impacts:</u> Low <u>Visual Impacts:</u> Low <u>Cultural/Heritage Impacts:</u> Low <u>Biological Impacts:</u> High; Negative <u>Socio-economic Impacts:</u> High; Negative</p>	<p><u>Noise Impacts:</u> Noise impacts will be restricted to the construction phase only and will only be temporary and restricted to business hours only. Therefore, no mitigation measures will be required. <u>Visual Impacts:</u> It is not anticipated that there will be any visual impacts as the proposed development is surrounded by existing residential areas to the west and to the south of the proposed</p>

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
			<p>development site. Therefore, no mitigation measures will be required.</p> <p><u>Cultural/Heritage Impacts:</u> It is not anticipated that the proposed development will have any negative impacts on any cultural or heritage related resources as no artefacts of historical or archaeological significance is expected on the site. Trees located within the proposed development site are not older than 60 years. Severe excavations and the commencement of Phase 1 have altered the proposed development site. Therefore, no mitigation measures are considered.</p> <p><u>Biological Impacts:</u> The proposed development will take place within the 1:100 year flood-line of the semi natural stream located at the northern boundary of the proposed Wrenchville Phase 2 Low-Cost housing development. This will cause further degradation of the semi natural stream and its associated riparian zone. The mitigation measures required will cause financial and developmental constraints.</p> <p><u>Socio-economic Impacts:</u> The construction of housing units within the 1:100 year flood-line will place significant time as well as financial constraints on the development, which</p>

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
			may bring the feasibility of this project into question. Commencing with alternative 1 (preferred alternative) would be the most desirable mitigation measure.
	Indirect impacts: No significant negative impacts are expected.	N/A	N/A
	Cumulative impacts: No significant negative cumulative impacts are expected.	N/A	N/A
Alternative 3			
	Direct impacts:	N/A	N/A
	Indirect impacts:	N/A	N/A
	Cumulative impacts:	N/A	N/A
No-go option			
	<p>Direct impacts:</p> <p><u>Noise Impacts:</u> Temporary during construction phase.</p> <p><u>Visual Impacts:</u> Concerned property is currently an open field.</p> <p><u>Cultural/Heritage Impacts:</u> Undeveloped land.</p> <p><u>Biological Impacts:</u> Clearance of vegetation, close proximity of semi-natural stream.</p> <p><u>Socio-economic Impacts:</u> Provision of Low-Cost housing for community.</p>	<p><u>Noise Impacts:</u> Low</p> <p><u>Visual Impacts:</u> Low</p> <p><u>Cultural/Heritage Impacts:</u> Low</p> <p><u>Biological Impacts:</u> High; Negative</p> <p><u>Socio-economic Impacts:</u> High; Negative</p>	<p><u>Noise Impact:</u> No noise impacts will occur due to no-go option. No mitigation needed.</p> <p><u>Visual Impacts:</u> No visual impacts will occur due to the no-go option. No mitigation measures needed.</p> <p><u>Biological Impacts:</u> Deterioration of the proposed development site will continue with excavation, informal dumping and footpaths occurring, leading to the loss of vegetation type and the further degradation of the stream channel and riparian area located to the north of the concerned property. The best option to minimise and mitigate these negative impacts, would be to commence</p>

Activity	Impact summary	Significance	Proposed mitigation
			<p>with the proposed development.</p> <p><u>Socio-economic Impacts:</u> The proposed development is of utmost importance and is required to address the current housing backlog in the area. The proposed Wrenchville Phase 2 Low-Cost Housing development will improve the quality of life of the surrounding community. Direct temporary employment opportunities will be added to the market during the construction phase of the development. Indirect employment opportunities might be created through upkeep and the maintenance of houses. Therefore, the No-Go option will result in negative socio-economic impacts and the best option to mitigate will be to commence with alternative 1 (preferred alternative).</p>
	<p>Indirect impacts: No significant negative impacts are expected.</p>	<p>N/A</p>	<p>N/A</p>
	<p>Cumulative impacts: No significant negative cumulative impacts are expected.</p>	<p>N/A</p>	<p>N/A</p>

A complete impact assessment in terms of Regulation 19(3) of GN 733 must be included as Appendix F.

2. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Alternative 1 (preferred alternative)

The proposed development is situated within the John Taola Gaetsewe District, Ga- Segonyana Local Municipality. The total extent of the property is approximately 10 ha and is located approximately 3.5 Km North-East from the town centre of Kuruman along Buitekant Street.

The Applicant CoGHSTA is proposing to facilitate the development of the Wrenchville Phase 2 Low-Cost housing development on the Remainder of Erf 1, Kuruman, Northern Cape Province, in order to alleviate the current housing backlog within the Ga-Segonayana Municipality.

Alternative 1 (preferred alternative) is approximately 10 ha and makes provision for all proposed housing units (approximately 200) to fall outside of the 1:100 year flood-line and the riparian zone associated with the semi natural stream located along the northern boundary of the proposed Wrenchville Phase 2 Low-Cost housing development.

Currently, the **only** structures proposed within this area, is the required **Bulk Sewer Pipeline** to service the proposed development. The Bulk Sewer Pipeline is proposed to be located below the 1:100 year Floodline of the concerned Non-Perennial Watercourse situated north of the proposed development, whilst the associated manholes are to be constructed above the 1:100 year Floodline Delineation.

Alternative 1 (preferred) is the most feasible as it will not require a substantial amount of earthworks due to the fact the development footprint largely falls outside the heavily degraded and excavated 1:100 year flood-line and riparian zone of the semi-natural stream.

a. Vegetation:

The vegetation type in the area is dominated by the Savana Biome which is the largest Biome in Southern Africa. According to Mucina and Rutherford (2006) the concerned property comprises of natural Kuruman Thornveld and is considered as **Least Threatened** as only 2% of the vegetation type has been disturbed.

A portion of the northern and eastern tip of the site has been mined in the past. The occurrence of gravel mining is observed in a portion of the site situated just north of the Wrenchville Phase 1 development (school). The eastern tip of the area falls in an area where red sand has been removed. Rubble has been dumped over approximately 20% of the site. The site is disturbed and livestock grazed over the area. The dominance of grass such as *Rhynchelytrum repens*, *Aristida concasta*, *Enneapogon cenchroides* and the presence of weedy species such as *Tagets*, *Rumex* and *Zinnea* in the area provides proof thereof.

The area is a mosaic of grasslands and thickets. Sixty seven (67) plant species were identified, of which four (4) species were weedy and the rest all classified as Least Concern (LC). *Wachelia (Acacia) eriobola* (camel thorn) trees are scattered over the site, but the dense and larger *Wachelia (Acacia) erioloba* trees fall outside of the development site. The number of *Wachelia (Acacia) erioloba* that will have to be removed, falls well within the acceptable limits. Where the removal of Camel Thorn trees will be necessary a permit will have to be required from the Department of Agriculture, Fisheries and Forestry (DAFF), since these trees are protected under the National Forests Act, 1998 (Act No. 84 of 1998).

The Kuruman Thornveld on the Remainder of Erf 1 is Least Threatened and in a poor state due to excavation and informal dumping. **No** plant species of conservation concern (**Red List Species**)

were found on the concerned property.

b. Aquatics:

A semi-natural stream channel with an associated riparian zone is located to the north of the proposed development area. The Kuruman Formal Landfill is located at the lower end of the river reach, upstream of Buitekant Street. The stream channel has visible signs of **severe disturbances** and informal dumping.

Certain sections of the semi-natural stream has been **excavated** several metres below the original stream channel surface. Excavations has progressed to such an extent that no definitive stream is evident. Furthermore a sand quarry is situated in the north eastern corner of the proposed development area, within the stream channel Riparian Area. The concerned area is not inundated with water at regular intervals or for prolonged periods of time to form Hydromorphic Soils (wetland conditions), therefore no additional wetland conditions were identified within the development area.

Currently the Draft Layout for the proposed Wrenchville Phase 2 Low-Income Housing Development, makes provision for all civils associated with the development, to fall outside the 1:100 year flood-line Delineation of the semi-natural stream running along the northern boundary of the concerned property. The watercourse running along the northern boundary of the proposed development which includes the entire riparian zone and 1:100 year flood-line delineation is considered to be “undevelopable”.

Based on the Site Inspection undertaken on 06 April 2019, consideration was given to General Notice 509 of 2016 for Section 21(c) or 21(i) Water Use Activities, as listed in the National Water Act, 1998 (Act No. 36 of 1998) pertaining to the proposed Wrenchville Phase 2 Low-Cost Housing Development. The location of the proposed **Bulk Sewer Pipeline** within the Riparian Area / defined 1:100 year Floodline Delineation of the concerned Non-Perennial Watercourse, constitutes the compilation of a DWS Risk Assessment Matrix contained in the Aquatic Constraints Analysis which can be found in Addendum D in this document.

The submission of a Water Use License (WUL) in terms of Section 21(c) and 21(i) of the National Water Act, 1998 (Act No. 36 of 1998) is hence **applicable** to the current development proposal. Additionally, should the current design proposal change in any way and additional structures be proposed within the 1:100 year Floodline Delineation, then the impacts of these structures on the surrounding Water Resources will have to be evaluated and included in the compiled Risk Assessment Matrix.

No significant impacts on existing Aquatic Ecosystems are expected as a result of the proposed Wrenchville Phase 2 Low-Cost Housing Development Kuruman, Northern Cape Province.

Alternative 2

Alternative 2 (not preferred) would be approximately 25 ha. This layout offers more residential development opportunity, however, this alternative will trigger Activity 15 in the Environmental Impact Assessment Regulations Listing Notice 2 of 2014, published under Government Notice No. 984 which will require a full EIA and Scoping process.

Additionally, the severe extent of the dumping activities, will also result in significant financial expenditure to clean up and remove the rubble from the concerned property. The severely

degraded and excavated nature of the area situated within the semi natural stream will cause **developmental constraints**.

Development within the 1:100 year flood-line delineation of the watercourse will also require a Water Use License, over and above the current legal obligation of the development, placing additional time and financial constraints on the development process.

The proposed Bulk Sewer Pipeline will have excavations of up to 6m in areas containing bedrock. Therefore, this alternative is not preferred as it might cause developmental and financial constraints.

Alternative 3

N/A

No-go alternative (compulsory)

Should the activity not be approved the concerned property will remain in its poor state with numerous excavations, informal footpaths and dumping. This will result in further degradation of the concerned property.

The proposed development is of utmost importance and is required to address the current housing backlog in the area. The proposed Wrenchville Phase 2 Low-Cost Housing development will improve the quality of life of the surrounding community

Direct temporary employment opportunities will be added to the market during the construction phase of the development.

Indirect employment opportunities might be created through upkeep and the maintenance of houses. The proposed Wrenchville Phase 2 Low-Cost housing development will thus have a **positive** socio-economic impact.

SECTION E. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

YES	NO
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If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment).

N/A

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application.

Kindly refer to the attached EMP

Is an EMPr attached?

YES	NO
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The EMPr must be attached as Appendix G.

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.

____ Cahlan Williams _____
NAME OF EAP

SIGNATURE OF EAP

DATE

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation

Appendix F: Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

Appendix H: Details of EAP and expertise

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information