iLifa leMveli leNtshona Koloni
Erfenis Wes-Kaap
Heritage Western Cape

NOTIFICATION OF INTENT TO DEVELOP

Completion of this form is required by Heritage Western Cape for the initiation of all impact assessment processes under Section 38(1) & (8) of the National Heritage Resources Act.

Whilst it is not a requirement, it may expedite processes and in particular avoid calls for additional information if certain of the information required in this form is provided by a heritage specialist/s with the necessary qualifications, skills and experience.

A. BASIC DETAILS

PROPERTY DETAILS:

Name of property: Montagu Wine Cellar Erf 901	
Street address or location (eg: off R44): The property is situated in the Montagu Industrial area in Badstraat.	
Erf or farm number/s: Erf 901, Montagu	Coordinates: 33 46' 36"S 20 07' 58"E (A logical centre point. Format based on WGS84.)
Town or District: Montagu	Responsible Municipality: Langeberg Municipality
Extent of property: 1.9311ha	Current use: Montagu Wine Cellar
Predominant land use/s of surrounding properties: The proposed property is located within the industrial area of Montagu, adjacent land uses includes industrial activities, a golf course, untransformed mountainous area and a river tributary.	

REGISTERED OWNER OF PROPERTY:

Name Montagu Co-operative Wine Cellar Ltd		
Address PO Box 29 Montagu 6720		
Telephone 023 614 1125	Cell -	E-mail manager@montaguwines.co.za

By the submission of this form and all material submitted in support of this notification (ie: 'the material'), all applicant parties acknowledge that they are aware that the material and/or parts thereof will be put to the following uses and consent to such use being made: filing as a public record; presentations to committees, etc; inclusion in databases; inclusion on and downloading from websites; distribution to committee members and other stakeholders and any other use required in terms of powers, functions, duties and responsibilities allocated to Heritage Western Cape under the terms of the National Heritage Resources Act. Should restrictions on such use apply or if it is not possible to copy or lift information from any part of the digital version of the material, the material will be returned unprocessed.

I confirm that I enclose with this form four hardcopies of all material submitted together with a CD ROM containing digital versions of all of the same.

Signature of owner or authorised agent Date / / 20
(Agents must attach copy of power of attorney to this form.)

DEVELOPMENT DETAILS:

Please indicate below which of the following Sections of the National Heritage Resources Act, or other legislation has triggered the need for notification of intent to develop.

☒ S38(1)(a) Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length.

☐ S38(1)(b) Construction of a bridge or similar structure exceeding 50m in length.

☐ S38(1)(d) Rezoning of a site exceeding 10 000m^2 in extent.

☒ Other triggers, eg: in terms of other legislation, (ie: National Environment Management Act, etc.) Please set out details: Waste Management Licence in terms of section 45 of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008).

S38(1)(c) Any development or activity that will change the character of a site -

☐ (i) exceeding 5 000m^2 in extent;

☐ (ii) involving three or more existing erven or subdivisions thereof;

☐ (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years.

If you have checked any of the three boxes above, describe how the proposed development will change the character of the site: Montagu Wine Cellar proposes to upgrade and expand their existing cellar waste water treatment works to establish a waste water treatment works at the wine cellar premises to treat cellar wash water to DWA irrigation standards. A pump will be installed next to the proposed WWTW and a underground 450m long 100mm PVC pipe be laid to the golf course

If an impact assessment process has also been / will be initiated in terms of other legislation please provide the following information:

Authority / government department (ie: consenting authority) to which information has been /will be submitted for final decision: Department of Environmental Affairs and Development Planning

Present phase at which the process with that authority stands: First Draft Basic Assessment Report

Provide a <u>full</u> description of the nature and extent of the proposed development or activity including its potential impacts (eg: changes in land use, envisaged timeframes, provision of additional bulk services, excavations, landscaping, total floor area, height of development, etc. etc.):
Montagu Wine Cellar proposes to upgrade and expand their existing cellar waste water treatment works to establish a waste water treatment works at the wine cellar premises to treat cellar wash water to DWA irrigation standards.

Proposed waste water treatment works upgrade and expansion - The winery effluent comprises only

cellar wash water (excluding sewage and condensate). The system design is based on standard aerobic biological treatment in pre-fabricated steel tanks with internal HDPE liners and comprises the following operational units:

1.Screening (existing infrastructure which will be expanded)
Mechanical screens remove the pips and skins from the cellar wash water (these screened solids will be removed and mixed with bulk grape solids for composting).

2. Lime dosing (existing infrastructure which will be expanded)
Lime is mixed in a concentrate/tank and then continuously dosed into the winery effluent stream; the purpose is to neutralise the effluent prior to biological treatment.

3. Settling (existing infrastructure)
The delta-separator allows for removal of settleable material, consisting mainly of insoluble lime and filter aid material (these settled solids will be removed and mixed with bulk grape solids for composting).

4. Bioreactor (New infrastructure to allow for the expansion of the existing waste water treatment system)
These will be pre-fabricated steel tanks (two tanks) of 360 m³ with internal HDPE liner and fitted with mechanical aeration to provide sufficient dissolved oxygen for biological COD degradation. The hydraulic retention will be 3 days in this unit,

5. Clarifier (New infrastructure to allow for the expansion of the existing waste water treatment system)
A smaller steel tank of approximately 210 m³ providing 2 hours for settling of the microbial biomass that developed in the previous bioreactor. The biomass will be partially returned to the bioreactor and partially removed for co-composting with the bulk grape solids waste.

6. Final treated waste water disposal (New infrastructure to allow for the expansion of the existing waste water treatment system)
The overflow from the clarifier tank will be compliant with DWA irrigation standard (i.e. COD < 400 mg/L) and will be pumped towards the nearby golf course for irrigation use via a 450m udergound 100m PVC pipe.

Discharge/irrigation quantities expected:
- The main stream is discharged for 250 days per annum.
- There are seasonal discharges.
- Average discharge is - 100 m3/day (season) and 45 m3/day out of season
- Maximum discharge is 155 m3/day (season) and 65 m3/day out of season
- Average annual discharge is 18 000 m3
- Maximum annual discharge is 20 000 m³

Treatment/technology alternative assessed:
Several options exist to treat the wastewater but several factors will depict the system to be used like -
- The type of wastewater (Its chemical composition) and if it is sewage or plant wastewater
- The surrounding environment
- The end quality of the treated wastewater that must be achieved
- The daily volume of wastewater produced and if it is seasonal or continuous.
- The capital cost involved
- The available footprint
- Operating cost (Electrical, chemical, salaries)
- How complicated is it to operate the system?

Several treatment options exist, like the Activated Sludge System, UASB and Membrane Reactor

systems, which is compact systems and capital intensive, expensive and complicated to operate. These systems also require wastewater at a more standard flow rate and quality.

More robust are the ponding and activated sludge systems. The most negative aspect of the ponding systems are that it requires a large footprint.

The Bioreactor system (preferred for Montagu Cellar) is an activated system which:

- Requires a small footprint
- Is uncomplicated to operate
- It is a proven effective system
- Low capital maintenance cost
- Has a great buffer capacity
- Can handle great fluctuations in hydraulic loads
- Will be utilizing existing infrastructure at the cellar of which the most important is the solids separating system.

B. HERITAGE RESOURCES AND IMPACTS THEREUPON

Section 3 of the National Heritage Resources Act sets out the following categories of heritage resource as forming part of the national estate. Please indicate the known presence of any of these by checking the box alongside and then providing a description of each occurrence, including nature, location, size, type

Failure to provide sufficient detail or to anticipate the likely presence of heritage resources on the site may lead to a request for more detailed specialist information.

(The assistance of relevant heritage professionals is particularly relevant in completing this section.)

Provide a short history of the site and its environs (Include sources where available): Montagu cellar is an existing winery, situated in Montagu, which processes about 15 078 tons of grapes per annum, producing 10,5 million liters of red and white wine. The wine is mostly sold as bulk wine, while about 3750 liters are bottled (5 000 cases). 1,9 Million liters grape juice is also produced to be concentrated to 410 000 liters as well as 1,2 million liters distilling wine.

Due to its activities water is used and wastewater is produced. This wastewater has a high organic load, mainly during the harvesting season and must be correctly treated to prevent contamination of the environment. The effluent volume is currently about 11 000 m3 per season. The average wastewater volume during the harvesting season is calculated on 100m3/ day, varying from 55 – 155 m3/day. During the "off – season", water consumption drops to 30 - 40 m3/day.

Until the 2013 season a wastewater pre - treatment system was designed and built, consisting mainly of a mechanical, solid separation system, lime treatment and settling pits (Delta separator) to settle the filter powder. Wastewater is currently disposed of by irrigation on 0,75 ha on plot 1721 but mainly removal by tanker and disposed of on a farmer's land. The over irrigation of plot 1721 caused problems with bad smells, and also pollution of the Kingna River. The cellar also received complaints from the local municipality and the municipal WWTW does not have the capacity to handle the cellar waste water. Transporting all the wastewater away in a tanker and dumping it on farmland, where it could not cause any pollution, temporarily solved the problem.

The reason why Montagu cellar is now proposing the upgrade and expansion of their existing WWTW is because the municipality does not have the capacity and infrastructure to treat the wastewater. Negotiations have been going on for years with the municipality, but to no avail. None of the farmers want to allow the dumping of wastewater onto their properties anymore.

Because of its environmental responsibilities and the sensitivity of the areas where it is situated, Montagu Cellar realised that the existing treatment system had to be upgraded and expanded to accommodate the treatment of waste water from the cellar. A closed system (Bioreactor) wastewater treatment system has been designed by Dekker Envirotech to utilise the existing sold separation system and then have a closed system, in the form of a tank with mechanical aeration for COD degradation. This will be followed with by another tank, which will serve as clarifier. The effluent, treated to irrigation standards, will be conveyed by pipeline to the Golf Course, where it will be mixed with water from the Cogmanskloof Irrigation Board ("CBR") and irrigated on 11ha golf course irrigation area. In case of an emergency Montagu Cellar also has authorisation to irrigate the treated waste water unto Erf 1721 (0.75ha)	
Please indicate which heritage resources exist on the site and in its environs, describe them and indicate the nature of any impact upon them:	
☐	**Places, buildings, structures and equipment of cultural significance** Description of resource: Description of impact on heritage resource:
☐	**Places to which oral traditions are attached or which are associated with living heritage** Description of resource: Description of impact on heritage resource:
☒	**Historical settlements and townscapes** Description of resource: Montagu Description of impact on heritage resource: Provision of more effective WWTW at the Montagy Cellar and additional recycled irrigation water for the golfcourse
☐	**Landscapes and natural features of cultural significance** Description of resource: Description of impact on heritage resource:
☐	**Geological resources of scientific or cultural importance** Description of resource: Description of impact on heritage resource:
☐	**Archaeological resources** (Including archaeological sites and material, rock art, battlefields & wrecks)**:** Description of resource: Description of impact on heritage resource:
☐	**Palaeontological resources** (ie: fossils)**:** Description of resource: Description of impact on heritage resource:
☐	**Graves and burial grounds** (eg: ancestral graves, graves of victims of conflict, historical graves & cemeteries)**:** Description of Resource: Description of Impact on Heritage Resource:
☐	**Other human remains:** Description of resource: Description of impact on heritage resource:
☐	**Sites of significance relating to the history of slavery in South Africa:** Description of resource: Description of impact on heritage resource:

☐	**Other heritage resources:** Description of resource: Description of impact on heritage resource:

Describe elements in the environs of the site that could be deemed to be heritage resources: Listed above

Description of impacts on heritage resources in the environs of the site: Temporary visual impacts during installation of the WWTW and irrigation pipeline.

Summary of anticipated impacts on heritage resources: Listed above

ILLUSTRATIVE MATERIAL (This form will not be processed unless the following are included):

Attach to this form a minimum A4 sized locality plan showing the boundaries of the area affected by the proposed development, its environs, property boundaries and a scale. The plan must be of a scale and size that is appropriate to creating a clear understanding of the development.

Attach also other relevant graphic material such as maps, site plans, satellite photographs and photographs of the site and the heritage resources on it and in its environs. These are essential to the processing of this notification.

Please provide all graphic material on paper of appropriate size and on CD ROM in JPEG format. It is essential that graphic material be annotated via titles on the photographs, map names and numbers, names of files and/or provision of a numbered list describing what is visible in each image.

C. RECOMMENDATION

In your opinion do you believe that a heritage impact assessment is required? ☐ Yes ☒ No

Recommendation made by:

Name Johmandie Giliomee

Capacity Environmental Assessment Practitioner

PLEASE NOTE: No Heritage Impact Assessment should be submitted with this form or conducted until Heritage Western Cape has expressed its opinion on the need for such and the nature thereof.

D. INFORMATION TO BE PROVIDED AND STUDIES TO BE CONDUCTED AS PART OF THE HERITAGE IMPACT ASSESSMENT (HIA)

If it is recommended that an HIA is required please complete this section of the form.

DETAILS OF HERITAGE PRACTITIONERS AND SPECIALISTS INTENDING TO CONDUCT THE HIA:

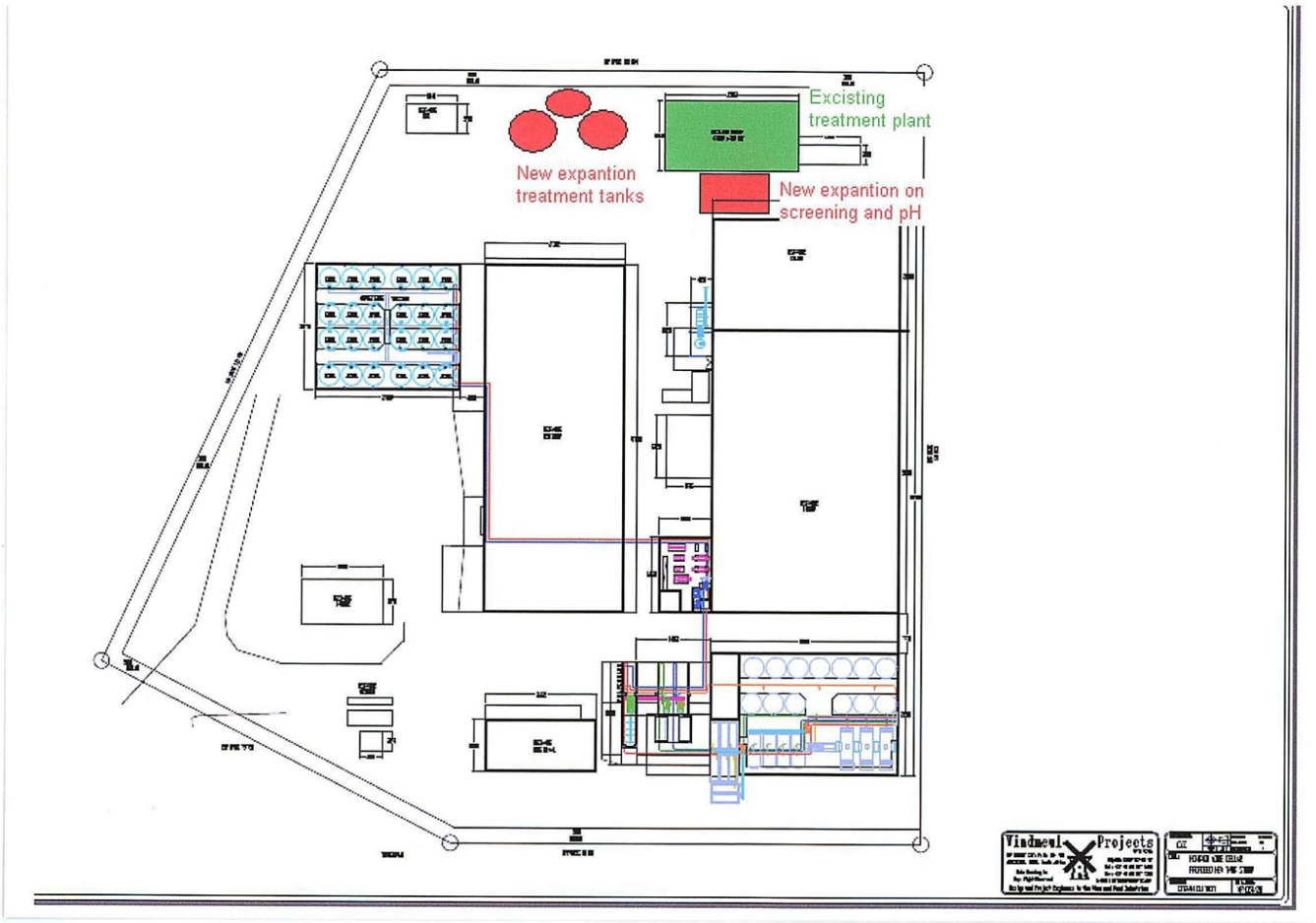
1.	Name of individual: NA Name of Practice: Area of specialisation: Qualifications: Experience: Standing in heritage resource management: E-mail Address: Telephone: Cell:
2.	Name of individual: NA Name of Practice: Area of specialisation: Qualifications: Experience: Standing in heritage resource management: E-mail Address: Telephone: Cell:
3.	Name of individual: NA Name of Practice: Area of specialisation: Qualifications: Experience: Standing in heritage resource management: E-mail Address: Telephone: Cell:
4.	Name of individual: NA Name of Practice: Area of specialisation: Qualifications: Experience: Standing in heritage resource management: E-mail Address: Telephone: Cell:
5.	Name of individual: NA Name of Practice: Area of specialisation: Qualifications: Experience: NA Standing in heritage resource management: E-mail Address: Telephone: Cell:
If this submission is made in terms of Section 38(8) of the National Heritage Resources Act indicate below the particulars of the principle environmental consultant on the project.	
Name of individual: Johmandie Giliomee Name of Practice: Eco Impact Legal Consulting Area of specialisation: Environmental Assessment Practitioner E-mail Address: johmandie@ecoimpact.co.za Telephone: 021 671 1660 Fax: 088 021 671 1660 Cell: 072 240 3092 Postal Address: PO Box 45070 Claremont South Africa 7735	

DETAILS OF STUDIES TO BE CONDUCTED IN THE INTENDED HIA

In addition to the requirements set out in Section 38(3) of the NHRA, indicate envisaged studies:	
☐	Heritage resource-related guidelines and policies.
☐	Local authority planning and other laws and policies.
☐	Details of parties, communities, etc. to be consulted.
☐	Specialist studies, eg: archaeology, palaeontology, architecture, townscape, visual impact, etc. Provide details:
☐	Other. Provide details:
PLEASE NOTE: Any further studies which Heritage Western Cape may resolve should be submitted must be in the form of a single, consolidated report with a single set of recommendations. Specialist studies must be incorporated in full, either as chapters of the report, or as annexures thereto.	

LOCALITY MAP

SITE DEVELOPMENT PLAN



Proposed 450m x 1m underground pipeline from Montagu Cellar WWTW to Golf Course (to connect to current water supply system from Cogmanskloof Irrigation Board)

SITE PHOTOS

Photo 1: Existing Montagu Cellar Waste Water Treatment Works to be upgraded and expanded.

Photo 2: Existing Montagu Cellar Waste Water Treatment Works to be upgraded and expanded.

Photo 3: Proposed WWTW expansion area adjacent to existing WWTW also to be upgraded.

Photo 4: Proposed underground pipeline route towards golf course for irrigation