

11 January 2021

Ms Veronique Fyfe
G7 Renewable Energies (Pty) Ltd
5th Floor, 125 Buitengracht Street
Cape Town
8001

Dear Ms Fyfe

KUDUSBERG WEF ENVIRONMENTAL AUTHORISATION AMENDMENT: SPECIALIST IMPACT STATEMENT

1. Introduction

Katie Smuts is an archaeologist and heritage practitioner who undertook the archaeological fieldwork for the original Basic Assessment (BA) process for the Kudusberg WEF, and compiled both the Archaeological Impact Assessment (Smuts, 2018a) and the Heritage Impact Assessment (Smuts, 2018b). Although working freelance at the time of the project, Katie is now the archaeologist for Rennie Scurr Adendorff, a multidisciplinary firm offering architectural and heritage services, including archaeological assessments.

The HIA comprised an integrated assessment of archaeological heritage resources, built environment and cultural landscapes, scenic routes, burial grounds and graves and palaeontological heritage resources. The PIA (Almond, 2018) and Cultural Landscape Assessment (Rabe Bailey, 2018) were undertaken by independent specialists.

This specialist letter reviews the archaeological, built environment, burial grounds and graves and cultural landscape impacts of the proposed amendments detailed below; it does not include the palaeontological resources, as these are being addressed in a separate specialist letter. This letter must be read in conjunction with the original assessment (Smuts, 2018b).

2. Project Description

Kudusberg Wind Farm (Pty) Ltd (hereafter referred to as "Kudusberg Wind Farm") was issued with an Environmental Authorisation (EA) for the proposed construction of the 325MW Kudusberg Wind Energy Facility (WEF) and associated infrastructure, between Matjiesfontein and Sutherland in the Western and Northern Cape Provinces. The EA was granted on 25 March 2019 (DEFF Reference No.: 14/12/16/3/3/1/1976), and subsequently amended on 04 April 2019 to correct a minor naming error (14/12/16/3/3/1/1976/AM1) (see Figure 1 below for layout of authorised Kudusberg WEF).



Figure 1. The layout of the 2018 Kudusberg WEF project (RSA, 2020).

Kudusberg Wind Farm is now proposing to submit a Part 2 EA Amendment Application to split the authorised Kudusberg WEF (14/12/16/3/3/1/1976/AM1) into two (2) separate smaller WEF projects, namely the Kudusberg WEF and Oya WEF, which will result in a number of technical and administrative changes detailed in Table 1 below. The split is being proposed to allow the projects to be suitable for numerous opportunities such as either the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), Risk Mitigation Independent Power Producer Procurement Programme (RMIPPPP), other government run procurement programmes that may arise or for sale to private entities, if enabled and/or required in the drive for energy security in South Africa).

Following the split, the northern section of the authorised WEF will become the Oya WEF (Figure 2), while the southern section of the authorised WEF will remain known as the Kudusberg WEF (authorised under 14/12/16/3/3/1/1976/AM1) (Table 1) (Figure 3). In addition to the split, the final layout for the Oya WEF has been assessed and was found to be acceptable from a heritage perspective.

The respective layouts for the proposed Kudusberg WEF (southern section of the authorised WEF) and Oya WEF (northern section of the authorised WEF) are presented in Figure 2 and Figure 3 below.



Figure 2. The newly proposed Kudusberg WEF layout overlaid on the original layout showing the minor differences proposed; all visible Kudusberg 2018 turbines will be relocated or removed (RSA, 2021).

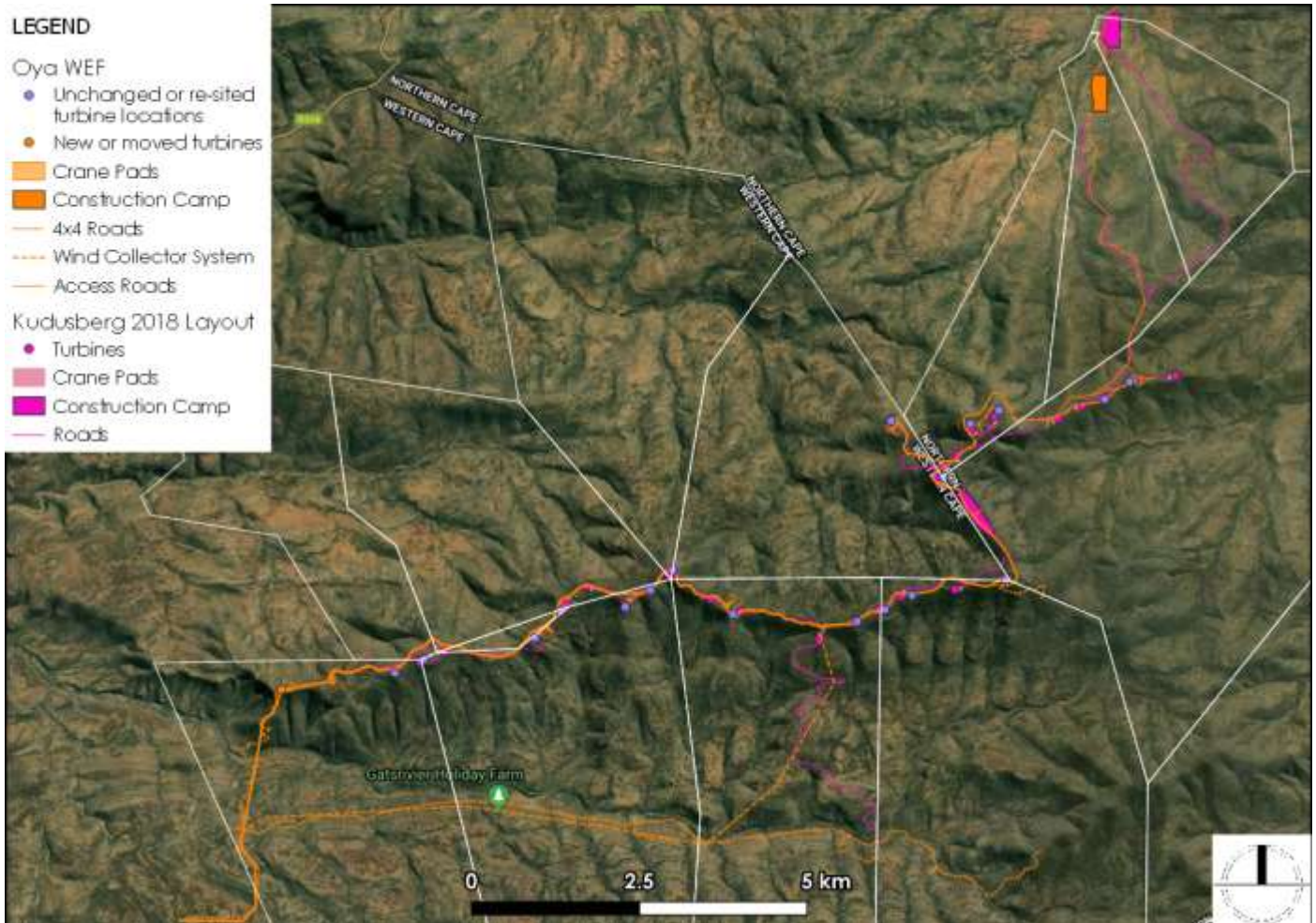


Figure 3. The newly proposed Oya WEF layout overlaid on the original layout showing minor differences proposed; all visible Kudusberg 2018 turbines and construction camps will be relocated or removed (RSA, 2021).

Furthermore, the approved Environmental Management Programme (EMPr) authorised as part of the Kudusberg EA is being amended to each WEF and to incorporate the final layout for the Oya WEF, management plans and the walk-throughs.

The amendments detailed in Table 1 below (including affected farm portions) are proposed for each of the two (2) WEFs mentioned above:

Table 1: Proposed Amendments

Aspect to be amended	Authorised	Proposed Amendment	
		Oya WEF	Kudusberg WEF
Administrative Aspects			
Amend the holder of the EA's	Kudusberg Wind Farm (Pty) Ltd	Oya Energy (Pty) Ltd	Kudusberg Wind Farm (Pty) Ltd
Amend the name of the WEFs	Kudusberg Wind Energy Facility	Oya Wind Energy Facility	Kudusberg Wind Energy Facility
Contact Details	kudusberg@g7energies.com	oya@g7energies.com	kudusberg@g7energies.com
Extend the validity of the EA	This activity must commence within a period of five (05) years from the date of issue of this environmental authorization.	This activity must commence within a period of five (05) years from the date of issue of this amended environmental authorization.	This activity must commence within a period of five (05) years from the date of issue of this amended environmental authorization.
Location of Activity and SG codes	Western Cape 1. Portion 1 of 156 Gats Rivier Farm: C01900000000015600001 2. Portion 3 of 156 Gats River Farm: C01900000000015600002 3. Remainder of 156 Gats Rivier Farm: C01900000000015600000 4. Portion 1 of 157 Riet Fontein Farm: C01900000000015700001 5. Portion 1 of 158 Amandelbloom Farm: C01900000000015800001 6. Remainder of 158 Amandelboom Farm: C01900000000015800000 7. Portion 1 of 159 Oliviers Berg Farm: C01900000000015900001 8. Remainder of 159 Oliviers Berg Farm: C01900000000015900000 9. Portion 2 of 157 Riet Fontein Farm: C01900000000015700002 10. Remainder of 161 Muishond Rivier Farm: C01900000000016100000	Western Cape 1. Portion 1 of the Farm Gats Rivier No 156: C01900000000015600001 2. Portion 2 of the Farm Gats Rivier No 156: C01900000000015600002 3. Remainder of the Farm Gats Rivier No 156: C01900000000015600000 4. Portion 1 of the Farm Riet Fontein No 157: C01900000000015700001 5. Portion 2 of the Farm Riet Fontein No 157: C01900000000015700002 6. Portion 1 of the Farm Amandelbloom No 158: C01900000000015800001 7. Remainder of the Farm Amandelboom No 158: C01900000000015800000 8. Portion 1 of the Farm Oliviers Berg No 159: C01900000000015900001	Western Cape 1. Portion 1 of the Farm Gats Rivier No 156: C01900000000015600001 2. Remainder of the Farm Gats Rivier No 156: C01900000000015600000 3. Portion 1 of the Farm Oliviers Berg No 159: C01900000000015900001 4. Remainder of the Farm Oliviers Berg No 159: C01900000000015900000 5. Klipbanks Fontein No 395: C01900000000039500000 6. Remainder of the Farm Muishond Rivier No 159: C01900000000016100000 Northern Cape 7. Remainder of the Farm Karee Kloof No 196: C07200000000019600000

	<p>11. Remainder of 395 Klipbanks Fontein Farm: C01900000000019500000</p> <p>Northern Cape</p> <p>12. Portion 4 of 193 Urias Gat Farm: C07200000000019300004</p> <p>13. Portion 6 of 193 Urias Gat Farm: C07200000000019300006</p> <p>14. Remainder of 193 Urias Gat Farm: C07200000000019300000</p> <p>15. Remainder of 194 Matjes Fontein Farm: C07200000000019400000</p> <p>16. Remainder of 196 Karree Kloof Farm: C07200000000019600000</p> <p>Properties affected by public road:</p> <p>17. 169 Zeekoegat Farm: C07200000000016900000</p> <p>18. Portion 1 of 170 Roodeheuvel Farm: C07200000000017000001</p> <p>19. Remainder of 170 Roodeheuvel Farm: C07200000000017000000</p> <p>20. Remainder of 190 Wind Heuvel Farm: C07200000000019000000</p> <p>21. Portion 1 of 190 Wind Heuvel Farm: C07200000000019000001</p> <p>22. Portion 5 of 193 Urias Gat Farm: C07200000000019300005</p> <p>23. Remainder of 171 Vinke Kuil Farm: C07200000000017100000</p> <p>24. Alkant Re/220 Farm: C07200000000022000000</p> <p>25. Portion 1 of 174 Lange Huis Farm: C07200000000017400001</p>	<p>9. Remainder of the Farm Oliviers Berg No 159: C01900000000015900000</p> <p>Northern Cape</p> <p>10. Portion 4 of the Farm Urias Gat No 193: C07200000000019300004</p> <p>11. Portion 6 of the Farm Urias Gat No 193: C07200000000019300006</p> <p>12. Remainder of the Farm Urias Gat No 193: C07200000000019300000</p> <p>13. Remainder of the Farm Matjies Fontein No 194: C07200000000019400000</p> <p>14. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005</p> <p>Properties affected by access road:</p> <p>15. Zeekoegat Farm No 169: C07200000000016900000</p> <p>16. Portion 1 of the Farm Roodeheuvel No 170: C07200000000017000001</p> <p>17. Remainder of the Farm Roodeheuvel No 170: C07200000000017000000</p> <p>18. Remainder of the Farm Wind Heuvel No 190: C07200000000019000000</p> <p>19. Portion 1 of the Farm Wind Heuvel No 190: C07200000000019000001</p> <p>20. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005</p> <p>21. Remainder of the Farm Vinke Kuil No 171: C07200000000017100000</p> <p>22. Alkant Farm No 220: C07200000000022000000</p>	<p>8. Remainder of the Farm Matjes Fontein No 194: C07200000000019400000</p> <p>Properties affected by public road:</p> <p>9. Zeekoegat Farm No 169: C07200000000016900000</p> <p>10. Portion 1 of the Farm Roodeheuvel No 170: C07200000000017000001</p> <p>11. Remainder of the Farm Roodeheuvel No 170: C07200000000017000000</p> <p>12. Remainder of the Farm Wind Heuvel No 190: C07200000000019000000</p> <p>13. Portion 1 of the Farm Wind Heuvel No 190: C07200000000019000001</p> <p>14. Portion 5 of the Farm Urias Gat No 193: C07200000000019300005</p> <p>15. Remainder of the Farm Vinke Kuil No 171: C07200000000017100000</p> <p>16. The Farm Alkant No 220: C07200000000022000000</p> <p>17. Portion 1 of the Farm Lange Huis No 174: C07200000000017400001</p>
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		23. Portion 1 of the Farm Lange Huis No 174: C07200000000017400001 24. Remainder of the Farm Baakens Rivier No. 155: C01900000000015500000	
Technical Aspects			
Overall Capacity	325 MW	99 MW	226 MW
Number of turbines	56	18	38
Hub height	Up to 140 m	Up to 101 m above the foundation	Up to 140 m
Rotor diameter	Up to 180 m	Up to 158 m	Up to 180 m
Blade length	Up to 90 m	Up to 79 m	Up to 90 m
Wind Measuring Lattice Masts	Up to 4 x 140 m high depending the final hub height.	2 x height of the hub height	2 x up to 140 m high depending the final hub height.
Layout	-	Layout submitted for final approval	To be submitted prior to construction.
EMPr	The EMPr submitted as part of the Application for EA is hereby approved.	Approve Final EMPr	To be submitted based on final approval of layout.

The administrative changes have no bearing on heritage resources and are considered acceptable.

The northern section, Oya WEF would comprise 18 turbines (Figure 3), while the southern, Kudusberg WEF, would comprise 38 turbines (Figure 2); together these represent the 56 turbines proposed and authorised in the original development. The combined footprint of the two (2) project areas remains the same as that intended for the original Kudusberg WEF and that assessed as part of the original assessment. Further to these changes, the hub height, rotor diameter and blade length of the Oya turbines are being reduced; the turbine dimensions proposed for northern facility will have a hub height of 101m and a rotor diameter of 158m substantially smaller than the approved dimensions of hub height up to 140m and rotor diameter up to 180m.

The affected farm portions are provided in Table 1 above.

The proposed amendments in themselves are not listed activities according to Government Notice (GN) R326, R327, R325 and R324 of the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended on 07 April 2017 and 13 July 2018), and do not trigger any new listed activity. In addition, the proposed amendments are within the original authorised development footprint, and do not change the scope of the EA.

The EA amendment application does not trigger a new BA process in terms of the National Environmental Management Act (NEMA) (Act No. 107 of 1998), but as some minor adjustments to turbine locations, the final layout, road layouts and similar installations have been proposed which necessitated specialist impact statements, such as this heritage amendment letter, which have been requested to accompany the application. This statement considers whether any new impacts arise as a result of the proposed changes and final layout, and recommend any additional resulting mitigation if necessary.

3. Methodology

- This specialist letter is based on the outcomes of the 2018 HIA (Which must be read in conjunction with this letter) as well as the working knowledge of the area gained during the fieldwork conducted for that report.
- The updated and final layouts have been mapped and reviewed, and likely impacts arising from the proposed changes and final layout have been assessed.
- Special consideration has been given to those areas where sites were recorded during the fieldwork, and the relevant site buffers have been reviewed

4. Specialist Comment

4.1. Review of the 2018 HIA

The relevant findings of the 2018 HIA were:

Archaeology:

- Archaeological resources included scattered, isolated Middle and Later Stone Age artefacts, although these were very infrequent.
- A single cave with finger painted rock art, Later Stone Age artefactual material and a single sherd of indigenous pot was also identified.
- Several stone-built kraals, either rounded or rectilinear in shape, and dry stacked or mortared, were recorded and are likely of historic age, although some could be pre-colonial.

- Ruined dwellings and other disused farm buildings that are all likely over 100 years old were also recorded, usually in association with one or more kraals.

Built Environment:

- Built environment features included farmsteads and associated outbuildings at several farms.

Burial Grounds and Graves:

- A single, fenced grave with marble headstone was recorded, as well as a likely child's grave and a further graveyard containing about 12 graves with hand carved sandstone headstones and stone covered graves.
- Likely burials included an informal graveyard containing over ten stone cairns.

Cultural Landscape:

- The cultural landscape of the region comprises the largely undeveloped ridges and slopes, as well as the cumulative evidence for hundreds of years of continuous patterns of transhumant pastoralism that has left, at most, ephemeral traces on the landscape.

Almost all features were found along valley bottoms or on open plains near watercourses, with no significant heritage resources of any kind identified at higher elevations.

The assessment of impacts were:

Archaeology

- With the ridges devoid of artefactual material of any kind, impacts are likely only to occur at sites at lower elevations, where most of the infrastructure is NOT proposed.
- These impacts will arise from the widening of existing roads, the creation of new access roads, and the development of construction camps and the onsite substation.
- Impacts could be direct or indirect and include damage, destruction and degradation of sites, as well as loss of sense of place resulting in diminished significance of heritage resources.
- The anticipated direct impacts of the turbines themselves on heritage resources are expected to be low.
- A moderate, indirect threat is posed to the stone-built features in the landscape, and a low threat to the rock art cave (KDB045); this threat is derived from the increase of people in the landscape who could accidentally or intentionally damage or destroy features.
- The originally proposed alignment of Access Alternative 1 would have resulted in impacts to sites including one stone cairn (KDB058), a U-shaped stone-built structure, several kraal structures and a three-roomed stone-built structure (KDBc7), and further kraals and a stone and mudbrick-built structure (KDBc8).

Built Environment:

- Common Access Road 1 would have bisected Wind Heuvel farmstead (KDB059), and passed directly adjacent to the graveyard located there (KDB081).
- Impacts to these sites would have been high to very high. The applicant has subsequently amended these layouts, reducing likely impacts to low or insignificant.

Burial Grounds and Graves:

- Construction Camp Alternative 3 is proposed for construction on the site of the informal graveyard (KDBc6), posing a very high threat of impact to those sites.

Cultural Landscape:

- Indirect impacts are likely to the context of the region by the nature of the proposed development which will detract from the sense of place and degrade the cultural landscape.
- Impacts to the cultural landscape are expected to be very high and are generally impossible to mitigate without avoidance of sensitive areas by infrastructure.
- Sensitive placement of turbines and infrastructure, along with observation of appropriate buffers can, however, be expected to reduce these impacts to cultural landscapes and sense of place from high to moderate.

The recommendations of the HIA were:

- Substation Alternative 1 is the recommended substation alternative, although Substation Alternatives 2 and 3 are not considered to be a no-go option;
- Construction Camp 2 is the recommended construction camp alternative, although Construction Camp 1 is likely to be an acceptable alternative.
- Construction Camp 3 should be considered a no-go option;
- The realignment of Access Road Alternative 1 renders it an acceptable choice, while Access Road Alternative 2 is likely to be an acceptable alternative. The proposed alignment for Access Road Alternative 2 should be subjected to a walkdown by an archaeologist prior to commencement of development to identify any areas or sites that require protection or mitigation, should it be selected;
- Common Access Road 1 has been realigned to the east to avoid Wind Heuvel farmstead and is considered an acceptable route. The road should not be widened or altered at this point and a proper fence should be erected around the Stadler graveyard (KDB081);
- The following buffers should be observed around identified heritage resources:
 - Graves: no development should be permitted within 50m of identified graves and cemeteries; existing roads within this buffer should not be altered or widened;
 - Cave site (KDB045): construction staff should not be permitted within 200m of the site;
 - Farmsteads: no turbines should be located within 500m of farmsteads;
 - Kraals, stone walling and ruins > 100 years: construction staff should not be permitted within 100m of these sites and no development should occur within 15m of these sites; and
 - Archaeological finds: no buffers are recommended for the isolated artefacts identified in this survey.
- All site crew should be informed of the heritage significance of the resources in the study area, and those sites near development infrastructure, or easily reached should be inspected by the ECO during the construction phase to ensure they are being respected;
- The alignment of the proposed road over the ridge saddle south of Pad se Hoek close to turbines 25 (-32.870067, 20.376674) and 26 (-32.868236, 20.381335) should be subject to an archaeological walkdown prior to construction;
- The R356 should be put forward for recognition as a scenic route to afford its scenic qualities and historic significance some measure of protection going forward;
- New construction work, construction camps, substations or access roads should not impact negatively or threaten any of the historic built form, which is part of the history and land use evolution of the cultural landscape by observing appropriate buffers around these features;
- If supported in consultation with local inhabitants (of permanent or seasonal habitation, owners or labourers), the negative impact of non-local inhabitants on cultural lifeways and language, employees associated with the new WEF should be reduced by housing the employees away from the Cultural Landscape Areas (CLAs);
- Impact of the proposed WEF on local inhabitants (of permanent and seasonal habitation, owners and labourers) should be monitored by the Holder of the Environmental

Authorisation through a grievance mechanism described in the EMP. Such a grievance mechanism should take into account economic and social inequality and be made accessible and known to all inhabitants of the CLAs, not just the land owners. Such a grievance mechanism should be in place for the duration of the development process through to the end of the decommissioning phase;

- If any archaeological material or human burials are uncovered during the course of development, then work in the immediate area should be halted at once. The find should be reported to the heritage authorities (SAHRA in the Northern Cape and HWC in the Western Cape) and may require inspection by an archaeologist to determine whether mitigation should take place and what form that mitigation should take.

It is not anticipated that the proposed development will have significant impacts to heritage resources, beyond those to the cultural landscape, given that they are generally of low heritage significance.

It is therefore recommended that the project be authorised, subject to implementation of the above recommendations. These recommendations should be included in the Environmental Management Programme (EMPr) and the Environmental Authorisation (EA).

4.2. Consideration of the Proposed Amendment

Kudusberg Southern Ridge WEF

The proposed alignment and layout for this development is largely unchanged from the 2018 proposal (see Figure 2). The total number of turbines proposed for this part of the project area increases from 26 to 38, with all new turbines located along ridge lines. Four (4) new turbines are proposed for the ridge above the Oliviersberg farmstead, but the closest of these is 1.5km away, is situated well outside of the 500m buffer proposed around all farmhouses and is located in an area previously assessed as part of the 2018 BA process.

In addition to these extra turbines, a substation and construction camp is also proposed for the area between the proposed split project areas, i.e. north of the eastern extent of the proposed Kudusberg WEF. It should be noted that the substation site was assessed and authorised as part of the original EA for the Kudusberg WEF, and the new construction camp site was assessed as turbines were proposed along the ridgeline in that location. These three (3) turbines have now been moved to the proposed southern Kudusberg WEF.; Construction Camp 1 (in the original layout) was proposed for north of the new development area and this site was assessed and found to be an acceptable development site.

Most changes in this development area are restricted to the mountain ridges, which formed part of the original assessment and have been shown to be almost entirely devoid of archaeological or built environment features. As such, there are no new, additional or changed impacts to archaeological or built environment heritage resources. As the turbines remain generally in the same location, and are the same height and form as those proposed previously, there is no change in the impacts associated to the cultural landscape or any change to visual impacts of the proposal than previously.

Minimal new internal access roads will be created. Where these are to be built to service turbines, these are along ridges which were previously surveyed and found to be devoid of heritage

resources. The route out to the west will be retained as a 4x4 track as it currently is (see Figure 2 and Figure 3). None of the identified structures, ruined structures or kraals along the route to the west will be affected as the road is an established, existing route in and out of the valley, and relevant buffers are not compromised. Where this track deviates from existing routes across the valley floor a walkdown should be undertaken by a suitably experienced archaeologist as this new alignment could pose impacts to archaeological sites or features located there (see Figure 4 below). It should be noted that a detailed walkdown of the proposed layout is being undertaken by a suitably experienced archaeologist accordingly, and the findings are presented in a separate standalone walkdown report which does not form part of this letter.

The proposed changes do not affect the impacts to the cultural landscape either positively or negatively, and impacts remain the same as those assessed in terms of the original HIA.

Oya WEF

In the case of Oya WEF, the northern portion of the original proposal, there is little substantive change in terms of turbine placement, and two turbines previously proposed for the area will be moved to the southern development (see Figure 3). Most changes are simply repositioning of turbines in the immediate area of those previously proposed. Oya WEF will utilise Construction Camp 2, the recommended and approved construction camp alternative site in terms of the HIA, with no changes in the layout or location of that facility.

Two (2) turbines are moved to the very western end of the previous array, some 1.75km west of the most western turbine previously proposed. These relocated turbines are proposed for a ridge line that has been surveyed and found to be entirely devoid of any kind of heritage resources. Further visual impacts, or impacts to the cultural landscape will be negligible, as the ridge is not close to any scenic or important routes, and the turbines are far removed from the houses at Gats Rivier than any other along that ridge.

The reduction in turbine height and rotor diameter might reduce the visual impacts of the Oya WEF, and might reduce its visibility slightly from the R356. Such reductions in visual impacts are, however, likely only to be slight.

Very little change is proposed in terms of the access routes to service the turbines, and, as such, no further or additional impacts are anticipated. The 4x4 route out of the valley to the west is aligned with that proposed for the Kudusberg facility and utilises the alignment of the existing road. A new track will be created up to the western end of the Gatsrivier mountain ridge. This area is also proposed for the alignment of a new Wind Collector System, a 33kV line which could be installed above or below ground. Where the new 4x4 route and the newly installed Wind Collector System, cross the valley floor along new alignments that do not follow existing routes, and where they traverse the lower slopes of the mountains, it is possible that archaeological sites and features might be present. As such, a walkdown should be undertaken by a suitably experienced archaeologist (see Figure 4). It should however be noted that a detailed walkdown of the proposed layout is being undertaken by a suitably experienced archaeologist accordingly, and the findings are presented in a separate standalone walkdown report which does not form part of this letter. In addition, a Heritage Management Plan (HMP) is being compiled by this archaeologist and will form part of the EMP which is to be submitted to the DEFF for approval.

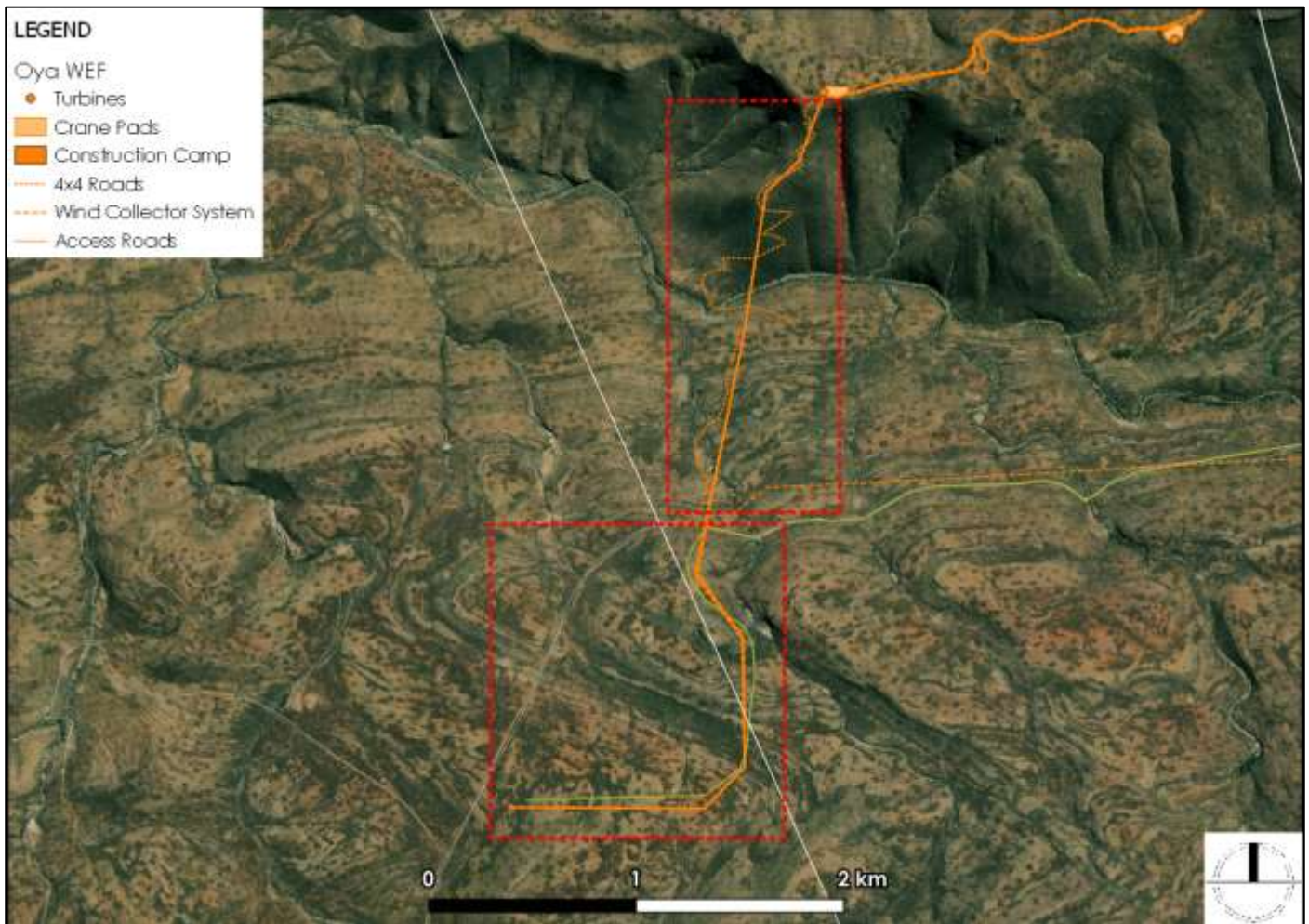


Figure 4: The new alignments of the Wind Collector System and 4x4 tracks that is proposed for a walkdown to identify any areas of archaeological sensitivity (RSA, 2020).

A further Wind Collector System is proposed along a route previously earmarked as an access road linking the central part of the Gatsrivier ridge to the valley floor. Where this new infrastructure follows the previously proposed access route, no new impacts are likely. However, where this route deviates from the previously proposed alignment, along the lower slopes of the mountain, this route should be subject to a walkdown by a suitably experienced archaeologist (see Figure 5 below).



Figure 5: The area of deviation of the Wind Collector System that is proposed for a walkdown to identify any areas of archaeological sensitivity (RSA, 2020).

The proposed changes do not affect the impacts to the cultural landscape either positively or negatively, although some reduction in the visual impacts may arise from the reduced height of the infrastructure; impacts are considered to remain the same as those assessed in terms of the original HIA.

5. Conclusion

The proposed development area for the split facilities occupies the same area as that surveyed and assessed in 2018, with only slight deviations in proposed layouts of roads, turbines and associated infrastructure.

Due to the fact that the recommended walkdowns are being undertaken (part of separate standalone report), and appropriate mitigatory measures pertaining to heritage resources identified during the assessments have been recommended and provided in the EMP for implementation accordingly, it is not anticipated that the proposed changes will result in any further, different or greater impacts to heritage resources than those already identified in the 2018 HIA. All buffers previously imposed are respected and, in the case of the northern site clusters on Urias Gat, the new proposal increases the buffer between sites and infrastructure; no turbines are

proposed for this area and these buffers pertain to road and construction infrastructure (Figure 6 and Figure 7 below).



Figure 6: Detail of known sites along Gats Rivier valley bottom, showing relative location of sites and buffers. The 500m farmstead exclusion zone applies only to turbine placement (RSA, 2020).

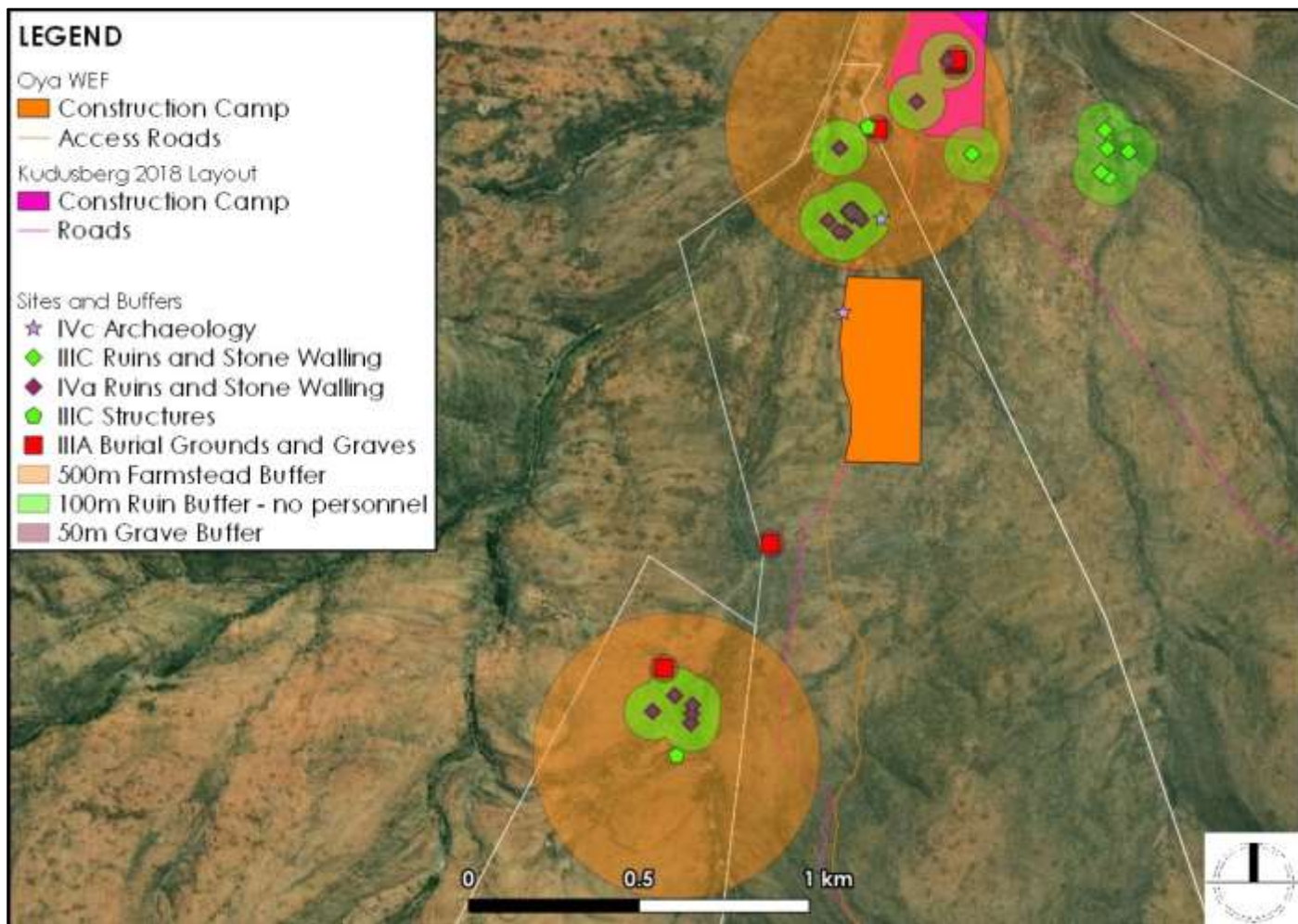


Figure 7: Detail of known sites on Urias Gat, showing relative location of sites and buffers. The 500m farmstead exclusion zone applies only to turbine placement (RSA, 2020).

In light of the above, it is not anticipated that the proposed amended developments will have significant impacts to heritage resources, beyond those to the cultural landscape, given that they are generally of low heritage significance. Cumulative impacts are unchanged in terms of the proposed amendment, and no additional cumulative impacts will be effected.

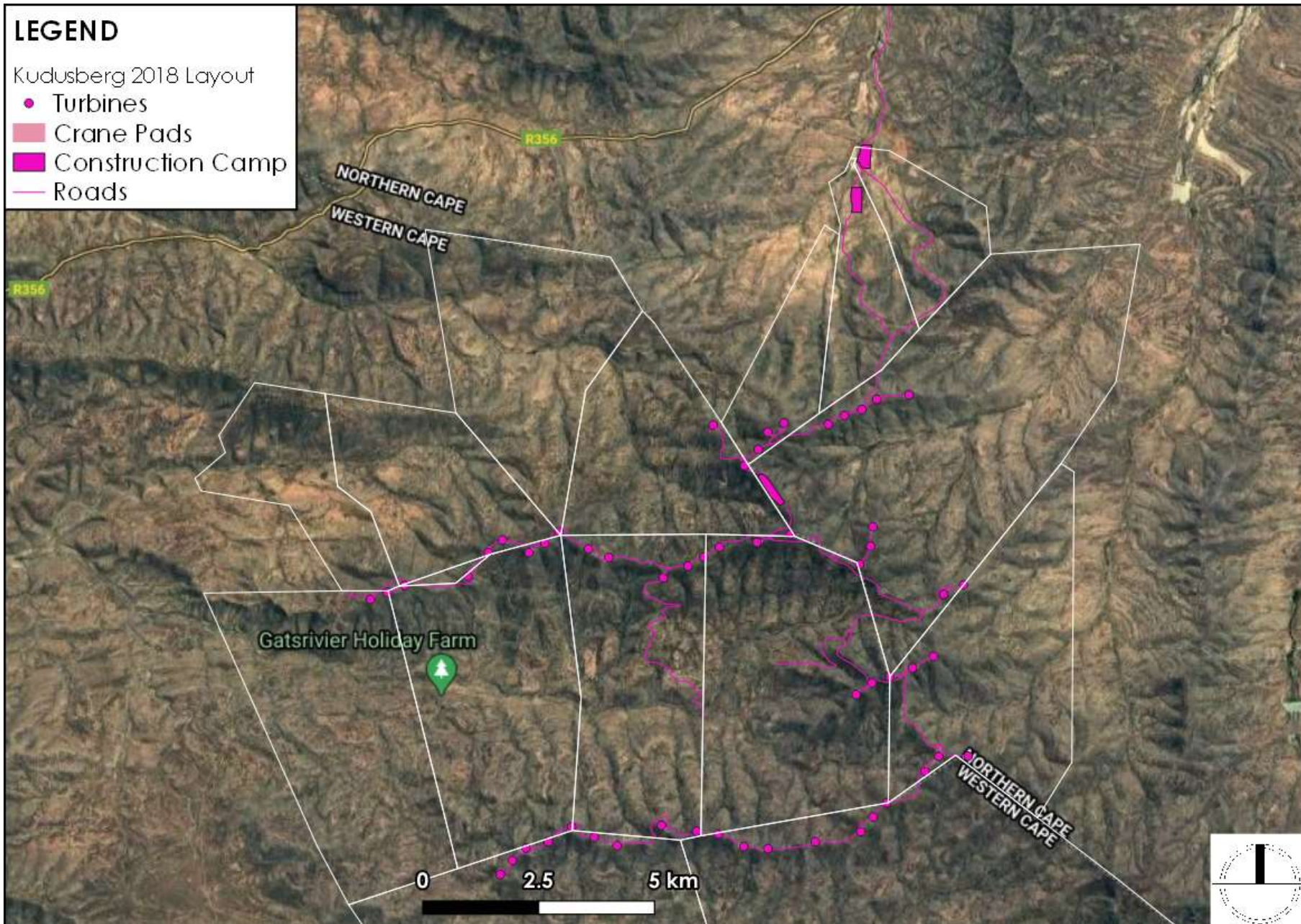
It is therefore recommended that the amendment be granted, subject to implementation of the above recommendations. These recommendations should be included in the Environmental Management Programme (EMPr) and the Environmental Authorisation (EA).

Katie Smuts
 Archaeologist, Rennie Scurr Adendorff
 27 October 2020

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6. References

- Almond, J. 2018. Palaeontological Heritage: Basic Assessment for the Proposed Development of the 325MW Kudusberg Wind Energy Facility and associated infrastructure, between Matjiesfontein and Sutherland in the Western and Northern Cape Provinces: BA Report. Cape Town: Natura Viva.
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- Smuts, K. 2018. Archaeological Impact Assessment Basic Assessment for the Proposed Development of the 325MW Kudusberg Wind Energy Facility and associated infrastructure, between Matjiesfontein and Sutherland in the Western and Northern Cape Provinces: BA Report. Prepared for G7. Cape Town: Katie Smuts.
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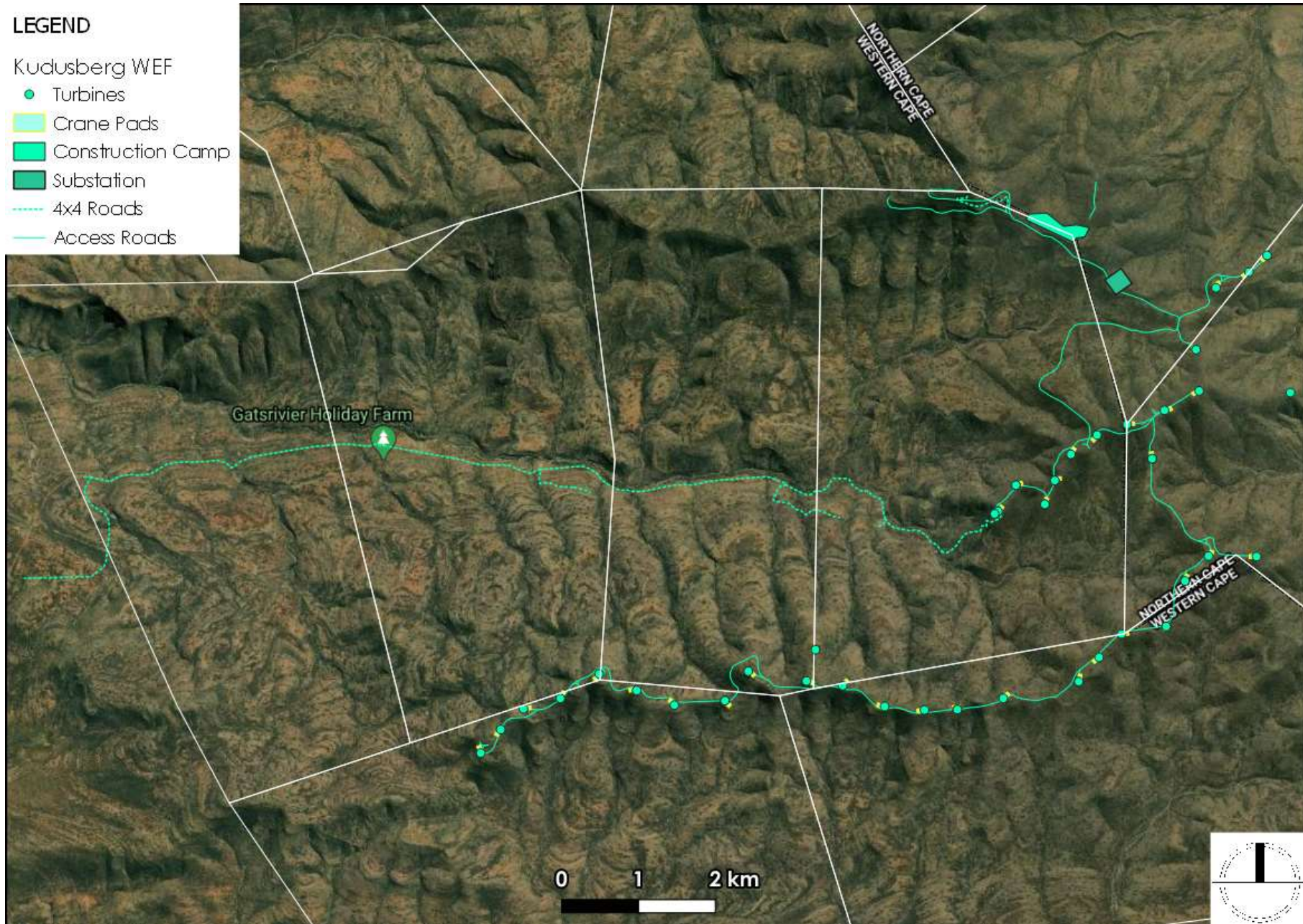


The layout of the 2018 Kudusberg WEF project (RSA, 2020).

LEGEND

Kudusberg WEF

- Turbines
- Crane Pads
- Construction Camp
- Substation
- 4x4 Roads
- Access Roads

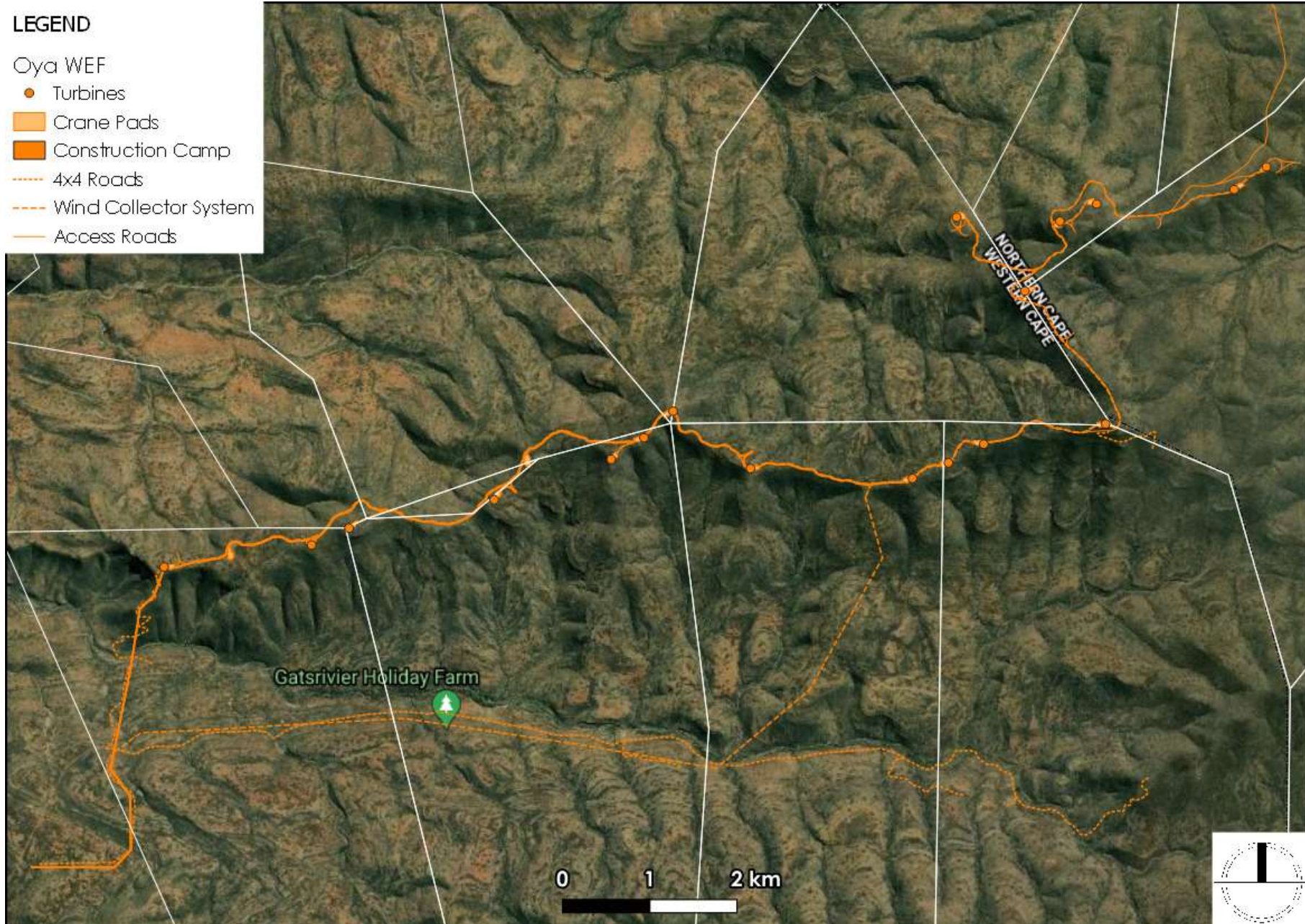


The proposed layout of the Kudusberg WEF in terms of the EA amendment (RSA, 2020).

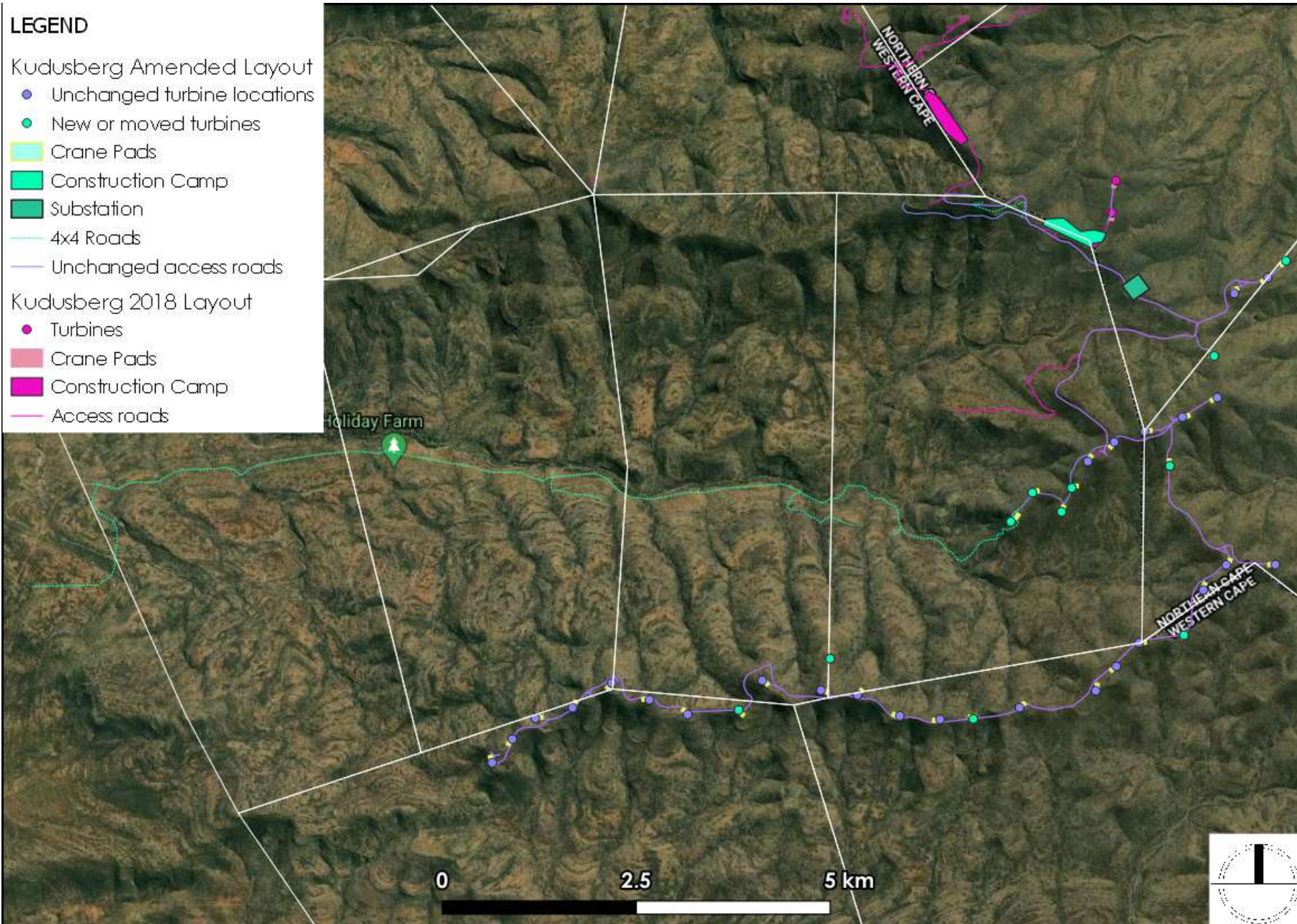
LEGEND

Oya WEF

- Turbines
- Crane Pads
- Construction Camp
- - - 4x4 Roads
- - - Wind Collector System
- Access Roads



The proposed layout of the Oya WEF in terms of the EA amendment (RSA, 2020).



The newly proposed Kudusberg WEF layout overlaid on the original layout (RSA, 2020).

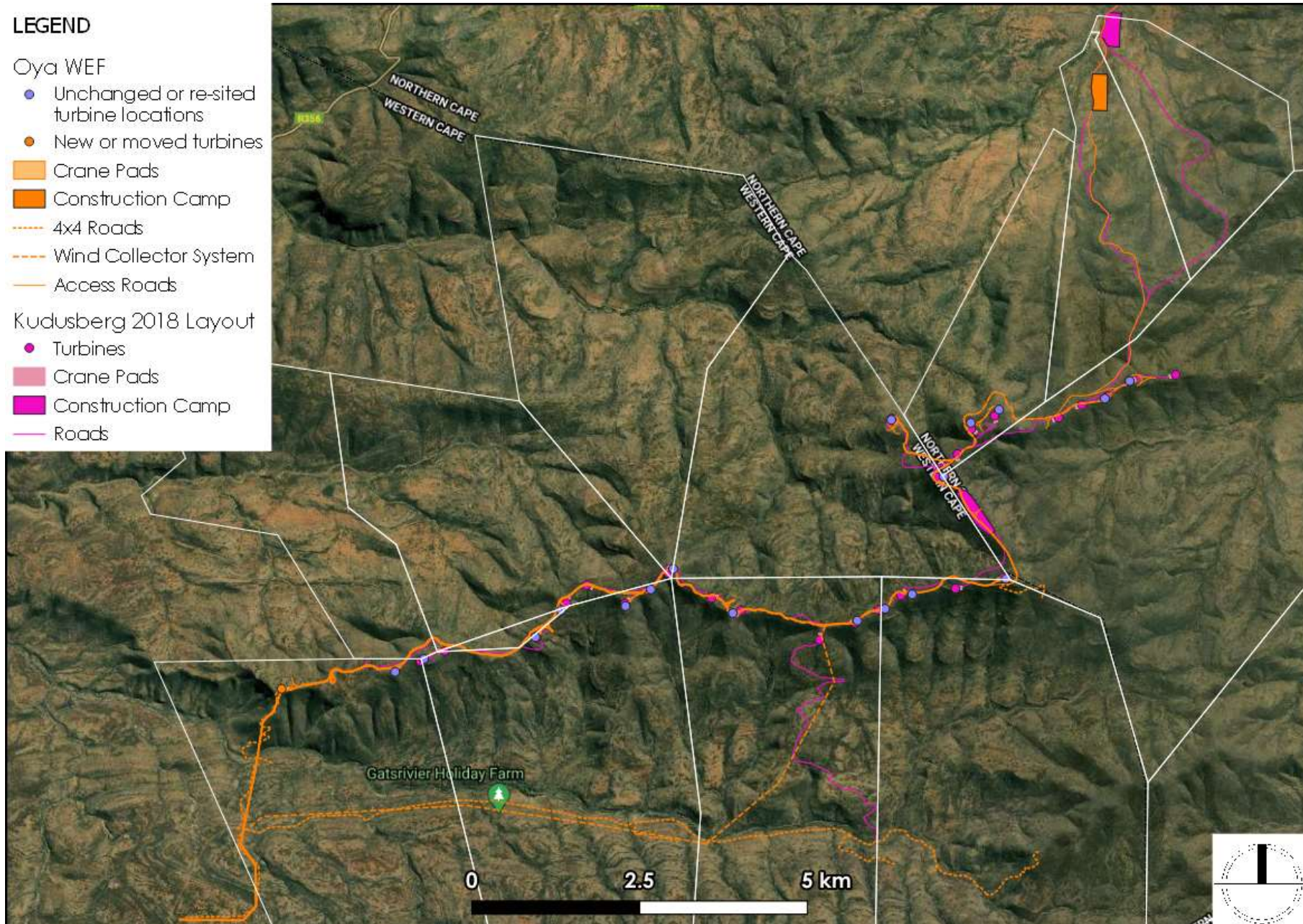
LEGEND

Oya WEF

- Unchanged or re-sited turbine locations
- New or moved turbines
- Crane Pads
- Construction Camp
- - - 4x4 Roads
- - - Wind Collector System
- - - Access Roads

Kudusberg 2018 Layout

- Turbines
- Crane Pads
- Construction Camp
- - - Roads



The newly proposed Oya WEF layout overlaid on the original layout (RSA, 2020).

LEGEND

Oya WEF

- Turbines
- Crane Pads
- Construction Camp
- 4x4 Roads
- Wind Collector System
- Access Roads



The area of deviation of the Wind Collector System and 4x4 tracks that is proposed for a walkdown to identify any areas of archaeological sensitivity (RSA, 2020).

LEGEND

Oya WEF

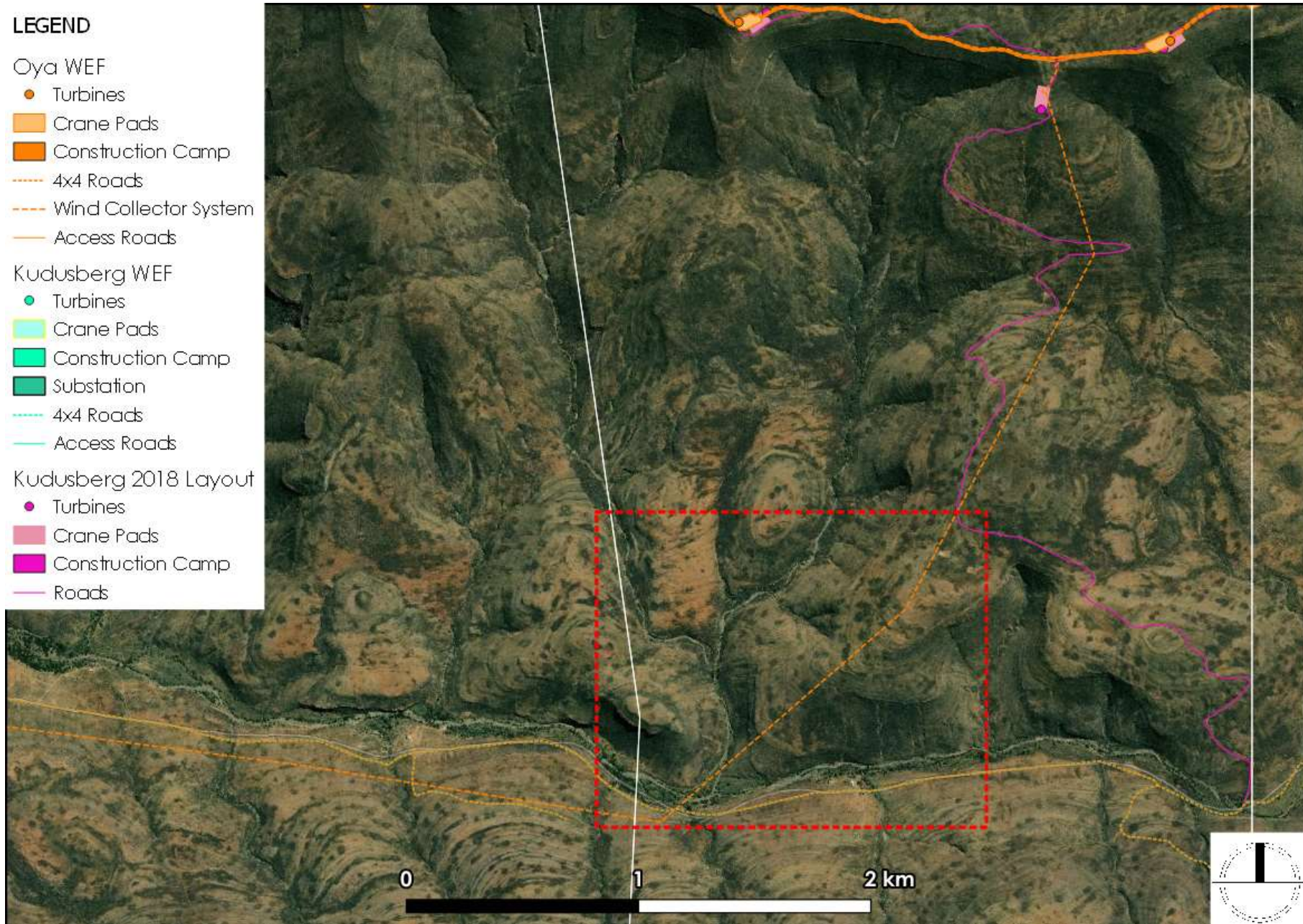
- Turbines
- Crane Pads
- Construction Camp
- - - 4x4 Roads
- - - Wind Collector System
- - - Access Roads

Kudusberg WEF

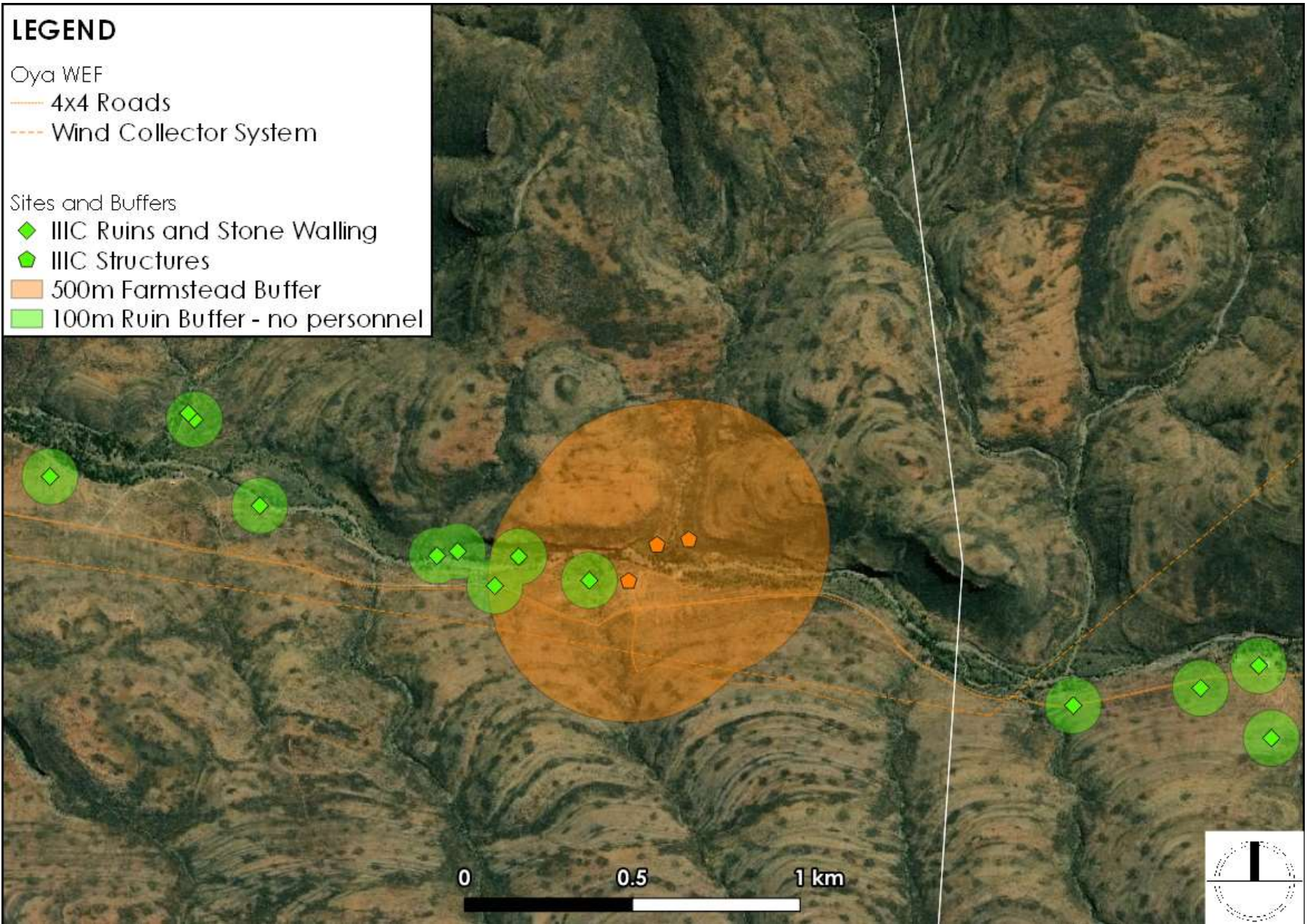
- Turbines
- Crane Pads
- Construction Camp
- Substation
- - - 4x4 Roads
- - - Access Roads

Kudusberg 2018 Layout

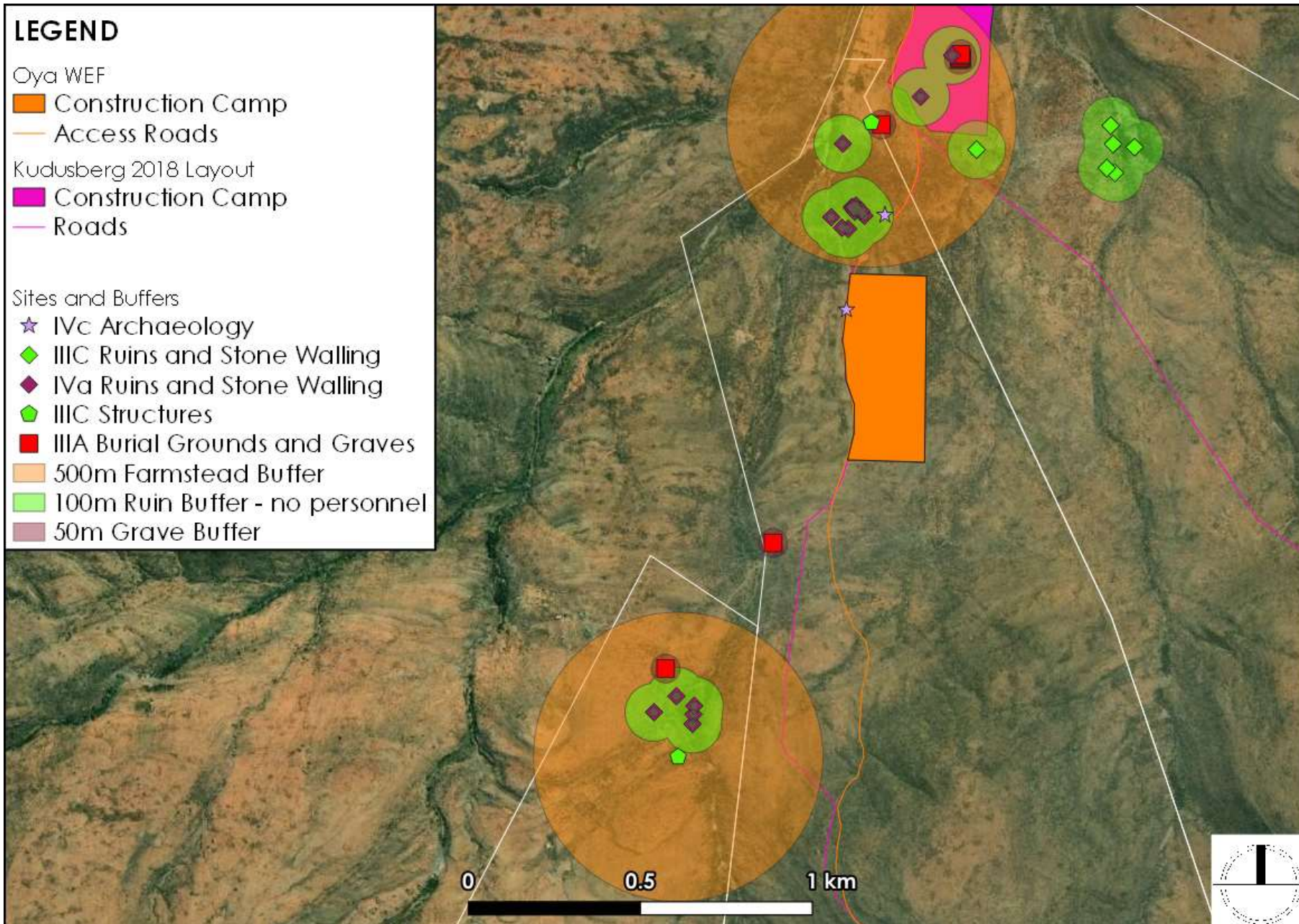
- Turbines
- Crane Pads
- Construction Camp
- - - Roads



The area of deviation of the Wind Collector System that is proposed for a walkdown to identify any areas of archaeological sensitivity (RSA, 2020).



Detail of known sites along Gats Rivier valley bottom, showing relative location of sites and buffers. The 500m farmstead exclusion zone applies only to turbine placement (RSA, 2020).



Detail of known sites on Urias Gat, showing relative location of sites and buffers. The 500m farmstead exclusion zone applies only to turbine placement (RSA, 2020).