iLifa leMveli leNtshona Koloni
Erfenis Wes-Kaap
Heritage Western Cape

APPLICATION FORM
NOTIFICATION OF INTENT TO
SECTION 38 (1) AND SECTION 38 (8)

Heritage Western Cape Reference No:
To be completed by applicant

20103006

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 (NHRA).

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. APPLICABILITY OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NEMA)

DEADP/ DMR Reference Number:	
X	This application is made in terms of Section 38(8) of the NHRA and an application under NEMA has been made to the following authority: **DEFF**
☐	This development will not require a NEMA application.
NOTE:	Making an incorrect statement or providing incorrect information in this part of the form may result in all or part of the application having to be reconsidered by HWC in the future, or submission of a new application.

B. BASIC DETAILS

PROPERTY DETAILS:

Name of property: **The 132kV Oya power line near Maitjiesfontein, Western and Northern Cape**
Street address or location (eg: off R44): **South of the R356**

Erf or farm number/s: **See attached screening assessment**	Coordinates: **-33.0218 S 20.1050 E** (A logical centre point. Format based on WGS84.)
Town or District: **Cape Winelands District Municipality and Namakwa District Multiplicity**	Municipality: **Witzenberg Local Municipality and Karoo Hooglands Local Municipality**
Extent of property: **Maximum 35km x 300m assessment corridor**	Current use: **The properties are currently zoned for agricultural land use and due to the low agricultural potential of the land, it was previously used for low intensity grazing however the properties are no longer actively used for agricultural activities**
Predominant land use/s of surrounding properties: **Agricultural**	

REGISTERED OWNER OF PROPERTY:

Name and Surname:		
Address		
Telephone	Cell	E-mail

APPLICANT/ AUTHORISED AGENT:

Name and Surname: **Jenna Lavin**		
Address: **34 Harries Street, Plumstead**		
Telephone **083 619 0854**	Cell **083 619 0854**	E-mail **jenna.lavin@ctsheritage.com**

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 two hardcopies of all material submitted together with a CD/ USB containing digital versions of all of the same.

Signature of Owner: _____ Date:

Signature of Applicant/ Authorised Agent: _____ Date: 30 Oct 2020
(Applicants/ agents must attach a copy of power of attorney to this

form.)

C. 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.

X	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)(c) Any development or activity that will change the character of a site -		
☐	S38(1)(b) Construction of a bridge or similar structure exceeding 50m in length.		☐	(i) exceeding 5 000m^2 in extent;
☐	S38(1)(d) Rezoning of a site exceeding 10 000m^2 in extent.		☐	(ii) involving three or more existing erven or subdivisions thereof;
X	Other triggers, eg: in terms of other legislation, (ie: National Environment Management Act, etc.) Please set out details: **Procedures laid out in GN No. 1131, namely the Central Corridor. The proposed overhead power line project will therefore be subject to a BA process in terms of the NEMA (as amended) and Appendix 1 of the EIA Regulations, 2014 promulgated in Government Gazette 40772 and GN R326, R327, R325 and R324 on 7 April 2017. The competent authority for this BA is the DEFF.**		☐	(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:		

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: **DEFF**

Present phase at which the process with that authority stands:

Notice of Intent to Submit

Provide a full description of the nature and extent of the proposed development or activity including its potential impacts:

Oya Energy (Pty) Ltd (hereafter referred to as "Oya Energy") is proposing to construct a 132kV overhead power line near Matjiesfontein in the Western and Northern Cape Provinces (hereafter referred to as the "proposed development"). The overall objective of the proposed development is to feed the electricity generated by the proposed 750MW Oya Energy Facility (part of separate on-going EIA process with DEFF Ref No.: 14/12/16/3/3/2/2009) as well as potentially the nearby developments into the national grid. The grid connection and substation (this application) will requires a separate EA, in order to allow the EA to be handed over to Eskom. The proposed power line is located in the Witzenberg and Karoo Hoogland Local Municipalities respectively, which fall within the Cape Winelands and Namakwa District Municipalities.

The entire extent of the proposed overhead power line is located within one (1) of the Strategic Transmission Corridors as defined and in terms of the procedures laid out in GN No. 1131, namely the Central Corridor. The proposed overhead power line project will therefore be subject to a BA process in terms of the NEMA (as amended) and Appendix 1 of the EIA Regulations, 2014 promulgated in Government Gazette 40772 and GN R326, R327, R325 and R324 on 7 April 2017. The competent authority for this BA is the DEFF.

At this stage, it is anticipated that the proposed development will include a 132kV power line and a 33/132kV substation to feed electricity generated by the renewable energy facilities owned by the applicant into the national gird at the Kappa substation.

The type of power line towers being considered at this stage include both lattice and monopole towers and it is assumed that these towers will be located approximately 200m to 250m apart. The towers will be up to 45m in height, depending on the terrain, but will ensure minimum overhead line clearances from buildings and surrounding infrastructure. The exact location of the towers will be determined during the final design stages of the power line design process and will be submitted along with the Final Basic Assessment report.

300m wide power line corridors (i.e. 150m on either side) are being assessed to allow flexibility when determining the final route alignment. The proposed power line however only requires a 31m wide servitude and as such, this servitude would be positioned within the assessed corridor.

The size of the proposed Oya and Kudusberg on-site Eskom substation and O&M building site will be approximately 200m x 200m [i.e. 2 hectare (ha)] each. It should be noted that only one (1) route is possible for the section of the proposed power line which connects the Kudusberg WEF on-site substation (authorised under 14/12/16/3/3/1/1976/AM1) to the Oya Energy Facility on-site substation. No alternatives can therefore be provided for this section of the power line. The Kudusberg to Oya power line corridor route is approximately 16.6km in length and runs from the Kudusberg on-site substation along the RE/194, 1/158, RE/159, RE/156, 1/156 and RE/155

properties to the Oya on-site substation. This power line corridor route is to be assessed with each alternative mentioned below (i.e. Alternative 1-5) as these cannot be developed without this power line corridor (i.e. cannot have alternatives mentioned below without this power line corridor).

Five (5) power line corridor route alternatives have however been provided for the section of the proposed overhead power line which connects the Oya Energy Facility on-site substation to the Kappa substation. The power line corridor route alternatives provide different route alignments contained within an assessment corridor of up to approximately 300m wide. This is to allow for flexibility to route the power line within the authorised corridor. The above-mentioned alternatives are described below:

- **Power Line Corridor Alternative 1 (Oya to Kappa): Approximately 34.14km in length and runs along the RE/155, RE/152, 2/152, RE/169, RE/243, 241, 240 and RE/244 properties to the Kappa substation**
- **Power Line Corridor Alternative 2 (Oya to Kappa): Approximately 32.43km in length and runs along the RE/155, 3/155, RE/152, 2/152, RE/169, 13/168, 5/168, 1/243, RE/243, 241 and 240 properties to the Kappa substation**
- **Power Line Corridor Alternative 3 (Oya to Kappa): Approximately 30.56km in length and runs along the RE/155, 4/168, 13/168, 5/168, 1/243, 240 and RE/244 properties to the Kappa substation**
- **Power Line Corridor Alternative 4 (Oya to Kappa): Approximately 32.94km in length and runs along the RE/155, 4/168, 13/168, RE/169, RE/243, 241 and 240 properties to the Kappa substation**
- **Power Line Corridor Alternative 5 (Oya to Kappa): Approximately 32.26km in length and runs along the RE/155, RE/152, 2/152, RE/169, 5/168, 1/243 and 240 properties to the Kappa substation**
- **'No-go' alternative: The 'no-go' alternative is the option of not fulfilling the proposed project as well as prevent the connection of the energy development in the area to feed electricity into the national grid. This alternative would result in no environmental impacts from the proposed project on the site or surrounding local area. It provides the baseline against which other alternatives are compared and will be considered throughout the report. Implementing the 'no-go' option would entail no development. The affected properties are currently not used for agricultural activities, although they are suitable for very low-level grazing.**

The 'no-go' option is a feasible option, however, this would prevent the proposed development from contributing to the environmental, social and economic benefits associated with the development of the renewables sector.

D. ANTICIPATED IMPACTS ON HERITAGE RESOURCES

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): **See attached Heritage Screening Assessment**	
Please indicate which heritage resources exist on the site and in its environs, describe them and indicate the nature of any impact upon them: **See attached Heritage Screening Assessment**	
☐	**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: **see attached screening assessment** Description of impact on heritage resource:
X	**Landscapes and natural features of cultural significance** Description of resource: **see attached screening assessment** Description of impact on heritage resource:
☐	**Geological resources of scientific or cultural importance** Description of resource: Description of impact on heritage resource:
X	**Archaeological resources** (Including archaeological sites and material, rock art, battlefields & wrecks)**:** Description of resource: **see attached screening assessment** Description of impact on heritage resource:
X	**Palaeontological resources** (ie: fossils)**:** Description of resource: **see attached screening assessment** 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:

Background

Oya Energy (Pty) Ltd (hereafter referred to as "Oya Energy") is proposing to construct a 132kV overhead power line near Matjiesfontein in the Western and Northern Cape Provinces (hereafter referred to as the "proposed development"). The overall objective of the proposed development is to feed the electricity generated by the proposed 750MW Oya Energy Facility (part of separate on-going EIA process with DEFF Ref No.: 14/12/16/3/3/2/2009) as well as potentially the nearby developments into the national grid. The grid connection and substation (this application) will requires a separate EA, in order to allow the EA to be handed over to Eskom.

Cultural Landscape

The proposed power line is located in the Witzenberg and Karoo Hoogland Local Municipalities respectively, which fall within the Cape Winelands and Namakwa District Municipalities. The area proposed for development is located within a REDZ area and is firmly located within the Tanqua and Ceres Karoo. This part of the Karoo is prized for its wide-open spaces and expansive vistas. Hart et al. (2016) note that the cultural landscape of this area is agricultural in nature, and consists of mostly stock farming with very occasional agriculture. The area is isolated with natural qualities and semi-desert landscapes. Many of the farm werfs in the broader area include historic structures. These are usually a modest size farm dwelling made from local rocks, and painted white with an outbuilding. Some of these structures are no longer in use, or are converted into farm sheds, housing animals, or any other use that supports farming activities.Other infrastructure typically found in the karoo is a round concrete dam, with a wind pump. The broader cultural landscape associated with the Baakens River Cultural Landscape has been previously thoroughly assessed by Bailey (2020) for the Oya PV HIA.

The interaction between the topography, geology, flora and historical remnants of human occupation of the area form a unique cultural landscape that may be negatively impacted by the proposed development. However, it must be noted that there are a number of approved Renewable Energy Facilities in the area, furthermore, the proposed OHL alignment falls within a Strategic Transmission Corridor which already contains existing powerline infrastructure (Figure 6). As noted in the Cultural Landscape Assessment for Oya PV (Bailey 2020), the negative impact of the development of such infrastructure on the Cultural Landscape is unavoidably high and are inevitable. The only mitigation option available is to develop this infrastructure in clusters, such as within the Komsberg REDZ (as with this project). As the cultural landscape for this area has already been assessed by Bailey 2020 as well as Jansen 2020, it is recommended that no additional Cultural Landscape assessment is necessary for this project.

Archaeology and the Built Environment

Heritage Impact Assessments have been completed within 20km of the area proposed for development and are recorded on SAHRIS, the South African Heritage Resources Information System, or have been sourced for this desktop screening assessment. It is noted that wherever

an assessment has been completed, heritage resources of significance have been identified. According to Deacon (2008, SAHRIS ID 4843), this area "is well known for its rock art. However this is restricted to the kloofs and higher lying areas. There is the possibility that stone artefacts of different ages may occur in well-watered lowlands and valley margins." In addition, according to Pinto and Smuts (2011, SAHRIS ID 375379), "Agriculture since colonial times has been, to a large extent, marginal and has had a low impact on the archaeological evidence for these early communities. Prehistoric sites in the area, consisting predominantly of surface and sub-surface stone artefact scatters in the open landscape together with overhangs and recesses in the sandstone hills used as shelters, are likely to be well preserved with little disturbance from later historic periods." According to Smuts et al. (2018, SAHRIS NID 514990), studies completed in the broader area identified surprisingly little pre-colonial or stone age archaeology, and distinct spatial patterning to the little that was found. Almost all archaeological material, predominantly in the form of scatters, has been identified on the flat floodplains up to the foothills of the mountains, and within river valleys along watercourses… The area is known to have been inhabited since the Early Stone Age (ESA) and throughout the Middle Stone Age (MSA). Later Stone Age (LSA) scatters have also been documented throughout the region, although at remarkably low density, although excavations at cave sites near Sutherland yielded significant LSA cultural material" Furthermore, Smuts et al (2018) notes that rock art and archaeological resources associated with the trek boers and historical occupation of the area are known from the region. In addition, it has been noted that there is often a more dense accumulation of archaeological artefactual material along an exposure of the Collingwood Formation (Pc) as this formation provides an excellent raw material source. Part of the proposed OHL lies along this formation (Figure 5b).

In 2016 a Draft HIA (Hart et al.) for the proposed Kolkies and Karee WEFs on neighbouring properties was not completed as the project was cancelled. Hart et al. (2016) note that in terms of impacts to archaeology, sites tend to be found on the banks of river beds. Discrete scatters of Middle Stone Age artefacts are often identified in sheet washed locations at several farms in the area but they are not considered to be of high significance. In general, Hart et al. (2016) found that Late and Early Stone Age Archaeology is sparse. Hart et al. (2016) also found that the built environment is sparse. Hart et al. (2016) note that previous heritage work has shown there are numerous stone cairns along the dry river beds which may represent graves. Similarly, in the archaeological assessment completed for the Oya PV facility by Fourie (2020), burial grounds and graves, some old farmsteads and kraals. Lavin and Wiltshire (2020) identified diffuse scatters of Middle and Later Stone Age artefacts in the neighbouring Pienaarspoort REF area.

As such, it is likely that the proposed OHL development will impact on significant archaeological and other heritage resources and as such, an assessment that identifies this impact is recommended. However, much of the OHL alternative alignments have been covered by existing completed heritage assessments (Figure 2). It is therefore recommended that only the portions of the alternatives that have not yet been assessed are surveyed for impacts to archaeological heritage.

Palaeontology

According to the SAHRIS Palaeosensitivity Map, the area proposed for development is underlain by sediments that are of low, moderate, high and very high palaeontological sensitivity (Figure 4a). According to the extract from the Council for GeoScience Map 3220 for Sutherland (Figure 5a) and Map 3320 for Ladismith (Figure 5b), the area proposed for development is underlain by sediments of the Karoo Supergroup assigned to the Dwyka, Ecca and Witteberg Groups in addition to Quaternary Sands. The Dwyka Group is known to preserve trace fossils, organic-walled microfossils, rare marine invertebrates (*eg* molluscs), fish, vascular plants, predominantly interglacial and post-glacial trace fossil assemblages, possibility of body fossils (*eg* molluscs, fish, plants). The Ecca Group is known to conserve non-marine trace fossils,

vascular plants (including petrified wood) and palynomorphs of *Glossopteris* flora, mesosaurid reptiles, fish (including microvertebrate remains, coprolites), crustaceans, sparse marine shelly invertebrates (molluscs, brachiopods), microfossils (radiolarians *etc*) and insects. The Witteberg Group is very palaeontologically sensitive and is known to conserve trace fossils, vascular plants, sparse shelly invertebrates and fish (brachiopods, bivalves *etc*). In the palaeontological assessment completed for the Oya PV facility, Almond (2020) concluded that the Oya PV project area has low paleontological sensitivity overall, but with small unpredictable areas of high to very high sensitivity. It is therefore likely that the proposed development will impact on significant palaeontological heritage and as such, an assessment of impacts to palaeontological resources is recommended for the portions of the proposed OHL alternatives that have not been previously assessed.

Known Resources
Four known heritage resources fall within the 300m buffer area proposed for the Oya OHL. These are SAHRIS Site ID 130730, 130734, 130768 and 130772. Site 130730 is graded IIIA and is described by Fourie (2020) as "Three grave features including a medium-density scatter of MSA and LSA stone tools... The site is located on the eastern bank of a river and has evidence of flooding. Three possible stone grave features were identified. The first grave (OYPV-10a) consists of packed stones in a semi-rectangular shape. The second grave (OYPV- 10b) has two sharp rectangular stones placed in one corner, most likely forming part of a grave marker that has been washed away or covered by sand from the river. The third grave feature (OYPV-10c) contains two stones placed on the eastern and western end, marking the feature as a grave. A medium-density scatter of MSA and LSA tools were found around the site. The stone tools mostly consist of cores, flakes, blades and chunks, and formal tools such as scrapers. The tools were made from chert, shale, and hornfels. Burial grounds and graves are protected under Section 36 of the NHRA 25 of 1999. Thus, the site is provisionally rated as having a high heritage significance with a heritage rating of IIIA. All graves have high levels of emotional, religious and in some cases historical significance. It is also important to understand that the identified graves could have significant heritage value to the relevant families."

Site 130734 is not graded as significant and is described by Fourie (2020) as consisting of "Several LSA stone tools were found scattered over an area of 107,23m 2 near the river on the farm Gats Rivier 156. The flakes were made from chert and shale." Site 130768 is also graded IIIA for its palaeontological research potential and is described by Almond (2020) as "Good riverbed and bank exposures of tabular, greyish wackes with undulose or wave-rippled tops. Thin, fissile, medium-grained, laminated, greyish sandy interbeds, locally ferruginised, towards base of package of medium- to thick-bedded wackes (horizontally to current ripple cross-laminated) containing dense hash of transported plant debris – mainly stems, including probable sphenophytes - preserved as moulds where weathered and carbonaceous compressions in fresher material. Some possible axes up to 10 cm across". Site 130772 is graded IIIC by Almond (2020) and is described as an exposure of the Waterford Formation. It includes "Hillslope exposure of grey-green mudrocks with large ferruginous carbonate diagenetic concretions and package of tabular, thin-bedded wackes. Small float block of silicified wood."

Description of impacts on heritage resources in the environs of the site:
The heritage resources within the area proposed for the development have not been adequately surveyed yet

A full Heritage Impact Assessment with a detailed field component is recommended for the proposed development. Before the alignment has been finalised, it is recommended that an archaeological and palaeontological field assessment be undertaken to ensure that significant heritage

resources are not impacted by the proposed development. It is recommended that these field assessments be integrated into a Heritage Impact Assessment that satisfies section 38(3) of the NHRA.

Summary of anticipated impacts on heritage resources:

The heritage resources within the area proposed for the development have not been adequately surveyed yet

A full Heritage Impact Assessment with a detailed field component is recommended for the proposed development. Before the alignment has been finalised, it is recommended that an archaeological and palaeontological field assessment be undertaken to ensure that significant heritage resources are not impacted by the proposed development. It is recommended that these field assessments be integrated into a Heritage Impact Assessment that satisfies section 38(3) of the NHRA.

E. 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/ USB 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.

F. RECOMMENDATION

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

Recommendation made by: **Jenna Lavin**

Name **Jenna Lavin**

Capacity **Heritage 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.

G. 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 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.
X	Specialist studies, eg: archaeology, palaeontology, architecture, townscape, visual impact, etc. Provide details: **See attached screening assessment**
☐	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.	