

**SURVEY OF THE PROPOSED THOMASVILLE DAM,
CURRYS POST, KWAZULU-NATAL**

**FOR THE INDEPENDENT ENVIRONMENTAL
ADVISOR**

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INTRODUCTION

Umlando was appointed by The Independent Environmental Advisor to undertake a heritage survey at the site of an old dam on the property Portion 34 of Thomasville No. 2120FT at Curries Post in KwaZulu-Natal. The project site occurs alongside Road P065 and is opposite the Curry's Post Hotel and historical Anglican Church, Figures 1 – 3 show the location of the site.

The development consists of re-instating an old dam by means of constructing a new wall over an older structure and to excavate wall material from the basin so that the storage capacity will have a full supply water depth of 1.7m. The full supply level is to remain at approximately the same as that of the original dam. It is estimated that the surface area of the new dam will be approximately 0.46 ha.

Figure 4 shows the general study area.

FIG. 1 GENERAL LOCATION OF THE STUDY AREA

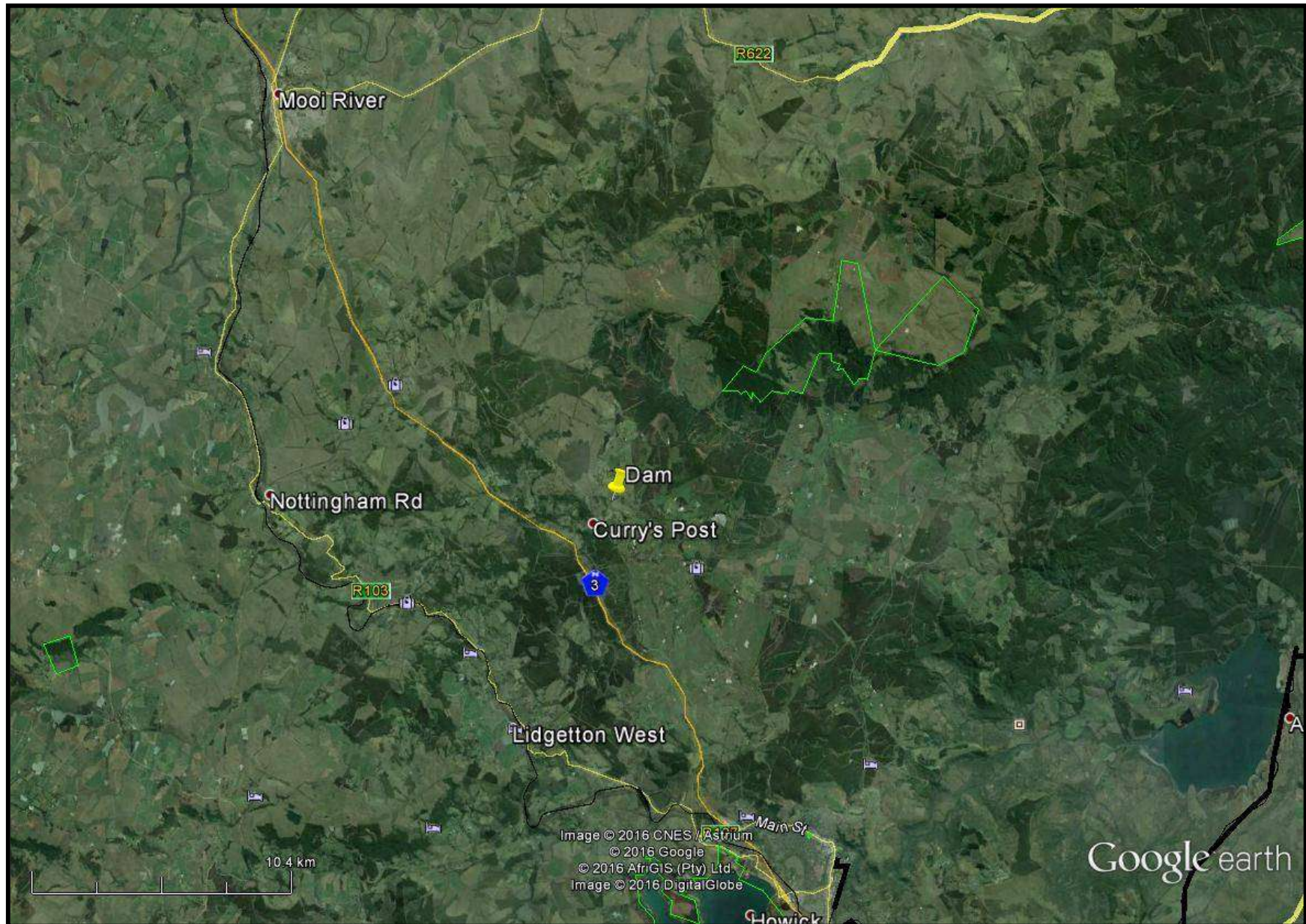


FIG. 2: AERIAL OVERVIEW OF THE STUDY AREA



FIG. 3: TOPOGRAPHICAL OVERVIEW OF THE STUDY AREA

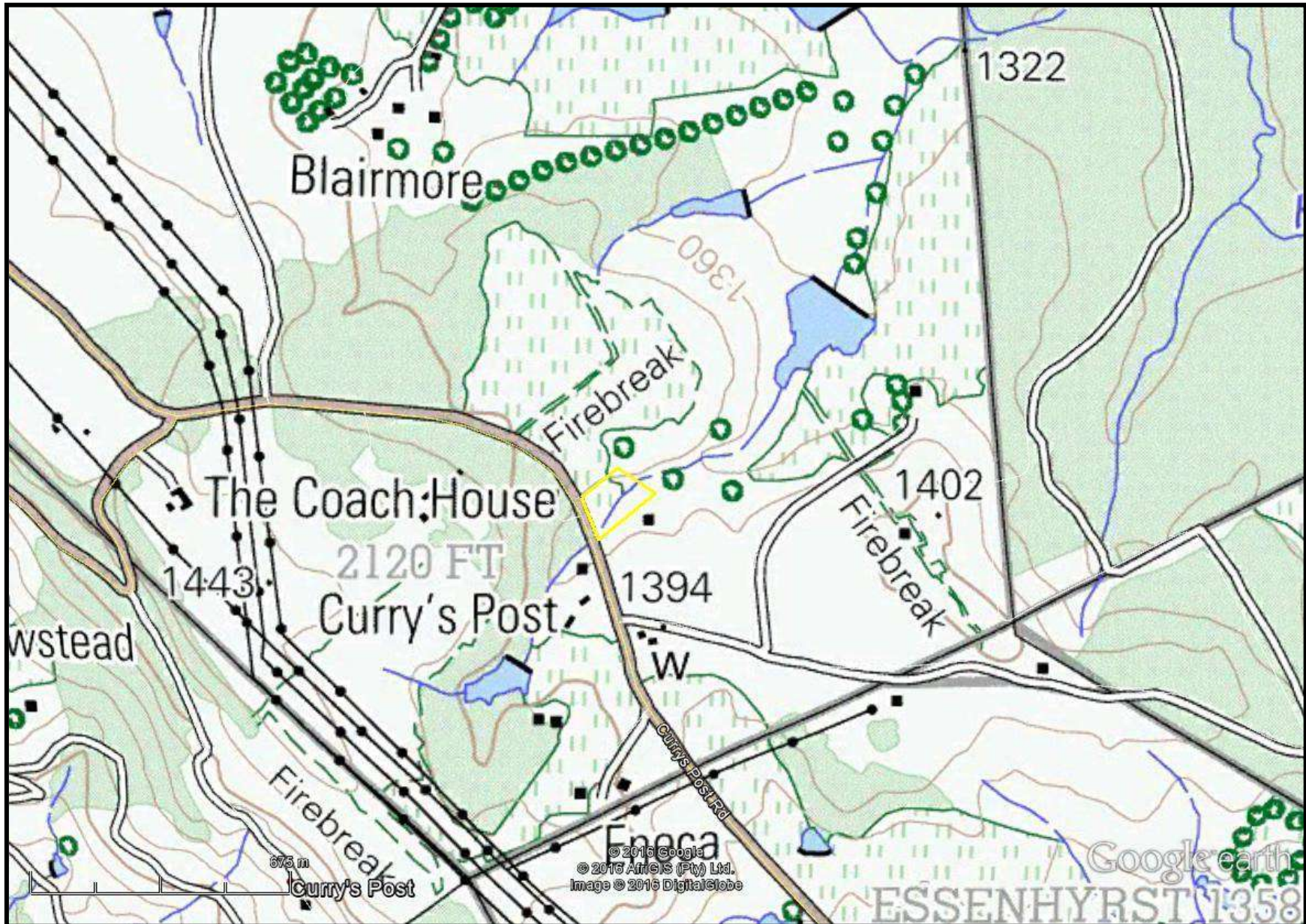


FIG. 4: SCENIC VIEWS OF THE PROPOSED DAM



KWAZULU-NATAL HERITAGE ACT NO. 4 OF 2008

“General protection: Structures.—

- No structure which is, or which may reasonably be expected to be older than 60 years, may be demolished, altered or added to without the prior written approval of the Council having been obtained on written application to the Council.
- Where the Council does not grant approval, the Council must consider special protection in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
- The Council may, by notice in the *Gazette*, exempt—
- A defined geographical area; or
- defined categories of sites within a defined geographical area, from the provisions of subsection where the Council is satisfied that heritage resources falling in the defined geographical area or category have been identified and are adequately protected in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
- A notice referred to in subsection (2) may, by notice in the *Gazette*, be amended or withdrawn by the Council.

General protection: Graves of victims of conflict.—No person may damage, alter, exhume, or remove from its original position—

- the grave of a victim of conflict;
- a cemetery made up of such graves; or
- any part of a cemetery containing such graves, without the prior written approval of the Council having been obtained on written application to the Council.
- General protection: Traditional burial places.—
- No grave—
- not otherwise protected by this Act; and
- not located in a formal cemetery managed or administered by a local authority, may be damaged, altered, exhumed, removed from its original position, or otherwise disturbed without the prior written approval of the Council having been obtained on written application to the Council.

The Council may only issue written approval once the Council is satisfied that—

- the applicant has made a concerted effort to consult with communities and individuals who by tradition may have an interest in the grave; and
- the applicant and the relevant communities or individuals have reached agreement regarding the grave.

General protection: Battlefield sites, archaeological sites, rock art sites, palaeontological sites, historic fortifications, meteorite or meteorite impact sites.—

- No person may destroy, damage, excavate, alter, write or draw upon, or otherwise disturb any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- Upon discovery of archaeological or palaeontological material or a meteorite by any person, all activity or operations in the general vicinity of such material or meteorite must cease forthwith and a person who made the discovery must submit a written report to the Council without delay.
- The Council may, after consultation with an owner or controlling authority, by way of written notice served on the owner or controlling authority, prohibit any activity considered by the Council to be inappropriate within 50 metres of a rock art site.
- No person may exhume, remove from its original position or otherwise disturb, damage, destroy, own or collect any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- No person may bring any equipment which assists in the detection of metals and archaeological and palaeontological objects and material, or excavation equipment onto any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, or meteorite impact site, or

- use similar detection or excavation equipment for the recovery of meteorites, without the prior written approval of the Council having been obtained on written application to the Council.
- The ownership of any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site, on discovery, vest in the Provincial Government and the Council is regarded as the custodian on behalf of the Provincial Government.” (KZN Heritage Act of 2008)

METHOD

The method for Heritage assessment consists of several steps.

The first step forms part of the desktop assessment. Here we would consult the database that has been collated by Umlando. These databases contains archaeological site locations and basic information from several provinces (information from Umlando surveys and some colleagues), most of the national and provincial monuments and battlefields in Southern Africa (<http://www.vuvuzela.com/googleearth/monuments.html>) and cemeteries in southern Africa (information supplied by the Genealogical Society of Southern Africa). We use 1st and 2nd edition 1:50 000 topographical and 1937 aerial photographs where available, to assist in general location and dating of buildings and/or graves. The database is in Google Earth format and thus used as a quick reference when undertaking desktop studies. Where required we would consult with a local data recording centre, however these tend to be fragmented between different institutions and areas and thus difficult to access at times. 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, there are several criteria that 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 time 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.

RESULTS

DESKTOP STUDY

The desktop study consisted of analysing various maps for evidence of prior habitation in the study area, as well as for previous archaeological surveys. The archaeological database indicates that there are archaeological sites in the general area (fig. 5). These sites include all types of Stone Age sites while Late Iron Age sites occur in fewer numbers. No sites occur in the study area.

No national monuments, battlefields, or historical cemeteries are known to occur in the study area. There is an Anglican Church with a cemetery on the opposite side of the road.

The first Surveyor General map of the farm dates to 1863 (fig 6). The map shows the houses but not the dam wall.

The 1937 aerial photographs show the farm buildings and the walling that is now covered in bushes and surrounded by trees (fig. 7). The walling forms two 'paddocks'.

This walling is not shown on the 1973 topographical map (fig. 8), even though it is still there.

FIG. 5: LOCATION OF KNOWN HERITAGE SITES NEAR THE STUDY AREA

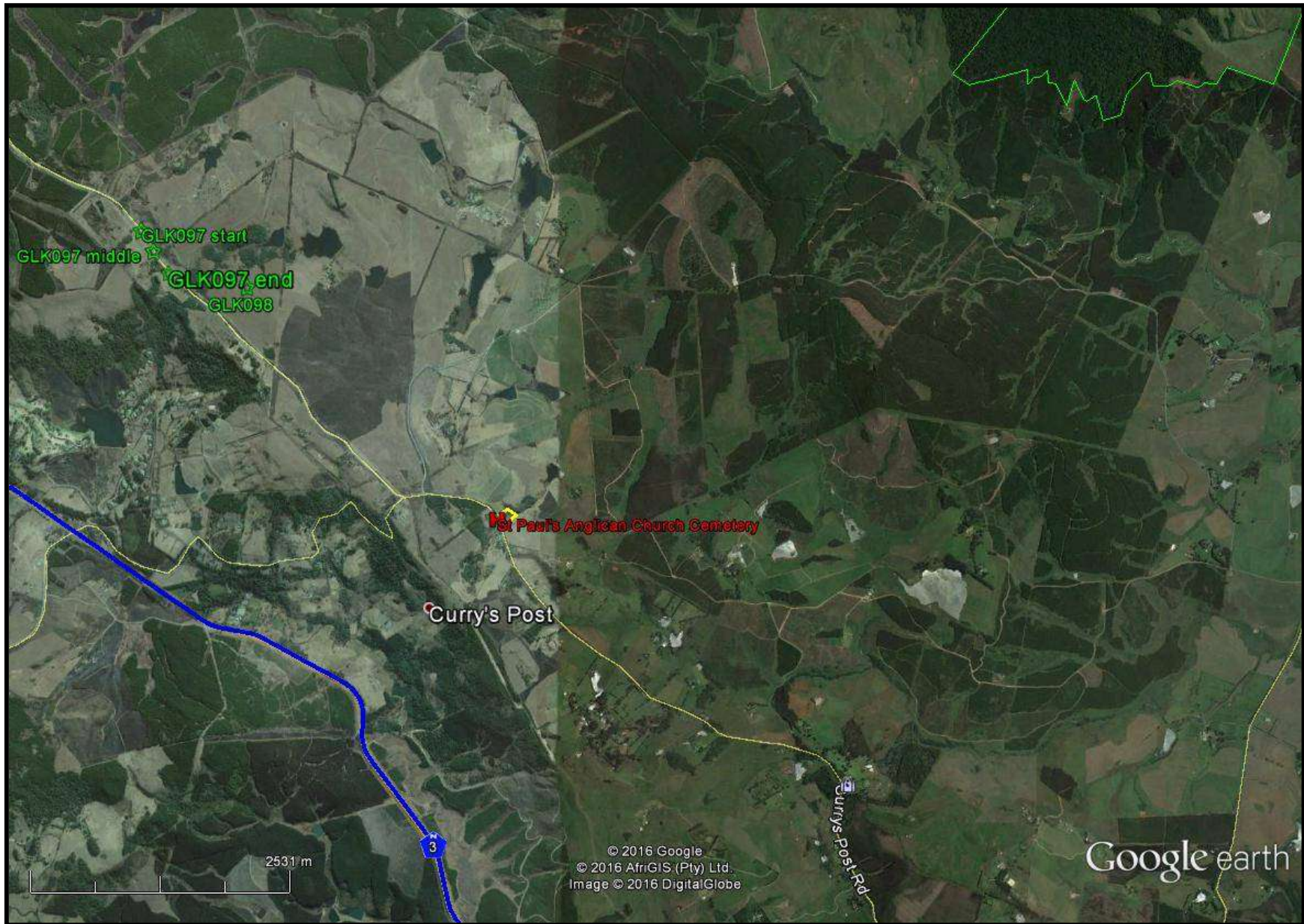


FIG. 6: ORIGINAL SURVEYOR GENERAL MAP (1863)

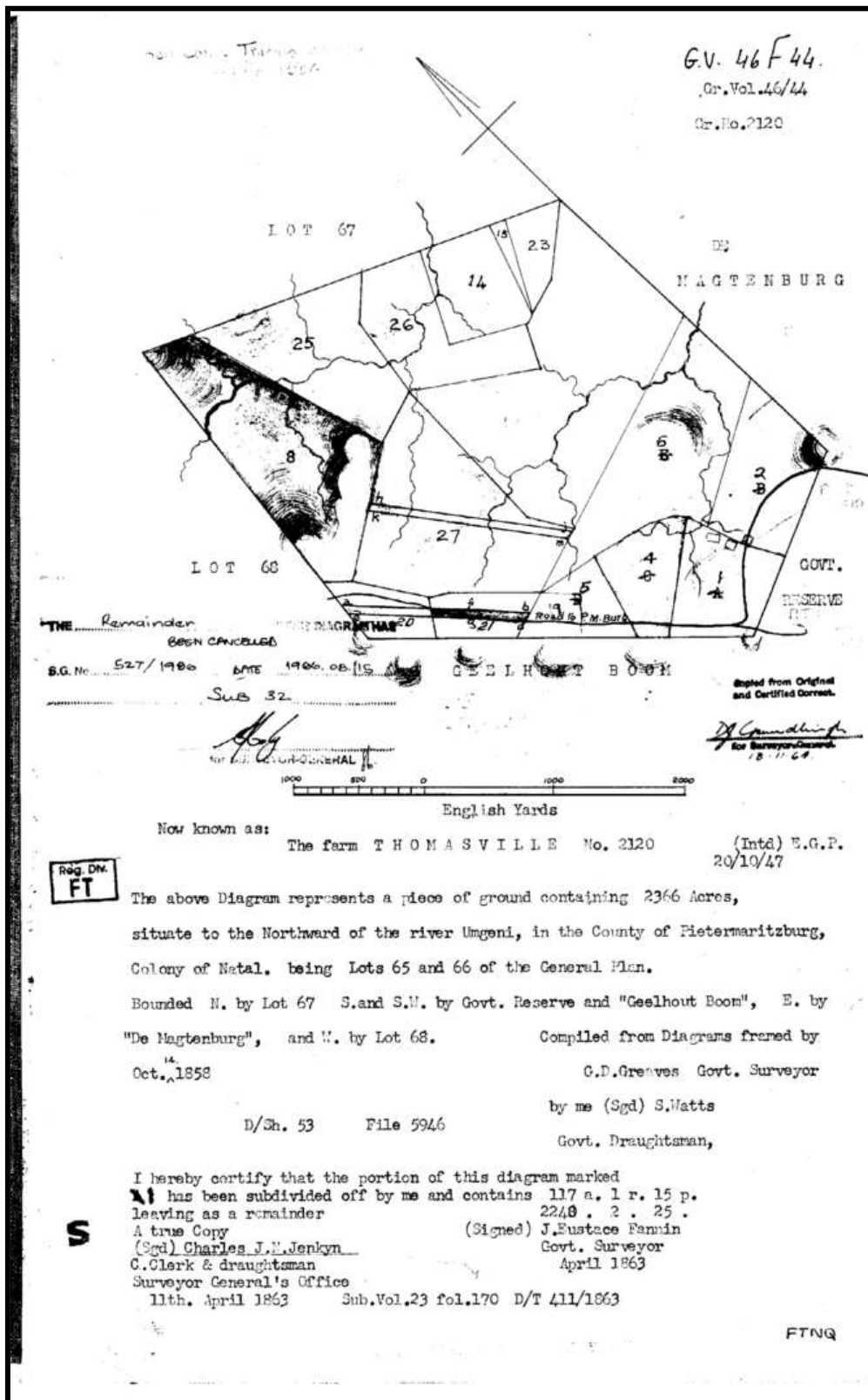
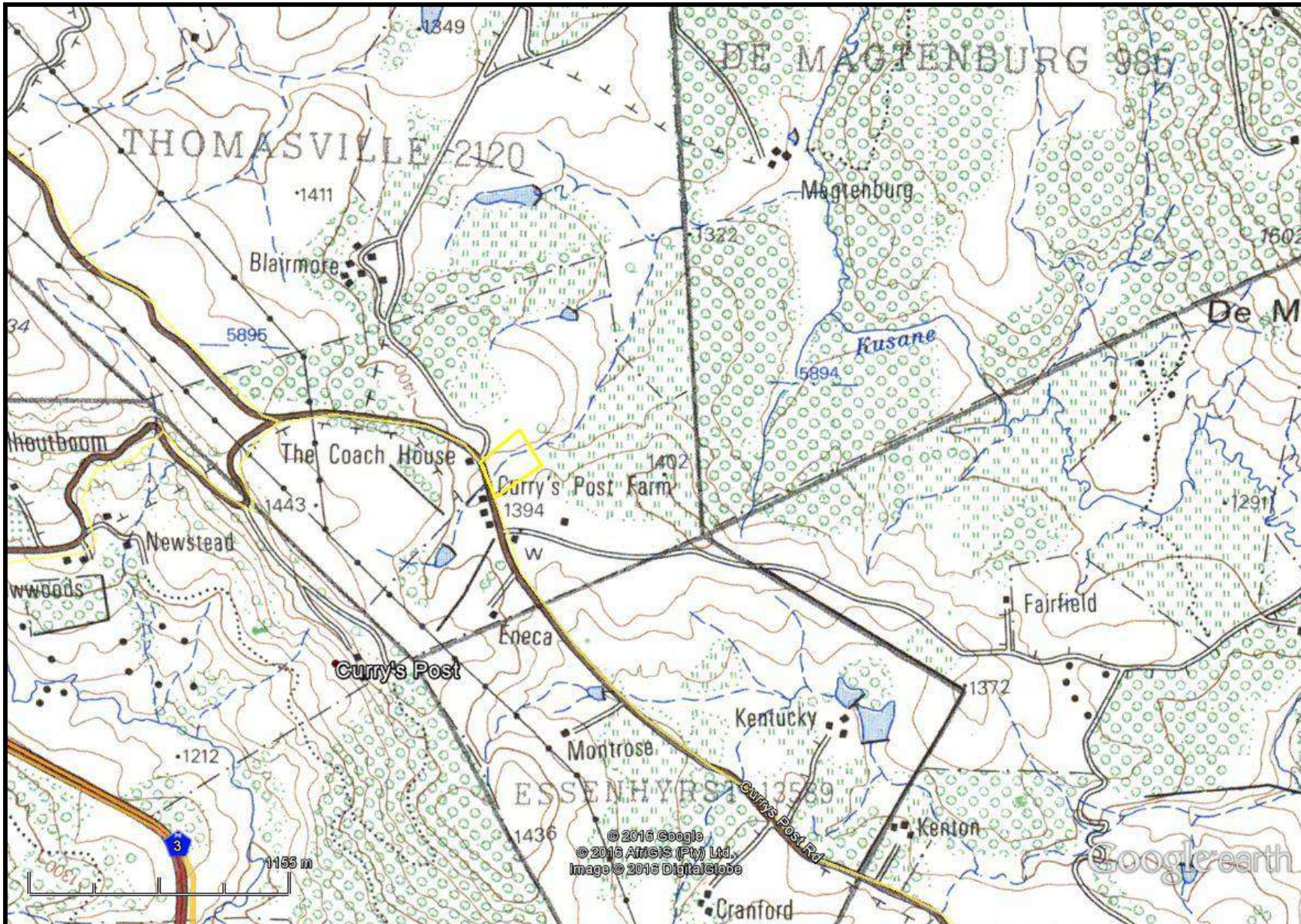


FIG. 7: STUDY AREA IN 1937



FIG. 8: STUDY AREA IN 1968



FIELD SURVEY

The field survey was undertaken in February 2016. The only heritage site that was recorded was the walling noted in the 1937 photographs. The walling is mostly in ruins and only partially intact along the north-eastern corner. The walling consists of various sized rocks that have been placed on top of each other to form a low wall. Most of the north-western side of the wall is very broken and ~50cm in height (fig. 9). The north-eastern section is higher but has been broken by the older trees (fig. 10). The far north-eastern corner is ~1m high and appears to be linked to two smaller walls (fig. 11).

There is no existing evidence that the original wall was plastered to retain water; however, this could have eroded over the decades. The wall is made from local dolerite boulders.

Significance: The walling is of low significance and is in a poor state of preservation.

Mitigation: The walling should be mapped and photographed.

SAHRA Rating: 3C

Management Plan: The walling has been mapped (fig. 12), and photographed (fig.'s 9 – 11). The locations of the GPS points are given in Table 1.

FIG. 9: NORTHEASTERN WALLING¹



¹ GPS = 11cm x 6 cm in size

FIG. 10: BROKEN WALLING BY TREES



FIG. 11: SEMI-IN TACT WALLING AT NORTHEASTERN CORNER



FIG. 12: GPS LOCATIONS OF THE WALLING



TABLE 1: GPS POINTS FOR THE HISTORICAL WALL

Point	Latitude	Longitude
1	-29.357584000	30.141587000
2	-29.357764000	30.141495000
3	-29.357871000	30.141436000
4	-29.357997000	30.141279000
5	-29.357996000	30.141275000
6	-29.358130000	30.141190000
7	-29.358424000	30.141113000
8	-29.358722000	30.141224000
9	-29.357842000	30.142201000
10	-29.357886000	30.142165000
11	-29.357825000	30.142196000
12	-29.357917000	30.142074000
13	-29.358025000	30.141999000
14	-29.358098000	30.141933000
15	-29.358161000	30.141839000
16	-29.358266000	30.141741000
17	-29.358345000	30.141652000
18	-29.358424000	30.141567000
19	-29.358613000	30.141476000
20	-29.358611529	30.141315348
21	-29.358525110	30.141423376

PALAEONTOLOGICAL IMPACT ASSESSMENT

Part of the dam occurs in the highly sensitive area for palaeontological sites (fig. 13). A Palaeontological Impact Assessment was not undertaken for the dam, as any paleontological levels will not be affected.

“Up there the weathering profile in mud rock/shale/siltstone should be quite thick. Within 2m of the surface there might be an irregular transition from clayey saprolite to fresh shale” (Dr Greg. Botha, pers. Comm. to Sarah Allan).

The basin will not affect these shale layers as it does not extend beyond 2m in depth. No further PIA is required.

FIG. 13: PALAEOLOGICAL SENSITIVITY



COLOUR	SENSITIVITY	REQUIRED ACTION
RED	VERY HIGH	field assessment and protocol for finds is required
ORANGE/YELLOW	HIGH	desktop study is required and based on the outcome of the desktop study, a field assessment is likely
GREEN	MODERATE	desktop study is required
BLUE	LOW	no palaeontological studies are required however a protocol for finds is required
GREY	INSIGNIFICANT/ZERO	no palaeontological studies are required
WHITE/CLEAR	UNKNOWN	These areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map.

MANAGEMENT PLAN

No further management is required. The walling has been mapped and photographed. These photographs will be uploaded to SAHRIS. The decision of whether a destruction permit is required for the wall, lies with Amafa KZN.

CONCLUSION

A heritage survey was undertaken for the proposed Thomasville Dam. The dam is small and will only cover 0.4 hectares. Only a broken stone wall was recorded. This wall predates 1937 and is thus protected by the KZN Heritage Act. The wall is of very low significance and no further mitigation is required.

While the proposed dam is in a palaeontologically sensitive area, the dam itself and the excavation of old wall material from the basin, will not affect fossil bearing horizons.

No further heritage mitigation is required for this project.