Western Cape Government
Environmental Affairs and Development Planning

BETTER TOGETHER.

NEMA SECTION 24G APPLICATION COMPLETENESS CHECKLIST

IMPORTANT: Kindly ensure that this checklist is completed and attached to the NEMA SECTION 24G Application.

Please indicate by ticking the following below to serve as confirmation that the required information has been included in the application.

No.	Application Requirements	Please tick for confirmation
1.	Requirements of Preliminary Advertisement (pre-application public participation requirements including register of all I&APs), in accordance with Annexure A, Section D of the Section 24G Fine Regulations. **(Note: Failure to meet the Regulation 8 will result in rejection of the application)**	X
2.	Application form has been completed and attached, which includes among others:	X
	2.1. A list of all listed activities and/or waste management activities that was triggered when the development activity was commenced with.	X
	2.2. A list of all **similarly listed** activities in terms of the current EIA regulations (if applicable).	X
	2.3. A description of the receiving environment **before** commences of the activity(ies).	X
	2.4. A description of the receiving environment **after** commences of the activity(ies).	X
	2.5. All appendices and annexures:	X
	2.5.1. Locality map	X
	2.5.2. Site plans or/and Layout plan	X
	2.5.3. Building plans (if applicable)	NA
	2.5.4. Colour photographs	X
	2.5.5. Biodiversity overlay map	X
	2.5.6. Permit(s) / license(s) from any other organ of state including service letters from the municipality	X
	2.5.7. Public participation information: including a copy of the register of interested and affected parties, the comments and responses report, proof of notices, advertisements, Land owner consent and any other public participation information	X
	2.5.8. Environmental Management Programme	X
	2.5.9. Certified copy of Identity Document of Applicant	NA
	2.5.10. Certified copy of the title deed (or title deeds in the case of linear activities)	X
	2.6. Signed declaration forms.	X
3.	Are any specialist assessments required: e.g. Botanical, Hydro-geological, soil, socio-economic?	X - YES
	3.1. If yes, has the specialist assessment report been attached to the application?	X - YES
4.	An assessment of the impacts of the activity or activities in terms of the following categories:	X
	• Socio-economic	X
	• Biodiversity	X
	• Sense of place &/or Heritage/ Cultural	X
	• Any pollution or environmental degradation which has been, is being, is being or may be caused	X
5.	A methodology of how the investigation into the impacts associated with the unlawful activity was undertaken.	X
6.	Completed and attached representations of Annexure A, Section A (Directives) in terms of the S24G Fine Regulations: Information/ Representation submitted in terms of any Directives the Minister/ decision maker may issue in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA) s24G(1)(b)(i)-(viii).	X
7.	Completed and attached representations in terms of Annexure A, Section B (Deferral) of the S24G Fine Regulations.	X

8.	Completed and attached representations in terms of Annexure A, Section C, Part 1 (Fine Quantum based on the assessment as specified above (4)**.**	X
	Confirmation that Annexure A, Section C, Part 1 has been completed by an environmental assessment practitioner (EAP)	X
9.	Compliance history of the applicant:	X
	9.1. Completed Annexure A, Section C, Part 2 and 3; namely:	X
	9.1.1. Whether or not administrative enforcement notices, including pre -notices where appropriate, have previously been issued to the applicant in respect of a contravention of section 24F(1) of the NEMA and/or section 20(b) of the National Environmental Management: Waste Act (Act 59 of 2008) (NEM: WA).	X
	9.1.2. Whether or not the applicant has previously been convicted in respect of a contravention of section 24F(1) of the Act and /or section 20(b) of the NEM: WA;	X
	9.1.3. Whether or not the applicant has previously submitted a section 24G application in respect of an activity or activities which commenced prior to the activity or activities that are the subject of the current application; and	X
	9.1.4. Whether the applicant is a firm or a natural person. (see Section 24G Fine Regulations for definition of "firm")	X
	9.2. Provided information or whether or not any of the directors of the applicant firm are, or were, at the relevant time, directors of a firm to whom the above (9.1.1. - 9.1.3.) applies;	X
	9.3. Advise on whether an applicant who is a natural person is, or was, at the relevant time a director of a firm to whom the above (9.1.1.- 9.1.3.) may apply.	X
10.	Consultation with relevant State departments in terms of section 24O(2) & 24O(3) of the NEMA.	X
	10.1 Proof of Consultation with relevant State departments, including, *inter alia*, notices, adverts etc.	X
	10.2 Copies of comments and responses included in the application.	X
	10.2 Comments and Response report attached to the application.	X
11.	Public Participation Process undertaken in terms of Chapter 6 of the Environmental Impact Assessment Regulations, 2014 ("EIA Regulations, 2014") *(GN No. R.326 of 7 April 2017)* **(if conducted/undertaken)**	X

NEMA SECTION 24G APPLICATION FORM

Section 24G Application Form for the consequences of unlawful commencement of listed activity/ies in terms of the:

- **National Environmental Management Act, 1998 (Act No. 107 of 1998), ("NEMA");**
- **National Environmental Management: Waste Act, 2008 (Act 59 of 2008) ("NEM: WA")**

April 2018

Form Number S24GAF/04/2018

Kindly note that:

1. This application must be submitted where a person has commenced with a listed or specified activity without an environmental authorisation in contravention of section 24F(1) of NEMA (i.e. where the person commenced with an activity listed or specified in terms of section 24(2) (a) or (b) of NEMA - the activities contained in the EIA Listing Notices) or has commenced, undertaken or conducted a waste management activity without a waste management licence in terms of section 20 (b) of the NEM:WA.

2. This **Application Form** must be completed for all section 24G applications, by an independent Environmental Assessment Practitioner ("EAP").

3. This Application Form is current as of 01 April 2018. It is the responsibility of the Applicant/EAP to ascertain whether subsequent versions of the Application Form have been published or produced by the competent authority. Note that this Application Form replaces all the previous versions. This updated Application Form must be used for all new applications submitted from 01 April 2018.

4. **<u>The contents of this Application Form includes the following:</u>**

   PART 1 -
   Section A: Background Information
   Section B: Activity Information
   Section C: Description of Receiving Environment
   Section D: Need and Desirability
   Section E: Alternatives
   Section F: Impact Assessment, Management, Mitigation and Monitoring Measures
   Section G: Assessment Methodologies and Criteria, Gaps in Knowledge, underlying Assumptions and Uncertainties
   Section H: Recommendations of the EAP
   Section I: Representations - Response to an Incident or Emergency Situation
   Section J: Public Participation Process

   PART 2 –
   ANNEXURE A of Fine Regulations
   Section A: Directives
   Section B: Deferral of the Application
   Section C: Quantum of the section 24G fine
   Section D: Preliminary advertisement

   PART 3 –
   Appendices and Declarations

   PART 4 –
   ANNEXURE B: Waste Management Activity Supporting Information (if relevant)

5. An independent EAP must be appointed to complete the required sections (in terms of NEMA and its Regulations) of the Application Form on behalf of the applicant; the declaration of independence must be completed by the independent EAP and submitted with this Application Form. If a specialist report is required, the specialist will also be required to complete the declaration of independence.

6. Two hard copies (including the original) and one electronic copy (CD/DVD/Flash drive) of this application form must be submitted.

7. The required information must be typed within the spaces provided. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. The space provided extend as each space is filled with typing. **A legible font type and size must be used when completing the form.** A digital copy of the Application Form is available on the Department's website https://www.westerncape.gov.za/eadp/

8. The use of "not applicable" in the Application Form must be done with circumspection.

9. **No faxed or e-mailed application forms will be accepted.**

10. Unless protected by law, all information contained in and attached to this application will become public information on receipt by the competent authority. Please note that, unless exemption has been granted in terms of the National Exemption Regulations published under GN R994 in GG 38303 of 8 December 2014, any Interested and Affected Party should be provided with the information contained in and attached to this Application Form as well as any subsequent information submitted.

11. This Application Form must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department.

PROCESS TO BE FOLLOWED:

a) **Prior to submission of an Application Form,** the applicant is required to undertake a pre-application public participation process in terms of Regulation 8 of the Regulations relating to the procedure to be followed and criteria to be considered when determining an appropriate fine in terms of section 24G published in the Government Gazette on 20 July 2017, Gazette No 40994, No. R. 698 ("Section 24G Fine Regulations").

b) Together with the submission of a section 24G Application Form, the form **must include Proof of compliance of with Regulation 8** of the Section 24G Fine Regulations, including, but not limited to, proof of the pre-application advertisement in a local newspaper and register of I&APs.

c) The Department will acknowledge receipt of the application (within 14 days) and provide the Applicant / EAP with the relevant application reference number to be used in all future correspondence and the application public participation processes.

d) Upon receipt of the application, the MEC/Competent Authority may direct the applicant in terms of section 24G(1)(i-viii) of the NEMA.

e) In terms of the provisions of section 24G of NEMA, the applicant must pay an administrative fine up to a maximum of R5 million before the MEC/Competent Authority decides on the application.

f) The applicant **must within 14 days** of receipt of the determination of the quantum of the fine, ensure that all registered interested and affected parties are notified of the determination of the quantum of the fine, including the reasons and provided with access to the determination.

g) The administrative fine **must be paid within the time period stipulated** in the determination. Failure to pay the fine within the specified period, will result in the lapse of the application and any partial amounts paid in will not be refunded.

h) **Proof of payment of the fine must be submitted to the Department**. Upon payment of the administrative fine, the MEC/Competent Authority may-

- refuse to issue an environmental authorisation; or
- issue an environmental authorisation to such person to continue, conduct or undertake the activity subject to such conditions as may be deemed necessary, which environmental authorisation shall only take effect from the date on which it has been issued; or
- direct the applicant to provide further information or take further steps prior to making a decision provided for above;
- together with the above decision the MEC/Competent Authority may direct a person to rehabilitate the environment within such time and subject to such conditions as may deem necessary or take any other steps necessary under the circumstances.

PLEASE NOTE THE FOLLOWING:

1. Failure to comply with a directive may result in the institution of appropriate legal action as is deemed necessary and as provided for in the legislation.

2. The submission of an application or the granting of an environmental authorisation shall in no way derogate from—

(a) the environmental management inspector's or the South African Police Services' authority to investigate any transgression in terms of NEMA or any specific environmental management Act;
(b) the National Prosecuting Authority's legal authority to institute any criminal prosecution.

3. If, at any stage after the submission of an application it comes to the attention of the Minister, Minister for mineral resources or MEC that the applicant is under criminal investigation for the contravention of or failure to comply with section 24F(1) or section 20(b) of the *National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)*, the Minister, Minister for mineral resources or MEC may defer a decision to issue an environmental authorisation until such time that the investigation is concluded and—
   (a) the National Prosecuting Authority has decided not to institute prosecution in respect of such contravention or failure;
   (b) the applicant concerned is acquitted or found not guilty after prosecution in respect of such contravention or failure has been instituted; or
   (c) the applicant concerned has been convicted by a court of law of an offence in respect of such contravention or failure and the applicant has in respect of the conviction exhausted all the recognised legal proceedings pertaining to appeal or review.

4. A person is guilty of an offence if that person:

   - Prior to submission of a section 24G application:
     - fails, in terms of Regulation 8(1), to place a preliminary advertisement in a local newspaper in circulation in the area in which the activity was, or activities were, commenced and on the applicant's website, if any or
     - fails, in terms of Regulation 8(2), to comply with the advertisement requirements set out in Annexure A, section D or
     - fails, in terms of Regulation 8(3), to open and maintain a register of interested and affected parties)); or
     - fails, in terms of Regulation 8(4), to attach to the application form the register of interested and affected parties, which must be included in the report, or form part of the information submitted in terms of section 24G(1) of NEMA.

   - Provides incorrect, false or misleading information in any form, including in any document submitted to a competent authority in terms of the Section 24G Fine Regulations or omits information that may have an influence on the outcome of a recommendation of the fine committee or determination of the competent authority.

5. A person convicted of an offence in terms of these Regulations is liable to a fine not exceeding R5 million or to imprisonment for a period not exceeding 5 years, and in the case of a second or subsequent conviction to a fine not exceeding R10 million or to imprisonment for a period not exceeding 10 years, and in both instances to both such fine and such imprisonment.

DEPARTMENTAL DETAILS

Department of Environmental Affairs and Development Planning,
Directorate: Environmental Governance
Attention: Sub-directorate: Rectification
Private Bag X9086
Cape Town, 8000

Registry Office
1st Floor Utilitas Building
1 Dorp Street, Cape Town

Queries should be directed to the Sub-directorate: Rectification at:
Tel: (021) 483-5827 Fax: (021) 483-4033

DEPARTMENTAL REFERENCE NUMBER(S) (for official use)

File Reference number (S24G)	
Administrative Fine Reference	

DEPARTMENTAL REFERENCE NUMBER(S) (to be completed by the EAP)

File Reference number (Enforcement), if applicable	I 4/2/4/2/2/B4/I 8/0012/I 8
File reference number (EIA), if applicable:	
File reference number (Waste), if applicable:	
File reference number (Other (specify)):	

View the Department's website on http://www.westerncape.gov.za/eadp for the latest version of the documents

PART 1

PROJECT TITLE

S24G APPLICATION – ERF 9445 IDAS VALLEY STELLENBOSCH

RELEVANT REGION IN WHICH THE ACTIVITY COMMENCED

Cross out the appropriate box "☒" in which region the unlawful activity/ies has commenced.

REGION 1 City of Cape Town and West Coast District	REGION 2 Cape Winelands District and Overberg District	REGION 3 Central Karoo District and Eden District
	X	

SECTION A: BACKGROUND INFORMATION

1. APPLICANT PROFILE INDEX

Cross out the appropriate box "☒".

1.1	The applicant is a Natural Person (individual)					
1.2	The applicant is a Firm (i.e. any body incorporated by, or established in terms of, any law as well as any partnership, trust, parastatal or organ of state)					
1.2.1	If a firm, please tick the relevant box below:					
	Body Corporate	Partnership	Trust	Parastatal	Organ of State	
	Directors of a Company	Members of a Board	Other, please specify			
1.3	The applicant is a state-owned enterprise or municipality or State Department					X

Applicant's details (duplicate this section where there is more than one applicant)	Stellenbosch Municipality		
Applicant Name:	Stellenbosch Municipality		
RSA Identity Number/ Passport Number of Applicant, if natural person:	NA		
Name of Firm (if applicable):	NA		
Firm Registration Number:	NA		
Contact Person at the Firm:	Myra Francis		
List of all (as applicable at the relevant time):	Please insert the names and RSA ID numbers of the relevant persons below – **(In the list below, delete the firms that are not applicable to this application)**		
● Directors of a company; or ● Members of the board; or ● Executive committee or other managing body of a corporate body or parastatal; or ● Members of close corporation; or ● Partners of a partnership; or ● Trustees of a trust	Name: RSA ID No. Name: RSA ID No. Name: RSA ID No. Name: RSA ID No. Name: RSA ID No. Name: RSA ID No.		
Postal address:	P.O Box 17		
	Stellenbosch	Postal code:	7600
Telephone:	021 808 8760	Cell:	079 453 5052
E-mail:	Myra.Francis@stellenbosch.co.za	Fax:	NA
Project Consultant	ASLA Devco		
Contact person:	Karen Siebrits		
Postal address:	P.O. Box 118		
	Gordons Bay	Postal code:	7151
Telephone:	021 845 8335	Cell:	NA
E-mail:	karen@asla.co.za	Fax:	021 845 8552
Name of the Environmental Assessment Practitioner ("EAP") responsible for the application:	Eco Impact Legal Consulting (Pty) Ltd		
Company name (if any):	Jessica Hansen		
Postal address:	P.O. Box 45070		
	Claremont	Postal code:	7735

Telephone:	021 671 1660	Cell:	083 666 8046
E-mail:	admin@ecoimpact.co.za	Fax:	021 671 9976
EAP Qualifications	Jessica has a BSc (Honours) in Environmental and Geographical Science in 2011 from the University of Cape Town and subsequently obtained her MSc in Zoology in 2013. Jessica has worked as an Environmental Assessment Practitioner since August 2013 and has been involved in the compilation, coordination and management of Basic Assessment Reports, Environmental Impact Assessments, Environmental Management Programmes, Waste Licence Applications, Water Use Licence Applications and Baseline Biodiversity Surveys for numerous clients. See EAP CV under Appendix M3.		
EAP Registrations/Associations	SACNASP- Professional Natural Scientist in the field of practice Environmental Science (Registration number 400192/16)		
Name of the Landowner:	Stellenbosch Municipality		
Name of the contact person for the land owner (if other):	NA		
Postal address:	P.O Box 17		
	Stellenbosch	Postal code:	7600
Telephone:	021 808 8760	Cell:	079 453 5052
E-mail:	Myra.Francis@stellenbosch.co.za	Fax:	NA
Person in control of land:	Stellenbosch Municipality		
Contact person:	Myra Francis		
Postal address:	P.O Box 17		
	Stellenbosch	Postal code:	7600
Telephone:	021 808 8760	Cell:	079 453 5052
E-mail:	Myra.Francis@stellenbosch.co.za	Fax:	NA

Please note:

In instances where there is more than one landowner, please attach a list of landowners with their contact details to the back of this form.

A certified copy of the applicant's (if natural person), alternatively a director's (as defined), Identity Document must be attached to the application.

A certified copy of the title deed of the property/s on which the unlawful listed activity/ies has commenced must be attached to the application.

Municipality in whose area of jurisdiction the activity falls:	Stellenbosch Municipality		
Contact person, if known:	Myra Francis		
Postal address:	P.O Box 17		
	Stellenbosch	Postal code:	7600
Telephone	021 808 8760	Cell:	079 453 5052
E-mail:	Myra.Francis@stellenbosch.co.za	Fax:	NA

Please note:

In instances where there is more than one Municipality involved, please attach a list of Municipalities with their respective contact details to the form.

Property location(s):	Erf 9445 situated in Lindida, Idas Valley, Stellenbosch.
Farm/Erf name(s) & number(s) including portion(s)	Erf 9445
Property size(s) (m^2)	51600
Development footprint size(s) (m^2)	8000
SG21 Digit code(s)	C06700220000944500000

Property boundary:

Point	Latitude (S)	Longitude (E)
1	33°55'4.75"South	18°53'20.13"East
2	33°55'8.87"South	18°53'24.35"East
3	33°54'54.39"South	18°53'26.94"East
4	33°54'56.67"South	18°53'32.35"East

The co-ordinates for the site boundary are:

Point	Latitude (S)	Longitude (E)
1	33°55'4.75"South	18°53'20.13"East
2	33°55'8.87"South	18°53'24.35"East
3	33°54'54.39"South	18°53'26.94"East
4	33°54'56.67"South	18°53'32.35"East

Please note: Where numerous properties/sites are involved (e.g. linear activities), attach a list of property descriptions and street addresses to the consultation form.

Street address:	Starking Road		
Magisterial District or Town:	Stellenbosch		
Closest City/Town:	Idas Valley, Lindida	Distance	0 (km)
Zoning of Property:	Residential		

Please note:

In instances where there is more than one zoning applicable, please attach a list or map of the properties indicating their respective zoning to the Application Form.

Was the property rezoned after commencement of activities?	YES	~~NO~~
If yes, what was the previous zoning?		
Previous zoning was PUBLIC OPEN SPACE. See Appendix M1. On the 23rd of November 2017, the property was changed from PUBLIC OPEN SPACE to Sub-divisional Area for the 166 Single Residential Zone properties, 3 Public Open Space Zone properties and I Local Authority Zone. Construction of the gabions commenced in June 2017.		
Is a rezoning application required?	~~YES~~	NO
Is a consent use application required?	~~YES~~	NO

Locality map:	A locality map must be attached to the Application Form as an appendix. The scale of the locality map must be 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: • an accurate indication of the project site position as well as the positions of the alternative sites, if any; • road names or numbers of all the major roads as well as the roads that provide access to the site(s) • a north arrow; • a legend; • the prevailing wind direction; and • GPS co-ordinates (Indicate the position of the proposed 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 WGS-84 spheroid in a national or local projection)
Landowner(s) Consent:	If the applicant is not the owner or person in control of the land on which the activity has been undertaken, he/she must obtain written consent from all landowners or persons in control of the land (of the site and all alternative sites). This must be attached to this document as Appendix G. Such consent must indicate whether or not the owner or person in control of the land would support approval of the application and that the land need not be rehabilitated. **Note:** The consent of the landowner or person in control of the land is not required for: a) linear activities; b) an activity directly related to prospecting or exploration of a mineral and petroleum resource or extraction and primary processing of a mineral resource; or c) strategic integrated projects ("SIPs") as contemplated in the *Infrastructure Development Act, 2014 (Act No. 23 of 2014*).

2. APPLICATION HISTORY

(Cross out the appropriate box "☒" and provide a description where required).

Has any national, provincial or local authority considered any development applications on the property previously?	Yes	~~No~~
If so, please give a brief description of the type and/or nature of the application/s as well as a reference number, if applicable: (In instances where there was more than one application, please attach a list of these applications)		
On the 02 September 2014 an EA Application was submitted to DEADP for a housing development on erf 11330 and erf 9445. On the 19th of February 2016 the Final BAR was rejected by DEADP. It was then decided to split the BAR and complete two separate applications. Erf 11330 went on to be approved and the EA was granted in favour of Stellenbosch Municipality. EIA Ref: 16/3/1/1/B4/45/1105/14. The layout for ERF 9445 was amended to exclude the wetland from the development area in an effort to protect the environment and to "de-list" the proposed activity on erf 9445. On the 15th of September 2016, a checklist for NEMA applicability was submitted to DEADP. On the 24th of February 2017, DEADP indicated that the proposed development would not require an Environmental Authorisation. The checklist indicated that the infrastructure would be situated outside the non-perennial river and would not result in the infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres. Checklist Ref: 16/3/3/6/1/B4/45/1275/16.		
Which authority considered the application:		
DEA&DP: Development Management (Region 2)		
Has <u>any</u> one of the previous application/s on the property been approved **or** refused? If so provide a list of the successful and unsuccessful application/s and the reasons for decision(s).	Yes	~~No~~
On the 02 September 2014 an EA Application was submitted to DEADP for a housing development on erf 11330 and erf 9445. On the 19th of February 2016 the Final BAR was rejected by DEADP. It was then decided to split the BAR and complete two separate applications. Erf 11330 went on to be approved and the EA was granted in favour of Stellenbosch Municipality. EIA Ref: 16/3/1/1/B4/45/1105/14. The layout for ERF 9445 was amended to exclude the wetland from the development area in an effort to protect the environment and to "de-list" the proposed activity on erf 9445. On the 15th of September 2016, a checklist for NEMA applicability was submitted to DEADP. On the 24th of February 2017, DEADP indicated that the proposed development would not require an Environmental Authorisation. The checklist indicated that the infrastructure would be situated outside the non-perennial river and would not result in the infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres. Checklist Ref: 16/3/3/6/1/B4/45/1275/16.		
Provide detail on the period of validity of decision and expiry dates of the above applications/ permits etc.		
NA		

SECTION B: ACTIVITY INFORMATION

1. ACTIVITIES APPLIED FOR

I hereby apply in terms of section 24G of the National Environmental Management Act (Act 107 of 1998) for the regularisation of the unlawful commencement or continuation of the listed or waste management activities as specified in Section B:1 below.

Applicant (Full names): Petrus Du Plessis Smit **Signature:** _____

Place: Stellenbosch **Date:** 2018.07.30

EAP (Full names): Jessica Hansen **Signature:** Hansen

Place: Kenilworth **Date:** 2019.01.21

All listed activities associated with the development must be indicated below.

1.1 Applicable EIA listed activities

ECA EIA Contraventions: between 08 September 1997 and end of 09 May 2002			
Activities commenced with on or after 08 September 1997 and before end 09 May 2002: EIA regulations promulgated in terms of the ECA, Act 73 of 1989			
Government Notice No. ("GN") R1182 Activity No(s):	Describe the relevant listed activity/ies in writing as per GN No. 1182 of 1997	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
NA			
ECA EIA Contraventions: between 10 May 2002 and end of 02 July 2006			
Activities unlawfully commenced with on or after 10 May 2002 and before end 02 July 2006: EIA regulations promulgated in terms of the ECA, Act 73 of 1989,			
NA			
NEMA EIA Contraventions: between 03 July 2006 and end of 01 August 2010			
Activities unlawfully commenced with on or after 03 July 2006 and before end 01 August 2010: EIA regulations promulgated in terms of the NEMA			
GN R386 Activity No(s): **(Listing Notice 1 of 2006)**	Describe the relevant listed activity/ies in writing as per GN No. R. 386 of 2006 ("NEMA 2006 Basic Assessment listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
NA			
Government Notice No. R387 Activity No(s): **(Listing Notice 2 of 2006)**	Describe the relevant listed activity/ies in writing as per GN No. R. 387 of 2006 ("NEMA 2006 Scoping/EIA listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
NA			
NEMA EIA Contraventions: between 02 August 2010 and end of 07 December 2014			
Activities unlawfully commenced with on or after 02 August 2010 and before end 07 December 2014: EIA regulations promulgated in terms of the NEMA, Act 107 of 1998,			
GN No. R. 544 Activity No(s): **(Listing Notice 1 of 2010)**	Describe the relevant listed activity(ies) in writing as per GN No. R. 544 of 2010 ("NEMA 2010 Basic Assessment listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
NA			
GN No. R. 545 Activity No(s): **(Listing**	Describe the relevant listed activity/ies in writing as per GN No. R. 545 of 2010. (NEMA 2010 Scoping/EIA listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity

Notice 2 of 2010)			
NA			
GN No. R. 546 Activity No(s): **(Listing Notice 3 of 2010)**	Describe the relevant listed Activity(ies) in writing as per GN No. R. 546 of 2010	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
NA			
NEMA EIA Contraventions: on or after 08 December 2014			
Activities unlawfully commenced with on or after 08 December 2014: EIA regulations promulgated in terms of the NEMA, Act 107 of 1998,			
GN No. R. 327 Activity No(s): **(Listing Notice 1 of 2014)**	Describe the relevant listed activity(ies) in writing as per GN No. R.327 of 2014 ("NEMA 2014 Basic Assessment listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
19	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from- (i) a watercourse	The excavation and construction of the gabion wall within the drainage line resulted in the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres. Should the activity be authorized, activity 19 would also be triggered by the housing development as housing (25 erven) and roads are proposed within the delineated wetland. See Figure 3 in Appendix E.	June 2017
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; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	Should the activity be authorized, further indigenous vegetation (more than 1 hectare) would be cleared on site for the proposed housing development.	Not yet commenced
GN No. R. 325 Activity No(s): **(Listing Notice 2 of 2014)**	Describe the relevant listed activity(ies) in writing as per GN No. R.325 of 2014 ("NEMA 2014 Scoping/EIA listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
NOT APPLICABLE			
GN No. R. 324 Activity No(s): **(Listing Notice 3 of 2014)**	Describe the relevant listed activity(ies) in writing as per GN No. R.324 of 2014	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
12	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. i. Western Cape	The excavation and construction of the gabion wall resulted in the clearance of an area of more than 300 square metres of indigenous vegetation. The site was zoned PUBLIC OPEN SPACE prior to November 2017.	June 2017

	iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning.	Should the activity be authorized, further indigenous vegetation would be cleared on site for the proposed housing development.	

Please ensure that you have provided the similarly listed activities if the listed activities were commenced before the period the EIA Regulations came into effect, i.e. before 08 December 2014.

1.2 Applicable Waste Management Activities

List the relevant waste management activity/ies applied for:

Waste Management Activity Contraventions: On or after 03 July 2007 up to end of 28 November 2013			
Activities unlawfully commenced with in terms of GNR 718 of 03 July 2009 under the National Environmental Management Waste Act, Act 59 of 2008			
GN No. 718 – Category A Activity No(s):	Describe the relevant Category A waste management activity/ies in writing.	Describe the portion of the development as per the project description that relates to the applicable waste activity.	State the date of commencement of each activity
NOT APPLICABLE			
GN No. 718 – Category B Activity No(s):	Describe the relevant Category B waste management activity/ies in writing.	Describe the portion of the development as per the project description that relates to the applicable waste activity.	State the date of commencement of each activity
NOT APPLICABLE			

Waste Management Activity Contraventions: On or after 29 November 2013			
Activities unlawfully commenced with in terms of GNR 921 of 29 November 2013 under the National Environmental Management Waste Act, Act 59 of 2008,			
GN No. 921 - Category A Activity No(s):	Describe the relevant Category A waste management activity/ies in writing.	Describe the portion of the development as per the project description that relates to the applicable waste activity.	State the date of commencement of each activity
NOT APPLICABLE			
GN No. 921 – Category B Activity No(s):	Describe the relevant Category B waste management activity/ies in writing.	Describe the portion of the development as per the project description that relates to the applicable waste activity.	State the date of commencement of each activity
NOT APPLICABLE			

Please note:

The National Department of Environmental Affairs is the competent authority for activities regarded as hazardous waste. Such activities must be indicated as hazardous waste in the abovementioned lists.

Only those activities listed above shall be considered for authorisation. The onus is on the applicant to ensure that all applicable listed activities are included in the application. If a specific listed activity is not included in an Environmental Authorisation, an application for amendment or a new application for Environmental Authorisation will have to be submitted.

1.3 Activities listed similarly in terms of the EIA Regulations

Kindly indicate the listed activities in terms of the EIA Regulations that is listed similar to the unlawfully commenced activities. The descriptions provided below must clearly state why the activity/development is still similarly listed in terms of the EIA Regulations, 2014.

The similarly listed activities in terms of the EIA Regulations promulgated in terms of the NEMA, Act 107 of 1998,		
GN No. R. 327 Activity No(s): **(Listing Notice 1 of 2014)**	Describe the relevant listed activity(ies) in writing as per GN No. R.327 of 2014 ("NEMA 2014 Basic Assessment listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.
19	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from- (i) a watercourse	The excavation and construction of the gabion wall within the drainage line resulted in the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres. Should the activity be authorized, activity 19 would also be triggered by the housing development as housing (25 erven) and roads are

		proposed within the delineated wetland. See Figure 3 in Appendix E.
12	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. i. Western Cape iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning.	The excavation and construction of the gabion wall resulted in the clearance of an area of more than 300 square metres of indigenous vegetation. The site was zoned PUBLIC OPEN SPACE prior to November 2017. Should the activity be authorized, further indigenous vegetation would be cleared on site for the proposed housing development.
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; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	Should the activity be authorized, further indigenous vegetation (more than 1 hectare) would be cleared on site for the proposed housing development.
GN No. R. 325 Activity No(s): **(Listing Notice 2 of 2014)**	Describe the relevant listed activity(ies) in writing as per GN No. R.325 of 2014 ("NEMA 2014 Scoping/EIA listed activity/ies")	Describe the portion of the development as per the project description that relates to the applicable listed activity.
NA		
GN No. R. 324 Activity No(s): **(Listing Notice 3 of 2014)**	Describe the relevant listed activity(ies) in writing as per GN No. R.324 of 2014	Describe the portion of the development as per the project description that relates to the applicable listed activity.
NA		

Please note: Where approvals for the activity have been obtained in terms of any other legislation (e.g. National Water Act, Act 36 of 1998), certified copies of such approvals must be attached to this form.

2. ACTIVITY DESCRIPTION

(Cross out the appropriate box "☒" and provide a description where required).

Is/are the activity(ies) complete or is/are the activity(ies) still to be completed?	~~Completed~~	Incomplete
(a) Is/was the project a new development or an upgrade of an existing development? Also indicate the date (e.g. 2 August 2010) when the activity commenced as well as the original date of commencement if the application is an upgrade.	New	~~Upgrade~~
June 2017 – started excavation and gabion construction (rectangular shaped steel wire basket filled with rock for embankment protection and flood control).		

(b) Clearly describe the activity and associated infrastructure commenced with, indicating what has been completed and what still has to be completed.

Work conducted to date:

- Gabions complete between CH 350 and CH 118.3
- Between CH 118.3 and CH 108.8 the gabions are halfway and needs to be completed.
- Between CH 108.8 and CH 38 the excavation is about complete but will need to be cleaned and inspected before gabions are constructed as per design.
- South river crossing: gabion mattress protection, 2 x1500 x 1200 rectangular portal culverts

Work still to be conducted:

- Between CH 80 and CH 60 a stabilizing layer of rock fill wrapped in geotextile is to be placed before the construction of the gabions as per design.
- Silt removal within the watercourse still to be conducted. The middle section of the water course has a built up of silt that affect the flow of the river and the silt in this area must be removed to reinstate the river flow channel which is prominent upstream and downstream. Silt is to be use to naturalise and stabilise the gabions as per the request of DWS.
- Portion A of the river: Embankment re-sloping, Portion B of the river: extensive re-sloping works and vegetation clearing and Portion C of the river: limited rehabilitation requirements other than vegetation control.
- Rehabilitation of the river and wetland as per the FRESHWATER RESOURCE REHABILITATION AND IMPLEMENTATION PLAN FOR THE PROPOSED IDAS VALLEY RESIDENTIAL DEVELOPMENT ON ERF 9445, STELLENBOSCH, WESTERN CAPE PROVINCE dated September 2018.
- 166 subsidy housing erven (single residential)
- 3 public open space erven
- 2 local authority erven (roads and substation)
- 600m^2 retention pond
- North river crossing: gabion mattress protection, 2 x1500 x 1200 rectangular portal culverts

See appendix B for a detailed Site Development Plan.

(c) Please provide details of all components of the activity and attach diagrams (e.g. architectural drawings or perspectives, engineering drawings, process flow charts etc.).

Buildings	YES	~~NO~~

Provide brief description:

Gabions

- Work is complete between CH 350 and CH 118.3
- Between CH 118.3 and CH 108.8 the gabions are halfway and needs to be completed.
- Between CH 108.8 and CH 38 the excavation is about complete but will need to be cleaned and inspected before gabions are constructed as per design.
- Between CH 80 and CH 60 a stabilizing layer of rock fill wrapped in geotextile is to be placed before the construction of the gabions as per design.

Housing

- 166 subsidy housing erven (single residential)
- 3 public open space erven
- 2 local authority erven (roads and substation)
- 600m2 retention pond
- South river crossing: gabion mattress protection, 2 x1500 x 1200 rectangular portal culverts
- North river crossing: gabion mattress protection, 2 x1500 x 1200 rectangular portal culverts

See appendix B for a detailed Site Development Plan.

Infrastructure (e.g. roads, power and water supply/ storage)	YES	~~NO~~

Provide brief description:

- The 1:100 year recurrence interval storm event be contained within its banks by means of the construction of a berm/gabions/retaining wall along the stream. Gabions (rectangular shaped steel wire basket filled with rock for embankment protection and flood control).
- The access roads will be 6.0m wide within a 10.0m wide road reserve and the internal roads will be 5.0m/4.5m wide within a 10.0m wide road reserve. The road verges will be shaped, trimmed and a 75mm ferricrete gravel will be provided as a surface.
- The attenuation facility is proposed to be in the form of a detention pond with the following characteristics:
    - Pond Area 600m^2
    - 1:50 Inflow 0.891m^3/s
    - 1:100 Inflow 1.048m^3/s
    - Max. depth – 1:50 1.33m
    - Max. depth – 1:100 1.56m
    - Pond storage volume – 1:50 533m^3
    - Pond storage volume – 1:100 732m^3
    - 1:50 Outflow 0.313m^3/s
    - 1:100 Outflow 0.325m^3/s
    - Orifice (Pipe dia.) 1 x 300mm
    - 1:50 Freeboard 0.37m

- 1:100 Freeboard 0.14m

- The proposed internal water reticulation system will consist of a 110mm dia. uPVC water reticulation system and be connected to the existing water reticulation system.
- According to the water reticulation master plan of Stellenbosch Municipality, compiled by messers GLS Consulting Engineers, accommodation of the proposed development in the present system will require no upgrading of the existing system.
- The proposed internal sewerage reticulation system will consist of a 160mm dia. conventional gravity uPVC piped system, which will be connected to the existing sewerage reticulation system.
- According to the sewerage reticulation master plan of Stellenbosch Municipality, prepared by messers GLS consulting engineers, the following master plan items will be required to reinforce the existing Stellenbosch sewer reticulation system in order to accommodate the proposed development together with other future development areas:

  Bulk Sewer Upgrades
  Phase 1 – R29 000 000)
  SSS1.1 : 2 482m x 1 200mm dia. New Main Sewer
  SSS1.2 : New diversion Structure
  SSS1.3 : New Diversion Structure
  SSS1.4 : New Diversion Structure
  SSS1.5 : 162m x 750mm dia. New Diversion sewer (including river crossing)
  Phase 2 (R12 000 000)
  SSS1.6 : 1 008m x 1 200mm dia. New Main Sewer
  SSS1.7 : New Diversion Structure
  SSS1.8 : Modify existing diversion structure
  SSS1.9 : 48m x 750mm dia. New Diversion Sewer (including railway crossing)
  Network Upgrades
  Phase 3 (R5 000 000)
  SSS1.14 : 578m x 450mm dia. Upgrade existing outfall sewer
  SSS1.15 : 1 407m x 355mm dia. Upgrade existing outfall sewer
  Phase 4 (R1 500 000)
  SSS1.43 : Modify existing diversion structure
  SSS1.44 : 685m x 250mm dia. Upgrade existing outfall sewer
  SSS1.45 : Modify existing diversion structure

Processing activities (e.g. manufacturing, storage, distribution)	~~YES~~	NO
Provide brief description:		
NA		
Storage facilities for raw materials and products (e.g. volume and substances to be stored)		
Provide brief description	~~YES~~	NO
NA		
Storage and treatment facilities for solid waste and effluent generated by the project	~~Yes~~	No
Provide brief description		
NA		

(d) Other activities (e.g. water abstraction activities, crop planting activities)	~~Yes~~	No
Provide brief description		
NA		

3. PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical spatial size of the activity as well as associated infrastructure (footprints):	52030	m^2
Indicate the area that **has been** transformed / cleared to allow for the activity as well as associated infrastructure	8309 Gabions only	m^2
Total area:	52030	m^2

4. SITE ACCESS

Was there an existing access road?	YES	~~NO~~	
If NO, what was the distance over which the new access road was built? Please indicate the length and width of the new road.	(Length) NA		m
	(width) NA		m
Describe the type of access road constructed:			
NA			

Please Note: Indicate the position of the access road on the site plan (See Section 5 below)

5. SITE PHOTOGRAPHS

Colour photographs of the site and its surroundings (taken of the site and from the site), both before (if available) and after the activity commenced, with a description of each photograph, must be attached to this application. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide past and recent aerial photographs. It should be supplemented with additional photographs of relevant features on the site. Date and source of photographs must be included. Photographs must be attached as an **appendix** to this form.

Please note:

Should the relevant photographs not be included in the application, the application may be deemed insufficient and further information in this regard will be requested.

6. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

Please list all legislation, policies and/or guidelines that were or are relevant to this activity.

LEGISLATION	ADMINISTERING AUTHORITY	TYPE Permit/ license/ authorization/comment	DATE (if already obtained):
National Environmental Management Act, 1998 (Act No. 107 of 1998) [NEMA] and relevant regulations	Western Cape Department of Environmental Affairs and Development Planning	S24G Application	In progress
National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) [NEMWA] and relevant regulations	Western Cape Department of Environmental Affairs and Development Planning	N/A	N/A
National Environmental Management: Biodiversity Act 10 of 2004 [NEMBA] and relevant regulations	Western Cape Department of Environmental Affairs and Development Planning	N/A	N/A
National Environmental Management: Air Quality Act, 39 Of 2004 [NEMAQA] and Relevant Regulations	Western Cape Department of Environmental Affairs and Development Planning	N/A	N/A
National Water Act, 1998 (Act No. 36 of 1998) [NWA] and relevant regulations	Departmentof Water Affairs	Water Use Application	Submitted and await decision
Conservation Of Agricultural Resources Act, 43 Of 1983 [CARA]	National Department of Agriculture, forestry and Fisheries Western Cape Department of Agriculture	Weeds and the tolerance thereof	N/A
National Health Act, 61 Of 2003		Littering and causing a nuisance	N/A
Constitution of the Republic of South Africa, 1996		General application to individual rights of all on and adjacent to the Sites	N/A
Fencing Act, 31 of 1963		The erection and maintenance of fences.	N/A
National Building Regulations and Building Standards Act 103 of 1977		N/A	N/A

[NBRBSA] and relevant regulations			
National Heritage Resources Act 25 of 1999 [NHRA]	Heritage Western Cape South African Heritage Resource Agency	HWC NID	2 October 2014 ROD Received – no heritage impacts
National Veld and Forest Fire Act 101 of 1998 [NVFFA]		N/A	N/A
Fertilizers, Farm Feeds, Agricultural Remedies And Stock Remedies Act, 36 Of 1947 [FFFARSRA] and Relevant Regulations	National Department of Agriculture, forestry and Fisheries Western Cape Department of Agriculture	N/A	N/A
Environment Conservation Act, 73 Of 1989, Western Cape Noise Control Regulations	Western Cape Department of Environmental Affairs and Development Planning	N/A	N/A
National Forests Act, 84 Of 1998	National Department of Agriculture, forestry and Fisheries Western Cape Department of Agriculture	N/A	N/A
Hazardous Substances Act, 15 Of 1973	Department of Labour	N/A	N/A
National Environmental Management: Protected Areas Act 57 Of 2003		N/A	N/A
Occupational Health And Safety Act 85 Of 1993	Department of Labour	N/A	N/A
Compensation For Occupational Injuries And Diseases Act 130 Of 1993	Department of Labour	N/A	N/A
Basic Conditions Of Employment Act 75 Of 1997	Department of Labour	N/A	N/A
Labour Relations Act 66 Of 1995	Department of Labour	N/A	N/A
Tobacco Products Control Act 83 Of 1993		N/A	N/A
Stellenbosch Local Municipality By- Law Relating To The Control Of Boundary Walls And Fences	Stellenbosch Local Municipality	N/A	N/A
Stellenbosch Local Municipality By- Law On Streets	Stellenbosch Local Municipality	N/A	N/A
Stellenbosch Local Municipality Community Fire Services By-Law	Stellenbosch Local Municipality	N/A	N/A
Cape Winelands District Municipality Municipal Health By-Laws	Cape Winelands District Municipality	N/A	N/A

POLICY/ GUIDELINES	ADMINISTERING AUTHORITY
Guideline on Public Participation	Western Cape Department of Environmental Affairs and Development Planning
Guidelines on Alternatives	Western Cape Department of Environmental Affairs and Development Planning
Guideline on Need and desirability	Western Cape Department of Environmental Affairs and Development Planning
Guideline for Environmental Management Plans (EMP's)	Western Cape Department of Environmental Affairs and Development Planning

7. APPLICATIONS IN TERMS OF NEMA AND SPECIFIC ENVIRONMENTAL MANAGEMENT ACTS ("SEMAs")

If not specifically applied for in terms of this application, does the development require an application for a waste management license in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)?	~~YES~~	NO
If yes, has an application been submitted to the licensing authority?	~~YES~~	NO
Does the proposed project require an application for a water use license in terms of the National Water Act, 1998 (Act No. 36 of 1998)?	YES	~~NO~~
If yes, has an application been submitted to the licensing authority?	YES	~~NO~~
If no, please provide evidence of existing water use rights (if applicable) with this application form.		
Does the proposed project require an application for an atmospheric emissions license in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)?	~~YES~~	NO
If yes, has an application been submitted to the licensing authority?	~~YES~~	NO
Does the proposed project require an application in terms of the National Environmental Management: Integrated Coastal Management Act ("NEM: ICMA")?	~~YES~~	NO
If yes, has an application been submitted to the relevant competent authority?	~~YES~~	NO
If yes, provide more details of the application submitted/to be submitted in terms of the NEM: ICMA		
NA		

8. APPLICATIONS IN TERMS OF OTHER LEGISLATION

Is any permission, licence or other approval required in terms of any other legislation? (Please tick)	YES	~~NO~~

If yes, please complete the table below:

Type of approval required (List the applicable legislation & approval required):	Name of the authority responsible for administering the applicable legislation	Application submitted (Yes / No)	Status of application (e.g. pending/ granted/ refused)
National Water Act section 21 C and I	Department of Water and Sanitation	Yes	Pending

SECTION C: DESCRIPTION OF RECEIVING ENVIRONMENT

Site/Area Description

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

Section C Copy No. (e.g. 1, 2, or 3): [ ]

1. THE GEOLOGICAL FORMATIONS UNDERLYING THE SITE (Tick the appropriate box)

GRANITE	X	QUARTZITE	
SHALE	X	DOLOMITE	
SANDSTONE		DOLERITE	
OTHER (specify)			

2. GRADIENT OF THE SITE

Indicate the general gradient of the site(s) (cross out the appropriate box).

Flat	~~Flatter than 1:10~~	~~1:10 – 1:5~~	~~Steeper than 1:5~~

3. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site (cross out ("☒") the appropriate boxes).

~~Ridgeline~~	~~Plateau~~	~~Side slope of hill/mountain~~	~~Closed valley~~	Open valley	~~Plain~~	~~Undulating plain/low hills~~	~~Dune~~	~~Sea-front~~	~~Other~~
If other, please describe									

4. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

4.1 GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE (PRE-COMMENCEMENT)

Is the site(s) located on or near any of the following (cross out ("☒") the appropriate boxes)?

Shallow water table (less than 1.5m deep)	YES	~~NO~~	UNSURE
Seasonally wet soils (often close to water bodies)	YES	~~NO~~	UNSURE
Unstable rocky slopes or steep slopes with loose soil	~~YES~~	NO	UNSURE
Dispersive soils (soils that dissolve in water)	~~YES~~	NO	UNSURE
Soils with high clay content	~~YES~~	NO	UNSURE
Any other unstable soil or geological feature	~~YES~~	NO	UNSURE
An area sensitive to erosion	~~YES~~	NO	UNSURE

4.2 GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE (POST-COMMENCEMENT)

Shallow water table (less than 1.5m deep)	YES	~~NO~~	UNSURE
Seasonally wet soils (often close to water bodies)	YES	~~NO~~	UNSURE
Unstable rocky slopes or steep slopes with loose soil	~~YES~~	NO	UNSURE
Dispersive soils (soils that dissolve in water)	~~YES~~	NO	UNSURE
Soils with high clay content	~~YES~~	NO	UNSURE
Any other unstable soil or geological feature	~~YES~~	NO	UNSURE
An area sensitive to erosion	~~YES~~	NO	UNSURE

If any of the answers to the above are "YES" or "unsure", specialist input may be requested by the Department.
(Information in respect of the above will often be available at the planning sections of local authorities. Where it does not exist, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

5. SURFACE WATER

5.1 SURFACE WATER (PRE-COMMENCEMENT)

Indicate the surface water present on and or adjacent to the site and alternative sites (cross out ("☒") the appropriate boxes)?

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

5.2 SURFACE WATER (POST-COMMENCEMENT)

Indicate the surface water present on and or adjacent to the site and alternative sites (cross out ("☒") the appropriate boxes)?

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

6. VEGETATION AND/OR GROUNDCOVER

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 activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult http://bgis.sanbi.org.za or BGIShelp@sanbi.org.za. Information is also available on compact disc ("cd") from the Biodiversity-GIS Unit, Ph (021) 799 8738. 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 **appendix** to this form.

6.1 VEGETATION AND/OR GROUNDCOVER (PRE-COMMENCEMENT)

Cross out ("☒") the block **and** describe (where applicable) the vegetation types / groundcover present on the site before commencement of the activity.

~~Indigenous Vegetation - good condition~~		~~Indigenous Vegetation with scattered aliens~~		Indigenous Vegetation with heavy alien infestation	X
~~Describe the vegetation type above:~~		~~Describe the vegetation type above:~~		Describe the vegetation type above: Boland Granite Fynbos	
~~Provide ecosystem status for above:~~		~~Provide ecosystem status for above:~~		Provide Ecosystem status for above: The property lies in the general area that used to support Boland Granite Fynbos. This vegetation type is listed as Vulnerable (Western Cape Biodiversity Spatial Plan 2017). The southern section of the site comprises mainly grasses. There is a heavy presence of alien invasive vegetation on the site. The site contains Port Jackson (Acacia saligna), Kikuyu Grass (Pennisetum clandestinum), Patterson's Curse (Echium Plantagineum) etc. Some indigenous riparian vegetation can be found in the rivers. The river running to the east of the study area was noted to be in a largely degraded state, with both Acacia saligna and Pennisetum clandestinum dominating throughout. Indigenous obligate (wetland indicator) species can be found on site in the wetland areas. The vegetation composition of both Seep wetlands has been critically modified through the removal of indigenous wetland species during the historical agricultural activities and through the proliferation of alien and invasive plant species such as Acacia saligna and Pennisetum clandestinum as well as a large variety of other weed and grass species indicative of disturbed areas.	
~~Indigenous Vegetation in an ecological corridor or along a soil boundary / interface~~		~~Veld dominated by alien species~~		~~Distinctive soil conditions (e.g. Sand over shale, quartz patches, limestone, alluvial deposits, termitaria etc.) – describe~~	

~~Bare soil~~	~~Building or other structure~~	~~Sport field~~
~~Other (describe below)~~	~~Cultivated land~~	~~Paved surface~~

(a) Highlight the applicable pre-commencement 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)~~	The site is classified as an ESA (RESTORE) due to the presence of the watercourse and wetland.

(b) Highlight 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	0%	
Near Natural (includes areas with low to moderate level of alien invasive plants)	%	
Degraded (includes areas heavily invaded by alien plants)	100%	The property lies in the general area that used to support Boland Granite Fynbos. This vegetation type is listed as Vulnerable (Western Cape Biodiversity Spatial Plan 2017). The southern section of the site comprises mainly grasses. There is a heavy presence of alien invasive vegetation on the site. The site contains Port Jackson (Acacia saligna), Kikuyu Grass (Pennisetum clandestinum), Patterson's Curse (Echium Plantagineum) etc. Some indigenous riparian vegetation can be found in the rivers. The river running to the east of the study area was noted to be in a largely degraded state, with both Acacia saligna and Pennisetum clandestinum dominating throughout. Indigenous obligate (wetland indicator) species can be found on site in the wetland areas. The vegetation composition of both Seep wetlands has been critically modified through the removal of indigenous wetland species during the historical agricultural activities and through the proliferation of alien and invasive plant species such as Acacia saligna and Pennisetum clandestinum as well as a large variety of other weed and grass species indicative of disturbed areas.
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	0%	

(c) Complete the table to indicate:
(i) the type of vegetation, including its ecosystem status, that was previously present on the site; and
(ii) whether an aquatic ecosystem was previously present on site.

Terrestrial Ecosystems		**Aquatic Ecosystems**						
Ecosystem threat status as per the National Environmental Management: Biodiversity Act,2004 (Act No. 10 of 2004)	~~Critical~~	Wetland (including rivers, depressions, channelled and un-channelled 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:

The property lies in the general area that used to support Boland Granite Fynbos. This vegetation type is listed as Vulnerable (Western Cape Biodiversity Spatial Plan 2017). The southern section of the site comprises mainly grasses. There is a heavy presence of alien invasive vegetation on the site. The site contains Port Jackson (Acacia saligna), Kikuyu Grass (Pennisetum clandestinum), Patterson's Curse (Echium Plantagineum) etc. Some indigenous riparian vegetation can be found in the rivers. The river running to the east of the study area was noted to be in a largely degraded state, with both Acacia saligna and Pennisetum clandestinum dominating throughout. Indigenous obligate (wetland indicator) species can be found on site in the wetland areas. The vegetation composition of both Seep wetlands has been critically modified through the removal of indigenous wetland species during the historical agricultural activities and through the proliferation of alien and invasive plant species such as Acacia saligna and Pennisetum clandestinum as well as a large variety of other weed and grass species indicative of disturbed areas.

Rivers:

Two rivers are located on site. Both rivers are tributaries of the Krom River.

The non-perennial river on the eastern edge of the development rises in the foothills of the Simonsberg Mountains and flows from north to south on the western edge of Lindida, Idas Valley area of Stellenbosch. The non-perennial river rises at 222m above mean sea level and runs for 1.2km before it reaches the property at 168m above mean sea level. The middle portion of the river on erf 9445 has been silted up and the defined channel that is evident on either side of this area disappears. Much of this river is invaded by Kikuyu Grass (Pennisetum clandestinum).

The perennial tributary rises in the Hottentots Holland mountains and runs through Idas Valley and forms the southern boundary of the proposed development. This river on the southern boundary will not be affected by the proposed development. The development infrastructure, although within 100m of the river, will be developed outside the flood line. The development will therefore not affect the flow or ecological functioning of this river.

Wetlands:

Two Seep Wetlands are located on the site.

Hydrological state: The hydrological functioning of the Seep Wetlands has been largely modified due to surrounding agricultural and anthropogenic activities, including various drains, likely excavated when the land was actively cultivated. These drains as well as piles of deposited materials have created berms within and surrounding the Seeps and have changed the pattern, direction and timing of runoff within the system.

Geomorphological state: The geomorphology of the Seep wetlands is considered moderately modified due to excavation works and deposition of materials observed within the wetland. This has resulted in loss of organic matter and impacted on the dispersal of water across the HGM unit.

Vegetation health: The vegetation composition of both Seep wetlands has been critically modified through the removal of indigenous wetland species during the historical agricultural activities and through the proliferation of alien and invasive plant species such as Acacia saligna and Pennisetum clandestinum as well as a large variety of other weed and grass species indicative of disturbed areas. No endangered species were identified during the site visit, but the system may provide suitable breeding habitat for various common avifaunal and amphibian species.

6.2 VEGETATION AND/OR GROUNDCOVER (POST-COMMENCEMENT)

Cross out ("☒") the block **and** describe (where required) the vegetation types / groundcover present on the site after commencement of the activity.

~~Indigenous Vegetation - good condition~~		~~Indigenous Vegetation with scattered aliens~~		Indigenous Vegetation with heavy alien infestation	X
~~Describe the vegetation type above:~~		~~Describe the vegetation type above:~~		Describe the vegetation type above: Boland Granite Fynbos	
~~Provide ecosystem status for above:~~		~~Provide ecosystem status for above:~~		Provide Ecosystem status for above: The property lies in the general area that used to support Boland Granite Fynbos. This vegetation type is listed as Vulnerable (Western Cape Biodiversity Spatial Plan 2017). The southern section of the site comprises mainly grasses. There is a heavy presence of alien invasive vegetation on the site. The site contains Port Jackson (Acacia saligna), Kikuyu Grass (Pennisetum clandestinum), Patterson's Curse (Echium Plantagineum) etc. Some indigenous riparian vegetation can be found in the rivers. The river running to the east of the study area was noted to be in a largely degraded state, with both Acacia saligna and Pennisetum clandestinum dominating throughout. Indigenous obligate (wetland indicator) species can be found on site in the wetland areas. The vegetation composition of both Seep wetlands has been critically modified through the removal of indigenous wetland species during the historical agricultural activities and through the proliferation of alien and invasive plant species such as Acacia saligna and Pennisetum clandestinum as well as a large variety of other weed and grass species indicative of disturbed areas. The only vegetation that has been cleared to date is in the non-perennial river as can be seen in Appendix D. the vegetation cleared was mostly Kikuyu Grass (Pennisetum clandestinum) and some indigenous riparian vegetation.	
~~Indigenous Vegetation in an ecological corridor or along a soil boundary / interface~~		~~Veld dominated by alien species~~		~~Distinctive soil conditions (e.g. Sand over shale, quartz patches, limestone, alluvial deposits, termitaria etc.) – describe~~	
~~Bare soil~~		~~Building or other structure~~		~~Sport field~~	
~~Other (describe below)~~		~~Cultivated land~~		~~Paved surface~~	

(a) Highlight and describe the post-construction 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	%	
Near Natural (includes areas with low to moderate level of alien invasive plants)	%	
Degraded (includes areas heavily invaded by alien plants)	85%	The property lies in the general area that used to support Boland Granite Fynbos. This vegetation type is listed as Vulnerable (Western Cape Biodiversity Spatial Plan 2017). The southern section of the site comprises mainly grasses. There is a heavy presence of alien invasive vegetation on the site. The site contains Port Jackson (Acacia saligna), Kikuyu Grass (Pennisetum clandestinum), Patterson's Curse (Echium Plantagineum) etc. Some indigenous riparian vegetation can be found in the rivers. The river running to the east of the study area was noted to be in a largely degraded state, with both Acacia saligna and Pennisetum clandestinum dominating throughout. Indigenous obligate (wetland indicator) species can be found on site in the wetland areas. The vegetation composition of both Seep wetlands has been critically modified through the removal of indigenous wetland species during the historical agricultural activities and through the proliferation of alien and invasive plant species such as Acacia saligna and Pennisetum clandestinum as well as a large variety of other weed and grass species indicative of disturbed areas.
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	15%	The only vegetation that has been cleared to date is in the non-perennial river as can be seen in Appendix D. the vegetation cleared was mostly Kikuyu Grass (Pennisetum clandestinum) and some indigenous riparian vegetation.

(b) How have the vegetation and/or aquatic ecosystem(s) present on site (including any important biodiversity features identified on site (e.g. threatened species and special habitats)) been affected by the commencement of the listed activity(ies)?

River:
The excavation and construction of gabions in the river have impacted on the river. However, the impact does not appear to be extensive due to the fact the that river was disturbed prior to commencement as well as the fact the excavation and construction of the gabions inside the watercourse was limited to certain areas. The excavation and gabion construction was for embankment protection and flood control.

Vegetation:
The majority of the vegetation that was cleared due to the activity was either alien vegetation or kikuyu grass. Small amounts of natural riparian vegetation that were present pre-commencement have been disturbed and removed to some extent.

Wetland:
The wetlands on site have not been affected to date. No clearing or construction has taken place inside the wetlands to date.

6.3 VEGETATION / GROUNDCOVER MANAGEMENT

(a) Describe any mitigation/management measures that were adopted and the adequacy of these:

- During the gabion construction – focus on the removal of alien vegetation

7. LAND USE OF THE SITE (PRE-COMMENCEMENT)

Please note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the activity/ies.

Untransformed area	~~Low density residential~~	~~Medium density residential~~	~~High density residential~~	~~Informal residential~~
~~Retail~~	~~Commercial & warehousing~~	~~Light industrial~~	~~Medium industrial~~	~~Heavy industrial~~
~~Power station~~	~~Office/consulting room~~	~~Military or police base/station/compound~~	~~Casino/entertainment complex~~	~~Tourism & Hospitality facility~~
~~Open cast mine~~	~~Underground mine~~	~~Spoil heap or slimes dam~~	~~Quarry, sand or borrow pit~~	~~Dam or reservoir~~
~~Hospital/medical centre~~	~~School~~	~~Tertiary education facility~~	~~Church~~	~~Old age home~~
~~Sewage treatment plant~~	~~Train station or shunting yard~~	~~Railway line~~	~~Major road (4 lanes or more)~~	~~Airport~~
~~Harbour~~	~~Sport facilities~~	~~Golf course~~	~~Polo fields~~	~~Filling station~~
~~Landfill or waste treatment site~~	~~Plantation~~	~~Agriculture~~	River, stream or wetland	~~Nature conservation area~~
~~Mountain, koppie or ridge~~	~~Museum~~	~~Historical building~~	~~Graveyard~~	~~Archaeological site~~
Other land uses (describe):				

(a) Please provide a description.

Vacant open space: The property lies in the general area that used to support Boland Granite Fynbos. This vegetation type is listed as Vulnerable (Western Cape Biodiversity Spatial Plan 2017). The southern section of the site comprises mainly grasses. There is a heavy presence of alien invasive vegetation on the site. The site contains Port Jackson (Acacia saligna), Kikuyu Grass (Pennisetum clandestinum), Patterson's Curse (Echium Plantagineum) etc. Some indigenous riparian vegetation can be found in the rivers. The river running to the east of the study area was noted to be in a largely degraded state, with both Acacia saligna and Pennisetum clandestinum dominating throughout. Indigenous obligate (wetland indicator) species can be found on site in the wetland areas. The vegetation composition of both Seep wetlands has been critically modified through the removal of indigenous wetland species during the historical agricultural activities and through the proliferation of alien and invasive plant species such as Acacia saligna and Pennisetum clandestinum as well as a large variety of other weed and grass species indicative of disturbed areas.

Rivers: Two rivers are located on site. Both rivers are tributaries of the Krom River. The non-perennial river on the eastern edge of the development rises in the foothills of the Simonsberg Mountains and flows from north to south on the western edge of Lindida, Idas Valley area of Stellenbosch. The non-perennial river rises at 222m above mean sea level and runs for 1.2km before it reaches the property at 168m above mean sea level. The middle portion of the river on erf 9445 has been silted up and the defined channel that is evident on either side of this area disappears. Much of this river is invaded by Kikuyu Grass (Pennisetum clandestinum). The perennial tributary rises in the Hottentots Holland mountains and runs through Idas Valley and forms the southern boundary of the proposed development. This river on the southern boundary will not be affected by the proposed development. The development infrastructure, although within 100m of the river, will be developed outside the flood line. The development will therefore not affect the flow or ecological functioning of this river.

Wetlands: Two Seep Wetlands are located on the site. Hydrological state: The hydrological functioning of the Seep Wetlands has been largely modified due to surrounding agricultural and anthropogenic activities, including various drains, likely excavated when the land was actively cultivated. These drains as well as piles of deposited materials have created berms within and surrounding the Seeps and have changed the pattern, direction and timing of runoff within the system. Geomorphological state: The geomorphology of the Seep wetlands is considered moderately modified due to excavation works and deposition of materials observed within the wetland. This has resulted in loss of organic matter and impacted on the dispersal of water across the HGM unit.

8. LAND USE CHARACTER OF SURROUNDING AREA (PRE-COMMENCEMENT)

Cross out ("☒") the block that reflects the past land uses and/or prominent features that occur/red within +/- 500m radius of the site and neighbouring properties if these are located beyond 500m of the site. **Please note:** The Department may request specialist input/studies depending on the nature of the land use character of the area and impact(s) of the activity/ies.

Untransformed area	~~Low density residential~~	Medium density residential	High density residential	~~Informal residential~~
~~Retail~~	~~Commercial & warehousing~~	~~Light industrial~~	~~Medium industrial~~	~~Heavy industrial~~
~~Power station~~	~~Office/consulting room~~	~~Military or police base/station/compound~~	~~Casino/entertainment complex~~	~~Tourism & Hospitality facility~~

~~Open cast mine~~	~~Underground mine~~	~~Spoil heap or slimes dam~~	~~Quarry, sand or borrow pit~~	Dam or reservoir
~~Hospital/medical centre~~	School	~~Tertiary education facility~~	~~Church~~	~~Old age home~~
~~Sewage treatment plant~~	~~Train station or shunting yard~~	~~Railway line~~	~~Major road (4 lanes or more)~~	~~Airport~~
~~Harbour~~	Sport facilities	~~Golf course~~	~~Polo fields~~	~~Filling station~~
~~Landfill or waste treatment site~~	~~Plantation~~	Agriculture	River, stream or wetland	~~Nature conservation area~~
~~Mountain, koppie or ridge~~	~~Museum~~	~~Historical building~~	~~Graveyard~~	~~Archaeological site~~
Other land uses (describe):				

9. LAND USE CHARACTER OF SURROUNDING AREA (POST-COMMENCEMENT)

Cross out ("☒") the block that reflects the current land uses and/or prominent features that occur(s) within +/- 500m radius of the site and neighbouring properties if these are located beyond 500m of the site. **Please note:** The Department may request specialist input/studies depending on the nature of the land use character of the area and impact(s) of the activity/ies.

Untransformed area	~~Low density residential~~	Medium density residential	High density residential	~~Informal residential~~
~~Retail~~	~~Commercial & warehousing~~	~~Light industrial~~	~~Medium industrial~~	~~Heavy industrial~~
~~Power station~~	~~Office/consulting room~~	~~Military or police base/station/compound~~	~~Casino/entertainment complex~~	~~Tourism & Hospitality facility~~
~~Open cast mine~~	~~Underground mine~~	~~Spoil heap or slimes dam~~	~~Quarry, sand or borrow pit~~	Dam or reservoir
~~Hospital/medical centre~~	School	~~Tertiary education facility~~	~~Church~~	~~Old age home~~
~~Sewage treatment plant~~	~~Train station or shunting yard~~	~~Railway line~~	~~Major road (4 lanes or more)~~	~~Airport~~
~~Harbour~~	Sport facilities	~~Golf course~~	~~Polo fields~~	~~Filling station~~
~~Landfill or waste treatment site~~	~~Plantation~~	Agriculture	River, stream or wetland	~~Nature conservation area~~
~~Mountain, koppie or ridge~~	~~Museum~~	~~Historical building~~	~~Graveyard~~	~~Archaeological site~~
Other land uses (describe):				

10. SOCIO-ECONOMIC CONTEXT

10.1 SOCIO-ECONOMIC CONTEXT (PRE-COMMENCEMENT)

Describe the pre-commencement social and economic characteristics of the community in order to provide baseline information.

The Stellenbosch Local Municipal area covers approximately 900 km² and has a population of approximately 270 000 people. The population composition of Stellenbosch in 2001 was as follows: Coloured population (56.4%), Whites (21.6%), African (20.1%) and Indian/Asians (0.2%).In 2009, 30.4% of households earned income between R0 to R42 000; 36.1% earned between R42 000 to R132 000; 28.5% between R132 000 and R600 000 and 4.9% earn above R600 000.

The three largest sectors in 2009 were: community services (27.1%), finance and business services (25.1%) and manufacturing (23.5%).There are strong linkages from Stellenbosch municipality's agricultural sector to its manufacturing, wholesale, trade and accommodation, and financial services sectors, particularly with agri-tourism. The wine industry, followed by vegetable products, both strongly vertically linked to the agricultural sector, are the district municipality's largest export products.

Unemployment in Stellenbosch was concentrated within the Coloured racial group in 2007. The Coloured population's share of the unemployed increased from 46.1% share in 2001 to 50.2% share in 2007. The African population has the second largest share of unemployment in the area, however their unemployment share decreased from 51.4% in 2001 to 47.3% in 2007.

General socio economic characteristics:
Stellenbosch Municipality accounted for 24.4% of the District's economy in 2009 making it the second largest economy in the Cape Winelands District. Stellenbosch's regional gross value added figure (GVA-R) increased from R3.834 billion in 2001 to R5.234 billion in 2009 at an average annual rate of 4% compared to 3.2% for the Cape Winelands District over the same period (2001-2009).

References –Stellenbosch Municipality 3rd Generation Integrated Development Plan 2012 – 2017

10.2 SOCIO-ECONOMIC CONTEXT (POST-COMMENCEMENT)

Describe the post commencement social and economic characteristics of the community in order to determine any change. Where differences between pre- and post-commencement exist, state which are as a result of the activity(ies) for which rectification is being applied for.

The Stellenbosch Local Municipal area covers approximately 900 km² and has a population of approximately 270 000 people. The population composition of Stellenbosch in 2001 was as follows: Coloured population (56.4%), Whites (21.6%), African (20.1%) and Indian/Asians (0.2%).In 2009, 30.4% of households earned income between R0 to R42 000; 36.1% earned between R42 000 to R132 000; 28.5% between R132 000 and R600 000 and 4.9% earn above R600 000.

The three largest sectors in 2009 were: community services (27.1%), finance and business services (25.1%) and manufacturing (23.5%).There are strong linkages from Stellenbosch municipality's agricultural sector to its manufacturing, wholesale, trade and accommodation, and financial services sectors, particularly with agri-tourism. The wine industry, followed by vegetable products, both strongly vertically linked to the agricultural sector, are the district municipality's largest export products.

Unemployment in Stellenbosch was concentrated within the Coloured racial group in 2007. The Coloured population's share of the unemployed increased from 46.1% share in 2001 to 50.2% share in 2007. The African population has the second largest share of unemployment in the area, however their unemployment share decreased from 51.4% in 2001 to 47.3% in 2007.

General socio economic characteristics:
Stellenbosch Municipality accounted for 24.4% of the District's economy in 2009 making it the second largest economy in the Cape Winelands District. Stellenbosch's regional gross value added figure (GVA-R) increased from R3.834 billion in 2001 to R5.234 billion in 2009 at an average annual rate of 4% compared to 3.2% for the Cape Winelands District over the same period (2001-2009).

References –Stellenbosch Municipality 3rd Generation Integrated Development Plan 2012 – 2017

11. HISTORICAL AND CULTURAL ASPECTS

(a) Please be advised that every application for Environmental Authorisation including an application for a Waste Management Licence, must include, where applicable the investigation, assessment and evaluation of the impact of any proposed listed or specified activity on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), excluding the national estate contemplated in section 3(2)(i)(vi) and (vii) of that Act.

Please be further advised that if section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), is applicable to your application, then you are requested to furnish this Department with written comment from Heritage Western Cape as part of your public participation process. Section 38 of the Act states as follows: "*38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-*

(a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
(b) the construction of a bridge or similar structure exceeding 50m in length;
(c) any development or other activity which will change the character of a site-
(i) exceeding 5 000 m² in extent; or
(ii) involving three or more existing erven or subdivisions thereof; or
(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
(d) the re-zoning of a site exceeding 10 000 m² in extent; or
(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development."

(b) The impact on any national estate referred to in section 3(2), excluding the national estate contemplated in section 3(2)(i)(vi) and (vii), of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), must also be investigated, assessed and evaluated. Section 3(2) states as follows: "*3(2) Without limiting the generality of subsection (1), the national estate may include—*

(a) places, buildings, structures and equipment of cultural significance;
(b) places to which oral traditions are attached or which are associated with living heritage;
(c) historical settlements and townscapes;
(d) landscapes and natural features of cultural significance;
(e) geological sites of scientific or cultural importance;
(f) archaeological and palaeontological sites;
(g) graves and burial grounds, including—
(i) ancestral graves;
(ii) royal graves and graves of traditional leaders;
(iii) graves of victims of conflict;
(iv) graves of individuals designated by the Minister by notice in the Gazette;
(v) historical graves and cemeteries; and
(vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
(h) sites of significance relating to the history of slavery in South Africa;
(i) movable objects, including—
(i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
(ii) objects to which oral traditions are attached or which are associated with living heritage;
(iii) ethnographic art and objects;
(iv) military objects;
(v) objects of decorative or fine art;
(vi) objects of scientific or technological interest; and
(vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996)."

Is section 38 of the National Heritage Resources Act, 1999, applicable to the development?	YES	~~NO~~	~~UNCERTAIN~~
If YES, explain:	Notice of Intent submitted to Heritage Western Cape.		
Did/does the development impact on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999?	~~YES~~	NO	~~UNCERTAIN~~
If YES, explain:			
Was any building or structure older than 60 years affected in any way?	~~YES~~	NO	~~UNCERTAIN~~
If YES, explain:			

Please Note:
If uncertain, the Department may request that specialist input be provided. If, yes, a copy of the Notice of Intent submitted to Heritage Western Cape must be submitted with this form.

12. COASTAL ASPECTS (SEAFRONT/SEA ENVIRONMENT)

(a) Is the site(s) located within any of the following areas? (highlight the appropriate boxes).
If the site or alternative site is closer than 100m to such an area, please provide the approximate distance in (m).

AREA	YES	NO	UNSURE	If "YES": Distance to nearest area (m)
An area within 100m of the high water mark of the sea	~~YES~~	NO	~~UNSURE~~	
An area within 100m of the high water mark of an estuary/lagoon	~~YES~~	NO	~~UNSURE~~	
An area within the littoral active zone	~~YES~~	NO	~~UNSURE~~	
An area in the coastal public property	~~YES~~	NO	~~UNSURE~~	
Major anthropogenic structures	~~YES~~	NO	~~UNSURE~~	
An area within a Coastal Protection Zone	~~YES~~	NO	~~UNSURE~~	
An area seaward of the coastal management line	~~YES~~	NO	~~UNSURE~~	
An area within the high risk zone (20 years)	~~YES~~	NO	~~UNSURE~~	
An area within the medium risk zone (50 years)	~~YES~~	NO	~~UNSURE~~	
An area within the low risk zone (100 years)	~~YES~~	NO	~~UNSURE~~	
An area below the 5m contour	~~YES~~	NO	~~UNSURE~~	
An area within 1km from the high water mark of the sea	~~YES~~	NO	~~UNSURE~~	
A rocky beach	~~YES~~	NO	~~UNSURE~~	
A sandy beach	~~YES~~	NO	~~UNSURE~~	

(b) If any of the answers to the above is "YES" or "UNSURE", specialist input may be requested by the Department. (The 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

13. REGIONAL PLANNING CONTEXT

Is the activity permitted in terms of the property's existing land use rights?	YES	~~NO~~	Please explain
The Rezoning from Agriculture to **Subdivisional Area** for the 166 Single Residential Zone properties, 3 **Public Open Space Zone** properties and I Local Authority Zone property WAS APPROVED in terms of Section 60 of the Stellenbosch Municipal Land Use Planning By-Law.			
Will the activity be in line with the following?			
Provincial Spatial Development Framework (PSDF)	YES	~~NO~~	Please explain
The proposed development is consistent with the PSDF and within the urban edge.			
Urban edge / Edge of Built environment for the area	YES	~~NO~~	Please explain
The area is within the approved urban edge.			
Integrated Development Plan of the Local Municipality	YES	~~NO~~	Please explain
According to the Stellenbosch IDP the area has been earmarked for residential development.			
Spatial Development Framework of the Local Municipality	YES	~~NO~~	Please explain
Earmarked for residential development and within the urban edge.			
Approved Structure Plan of the Municipality	YES	~~NO~~	Please explain
As above.			
An Environmental Management Framework (EMF) adopted by the Department	~~YES~~	~~NO~~	Please explain
No EMF adopted for area.			
Any other Plans	~~YES~~	~~NO~~	Please explain
NA			

SECTION D: NEED AND DESIRABILITY

Please Note: Before completing this section, first consult this Department's *Guideline on Need and Desirability* (March 2013) available on the Department's website (**http://www.capegateway.gov.za/eadp**).

1. Was the activity permitted in terms of the property's land use rights at the time of commencement?	YES	~~NO~~	Please explain

The gabions are located on the boundary of the single residential erven, next to the Public Open Space erf. The Rezoning from Agriculture to Sub-divisional Area for the 166 Single Residential Zone properties, 3 Public Open Space Zone properties and I Local Authority Zone property WAS APPROVED in terms of Section 60 of the Stellenbosch Municipal Land Use Planning By-Law.

2. Was the activity in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES	~~NO~~	Please explain
Consistent with the PSDF and within the urban edge.			
(b) Urban edge / Edge of Built environment for the area	YES	~~NO~~	Please explain
The area is within the approved urban edge.			
(c) Integrated Development Plan and Spatial Development Framework of the Local Municipality (e.g. would the approval of this application have compromised the integrity of the existing approved and credible municipal IDP and SDF?).	YES	~~NO~~	Please explain
According to the Stellenbosch IDP the area has been earmarked for residential development.			
(d) Approved Structure Plan of the Municipality	YES	~~NO~~	Please explain
As above.			

(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application have compromised the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	~~YES~~	~~NO~~	Please explain
No EMF adopted for area.			
(f) Any other Plans (e.g. Guide Plan)	~~YES~~	~~NO~~	Please explain
NA			

3. Was the land use (associated with the activity for which rectification is sought) considered within the timeframe intended by the existing approved Spatial Development Framework (SDF) agreed to by the relevant environmental authority (i.e. was the development in line with the projects and programmes identified as priorities within the relevant IDP)?	YES	~~NO~~	Please explain
The Rezoning from Agriculture to Subdivisional Area for the 166 Single Residential Zone properties, 3 Public Open Space Zone properties and I Local Authority Zone property BE APPROVED in terms of Section 60 of the Stellenbosch Municipal Land Use Planning By-Law. The gabions are located on the boundary of the single residential erven, next to the Public Open Space erf. The gabions were needed to re-establish the bank of the river.			

4. Should development, or if applicable, expansion of the town/area concerned in terms of this land use (associated with the activity being applied for) have occurred here when activities commenced?	YES	~~NO~~	Please explain
The Rezoning from Agriculture to Subdivisional Area for the 166 Single Residential Zone properties, 3 Public Open Space Zone properties and I Local Authority Zone property BE APPROVED in terms of Section 60 of the Stellenbosch Municipal Land Use Planning By-Law. The gabions are located on the boundary of the single residential erven, next to the Public Open Space erf. The gabions were needed to re-establish the bank of the river.			

5. Did the community/area need the activity and the associated land use concerned (was 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.)	YES	~~NO~~	Please explain
The Rezoning from Agriculture to Subdivisional Area for the 166 Single Residential Zone properties, 3 Public Open Space Zone properties and I Local Authority Zone property BE APPROVED in terms of Section 60 of the Stellenbosch Municipal Land Use Planning By-Law. The gabions are located on the boundary of the single residential erven, next to the Public Open Space erf. The gabions were needed to re-establish the bank of the river. The IDP identified the need for Housing. This need in the municipality is estimated at over 20 000 units (comprising some 6 000 informal dwellings, 9 000 backyard and overcrowded households, and rural households in need of accommodation) in 2012.			

6. Were the necessary services with adequate capacity available (at the time of commencement), or was additional capacity created to cater for the development? (Confirmation by the relevant Municipality in this regard must	~~YES~~	NO	Please explain

be attached to the Application Form / additional information as an **appendix**, where applicable.)			

- The 1:100 year recurrence interval storm event be contained within its banks by means of the construction of a berm/gabions/retaining wall along the stream. Gabions (rectangular shaped steel wire basket filled with rock for embankment protection and flood control).
- The access roads will be 6.0m wide within a 10.0m wide road reserve and the internal roads will be 5.0m/4.5m wide within a 10.0m wide road reserve. The road verges will be shaped, trimmed and a 75mm ferricrete gravel will be provided as a surface.
- The attenuation facility is proposed to be in the form of a detention pond with the following characteristics:
    - Pond Area 600m²
    - 1:50 Inflow 0.891m³/s
    - 1:100 Inflow 1.048m³/s
    - Max. depth – 1:50 1.33m
    - Max. depth – 1:100 1.56m
    - Pond storage volume – 1:50 533m³
    - Pond storage volume – 1:100 732m³
    - 1:50 Outflow 0.313m³/s
    - 1:100 Outflow 0.325m³/s
    - Orifice (Pipe dia.) 1 x 300mm
    - 1:50 Freeboard 0.37m
    - 1:100 Freeboard 0.14m
- The proposed internal water reticulation system will consist of a 110mm dia. uPVC water reticulation system and be connected to the existing water reticulation system. According to the water reticulation master plan of Stellenbosch Municipality, compiled by messers GLS Consulting Engineers, accommodation of the proposed development in the present system will require no upgrading of the existing system.
- The proposed internal sewerage reticulation system will consist of a 160mm dia. conventional gravity uPVC piped system, which will be connected to the existing sewerage reticulation system. According to the sewerage reticulation master plan of Stellenbosch Municipality, prepared by messers GLS consulting engineers, the following master plan items will be required to reinforce the existing Stellenbosch sewer reticulation system in order to accommodate the proposed development together with other future development areas:

<u>Bulk Sewer Upgrades</u>
Phase 1 – R29 000 000)
SSS1.1 : 2 482m x 1 200mm dia. New Main Sewer
SSS1.2 : New diversion Structure
SSS1.3 : New Diversion Structure
SSS1.4 : New Diversion Structure
SSS1.5 : 162m x 750mm dia. New Diversion sewer (including river crossing)
Phase 2 (R12 000 000)
SSS1.6 : 1 008m x 1 200mm dia. New Main Sewer
SSS1.7 : New Diversion Structure
SSS1.8 : Modify existing diversion structure
SSS1.9 : 48m x 750mm dia. New Diversion Sewer (including railway crossing)
<u>Network Upgrades</u>
Phase 3 (R5 000 000)
SSS1.14 : 578m x 450mm dia. Upgrade existing outfall sewer
SSS1.15 : 1 407m x 355mm dia. Upgrade existing outfall sewer
Phase 4 (R1 500 000)
SSS1.43 : Modify existing diversion structure
SSS1.44 : 685m x 250mm dia. Upgrade existing outfall sewer
SSS1.45 : Modify existing diversion structure

7. Is/was this development provided for in the infrastructure planning of the municipality, and if not what was/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 Application Form / additional information as an **appendix**, where applicable.)	YES	~~NO~~	Please explain
The applicant is the municipality and this development was provided for in the infrastructure			

planning of the municipality.

8. Was this project part of a national programme to address an issue of national concern or importance?	YES	~~NO~~	Please explain
Development of houses as per the needs of the community. The gabions are located on the boundary of the single residential erven, next to the Public Open Space erf. The gabions were needed to re-establish the bank of the river.			

9. Did location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the land use on this site within its broader context.)	YES	~~NO~~	Please explain
Development of houses as per the needs of the community. According to the SDF the area has been earmarked for future high-density residential development. Vacant municipal land. The gabions are located on the boundary of the single residential erven, next to the Public Open Space erf. The gabions were needed to re-establish the bank of the river.			

10. How did/does the activity or the land use associated with the activity applied for, impact on sensitive natural and cultural areas (built and rural/natural environment)?	YES	~~NO~~	Please explain
Impacts on the river are limited due to the location of the gabion wall and the pre-commencement status of the river.			

11. How did/does the development impact on people's health and wellbeing (e.g. in terms of noise, odours, visual character and sense of place, etc.)?	YES	~~NO~~	Please explain
The visual character of the open space has been slightly impacted on and will affect approximately 17 households which face directly onto the site. The visual character will be changed and views impacted upon. 17 households face directly onto the development and will have an impact on these home owners. Also note that all the houses for this site will be for the GAP market and no subsidised housing units are planned on erf 9445. That means people will have to either buy the house cash or register for a bond. See the policy for FLISP. People in a certain income bracket do qualify for a small subsidy ranging between R27,960.00 and R121,626.00 but this will not be enough to secure an opportunity. Due to the topography of the site the visual impact is limited to nearby neighbours. Furthermore, the houses are not considered hideous or unsightly but rather in keeping with the surrounding area. Houses in Bartlett and Cornelly road area are of similar typologies as the houses proposed.			

12. Did/does the proposed activity or the land use associated with the activity applied for, result in unacceptable opportunity costs?	~~YES~~	NO	Please explain
Impacts on the river are limited due to the location of the gabion wall and the pre-commencement status of the river. The gabions were needed to re-establish the bank of the river.			

13. What were the cumulative impacts (positive and negative) of the land use associated with the activity applied for?	YES	~~NO~~	Please explain
Impacts on the river are limited due to the location of the gabion wall and the pre-commencement status of the river. The gabions were needed to re-establish the bank of the river.			

14. Is/was the development the best practicable environmental option for this land/site?	YES	~~NO~~	Please explain
Impacts on the river are limited due to the location of the gabion wall and the pre-commencement status of the river. The gabions were needed to re-establish the bank of the river.			

15. What are/were the benefits to society in general and to the local communities?	Please explain
The gabions were needed to re-establish the bank of the river. Proposed removal of silt from the river will assist in the storm water management of the municipality and the prevention of flooding and re-establish the functioning of the river system. Some of the existing homeowners on the eastern side of the water course complaint during the public participation that their house foundations are wet as a result of the silt built-up in the water course.	

16. Any other need and desirability considerations related to the activity?	Please explain
No	

17. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA were taken into account:

All decisions during the planning and assessment by all involved for the activity promote the integration of the principles of environmental management set out in section 2 to minimize and mitigate any significant effect on the environment. All these mitigations and management measures must be included as EA conditions and into the EMP.

All involved in the planning and design identified and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage. The risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management set out in section 2 were taken in consideration.

All specialists involved in the planning and design of the activity are independent and ensured that the effects of the activities on the environment receive adequate consideration before recommendations and actions.

18. Please describe how the **principles of environmental management** as set out in section 2 of NEMA were taken into account:

A public participation process as described in the legislation and guidelines is followed.

The proposed development will not have an impact on an endangered vegetation type, and the loss of habitat and ecological functioning will be offset in accordance with the Wetland offset agreement as per Appendix M2.

The proposed development will not disturb the sites that constitute the nation's cultural heritage. The proposed development will not exceed or exploit renewable resources to an extent that they reach a level beyond which their integrity is jeopardised. A risk-averse and caution first approach is being applied.

All alternatives were assessed against the no go or no development option. All impacts and aspects were assessed and identified. Both specialists and the public through the public participation process identified impacts and aspects.

An environmental management programme is included. This will guide the responsibilities in execution as stipulated above. The social, economic and environmental impacts of activities, including disadvantages and benefits, were considered, assessed and evaluated, and decisions are appropriate in the light of such consideration and assessment.
The proposed development gives attention to sensitive, vulnerable, highly dynamic or stressed ecosystems, such as the natural veld and wetland.

SECTION E: ALTERNATIVES

Please Note: Before completing this section, first consult this Department's *Guideline on Alternatives* (March 2013) available on the Department's website (**http://www.capegateway.gov.za/eadp**).

"Alternatives", in relation to an activity, means different means of meeting the general purposes and requirements of the activity, which may include alternatives to –

(a) the property on which, or location where, it is to undertake the activity/the activity was undertaken;
(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.

The NEMA prescribes that the procedures for the investigation, assessment and communication of the (potential) consequences or impacts of activities on the environment must, *inter alia*, with respect to every application for environmental authorisation –

- ensure that the general objectives of integrated environmental management laid down in NEMA and the National Environmental Management Principles set out in NEMA are taken into account; and (where applicable)
- include an investigation of the potential consequences or impacts of the alternatives to the activity on the environment and assessment of the significance of those potential consequences or impacts, including the option of not implementing the activity.

The general objective of integrated environmental management is, *inter alia*, to "*identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management*" set out in NEMA.

1. In the sections below, please provide a description of any considered alternatives and alternatives that were found to be feasible and reasonable.

Please note:

- Detailed written proof of the investigation of alternatives must be provided. If no reasonable or feasible alternative exists, a motivation must be provided.
- Alternatives considered for a Section 24G application are used to determine if the development was the best practicable alternative (environmentally, socially and economically) for the site or property.
- In respect of a section 24 application, the option of not implementing the activity ("no-go"), includes the option of ceasing the activity, not implementing continuation of the activity, refusal of the commenced activity and complete rehabilitation of the affected site.

(a) Property and location/site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

No other property alternatives were assessed as no feasible or reasonable property alternative exists. The development areas are situated within the agreed urban edge of the town of Idas Valley, Stellenbosch and earmarked for residential development in the SDF. Due to the need for housing in the surrounding community this location was the only feasible option. The IDP identified the need for Housing. This need in the municipality is estimated at over 20 000 units (comprising some 6 000 informal dwellings, 9 000 backyard and overcrowded households, and rural households in need of accommodation) in 2012. The municipality through the IDP and SDF process earmarked these properties for future residential development.

Following a floodline study and stormwater management plan it was determined that the re-establishment of the river banks by way of gabions would be required to prevent flooding since the stream disappears due to sedimentation. Due to the sedimentation of the existing stream, it is our proposal that the stream be opened by means of excavation in order to ensure a capacity to discharge the 1: 100 year RI storm event runoff.

(b) Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

No other activity alternatives were assessed as no feasible or reasonable activity alternative exists. The development area is situated within the agreed urban edge of the town of Stellenbosch, Idas Valley and earmarked for residential development in the SDF. Due to the need for housing in the surrounding community this activity was the only feasible option. Following a floodline study and stormwater management plan it was determined that the re-establishment of the river banks by way of gabions would be required to prevent flooding since the stream disappears due to sedimentation. Due to the sedimentation of the existing stream, it is our proposal that the stream be opened by means of excavation in order to ensure a capacity to discharge the 1: 100 year RI storm event runoff.

No other activity would allow for effective storm water planning within the municipality.

(c) Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

When considering the layout alternatives, the specialist reports and the engineering needs were considered and a workshop with planners, the municipality and engineers was held to take into account the SDP needs and requirements.

Alternative 1 – PREFERRED -

- South river crossing: gabion mattress protection, 2 x1500 x 1200 rectangular portal culverts
- North river crossing: gabion mattress protection, 2 x1500 x 1200 rectangular portal culverts
- Gabions between CH 350 and CH 40 (Starking Road river crossing to Bartlett Road river crossing). Between CH 80 and CH 60 a stabilizing layer of rock fill wrapped in geotextile is to be placed before the construction of the gabions as per design.
- Silt removal within the watercourse. The middle section of the water course has a built up of silt that affect the flow of the river and the silt in this area must be removed to reinstate the river flow channel which is prominent upstream and downstream. Silt is to be use to naturalise and stabilise the gabions as per the request of DWS. Portion A: Embankment re-sloping, Portion B: extensive re-sloping works and vegetation clearing and Portion C: limited rehabilitation requirements other than vegetation control.
- 166 residential units (subsidy housing) on 1.9ha
- 3 public open space erven on 2.2 ha
- 2 local authority erven (roads and substation) on 1ha
- 600m2 retention pond

See appendix B for a detailed Site Development Plan.

Alternative 2 (2015)

- South River crossing: 1.2m x 0.9m box culvert
- A Gabion mattress protection is also proposed to the south of the vehicle bridge at Starking Road.
- Silt removal within the watercourse. The middle section of the water course has a built up of silt that affect the flow of the river and the silt in this area must be removed to reinstate the river flow channel which is prominent upstream and downstream.
- 217 residential units (subsidy housing) on 2.29 ha
- 2 erven will be Public Open Space on 1.76 ha
- Roads on 1.11 ha
- 600m2 retention pond

This is not the preferred option as the layout will significantly impact on the two seep wetlands. This is not the preferred option as it will not allow for effective flooding protection.

No other layout alternatives were assessed as no feasible or reasonable layout alternatives exists. The layouts were based on the stormwater calculations and location of the river.

(d) Technology alternatives (e.g. to reduce resource demand and resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts or detailed motivation if no reasonable or feasible alternatives exist:

Non-structural measures where considered. Non-structural measures refer to planning, institutional and pollution prevention practices designed to prevent or minimise pollutants from entering stormwater runoff and/or reduce the volume of stormwater requiring management. The South African Guidelines for Sustainable Drainage Systems and recommendations from engineers were consulted in the selection of the only feasible technology alternative. It was deemed that a gabion wall to re-establish the river bank would be the only way to ensure effective stormwater management.

(e) Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

None. Operation in terms of MMP.

(f) The option of ceasing the activity (the refusal of the activity(ies) and/or rehabilitation of the site):

Removal of the gabions and rehabilitation of the area would result in the area to the north west prone to flooding. Furthermore, a loss of 166 subsidy housing opportunities would be lost.

(g) Any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

None identified.

(h) Please provide a summary of the alternatives investigated and the outcomes of such investigation:

Please note: If no feasible and reasonable alternatives exist, the description and proof of the investigation of alternatives, together with motivation of why no feasible or reasonable alternatives exist, must be provided.

SUMMARY OF THE ALTERNATIVES

Property and location/site alternatives

No other property alternatives were assessed as no feasible or reasonable property alternative exists. The development areas are situated within the agreed urban edge of the town of Idas Valley, Stellenbosch and earmarked for residential development in the SDF. Due to the need for housing in the surrounding community this location was the only feasible option. The IDP identified the need for Housing. This need in the municipality is estimated at over 20 000 units (comprising some 6 000 informal dwellings, 9 000 backyard and overcrowded households, and rural households in need of accommodation) in 2012. The municipality through the IDP and SDF process earmarked these properties for future residential development..

Activity alternatives

Following a floodline study and stormwater management plan it was determined that the re-establishment of the river banks by way of gabions would be required to prevent flooding since the stream disappears due to sedimentation. Due to the sedimentation of the existing stream, it is proposed that the stream be opened by means of excavation in order to ensure a capacity to discharge the 1: 100 year RI storm event runoff.

No other activity alternatives were assessed as no feasible or reasonable activity alternative exists. The development area is situated within the agreed urban edge of the town of Stellenbosch, Idas Valley and earmarked for residential development in the SDF. Due to the need for housing in the surrounding community this activity was the only feasible option. Following a floodline study and stormwater management plan it was determined that the re-establishment of the river banks by way of gabions would be required to prevent flooding since the stream disappears due to sedimentation. Due to the sedimentation of the existing stream, it is our proposal that the stream be opened by means of excavation in order to ensure a capacity to discharge the 1: 100 year RI storm event runoff.

No other activity would allow for effective storm water planning within the municipality.

Design or layout alternatives

When considering the layout alternatives, the specialist reports and the engineering needs were considered and a workshop with planners, the municipality and engineers was held to take into account the SDP needs and requirements.

Alternative 1 – PREFERRED -

- South river crossing: gabion mattress protection, 2 x1500 x 1200 rectangular portal culverts
- North river crossing: gabion mattress protection, 2 x1500 x 1200 rectangular portal culverts
- Gabions between CH 350 and CH 40 (Starking Road river crossing to Bartlett Road river crossing). Between CH 80 and CH 60 a stabilizing layer of rock fill wrapped in geotextile is to be placed before the construction of the gabions as per design.
- Silt removal within the watercourse. The middle section of the water course has a built up of silt that affect the flow of the river and the silt in this area must be removed to reinstate the river flow channel which is prominent upstream and downstream. Silt is to be use to naturalise and stabilise the gabions as per the request of DWS. Portion A: Embankment re-sloping, Portion B: extensive re-sloping works and vegetation clearing and Portion C: limited

rehabilitation requirements other than vegetation control.

- 166 residential units (subsidy housing) on 1.9ha
- 3 public open space erven on 2.2 ha
- 2 local authority erven (roads and substation) on 1ha
- 600m2 retention pond

See appendix B for a detailed Site Development Plan.

Alternative 2 (2015)

- South River crossing: 1.2m x 0.9m box culvert
- A Gabion mattress protection is also proposed to the south of the vehicle bridge at Starking Road.
- Silt removal within the watercourse. The middle section of the water course has a built up of silt that affect the flow of the river and the silt in this area must be removed to reinstate the river flow channel which is prominent upstream and downstream.
- 217 residential units (subsidy housing) on 2.29 ha
- 2 erven will be Public Open Space on 1.76 ha
- Roads on 1.11 ha
- 600m2 retention pond

This is not the preferred option as the layout will significantly impact on the two seep wetlands. This is not the preferred option as it will not allow for effective flooding protection.

No other layout alternatives were assessed as no feasible or reasonable layout alternatives exists. The layouts were based on the stormwater calculations and location of the river.

Technology alternatives

Non-structural measures where considered. Non-structural measures refer to planning, institutional and pollution prevention practices designed to prevent or minimise pollutants from entering stormwater runoff and/or reduce the volume of stormwater requiring management. The South African Guidelines for Sustainable Drainage Systems and recommendations from engineers were consulted in the selection of the only feasible technology alternative. It was deemed that a gabion wall to re-establish the river bank would be the only way to ensure effective stormwater management.

Operational alternatives

None. Operation in terms of MMP.

Ceasing the activity

Removal of the gabions and rehabilitation of the area would result in the area to the north west prone to flooding. Furthermore, a loss of 166 subsidy housing opportunities would be lost.

SECTION F: IMPACT ASSESSMENT, MANAGEMENT, MITIGATION AND MONITORING MEASURES

Please note, the impacts identified below refer to general impacts commonly associated with development activities. The list below is not exhaustive and may need to be supplemented. Where required, please append the information on any additional impacts to this application.

Please note: The information in this section must be duplicated for all the feasible and reasonable alternatives (where relevant).

1. PLEASE DESCRIBE THE MANNER IN WHICH THE DEVELOPMENT HAS IMPACTED ON THE FOLLOWING ASPECTS:

(a) Geographical and physical aspects:

The proposed action will not have a significant adverse cumulative effect on topography, slopes, soils and groundwater resources, if operational and construction mitigation measures are implemented.

The non-perennial river has been impacted on but has not modified its natural flow or meandering. The gabions have been placed to re-establish the bank of the river. This was required due to the stream disappearing in the middle sections of the site due to sedimentation. Therefore, flow modification is limited to absent. Mitigation measures to minimise impact on the river and wetland have been addressed in the site development plans and environmental management plan.

(b) Biological aspects:

Has the development impacted on critical biodiversity areas (CBAs) or ecological support areas (ESAs)?	YES	~~NO~~
If yes, please describe:		
The site and non-perennial river are classified as an ESA (restore). The excavation and physical gabion structure resulted in the removal of alien species and some indigenous vegetation in the river. The removal of vegetation has not completely affected the functioning of the ecological support area as the gabion wall is a narrow structure to the west of the river and is only situated within the watercourse in 3 locations. The construction of the gabion wall and proposed excavation (removal of silt) in the river will after some time allow for a better functioning aquatic system. The housing development preferred alternative 1 will result in the loss of 0.88 hectares of seep wetland.		
Has the development impacted on terrestrial vegetation, or aquatic ecosystems (wetlands, estuaries or the coastline)?	YES	~~NO~~
If yes, please describe:		

Vegetation:
The excavation and physical gabion structure resulted in the removal of alien species and some indigenous vegetation in the river. The removal of vegetation has not affected the functioning of the ecological support area as the majority of vegetation removed was alien. Further vegetation will be removed if the proposed development is approved. The property lies in the general area that used to support Boland Granite Fynbos. This vegetation type is listed as Vulnerable (Western Cape Biodiversity Spatial Plan 2017). The southern section of the site comprises mainly grasses. There is a heavy presence of alien invasive vegetation on the site. The site contains Port Jackson (Acacia saligna), Kikuyu Grass (Pennisetum clandestinum), Patterson's Curse (Echium Plantagineum) etc.
River:
The gabion wall is a narrow structure to the west of the river and is only situated "within" the watercourse in 3 locations. The non-perennial river has been impacted on but has not modified its natural flow or meandering. The gabions have been placed to re-establish the bank of the river. This was required due to the stream disappearing in the middle sections of the site due to sedimentation. Therefore, flow modification is limited to absent. In some aspects the construction of the gabion wall and proposed excavation (removal of silt) in the river will after some time allow for a better functioning aquatic system.
Wetland:
The housing development preferred alternative 1 will result in the loss of 0.88 hectares of seep wetland.

Has the development impacted on any populations of threatened plant or animal species, and/or on any habitat that may contain a unique signature of plant or animal species?	~~YES~~	NO
If yes, please describe:		
According to specialist studies no threatened species will be impacted on.		
Please describe the manner in which any other biological aspects were impacted:		
As above.		

(c) Socio-Economic aspects:

What was the capital value of the activity on completion?	Unknown	
What is the (expected) yearly income or contribution to the economy that is/will be generated by or as a result of the activity?	NA	
Has/will the activity have contributed to service infrastructure?	YES	~~NO~~
How many new employment opportunities were/will be created in the construction phase of the activity?	Unknown	
What was the value of the employment opportunities during the construction phase?	Unknown	
What percentage of this accrued to previously disadvantaged individuals?	Unknown %	
How was this ensured and monitored (please explain):		
Stellenbosch Municipality always apply BEE policy and legislation in their tender process.		
How many permanent new employment opportunities were/will be created during the operational phase of the activity?	None	
What is the current/expected value of the employment opportunities during the first 10 years?	NA	
What percentage of this accrued/will accrue to previously disadvantaged individuals?	NA%	
How was/will this be ensured and monitored (please explain):		
NA		
Any other information related to the manner in which the socio-economic aspects was/will be impacted:		
NONE		

(d) Cultural and historic aspects:

A Notice of Intent to Develop (NID) was submitted to the Heritage Western Cape (HWC) for review in 2014 and it was found that no heritage resources will be impacted by the development.

2. WASTE AND EMISSIONS

(a) Waste (including effluent) management

Did the activity produce waste (including rubble) during the construction phase?	YES	~~NO~~
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type?	Approx.. 40 m^3	
Estimate of - 10m^3 builders waste and 30m^3 silt.		

Does the activity produce waste during its operational phase?	YES	~~NO~~
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type?	Domestic waste	

	associated with residential developments. Approximately 1m³ per residential unit per week.

Where and how was/will the waste be treated / disposed of (describe)?		
All non-recyclable waste will be removed from site to a licensed landfill site. Silt is to be use to naturalise and stabilise the gabions as per the request of DWS. Any remaining silt will be used as infill as directed by the ECO and Municipality.		
Has the municipality or relevant authority confirmed that sufficient capacity exists for treating / disposing of the waste (to be) generated by this activity(ies)? If yes, provide written confirmation from Municipality or relevant authority	YES	~~NO~~
Does/will the activity produce waste that is/will be treated and/or disposed of at another facility other than into a municipal waste stream?	~~YES~~	NO
If yes, has this facility confirmed that sufficient capacity exists for treating / disposing of the waste (to be) generated by this activity(ies)? Provide written confirmation from the facility and provide the following particulars of the facility:	~~YES~~	~~NO~~
Does the facility have an operating license? (If yes, please attach a copy of the license.)	~~YES~~	~~NO~~
Facility name:		
Contact person:		
Postal address:		
	Postal code:	
Telephone:	Cell:	
E-mail:	Fax:	

Describe the measures that were/will be taken to reduce, reuse or recycle waste:
All non-recyclable waste will be removed from site to a licensed landfill site. Silt is to be use to naturalise and stabilise the gabions as per the request of DWS. Any remaining silt will be used as infill as directed by the ECO and Municipality.

(b) Emissions into the atmosphere

Does/will the activity produce emissions that will be disposed of into the atmosphere?	~~YES~~	NO
If yes, does it require approval in terms of relevant legislation?	~~YES~~	~~NO~~
Describe the emissions in terms of type and concentration and how it is/will be treated/mitigated:		
NA		

3. WATER USE

Please indicate the source(s) of water for the activity by ticking the appropriate boxes)

Municipal	~~Water board~~	~~Groundwater~~	~~River, Stream, Dam or Lake~~	~~Other~~	~~The activity did/does/will not use water~~

If water was extracted from a groundwater source, river, stream, dam, lake or any other natural feature, please indicate the volume that was extracted per month:	NA	m³

Please provide proof of assurance of water supply (e.g. Letter of confirmation from municipality / water user associations, yield of borehole)		
The existing Arbeidslus reservoir has sufficient spare capacity to accommodate the proposed development.		
Did/does the activity require a water use permit / license from DWA?	YES	~~NO~~
If yes, please submit a certified copy of the water use permit/license or submit the necessary application to Department of Water Affairs and attach proof thereof to this application, whichever is applicable.		
Describe the measures that were/ will be taken to reduce water demand, and measures to reuse or recycle water:		
NA		

4. POWER SUPPLY

Please indicate the source of power supply e.g. Municipality / Eskom / Renewable energy source

Power will be supplied from the Stellenbosch Municipality's grid network as currently supplying the existing developed area adjoining. The reticulation system will be installed underground in accordance with the provisions of the relevant supply authority. According to Stellenbosch Municipality, sufficient electricity supply is available for the proposed development.

If power supply is not available, where will power be sourced from?
NA

5. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:
Technology alternatives Technology alternatives were assessed and where not deemed feasible or reasonable due to the cost constrains of a "low cost" housing development.

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

Technology alternatives Technology alternatives were assessed and where not deemed feasible or reasonable due to the cost constrains of a "low cost" housing development.

6. DESCRIPTION AND ASSESSMENT OF THE SIGNIFICANCE OF IMPACTS prior to and after MITIGATION

Please note:

- While sections are provided for impacts on certain aspects of the environment and certain impacts, the sections should also be copied and completed for all other impacts.
- Mitigation measures that were implemented and mitigation measures that are to be implemented should be clearly distinguished.

IMPACTS OF GABIONS (WORK COMPLETED TO DATE)

(a) **Impacts that resulted from the planning, design and construction phases (briefly describe and compare the impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that occurred as a result of the planning, design and construction phases.**

Impacts on geographical and physical aspects:	
Nature of impact:	**Physical Impact on the non-perennial river.** The magnitude of the impact is considered Minor (Mi)-2-will not result in an impact on processes.
Extent and duration of impact:	Extent: Local (L)-3-Within a 20 km radius of the centre of the site Duration: Short term (S)-1-0 – 1 years
Probability of occurrence:	Definite (D) 5
Degree to which the impact can be reversed:	Partly reversible (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Resource will not be lost (R)
Cumulative impact prior to mitigation:	The gabion wall is a narrow structure to the west of the river and is only situated "within" the watercourse in 3 locations. The non-perennial river has been impacted on but has not modified its natural flow or meandering. The gabions have been placed to re-establish the bank of the river. This was required due to the stream disappearing in the middle sections of the site due to sedimentation. Therefore, flow modification is limited to absent. In some aspects the construction of the gabion wall and proposed excavation (removal of silt) in the river will after some time allow for a better functioning aquatic system.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	Un-mitigatible (UM)
Proposed mitigation:	None
Cumulative impact post mitigation:	As above.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	As above.

Impact on biological aspects:	
Nature of impact:	**The excavation and physical gabion structure resulted in the removal of vegetation within the watercourse / ESA.**

Extent and duration of impact:	Extent: Local (L)-3-Within a 20 km radius of the centre of the site Duration: Short term (S)-1-0 – 1 years
Probability of occurrence:	Definite (D) 5
Degree to which the impact can be reversed:	Partly reversible (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Resource will not be lost (R)
Cumulative impact prior to mitigation:	The excavation and physical gabion structure resulted in the removal of alien species and some indigenous vegetation in the river. The removal of vegetation has not affected the functioning of the ecological support area as the majority of vegetation removed was alien.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	Un-mitigatible (UM)
Proposed mitigation:	None
Cumulative impact post mitigation:	As above.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	As above.

Impacts on socio-economic aspects:	
Nature of impact:	**Temporary construction jobs created.**
Extent and duration of impact:	Extent 2 (On site or within 100 m of the site) & Duration 1 (0 – 1 years)
Probability of occurrence:	4 (most likely)
Degree to which the impact can be reversed:	NA – Positive
Degree to which the impact may cause irreplaceable loss of resources:	NA – Positive
Cumulative impact prior to mitigation:	NA – Positive
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	8 – Low (positive)
Degree to which the impact can be mitigated:	NA – Positive
Proposed mitigation:	Local contractors, employing or seeking to employ local (historically disadvantaged individuals (HDIs) from the region who are suitably qualified, should get preference. The municipality, local community and local community organizations should be informed of the project and potential job opportunities by the developer.
Cumulative impact post mitigation:	NA – Positive
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	8 – Low (positive)

Impacts on cultural-historical aspects:	
Nature of impact:	**The impact of the development on archaeological, paleontological and heritage remains.** Magnitude - Small (S) 0 will have no effect on the environment
Extent and duration of impact:	Extent 2 (On site or within 100 m of the site) & Duration 1 (0 – 1 years)
Probability of occurrence:	2 (some possibility, but low likelihood)
Degree to which the impact can be reversed:	2-Resource may be partly destroyed (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Partly reversible (PR)
Cumulative impact prior to mitigation:	The excavation and gabion construction did not impact on archaeological, paleontological or heritage remains.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	Partly mitigatible (PM)
Proposed mitigation:	Should any burials, fossils or other historical material be encountered during construction, work must cease immediately and HWC must be contacted.
Cumulative impact post mitigation:	The excavation and gabion construction did not impact on archaeological, paleontological or heritage remains.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Noise impacts:

Nature of impact:	**Noise due to construction machinery.**
Extent and duration of impact:	Extent 2 (On site or within 100 m of the site) & Duration 1 (0 – 1 years)
Probability of occurrence:	1 (Very improbable (VP))
Degree to which the impact can be reversed:	Completely reversible (R) - This will not be a long-term impact nor will it have an impact on the natural processes. It is thus 100% reversible.
Degree to which the impact may cause irreplaceable loss of resources:	1-Resource will not be lost (R)
Cumulative impact prior to mitigation:	Nuisance. Noise due to construction machinery during the construction phase. Construction machinery may cause noise disturbance to the directly adjacent land users/ owners. The noise was not considered to be considerable and will only be temporary.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	Partly mitigatible (PM)
Proposed mitigation:	Machinery and vehicles should be regularly maintained to prevent excessive noise. All machinery and work activities must adhere to the requirements of the noise regulations.
Cumulative impact post mitigation:	Nuisance.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Visual impacts / Sense of Place:	
Nature of impact:	**Visual impact of construction.** Magnitude - Minor (Mi) 2 will not result in an impact on processes. The visual character of the open space has been slightly impacted on and will affect approximately **17 households** which face directly onto the site.
Extent and duration of impact:	Extent 3 (Local) & Duration 1 (0 – 1 years)
Probability of occurrence:	2 (some possibility, but low likelihood)
Degree to which the impact can be reversed:	Partly reversible (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Resource may be partly destroyed (PR)
Cumulative impact prior to mitigation:	Temporary visual impact on the landscape. The construction activities will have a temporary visual impact on the landscape. Unsightly construction machinery and activities on construction site.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	Un-mitigatible (UM)
Proposed mitigation:	NA
Cumulative impact post mitigation:	Temporary visual impact on the landscape.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

(b) **Impacts that result from the operational phase (briefly describe and compare impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the operational phase.**

Impacts on geographical and physical aspects:	
Nature of impact:	**Physical Impact on the non-perennial river.** The magnitude of the impact is considered Minor (Mi)-2-will not result in an impact on processes.
Extent and duration of impact:	Extent: Local (L)-3-Within a 20 km radius of the centre of the site Duration: Permanent(P)-5-Will not cease
Probability of occurrence:	Definite (D)-5
Degree to which the impact can be reversed:	Partly reversible (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Resource will not be lost (R)
Cumulative impact prior to mitigation:	The gabion wall is a narrow structure to the west of the river and is only situated "within" the watercourse in 3 locations. The non-perennial river has been impacted on but has not modified its natural flow or meandering. The gabions have been placed to re-establish the bank of the river. This was required due to the stream disappearing in the middle sections of the site due to sedimentation. Therefore, flow modification is limited to absent. In some aspects the construction of the gabion wall and proposed excavation (removal of silt) in the river will after some time allow for a better functioning aquatic system.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium

Degree to which the impact can be mitigated:	Partly mitigatible (PM)
Proposed mitigation:	EMP and MMP
Cumulative impact post mitigation:	Defined river channel and flow and improved stormwater management. Improve damp foundation conditions inside the houses on the eastern section of the watercourse.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Impact on biological aspects:	
Nature of impact:	The excavation within the watercourse / ESA. Magnitude - Low (L)-4-will cause a slight impact on processes.
Extent and duration of impact:	Extent: Local (L)-3-Within a 20 km radius of the centre of the site Duration: Short to medium (S-M)-2-2 – 5 years
Probability of occurrence:	Definite (D)-5
Degree to which the impact can be reversed:	Partly reversible (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Resource will not be lost (R)
Cumulative impact prior to mitigation:	The physical gabion structure will not impact on the biological aspects further. Removal of silt during the operational phase will result in the removal of aquatic vegetation and disturbance of habitat.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be mitigated:	Partly mitigatible (PM)
Proposed mitigation:	MMP and on-going alien vegetation removal.
Cumulative impact post mitigation:	Disturbance to ESA.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Impacts on the socio-economic aspects:	
Nature of impact:	**None.**

Impacts on the cultural-historical aspects:	
Nature of impact:	**None.**

Noise impacts:	
Nature of impact:	**None.**

Visual impacts / Sense of Place:	
Nature of impact:	**Visual impact of gabions.** Magnitude - Minor (Mi)-2-will not result in an impact on processes.
Extent and duration of impact:	Extent 3 (Local) & Permanent(P)-5-Will not cease
Probability of occurrence:	2 (some possibility, but low likelihood)
Degree to which the impact can be reversed:	Partly reversible (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Resource may be partly destroyed (PR)
Cumulative impact prior to mitigation:	The visual character of the open space has been slightly impacted on and will affect approximately 17 households which face directly onto the site.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	Un-mitigatable (UM)
Proposed mitigation:	NA
Cumulative impact post mitigation:	The site will still be open space but will have the low gabion wall present. With the natural reestablishment of vegetation is the open space the visual impact is considered to be low.

Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

(c) Impacts that may result from the decommissioning and closure phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase.

Impacts on geographical and physical aspects:	
Nature of impact:	**Physical Impact on the non-perennial river by removing gabion wall.** The magnitude of the impact is considered Minor (Mi)-2-will not result in an impact on processes.
Extent and duration of impact:	Extent: Local (L)-3-Within a 20 km radius of the centre of the site Duration: Short term (S)-1-0 – 1 years
Probability of occurrence:	Definite (D) 5
Degree to which the impact can be reversed:	Partly reversible (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Resource will not be lost (R)
Cumulative impact prior to mitigation:	The bank of the river (gabions) would be removed. This was required due to the stream disappearing in the middle sections of the site due to sedimentation. Therefore, it is likely that the river would silt up again and that flow would not be restricted to the channel and flooding could become an issue to neighbouring properties. The rehabilitation of the river will allow for the better function of the aquatic system as such decommissioning is not recommended.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	Un-mitigatable (UM)
Proposed mitigation:	None
Cumulative impact post mitigation:	As above.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	As above.

Impact on biological aspects:	
Nature of impact:	**The removal of the gabion structure could result in the removal of vegetation within the watercourse / ESA.**
Extent and duration of impact:	Extent: Local (L)-3-Within a 20 km radius of the centre of the site Duration: Short term (S)-1-0 – 1 years
Probability of occurrence:	Definite (D) 5
Degree to which the impact can be reversed:	Partly reversible (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Resource will not be lost (R)
Cumulative impact prior to mitigation:	Depending on when decommissioning takes place, removal of re-established vegetation is likely.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	Un-mitigatible (UM)
Proposed mitigation:	None
Cumulative impact post mitigation:	As above.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	As above.

Impacts on socio-economic aspects:	
Nature of impact:	**Temporary jobs created.**
Extent and duration of impact:	Extent 2 (On site or within 100 m of the site) & Duration 1 (0 – 1 years)
Probability of occurrence:	4 (most likely)
Degree to which the impact can be reversed:	NA – Positive
Degree to which the impact may cause irreplaceable loss of resources:	NA – Positive
Cumulative impact prior to mitigation:	NA – Positive
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	8 – Low (positive)
Degree to which the impact can be mitigated:	NA – Positive
Proposed mitigation:	Local contractors, employing or seeking to employ local (historically disadvantaged individuals (HDIs) from the region who are suitably qualified, should get preference. The municipality, local community and local community organizations should be informed of the project and potential job opportunities by the developer.
Cumulative impact post mitigation:	NA – Positive
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	8 – Low (positive)

Impacts on cultural-historical aspects:	
Nature of impact:	**None.**

Noise impacts:	
Nature of impact:	**Noise due to decommissioning machinery.**
Extent and duration of impact:	Extent 2 (On site or within 100 m of the site) & Duration 1 (0 – 1 years)
Probability of occurrence:	1 (Very improbable (VP))
Degree to which the impact can be reversed:	Completely reversible (R) - This will not be a long-term impact nor will it have an impact on the natural processes. It is thus 100% reversible.
Degree to which the impact may cause irreplaceable loss of resources:	1-Resource will not be lost (R)
Cumulative impact prior to mitigation:	Nuisance. Noise due to decommissioning machinery during the construction phase. Decommissioning machinery may cause noise disturbance to the directly adjacent land users/ owners. The noise was not considered to be considerable and would only be temporary.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	Partly mitigatible (PM)
Proposed mitigation:	Machinery and vehicles should be regularly maintained to prevent excessive noise. All machinery and work activities must adhere to the requirements of the noise regulations.
Cumulative impact post mitigation:	Nuisance.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

Visual impacts / Sense of Place:	
Nature of impact:	**Visual impact of decommissioning.** Magnitude - Minor (Mi)-2-will not result in an impact on processes. The visual character of the open space has been slightly impacted on and will affect approximately **17 households** which face directly onto the site.
Extent and duration of impact:	Extent 3 (Local) & Duration 1 (0 – 1 years)
Probability of occurrence:	2 (some possibility, but low likelihood)
Degree to which the impact can be reversed:	Partly reversible (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Resource may be partly destroyed (PR)
Cumulative impact prior to mitigation:	Temporary visual impact on the landscape. The decommissioning activities will have a temporary visual impact on the landscape. Unsightly construction machinery and activities on construction site.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	Un-mitigatible (UM)
Proposed mitigation:	NA
Cumulative impact post mitigation:	Temporary visual impact on the landscape.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

(d) Any other impacts:

None identified to date.

------IMPACTS OF WORK TO BE COMPLETED ------

(b) **Impacts that resulted from the planning, design and construction phases (briefly describe and compare the impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that occurred as a result of the planning, design and construction phases.**

Impacts on geographical and physical aspects:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	**Physical Impact on the rivers and wetlands.**		
Extent and duration of impact:	Site (2) Permanent (5)		
Probability of occurrence:	Definite (D) 5	Definite (D) 5	Highly probable (HP) 4
Degree to which the impact can be reversed:	Partly reversible (PR)	Irreversible (IR)	Partly reversible (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Resource may be partly destroyed (PR)		
Cumulative impact prior to mitigation:	0.88 hectares of wetland will be lost calculated using a 15 m buffer included as edge effects and the anticipated loss of wetland habitat. The gabions will re-establish the bank of the river. Therefore, flow modification is limited to absent. In some aspects the construction of the gabion wall and proposed excavation (removal of silt) in the river will after some time allow for a better functioning aquatic system. Two road crossings will impede flow.	1.5 hectares of wetland will be lost calculated using a 15 m buffer included as edge effects and the anticipated loss of wetland habitat. The non-perennial river will be impacted on by the silt removal and one road crossing.	Should the authorities decide not to allow any development, it seems probable that the current wetland function, would gradually be lost anyway, as the current process of dehydration would persist.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium	Medium-High	Medium-High
Degree to which the impact can be mitigated:	Partly- mitigatable (PM)	Partly- mitigatable (PM)	Un-mitigatable (UM)
Proposed mitigation:	Rehabilitate river and wetland in accordance with FRESHWATER RESOURCE REHABILITATION AND IMPLEMENTATION PLAN FOR THE PROPOSED IDAS VALLEY RESIDENTIAL DEVELOPMENT ON ERF 9445, STELLENBOSCH, WESTERN CAPE PROVINCE dated September 2018		NA
Cumulative impact post mitigation:	The measures will allow the water regime to once again flow through the river to the east of the development site and improve the remaining wetland habitat, leading to an overall betterment of the watercourses and the general environment.	Due to a lack of reestablishment of the river banks, flooding may potentially occur.	Loss of wetland habitat and functioning of river system.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Medium-High

Impact on biological aspects:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	**Removal of vegetation.**		
Extent and duration of impact:	Site (2) Medium (3)		Not applicable to the no-go alternative.
Probability of occurrence:	Definite (D) 5	Definite (D) 5	
Degree to which the impact can be reversed:	Partly reversible (PR)	Irreversible (IR)	
Degree to which the impact may cause irreplaceable loss of resources:	Resource may be partly destroyed (PR)		
Cumulative impact prior to mitigation:	0.88 hectares of wetland will be lost calculated using a 15 m buffer included as edge effects and the anticipated loss of wetland habitat. Removal of vegetation from the non-perennial river due to silt removal and one road crossing.	1.5 hectares of wetland will be lost calculated using a 15 m buffer included as edge effects and the anticipated loss of wetland habitat. Removal of vegetation from the non-perennial river due to silt removal and one road crossing.	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium	Medium-High	
Degree to which the impact can be mitigated:	Partly- mitigatable (PM)	Partly- mitigatable (PM)	
Proposed mitigation:	Rehabilitate river and wetland in accordance with FRESHWATER RESOURCE REHABILITATION AND IMPLEMENTATION PLAN FOR THE PROPOSED IDAS VALLEY RESIDENTIAL DEVELOPMENT ON ERF 9445, STELLENBOSCH, WESTERN CAPE PROVINCE dated September 2018		
Cumulative impact post mitigation:	Loss of wetland habitat to be offset in accordance with offset agreement. Areas will be re-vegetated in accordance with FRESHWATER RESOURCE REHABILITATION AND IMPLEMENTATION PLAN.	Loss of larger extent of wetland habitat.	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	

Impacts on socio-economic aspects:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	**Temporary construction jobs created.**		
Extent and duration of impact:	Extent 2 (On site or within 100 m of the site) & Duration 1 (0 – 1 years)		Not applicable to no-go alternative.
Probability of occurrence:	4 (most likely)		
Degree to which the impact can be reversed:	NA – Positive		
Degree to which the impact may cause irreplaceable loss of resources:	NA – Positive		

Cumulative impact prior to mitigation:	NA – Positive	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	8 – Low (positive)	
Degree to which the impact can be mitigated:	NA – Positive	
Proposed mitigation:	Local contractors, employing or seeking to employ local (historically disadvantaged individuals (HDIs) from the region who are suitably qualified, should get preference. The municipality, local community and local community organizations should be informed of the project and potential job opportunities by the developer.	
Cumulative impact post mitigation:	NA – Positive	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	8 – Low (positive)	

Impacts on cultural-historical aspects:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	**The potential impact of the proposed development on archaeological, paleontological and heritage remains.**		
Extent and duration of impact:	Extent 2 (On site or within 100 m of the site) & Duration 1 (0 – 1 years)		Not applicable to no-go alternative.
Probability of occurrence:	2 (some possibility, but low likelihood)		
Degree to which the impact can be reversed:	2-Resource may be partly destroyed (PR)		
Degree to which the impact may cause irreplaceable loss of resources:	Partly reversible (PR)		
Cumulative impact prior to mitigation:	The excavation to have potential impact on archaeological, paleontological or heritage remains.		
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low		
Degree to which the impact can be mitigated:	Partly mitigatable (PM)		
Proposed mitigation:	Should any burials, fossils or other historical material be encountered during construction, work must cease immediately and HWC must be contacted.		
Cumulative impact post mitigation:	The excavation to have potential impact on archaeological, paleontological or heritage remains.		
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low		

Noise impacts:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	**Noise due to construction machinery.**		
Extent and duration of impact:	Extent 2 (On site or within 100 m of the site) & Duration 1 (0 – 1 years)		Not applicable to the no go alternative.
Probability of occurrence:	1 (Very improbable (VP))		
Degree to which the impact can be reversed:	Completely reversible (R) - This will not be a long-term impact nor will it have an impact on the natural processes. It is thus 100% reversible.		
Degree to which the impact may cause irreplaceable loss of resources:	1-Resource will not be lost (R)		
Cumulative impact prior to mitigation:	Nuisance. Noise due to construction machinery during the construction phase. Construction machinery may cause noise disturbance to the directly adjacent land users/ owners. The noise was not considered to be considerable and will only be temporary.		
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low		
Degree to which the impact can be mitigated:	Partly mitigatible (PM)		
Proposed mitigation:	Machinery and vehicles should be regularly maintained to prevent excessive noise. All machinery and work activities must adhere to the requirements of the noise regulations.		
Cumulative impact post mitigation:	Nuisance.		
Significance rating of impact after mitigation	Low		

(Low, Medium, Medium-High, High, or Very-High)		

Visual impacts / Sense of Place:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	**Visual impact of construction.** Magnitude - Minor (Mi) 2 will not result in an impact on processes. The visual character of the open space has been slightly impacted on and will affect approximately **17 households** which face directly onto the site.		
Extent and duration of impact:	Extent 3 (Local) & Duration 1 (0 – 1 years)		
Probability of occurrence:	2 (some possibility, but low likelihood)		
Degree to which the impact can be reversed:	Partly reversible (PR)		
Degree to which the impact may cause irreplaceable loss of resources:	Resource may be partly destroyed (PR)		
Cumulative impact prior to mitigation:	Temporary visual impact on the landscape. The construction activities will have a temporary visual impact on the landscape. Unsightly construction machinery and activities on construction site.		
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low		
Degree to which the impact can be mitigated:	Un-mitigatible (UM)		
Proposed mitigation:	NA		
Cumulative impact post mitigation:	Temporary visual impact on the landscape.		
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low		

(c) **Impacts that result from the operational phase (briefly describe and compare impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the operational phase.**

Impacts on geographical and physical aspects:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	**Physical Impact on the rivers and wetlands.**		
Extent and duration of impact:	Local (L)-3-Within a 20 km radius of the centre of the site Permanent (5)		
Probability of occurrence:	Definite (D) 5	Definite (D) 5	Highly probable (HP) 4
Degree to which the impact can be reversed:	Partly reversible (PR)	Irreversible (IR)	Partly reversible (PR)
Degree to which the impact may cause irreplaceable loss of resources:	Resource may be partly destroyed (PR)		
Cumulative impact prior to mitigation:	0.88 hectares of wetland will be lost calculated using a 15 m buffer included as edge effects and the anticipated loss of wetland habitat. The gabions will re-establish the bank of the river. Therefore, flow modification is limited to absent. In some aspects the construction of the gabion wall and proposed excavation (removal of silt) in the river will after some time allow for a better functioning aquatic system. Two road crossings will impede flow. Edge effects from local residents.	1.5 hectares of wetland will be lost calculated using a 15 m buffer included as edge effects and the anticipated loss of wetland habitat. The non-perennial river will be impacted on by the silt removal and one road crossing. Edge effects from local residents.	Should the authorities decide not to allow any development, it seems probable that the current wetland function, would gradually be lost anyway, as the current process of dehydration would persist.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium	Medium-High	Medium-High
Degree to which the impact can be mitigated:	Partly- mitigatable (PM)	Partly- mitigatable (PM)	Un-mitigatable (UM)
Proposed mitigation:	Rehabilitate river and wetland in accordance with FRESHWATER RESOURCE REHABILITATION AND IMPLEMENTATION PLAN FOR THE PROPOSED IDAS VALLEY RESIDENTIAL DEVELOPMENT ON ERF 9445, STELLENBOSCH, WESTERN CAPE PROVINCE dated September 2018		NA
Cumulative impact post mitigation:	The measures will allow the water regime to once again flow through the river to the east of the development site and improve the remaining wetland habitat, leading to an overall betterment of the watercourses and the general environment.	Due to a lack of reestablishment of the river banks, flooding may potentially occur.	Loss of wetland habitat and functioning of river system.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High,	Medium	Medium	Medium-High

or Very-High)			

Impact on biological aspects:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	The excavation within the watercourse / ESA. Magnitude - Low (L)-4-will cause a slight impact on processes.		
Extent and duration of impact:	Extent: Local (L)-3-Within a 20 km radius of the centre of the site Duration: Short to medium (S-M)-2-2 – 5 years	Extent: Local (L)-3-Within a 20 km radius of the centre of the site Duration: Short to medium (S-M)-2-2 – 5 years	Not applicable to no-go alternative.
Probability of occurrence:	Definite (D)-5	Definite (D)-5	
Degree to which the impact can be reversed:	Partly reversible (PR)	Partly reversible (PR)	
Degree to which the impact may cause irreplaceable loss of resources:	Resource will not be lost (R)	Resource will not be lost (R)	
Cumulative impact prior to mitigation:	Removal of silt during the operational phase will result in the removal of aquatic vegetation and disturbance of habitat.	Removal of silt during the operational phase will result in the removal of aquatic vegetation and disturbance of habitat.	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	
Degree to which the impact can be mitigated:	Partly mitigatable (PM)	Partly mitigatable (PM)	
Proposed mitigation:	MMP and on-going alien vegetation removal. Rehab in accordance with FRESHWATER RESOURCE REHABILITATION AND IMPLEMENTATION PLAN FOR THE PROPOSED IDAS VALLEY RESIDENTIAL DEVELOPMENT ON ERF 9445, STELLENBOSCH, WESTERN CAPE PROVINCE dated September 2018	MMP and on-going alien vegetation removal.	
Cumulative impact post mitigation:	Disturbance to ESA.	Disturbance to ESA.	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low	Low	

Impacts on socio-economic aspects:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	**Increase in housing**		
Extent and duration of impact:	Extent 3 (Local) & Permanent(P)-5-Will not cease		Not applicable to no-go alternative.
Probability of occurrence:	5 Definite		
Degree to which the impact can be reversed:	NA – Positive		
Degree to which the impact may cause irreplaceable loss of resources:	NA – Positive		
Cumulative impact prior to mitigation:	NA – Positive		
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	8 – Low (positive)		
Degree to which the impact can be mitigated:	NA – Positive		
Proposed mitigation:	Ongoing maintenance of services infrastructure.		
Cumulative impact post mitigation:	NA – Positive		
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	8 – Low (positive)		

Impacts on socio-economic aspects:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	**Strain on municipal services.**		
Extent and duration of impact:	Extent 3 & Duration 5		Not applicable to no-go alternative.
Probability of occurrence:	2		
Degree to which the impact can be reversed:	IR		
Degree to which the impact may cause irreplaceable loss of resources:	R		
Cumulative impact prior to mitigation:	Potential disruption of municipal service provision.		

Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	16 – Low	
Degree to which the impact can be mitigated:	PM	
Proposed mitigation:	Services confirmation has been provided by the municipality to indicate that sufficient services are available. There is sufficient capacity in the bulk sewer network to accommodate the proposed development. The bulk sewer upgrades are currently underway that will provide sufficient capacity for the proposed development. The proposed development falls within the catchment area of the existing Stellenbosch WWTW (Waste Water Treatment Works). There is sufficient spare capacity at the Stellenbosch WWTW to accommodate the proposed development. It is confirmed that Stellenbosch Municipality will handle all solid waste as per the normal waste removal policy and that limited but sufficient capacity is available at the waste removal site.	
Cumulative impact post mitigation:	NA	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	16 – Low	

Impacts on socio-economic aspects:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	**Decrease in property values of surrounding erven.** **Property valuations are complex and while the sales values or rentals of other similar properties in the market affect a property value, valuations are also affected by the factors like the property's location, condition, access to amenities, its current and future use and the income it generates. It should therefore not be assumed that affordable housing will have a negative impact on property prices. The development will result in a major investment into the upgrading of the surrounding road infrastructure and roads. The property's surroundings, namely location and the condition of the neighbourhood affect property value.** **This development is an initiative of Stellenbosch Municipality to provide affordable, high quality housing units to first time home owners. That means people will have to either buy the house cash or register for a bond. People in a certain income bracket do qualify for a small subsidy ranging between R27,960.00 and R121,626.00 but this will not be enough to secure an opportunity.**		
Extent and duration of impact:	Extent 3 & Duration 5		Not applicable to no-go alternative.
Probability of occurrence:	2		
Degree to which the impact can be reversed:	PR		
Degree to which the impact may cause irreplaceable loss of resources:	R		
Cumulative impact prior to mitigation:	There are concerns that affordable housing and similar projects affect the property values in the surrounding residential area.		
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	24 – Low		
Degree to which the impact can be mitigated:	PM		
Proposed mitigation:	Maintenance by the Municipality of open spaces and infrastructure in terms of EMP and MMP.		
Cumulative impact post mitigation:	There are concerns that affordable housing and similar projects affect the property values in the surrounding residential area.		
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	24 – Low		

Impacts on socio-economic aspects:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	**Increase in crime. Safety and security concerns for surrounding community.** **This development is an initiative of Stellenbosch Municipality to provide affordable, high quality housing units to first time home owners. That means people will have to either buy the house cash or register for a bond. People in a certain income bracket (earning between R3 500 and R22 000 a month) do qualify for a small subsidy ranging between R27,960.00 and R121,626.00 but this will not be enough to secure an opportunity.**		

	To qualify for a home loan, one has to be over 21, have been employed for a minimum of six months, have no defaults on your credit profile and earn above the minimum salary requirement as decided by your chosen bank. If your home loan application is denied, your FLISP application will not be considered. **Hence the development is not anticipated to result in a significant increase in crime.**	
Extent and duration of impact:	Extent 3 & Duration 5	Not applicable to no-go alternative.
Probability of occurrence:	2	
Degree to which the impact can be reversed:	PR	
Degree to which the impact may cause irreplaceable loss of resources:	R	
Cumulative impact prior to mitigation:	Change in crime statistics	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	24 – Low	
Degree to which the impact can be mitigated:	PM	
Proposed mitigation:	None	
Cumulative impact post mitigation:	None	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	24 – Low	

Impact on socio-economic aspects:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	**Increase in traffic** **The proposed development will take access off the extension of Starking Road, which is a Class 5 road.** **Erf 9445 trips were distributed via Bloekom Avenue and Old Helshoogte Road to Rustenburg Road and the Helshoogte Road / Cluver Street / Rustenburg Road intersection. The full developments on Erf 9445 and Remainder Erf 11330 Ida's Valley will have a moderate traffic impact.** **The following road upgrades have recently been completed by the Municipality, to create additional capacity for new developments in the Idas Valley area, specifically the municipal housing projects on erven 9445 and 11330:** **Helshoogte Road/Lelie Street intersection** **Helshoogte Road/Cluver Road/Rustenburg Road intersection and Rustenburg Road/Sonnebloem Road intersection**		
Extent and duration of impact:	Extent: Local (L)-3-Within a 20 km radius of the centre of the site Duration: 5	Extent: Local (L)-3-Within a 20 km radius of the centre of the site Duration: 5	Not applicable to no-go alternative.
Probability of occurrence:	Definite (D)-5	Definite (D)-5	
Degree to which the impact can be reversed:	Partly reversible (PR)	Partly reversible (PR)	
Degree to which the impact may cause irreplaceable loss of resources:	Resource will not be lost (R)	Resource will not be lost (R)	
Cumulative impact prior to mitigation:	Traffic congestion	Traffic congestion	
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	60 - Medium	60 - Medium	
Degree to which the impact can be mitigated:	Partly mitigatable (PM)	Partly mitigatable (PM)	
Proposed mitigation:	This site layout provides access of Starking Road and Bartlett Rise. Access of Bartlett Road is planned for the future and speaks to the ease of access for the residents and emergency services. The Site Layout Plan shows that all internal roads will have 10-metre reserve widths. Corner erven all have splays. Dead end streets are maximum 5 erven deep and will not require turning circles. All parking will be provided on site.	This site layout provides access of Starking Road only.	

	Most roads (Lindida Road, Hector Road, Adendorff Road) in the vicinity of the proposed development has paved sidewalks and it is recommended that the provision of a sidewalk along at least one side of Starking Road, which will be the access road and main ring road serving the development, should be considered.		
Cumulative impact post mitigation:	Traffic congestion	Traffic congestion	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	60 - Medium	60 - Medium	

Impacts on the cultural-historical aspects:	
Nature of impact:	**None.**

Noise Impacts:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	**Noise due to new residential development.**		
Extent and duration of impact:	Extent 2 (On site or within 100 m of the site) & Permanent(P)-5-Will not cease		Not applicable to no-go alternative.
Probability of occurrence:	1 (Very improbable (VP))		
Degree to which the impact can be reversed:	Completely reversible (R)		
Degree to which the impact may cause irreplaceable loss of resources:	1-Resource will not be lost (R)		
Cumulative impact prior to mitigation:	Nuisance. Once developed this will lead to additional "residential noise" created in the area. May cause noise disturbance to the directly adjacent land users/ owners.		
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low		
Degree to which the impact can be mitigated:	Partly mitigatable (PM)		
Proposed mitigation:	Noise due to residential development may cause a nuisance to adjacent residential areas. It is however not expected that this will be significant as it will not be in excess of current residential noise produced by existing residential areas.		
Cumulative impact post mitigation:	Nuisance.		
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low		

Visual impacts / Sense of Place:			
	Alternative 1 (Preferred)	**Alternative (2015)**	**No-go Alternative**
Nature of impact:	**Visual impact of hosing establishment.** Magnitude - Minor (Mi)-2-will not result in an impact on processes. The visual character of the open space has been slightly impacted on and will affect approximately 17 households which face directly onto the site. The visual character will be changed and views impacted upon. 17 households face directly onto the development and will have an impact on these home owners. Also note that all the houses for this site will be for the GAP market and no subsidised housing units are planned on erf 9445. That means people will have to either buy the house cash or register for a bond. See the policy for FLISP. People in a certain income bracket do qualify for a small subsidy ranging between R27,960.00 and R121,626.00 but this will not be enough to secure an opportunity. Due to the topography of the site the visual impact is limited to nearby neighbours. Furthermore, the houses are not considered hideous or unsightly but rather in keeping with the surrounding area. Houses in Bartlett and Cornelly road area are of similar typologies as the houses proposed.		
Extent and duration of impact:	Extent 3 (Local) & Permanent(P)-5-Will not cease		
Probability of occurrence:	2 (some possibility, but low likelihood)		
Degree to which the impact can be reversed:	Partly reversible (PR)		
Degree to which the impact may cause irreplaceable loss of resources:	Resource may be partly destroyed (PR)		
Cumulative impact prior to mitigation:	The visual character of the open space will be impacted on and will affect approximately 17 households which face directly onto the site.		

Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low	Not applicable to no-go alternative.
Degree to which the impact can be mitigated:	Partly mitigatable (PM)	
Proposed mitigation:	Revegetation of open spaces in accordance with FRESHWATER RESOURCE REHABILITATION AND IMPLEMENTATION PLAN FOR THE PROPOSED IDAS VALLEY RESIDENTIAL DEVELOPMENT ON ERF 9445, STELLENBOSCH, WESTERN CAPE PROVINCE dated September 2018. Naturalising of gabions as per DWS requirements.	
Cumulative impact post mitigation:	The site will have considerable amounts of open space. With the natural reestablishment of vegetation in the open space the visual impact is considered to be low.	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low	

(d) Impacts that may result from the decommissioning and closure phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase.

It is not anticipated that decommissioning of housing will occur in the near future. Should decommissioning occur, the expected impacts are similar to those listed in the construction phase above with the additional positive impact of rehabilitating the decommissioned area to a near natural/indigenous state and negative impact of destroying houses and infrastructure. Impacts must be mitigated and managed according to the best practise techniques/management measures available for that time.

(e) Any other impacts:

None identified to date.

Please note: If any of the above information is not available, specialist input may be requested.

7. SPECIALIST INPUTS/STUDIES AND RECOMMENDATIONS

Please note: Specialist inputs/studies that will be undertaken as part of this application. These specialist inputs/studies must take into account the Department's relevant Guidelines on the Involvement of Specialists in EIA Processes available on the Department's website (**http://www.capegateway.gov.za/eadp**). A summary of all the specialist inputs/studies must be provided with the additional information.

Specialist inputs/studies and recommendations:

FRESHWATER ECOLOGICAL INFORMATION - Nicolaas Hanekom

The condition and functioning of this non-perennial river in terms of possible changes to the channel, flow regime and naturally-occurring riparian vegetation will not be altered from its current state as a result of the proposed construction of the housing project infrastructure and formalization of the river channel and berm. Care must be taken that the necessary engineering interventions are put in place to prevent erosion of the river banks and berm to ensure that the river does not overflow and result in the flooding of the houses. The proposed housing and infrastructure will not alter the current ecological functioning of the river due to its degraded state. Storm water structures must be designed to prevent flooding of the river banks and to prevent litter from entering the non-perennial rivers. The river banks not impacted upon and the non-development areas next to the river and the river itself must be cleared of aliens to allow for the natural riparian vegetation to establish. These management actions will improve the current ecological state and functioning of the river.

Idas Valley, Stellenbosch Erf 10866 Wetland Assessment - August 2015 – Dr Dirk van Driel

Please note this study is included for reference only. This study and delineation was used to inform the layout.

FRESHWATER RESOURCE REHABILITATION AND IMPLEMENTATION PLAN FOR THE PROPOSED IDAS VALLEY RESIDENTIAL DEVELOPMENT ON ERF 9445, STELLENBOSCH, WESTERN CAPE PROVINCE - K. Marais

Two Seep Wetlands were identified situated along the northern and north-western boundary of the study area with a river located along the eastern boundary. The need and desirability for the offset

came about due to the unavoidable loss of 0,88 hectares of wetland habitat associated with the proposed residential development. Although the development layout plan includes an open space area for the Seep wetland, this is based on the delineation as provided by van Driel (2015) and only included a portion of the permanent zone of the large Seep wetland and not the temporary zone. As part of the offset investigation it was determined that 0,7 functional hectare equivalents and 0,4 habitat hectare equivalents of wetland area would need to be conserved to offset this loss.

Following this, 1,68 hectares of Seep Wetland is available in the neighbouring property which can be utilised for the wetland offset. In accordance with the offset calculator, this wetland has a functional hectare equivalent of 0,4 hectares and therefore, in order to meet the offset requirement of 0,7, the wetland would need to be improved by 35% to a Category B (Largely Natural) State. Due to the existing high urbanisation, alien invasive plant species and agricultural activities within the surrounding area, this target was deemed to be unrealistic and therefore a PES of a Category C (Moderately Modified) was proposed and supported by the Department of Water and Sanitation.

Hydrological state: The hydrological functioning of the Seep Wetlands has been largely modified due to surrounding agricultural and anthropogenic activities, including various drains, likely excavated when the land was actively cultivated. These drains as well as piles of deposited materials have created berms within and surrounding the Seeps and have changed the pattern, direction and timing of runoff within the system.

Geomorphological state: The geomorphology of the Seep wetlands is considered moderately modified due to excavation works and deposition of materials observed within the wetland. This has resulted in loss of organic matter and impacted on the dispersal of water across the HGM unit.

Vegetation health: The vegetation composition of both Seep wetlands has been critically modified through the removal of indigenous wetland species during the historical agricultural activities and through the proliferation of alien and invasive plant species such as Acacia saligna and Pennisetum clandestinum as well as a large variety of other weed and grass species indicative of disturbed areas. No endangered species were identified during the site visit, but the system may provide suitable breeding habitat for various common avifaunal and amphibian species.
Rehabilitation earthworks associated with the River:
Summary of findings
• The river running to the east of the study area was noted to be in a largely degraded state, with both Acacia saligna and Pennisetum clandestinum dominating throughout.
• The embankments of the river are of a steep slope in the upper reaches, with erosion evident and thus sedimentation of the system. Approximately two thirds of the system has become severely silted up and indigenous riparian vegetation has been lost/ smothered by Pennisetum clandestinum.
• A gabion wall has been constructed along the west bank, bordering the study area, presumably to stabilise the western embankment and for stormwater protection.
• Ponding of water was noted in the upper reaches of the system as well as surrounding the culvert crossing in the lower reaches, installed as the access road from the proposed development. This further indicates that limited through flow of water is occurring within the central portion of the system.
Rehabilitation interventions proposed
It is the opinion of the freshwater specialist that extensive works need to be undertaken within this system to improve the ecoservice provision and ecological state. The system was divided into three portions, namely Portion A: Embankment re-sloping, Portion B: extensive re-sloping works and vegetation clearing and Portion C: limited rehabilitation requirements other than vegetation control (Figure G)
The following rehabilitation interventions are required:
• All alien vegetation within all three portions must be cleared, as per the guidelines stipulated within Table 3 of this report.
• Once cleared, all embankments within Portion A should be re- sloped to a minimum of 1:3 ratio (or similar, depending on what is feasibly possible given the space limitations due to the surrounding existing houses) and all erosion and gully formation fixed.
• Portion B of the river should be re-sloped with a 1:5 ratio, and a channel area created. All excess sediment must be utilised as part of the embankment re-instatement, for the building activities or be removed from site. At no point may this material be dumped on site or within any of the other freshwater features identified within the surrounding area.
• On completion of re-sloping within portion B, the channel should be developed so as to meander

and not as a straight line through the site (as indicated in Figure G). This will assist in increasing the water retention capability of the system and creation of ecological pockets for smaller faunal species.
• Loose pebbling should be installed within the channel and riparian vegetation re-instated within all portions to assist with increased sediment trapping and energy dispersal to prevent erosion and incision from occurring.
➢ Exposed slopes along the edge of the rehabilitated embankments are highly prone to erosion, therefore the surrounding area should be covered with a geotextile product such as hessian, with commercially available products such as Geojute, which is to be staked to the surface of the slopes and indigenous riparian vegetation should be re-instated therein.
➢ Should active erosion be identified, control features such as earth berms or perimeter berm/swales (see below) must be used to intercept and convey runoff from above disturbed areas to suitable dispersal areas or drainage systems. This helps to reduce the sedimentation from exposed areas. Walker, D. 1999 et al. and USEPA. 2005 have identified the following methods:
• Brush layering is when branches are placed perpendicular to the slope contour. This method is effective for earth reinforcement and mass stability. Brush layers break up the slope length, preventing surface erosion, and reinforce the soil with branch stems and roots, providing resistance to sliding or shear displacement. Brush layers also trap debris, aid infiltration on dry slopes, dry excessively wet sites, and mitigate slope seepage by acting as horizontal drains. Brush layers facilitate vegetation establishment by providing a stable slope and a favourable microclimate for growth of vegetation. USEPA 2005
• Live gully repair is a technique that is similar to branch packing but is used to repair rills and gullies. Live gully repairs offer immediate reinforcement and reduce the velocity of concentrated flows. They also provide a filter barrier that reduces further rill and gully erosion and must be used where gully erosion is taking place on the project footprint. USEPA 2005.
Rehabilitation considerations
• All rehabilitation work must be done during the drier summer months (November – April) to reduce contamination of surface water, increased sedimentation and erosion.
• Should the ECO not have the relevant expertise, it is recommended that the rehabilitation be overseen by a suitably qualified wetland specialist to ensure maximum service provision is achieved over the long-term in terms of hydrology, geomorphology, water quality and biota.
The last stage of the rehabilitation activities should be to re-instate indigenous vegetation within the rehabilitation areas. Propagation and purchasing of the required species should have been undertaken as part of the Planning (Step 1) and must be ready and available for transplantation as soon as the AIP clearing and re-sloping activities have been completed.

• A Storm water attenuation facility is proposed to the south of the development, alongside the river. It is recommended that this attenuation facility be designed to be as natural as possible (earthed and unlined) and vegetated to function as a constructed wetland for water quality filtration.
• Storm inlets and outlet points must be designed at ground level so as to prevent erosion and gully formation. Suitable engineering solutions (such as concrete aprons or gabion mattresses) should be utilised at all outlets to reduce the speed at which the water flows into the attenuation facility.
• Litter traps should be installed at all outlets to catch any litter/solid wastes from entering the system. This can be in the form of a stormwater drain net or grates. These traps should be regularly cleaned during the operational phase to prevent blockages.

• Two culvert crossings are proposed over the river to gain access into the Estate (Figure 4 below).
• Care must be taken when constructing the culverts to ensure that the design accommodates a 1 in 100 year flood event and that the base levels are maintained so that no erosion or ponding of water occurs surrounding the crossing.
• Soil surrounding the wingwalls must be suitably backfilled and sloped (minimum of a 1:3 ratio) and concrete aprons as well as gabion mattresses should be installed both up and downstream for energy dissipation and sediment trapping (Figure L).
• All soils within the river surrounding the culvert must be loosened on completion of works to allow for re-vegetation.

Step 4: Operational phase management and Monitoring.

Although loss of wetland habitat is not considered favourable, based on the above provided information, the offset initiative is deemed feasible provided all rehabilitation interventions and construction mitigation measures are implemented and therefore the Idas Valley Development can

be considered favourably on implementation of the wetland offset.

It should be noted that this document will form part of the Water Use Authorisation, and on approval, this document becomes binding and all aspects of the proposed rehabilitation and mitigation recommendations made herein must be adhered to by the proponent and appointed Contractor.

8. IMPACT ASSESSMENT SUMMARY

Briefly describe the impacts (as appropriate), significance rating of impacts, mitigation and significance rating of impacts of the activity. This must include an assessment of the significance of all impacts.

Gabions (work completed to date)	
Impacts	**Significance rating of impacts after mitigation (Low, Medium, Medium-High, High, Very High):**
CONSTRUCTION PHASES	
Physical Impact on the non-perennial river	**Low**
The excavation and physical gabion structure resulted in the removal of vegetation within the watercourse / ESA	**Low**
Temporary construction jobs created	**Positive**
The impact of the development on archaeological, paleontological and heritage remains	**Low**
Noise due to construction machinery	**Low**
Visual impact of construction	**Low**
OPERATIONAL PHASE	
Physical Impact on the non-perennial river.	**Low**
The excavation within the watercourse / ESA the removal of aquatic vegetation and disturbance of habitat.	**Low**
The visual character of the open space has been impacted on and will affect approximately 17 households which face directly onto the site.	**Low**
DECOMMISSIONING AND CLOSURE PHASE	
Physical Impact on the non-perennial river by removing gabion wall.	**Low**
The removal of the gabion structure could result in the removal of re-established vegetation within the watercourse / ESA.	**Low**
Temporary jobs created.	**Positive**
Temporary noise due to decommissioning machinery.	**Low**
Temporary visual impact of decommissioning.	**Low**

Housing etc (work still to be completed to date)	
Impacts	**Significance rating of impacts after mitigation (Low, Medium, Medium-High, High, Very High):**
CONSTRUCTION PHASES	
Physical Impact on the non-perennial river and wetlands.	**Medium**
Removal of vegetation.	**Medium**
Temporary construction jobs created	**Positive**
The impact of the development on archaeological, paleontological and heritage remains	**Low**

Noise due to construction machinery	**Low**
Visual impact of construction	**Low**
OPERATIONAL PHASE	
Physical Impact on the rivers and wetlands including edge effects.	**Medium**
The excavation within the watercourse / ESA.	**Low**
Increase in housing. Positive	**Positive**
Noise due to new residential development.	**Low**
Visual impact of hosing establishment.	**Low**
DECOMMISSIONING AND CLOSURE PHASE	
It is not anticipated that decommissioning of housing will occur in the near future. Should decommissioning occur, the expected impacts are similar to those listed in the construction phase above with the additional positive impact of rehabilitating the decommissioned area to a near natural/indigenous state and negative impact of destroying houses and infrastructure. Impacts must be mitigated and managed according to the best practise techniques/management measures available for that time.	

9. SUMMARY OF THE CONSEQUENCES OF/ IMPACTS OF THE UNLAWFULLY COMMENCED ACTIVITY/IES

Please provide a detailed summary of the consequences/impacts of commencement of the activity/ies on the environment.

The gabion wall is a narrow structure to the west of the river and is only situated "within" the watercourse in 3 locations. The non-perennial river has been impacted on but has not modified its natural flow or meandering. The gabions have been placed to re-establish the bank of the river. This was required due to the stream disappearing in the middle sections of the site due to sedimentation. Therefore, flow modification is limited to absent. In some aspects the construction of the gabion wall and proposed excavation (removal of silt) in the river will after some time allow for a better functioning aquatic system.

The excavation and physical gabion structure resulted in the removal of alien species and some indigenous vegetation in the river. The removal of vegetation has not affected the functioning of the ecological support area as the majority of vegetation removed was alien.

10. OTHER MANAGEMENT, MITIGATION AND MONITORING MEASURES

(a) Over and above the mitigation measures described above, please indicate any additional management, mitigation and monitoring measures.

None other than EMP and MMP.

(b) Describe the ability of the applicant to implement the management, mitigation and monitoring measures.

Municipality will ensure measures are implemented as agreed by signing the application.

Please note: A draft **ENVIRONMENTAL MANAGEMENT PROGRAMME** must be attached to this application as **Appendix I**.

SECTION G: ASSESSMENT METHODOLOGIES AND CRITERIA, GAPS IN KNOWLEDGE, UNDERLYING ASSUMPTIONS AND UNCERTAINTIES

(a) Please describe adequacy of the assessment methods used.

Based on the EAP's assessment information was provided to address the concerns and assess the impacts of the proposed development on the environment.

Information as provided by the project engineer and as collected by the EAP during site surveys etc. has been used by the to inform this report. .

(b) Please describe the assessment criteria used.

Criteria	**Description**		
Nature	a description of what causes the effect, what will be affected, and how it will be affected.		
	Type	**Score**	**Description**
Extent (E)	None (No)	1	Footprint
	Site (S)	2	On site or within 100 m of the site
	Local (L)	3	Within a 20 km radius of the centre of the site
	Regional (R)	4	Beyond a 20 km radius of the site

	National (Na)	5	Crossing provincial boundaries or on a national / land wide scale
Duration (D)	Short term (S)	1	0 – 1 years
	Short to medium (S-M)	2	2 – 5 years
	Medium term (M)	3	5 – 15 years
	Long term (L)	4	> 15 years
	Permanent(P)	5	Will not cease
Magnitude (M)	Small (S)	0	will have no effect on the environment
	Minor (Mi)	2	will not result in an impact on processes
	Low (L)	4	will cause a slight impact on processes
	Moderate (Mo)	6	processes continuing but in a modified way
	High (H)	8	processes are altered to the extent that they temporarily cease
	Very high (VH)	10	results in complete destruction of patterns and permanent cessation of processes.
Probability (P) the likelihood of the impact actually occurring. Probability is estimated on a scale, and a score assigned	Very improbable (VP)	1	probably will not happen
	Improbable (I)	2	some possibility, but low likelihood
	Probable (P)	3	distinct possibility
	Highly probable (HP)	4	most likely
	Definite (D)	5	impact will occur regardless of any prevention measures
Significance (S)	Determined through a synthesis of the characteristics described above: **S = (E+D+M) x P** Significance can be assessed as low, medium or high		
Low: < 30 points:	The impact would not have a direct influence on the decision to develop in the area		
Medium: 30 – 60 points:	The impact could influence the decision to develop in the area unless it is effectively mitigated		
High: < 60 points:	The impact must have an influence on the decision process to develop in the area		
No significance	When no impact will occur or the impact will not affect the environment		
Status	Positive (+)		Negative (-)
The degree to which the impact can be reversed	Completely reversible (R)	90-100%	The impact can be mostly to completely reversed with the implementation of the correct mitigation and rehabilitation measures.
	Partly reversible (PR)	6-89%	The impact can be partly reversed providing that mitigation measures as stipulated in the EMP are implemented and rehabilitation measures are undertaken
	Irreversible (IR)	0-5%	The impact cannot be reversed, regardless of the mitigation or rehabilitation measures taking place
The degree to which the impact may cause irreplaceable loss of resources	Resource will not be lost (R)	1	The resource will not be lost or destroyed provided that mitigation and rehabilitation measures as stipulated in the EMP are implemented
	Resource may be partly destroyed (PR)	2	Partial loss or destruction of the resources will occur even though all management and mitigation measures as stipulated in the EMP are implemented
	Resource cannot be replaced (IR)	3	The resource cannot be replaced no matter which management or mitigation measures are implemented.
The degree to which the impact can be mitigated	Completely mitigatible (CM)	1	The impact can be completely mitigated providing that all management and mitigation measures as stipulated in the EMP are implemented
	Partly mitigatible (PM)	2	The impact cannot be completely mitigated even though all management and mitigation measures as stipulated in the EMP are implemented. Implementation of these measures will provide a measure of mitigatibility
	Un-mitigatible (UM)	3	The impact cannot be mitigated no matter which management or mitigation measures are implemented.

(c) Please describe the gaps in knowledge.

EAP is only knowledgeable with regards to the biodiversity and ecosystem aspects.

(d) Please describe the underlying assumptions.

In undertaking the investigation and compiling this report, the following has been assumed:
•The information provided by the client and all specialists is accurate and unbiased;
•The scope of this investigation is to assess the direct and cumulative environmental impacts associated with the development.

(e) Please describe the uncertainties.

None at this stage.

SECTION H: RECOMMENDATIONS OF THE EAP

In my view (EAP), the information contained in the Application and the documentation attached hereto is sufficient to make a decision in respect of the activity applied for.	YES	~~NO~~
If "NO", list the aspects that should be further assessed through additional specialist input/assessment:		
If "YES", please indicate below whether in your opinion the applicant should be directed to cease the activity or if it should be authorised:		
Applicant should be directed to cease the activity:	~~YES~~	NO
Please provide reasons for your opinion		
The Rezoning from Agriculture to Subdivisional Area for the 166 Single Residential Zone properties, 3 Public Open Space Zone properties and I Local Authority Zone property has been APPROVED in terms of Section 60 of the Stellenbosch Municipal Land Use Planning By-Law. The gabions are located on the boundary of the single residential erven, next to the Public Open Space erf. The gabions were needed to re-establish the bank of the river. The excavation and construction of gabions in the river have impacted on the river. However, the impact does not appear to be extensive due to the fact the that river was disturbed prior to commencement as well as the fact the excavation and construction of the gabions inside the watercourse was limited to certain areas. The excavation and gabion construction was for embankment protection and flood control. The majority of the vegetation that was cleared due to the activity was either alien vegetation or kikuyu grass. The small amounts of riparian vegetation that were present pre-commencement mostly remain intact. In some aspects the construction of the gabion wall and proposed excavation (removal of silt) in the river will after some time allow for a better functioning aquatic system. Silt is to be use to naturalise and stabilise the gabions as per the request of DWS. The IDP identified the need for Housing. This need in the municipality is estimated at over 20 000 units (comprising some 6 000 informal dwellings, 9 000 backyard and overcrowded households, and rural households in need of accommodation) in 2012.		
If you are of the opinion that the activity should be authorised, then please provide any conditions, including mitigation measures that should in your view be considered for inclusion in an authorisation.		
All mitigation measures included in: • FRESHWATER RESOURCE REHABILITATION AND IMPLEMENTATION PLAN FOR THE PROPOSED IDAS VALLEY RESIDENTIAL DEVELOPMENT ON ERF 9445, STELLENBOSCH, WESTERN CAPE PROVINCE dated September 2018. • EMP • MMP		

SECTION I: REPRESENTATIONS – RESPONSE TO AN INCIDENT OR EMERGENCY SITUATION

This section is only applicable to instances where Section 49A (2) of NEMA applies. Please list all steps that where taken in response to the incident or emergency situation.
NA

Please note:

Section 30 of NEMA deals with the procedures to be followed for the control of emergency incidents and Section 30A deals with procedures to the followed in the case of emergency situations.

SECTION J: PUBLIC PARTICIPATION

1. PUBLIC PARTICIPATION PROCESS TO BE FOLLOWED

1.1 THE PUBLIC PARTICIPATION PROCESS IN TERMS OF THE SECTION 24G FINE REGULATIONS, 2017

Regulation 8 of the Section 24G Fine Regulations require that all applicants must conduct public participation **prior to submission** of a section 24G application (as outlined in Annexure A of the Section 24G Fine Regulations - Section D: Preliminary Advertisement).

"The applicant must place a preliminary advertisement in-
(1) A local newspaper in circulation in the area in which the activity was, or activities were, commenced; and on the applicant's website, if any.

(2) This advertisement must comply with the requirements set out in Annexure A, Section D of the Section 24G Fine Regulations, 2017.
(3) The applicant must open and maintain of a register of interested and affected parties.
*(4) The **register must be attached to the application form and included in the report**, or form part of the information submitted in terms of section 24G(1) of the Act, which the register must, as a minimum, contain the names, contact details and addresses of-* *(a) all persons who, as a consequence of the public participation process conducted in respect of the application, have submitted written comments or attended meetings with the applicant or any environmental assessment practitioner or other specialist appointed by the applicant to assist with the application;* *(b) all persons who have requested the applicant, in writing, to place their names on the register; and* *(c) all organs of state that have jurisdiction in respect of the activity to which application relates."*

Please provide a summary of the steps followed where public participation was undertaken in accordance with Regulation 8 prior to submission of this Application Form. Ensure that proof of compliance with Regulation 8 is submitted with this Application Form, including, *inter alia*, proof of preliminary advertisement in a local newspaper.		
See appendix G.		
Please indicate whether the applicant has a website (please tick relevant box):	YES	~~NO~~
If yes, please note that the application information as specified above must have been advertised on such website and proof thereof must accompany this application.		

Please note: Annexure A: Section D attached to this Application form must be strictly adhered to.

1.2 THE PUBLIC PARTICIPATION PROCESS IN TERMS OF NEMA EIA REGULATIONS, 2014

As the applicant, you may be directed to conduct the public participation process that fulfils the requirements outlined in Chapter 6 of the EIA Regulations, 2014. In doing so, you must take into account any applicable guidelines published in terms of Section 24J of NEMA, the Department's Circular EADP 0028/2014 on the "One Environmental Management System" and the EIA Regulations, 2014 as well as any other guidance provided by the Department. Note that the public participation requirements are applicable to all proposed sites.

Please highlight the appropriate box below to indicate the public participation process that has been or will be undertaken to give notice of the application to all potential interested and affected parties, including deviations that may be agreed to by the competent authority:

1. In terms of regulation 41 of the EIA Regulations, 2014 -			
(a) fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of -			
(i) the site where the activity to which the application relates is or is to be undertaken; and	YES	~~DEVIATION~~	
(ii) any alternative site	YES	~~DEVIATION~~	
(b) giving written notice, in any manner provided for in section 47D of the NEMA, to –			
(i) the occupiers of the site and, if the applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	YES	~~DEVIATION~~	~~N/A~~
(ii) owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	YES	~~DEVIATION~~	
(iii) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;	YES	~~DEVIATION~~	
(iv) the municipality (Local and District Municipality) which has jurisdiction in the area;	YES	~~DEVIATION~~	
(v) any organ of state having jurisdiction in respect of any aspect of the activity; and	YES	~~DEVIATION~~	
(vi) any other party as required by the Department;	YES	~~DEVIATION~~	~~N/A~~
(c) placing an advertisement in -			
(i) one local newspaper; or	YES	~~DEVIATION~~	
(ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;	~~YES~~	~~DEVIATION~~	N/A
(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken	~~YES~~	~~DEVIATION~~	N/A

(e) using reasonable alternative methods, as agreed to by the Department, in those instances where a person is desirous of but unable to participate in the process due to— (i) illiteracy; (ii) disability; or (iii) any other disadvantage.	YES	~~DEVIATION~~	~~N/A~~
If you have indicated that "DEVIATION" applies to any of the above, then Section 2. below must be completed.			
NOTE: 2. The NEM: WA requires that a notice must be placed in at least two newspapers.			
If applicable, have/will an advertisement be placed in at least two newspapers?	~~YES~~	~~NO~~	
If "NO", then an application for exemption from the requirement must be applied for.			

1. **Provide a list of all the state departments that will be consulted:**		
List of State Depts.	**Comment obtained (YES/NO)**	**If not, provide reasons**
DEA&DP Pollution Management	Yes	
DEA&DP Waste Management	No	Did not respond to request for comment
DEA&DP Development Management	Yes	
Cape Winelands District Municipality	No	Did not respond to request for comment
CapeNature	Yes	
Department of Agriculture	No	Did not respond to request for comment
Department of Health	No	Did not respond to request for comment
Department of Water Affairs	No	Did not respond to request for comment
Heritage Western Cape	No	Did not respond to request for comment
Stellenbosch Municipality	No	Did not respond to request for comment

2. **Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues raised were incorporated, or the reasons for not being incorporated or addressed.**
(The details of the outcomes of this process, including supporting information must be included in the Comments and Report to be attached to this application as Appendix G.)

- **Inadequacy of PPP**
- **Safety and security/crime**
- **Decrease in property values**
- **Visual impacts**
- **Wetland**
- **Cracked houses and wet ground**
- **Cape Rain Frog**
- **Availability of services**
- **Traffic and access of Bartlett rise**

All issues raised were responded to in detail in the comments and response report (45pages on comments and responses alone). All issues have been addressed and impacts assessed in the application.

3. **Provide a summary of any conditional aspects identified / highlighted by any Organs of State, which**

have jurisdiction in respect of any aspect of the relevant activity.	
DEADP DM 3.1. Please be advised that Activity 27 of Listing Notice 1 in terms of the NEMA EIA Regulations, 2014 will only be triggered if the proposed development results in the clearance of 1 ha or more of indigenous vegetation.	The proposed housing development will result in the clearing of more than 1ha of indigenous vegetation.
3.2. It was noted that the Wetland Offset Agreement between the Stellenbosch and the Department of Water Sanitation was only signed by the Stellenbosch Municipality. Please be advised that the agreement must be signed by both parties and included in the Final Report.	Signed MOU included in Appendix M2.
3.3. Comment must be obtained from the Department of Water Sanitation regarding the findings of the Freshwater Resource Rehabilitation and Implementation Plan for the proposed Idas Valley residential development on Erf No. 9445, Stellenbosch, Western Cape Province, dated September 2018 prepared by Scientific Aquatic Services and to confirm whether the proposed offset is acceptable.	Signed MOU included in Appendix M2. The MOU specifically references the Freshwater Resource Rehabilitation and Implementation Plan.
3.4. Comment from CapeNature must also be obtained and included in the Final Report.	Comment received and responded to below.
3.5. The Environmental Management Programme refers to Erf No. 995. This must be rectified.	The EMPr has been amended.
DEADP PCM 1. Careful consideration should be given to the effective drainage, collection and disposal of storm water runoff as the site consist of impermeable residual granites with permeable transported soils (Geotechnical Site Investigation); 2. What measures are to be put in place to ensure sustainability of the two seep wetlands taking into account that the wetlands are modified; 3. Potable and non-potable water must be used sparingly; 4. The applicant must at all times be mindful of the proposed activities applied for, and any additional environmentally impacting activity conducted may require a separate application for environmental authorisation.	1. Stormwater will be managed according to Stormwater Management Plan in EMP. 2. See Appendix H2.1 and H2.2. 3. Noted and stated in EMP 4. Noted.
A few other issues which require further discussion include: The proposal for control of the Kikuyu grass (Pennisetum clandestinum) is spraying with Glyphosate herbicide. The preference would be for a grass specific herbicide (e.g. Gallant), and it should be ensured that if Glyphosate is used it must be used in monospecific stands of Kikuyu and not where it is mixed with indigenous species.	This has been noted as a recommendation and listed in the mitigation measures in the MMP and s24G application.
The earthworks associated with the rehabilitation interventions should be undertaken prior to alien clearing in order to maximize resources as this will remove alien invasive species within the footprint. It is essential then that alien invasive species do not establish within these rehabilitation footprints.	This has been noted as a recommendation and listed in the mitigation measures in the MMP and s24G application.
It must be taken into account that an operational	This is for consideration of the departments.

agreement for the synchronisation of CARA/NWA/NEMA/NHRA processes within the Western Cape has recently been signed by the relevant state departments and is particularly of importance with regards to the water-related issues for this application. As such, the outcome of the WULA needs to be considered concurrently with this NEMA S24G rectification process and the WULA documentation should also be included in the NEMA process for consideration.	
Most significantly, the proposed wetland offset functions both to compensate for impacts on water resources as well as freshwater ecology and therefore must be taken into consideration for the outcome of the NEMA process, even if it is authorised in terms of the WULA. Collaborative consultation between CapeNature, DEA&DP and DWS is also required.	Agreed. This is for consideration of the departments.
Conclusion In conclusion, CapeNature agrees with the proposed wetland offset implementation as outlined in the FRIP, however further confirmation is required regarding the method of securing the offset and associated responsibilities. CapeNature also requests that any additional reports related to the calculation of the wetland offset and the current wetland delineation (2018, not 2015) are provided for review in order to fully interrogate the proposal.	Please see verification and offset requirements report attached as Appendix H2.2. Will be circulated for an additional 30 days.
An important consideration is the application of the mitigation hierarchy, including a motivation why a further revision of the proposed development was not undertaken in response to the 2018 wetland delineation as opposed to implementing a wetland offset.	43% of the site has already been set aside for public open space and further reducing the number of opportunities was deemed to be economically unfeasible.
In terms of other considerations in terms of the application, the concerns related to the unlawful activities have been adequately addressed as described above and we do not consider that any other remedial measures are required (again taking into consideration the mitigation hierarchy).	Agreed.

Please note:

- **A list of all the potential interested and affected parties, including the organs of State must be opened, maintained and made available to any person requesting access, in writing, to the register.**
- **All comments of interested and affected parties on the Application Form and Additional Information must be recorded, responded to and included in the Comments and Responses Report attached as Appendix G to the Application. The Comments and Responses Report must also include a description of the Public Participation Process followed.**
- **The minutes of any meetings held by the EAP with interested and affected parties and other role players which record the views of the participants must also be submitted as part of the public participation information to be attached to the additional information/Environmental Impact Report as Appendix G.**
- **<u>Proof</u> of all the notices given as indicated, as well as of notice to the interested and affected parties of the availability of the Application Form/Additional Information must be submitted as part of the public participation information to be attached to the application as Appendix G.**

2. REPRESENTATIONS REGARDING DEVIATION FROM PUBLIC PARTICIPATION REQUIREMENTS IN TERMS OF THE EIA REGULATIONS, 2014

Please provide detailed reasons (representations) as to why it would be appropriate not direct you to comply with all of the requirements and to deviate from the requirements of regulation 41 as indicated above.
NA

3. LIST OF STATE DEPARTMENTS

Section 24(O)(2) obliges the relevant authority to consult with every State department that administers a law relating to a matter affecting the environment when such authority considers an application for an environmental authorisation.

Provide a list of all the State departments that will be/have been consulted, including the name and contact details of the relevant official.			
State Department	Name of person	Contact details	
DEA&DP Pollution and Chemicals Management	The Director: Wilna Kloppers	Tel	021 483 2752
		Fax	021 483 3254
		E-mail	Wilna.kloppers@westerncape.gov.za
DEA&DP Waste Management	The Director: Mr E Hanekom	Tel	021 483 2728
		Fax	021 483 4425
		E-mail	ehanekom@westerncape.gov.za
Cape Winelands District Municipality	Municipal Manager, Mayor & W.C.	Tel	021 888 5272
		Fax	021 887 3451
		E-mail	mm@capewinelands.gov.za
CapeNature	Mr Rhett Smart	Tel	021 866 8000
		Fax	021 866 1523
		E-mail	rsmart@capenatue.co.za
Department of Agriculture	Mr B Layman	Tel	021 808 5093
		Fax	021 808 5092
		E-mail	brandonl@elsenburg.com
Department of Health	Mr Guillaume Oliver	Tel	023 348 8131
		Fax	023 348 8124
		E-mail	golivier@westerncape.gov.za
Department of Water Affairs	Mr Warren Dreyer	Tel	021 941 6189
		Fax	086 585 6935
		E-mail	DreyerW@dws.gov.za
Heritage Western Cape	Mr Calvin van Wijk	Tel	021 483 9842
		Fax	021 183 9842
		E-mail	Calvin.vanwijk@westerncape.gov.za
Stellenbosch Municipality	The Municipal Manager/ Mayor and Municipal Ward Councillors	Tel	021 808 8111
		Fax	021 808 8026
		E-mail	munmanager@stellenbosch.org
DEA&DP:Development Management (Region 2)	The Director: Henri Fortuin	Tel	021 483 3679
		Fax	021 48 3633
		E-mail	Henri.Fortuin@westerncape.gov.za

Please note:

A State department consulted in terms of Section 24O(2) of NEMA and Regulations 3(4) and 43(2) must within 30 days from the date of the Department/EAP's request for comment, submit such comment in writing to the Department. The applicant/EAP is therefore required to inform this Department in writing when the application/relevant information is submitted to the relevant State Departments. Upon receipt of this confirmation, this Department will in accordance with Section 24O (2) & (3) of the NEMA inform the relevant State Departments of the commencement date of the 30-day commenting period.

PART 2 – ANNEXURE A TO THE SECTION 24G APPLICATION FORM

SECTION A: DIRECTIVES

Section 24G(1) of NEMA provides that on application by a person who has commenced with a listed or specified activity without an environmental authorisation in contravention of section 24F(1); or a person who has commenced, undertaken or conducted a waste management activity without a waste management licence in terms of section 20(b) of the National Environment Management: Waste Act, 2008 (Act 59 of 2008) ("NEM:WA") the Minister, the Minister responsible for mineral resources or the MEC concerned (or the official to which this power has been delegated), as the case may be, may direct the applicant to-

i	*immediately cease the activity pending a decision on the application submitted in terms of this subsection*	
ii	*investigate, evaluate and assess the impact of the activity on the environment*	
iii	*remedy any adverse effects of the activity on the environment*	
iv	*cease, modify or control any act, activity, process or omission causing pollution or environmental degradation*	
v	*contain or prevent the movement of pollution or degradation of the environment*	
vi	*eliminate any source of pollution or degradation*	
vii	*compile a report containing-*	
	aa	*a description of the need and desirability of the activity*
	bb	*an assessment of the nature, extent, duration and significance of the consequences for or impacts on the environment of the activity, including the cumulative effects and the manner in which the geographical, physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity*
	cc	*a description of mitigation measures undertaken or to be undertaken in respect of the consequences for or impacts on the environment of the activity*
	dd	*a description of the public participation process followed during the course of compiling the report, including all comments received from interested and affected parties and an indication of how the issues raised have been addressed*
	ee	*an environmental management programme*
viii	*provide such other information or undertake such further studies as the Minister, Minister responsible for mineral resources or MEC, as the case may be, may deem necessary.*	

You are hereby provided with an opportunity to make representations on any or all of the abovementioned instructions including where you are of the opinion that any of these instructions are not relevant for the purposes of

your application setting out the reasons for your assertion. Kindly note further that after taking your representation into account a final directive may be issued.

Please Note:

Notwithstanding the above, subsequent to submission of the application form to the Department, you may be issued with a specific directive in terms of section 24G(1)(i) to (viii), and you will therefore be provided with an opportunity to make further representations as to the specific directive.

The appointed Environmental Assessment Practitioner, on behalf of the applicant, may be directed to compile and submit a report that meets the requirements of section 24G(vii)(aa)-(ee) as specified above.

SECTION B: DEFERRAL OF THE APPLICATION

Section 24G(7) of the NEMA provides that if at any stage after the submission of an application it comes to the attention of the Minister, the Minister responsible for mineral resources or the MEC, that the applicant is under criminal investigation for the contravention of, or failure to comply with, section 24F(1) of the NEMA or section 20(b) of the NEM:WA, the Minister, Minister responsible for mineral resources or MEC may defer a decision to issue an environmental authorisation until such time as the investigation is concluded and-

(a) the National Prosecuting Authority has decided not to institute prosecution in respect of such contravention or failure;
(b) the applicant concerned is acquitted or found not guilty after prosecution in respect of which such contravention or failure has been instituted; or
(c) the applicant concerned has been convicted by a court of law of an offence in respect of such contravention or failure and the applicant has in respect of the conviction exhausted all the recognised legal proceedings pertaining to appeal or review.

Kindly answer the following questions:

Are you, the applicant, being investigated for a contravention of section 24F(1) of the NEMA in respect of a matter that is not subject to this application and in any province in the Republic?	~~*YES*~~	*NO*	~~*UNCERTAIN*~~
If yes provide details of the offence being investigated and authority conducting the investigation. *If uncertain provide details of the activity or activities in relation to which you suspect you may be under investigation.*			
Are you, the applicant, being investigated for the contravention of section 20(b) of the NEMWA in respect of a matter that is not subject to this application and in any province in the Republic?	~~*YES*~~	*NO*	~~*UNCERTAIN*~~
If yes provide details of the offence being investigated and authority conducting the investigation. *If uncertain provide details of the activity or activities in relation to which you suspect you may be under investigation.*			
Are you, the applicant, being investigated for an offence in terms of section 24F(1) of the NEMA or section 20(b) of the NEMWA in terms of which this application directly relates?	~~*YES*~~	*NO*	~~*UNCERTAIN*~~
If yes provide details of the offence being investigated and authority conducting the investigation. *If uncertain provide details of the activity or activities in relation to which you suspect you may be under*			

investigation.

If you have answered yes or uncertain to any of the above questions, you are hereby provided with an opportunity to make representations as to why the Minister, Minister responsible for mineral resources or MEC, as the case may be, should not defer the application as he or she is entitled to do under section 24G(7).

SECTION C: QUANTUM OF THE SECTION 24G FINE

In terms of section 24G(4) of the NEMA, it is mandatory for an applicant to pay an administrative fine as determined by the competent authority before the Minister, Minister responsible for mineral resource or MEC may take a decision on whether or not to grant an *ex post facto* environmental authorisation or a waste management licence as the case may be. The quantum of this fine may not exceed R5 million.

Having regard to the factors listed below, you are hereby afforded with an opportunity to make representations in respect of the quantum of the fine and as to why the competent authority should not issue a maximum fine of R5 million.

Please note that Part 1 of this section must be completed by an independent environmental assessment practitioner after conducting the necessary specialist studies, copies of which must be submitted with this completed application form.

Please also include in your representations whether or not the activities applied for in this application (if more than 1) are in your view interrelated and provide reasons therefor.

PART 1: THE IMPACTS OR POTENTIAL IMPACTS OF THE ACTIVITY/ACTIVITIES

Index	**Socio Economic Impact** **Description of variable**	**Place an "x" in the appropriate box**
	The activity is not giving, has not given and will not give rise to any negative socio-economic impacts	
	The activity is giving, has given, or could give rise to negative socio-economic impacts, but highly localised	X
	The activity is giving, has given, or could give rise to significant negative socio-economic and regionalized impacts	
	The activity is resulting, has resulted or could result in wide-scale negative socio-economic impacts.	
	Motivation: Work completed to date including the excavation and gabion construction has not given rise to any negative socio-economic impacts. However, crime and impacts on property values are potentially associated with the housing development, see impact tables in this application for more details.	

Index	**Biodiversity Impact** **Description of variable**	**Place an "x" in the appropriate box**
	The activity is not giving, has not given and will not give rise to any impacts on biodiversity	
	The activity is giving, has given or could give rise to localised biodiversity impacts	X
	The activity is giving, has given or could give rise to significant biodiversity impacts	
	The activity is, has or is likely to permanently / irreversibly transform/ destroy a recognised biodiversity 'hot-spot' or threaten the existence of a species or sub-species.	

Motivation:
The gabion construction has impacted on the watercourse and resulted in the removed of some vegetation. The proposed housing development will impact on the wetlands, ecological support area and aquatic vegetation but a wetland offset is proposed.

Vegetation:
The property lies in the general area that used to support Boland Granite Fynbos. This vegetation type is listed as Vulnerable (Western Cape Biodiversity Spatial Plan 2017). The southern section of the site comprises mainly grasses. There is a heavy presence of alien invasive vegetation on the site. The site contains Port Jackson (Acacia saligna), Kikuyu Grass (Pennisetum clandestinum), Patterson's Curse (Echium Plantagineum) etc. Some indigenous riparian vegetation can be found in the rivers. The river running to the east of the study area was noted to be in a largely degraded state, with both Acacia saligna and Pennisetum clandestinum dominating throughout. Indigenous obligate (wetland indicator) species can be found on site in the wetland areas. The vegetation composition of both Seep wetlands has been critically modified through the removal of indigenous wetland species during the historical agricultural activities and through the proliferation of alien and invasive plant species such as Acacia saligna and Pennisetum clandestinum as well as a large variety of other weed and grass species indicative of disturbed areas.
Rivers:
Two rivers are located on site. Both rivers are tributaries of the Krom River.
The non-perennial river on the eastern edge of the development rises in the foothills of the Simonsberg Mountains and flows from north to south on the western edge of Lindida, Idas Valley area of Stellenbosch. The non-perennial river rises at 222m above mean sea level and runs for 1.2km before it reaches the property at 168m above mean sea level. The middle portion of the river on erf 9445 has been silted up and the defined channel that is evident on either side of this area disappears. Much of this river is invaded by Kikuyu Grass (Pennisetum clandestinum).
The perennial tributary rises in the Hottentots Holland mountains and runs through Idas Valley and forms the southern boundary of the proposed development. This river on the southern boundary will not be affected by the proposed development. The development infrastructure, although within 100m of the river, will be developed outside the flood line. The development will therefore not affect the flow or ecological functioning of this river.
Wetlands:
Two Seep Wetlands are located on the site.
Hydrological state: The hydrological functioning of the Seep Wetlands has been largely modified due to surrounding agricultural and anthropogenic activities, including various drains, likely excavated when the land was actively cultivated. These drains as well as piles of deposited materials have created berms within and surrounding the Seeps and have changed the pattern, direction and timing of runoff within the system.
Geomorphological state: The geomorphology of the Seep wetlands is considered moderately modified due to excavation works and deposition of materials observed within the wetland. This has resulted in loss of organic matter and impacted on the dispersal of water across the HGM unit.
Vegetation health: The vegetation composition of both Seep wetlands has been critically modified through the removal of indigenous wetland species during the historical agricultural activities and through the proliferation of alien and invasive plant species such as Acacia saligna and Pennisetum clandestinum as well as a large variety of other weed and grass species indicative of disturbed areas. No endangered species were identified during the site visit, but the system may provide suitable breeding habitat for various common avifaunal and amphibian species.

Index	**Sense of Place Impact and / or Heritage Impact** **Description of variable**	**Place an "x" in the appropriate box**
	The activity is in keeping with the surrounding environment and / or does not negatively impact on the affected area's sense of place and /or heritage	
	The activity is not in keeping with the surrounding environment and will have a localised impact on the affected area's sense of place and/or heritage	X
	The activity is not in keeping with the surrounding environment and will have a significant impact on the affected area's sense of place and/ or heritage	
	The activity is completely out of keeping with the surrounding environment and will have a significant impact on the affected area's sense of place and/ or heritage	
Motivation: The visual character of the open space has been slightly impacted on and will affect approximately 17 households which face directly onto the site. The visual character will be changed and views impacted upon. 17 households face directly onto the development and will have an impact on these home owners. Also note that all the houses for this site will be for the GAP market and no subsidised housing units are planned on erf 9445. That means people will have to either buy the house cash or register for a bond. See the policy for FLISP. People in a certain income bracket do qualify for a small subsidy ranging between		

R27,960.00 and R121,626.00 but this will not be enough to secure an opportunity. Due to the topography of the site the visual impact is limited to nearby neighbours. Furthermore, the houses are not considered hideous or unsightly but rather in keeping with the surrounding area. Houses in Bartlett and Cornelly road area are of similar typologies as the houses proposed.

Index	Pollution Impact Description of variable	Place an "x" in the appropriate box
	The activity is not giving, has not given and will not give rise to any pollution	
	The activity is giving, has given or could give rise to pollution with low impacts.	X
	The activity is giving, has given or could give rise to pollution with moderate impacts.	
	The activity is giving, has given or could give rise to pollution with high impacts.	
	The activity is giving, has given or could give rise to pollution with major impacts.	
	Motivation: The activity could give rise to pollution due to diesel or petrol spills or incorrect cement mixing during construction. However, this should not occur is measures in EMPr are followed. During operation the housing could potentially give rise to pollution due to littering etc. however this is mitigated by the conformation of services.	

PART 2: COMPLIANCE HISTORY AND KNOWLEDGE OF THE APPLICANT

Index	Previous administrative action (i.e. administrative enforcement notices) issued to the applicant in respect of a contravention of section 24F(1) of the National Environmental Management Act and/or section 20(b) of the National Environmental Management Waste Act Description of variable	Place an "x" in the appropriate box
	Administrative action was previously taken against the applicant in respect of the abovementioned provisions.	
	No previous administrative action was taken against the applicant but previous administrative action was taken against a firm(s) on whose board one or more of the applicant's directors sit or sat at the relevant time when the administrative action was taken.	
	Administrative action was **not** previously taken against the applicant in respect of the abovementioned provisions.	X
	Explanation of all previous administrative action taken in respect of the above:	

Index	Previous Convictions in terms of section 24F(1) of the National Environmental Management Act and/or section 20(b) of the National Environmental Management Waste Act Description of variable	Place an "x" in the appropriate box
	The applicant was previously convicted in terms of either or both of the abovementioned provisions.	
	No previous convictions have been secured against the applicant but a conviction has been secured against a firm(s) on whose board one or more of the applicant's directors sit or sat at the relevant time; or a conviction was secured against a director of the applicant in his or her personal capacity.	
	The applicant has not previously been convicted in terms of either or both of the abovementioned provisions.	X
	Explanation of all previous convictions in respect of the above:	

Index	Number of section 24G applications previously submitted by the applicant Description of variable	Place an "x" in the appropriate box
	Previous applications in terms of section 24G of NEMA were submitted by the applicant.	
	No previous applications have been submitted by the applicant but a previous application(s) have been submitted by a firm(s) on whose board one or more of the applicant's directors sit or sat at the relevant time.	
	No previous applications have been submitted by the applicant but the applicant sat on the board of a firm that previously submitted an application.	

Explanation in respect of all previous applications submitted in terms of section 24G:
No section 24G applications previously submitted by the applicant

PART 3: APPLICANT'S PERSONAL CIRCUMSTANCES

Index	**Applicant's legal persona** **Description of variable**	**Place an "x" in the appropriate box**
	The applicant is a natural person.	
	The applicant is a firm.	
	Describe the firm: The applicant is a Municipality.	

Index	**Any other relevant information that the applicant would like to be considered.**
	Motivate and explain fully: A full EIA process was initially initiated. On the 02 September 2014 an EA Application was submitted to DEADP for a housing development on erf 11330 and erf 9445. On the 19th of February 2016 the Final BAR was rejected by DEADP. It was then decided to split the BAR and complete two separate applications. Erf 11330 went on to be approved and the EA was granted in favour of Stellenbosch Municipality. EIA Ref: 16/3/1/1/B4/45/1105/14. The layout for ERF 9445 was amended to exclude the wetland from the development area in an effort to protect the environment and to "de-list" the proposed activity on erf 9445. This was based on the wetland delineation by Dirk van Driel. On the 15th of September 2016, a checklist for NEMA applicability was submitted to DEADP. On the 24th of February 2017, DEADP indicated that the proposed development would not require an Environmental Authorisation. The checklist indicated that the infrastructure would be situated outside the non-perennial river and would not result in the infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres. Checklist Ref: 16/3/3/6/1/B4/45/1275/16. As such Stellenbosch Municipality commenced without an Environmental Authorisation. Subsequent to this commencement it became clear that excavation of more than 10 cubic metres from a watercourse had taken place. This is noted as it was not the intention of Stellenbosch Municipality to commence with a listed activity without the required EA.

NOTE: An explanation as to why the applicant did not obtain an environmental authorisation and/or waste management licence must be attached to this application.

SECTION D: PRELIMINARY ADVERTISEMENT

When submitting this application form, the applicant must attach proof that the application has been advertised in at least one local newspaper in circulation in the area in which the activity was commenced, and on the applicant's website, if any.

The advertisement must state that the applicant commenced a listed or specified activity or activities or waste management activity or activities without the necessary environmental authorisation and/or waste management licence and is now applying for *ex post facto* approval. It must include the following:

- the date;
- the location;
- the applicable legislative provision contravened; and
- the activity or activities commenced with without the required authorisation.

Interested and affected parties must be provided with the details of where they can register as an interested and affected party and / or submit their comment. At least 20 days must be provided in which to do so.

This advertisement shall be considered as a preliminary notification and the competent authority may direct the applicant to undertake further public participation and advertising after receipt of this application form.

NOTE: Unless protected by law, all information contained in and attached to this application form may become public information on receipt by the competent authority. This application must be attached to any documentation or information submitted by an applicant further to section 24G(1).

PART 3 -

APPENDICES

The following appendices must, where applicable, be attached to this form:

Appendix		Tick the box if Appendix is attached
Appendix A:	**Locality map**	X
Appendix B:	**Site plan(s)**	X
Appendix C:	**Building plans (if applicable)**	NA
Appendix D:	**Colour photographs**	X
Appendix E:	**Biodiversity overlay map**	X
Appendix F:	**Permit(s) / license(s) from any other organ of state including service letters from the municipality**	X
Appendix G:	**Public participation information: including a copy of the register of interested and affected parties, the comments and responses report, proof of notices, advertisements, Land owner consent and any other public participation information as required in Section J above.**	X
Appendix H:	**Specialist Report(s), if any**	X
Appendix I:	**Environmental Management Programme**	X
Appendix J:	**Supporting documents relating to compliance/enforcement history of the applicant, including but not limited to, Pre-compliance/compliance notices, Pre-directives/directives etc.**	X
Appendix K:	**Certified copy of Identity Document of Applicant**	NA-Municipality
Appendix L:	**Certified copy of the title deed (or title deeds in the case of linear activities)**	X
Appendix M:	**Any Other (if applicable) (describe)**	X

Where an application has been made in terms of the waste management activities, please complete and annex Annexure 1 as in the following:

Annexures for waste listed activity/ies supporting information		Tick the box if Annexure is attached
Annexure 1	**Waste listed activities supporting information (as in prescribed attached form)**	NA
Other	(please list accordingly)	NA

DECLARATIONS