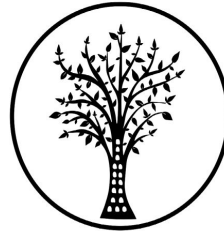


ADDENDUM TO HIA

In terms of Section 38(8) of the NHRA for a

Sorata-Witsieshoek 132kV Line

Prepared by



CTS HERITAGE

for NGT Holdings

December 2018

Report by:

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1. INTRODUCTION

In 2013, NGT Holdings conducted a Heritage Impact Assessment for the proposed Sorata-Witsieshoek 132 Power Transmission Line, in Phutadithjaba, Free State Province. The proposed project entails the construction of a new 30km long 132kV distribution powerline from the existing Sorata Switching Station to Witsies Substation, located within Phuthaditjhaba in the Free State Province. Two different route options are suggested in the BAR.

The HIA by NGT Holdings was submitted with the application. In an interim comment from 20 July 2017, SAHRA reviewed the HIA and requested an amendment thereof, to include more detailed maps that mark the precise locations of each of the identified heritage sites, the tracklog from the survey and detailed mapping for all the stone walled sites. In addition, SAHRA requested a Heritage Management Plan (HMP) and monitoring plans to be developed and submitted to SAHRA once the layout is finalised.

This Addendum has been drafted to address SAHRA's concerns as per the letter dated 20 July 2017:

- More detailed maps required to mark the location of sites
- A track-log must be included
- Detailed mapping of the stone-walled sites
- Heritage Management Plan is required once the layout is finalised.



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2. ARCHAEOLOGICAL RESOURCES IDENTIFIED

The sites identified by HGT Holdings in the HIA (2013) have been tabulated below. In consultation with NGT Holdings, we have proposed gradings for the identified resources (NCW = Not Conservation-Worthy).

These sites have been created as sites on SAHRIS, linked to the HIA and been assigned gradings on SAHRIS.

Table 1: Table of Identified Resources with the Stone-walled sites highlighted in blue

Corridor	Site Name	Latitude	Longitude	Description	Proposed Grading
Corridor 1	QWAC1-1	-28.416944	28.765528	Stone walled shed, a storage facility next to the shed, four houses and few structures located near the shed	Grade IIIB
Corridor 1	QWAC1-2	-28.415444	28.8355	Six structures, namely: two flat roof flats, two rondavels and two outside ablution facilities	NCW
Corridor 1	QWAC1-3	-28.379389	28.857556	A rectangular sandstone kraal	Grade IIIC
Corridor 1	QWAC1-4	-28.36725	28.87075	Farm labourers homestead	NCW
Corridor 1	QWAC1-5	-28.302556	28.908444	32 graves with stone mound dressings and cement headstones	Grade IIIA
Corridor 2	QWAC2-1	-28.469861	28.836056	Two rondavel foundation structures	Grade IIIB
Corridor 2	QWAC2-2	-28.467861	28.836833	Two rectangular stone foundations, a big kraal which is surrounded by approximately six small round, circle structures and two smaller kraals in a C.C.P pattern	Grade IIIA
Corridor 2	QWAC2-3	-28.462861	28.837694	A rectangular to square stone walled structure	Grade IIIB
Corridor 2	QWAC2-4	-28.4615	28.837444	Two round stone wall foundations that look to have been rondavels	Grade IIIB
Corridor 2	QWAC2-5	-28.460806	28.837194	A round stone wall foundations	Grade IIIC



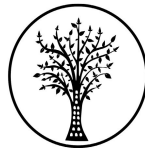
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Corridor 2	QWAC2-6	-28.459722	28.837139	Three round stone wall foundations	Grade IIIB
Corridor 2	QWAC2-7	-28.452944	28.836028	A rectangular stone walled kraal	Grade IIIB
Corridor 2	QWAC2-8	-28.425417	28.831222	A concrete reservoir	NCW
Corridor 2	QWAC2-9	-28.340389	28.828417	A stone walled kraal and three stone mound/ cairns structures predicted to be 'potential' graves	Grade IIIA
Corridor 2	QWAC2-10	-28.340083	28.828917	A big stone walled kraal and approximately nineteen small structures around/surrounding it.	Grade IIIA
Corridor 2	QWAC2-11	-28.337167	28.832917	Four structures which include: a stone walled kraal, farm shed, a dam and a grave	Grade IIIA
Corridor 2	QWAC2-12	-28.302556	28.908444	Thirty two graves with stone mound/cairns dressings and cement headstones	Grade IIIA
Corridor 3	QWAC1-1	-28.469861	28.836056	Farmhouse foundations, fence walls, reservoir remains old bricks, ash dumps and rusted corrugated iron sheets and metal poles or fence droppers	Grade IIIB
Corridor 3	QWAC1-2	-28.369639	28.801167	A rectangular stone walled kraal	Grade IIIB
Corridor 3	QWAC1-3	-28.369972	28.801139	A rectangular stone walled kraal on the hillside	Grade IIIB
Corridor 3	QWAC1-4	-28.386861	28.786833	Farms house ruins, approximately three reservoirs, cattle drinking pond, garden walls and other garden decorative features	Grade IIIB
Corridor 3	QWAC1-5	-28.390083	28.784833	A shed with two garage size doors and a smaller shed with a single door and a smaller structure in front of the shed	Grade IIIB
Corridor 3	QWAC1-6	-28.426806	28.8185	A cement reservoir	NCW
Corridor 3	QWAC1-7	-28.431417	28.820306	Stone walled kraal foundation and at the back of the kraal are three graves.	Grade IIIA
Corridor 3	QWAC1-8	-28.431694	28.821417	A stone walled kraal foundation and approximately four graves located at the back of the kraal	Grade IIIA
Corridor 3	QWAC1-9a	-28.453083	28.823722	A stone walled kraal. The kraal is located approximately 80m or less from QWAC3-9b	Grade IIIB

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Corridor 3	QWAC1-9b	-28.454028	28.823861	Two stone kraal foundations and two rondavels foundations	Grade IIIB
Corridor 3	QWAC1-10	-28.457306	28.823611	Three stone mound/cairns structures - possible graves	Grade IIIA
Corridor 3	QWAC1-11	-28.461194	28.821806	A historic farmstead consisting of approximately five house structures	Grade IIIA
Corridor 3	QWAC1-12	-28.461444	28.823889	A stone walled kraal	Grade IIIB
Corridor 3	QWAC1-13	-28.46275	28.823694	A scatter of four ceramic fragments located on the hill slope near an area that is forming a gully	Grade IIIC
Corridor 3	QWAC1-14	-28.463722	28.822611	Four rondavels foundations and two rectangular stone walled structures	Grade IIIC
Corridor 3	QWAC1-15 (Start Point)	-28.461194	28.821806	A historic Iron Age complex site covering approximately 287m in length and about 92m in width at the base of a hill. The site consists of approximately forty or more structures which include stone walled kraals of various sizes and shape with the most dominant shape being the round kraal. Around the kraal are rondavel structures as well as some rectangular structure foundations. Some of the kraals have internal divisions.	Grade IIIA
Corridor 3	QWAC1-15 (Middle Point)	-28.465944	28.823528	A historic Iron Age complex site covering approximately 287m in length and about 92m in width at the base of a hill. The site consists of approximately forty or more structures which include stone walled kraals of various sizes and shape with the most dominant shape being the round kraal. Around the kraal are rondavel structures as well as some rectangular structure foundations. Some of the kraals have internal divisions.	Grade IIIA
Corridor 3	QWAC1-15 (End Point)	-28.482611	28.824333	A historic Iron Age complex site covering approximately 287m in length and about 92m in width at the base of a hill. The site consists of approximately forty or more structures which include stone walled kraals of various sizes and shape with the most dominant shape being the round kraal. Around the kraal are rondavel structures as well as some rectangular structure foundations. Some of the kraals have internal divisions.	Grade IIIA
Corridor 3	QWAC1-16	-28.476139	28.826278	An old farm fence - presumably the gate	NCW

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Corridor 3	QWAC1-17	-28.340389	28.828417	A stone walled kraal and three stone mound/ cairns structures predicted to be 'potential' graves	Grade IIIA
Corridor 3	QWAC1-18	-28.340083	28.828917	A big stone walled kraal and approximately nineteen small structures around/surrounding it. The site complex is well preserved - good state of preservation. It forms a typical C.C.P pattern.	Grade IIIA
Corridor 3	QWAC1-19	-28.337167	28.832917	Four structures which include: a stone walled kraal, farm shed, a dam and a grave	Grade IIIA
Corridor 3	QWAC1-20	-28.302556	28.908444	Thirty two graves with stone mound/cairns dressings and cement headstones	Grade IIIA

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3. MAPPING AND SPATIALISATION OF FINDINGS

In SAHRA's comment of July 2017, it was required that the HIA be supplemented with more detailed maps to mark the location of sites. To this end, please see the maps below (Figures 1 to 9).

It was also required that a track-log must be included. From SAHRIS, it was ascertained that the HIA was uploaded in February 2013 however the HIA was only linked to Case 11301 in 2017. Unfortunately, as this field work was conducted in 2013, the track logs for the field assessment are no longer available.

SAHRA required that the stone-walled sites be mapped in detail. These sites have been highlighted in blue in Table 1.

It is proposed that the significant stone walled sites (Graded IIIA and marked in blue in Table 1) that will be impacted by the proposed development be mapped in detail as part of the recommended Heritage Management Plan.

The impacted sites will only be known once the final alignment has been approved.



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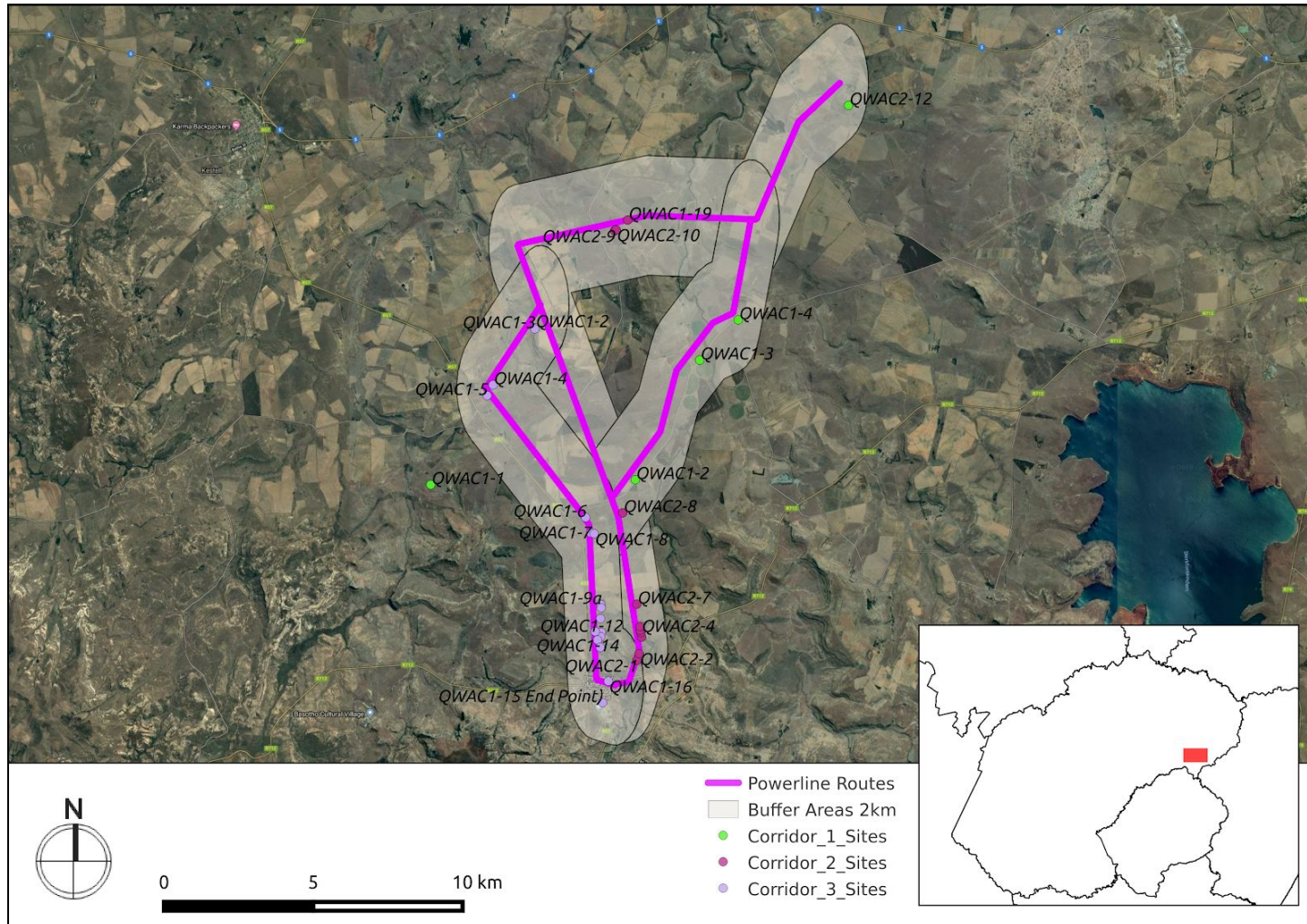


Figure 1: Development Area

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Figure 2

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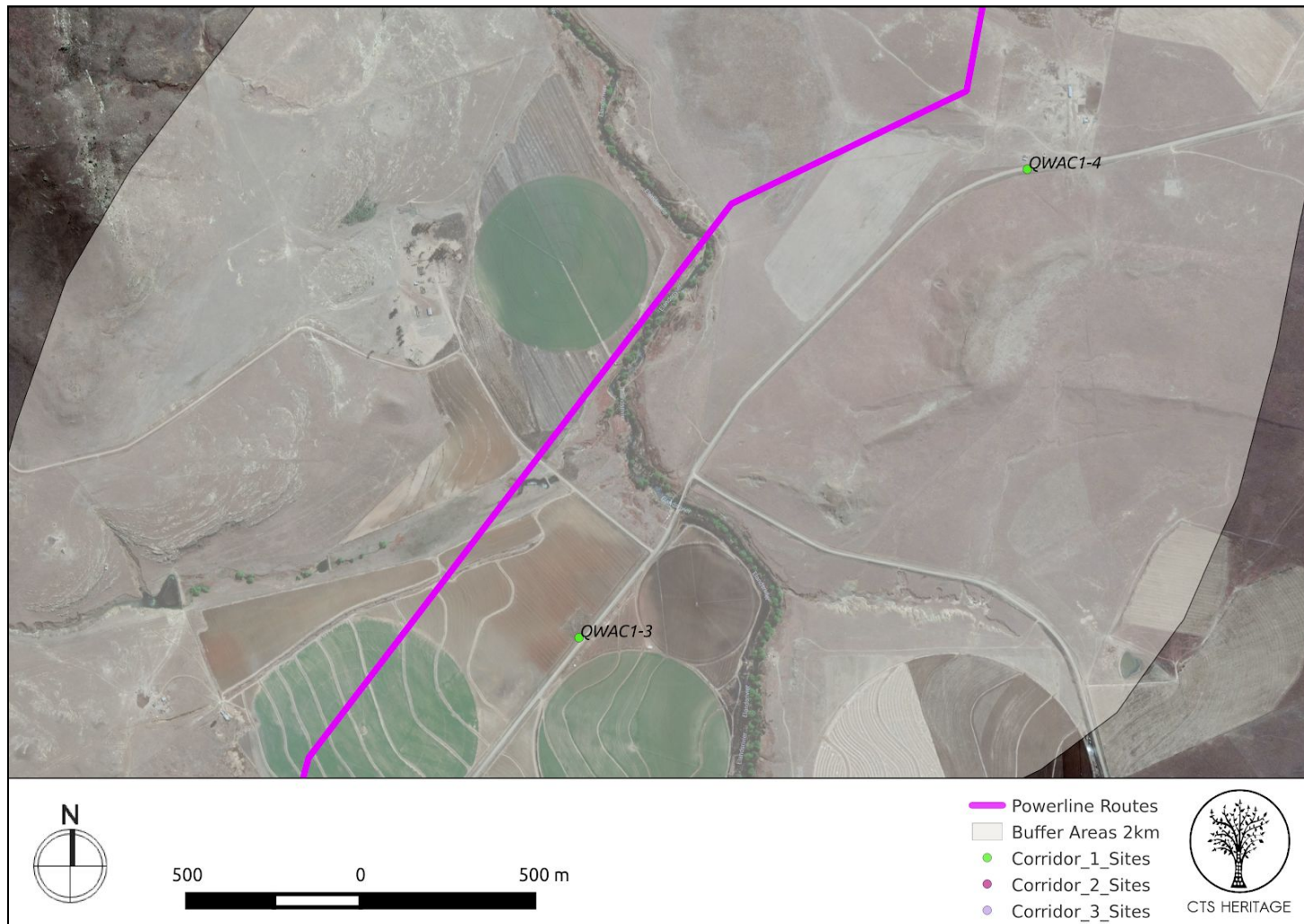


Figure 3

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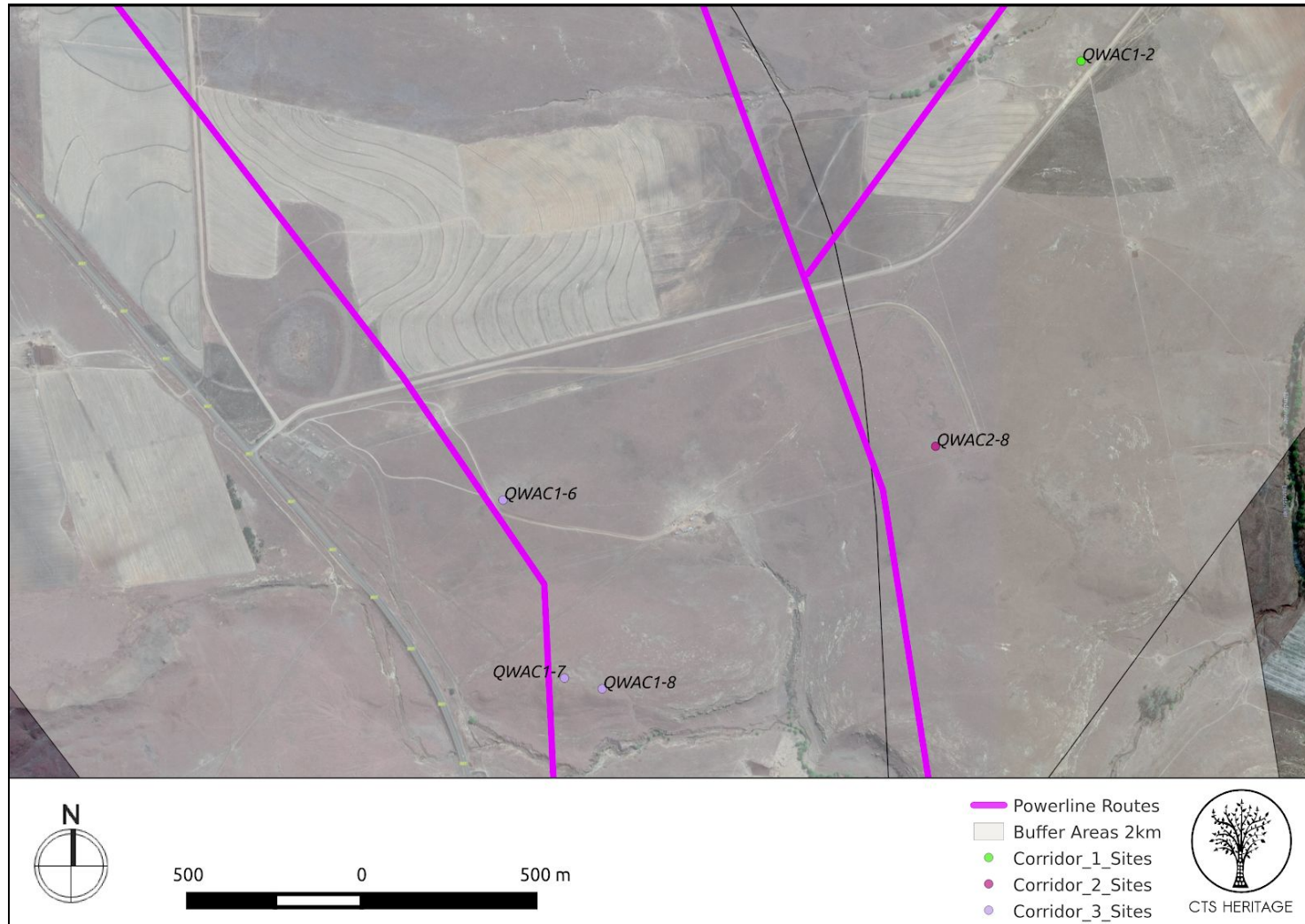


Figure 4

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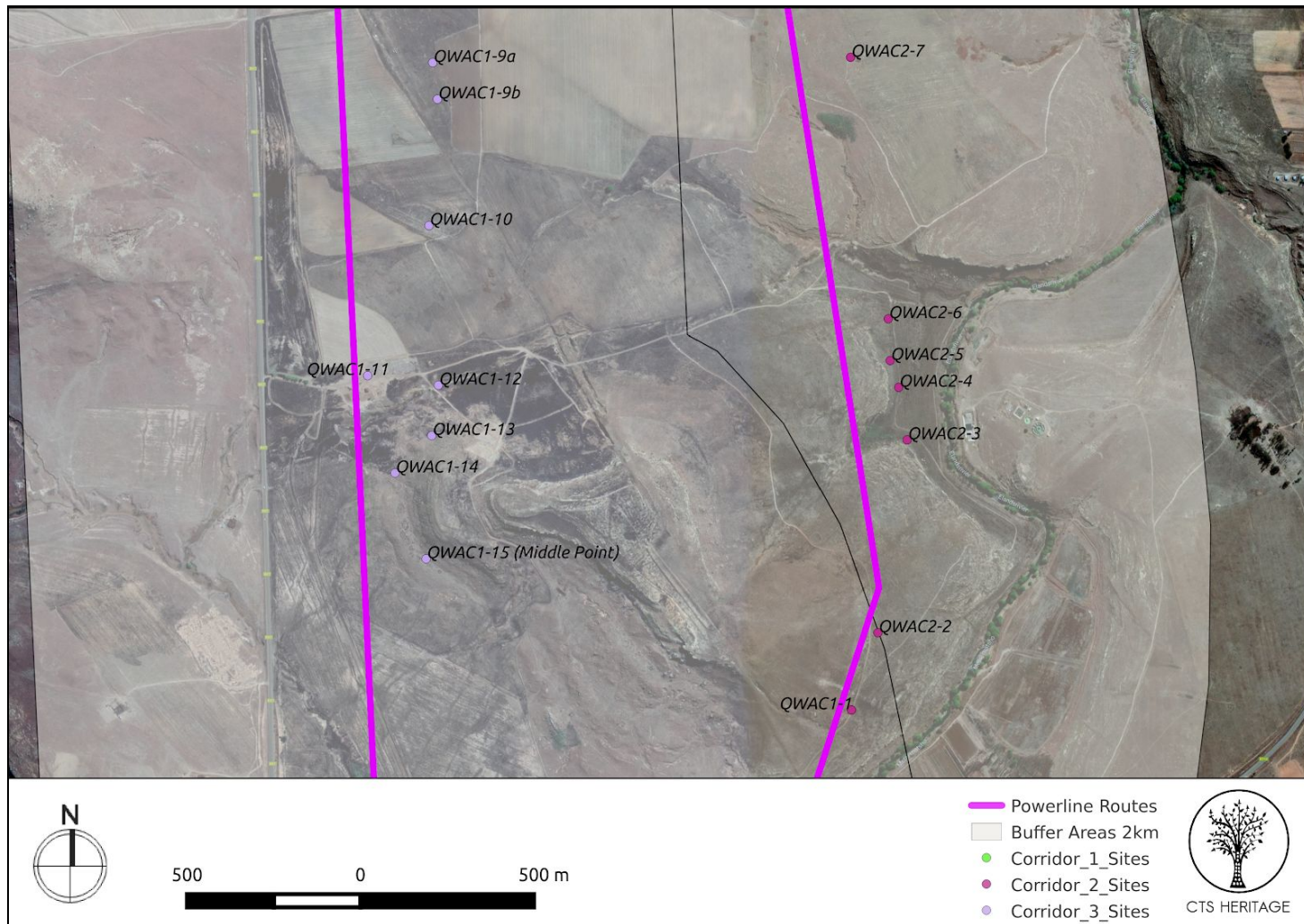
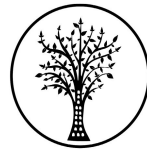


Figure 5

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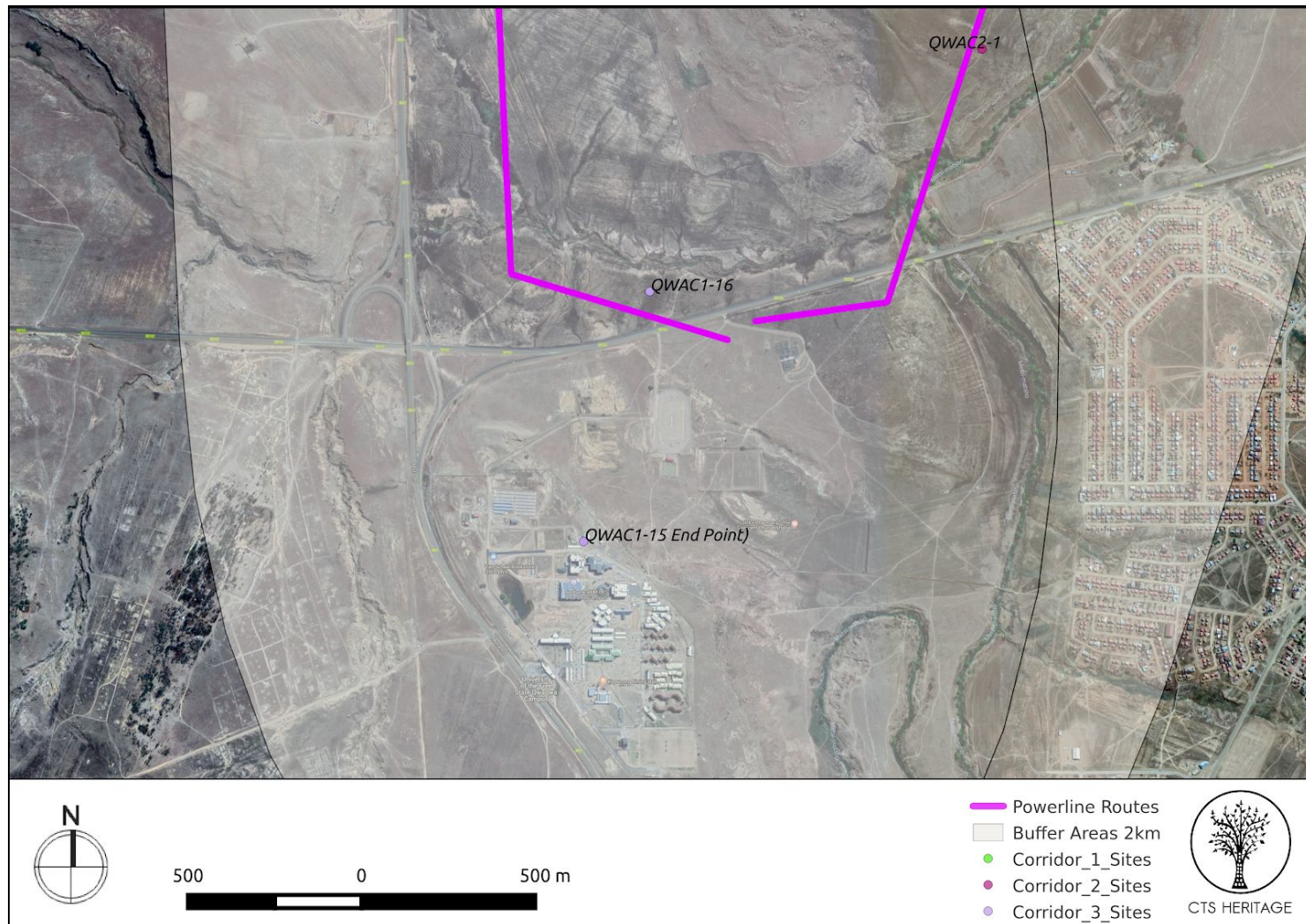


Figure 6

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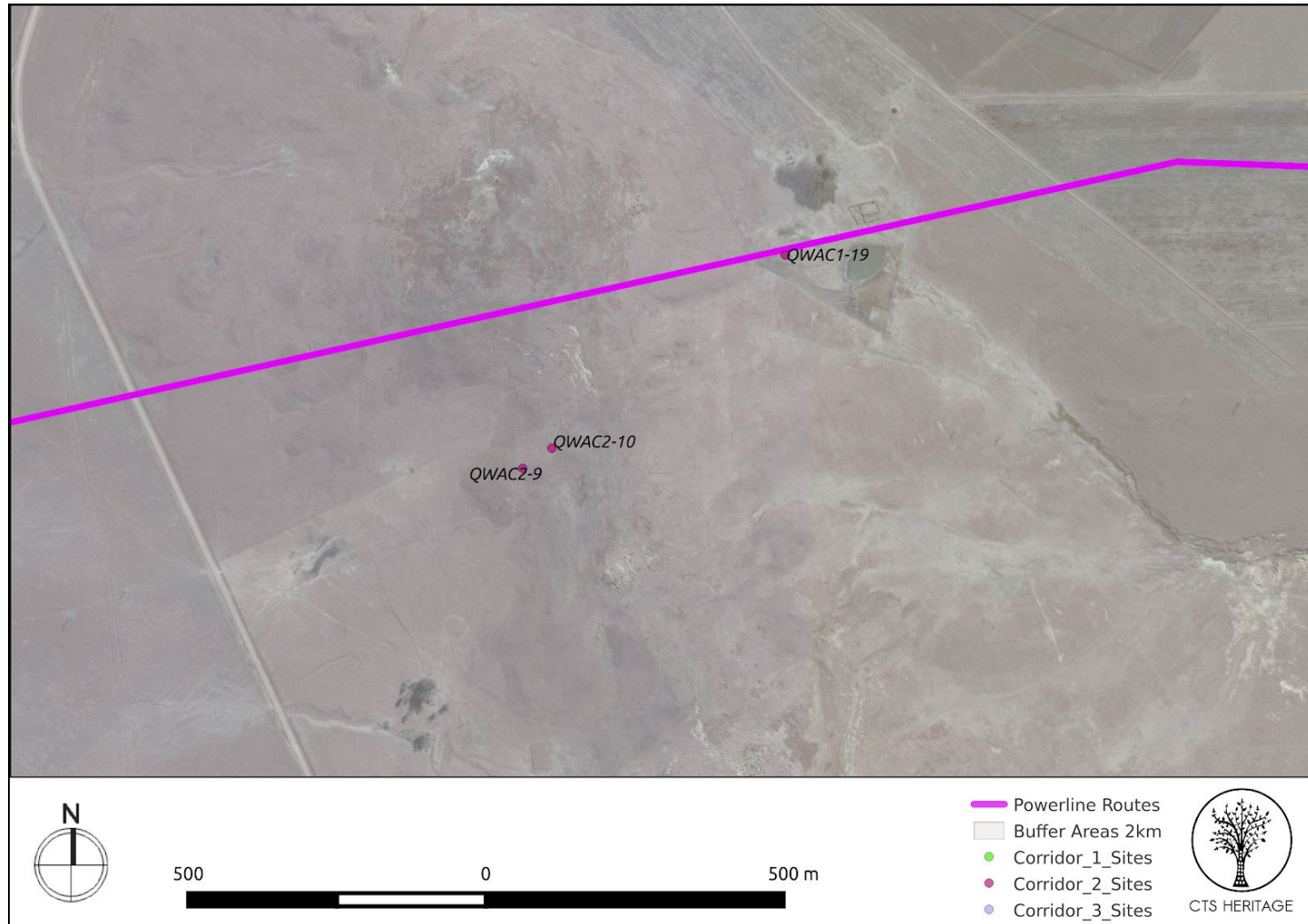


Figure 7

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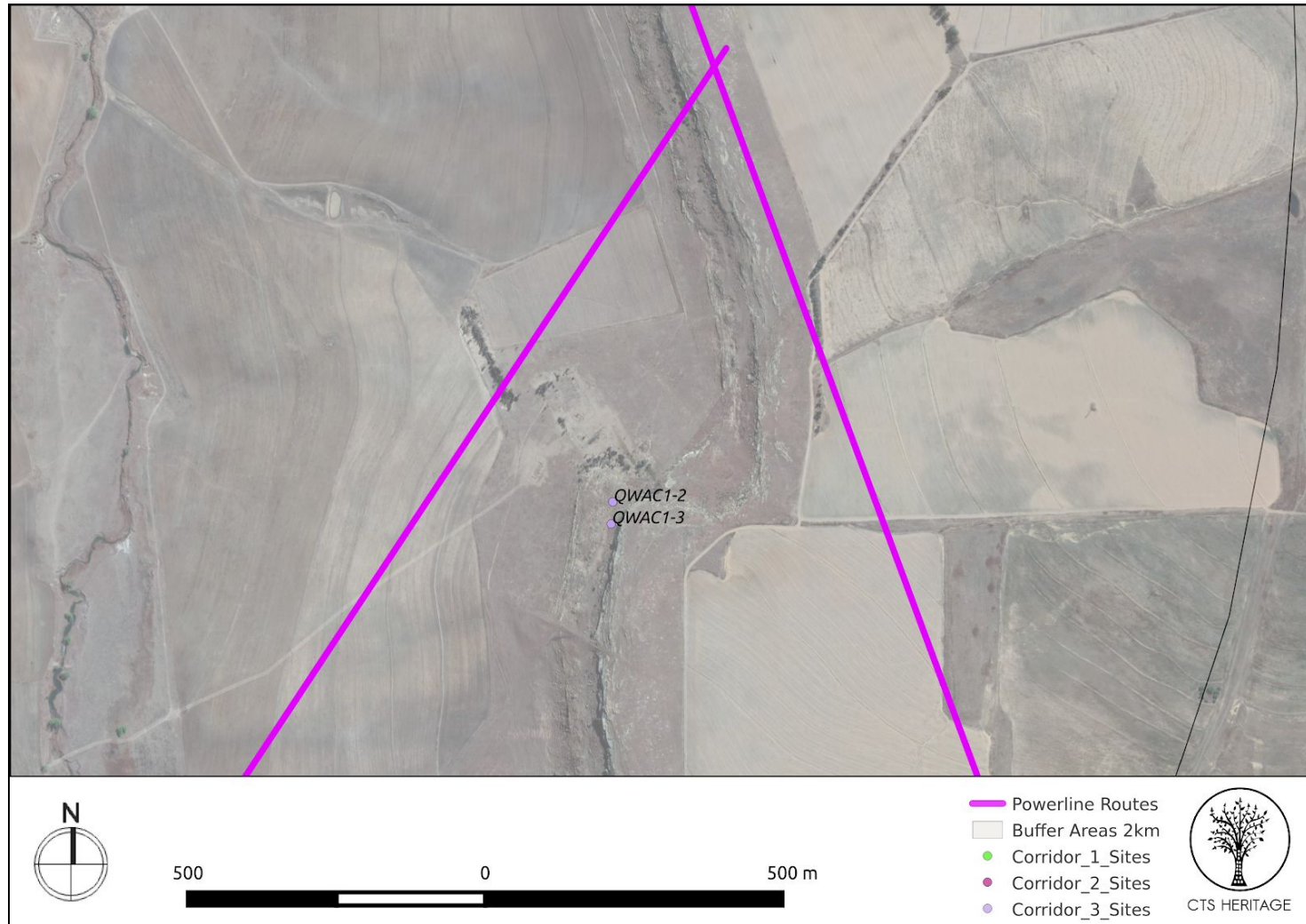
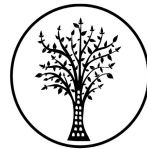


Figure 8

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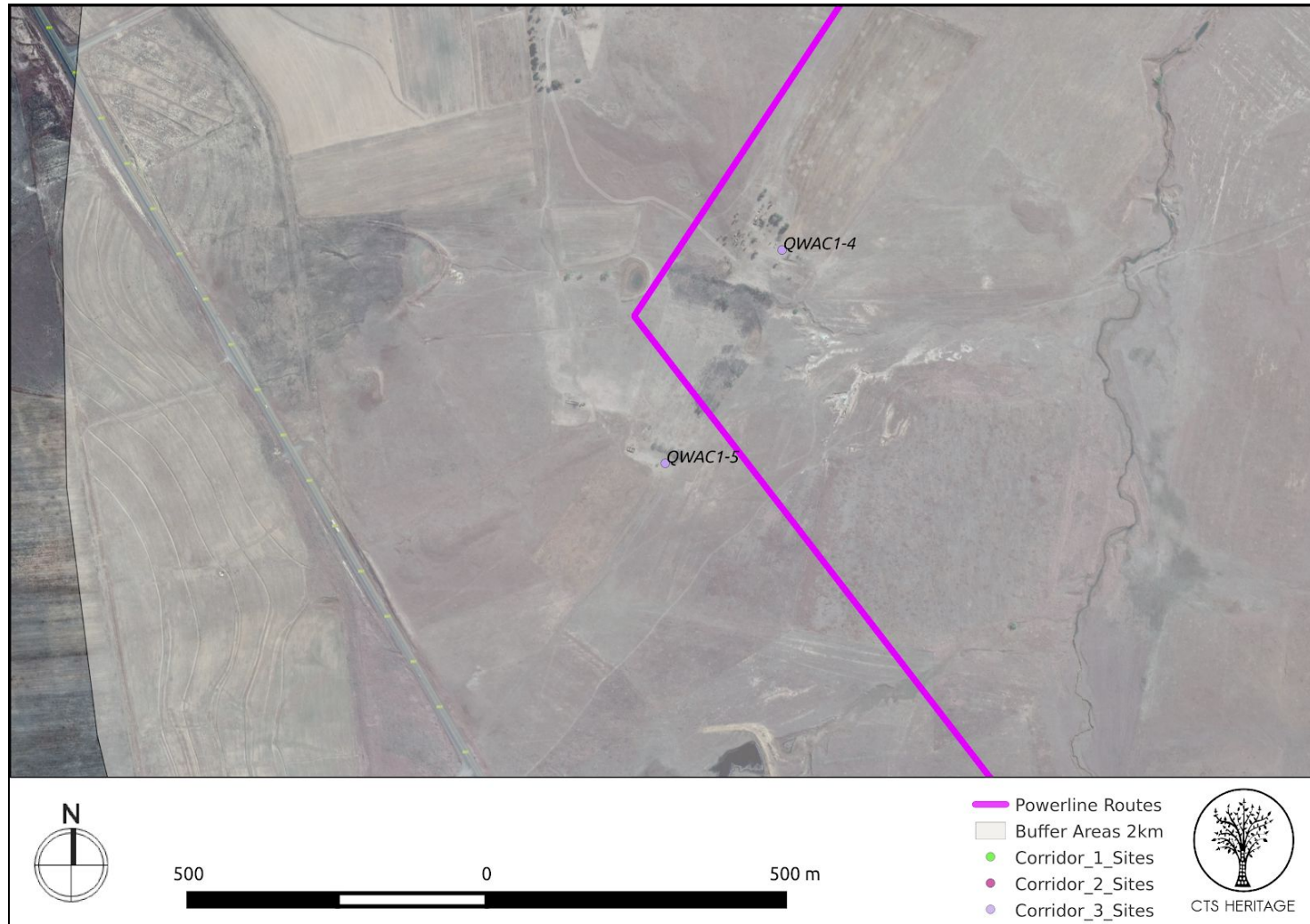


Figure 9

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4. DISCUSSION

The HIA concluded that:

- Corridor 1 is the least heritage sensitive corridor in terms of heritage resources management and based on the impact significance ratings according to Heritage and BAR Impact Assessment Standards. Most sites identified in this corridor from where it starts in Witsieshoek are of low heritage significance and some are not even considered heritage resources. This is with exception to QWAC1-5, a none municipal formalised cemetery consisting of 32 graves within the fence in Sorata- Substation where this corridor ends.
- Corridor 3 is the second least heritage sensitive corridor in terms of heritage resources management and according to impact assessment rating using Heritage and BAR Impact Assessment Standards
- Corridor 2 proved to be the highly sensitive corridor in terms of heritage resources management and based on the impact significance ratings according to Heritage and BAR Impact Assessment Standards. One of the sites which significantly contributed to this, in this corridor, is QWAC2-10 and a combination of it (i.e. QWAC2-10) with QWAC2-9, QWAC2-12 and QWAC2-2.

Based on the above the study makes the following recommendations about the Sorata- Witsieshoek 132kV Power Linez:

- Corridor 1/2 (i.e. combination of Corridor 1 and Corridor 2) is the preferred and recommended corridor from a heritage management point of view. Meaning that the power line will start at Sorata Substation using Corridor 2 and where Corridor 2 and Corridor 1 splits (i.e. at GPS Coordinates S28° 20' 22.3" E028° 52' 43.6"), the line will follow Corridor 1 up to where it rejoins Corridor 2 again (i.e. at GPS Coordinates: S28° 25' 15.5" E028° 49' 46.6") until it reached Witsieshoek Substation (Figure 106)
- The second alternative to Corridor 1/2 is Corridor 2. The reason for this preference is that a combination of Corridor 2 and Corridor 3, if Corridor 3 was to be considered as second alternative corridor based on the fact that it has the second least heritage sensitive and high impact significance sites as compared to Corridor 2, will result in an increased number of heritage sensitive and high impact significant sites. Corridor 3 has more sensitive and impact significant sites towards Witsieshoek Substation while Corridor 2 has more sensitive and high impact significant sites north-east of where it splits to form Corridor 3 on the mountainous area towards Wilge River. And Corridor 2 is less, but still highly sensitive toward Witsieshoek Substation. Therefore, a combination of Corridor 2 and Corridor 3 is not advisable as it would increase the impact significance levels of the power line on heritage resources. Thus, the choice to recommend Corridor 2, but with alternation or deviations from the current proposed servitude.

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- A special recommendation is made about QWAC2-12 - it is recommended that this site should be fenced off from the rest of construction activities during the construction phase of the project and a cemetery management plan should be developed to manage this site prior, during and post the construction phase of the project.

It is recommended that a Heritage Management Plan be drafted to ensure the long-term management of the heritage resources identified that will be impacted by the final alignment.

This HMP can only be drafted once the final alignment is approved and must focus on the conservation of the significant heritage resources identified within the selected alignment.

As part of this HMP, it is recommended that detailed mapping of the significant stone-walled sites that fall within the selected alignment be undertaken.