Agency for Cultural Resource Management
**Specialists in Archaeological Studies and Heritage Resource Management**

15 June, 2019

Att: Ms Natasha Higgit
Heritage Officer: Archaeology
South African Heritage Resources Agency
PO Box 4637
Cape Town
8001

Dear Ms Higgit,

**RECOMMENDED EXEMPTION, ARCHAEOLOGICAL IMPACT ASSESSMENT, INVESTIGATION OF EXISTING COPPER BEARING DUMPS NEAR OKIEP AND CAROLUSBERG, NAMA KHOI MUNICIPALITY, NORTHERN CAPE PROVINCE (SAHRA CASE NO. 13805)**

*1. Introduction*

The proposed activity entails the *sampling* of fine tailings (i. e. already mined deposits), at three `dump' locations (i. e. Okiep Dump, Carolusberg Leachate Dump & Carolusberg Tailings Dumps), near Springbok in the Namaqualand region of the Northern Cape Province (Figure 1).

The Okiep Fine Tailings Dump is located immediately north of the town of Okiep (Figure 2). The Carolusberg Leachate Dump is located about 400m south of Carolusberg (Figure 3) and the Carolusberg Tailings Dump is located ±3 km south of the small township, and partially within the Goegap Nature Reserve (Figure 4). Existing access roads and gravel tracks to all three dump sites will be used, and no new roads will need to be constructed.

The proposed investigation of the tailings consists of a combination of two sampling methods; Reverse Circulation Drilling, and excavator dug Trial Pits. Sampling of dumps will therefore take place in already approved Mining Authorisation areas, in previously disturbed areas (Figures 5-7). If the dumps yield good quantities of copper, it is likely that they will be reworked in the future, thus creating new employment opportunities in an economically depressed industry and region.

*2. Archaeological context*

Until fairly recently little archaeological work has taken place in the Springbok area of the Northern Cape, where most research has concentrated on the Namaqualand coast, the Richtersveld and further south in the Kamiesberg (Webley 1992). With the creation of an emerging alternative energy industry, and improved infrastructure developments in the region such as water and roads, a number of Heritage Impact Assessments (HIA's) have taken place in the surrounding area, but with mixed results. For example, only three stone flakes were encountered over a large area during an HIA for a proposed wind energy farm near Springbok, where some faded rock art and a burial were recorded (Kaplan 2010), while a few stone flakes were encountered in a proposed new powerline servitude between Springbok and Nababeep during scoping for the same study. Low density scatters of Later Stone Age flakes, chunks, a few cores and utilized pieces were recorded by Kaplan (2008) alongside DR2595 near Bulletrap (about 15kms north of Springbok), during an assessment of several borrow pits. No pre-colonial archaeological remains were documented during scoping for a proposed water pipeline between Rooiwinkel and Nababeep north of Springbok (Kaplan 2011a), or between Okiep and Bulletrap alongside the N7 (Kaplan

No. 5 Stuart Road Rondebosch, 7700 Phone/Fax 021-6857589
E-mail: acrm@wcaccess.co.za Mobile: 082 321 0172

2011b). A few stone tools and a possible grave were encountered by Smith (2013) during a HIA for a proposed solar energy farm near Carolusberg, while ephemeral scatters of stone tools, a stone walled kraal, colonial-era artefacts and a grave were also encountered by Smith (2013b) during a HIA for a proposed solar energy farm near Nababeep. No archaeological resources were encountered by Gaigher (2012) during a HIA for a proposed solar energy farm south of Springbok, and no pre-colonial archaeological traces were encountered by Morris (2012) during a survey of the proposed upgrading of the Goegap Nature Reserve facilities. A few Middle Stone Age (MSA) and LSA tools were recorded during a recent study for a large, regional water supply scheme connecting the small towns of Okiep, Concordia and Carolusberg. Several possible graves/grave markers were also recorded, while a dispersed scatter of tools, indigenous pottery and a pre-colonial Herder kraal were recorded alongside a small stream bed north of Carolusberg (Kaplan 2016).

The literature review of previous HIAs therefore indicates a paucity of archaeological traces in the Springbok/Okiep/Carolusberg area, where the majority of archaeological resources appear to be concentrated close to sources of water (i.e. rivers, streams and kopjes).

*3. Conclusion*

Since the proposed sampling sites in Okiep and Carolusberg occur in previously transformed landscapes (i. e. old copper tailing dumps), ACRM is applying for exemption from having to conduct an archaeological assessment of the proposed activities, as requested by SAHRA in their letter dated 07 June, 2019. The proposed activities are not considered to pose a serious threat to the local archaeological heritage because of the following considerations:

- Proposed activities will take place on existing mine tailing dumps, which constitute an irrevocably transformed landscape.

- The tailing dumps cannot be considered a sensitive or threatened archaeological landscape.

- It is impossible that any archaeological heritage will be impacted by proposed activities.

- A literature review has shown that Springbok and surrounding areas, including Okiep and Carolusberg do not appear to be an archaeologically sensitive landscape. The review indicates that pre-colonial resources are more likely to be found near rocky outcrops, and alongside rivers, stream channels and pans (close to water sources), while the urban and industrial/mining landscape has been transformed by development.

*4. Recommendations*

It is therefore recommended that exemption from further specialist archaeological studies and mitigation be granted, for the proposed activities.

Yours sincerely

Jonathan Kaplan

No. 5 Stuart Road Rondebosch, 7700 Phone/Fax 021-6857589
E-mail: acrm@wcaccess.co.za Mobile: 082 321 0172

*5. References*

Gaigher, S. 2012. Heritage Impact Assessment Report Basic Assessment, proposed establishment of the Brax Energy Photovoltaic Solar Park on a Portion of the Farm Voelklip near Springbok in the Northern Cape Province. Report prepared for Shawn Johnston Sustainable Future/Savannah Environmental

Kaplan, 2016. Heritage Impact Assessment, Namaqualand Regional Water Supply Scheme – upgrade of the water supply pipeline from Okiep to Concordia and Carolusberg, Northern Cape. Report prepared for Enviroafrica. ACRM, Cape Town

Kaplan, 2011a Archaeological scoping the proposed construction of a new water pipeline between Rooiwinkel and Nababeep, Northern Cape. Report prepared for EnviroAfrica. ACRM Cape Town

Kaplan, J. 2011b. Archaeological scoping the proposed construction of a new pipeline between Bulletrap and Okiep, Northern Cape. Report prepared for EnviroAfrica. ACRM Cape Town

Kaplan, J. 2010. Archaeological Impact Assessment for a proposed wind energy facility near Springbok, Northern Cape. Report prepared for DJ Environmental Consultants. ACRM, Cape Town.

Kaplan, 2008. An archaeological assessment of three proposed borrow pits alongside DR2595 N7 to Bulletrap, Northern Cape Province. Report prepared for Irme van Zyl Environmental Consultants.

Morris, D. 2012. Archaeological Impact Assessment, Phase 1 for inclusion in Basic Assessment Report 25/2011. Proposed upgrading of the Goegap Nature Reserve near Springbok, Northern Cape. Report prepared for Van Zyl Environmental Consultants. McGregor Museum, Kimberly

Smith, A. B. 2013a. Proposed Solar PV Facility Melkboskuil Farm 132/6 Carolusberg: A Heritage Impact Assessment. Report prepared for Footprint Environmental Services.

Smith, A. B. 2013b. Proposed Solar PV Facility Klipdam Farm 134/17 Springbok, Northern Cape: A Heritage Impact Assessment. Report prepared for Footprint Environmental Services.

Webley, L. 1992. The history and archaeology of pastoralist and hunter-gatherer settlement in the north-western Cape, South Africa. Unpublished D. Phil thesis: University of Cape Town.

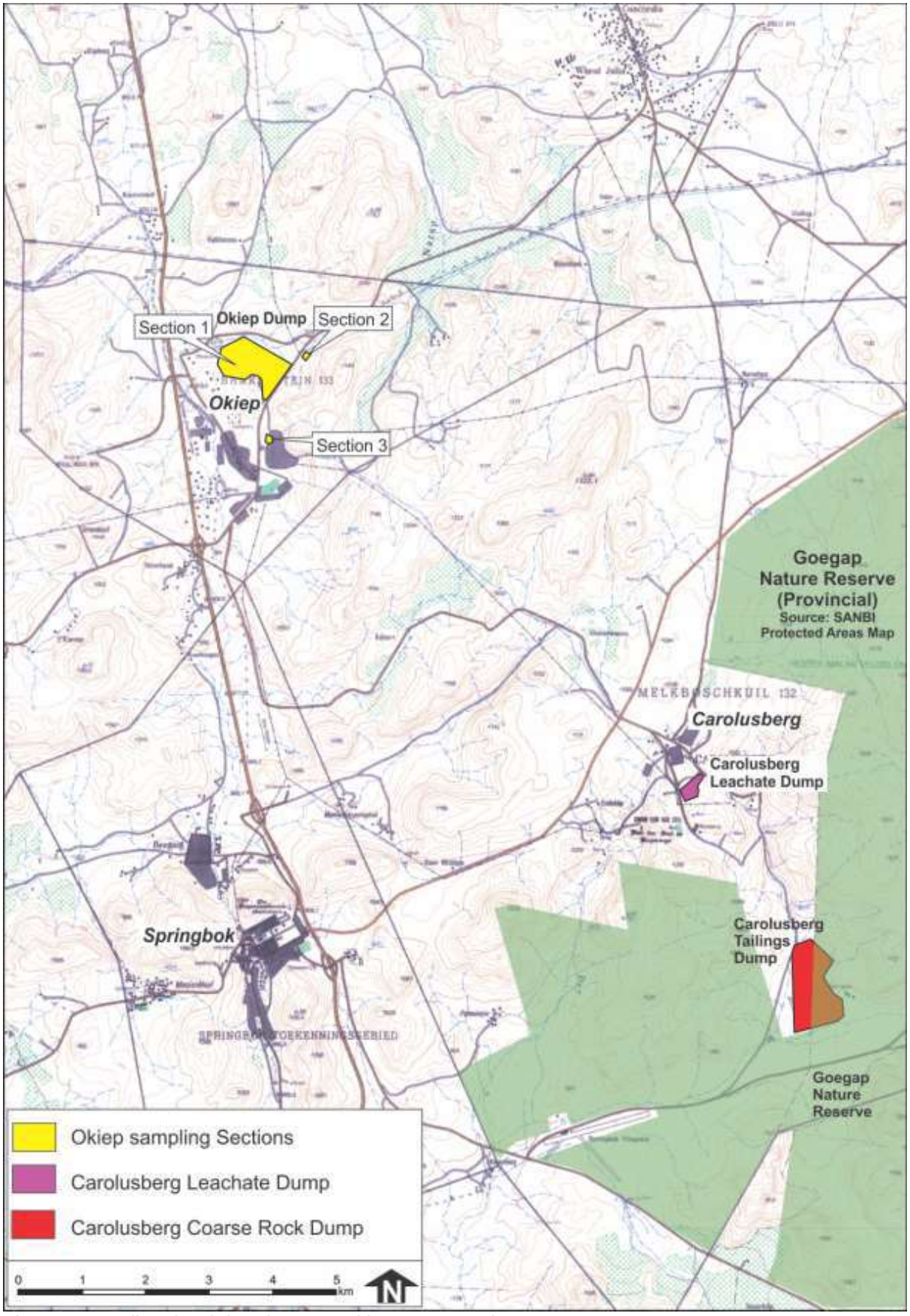


Figure 1. Locality Plan (Site Plan Consulting May, 2019)


Figure 2. Google satellite map indicating the location of the Okiep Fine Tailings Dam in relation to the town of Okiep (Site Plan Consulting May, 2019)

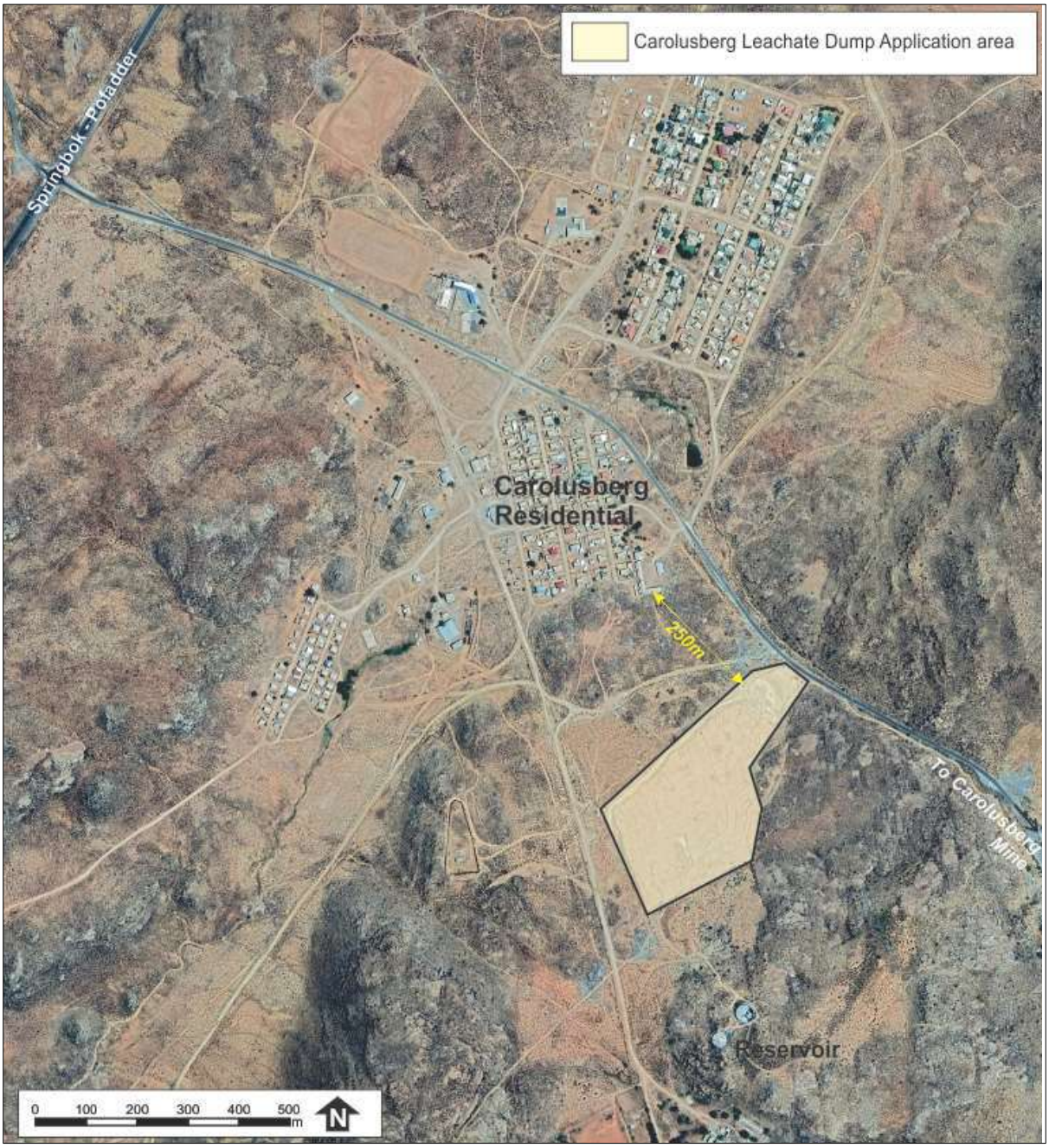


Figure 3. Google satellite map indicating the location of the Carolusberg Leachate Dump in relation to the town of Carolusberg (Site Plan Consulting May, 2019).

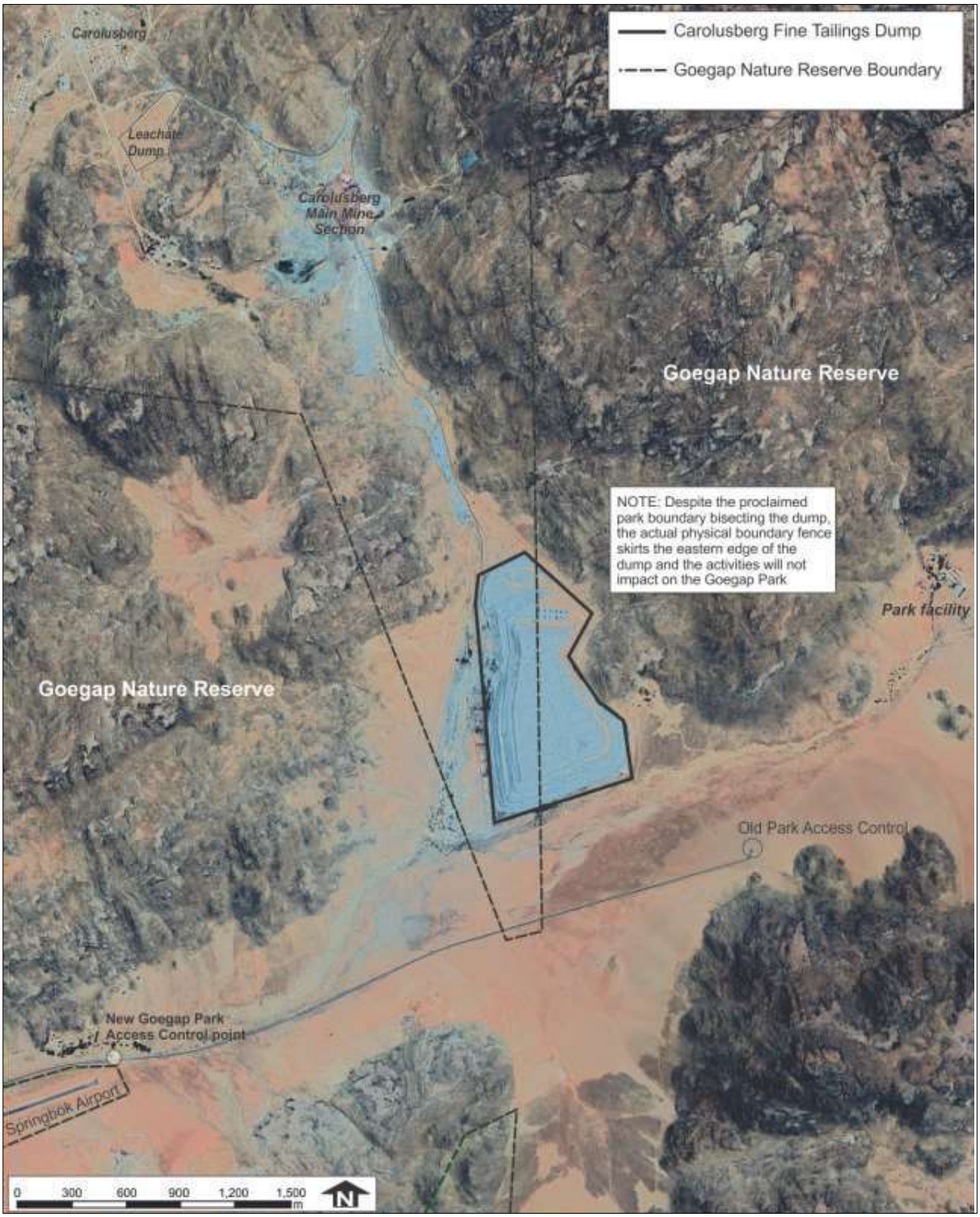


Figure 4. Google satellite map indicating the location of the Carolusberg Leachate Dump and surrounding land use (Site Plan Consulting May, 2019).


Figure 5. Detail locality of Okiep dumps under consideration, including site layout plan (Site Plan Consulting, May 2019)


Figure 6. Detail locality of Carolusberg leachate dumps and site layout plan (Site Plan Consulting, May 2019)

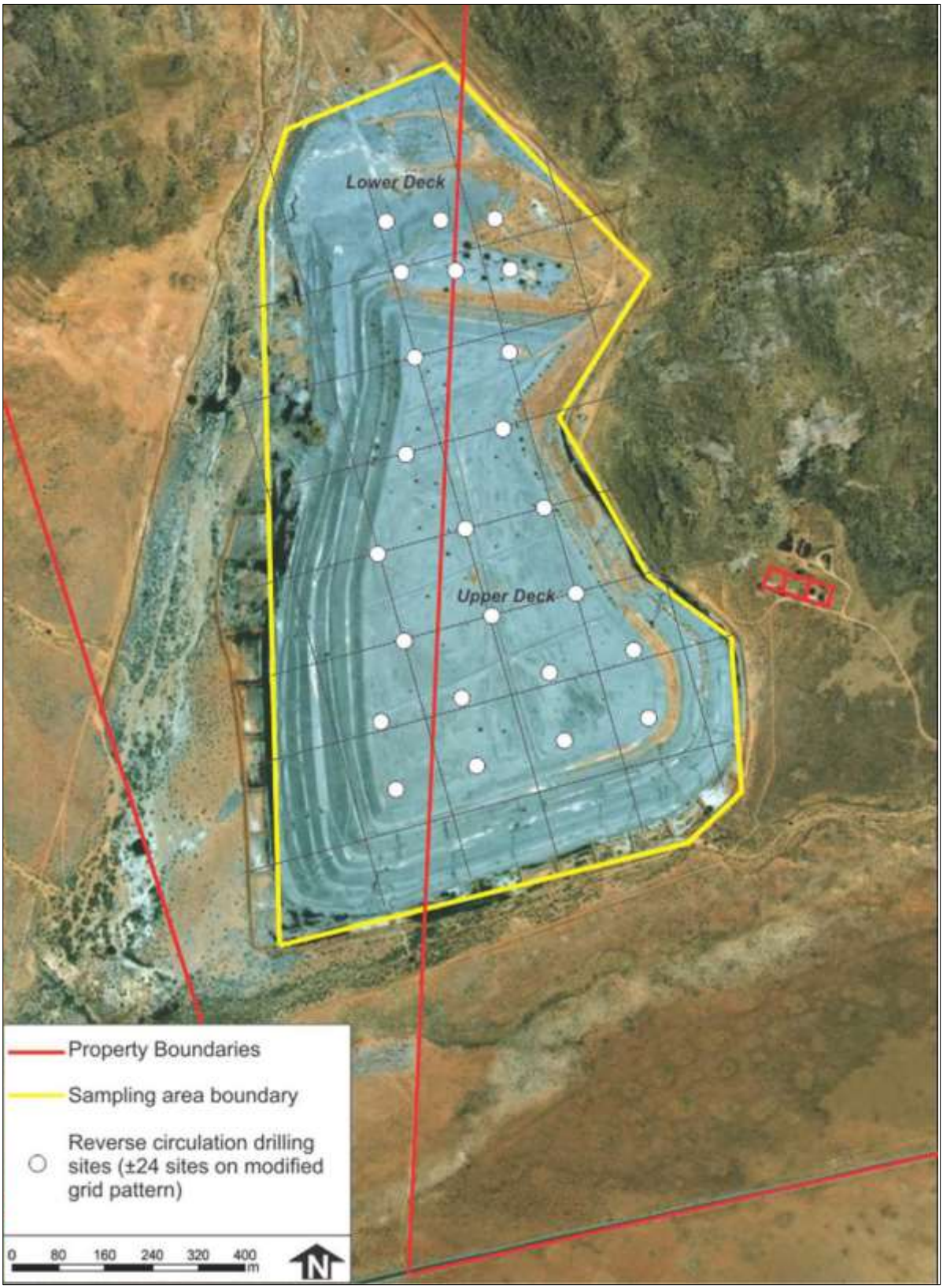


Figure 7. Detail locality of Carolusberg tailings dump including site layout plan (Site Plan Consulting, May 2019)