

**HERITAGE SURVEY OF THE PROPOSED RICHARDS
BAY CENTRAL INDUSTRIAL AREA**

FOR COASTAL & ENVIRONMENTAL SERVICES

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EXECUTIVE SUMMARY

A heritage survey was undertaken for the extension of the Richards Bay Central Industrial Area. The foot survey did not locate any heritage sites for various reasons. A survey of the 1937 aerial photographs did indicate that several settlements did exist in the study area, and these would probably have human graves. The aerial photographs suggest that certain areas would thus have been occupied in the past.

The heritage aspect of the development will need to be undertaken in two phases. Certain areas need to be resurveyed after vegetation clearance. These areas are those indicated as having possible settlements. These areas will also need to be monitored during construction activity for possible human remains. Other areas will need to be resurveyed after vegetation clearance and the management plan needs to be reviewed.

There is a strong possibility that human remains will occur in certain areas. The EMP must ensure that there are specific steps in reporting any animal and/or human remains, as this need to be assessed by an expert.

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INTRODUCTION

Umlando cc was contracted by Coastal & Environmental Services cc (CES) to undertake a heritage assessment of a proposed development in Richards Bay, KwaZulu-Natal. The uMhlathuze Municipality, situated in the KwaZulu Natal Province of South Africa, is proposing the establishment of a Central Industrial Area (CIA) on the Remainder of a Reserve in Richards Bay. The proposed development site is located on the western side of the Central Business District (CBD) of Richards Bay and Alton North (fig's 1 – 2).

The proposed development site is 132 hectares in extent and roughly rectangular. It is surrounded by industrial development, both established and ongoing. An overhead power line traverses the eastern and northern boundaries of the site. There are also a number of buried cables and pipelines, which cross the site (Drennan, Maud & Partners 2008). There is an isolated sand blasting business located to the south of the proposed site on the old north-south trending tar road. The site is otherwise undeveloped.

The impacts on the area will be:

- Access roads
- Servitudes for water, sewerage, electricity, etc.
- Excavations for buildings

The area has been a swamp and wetland in the historical past. The occurrence of afforestation and large drainage canals in the area has ensured that a majority of the water is kept away from the CBD. Humans thus not heavily occupied the area in the past, especially the last 1000 years, where similar climatic patterns have prevailed.

METHOD

The method for Heritage assessment consists of several steps.

The first step forms part of the desktop assessment. Here we would consult the databases. These databases contain most of the known heritage sites in KwaZulu-Natal, and known memorials and other protected sites, battlefields and cemeteries in southern Africa. We also consult with an historical architect, palaeontologist, and an historian where necessary.

The survey results will define the significance of each recorded site, as well as a management plan.

All sites are grouped according to low, medium and high significance for the purpose of this report. Sites of low significance have no diagnostic artefacts or features. Sites of medium significance have diagnostic artefacts or features and these sites tend to be sampled. Sampling includes the collection of artefacts for future analysis. All diagnostic pottery, such as rims, lips and decorated sherds are sampled, while bone, stone and shell are mostly noted. Sampling usually occurs on most sites. Sites of high significance are excavated and/or extensively sampled. Those sites that are extensively sampled have high research potential, yet poor preservation of features.

Defining significance

Heritage sites vary according to significance and several different criteria relate to each type of site. However, several criteria allow for a general significance rating of archaeological sites.

These criteria are:

1. State of preservation of:

- 1.1. Organic remains:
 - 1.1.1. Faunal
 - 1.1.2. Botanical
- 1.2. Rock art
- 1.3. Walling
- 1.4. Presence of a cultural deposit
- 1.5. Features:
 - 1.5.1. Ash Features
 - 1.5.2. Graves
 - 1.5.3. Middens
 - 1.5.4. Cattle byres
 - 1.5.5. Bedding and ash complexes

2. Spatial arrangements:

- 2.1. Internal housing arrangements
- 2.2. Intra-site settlement patterns
- 2.3. Inter-site settlement patterns

3. Features of the site:

- 3.1. Are there any unusual, unique or rare artefacts or images at the site?
- 3.2. Is it a type-site?
- 3.3. Does the site have a very good example of a specific period, feature, or artefact?

4. Research:

- 4.1. Providing information on current research projects
- 4.2. Salvaging information for potential future research projects

5. Inter- and intra-site variability

- 5.1. Can this particular site yield information regarding intra-site variability, i.e. spatial relationships between various features and artefacts?

5.2. Can this particular site yield information about a community's social relationships within itself, or between other communities?

6. Archaeological Experience:

6.1. The personal experience and expertise of the CRM practitioner should not be ignored. Experience can indicate sites that have potentially significant aspects, but need to be tested prior to any conclusions.

7. Educational:

7.1. Does the site have the potential to be used as an educational instrument?

7.2. Does the site have the potential to become a tourist attraction?

7.3. The educational value of a site can only be fully determined after initial test-pit excavations and/or full excavations.

8. Other Heritage Significance:

8.1. Palaeontological sites

8.2. Historical buildings

8.3. Battlefields and general Anglo-Zulu and Anglo-Boer sites

8.4. Graves and/or community cemeteries

8.5. Living Heritage Sites

8.6. Cultural Landscapes, that includes old trees, hills, mountains, rivers, etc related to cultural or historical experiences.

The more a site can fulfill the above criteria, the more significant it becomes. Test-pit excavations are used to test the full potential of an archaeological deposit. This occurs in Phase 2. These test-pit excavations may require further excavations if the site is of significance (Phase 3). Sites may also be mapped and/or have artefacts sampled as a form of mitigation. Sampling normally occurs when the artefacts may be good examples of their type, but are not in a primary archaeological context. Mapping records the spatial relationship between features and artefacts.

FIG. 1 GENERAL LOCATION OF THE PROPOSED DEVELOPMENT

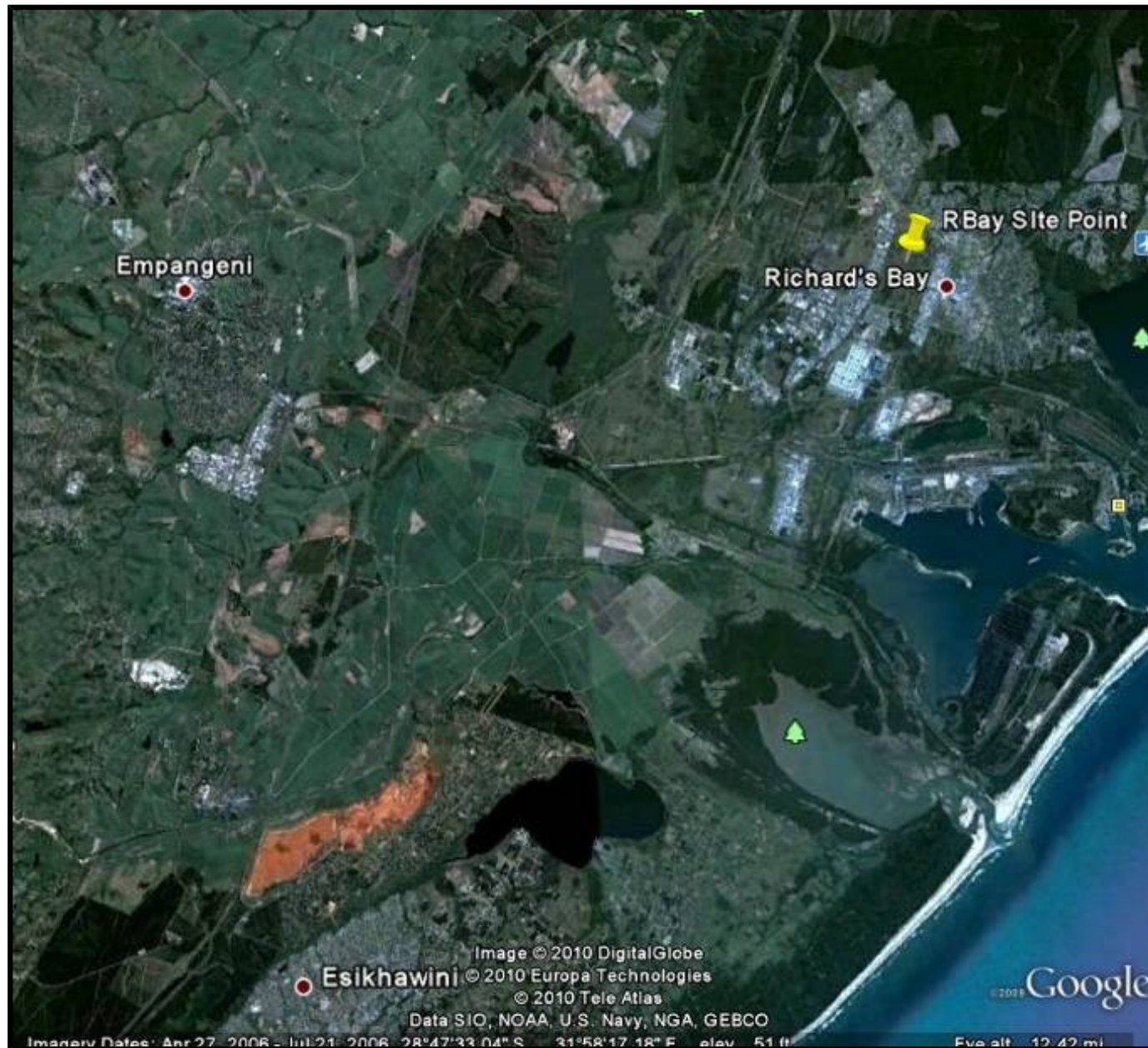


FIG. 2a GENERAL LOCATION OF THE PROPOSED DEVELOPMENT

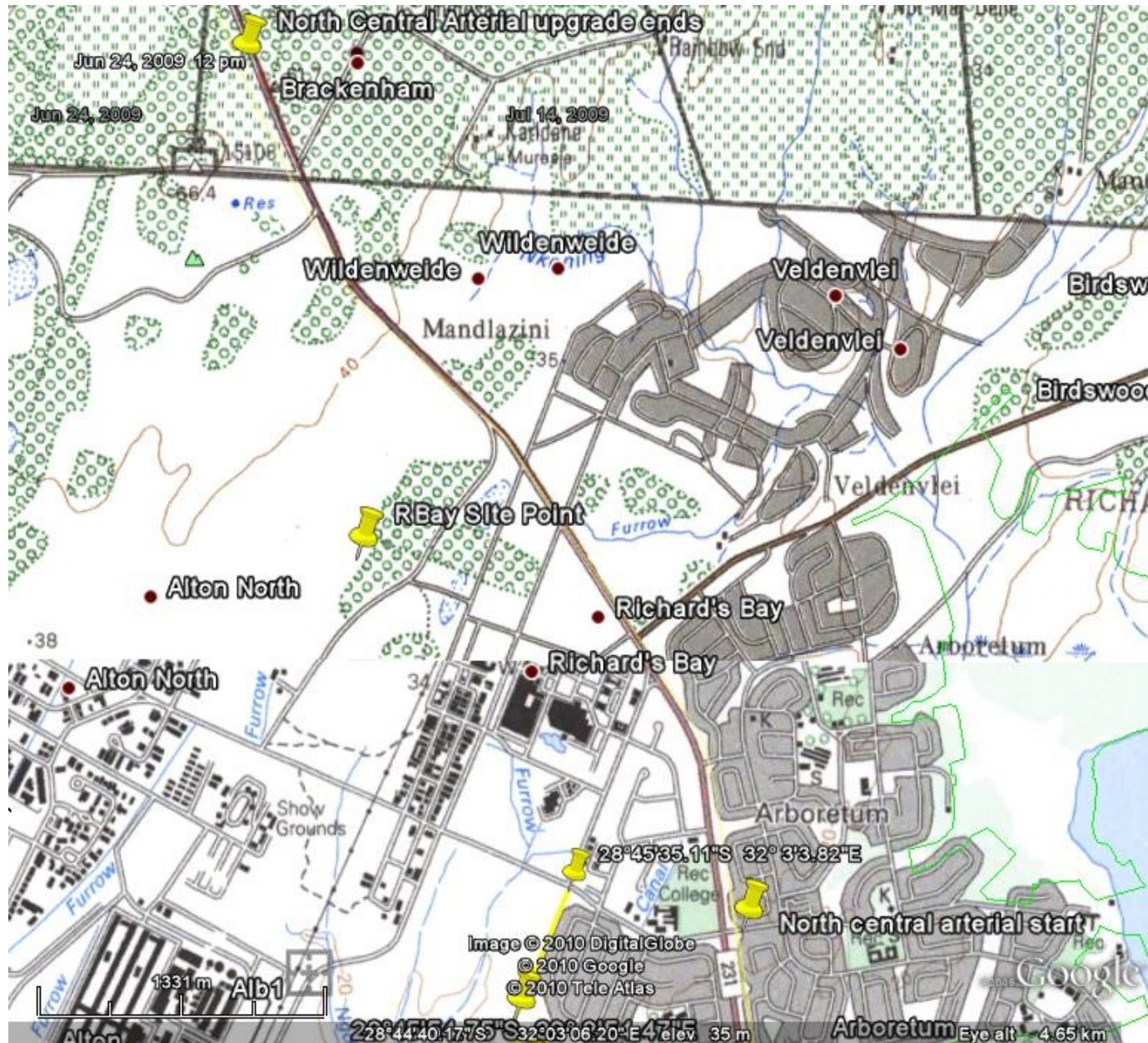
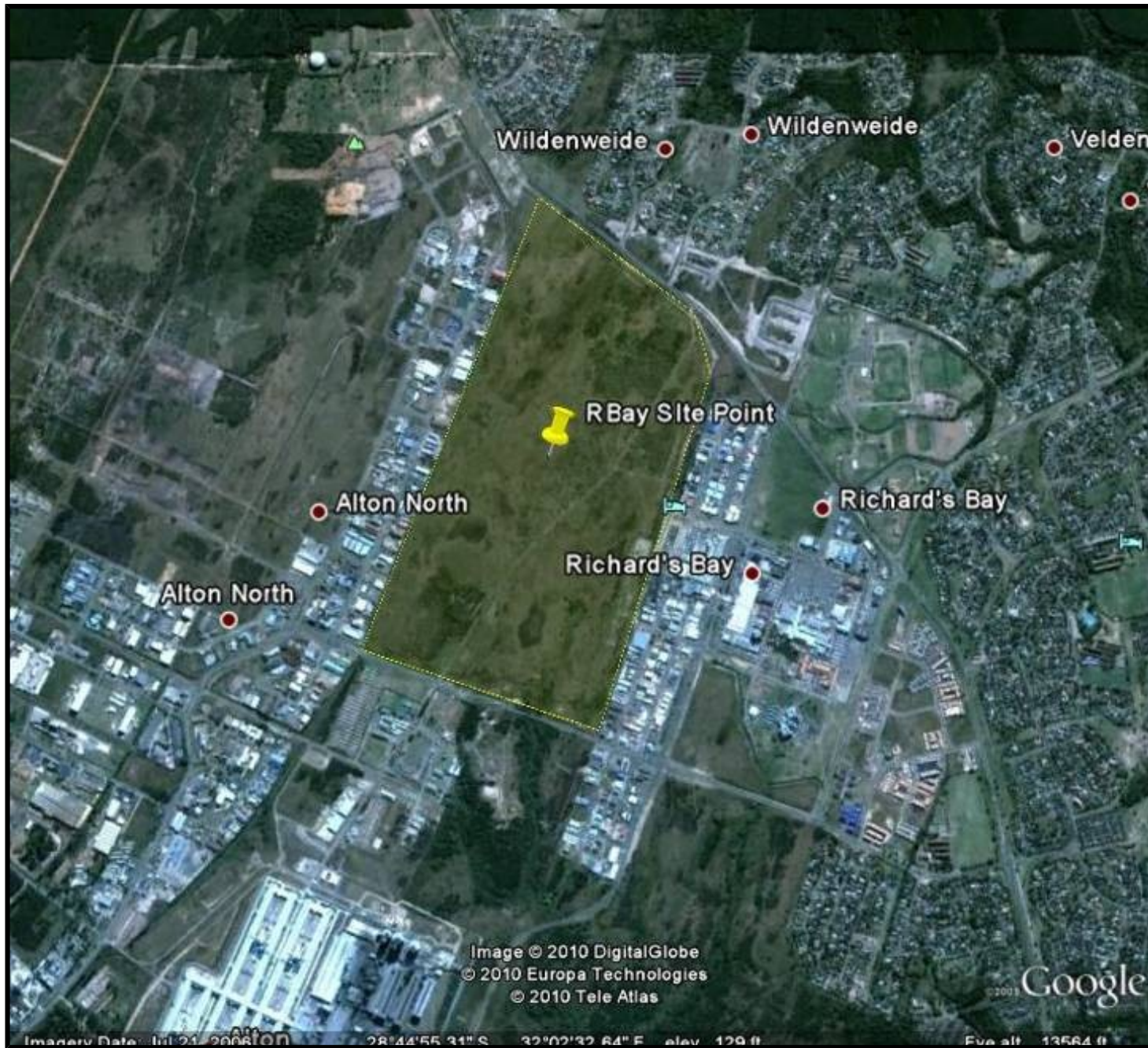


FIG. 2b: LOCATION OF THE PROPOSED DEVELOPMENT¹



¹ Study area is in yellow

RESULTS

The survey did not locate any heritage sites. This was because of the following factors:

1. The area was, in the past, a swamp wetland.
2. The vegetation was too dense in most areas to observe the ground surface. We did survey those areas that had visibility.
3. Large parts of the southern area were covered with recent sand deposits.
4. There is a lot of illegal dumping
5. There was a criminal element and we were warned by several people to not walk around the area

To counter the inability to undertake a foot survey I studied the 1937 aerial photographs. I placed them as an image overlay on Google Earth, and could thus pinpoint sensitive areas. The 1937 aerials also allowed me to see if people were living in the study area in the past. My argument is if people lived in this area in 1937, then they would have lived here further in the past. In this way, I can make a statement of potential heritage sites in the area.

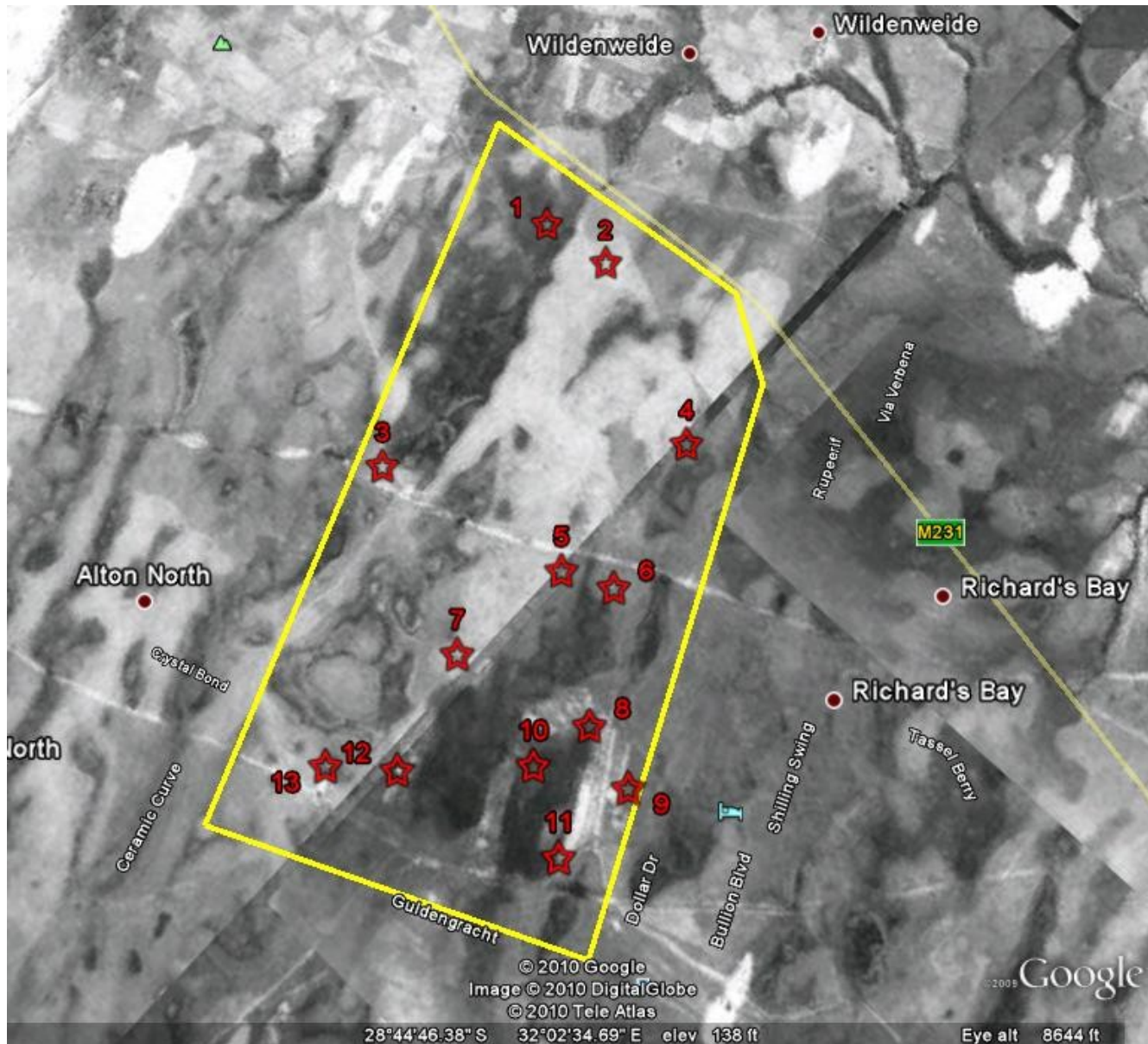
Figure 3 shows the general image overlay of the Richards CBD, while figures 4 and 5 show the study area at 1937 and 2010. Figures 4 and 5 indicate there are 14 possible human settlements in the study area. If these are settlements, then there will be human graves as well. The location of these areas is provided in Table 1. Interestingly, the 1943 topographical maps (fig. 6) indicate that these settlements no longer exist, except for homestead number.

I have transposed the 1937 sites onto the 2010 map (figure 5). The southern sites are now covered with sand (fig. 7). The central areas that were recently burnt did not yield any sites. The other areas were too densely vegetated to observe the settlements

FIG. 3: 1937 AERIAL PHOTOGRAPH OVERLAYS FOR RICHARDS BAY



FIG. 4: 1937 AERIAL PHOTOGRAPH OVERLAYS FOR THE RICHARDS BAY STUDY AREA²



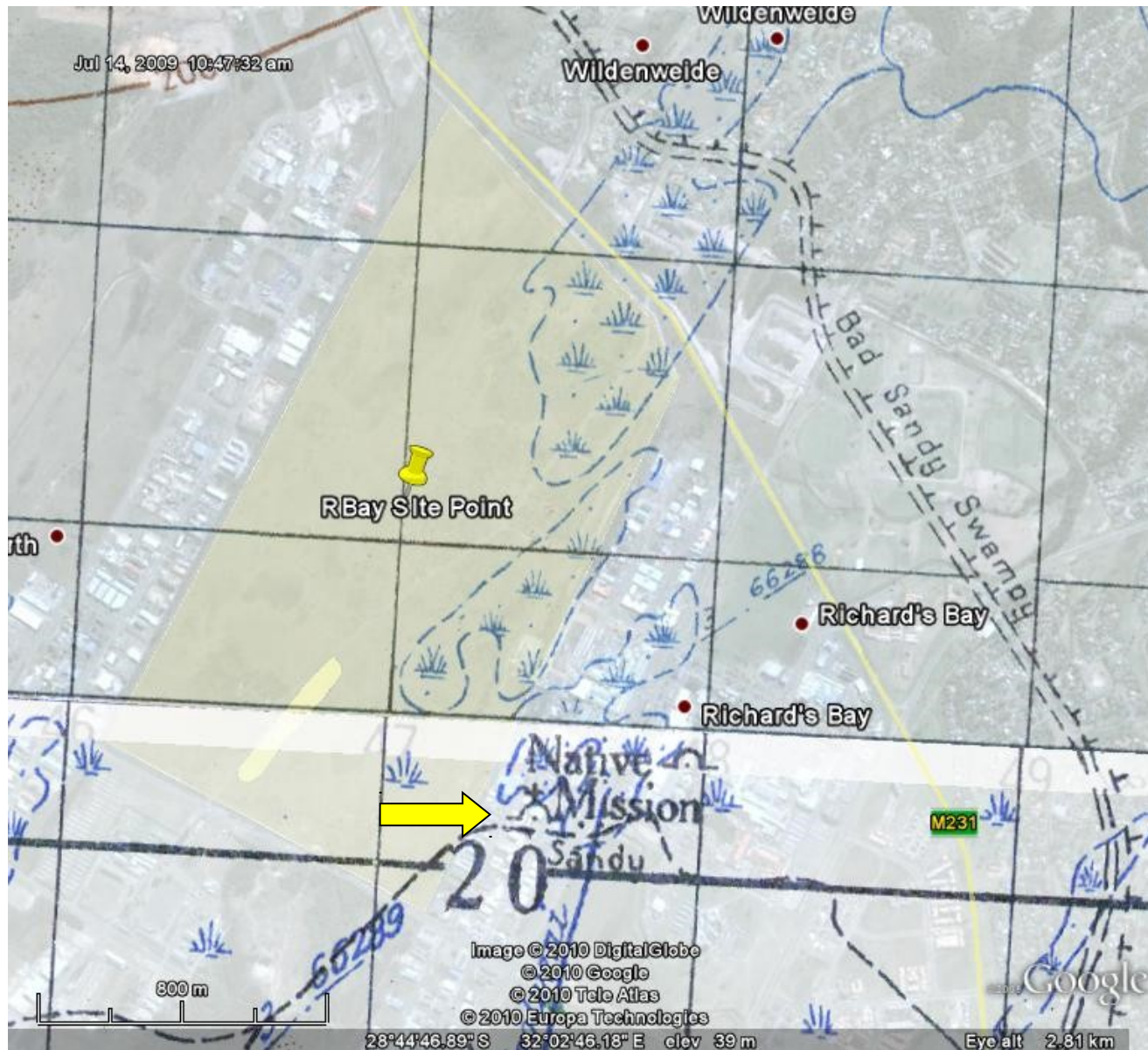
² Red star = human settlement in 1937

FIG. 5: LOCATION OF SETTLEMENTS FROM THE 1937 AERIALS FOR THE RICHARDS BAY STUDY AREA³



³ Red star = human settlement in 1937

FIG.6: LOCATION OF STUDY AREA FROM THE 1943 1:50 000 MAPS⁴



⁴ Yellow arrow indicates homestead 8 in Table 1

FIG.7: SITE PHOTOGRAPHS IN SENSITIVE AREAS



TABLE 1: LOCATION OF POSSIBLE HUMAN SETTLEMENTS IN THE STUDY AREA

Site Number	South ⁵	East
1	28°44' 18.89"	32° 2' 32.75"
2	28°44' 22.84"	32° 2' 38.50"
3	28°44' 40.17"	32° 2' 15.45"
4	28°44' 39.62"	32° 2' 45.33"
5	28°44' 50.05"	32° 2' 32.42"
6	28°44' 51.74"	32° 2' 37.37"
7	28°44' 56.59"	32° 2' 22.08"
8	28°45' 3.09"	32° 2' 34.31"
9	28°45' 8.30"	32° 2' 37.62"
10	28°45' 6.05"	32° 2' 28.84"
11	28°45' 13.51"	32° 2' 30.79"
12	32° 2' 30.79"	32° 2' 16.08"
13	28°45' 5.17"	32° 2' 9.36"

MANAGEMENT PLAN

The foot survey did not locate any heritage sites; however, the aerial photographs indicate that sites do exist in the study area. All of the sites demarcated in figures 4 and 5 need to be reassessed after vegetation clearance has occurred AND during the construction phase. Table one list the co-ordinates for these areas. The first assessment will be to determine if settlements are yet visible, while the second assessment will monitor the specific areas for human remains. **It should not be the responsibility of the company to report human remains; rather an archaeologist is on site to make the evaluation.**

I suggest the general areas are surveyed after vegetation clearance has occurred. There will be vegetation clearance for the various servitudes and for the construction of buildings. Umhlatuze Municipality will need to determine who is responsible for the costs of an archaeologist on site for the servitudes and/or site-specific construction. I suggest that costs for site specific activity is covered by the landowner; however, the owner of each plot of land must be made aware of these potential costs. All faunal remains, whether they are human or animal, that is uncovered in the study area need

⁵ WGS84

to be assessed and identified by an expert. Earthmoving activity will need to be stop until the remains and area has been assessed. This should not be a hindrance to the overall development, since there are only thirteen of these sensitive areas,

In summary, any form of earth moving activity will require an assessment, and certain specific areas will require assessment after vegetation clearance and construction phase. The municipality needs to ensure, and enforce, these surveys and monitoring activities.

CONCLUSION

A heritage survey of the Richards Bay Central Industrial area was undertaken. The dense vegetation and various forms of dumping made a foot survey very difficult, if not impossible. A study of the 1937 aerial photographs indicated that certain areas did have human settlements, and these areas would probably have had settlements before 1937 as well. The prehistory of Richards Bay extends to several thousands of years; however, most sites only date to the last 2000 years. Since this area has been a wetland for at least the last 1000 years⁶, I assumed that human settlements would occur in these slightly elevated areas for at least 100 years.

The EMP will require several areas to be re-surveyed after vegetation clearance, and some specific areas to be monitored during any form of earth moving activity.

⁶ We do not have detailed climatic information for this specific area, except to generalize and suggest that the area became wet over the last 1000 years (with fluctuations).