
PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT

**LAMAN LIME PROSPECTING APPLICATION:
FARM 101, FARM 102-1, FARM 206-2 AND FARM 206-5,
NDLAMBE MUNICIPALITY, EASTERN CAPE, SOUTH AFRICA**

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EXECUTIVE SUMMARY

TERMS OF REFERENCE:

Terreco Environmental has been appointed by the project proponent, the Laman Group (Pty) Ltd, to prepare the EIA and EMP for the proposed *Laman Lime Prospecting Application: Farm 101, Farm 102-1, Farm 206-2 and Farm 206-5, Ndlambe Municipality, Eastern Cape* (the *Laman Prospecting Project*). The application focuses on prospecting of 3 identified areas (Areas 1-3). Should sufficient reserves of limestone be identified to prove any of the 3 prospecting sites as a resource then Laman intends to establish mines at those respective sites. Mined material will be used to supply a factory that will produce cement and cement blocks. The intention is to develop the factory in one of the local towns with one of the outcomes being the provision of employment there. ArchaeoMaps was appointed by Terreco Environmental to prepare the Phase 1 AIA for the proposed *Laman Prospecting Project*.

THE PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT:

PROJECT AREA: Farm 101, Farm 102-1, Farm 206-2 and Farm 206-5, Ndlambe Municipality, Eastern Cape [1:50,000 Map Ref – 3326BD]. The application focuses on prospecting of three identified areas, summarized as:

- Area 1 (approximately 85ha) – Farm 206-5;
- Area 2 (approximately 100ha) – Farm 206-2 and Farm 206-5; and
- Area 3 (approximately 100ha) – Farm 101 and Farm 102-1.

GAP ANALYSIS: Phase 1 AIA assessment covered all 3 of the proposed prospecting sites

METHODOLOGY: Three day field assessment; GPS co-ordinates – Garmin Oregon 550; Photographic documentation – Pentax K20D. Archaeological and cultural heritage site significance assessment and mitigation recommendations – SAHRA 2007 system.

SUMMARY:

Sites	Period	Recommendations
Area 1 (85ha) – Farm 206-5		
A1S1	Colonial / Contemporary Period (?)	In situ conservation (Assessment at time of mining application)
Area 2 (100ha) – Farm 206-2 and Farm 206-5		
A2S1	Colonial Period – 1 st Birbury farmstead	In situ conservation
A2S2	Contemporary – Birbury farmstead	N/A
A2P1 & A2P1.1	Palaeontological	See palaeontological assessment
Area 3 (100ha) – Farm 101 and Farm 102-1		
A3S1	Stone Age (MSA)	In situ conservation
A3S2	Stone Age (MSA)	Archaeological monitoring at the time of prospecting impact
A3S3	Colonial Period – 1 st Lime Stone Hill residence	In situ conservation
A3S4	Colonial Period – 2 nd Lime Stone Hill farmstead	In situ conservation
A3S5	Contemporary – Whites Bush farmstead	N/A
Additional Archaeological and Cultural Heritage Sites		
A4S1	Colonial Period – School	In situ conservation
A4S2	Colonial Period – Church	In situ conservation
A4S3	Colonial Period – Cemetery	In situ conservation
A4S4	Colonial Period – Cemetery	In situ conservation
A4S5	Colonial Period – Clubhouse	In situ conservation

RECOMMENDATIONS:

With reference to cultural heritage compliance, as per the requirements of the NHRA 1999, it is recommended that the proposed *Laman Prospecting Project*, Ndlambe Municipality, Eastern Cape, proceeds as applied for provided the developer complies with the abovementioned recommendations.

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1) TERMS OF REFERENCE

Terreco Environmental has been appointed by the project proponent, the Laman Group (Pty) Ltd, to prepare the Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP), for the proposed *Laman Lime Prospecting Application: Farm 101, Farm 102-1, Farm 206-2 and Farm 206-5, Ndlambe Municipality, Eastern Cape* (the *Laman Prospecting Project*). The application focuses on prospecting of 3 identified areas (Areas 1-3). Should sufficient reserves of limestone be identified to prove any of the 3 prospecting sites as a resource then Laman intends to establish mines at those respective sites. Mined material will be used to supply a factory that will produce cement and cement blocks. The intention is to develop the factory in one of the local towns with one of the outcomes being the provision of employment there.

ArchaeoMaps Archaeological Consultancy was appointed by Terreco Environmental to prepare the Phase 1 AIA for the proposed *Laman Prospecting Project*.

❖ *Development Location, Details & Impact*

The proposed *Laman Prospecting Project* is situated near Bathurst in the Albany District of the Ndlambe Municipality, Eastern Cape. The general study site is located south of the N2, north-west of the R72 and east of the R67, roughly bounded by the Great Fish and Kap rivers to the north and the Kowie further to the south, with the Wes-Kleinemonde River running through the greater study site [1:50,000 Map Ref – 3326BD].

The application focuses on prospecting of three identified areas, summarized as:

- Area 1 (approximately 85ha) – Farm 206-5;
- Area 2 (approximately 100ha) – Farm 206-2 and Farm 206-5; and
- Area 3 (approximately 100ha) – Farm 101 and Farm 102-1.

The client, Laman Group (Pty) Ltd, wish to prospect for limestone material at the 3 Bathurst sites (Areas 1-3). An initial desktop geological assessment of the area has indicated that limestone is present at the 3 sites. Should sufficient reserves of limestone be identified to prove any of the three prospecting sites as a resource then Laman intends to establish quarries at those respective sites. The mined material will be used to supply a factory that will produce cement and cement blocks. The intention is to develop the factory in one of the local towns in the area and therefore provide employment there (Pers. Comm: Duncan Scott).

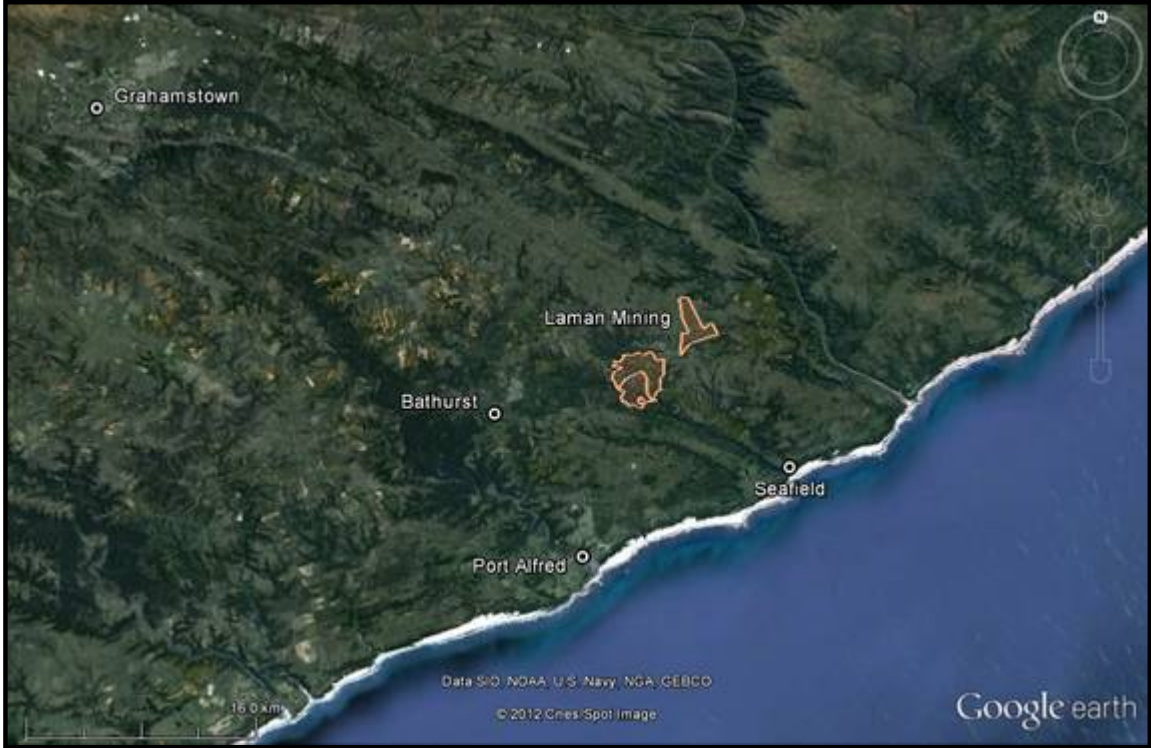


Figure 1: General locality of the proposed *Laman Prospecting Project* study site in relation to Grahamstown, Bathurst, Port Alfred and Seafeld, Eastern Cape



Figure 2: Proposed prospecting areas on applicable farm portions

2) THE ARCHAEOLOGICAL IMPACT ASSESSMENT

❖ *Archaeological Legislative Compliance*

The Phase 1 Archaeological Impact Assessment (AIA) was done for purposes of compliance to the South African Heritage Resources Agency's (SAHRA) requirements in terms of the National Heritage Resources Act, No 25 of 1999 (NHRA 1999), with specific reference to Section 38.

The Phase 1 AIA was requested as specialist sub-section with findings and recommendations thereof to be included in the Environmental Impact Assessment (EIA) and Environmental Management Plan / Program (EMP), of the project in compliance with requirements of the Minerals and Petroleum Resources Development Act, No 28 of 2002 (MPRDA 2002), the National Environmental Management Act, No 107 of 1998 (NEMA 1998) and associated Regulations (2006 and 2010) and the NHRA 1999.

The Phase 1 AIA aimed to locate, identify and assess the significance of cultural heritage resources, inclusive of archaeological deposits / sites, built structures older than 60 years, burial grounds and graves, graves of victims of conflict and cultural landscapes or viewsapes as defined and protected by the NHRA 1999, that may be affected by the proposed development.

This report comprises of a basic AIA, including a basic pre-feasibility, Phase 1 AIA and brief comments on the cultural landscape only. The report does not include any specialist heritage components inclusive of socio-cultural consultation, historical architecture or a full cultural landscape interpretation.

❖ *Methodology & Assessor Accreditation*

The Phase 1 AIA was done over a 3 day period (2012-04-09, 04-23 to 04-24) by one archaeologist. The assessment was done by foot and off-road vehicle and limited to a Phase 1 surface survey; no excavation or sub-surface testing was done. GPS co-ordinates were taken with a Garmin Oregon 550 (Datum: WGS84). Photographic documentation was done with a Pentax K20D camera. A combination of Garmap and Google Earth software was used in the display of spatial information.

SAHRA ARCHAEOLOGICAL AND CULTURAL HERITAGE SITE SIGNIFICANCE ASSESSMENT			
<i>SITE SIGNIFICANCE</i>	<i>FIELD RATING</i>	<i>GRADE</i>	<i>RECOMMENDED MITIGATION</i>
High Significance	National Significance	Grade 1	Site conservation / Site development
High Significance	Provincial Significance	Grade 2	Site conservation / Site development
High Significance	Local Significance	Grade 3A / 3B	Site conservation or extensive mitigation prior to development / destruction
High / Medium Significance	Generally Protected A	-	Site conservation or mitigation prior to development / destruction
Medium Significance	Generally Protected B	-	Site conservation or mitigation / test excavation / systematic sampling / monitoring prior to or during development / destruction
Low Significance	Generally Protected C	-	On-site sampling, monitoring or no archaeological mitigation required prior to or during development / destruction

Table 1: SAHRA archaeological and cultural heritage site significance assessment

Archaeological and cultural heritage site significance assessment and associated mitigation recommendations were done according to the system prescribed by SAHRA (2007).

The assessment was done by Karen van Ryneveld (ArchaeoMaps):

- Qualification: MSc Archaeology (2003) WITS University.
- Accreditation:
 1. 2004 – Association of Southern African Professional Archaeologists (ASAPA) – Professional Member.
 2. 2005 – ASAPA CRM Section: Accreditation – Field Director (Stone Age, Iron Age, Colonial Period).
 3. 2010 – ASAPA CRM Section: Accreditation – Principle Investigator (Stone Age).

Karen van Ryneveld is a SAHRA listed CRM archaeologist.

❖ *Coverage and Gap Analysis*

The Phase 1 AIA covered the total of the cumulative approximate 285ha study sites:

- Area 1 – approximately 85ha (Farm 206/5);
- Area 2 – approximately 100ha (Farm 206/2 & 206/5); and
- Area 3 – approximately 100ha (Farm 101 & 102/1).

Thick vegetation across the study sites obscured surface visibility, often in totality and assessment in plantations were limited to cleared pathways.

Phase 1 AIA assessment findings do not represent an all inclusive record of sites that may be situated on the relevant properties and surrounds. Assessment was focused on the 3 proposed study sites.

2.1) PRE-FEASIBILITY ASSESSMENT

Based on the basic introductory literature assessment of South African archaeology (see Appendix – A) the probability of archaeological and cultural heritage sites within the proposed *Laman Prospecting Project* study sites can briefly be described as:

1. **EARLY HOMININ** : Probability – *None*

2. **STONE AGE**
 - a. ESA : Probability – *Low – Medium*
 - b. MSA : Probability – *Medium – High*
 - c. LSA : Probability – *High* (Human remains may be expected; should they be identified they will be of both scientific and social significance)
 - i. Rock Art : Probability – *None*
 - ii. Shell Middens : Probability – *High*

3. **IRON AGE**
 - a. Early Iron Age : Probability – *None – Low*
 - b. Middle Iron Age : Probability – *None*
 - c. Later Iron Age : Probability – *Medium* (Human remains expected to be in direct association with archaeological and contemporary sites – of scientific / social significance)

4. **COLONIAL PERIOD**
 - a. Colonial Period : Probability – *Medium – High* (Human remains expected to be primarily associated with formal cemeteries)
 - i. Iron Age / Colonial Period Contact : Probability – *Medium*
 - ii. Industrial Revolution : Probability – *Low – Medium*

A number of Cultural Resources Management (CRM) projects are recorded in the SAHRA mapping project (2009) database situated within an approximate 50km radius from the *Laman Mining – Bathurst* project study site, summarized as:

- Attwell, M. (Melanie Attwell & Associates). 2006. *Carpe Diem: Heritage Impact Assessment*. (SAHRA reference: 2006-SAHRA-0347);
- Binneman, J. (Albany Museum). 2006a. *Archaeological Heritage Impact Assessment for the proposed Carpe Diem Coastal Eco-Estate Development, Great Fish Point: Coastal Farland Survey (Palmiet Annex)*. (SAHRA reference: 2006-SAHRA-0314);
- Binneman, J. (Albany Museum) 2006b. *Phase 1 Archaeological Heritage Impact Assessment for the proposed Mixed Use Development on the Farm Rosehill, Erf No 20, Port Alfred, Ndlambe Municipality District, Eastern Cape*. (SAHRA reference: 2006-SAHRA-0438);
- Nilssen, P.J. (CHARM). 2007. *Archaeological Heritage Impact Assessment. Remainder Portion 3 of the Farm Boekenhoutfontein No 297 and Remainder Portions 6 and 1 of Portion 1 of the Farm Assegaai Bush No296: Establishment of Game Lodges and Resorts to be incorporated into the Greater Lalibela Nature Reserve, Eastern Cape*. (SAHRA reference: 2007-SAHRA-0479);

- Van Ryneveld, K. (ArchaeoMaps). 2007a. *Phase 1 Archaeological Impact Assessment: Upgrade of the Waste Water Treatment Works, Port Alfred, Eastern Cape, South Africa.* (SAHRA reference: 2007-SAHRA-0431);
- Van Ryneveld, K. (ArchaeoMaps). 2007b. *Phase 1 Archaeological Impact Assessment: Thornhill Phase 1 Ministerial Housing Project, Port Alfred, Eastern Cape, South Africa.* (SAHRA reference: 2007-SAHRA-0545);
- Van Ryneveld, K. (ArchaeoMaps). 2007c. *Phase 1 Archaeological Impact Assessment: Thornhill Phase 2 Ministerial Housing Project, Port Alfred, Eastern Cape, South Africa.* (SAHRA reference: 2007-SAHRA-0556);
- Van Ryneveld, K. (ArchaeoMaps). 2008. *Phase 1 Archaeological Impact Assessment: The Albany Regional Water Supply Scheme, Eastern Cape, South Africa.* (SAHRA reference: 2008-SAHRA-0136);
- Van Schalkwyk, L.O. & Wahl, B. (eThembeni). 2008a. *Heritage Impact Assessment of Ndlambe and Makana Borrow Pits, Greater Cacadu Region, Eastern Cape Province, South Africa.* (SAHRA reference: 2008-SAHRA-0543);
- Van Schalkwyk, L.O. & Wahl, B. (eThembeni). 2008b. *Heritage Impact Assessment of Four Borrow Pits, Ndlambe and Makana Municipalities, Greater Cacadu Region, Eastern Cape Province, South Africa.* (SAHRA reference: 2008-SAHRA-0546);
- Webley, L.E. (Albany Museum). 2006. *Heritage Impact Assessment of the proposed location for the Sewage Works at Nolukhanyo, Bathurst, Eastern Cape.* (SAHRA reference: 2006-SAHRA-0248);
- Webley, L.E. (Albany Museum). 2007a. *Phase 1 Heritage Impact Assessment: Sand Mining on the Farm Commando Valley 273, situated in the Magisterial District of Alexandria, Eastern Cape.* (SAHRA reference: 2007-SAHRA-0064);
- Webley, L.E. (Albany Museum). 2007b. *Heritage Impact Assessment on Portions of Farms Boekenhout Fontein, Assegaai Bush and Birchwood Park for the Establishment of Game Lodges and Resorts to be incorporated into the Greater Lalibela Nature Reserve, Eastern Cape.* (SAHRA reference: 2007-SAHRA-0179);
- Webley, L.E. (Albany Museum). 2007c. *Heritage Impact Assessment: La Repose Development, Alexandria, Eastern Cape.* (SAHRA reference: 2007-SAHRA-0478);
- Webley, L.E. (Albany Museum). 2007d. *Phase 1 Heritage Impact Assessment: Harvest Vale Development. Kariega Game Reserve, Eastern Cape.* (SAHRA reference: 2007-SAHRA-0408);
- Webley, L.E. (Albany Museum). 2007e. *Letter of Recommendation for the Exemption of a Full Phase 1 Archaeological Impact Assessment: Development of a Retirement Village on a Portion of the Farm Port Alfred Park in the District of Ndlambe, Eastern Cape.* (SAHRA reference: 2007-SAHRA-0581);
- Webley, L.E. & Way-Jones, M.F. (Albany Museum). 2007a. *Phase 1 Heritage Impact Assessment on Erven 1, 44, 7586 and 4979, Rhodes University, Grahamstown.* (SAHRA reference: 2007-SAHRA-0574; and
- Webley, L.E. & Way-Jones, M.F. (Albany Museum). 2007b. *Phase 1 Heritage Impact Assessment of the Proposed Development of Ornee Cottage, Botanical Gardens, Grahamstown.* (SAHRA reference: 2007-SAHRA-0063).

More recent CRM studies may well have been done in the more immediate Bathurst area, studies done by Archaeomaps can be referenced as:

- Van Ryneveld, K. (ArchaeoMaps). 2011. *Phase 1 Archaeological Impact Assessment: The Albany / Kowie Power Line (& Bathurst Substation), Grahamstown to Port Alfred, Eastern Cape, South Africa.* Unpublished report to Arcus Gibb; and
- Van Ryneveld, K. (ArchaeoMaps). 2012. *Phase 1 Archaeological Impact Assessment: Refurbishment, Operation and Maintenance of the Port Alfred East Bank Dune Well Water Supply Scheme, Port Alfred, Ndlambe Municipality, Eastern Cape, South Africa.* Unpublished report to FieldWork / Terreco Environmental.

The majority of sites identified through CRM studies highlight the significance of Colonial Period presence on the landscape, more specifically from the time of the 1820 Settlers onwards. Iron Age presence is reported on mainly through comment, without specific reference to Iron Age sites, relating to the impact of later Iron Age Xhosa warring parties during the course of the Frontier Wars on Colonial settlement and society. Stone Age resources across the general area are of significance, very prominently Later Stone Age (LSA) sites, reported on both further inland, often associated with shelters containing Rock Art and along the coast, as 'Strandloper' type sites (Hewitt 1921).

[The Albany Museum, the SAHRA accredited Regional Data Recording Centre for the Eastern Cape region was contacted with regards to database access (SAHRA 2007). At the time of submission of this report database access could not be obtained, based on research department policy compilation procedures (E-mail correspondence with Dr. Johan Binneman, Head of Archaeology, Albany Museum – 2012-01-16, 01-31, 02-05 and 04-10)].

❖ 1820 SETTLER HISTORY:

At the end of the 18th Century conflict between Britain and France resulted in British military annexation of the Cape (1795). In 1802, after peace agreement between Britain and France, the Cape finds itself back in the hands of the Netherlands, or Batavia. But merely 4 years later (1806), following a fierce battle on the beaches of Cape Town, with British defeat of Dutch troops, the Cape finds itself yet again belonging to England. It is however only in 1814, after the French Revolution and at the end of the Napoleonic Wars in Europe, that the Cape Colony is officially ceded to Britain; formally purchased by the British from the Dutch for the sum of £6,000,000 (Giliomee & Mbenga 2007; <http://www.genealogyworld.net/settlers/tessa.htm>).

Lord Charles Somerset, appointed as Cape Governor in 1814, immediately set out to request British support, but the British Government was not prepared to give more finance to the army and Somerset began to lobby for more people, to be settled in the Eastern Cape in particular (Giliomee & Mbenga 2007), by means of an '*Immigration Scheme*'. With the onset of the 5th Frontier War (1818) the British Government decided to take action and appointed a Committee to investigate the feasibility of Somerset's scheme. In 1819 they voted to spend £50,000 on the implementation thereof (<http://www.genealogyworld.net/settlers/tessa.htm>).

The '*Immigration Scheme*' was three-fold in nature (<http://www.genealogyworld.net/settlers/tessa.htm>):

1. To settle the disputed eastern frontier of the Cape of Good Hope with an agrarian farming community whose presence would discourage Xhosa pastoralists and cattle raiders from crossing the Colonial boundary;
2. To increase the English speaking community in the new Colony: It was believed that the Settlers would reinforce British cultural tradition, support the more liberal British administrative system and that English would become the language of preference in the new British Colony; and
3. To ease political tensions in Britain that had been stretched to breaking point in post-war unemployment, industrialization and poor trade.

Initial selection for the scheme was to be limited to men who could afford to engage and maintain a party of at least 10 able bodied laborers over the age of 18, with or without families. In return they would receive free passage and *victuals* and be granted 100 acres of land in the Eastern Cape, plus 100 acres per man in their party. Within the scheme 'Settler Parties' were intended to be made up of middle to higher class people with some capital for investment, to be settled in the greater Albany area where English villages would be established. Deposits were required: Single men and women at £10; Families consisting of a husband, wife and 2 children at £10; Children between 14-18 years at £5; and those under 14 at £2.10s. If a 'Settler Party' included 100 families they would be permitted to take a clergyman of their denomination with, the salary of which would be paid by the Government.

On arrival at the Cape the Settlers were to remain on their land for a period of three years after which the land would be transferred to them (<http://www.genealogyworld.net/settlers/tessa.htm>).

The British Government was absolutely bombarded with 'Settler Party' application lists, with almost 90,000 applications received; prove of the emigration craze that gripped England at the time in order to escape post-war poverty. The scheme provided a way for the poor to own land and have freedom that they would not have experienced within British social structure. Many applications were from the middle to lower classes of society and included party lists and individual applications. Received applications were reduced to approximately 50,000, and of those less than 4,000 were granted emigration. More than 20 countries were involved, including Ireland and Scotland; people literally 'gravitated' to London to be included in the lists, making it particularly difficult to establish where applicants were born and bred (<http://www.genealogyworld.net/settlers/tessa.htm>).

Three types of 'Settler Parties' formed (<http://www.genealogyworld.net/settlers/tessa.htm>):

1. The *Proprietary* or *Sole-proprietary* parties, which consisted of a party leader, usually a man with some capital and indentured servants or laborers that were tied by contract to work for that party leader for a number of years, ranging from 3-10 years, for an annual salary, after which they would be given a piece of land of their own. This was the type of party the British Government had envisaged, but these only formed a small part of the 'Settler Parties' who eventually sailed for the Cape.
2. The majority of the parties comprised of what was known as *Joint-stock* or *Co-operative* parties. These were loosely-knit voluntary organizations in which leadership was purely nominal and each man contributed his own £10 deposit. Parties were organized on a basis of mutual assistance, shared labor and jointly owned stock of tools and implements. The heads of these parties would receive title to the party's grant of land but it was agreed that this would be divided and shared amongst party members as soon as possible. People were recruited by means of tavern meetings and advertisements and often consisted of families with many children. Many of the smaller rejected parties joined others to form large *Joint-stock* parties.
3. The third group were the *Independent* parties, which actually fell outside the parameters of the scheme but were included as part of the 1820 Settlers. These were the parties led by Major-General Charles Campbell, Lieutenant Richard Daniell and George Wilkinson. They paid their own way without assistance from the Government in return for their land allocations.

[As it turned out only 4 of the 54 parties consisted of the poor, where Parishes had raised money and assisted with the deposits, the Nottingham Party being one. Parishes were not allowed to use money from the 'poor relief' to pay deposits for their members.]

The 54 approved 'Settler Parties' can be listed as (<http://www.genealogyworld.net/settlers/tessa.htm>):

Baillie's Party, Barker's Party, Biggar's Party, Bowker's Party, Bradshaw's Party (Cam Parish Party), Butler's Party, Calton's Party (the Nottingham Party), C. Campbell's Party, D. Campbell's Party, Carlisle's Party, Clark's Party, Cock's Party (Society of Free Settlers), Crause's Party, Dalgairns' Party, Daniell's Party, Dixon's Party, Dyason's Party (the Isle of Thanet Party), Erith's Party, Ford's Party, Gardner's Party, Greathead's Party, Hayhurst's Party, Holder's Party, Howard's Party, Hyman's Party, James' Party, Liversage's Party, Mahoney's Party, Mandy's Party, Menezes' Party, Mills' Party, Morgan's Party, Mouncey's Party, Osler's Party, Owen's Party, Parkin's Party, Philipps' Party, Pigot's Party, Richardson's Party, Rowles' Party, Scanlan's Party, Scott's Party, Sephton's Party (the Salem Party), G. Smith's Party, W. Smith's Party, Southey's Party, Stanley's Party, Thornhill's Party, Turvey's Party, Wainwright's Party, Wait's Party, Wilkinson's Party and Willson's Party (for purposes of this report the Calton or Nottingham and the Richardson Parties are directly applicable, with specific reference to Settler surnames Bradfield, Elliot and Hulley).

Settlers were to embark the ships in December 1819, but many, due to snow, only left in February / March, arriving in the Cape in June / July 1820. Ships used included the *Chapman*, the *Nautilus*, the *Northampton*, the *Ocean*, the *Weymouth*, the *Kennerley Castle*, the *John*, the *Stentor*, the *East Indian*, the *Fanny*, the *La Belle Alliance*, the *Zoroaster*, the *Albury*, the *Sir George Osborn*, the *Aurora* and the *Briliant*. As the ships arrived at Table Bay the new Settlers were met by Henry Ellis, Deputy Colonial Secretary of the Cape and other officials. However, arrival at Algoa Bay proved to be a disappointment: Some 2,000 tents were set up to house the Settlers. *Canvas Town* became a bustling camp of Settlers from all walks of life, their pets, livestock and implements and for the well-off privileged quarters and sophisticated social entertainment with officials. From Algoa Bay Settlers were transported by commissioned Dutch wagons. Wagons followed established routes and moved along in one day stages, stopping overnight at usual *outspan* places, with journeys that took anything from 9-14 days. Good rains had just fallen and many of the early letters back to England specifically mentions the beautiful lush countryside (<http://www.genealogyworld.net/settlers/tessa.htm>).

Colonel Cuyler met the Settlers as they arrived and assigned them out to their settlements, which were surveyed from the top of a hill just outside Bathurst, at the time the magisterial seat of the Eastern Cape. Today a monument, the Settlers Toposcope, is erected at the hill. The monument is in the shape of a circular wall, to which brass plates have been secured, positioned to face the relevant settlements. On each is inscribed the name of the Party, their ship and the number of miles to their location. The Government Surveyor, J. Knobel, had been given the task of dividing Albany into locations for the various Parties. Knobel had endeavored to give each location direct access to water and had cautioned authorities that water sources were unreliable; a warning that was sadly ignored (<http://www.genealogyworld.net/settlers/tessa.htm>).

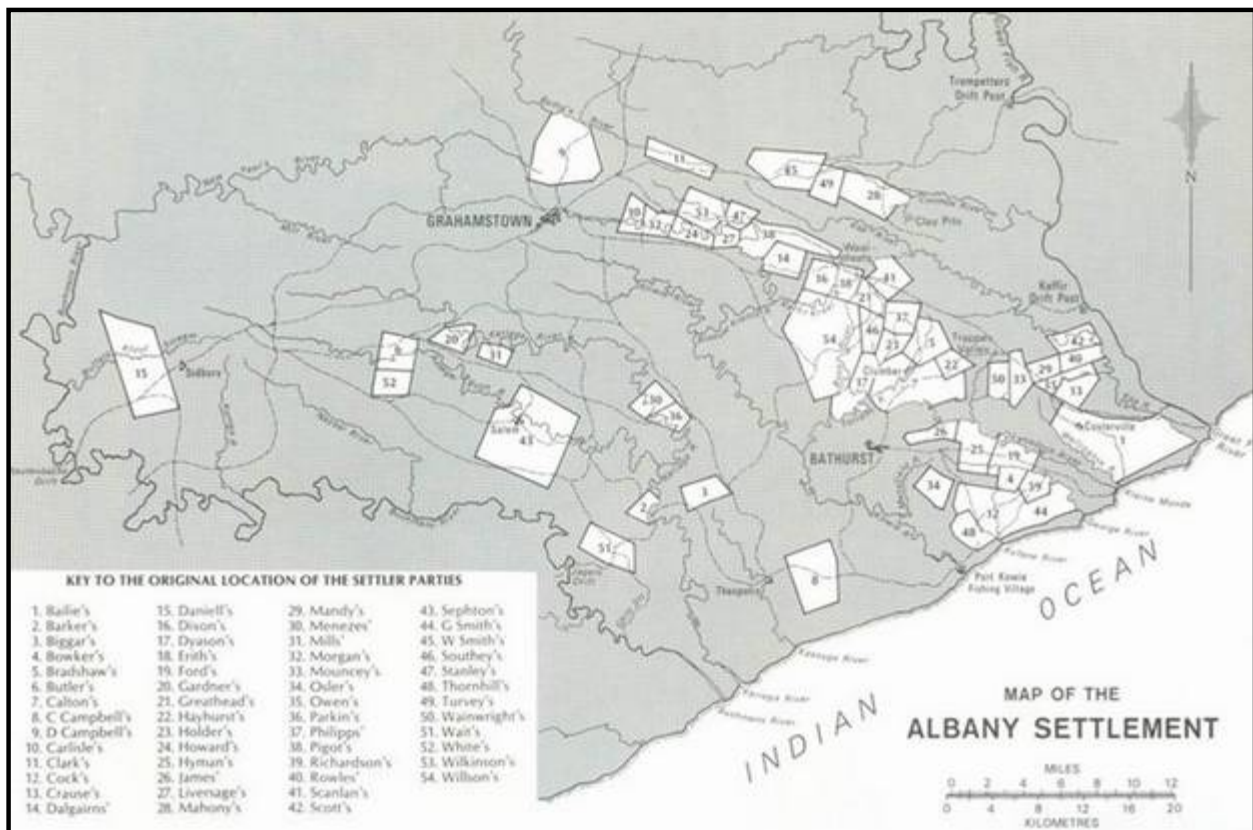


Figure 3: Initial location of the Settler Parties, as surveyed by J. Knobel, Government Surveyor of the Cape Colony (<http://www.genealogyworld.net/settlers/tessa.htm>)

Tents were used for shelter as Settlers set out to build their simple homes, for many, for the first time on land that they owned, or would own in the foreseeable future. Crops were planted from seeds bought in Algoa Bay. No outside labor were allowed; everything had to be done by the Settlers themselves, the majority of whom without a farming background. Their hopes for a future were crushed when the first crops were destroyed by rust; more rations were requested and soon it turned out that their initial deposits were not sufficient. Some were forced to find work in Bathurst, but under the Albany system of permits and passes Settlers were not allowed to leave their locations. In 1821 Major-General Sir Rufane Donkin, temporarily replacing Somerset while he was in England, relaxed the permit system and men with trades were allowed to go to Grahamstown and as far as Uitenhage in search of work. Fortunately many Settlers were trained artisans; a saving grace as it became apparent that Somerset's scheme was failing. But times were hard and artisan Settlers were paid in kind or on credit only for their skills. At this time the Settlers were still not aware that they had in fact been brought to the country to serve primarily as human buffer between the Xhosa and the Cape. In February 1821 the Settlers had their first encounter with the Xhosa, as the Xhosa arrived to collect clay from the clay pits for their annual ceremonies. Despite great consternation the first encounter with the Xhosa was at least reported as a fairly 'friendly' encounter (<http://www.genealogyworld.net/settlers/tessa.htm>).

As the second crops failed on virtually non-arable land it became apparent that 100 acres of land was not sufficient for crops (including grazing and residential areas). Little by little more Settlers left the settlements (with more land becoming available for distribution to those who stayed). In 1822-1823 a third crops failed. Up and until then the Xhosa had kept their distance, but in 1822 Richard Freemantle was killed. John Stubbs, believed to have been killed, disappeared (his body was never found). Thomas Scanlen has all his cattle stolen and 2 boys from Willson's Party north of Bathurst also go missing. Severe droughts mark the beginning of 1823, followed by disastrous floods that ravage the countryside with the little that some had left swept away in floodwaters. With partial relief secured for some through the *Society for the Aid of the Distressed*, complaints and pleas for help seemed to have fallen on deaf ears and it is only in 1825 that Somerset decided to visit the area and investigate the requests of the Settlers: He granted some additional land and for the first time Settlers were allowed to trade with the interior (<http://www.genealogyworld.net/settlers/tessa.htm>).

Proclamation of Settler land records indicate that by 1845 the Calton or Nottingham part was reduced from the original 43 greater family names to only 12 still farming in the area and including Bager, Bradfield, Elliot, Goulding, Hartley, Jackson, Keeton, Pike, Radford, Tarr, Timm and Valentine, while Settler families Goldswan, Hulley, Shone and Woods bought into the area. No records are available for the Richardson's Party, aside from family names who bought into other Settler Party areas (<http://www.1820settlers.com>).

➤ **Proclamation of Settler Lands - 1845- Records (with reference to family names Bradfield, Elliot and Hulley) –** (<http://www.1820settlers.com>):

- ***From Calton's, or the Nottingham Party:***

- Richard BRADFIELD, Lot No 5 – 96 morgen, surveyed for said RADFORD, being the share of Thomas GOULDING, who sold to said RADFORD;
- Richard BRADFIELD, Lot No 4 – 96 morgen, surveyed for him being the share of Joseph BRADFIELD, sold to said Richard BRADFIELD;
- Richard and Joseph BRADFIELD, Lot No 7 – 96 morgen, surveyed for the late John BRADFIELD senior, being the share of the said John BRADFIELD, the father of the present claimants, who appear to have purchased the claims of the other surviving members of the family to the said land;

- Joseph BRADFIELD, Lot No 8 – 96 morgen, surveyed for him, being the share of John MORRIS, sold to the said Joseph BRADFIELD;
- Richard and Joseph BRADFIELD, Lot No 14 – 96 morgen, allotted to and surveyed for John BRADFIELD junior, who sold to said Richard and Joseph BRADFIELD;
- Joseph BRADFIELD, Lot No 15 – 96 morgen, being the share allotted to and surveyed for Edmund BRADFIELD, who sold to said Joseph BRADFIELD;
- Richard BRADFIELD two thirds and Joseph BRADFIELD one third of Lot No 16 – 96 morgen allotted to and surveyed for Francis ALLISON , who sold to John and Edmund BRADFIELD, who sold to Richard and Joseph BRADFIELD;
- Joseph BRADFIELD, Lot No 19 – 96 morgen allotted to and surveyed for George HODGKINSON, who sold to Joseph BRADFIELD;
- Richard HULLEY, Lot No 28 – 96 morgen, surveyed for him, being the share of George DENNISON, who sold to Thomas WEBSTER, who sold to Richard SIMPSON, who sold to said HULLEY;
- William ELLIOT, Lot No 32 – 96 morgen, being the share allotted to and surveyed for the said ELLIOT; and
- Mark ELLIOT, Lot No 33 – 96 morgen, being the share allotted to and surveyed for the said ELLIOT.

- ***From Wilson's Party:***

Objections lodged against the recommendation of the Board of Commissioners for Land as published by proclamation on 29 August 1844:

- 1st – Ann HULLEY against No 4 in Cawood's Party, Caffre Drift, in favor of Samuel CAWOOD, 694 morgen.

- ***From Cawood's Party:***

- 4th – Richard HULLEY, 694 morgen, being the 2 shares surveyed respectively for Stephen GRADWELL and Robert FOXCROFT, who both sold to Richard KILBRECK, who sold to Samuel CAWOOD, who sold to Richard HULLEY, as appears by claim 223-D-A-Albany, and objection lodged by Ann HULLEY in terms of Section 2D of Ordinance No 15, 1844. This claim is subject, however, in common with the rest of CAWOOD's Party, to a general objection lodged by Richard HAYHURST.

- ***From Cawood's Party – Kaffir Drift:***

- Except in so far as regards the sub-division 4th, in which case, on the objection of Ann HULLEY, and not the objection lodged by Richard HAYHURST, they have amended their previous report, and have recommended Richard HULLEY as the person entitled to receive the grant instead of Samuel CAWOOD.

RICHARDSON'S PARTY

Richardson's Party – Colonial Department list No. 24: Led by James Richardson, a corn dealer of Heartshead, Sheffield, Yorkshire.

Information on the party is limited: Richardson wrote to the Colonial Department in August 1819, proposing to organize a group of families to emigrate from Sheffield on the condition that their passage had to be free of charge for economic reasons. A day later the application was followed with a list of names, including Richardson, Charles and William Denton, their families, and eight single men; all eight of which dropped out. Permission had to be obtained for replacements before the party was allowed to board the *Stentor* at Liverpool. According to Special Commissioner William Hayward's notes (1824), the party originally included seven servants, five employed by Richardson and two by William Denton, but it was unclear how the party was organized and funded, or which of the 11 men for whom deposits were paid were under indentures and which free Settlers.

The *Stentor* left Liverpool on 13 January 1820, reaching Table Bay on 19 April. Her charter expired at Table Bay and the Settler parties on board were disembarked. The parties led by Griffith, Neave and White were transported overland to their locations at the Zonder End River and the north-country parties led by Richardson and George Smith were transshipped to the *Weymouth*, reaching Algoa Bay on 15 May. Richardson's party was located in Albany on the right bank of the George River.

❖ **LIST OF RICHARDSON'S PARTY:**

BRADSHAW, John 24. Cutler.

CLAYTON, George 29. Farmer. w Elizabeth 30.

CLAYTON, William 32. Farmer. w Judith 30. c John 7, Ann 5, Elizabeth 3.

DENTON, Charles 38. Laborer. w Hannah 39. c Ann 13.

DENTON, William 26. Laborer and army pension. w Mary 26. c William 1.

HULLEY, Richard 34. Farmer. w Ann 33. c Richard 9, Ann 6, Sarah 4, Francis 1.

KENNEDY, Jonathan 24. Farmer.

MOSLEY, Joshua 20. Cutler.

NOON, Richard 21. Farmer.

RICHARDSON, James 25. Corn dealer. w Sarah 29. c John 4, Emma 3.

SENIOR, Elizabeth 12, James 8 and Martha 8 (stepchildren of James Richardson).

WELCH, Luke 25. Farmer. w Mary 30.

*MOSLEY, George.

(Cape Archives CO 6138/1,72).

*George Mosley, a stowaway on the Sir George Osborn, claimed to be a member of Richardson's party and attached himself to it after landing (Cape Archives 1/AY 8/71).

Figure 4: The 1820 Settlers – Richardson's Party

CALTON'S PARTY (THE NOTTINGHAM PARTY)

Calton's Party (the Nottingham Party) – Colonial Department list No. 54: Led by Thomas Calton, a surgeon of North Collingham, Nottinghamshire.

Calton's Party was sponsored by a committee of subscribers headed by the Duke of Newcastle and organized on joint-stock principles, with Thomas Webster, the son of Calton, the only man who paid his own deposit. Nottingham was an area hard-hit by unemployment and unrest during 1819. The lists of proposed emigrants from Nottingham were only sent to the Colonial Department in late October and November after the final selection of parties had already been made, however, the distinguished patronage of the Nottingham Party ensured its acceptance. Deposits were paid for 60 men and their families. Articles of Agreement bound the settlers to mutual help. Each man would be given his own 20-acre allotment as well as use of the commonage, but when title to the land was eventually granted it was not vested in the Settlers themselves but in Godfrey and Becher, as representatives of the subscribers' committee. The party travelled from Nottingham to Liverpool by road. The equipment provided by the subscribers' fund included agricultural implements, carpenters' and blacksmiths' tools and supplies, clothes, Bibles and writing materials and wooden chests for the emigrants' personal belongings. A number of people were at first refused permission to board the *Albury* because their names did not match those in the list held by the Agent of Transports. An urgent appeal to the Colonial Department resulted in an official instruction to the Navy Board to embark any substitutes presented by Calton, so long as the total numbers did not exceed those of the original list. Several would-be emigrants had followed the party from Nottingham in the hope of last minute vacancies, and in fact cancellations and substitutions occurred almost until the time of sailing. The embarkation proved particularly troublesome. Calton predicted that the framework knitters in the party had little chance of becoming successful Settlers. The *Albury's* departure was delayed by bad weather but she finally sailed from Liverpool on 13 February 1820, arriving in Simon's Bay on 1 May and in Algoa Bay on 15 May. Deaths are known to have occurred at sea of two infants and of an adult settler, John Sykes, whose widow was disembarked at Simon's Bay to await an opportunity to return to England. The birth of a daughter to the wife of George Sansom has been reported on. Dr Calton died unexpectedly on 8 July while the party was encamped at Algoa Bay and Thomas Draper was elected supervisor in his place. The party was located on the Torrens River, and the location was named Clumber after the seat of the Duke of Newcastle.

❖ **LIST OF CALTON'S PARTY**

ALLISON, Francis 40. Labourer. w Elizabeth 30. c William 11, Mary 9, Elizabeth 6, Samuel 4, Ann 2.
 ATKIN, Elizabeth 30 (sister-in-law of George Palmer). c Sarah 13.
 BAGER, George 36. Gardener.
 BILSON, Thomas 26. Sawyer. w Mary 27. c Eliza 5, Thomas 4, John.
BRADFIELD, Edmund 22. Turner.
BRADFIELD, Ellen or Eleanor 20 (daughter of John Bradfield below). Married Benjamin "Ben" Wright of Turvey's Party.
BRADFIELD, John 25. Draper.
BRADFIELD, John 46. Framework knitter. w Mary Dennis 45. c Mary 16, Richard 12, Thomas 10.
BRADFIELD, Joseph 19. Framework knitter.
 BRANFORD, Edward 23. Ropemaker.
 BROOKS, Thomas 24. Saddler and harness maker.
 BROWN, George 22. Labourer.
 CALTON, Thomas 40. (Leader: Died 8 July 1820, Algoa Bay). w Martha Maria O'Brien 39. (Returned to England).
 CROOKS, William 23. Labourer.
 CROSS, John 36. Wheelwright. w Mary 31. c Matilda 9, William 7, Charles 6, Mary Ann 3, John (died at sea).
 DENNISON, George 36. Sergt, 35th Regt. w Hannah 29. c Ann 7, George 5, Henry 2, Charlotte.
 DRAPER, Thomas 33. Gardener. c Thomas 8.
 DRIVER, Edward 23. Grocer.
 EDLESTON, Thomas 45. Labourer.
ELLIOT, Mark 21. Framework knitter. w Sarah 20. c Alfred 1.
ELLIOT, William 25. Framework knitter. w Elizabeth Rodgers 22. c Nathaniel Elliott 3, William Elliott 1.
 FOULDS, Henry 22. Labourer.
 GOULDING, George 21. Carpenter.
 GOULDING, Thomas 30. Gardener. w Elizabeth 27. c George 6, William 4.
 HARRIS, James 19. Framework knitter.
 HARTLEY, Ann 20 (daughter of Thomas Hartley and his first wife Hannah Hopkins).
 HARTLEY, Mary 22 (daughter of Thomas Hartley and his first wife Hannah Hopkins).
 HARTLEY, Thomas 18. Blacksmith. (son of Thomas Hartley and his first wife Hannah Hopkins)

HARTLEY, Thomas 48. Blacksmith. w (2nd) Sarah Field 39. c Hannah 16, Elizabeth 13, Sarah 10, Jeremiah 7, Henry 4, Susannah (died at sea).

HARTLEY, William 24. Blacksmith. w Sarah 25.

HODGKINSON, George 21. Labourer.

HOLLAND, Henry 22. Stonemason.

HUNT, Sarah 20 (daughter of William Hunt).

HUNT, William 44. Tailor. w Mary 50. c Ann 13, Elizabeth 10.

JACKSON, Samuel 33. Framework knitter. w Dorothy 33. c Samuel 4, William 2, Elizabeth 1.

JARMAN, Thomas 26. Brickmaker.

KEETON, Benjamin 19. Labourer.

MEATS, William 27. Labourer.

MORRIS, John 28. Labourer. w Esther 25. c William 8, Jane 6.

MUGGLESTON, George 36. Carpenter. w Sarah 46.

NELSON, Thomas 28. Labourer. w Mary 24. c William 3, Matilda 1.

PALMER, George 36. Framework knitter. w Millicent 32. c Gervase 14, Benjamin 12, George 8, Matilda 2.

PALMER, Thomas 22. Framework knitter.

PIKE, Thomas 19. Labourer.

PIKE, William 41. Framework knitter. w Mary 44. c Sarah 17, William 16, Elijah 6, Rosa 4.

POOLE, Matthew 34. Gardener and viticulturist.

RADFORD, Joseph 19. Framework knitter.

RADFORD, Richard 21. Labourer.

SANSOM, George 24. Labourer. w Dorothy 23. c Elizabeth (born at sea).

SHEPHERD, Henry 28. Framework knitter. w Hannah 26. c William 6, Eliza 3, Ann.

SMITH, John 20. Labourer.

SYKES, John 32. Farmer (died at sea). w Elizabeth 36.

SYKES, William 44. Carpenter.

TARR (or TORR), Thomas Henry 28. Carpenter. w Ann 28. c Selina 7, James 4, Eliza 3, George 1.

THIELE, William 19. Lawyer's clerk.

TIMM, Thomas 40. Framework knitter. wife Elizabeth Holt 40. c Charles 13, Edward 12, Thomas 9, Eliza 7, Louisa 5.

VALENTINE, Peter 24. Cordwainer.

WEBSTER, Thomas 21. Tailor.

WRIGHT, Joseph 22. Framework knitter. w Elizabeth 21.

WRIGHT, William 23. Framework knitter.

(Cape Archives CO 6138/2, 59-61 and 101-2)

(Clive M Burton, Settlers to the Cape of Good Hope: organization of the Nottinghamshire Party 1819-1820)

(Port Elizabeth Historical Society, 1971)

Figure 5: The 1820 Settlers – Calton's Party (or the Nottingham Party)

2.2) THE PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT

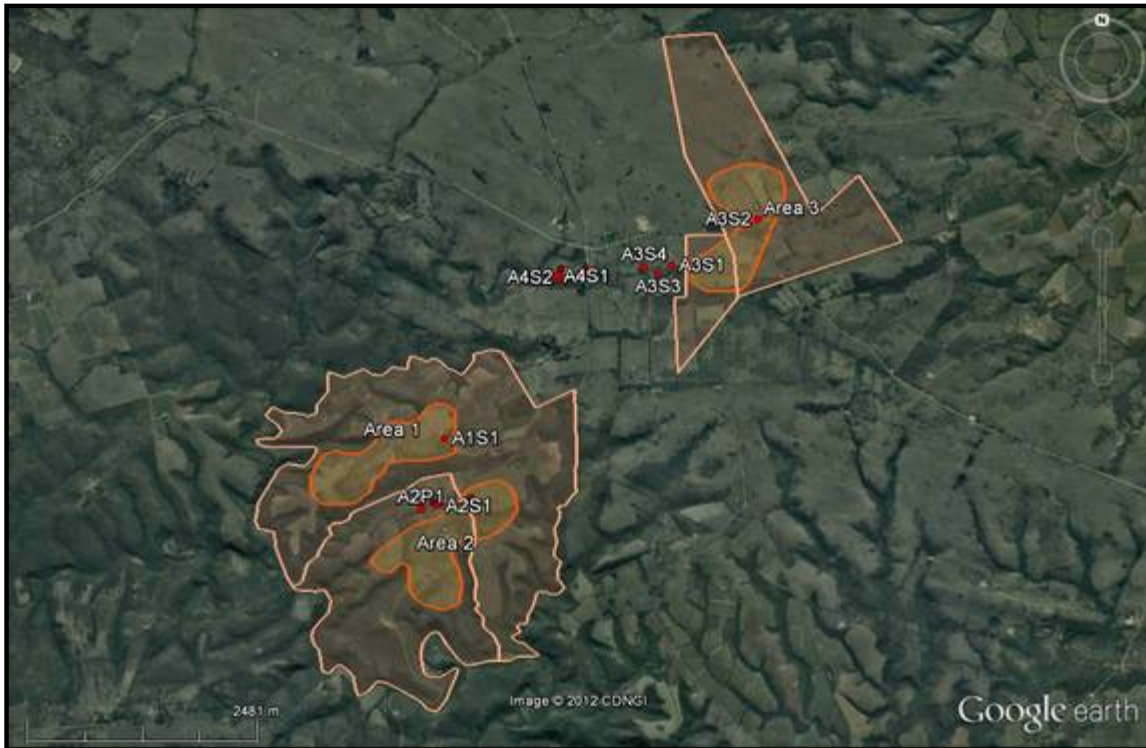


Figure 6: Phase 1 AIA assessment findings

A number of archaeological and cultural heritage resources, some formally protected by the NHRA 1999 and others not, were identified during the Phase 1 AIA assessment of the *Laman Prospecting Project*. All identified resources are ascribed either to the Stone Age or the Colonial Period, specifically to 1820 Settler history in the Eastern Cape.

Identified Stone Age resources were identified only within relation to the Area 3 study site; here prospecting may well impact on the low density Middle Stone Age (MSA) Site A2S2 occurrence and it is recommended that on-site monitoring be done at the time of prospecting impact. The Site A2S2 occurrence comprises of the only identified resource that will directly be impacted on by the proposed prospecting program.

The bulk of identified resources relate to 1820 Settler history in the Eastern Cape, characterized most prominently by structures pre-dating 60 years of age and situated in proximity to the Area 1-3 study sites only. The Shaw Park complex, described in the section additional archaeological sites, highlights the significance of Colonial Period sites of the greater area to further describe the general Colonial Period cultural receiving environment. In addition to tangible Colonial Period resources intangible heritage including the Settler cultural landscape and cultural tradition are of importance. Though prospecting will have a very limited impact, future mining will have a permanent effect on the environment and the general cultural sensitivity of the project area will need to be taken in consideration by the developer in the planning and decision making process.

2.2.1) AREA 1 – FARM 206-5



Figure 7: General locality of proposed prospecting Area 1, Farm 206-5

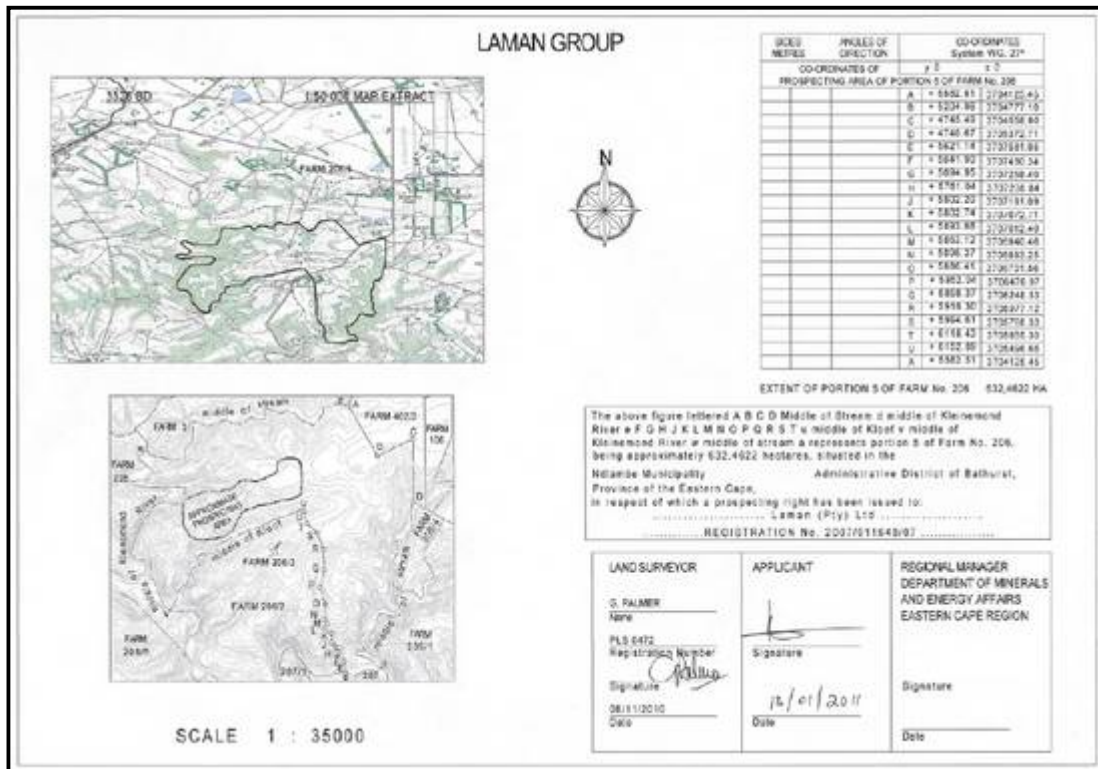


Figure 8: Prospecting Area 1 (courtesy Laman and Terreco Environmental)

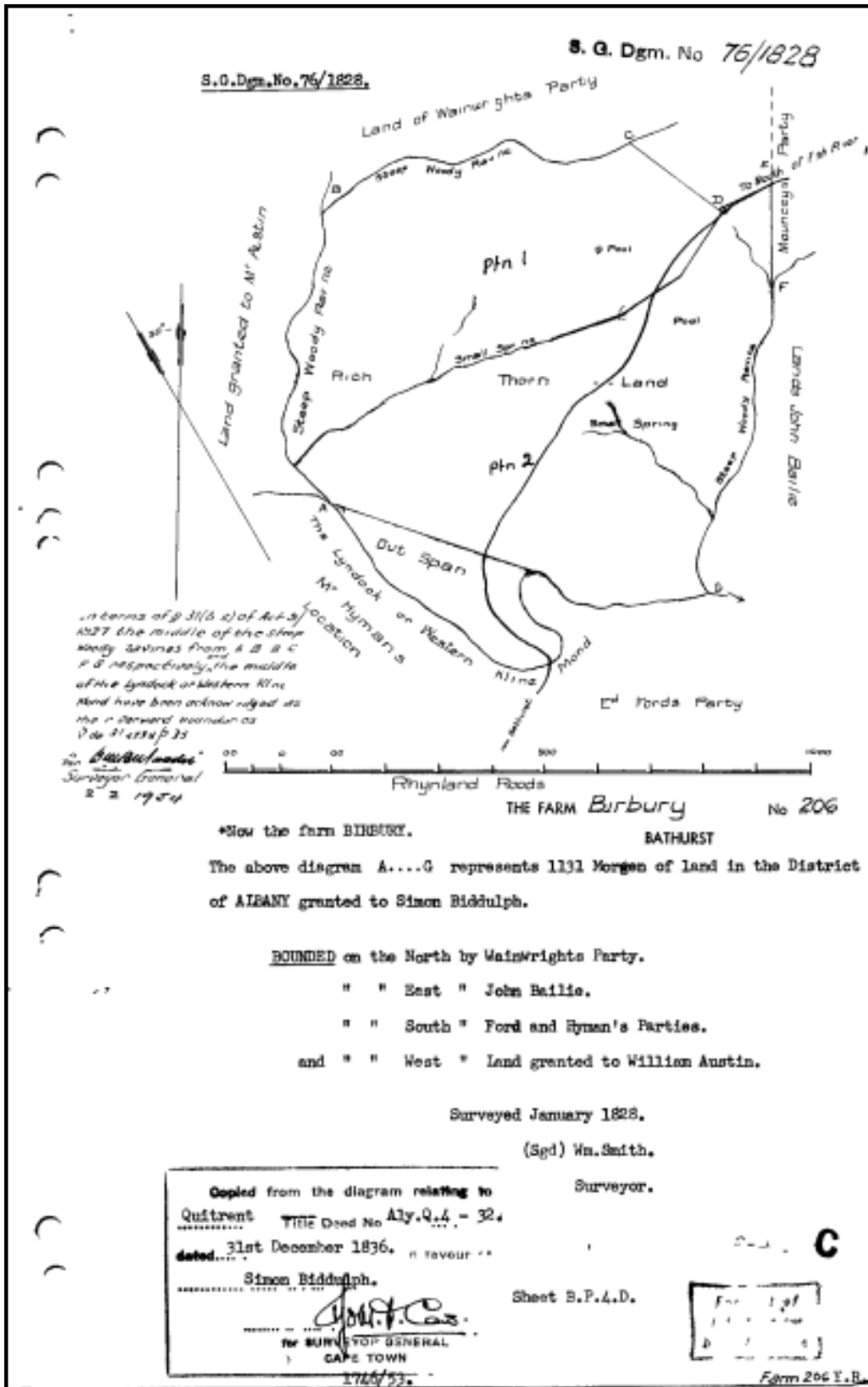


Figure 9: Farm 206, Birbury Farm, first surveyed in 1828 and registered to Simon Biddulph in 1836 (CSG Record Number – 76/1828)

❖ PHASE 1 AIA ASSESSMENT FINDINGS:

Area 1 comprises of approximately 85ha, situated on Farm 206-5. The site was assessed on 2012-04-24. No archaeological or cultural heritage resources, as defined and protected by the NHRA 1999, were identified during the assessment. The farmstead (A1S1 – S33°28'19.8"; E26°55'58.6") is situated towards the east of the Area 1 study site and was not inspected at the time of the Phase 1 AIA. Considering the rich Colonial Period history of the general area the farmstead may well pre-date 60 years of age implying that the site may be formally protected by the NHRA 1999. The farmstead will not be impacted on by proposed prospecting, but a site inspection will be necessary prior to mining.

The general Area 1 study site is characterized by pineapple plantations with limited portions of the study site situated on virgin land. Assessment in plantations was in large limited to cleared pathways while virgin land proved to be covered by thick vegetation, obscuring surface visibility often in totality.

❖ RECOMMENDATIONS:

It is recommended that proposed prospecting proceeds across the Area 1 study site.

1. Should prospecting result in a mining application the developer should ensure that an assessment of the A1S1 site be included in the relevant Phase 1 AIA or archaeological recommendations for the mining application.

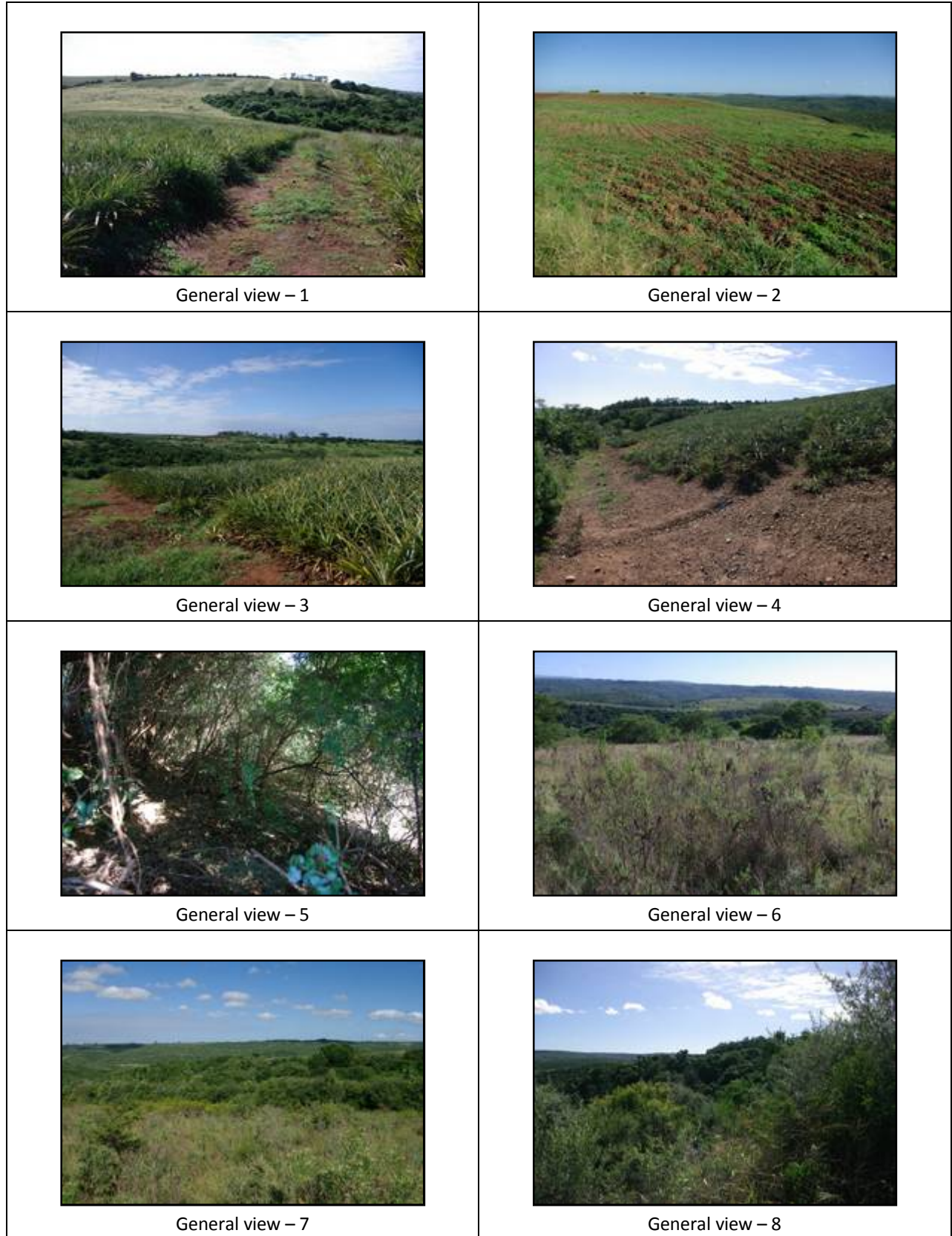


Figure 10: Image gallery – Area 1

2.2.2) AREA 2, FARM 206-2 AND FARM 206-5



Figure 11: General locality of proposed prospecting Area 2, Farm 206-2 and Farm 206-5

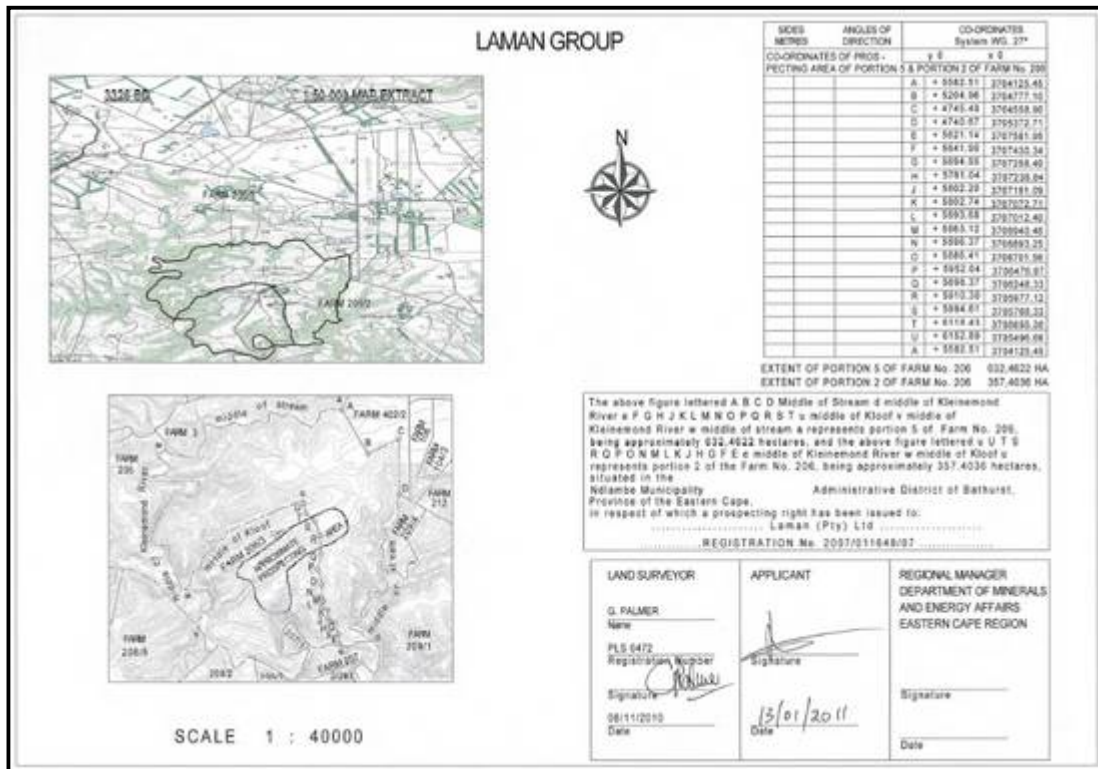


Figure 12: Prospecting Area 2 (courtesy Laman and Terreco Environmental)

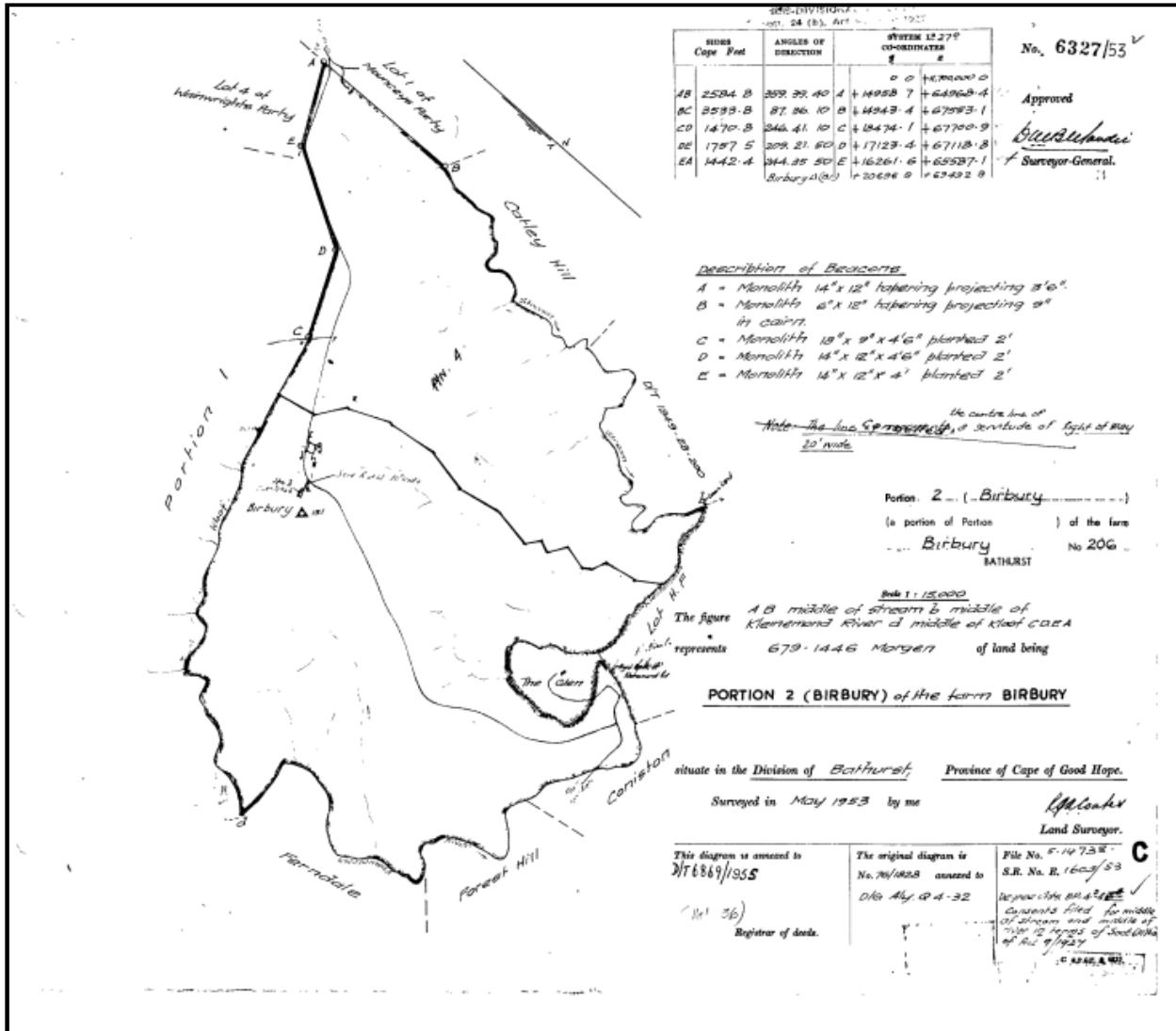


Figure 13: Portion 2 of Farm 206, Birbury Farm, surveyed in 1953 for purposes of 'right of way' (CSG Record Number – 6327/1953)

❖ **PHASE 1 AIA ASSESSMENT FINDINGS:**

Area 2 comprises of approximately 100ha, situated on Farm 206-2 and Farm 206-5. The site was assessed on 2012-04-24.

A single archaeological and cultural heritage resource, as defined and protected by the NHRA 1999, was identified during the Phase 1 AIA of proposed prospecting Area 2. The site, Site A2S1 (S33°28'43.7"; E26°55'55.8"), a Colonial Period farmstead, is situated approximately 100m from the Area 2 study site. The 2nd farmstead (Site A2S2 – S33°28'41.7"; E26°56'10.1"), is situated within the proposed study site, but with structures post-dating 60 years of age the site is not formally protected by the NHRA 1999. Destruction of, or impact on Site A2S2 is not subject to SAHRA / ECPHRA application or approval. Neither of the farmsteads will be impacted on by proposed prospecting activities. A known palaeontological site, here labeled Site A2P1 (S33°28'45.5"; E26°55'48.6") is situated on the property Farm 206-2, roughly 100m from the Area 2 study site, with further related palaeontological fossils having been identified within the nearby road cuttings (A2P1.1 – S33°28'43.0"; E26°55'54.0"). The palaeontological site is reported on for purposes of a general heritage sensitivity description but does not form the subject of this report: The site is further described in the palaeontological assessment by Dr. John Almond, Natura Viva, for the proposed *Laman Prospecting Project*.

Pineapple plantations again characterize large portions of the Area 2 study site; assessment within pineapple plantations were in large limited to cleared pathways. The majority of the Area 2 study site comprises of virgin land; thick vegetation radically hampered surface visibility.

COLONIAL PERIOD –

○ **Site A2S1 – Colonial Period farmstead – S33°28'43.7"; E26°55'55.8":**

Site A2S1, the Colonial Period Birbury farmstead is situated at S33°28'43.7"; E26°55'55.8" on the property Farm 206-2. The site comprises of the main residence and a number of outbuildings. The exact date of origin is not known, but is inferred to date to the late 1820's-40's. The main residence has burnt down on 2 occasions; the current structure is thus of contemporary origin but situated on the exact location of the original farmstead. Limited interior fittings are still of the original structure. Some of the related outbuildings date to the original structure.

Recommendations: Site A2S1 is ascribed a SAHRA *Low Significance* and a *Generally Protected C Field Rating*. Standard SAHRA site significance assignment criteria for structures pre-dating 60 years of age does not apply due to the fact that the site proper, the main residence, comprises of a contemporary structure demarcating the locality of the original Colonial Period residence. The locality of the residence is however of intangible heritage significance. The site will not be impacted on by proposed prospecting. Should mining impact on the site, based on the type of impact, recommendations will be made at the time of the mining application and may include either conservation (implying also continued use of the site) or destruction.

❖ **RECOMMENDATIONS:**

It is recommended that proposed prospecting proceeds across the Area 2 study site. (Recommendations regarding possible mining impact on Site A2S1 will be made should a mining application be considered).



General view – 1



General view – 2



General view – 3



General view – 4



General view – 5



General view – 6



General view – 7



General view – 8

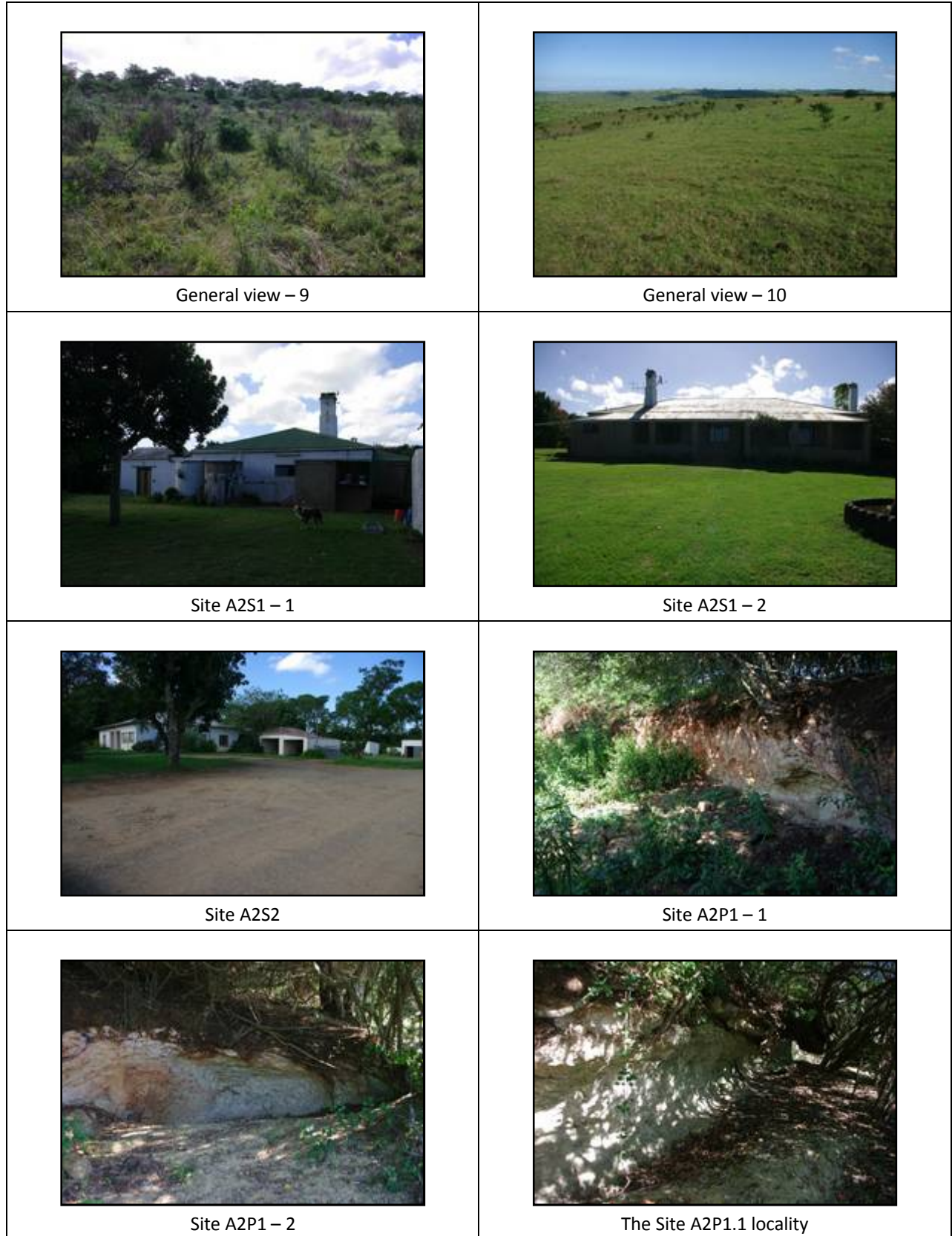


Figure 14: Image gallery – Area 2

2.2.3) AREA 3, FARM 101 AND FARM 102-1



Figure 15: General locality of proposed prospecting Area 3, Farm 101 and Farm 102-1

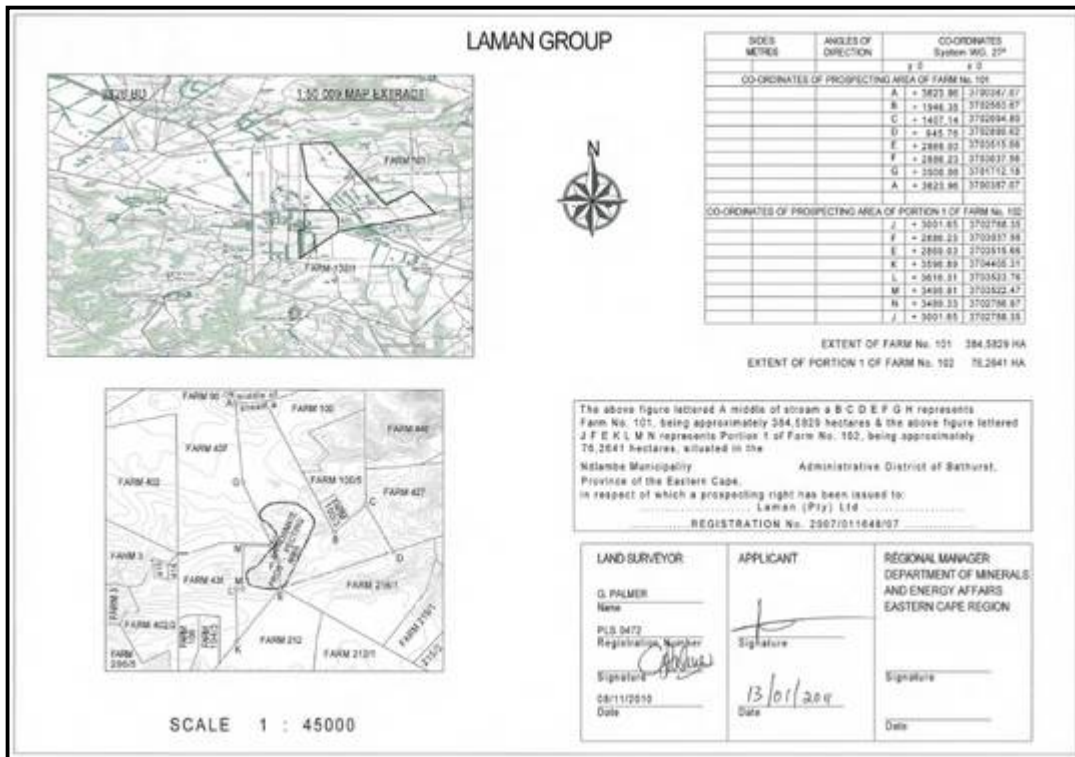


Figure 16: Prospecting Area 3 (courtesy Laman and Terreco Environmental)

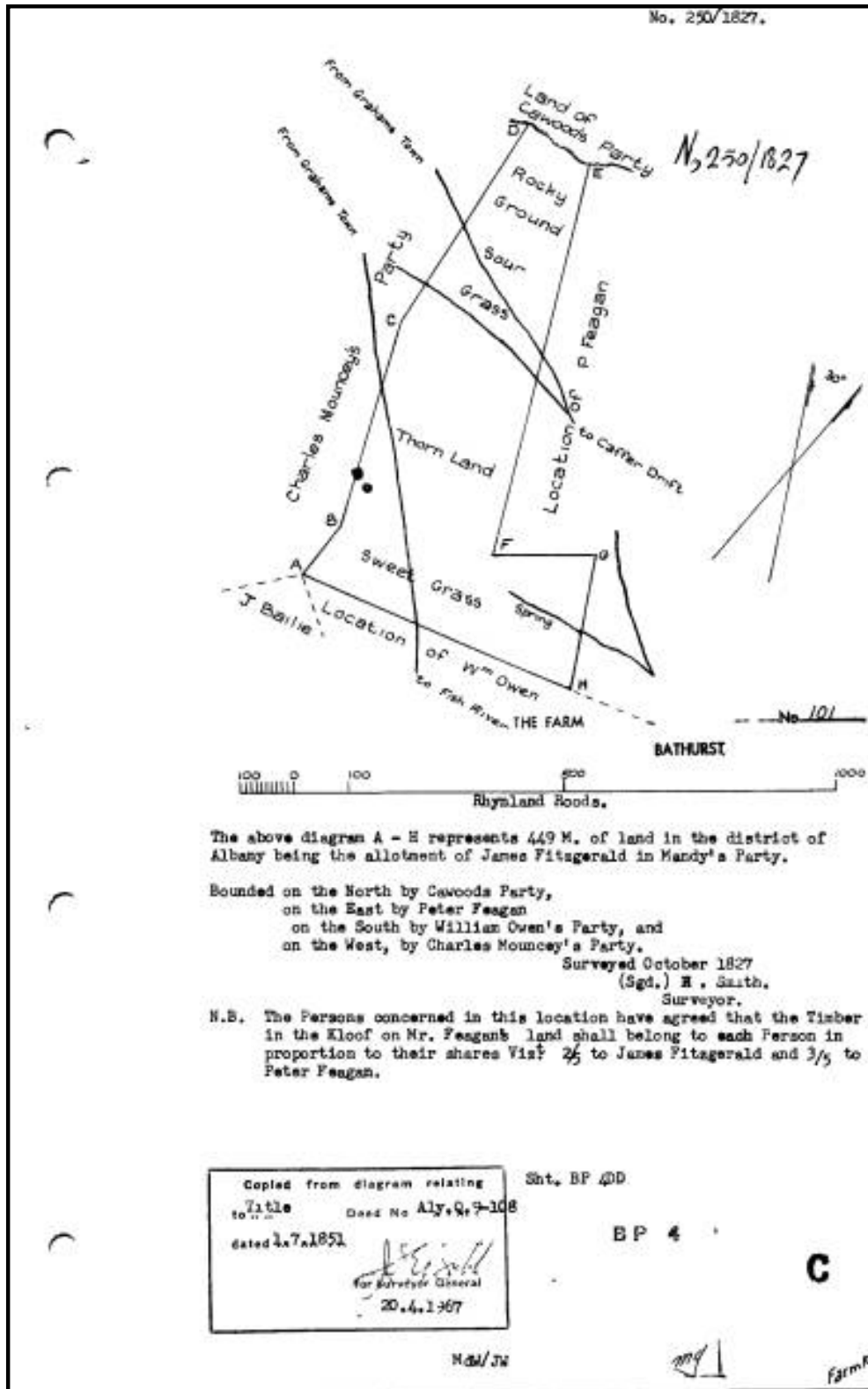


Figure 17: Copy of the 1851 record of farm 101, 1st surveyed in 1827, with the title deed to James Fitzgerald of Mandy's Party (CSG Record Number – 250/1827)

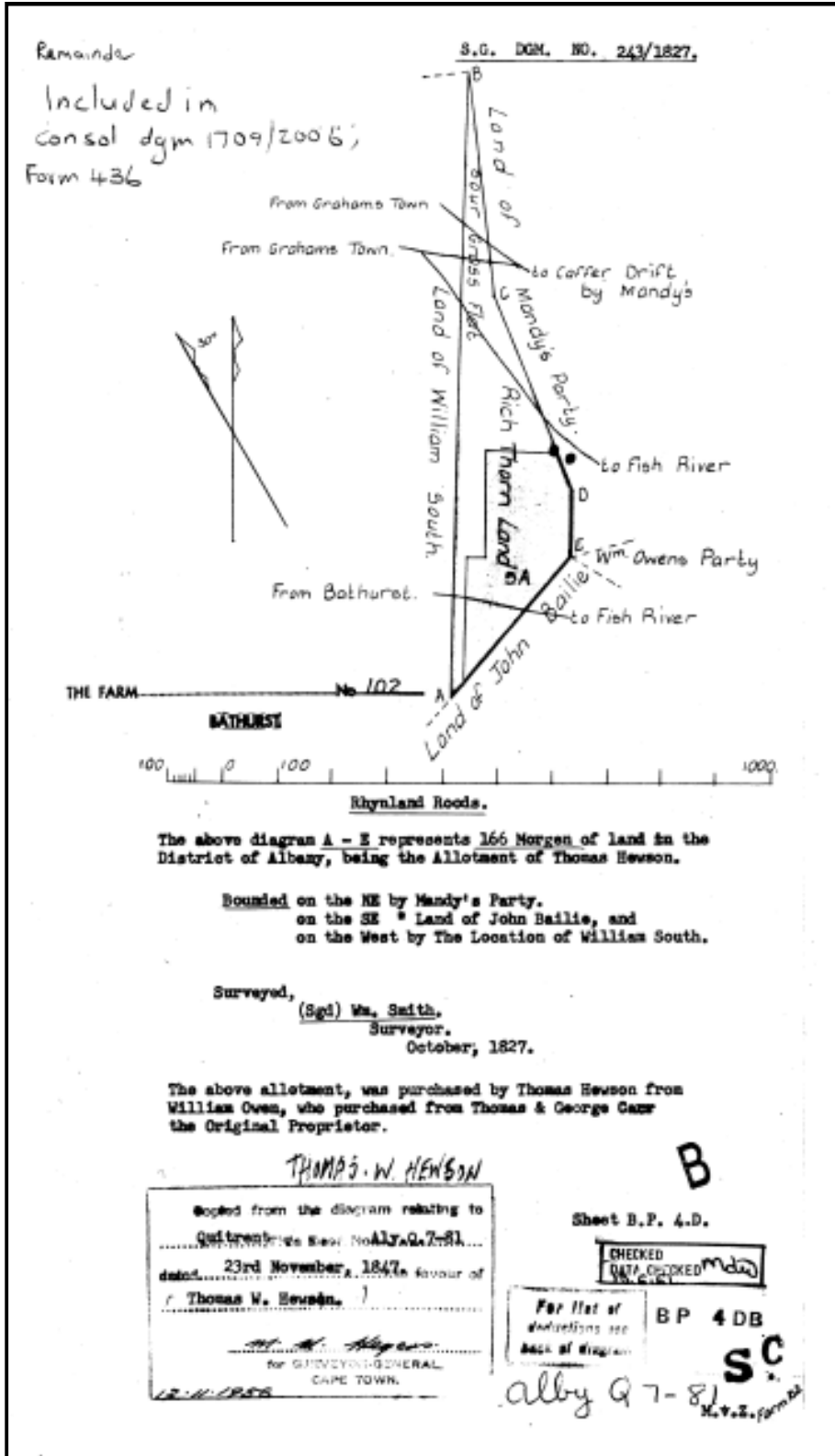


Figure 18: Farm 102, 1st surveyed in 1827 with a title deed to Thomas and John Carr, later sold to William Owen and again in 1847 to Thomas Hewson (CSG Record Number – 243/1827)

❖ **PHASE 1 AIA ASSESSMENT FINDINGS:**

Area 3 comprises of approximately 100ha, situated on Farm 101 and Farm 102-1. The site was assessed on 2012-04-09 and 04-23.

Of the 5 recorded sites 4 comprise of archaeological and cultural heritage sites, formally protected by the NHRA 1999. Low densities of Middle Stone Age (MSA) artefacts were identified at Site A3S1 (S33°27'16.3"; E26°57'39.7"), situated approximately 150m west of the proposed study site and Site A3S2 (S33°26'59.0"; E26°58'18.9") identified within proposed Area 3, signifying a general low density MSA occurrence that may stretch across a vast section of the proposed prospecting area. The Colonial Period residence, Site A3S3 (S33°27'19.1"; E26°57'33.5") and farmstead, Site A3S4 (S33°27'16.7"; E26°57'27.4") are both situated west of the study site and will not be directly impacted on by prospecting, while Site A3S5 (S33°26'55.4"; E26°58'33.2") comprises of a Contemporary Period farmstead situated more or less 120m east of the study site. Site A3S5 post-dates 60 years of age and is not formally protected by the NHRA 1999; reported on in this report for purposes of proximity to the study site only. Site A3S5 will not be impacted on by development. Future impact on, or destruction of the site, is not subject to SAHRA / ECPHRA application or approval.

The general area is characterized by cattle and game farming and thick vegetation, specifically grass cover, obscured surface visibility virtually in totality with surface visibility literally restricted to scraped road surfaces.

STONE AGE –

○ **Site A3S1 – Stone Age (MSA) – S33°27'16.3"; E26°57'39.7":**

The Site A3S1 Middle Stone Age (MSA) occurrence is situated on the property Farm 102-1 at S33°27'16.3"; E26°57'39.7", approximately 150m west of the proposed study site. The occurrence comprises of a low density scatter of artefacts identified within a farm access track where a gravel lens surfaces within the track surface. The lens measures approximately 5x2m in size but with only a few artefacts observed within the mixed gravels and with artefact ratios (artefacts: m²) too low to record an artefact density for the occurrence. The primary typology observed comprised of flakes, in cases worked into scrapes with 1 notch observed on a scraper edge. Artefacts are technologically of an inferior quality, inferred to be the result of local raw material sources.

Recommendations: Site A3S1 is ascribed a SAHRA *Low Significance* and a *Generally Protected C Field Rating*. The low density MSA occurrence is situated approximately 150m west of the proposed Area 3 study site and will not be impacted on by prospecting; the site will by implication be conserved. Future mining may well impact on the occurrence and relevant recommendations will be made at the time of a mining application.

○ **Site A3S2 – Stone Age (MSA) – S33°26'59.0"; E26°58'18.9":**

Site A3S2 is characterized by Middle Stone Age (MSA) artefacts identified within a gravel lens within the scraped farm access road towards the Site A3S5 Whites Bush Contemporary Period farmstead (Farm 101). The occurrence stretches for approximately 340m from S33°27'02.4"; E26°58'12.2" to S33°26'56.9"; E26°58'23.7". Artefacts are topologically ascribed to the MSA with flake types dominating. Mixed gravel from the gravel lens was used as raw material resulting in artefacts of a varying technological standard, based primarily on the raw material used. It is however evident that the majority type raw material were not suitable for knapping purposes resulting also in the low recorded artefact ratio (artefacts: m²) of 1:1. At present it is not possible to give an estimated occurrence size; think grass cover in both neighboring virgin land and pasture fields obscured surface visibility in totality, limiting visibility of the surface occurrence to the road surface.

Recommendations: Site A3S2 is ascribed a SAHRA *Low Significance* and a *Generally Protected C Field Rating*. Proposed prospecting may impact on deposits observed within the road surface, however the occurrence can reasonably be expected to extend across a significant portion of the application area and on site monitoring is recommended at the time of prospecting impact to determine if the surface observed deposits are associated with a sub-surface component and secondly to attempt at least a minimum site extent. Further recommendations based on monitoring results will be made for purposes of a mining application.

COLONIAL PERIOD –

- **Site A3S3 – Colonial Period residence – S33°27'19.1"; E26°57'33.5":**

The Site A3S3 Colonial Period residence, situated at S33°27'19.1"; E26°57'33.5" on the property Farm 102-1, demarcates the locality of the original Lime Stone Hill Settler residence. A number of structural alterations obscure early exterior architectural characteristics dating to the late 1820's / early 1830's but the original 2 roomed residence is conserved within the current structure. Original window and door frames, ceiling and floor boards are all still in place and particularly well conserved. The site is situated approximately 350m west of the proposed study site and will not be impacted on by prospecting.

Recommendations: Site A3S3, defined as a structure pre-dating 60 years of age, is formally protected by the NHRA 1999 and receives automatic SAHRA protection as a site of *High Significance* with a *Provincial Grade 2 Field Rating*. Despite the number of exterior alterations to the site the structure is ascribed a low-medium historical architectural significance, based primarily on the conservation standard of the interior contained original Settler structure. The site is situated approximately 350m west of the proposed study site and will not be impacted on by development. The site will by implication be conserved. Should future mining impact on the site, relevant recommendations will be made at the time of the mining application and may include either conservation (implying also continued use of the site) or destruction.

- **Site A3S4 – Colonial Period farmstead – S33°27'16.7"; E26°57'27.4":**

Site A3S4, situated at S33°27'16.7"; E26°57'27.4" on the property Farm 102-1, comprises of the 2nd Lime Stone Hill farmstead. The residence and related outbuildings was constructed in 1950. The site thus constitutes a structure pre-dating 60 years of age, implying formal protection by the NHRA 1999. The original structure has been slightly altered by a series of more recent renovations and alterations, but having been done to compliment the original structure and within time period style these do not diminish the architectural significance of the site. The site is situated more or less 540m west of the Area 3 study site and will not be impacted on by proposed prospecting activities.

Recommendations: Site A3S4, defined as a structure pre-dating 60 years of age, is formally protected by the NHRA 1999 and receives automatic SAHRA protection as a site of *High Significance* with a *Provincial Grade 2 Field Rating*. The site is ascribed a low historical architectural significance. The site is situated more or less 540m west of the Area 3 study site and will not be impacted on by development. The site will by implication be conserved. Should future mining impact on the site, relevant recommendations will be made at the time of the mining application and may include either conservation (implying also continued use of the site) or destruction.

❖ RECOMMENDATIONS:

It is recommended that proposed prospecting proceeds across the Area 3 study site. Archaeological monitoring should be done at the time of prospecting impact in the general Site A3S2 area. (Recommendations regarding possible mining impact on Site A3S1, Site A3S3 and Site A3S4 will be made should a mining application be considered).



General view – 1



General view – 2



General view – 3



General view – 4



General view – 5



General view – 6



General view – 7



General view – 8

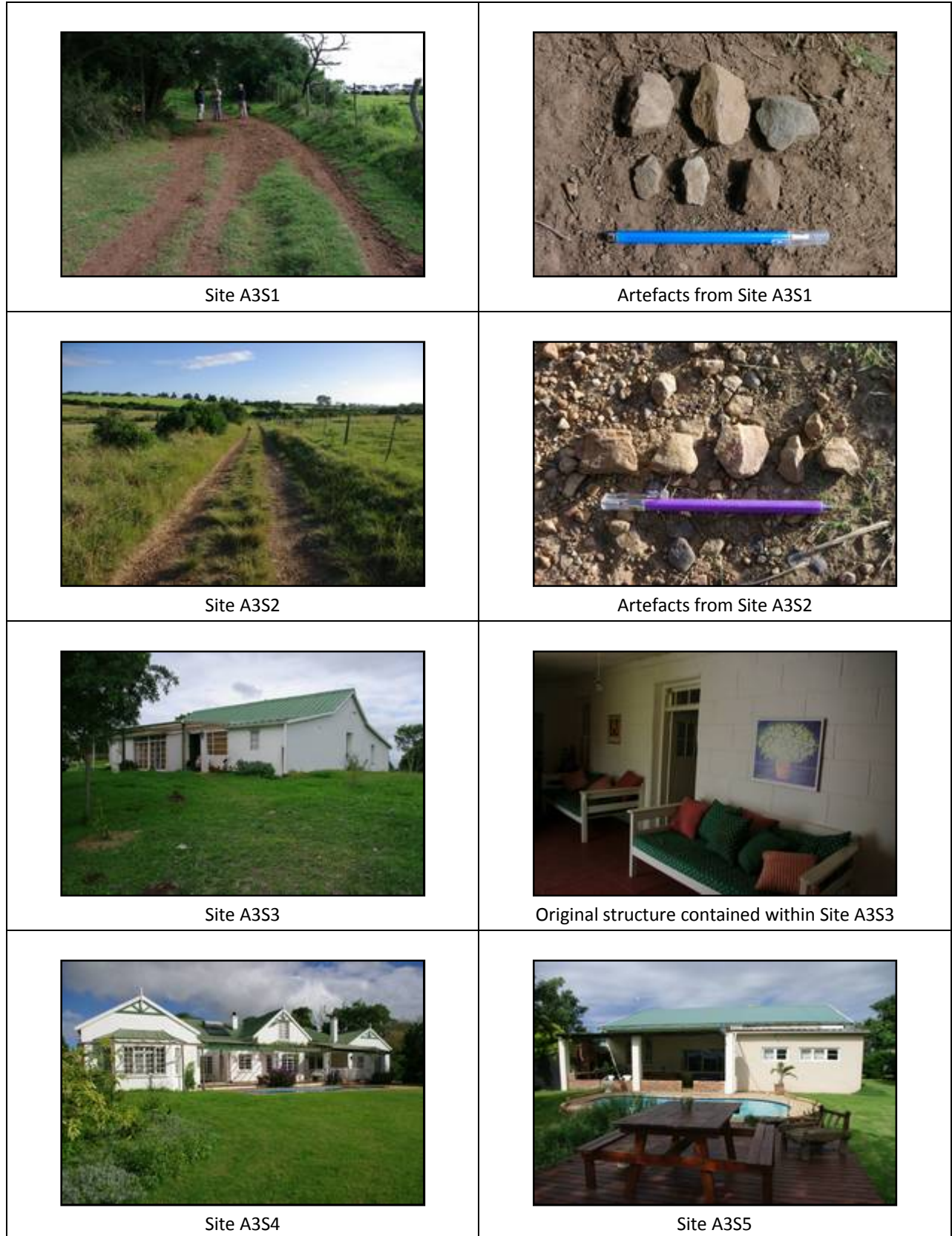


Figure 19: Image gallery – Area 3

2.2.4) ADDITIONAL ARCHAEOLOGICAL SITES



Figure 20: Additional sites – Phase 1 AIA assessment findings

❖ PHASE 1 AIA ASSESSMENT FINDINGS:

A number of additional archaeological sites, situated within the greater development area are reported on. The sites represent the Colonial Period Shaw Park area, established soon after arrival of the 1820 Settlers, with continued additions to the area throughout the years and active use of facilities by the contemporary community. None of the Shaw Park sites will be impacted on by proposed prospecting, but the Shaw Park area remains important in a preliminary description of the Colonial Period Settler history of the greater area. The significance of the area for the community was brought to the attention of ArchaeoMaps by Chris Hulley (landowner, Farm 101) and visited in the company of Jonathan Bradfield (landowner, Farm 102-1).

COLONIAL PERIOD –

○ Site A4S1 – Colonial Period school – S33°27'19.9"; E26°56'48.1":

Site A4S1, situated at S33°27'19.9"; E26°56'48.1" on the property Amor 415 represents the locality of the *Shaw Park School*. The 1st, 1 roomed school was constructed in 1952. Since then, in order to meet increasing demand and growing pupil numbers, a number of alterations and extensions have been made to the original structure. The original structure is today contained within the Shaw Park School as a single class room. A wall within the class room has been conserved within its original state, with its lime washed walls still clearly visible. Later additions are in themselves of heritage significance, though not necessarily formally protected by law (implying that these alterations do not pre-date 60 years of age) and with the earliest extension to the original school dating to 1961, merely 9 years after its construction. Site A4S1, the Shaw Park School, comprises of a structure pre-dating 60 years of age: The site is by implications formally protected by the NHRA 1999. The structure receives automatic SAHRA protection as a site of *High Significance* with a *Provincial Grade 2 Field Rating*. The site will not be impacted on by

prospecting. Relevant recommendations will be made at the time of a mining application and may include either conservation or destruction of the site.

- **Site A4S2 – Colonial Period church – S33°27'20.4"; E26°56'49.5":**

Site A4S2 (S33°27'20.4"; E26°56'49.5"), situated on the property Amor 415 and locally known as the *Shaw Park Chapel*, is characterized by the chapel structure. The chapel was constructed in 1864; the almost 150 year old structure is formally protected by the NHRA 1999. The structure receives automatic SAHRA protection as a site of *High Significance* with a *Provincial Grade 2 Field Rating*. In addition to its tangible heritage significance the site also demarcates the locality where sermons were held under a tree from as early as 1821, with a plaque commemorating these early humble Settler sermons. The well conserved site is no longer in use and the community is currently considering the use thereof as a pre-school facility. The site will not be impacted on by prospecting. Relevant recommendations will be made at the time of a mining application and may include either conservation or destruction of the site.

- **Site A4S3 – Colonial Period cemetery – S33°27'16.8"; E26°56'50.0":**

Site A4S3 represents the original Shaw Park Settler cemetery, situated at S33°27'16.8"; E26°56'50.0" on the property Amor 415. Many graves situated within the cemetery are of the original Settlers and their direct descendants, specifically of the Mouncey and Cawood Parties, but including graves of early Settlers who bought into the area. Graves vary radically from elaborated graves with inscribed headstones so simple markers without inscriptions whilst some inscriptions have decayed to such an extent that they are no longer legible. As a norm graves pre-date 60 years of age with many of them being older than 100 years. The cemetery is no longer in use; the 2nd Shaw Park cemetery or Site A4S4 is currently being used. The Site A4S3 cemetery is formally protected by the NHRA 1999. The site is ascribed a SAHRA *Medium Significance* and a *Generally Protected B Field Rating*. The cemetery will not be impacted on by the proposed prospecting project. Should the project result in a mining application then relevant recommendations will be made at the time and may include either conservation or relocation. The grave or cemetery relocation process for graves pre-dating 60 years of age is prescribed by SAHRA and subject to a SAHRA Permit.

- **Site A4S4 – Colonial Period cemetery – S33°27'22.0"; E26°56'52.2":**

Site A4S4 represents the 2nd Colonial Period cemetery situated on the property Amor 415. The cemetery is evidently younger than the Site A4S3 cemetery but the majority of the graves at the site pre-date 60 years of age, implying that the cemetery is formally protected by the NHRA 1999. The A4S4 cemetery is ascribed a SAHRA *Medium Significance* and a *Generally Protected B Field Rating*. The cemetery will not be impacted on by the proposed prospecting project. Should the project result in a mining application then relevant recommendations will be made at the time and may include either conservation (implying also continued use of the site) or relocation. The grave or cemetery relocation process for graves pre-dating 60 years of age is prescribed by SAHRA and subject to a SAHRA Permit.

- **Site A4S5 – Colonial Period clubhouse – S33°27'17.0"; E26°57'01.1":**

Site A4S5 represents the locality of Shaw Park Hall, currently used as clubhouse for the local community's sports club. The site is situated on the property Mamusa 414 at S33°27'17.0"; E26°57'01.1". The hall was built in 1931 as evidenced by the commemorative stone with the inscription '*Shaw Park Hall. Built by Public Subscription: 1931. Builder D.E. Kemp*'. The structure receives automatic SAHRA protection as a site of *High Significance* with a *Provincial Grade 2 Field Rating*. The site will not be impacted on by prospecting. Relevant recommendations will be made at the time of a mining application and may include either conservation (implying also continued use of the site) or destruction.



Site A4S1 – 1



Site A4S1 – 2



Site A4S1 – 3



Site A4S2 – 1



Site A4S2 – 2



Site A4S2 – 3



Site A4S2 – 4



Site A4S3 – 1

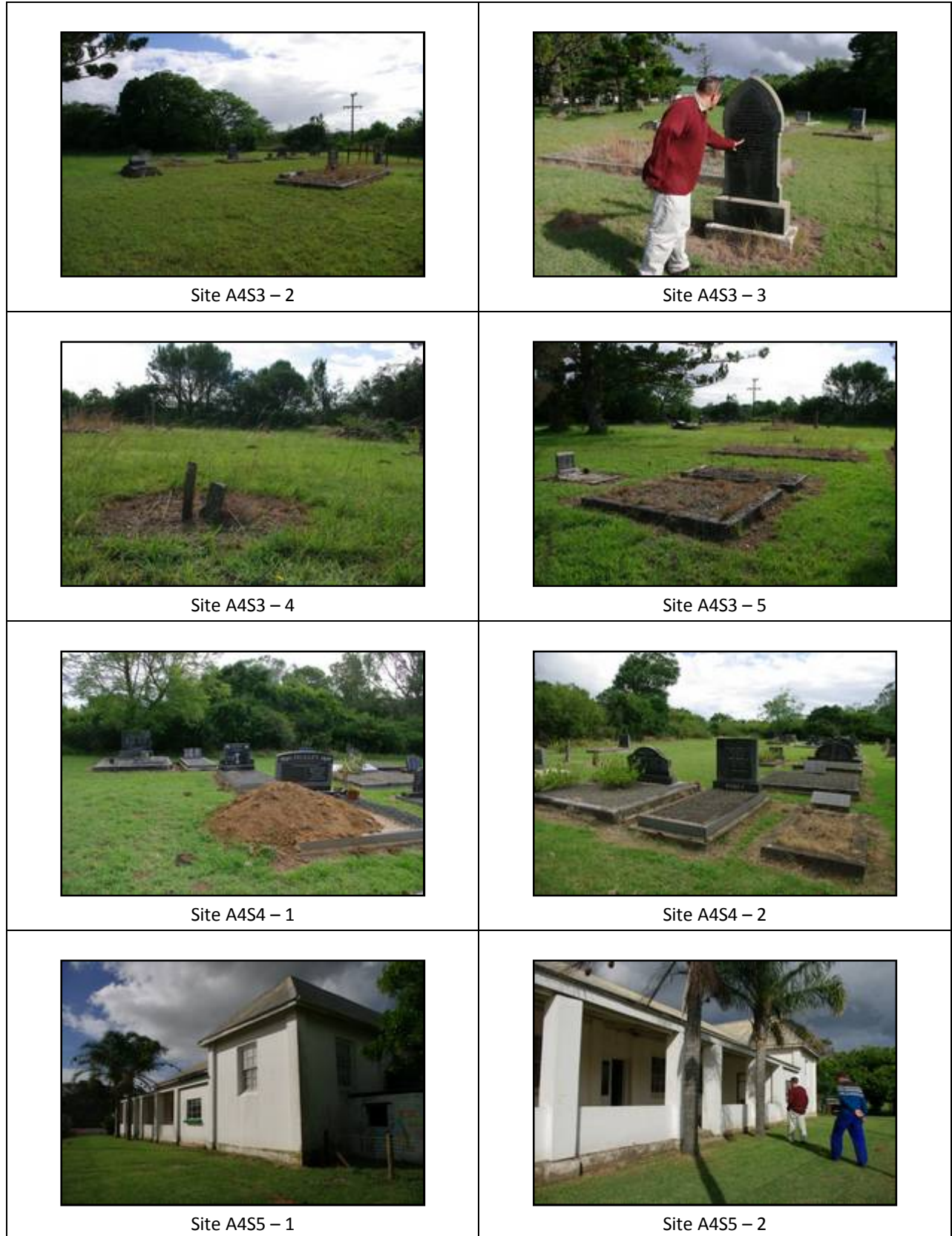


Figure 21: Image gallery – Additional archaeological sites

2.3) CULTURAL LANDSCAPES AND VIEWSCAPES

A 'Cultural Landscape' refers to a particular geographical area that represents the unique combined work of man and nature (James & Martin 1981). The term has its origins in 16th Century Germany where 'Cultural Landscape' (*Kultur Landschaft*) implies 'shaped lands' to differentiate it from the 'Original Landscape' (*Urlandschaft*), or the 'unaltered' landscape, prior to human impact (Sauer 1925). Sauer (1925) stresses the agency of culture as a force in shaping the visible features of the earth's surface in delimited areas where the physical environment retains a central significance, as the medium with and through which human cultures act. According to Sauer (1925) *'The cultural landscape is fashioned from a natural landscape by a cultural group. Culture is the agent, the natural the medium, the cultural landscape is the result'*.

In order to better understand the concept of 'Cultural Landscape' it is necessary to separate the term 'Culture' to further our understanding of its many definitions. Within the anthropological arena culture is generally understood as a *'complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society'*. Culture is *'human nature'* and is acquired through a learning process. Through culture people can adapt to their environment in non-genetic ways, so people living in different environments will often have different cultures, or will develop different cultures (Van Willigen 1986). An integral part of culture is change; be it the result of a changing natural environment to which the culture have to adapt or contact with another culture, the primary force of cultural change, and often the result of socio-political pressure. Els (1992) explain that cultural contact change usually occurs according to either the process of acculturation (dominating 'donor' culture) or the process of enculturation (dominating 'receiver' culture). Both cultural processes can be spontaneous, forced or guided; but cultural process is never a one-way street; any given cultural system is at once a 'donor' and a 'receiver'. The essence of cultural change lies in the restructuring of the parts so that a new cultural pattern results. Bourguignon (1979) highlights the fact that this 'restructuring' should center on the question of *'What changes are (were) necessary to make culture, as we know it, possible?'* Culture is thus a process of constant change and adaptation; psychologically, behaviorally, technologically, politically, economically and spiritually (religiously), collectively referred to as 'cultural evolution'. [Certain forms of society and culture could simply not have arisen before others; for example, industrial farming could not have been invented before simple farming, and metallurgy could not have developed without previous non-smelting processes involving metals (Van Willigen 1986).]

When considering the concept of 'Cultural Landscape', taking cognizance of the vital force of change as an agent of culture, it is only logical that cultural change will be reflected in a changing cultural landscape.

The concept of 'Cultural Landscape' has also been adapted and developed within international heritage arenas (UNESCO 2005) as part of an international effort to reconcile one of the most encompassing dualisms in Western thought; those of 'nature' and 'culture'. In so doing the World Heritage Committee has adopted 3 categories of 'Cultural Landscape', ranging from (a) those landscapes most deliberately 'shaped' by people, through (b) the full range of 'combined' works, to (c) those least evidently 'shaped' by people (yet highly valued). The 3 categories extracted from the UNESCO Committee's Operational Guidelines, are as follows (Punnell 2006):

1. A landscape designed and created intentionally by man;
2. An 'organically evolved landscape' which may be a 'relict (or fossil) landscape' or a 'continuing landscape'; and
3. An 'associative cultural landscape' which may be valued because of the religious, artistic or cultural associations of the natural environment.

❖ *The Laman Prospecting Project Cultural Landscape*

Based on the known archaeological record, as described in the general introduction to South African archaeology (Appendix 1), the more immediate regional context of the *Laman Prospecting Project*, briefly illustrated in the pre-feasibility assessment and findings of the Phase 1 AIA, it can be concluded that the following cultural landscapes will be affected by the development:

1. Stone Age (MSA); and
2. Colonial Period (1820 Settler cultural landscape).

THE MSA CULTURAL LANDSCAPE: The Middle Stone Age (MSA) Cultural Landscape of the *Laman Prospecting Project* can be classified, according to the UNESCO Operational Guidelines (Punnell 2006), as an ‘organically evolved fossil landscape’ that has been least evidently shaped by humans.

The low density of Middle Stone Age (MSA) artefacts found within and in direct proximity to the Area 3 study site is testimony to MSA occupation and use of the greater area. MSA use of the landscape is inferred to have been the 1st impact on the natural or unaltered landscape in the immediate study site area and described as of low significance. Recorded occurrences are of low typological and technological value with particularly low artefact densities, implying either a fairly ephemeral use of the landscape or based on the presence of known sites from the greater region, a preference for other type sites closely associated with the type of natural resources that each, often micro-environment, could offer.

THE COLONIAL PERIOD 1820 SETTLER LANDSCAPE: The Colonial Period 1820 Settler Cultural Landscape of the *Laman Prospecting Project* can be classified, according to the UNESCO Operation Guidelines (Punnell 2006), as an ‘organically evolved continuing cultural landscape’, shaped by a range of combined works and human impacts.

The Colonial Period 1820 Settler cultural landscape of the study site and immediate surrounds are of particularly high significance, being the 1st formal Colonial Period frontier landscape set out by the Cape Government at the time. The area of direct impact relate to the original areas set out for the Mouncey, Cawood, Nottingham and Richardson Parties, with the cultural landscape extending directly to cultural tradition, including the early practice of continuing acquisition of additional land in order to feasibly continue with farming, with decreasing numbers of settler families recorded to still have been farming by the 1840’s descendants of the 1820 Settlers still practicing farming in themselves represent a continuing farming tradition of close to 200 years. Farming as a cultural tradition is a much valued commodity and practice, at present recorded to be a tradition having been kept alive for approximately 5 generations as exemplified by amateur genealogical and historical research having been done by many of the landowners concerned: Percy Elliot (landowner, Farm 206-5) reported on him as 5th generation farmer on the property with Site A2S1, Area 2, as the original locality of the 1st Elliot Settler homestead. Chris Hulley (landowner, Farm 101) is also a 5th generation 1820 Settler descendant and Jonathan Bradfield (landowner, Farm 102-1), recently joined permanently by his son Nicolas constitutes a 5th / 6th generation continuing 1820 Settler cultural farming practice.

3) CONCLUSION AND RECOMMENDATIONS

With reference to cultural heritage compliance, as per the requirements of the NHRA 1999, it is recommended that the proposed *Laman Prospecting Project*, to be situated in the Ndlambe Municipality area of the Eastern Cape proceeds as applied for, provided the developer complies with the following recommendations:

A number of archaeological and cultural heritage resources, some formally protected by the NHRA 1999 and others not, were identified during the Phase 1 AIA assessment of the *Laman Prospecting Project*. All identified resources are ascribed either to the Stone Age or the Colonial Period, specifically to 1820 Settler history in the Eastern Cape.

Identified Stone Age resources were identified only within relation to the Area 3 study site; here prospecting may well impact on the low density Middle Stone Age (MSA) Site A2S2 occurrence and it is recommended that on-site monitoring be done at the time of prospecting impact. The Site A2S2 occurrence comprises of the only identified resource that will directly be impacted on by the proposed prospecting program.

The bulk of identified resources relate to 1820 Settler history in the Eastern Cape, characterized most prominently by structures pre-dating 60 years of age and situated in proximity to the Area 1-3 study sites only. The Shaw Park complex, described in the section additional archaeological sites, highlights the significance of Colonial Period sites of the greater area to further describe the general Colonial Period cultural receiving environment. In addition to tangible Colonial Period resources intangible heritage including the Settler cultural landscape and cultural tradition are of importance. Though prospecting will have a very limited impact, future mining will have a permanent effect on the environment and the general cultural sensitivity of the project area will need to be taken in consideration by the developer in the planning and decision making process.

LAMAN PROSPECTING PROJECT – FARM 101, 102-1, 206-2 & 206-5					
NDLAMBE MUNICIPALITY (NEAR BATHURST), EASTERN CAPE					
MAP CODE	SITE	TYPE / PERIOD	DESCRIPTION	CO-ORDINATES	PRELIMINARY RECOMMENDATIONS
THE POWERLINE ROUTE					
A1S1	A1S1	Colonial Period / Contemporary(?)	Farmstead	S33°28'19.8"; E26°55'58.6"	In situ Conservation (Assessment at time of mining application)
AREA 2 – FARM 206-2 & 206-5					
A2S1	A2S1	Colonial Period	Farmstead	S33°28'43.7"; E26°55'55.8"	In situ conservation
A2S2	A2S2	Contemporary	Farmstead	S33°28'41.7"; E26°56'10.1"	N/A
A2P1	A2P1	Palaeontological	-	S33°28'45.5"; E26°55'48.6"	See palaeontological assessment
A2P1.1	A2P1.1	Palaeontological	-	S33°28'43.0"; E26°55'54.0"	See palaeontological assessment
AREA 3 – FARM 101 & 102-1					
A3S1	A3S1	Stone Age	MSA	S33°27'16.3"; E26°57'39.7"	In situ conservation
A3S2	A3S2	Stone Age	MSA	S33°26'59.0"; E26°58'18.9"	Archaeological monitoring
A3S3	A3S3	Colonial Period	Residence	S33°27'19.1"; E26°57'33.5"	In situ conservation
A3S4	A3S4	Colonial Period	Farmstead	S33°27'16.7"; E26°57'27.4"	In situ conservation
A3S5	A3S5	Contemporary	Farmstead	S33°26'55.4"; E26°58'33.2"	N/A
ADDITIONAL ARCHAEOLOGICAL SITES					
A4S1	A4S1	Colonial Period	School	S33°27'19.9"; E26°56'48.1"	In situ conservation
A4S2	A4S2	Colonial Period	Church	S33°27'20.4"; E26°56'49.5"	In situ conservation
A4S3	A4S3	Colonial Period	Cemetery	S33°27'16.8"; E26°56'50.0"	In situ conservation
A4S4	A4S4	Colonial Period	Cemetery	S33°27'22.0"; E26°56'52.2"	In situ conservation
A4S5	A4S5	Colonial Period	Clubhouse	S33°27'17.0"; E26°57'01.1"	In situ conservation

Table 2: Development and Phase 1 AIA assessment findings – co-ordinate details

NOTE: Should any archaeological or cultural heritage resources, including human remains / graves, as defined and protected under the NHRA 1999, and not reported on in this report be identified during the course of development the developer should immediately cease operation in the vicinity of the find and report the site to SAHRA / an ASAPA accredited CRM archaeologist.

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INTRODUCTION TO THE ARCHAEOLOGY OF SOUTH AFRICA

Archaeologically the southern African cultural environment is roughly divided into the Stone Age, the Iron Age and the Colonial Period, including its subsequent Industrial component. This cultural division has a rough temporal association beginning with the Stone Age, followed by the Iron Age and the Colonial Period. The division is based on the identified primary technology used. The hunter-gatherer lifestyle of the Stone Age is identified in the archaeological record through stone being the primary raw material used to produce tools. Iron Age people, known for their skill to work iron and other metal, also practiced agriculture and animal husbandry. Kingdoms and civilizations associated with the Iron Age are indicative of a complex social hierarchy. The Colonial Period is marked by the advent of writing, in southern Africa primarily associated with the first European travelers (Mitchell 2002).

During the latter part of the Later Stone Age (LSA) hunter-gatherers shared their cultural landscape with both pastoralists and Iron Age people, while the advent of the Colonial Period in South Africa is marked by a complex cultural mosaic of people; including LSA hunter-gatherers, pastoralists, Later Iron Age farming communities and Colonial occupation.

1) Early Hominin Evolution

DNA studies indicate that humans and chimpanzees shared a common ancestor between 6-8Mya (Sibley & Ahlquist 1984). By 4Mya, based on fossil evidence from Ethiopia and Kenya, hominins (humans and their immediate fossil ancestors and relatives) had already evolved. The earliest fossils are ascribed to *Ardipithecus ramidus* (4.4Mya), succeeded by *Australopithecus anamensis* (4.2-3.9Mya). These fossils are inferred to lie at the base from which all other hominins evolved (Leakey *et al.* 1995; White *et al.* 1994).

In South Africa the later hominins are classed into 3 groups or distinct genera; *Australopithecus* (gracile australopithecines), *Paranthropus* (robust australopithecines) and *Homo*. South Africa has 3 major hominin sites: Taung in the North-West Province, where Raymond Dart identified the first *Australopithecus* fossil in 1924 (Dart 1925); The Cradle of Humankind (Sterkfontein Valley) sites in Gauteng, the most prolific hominin locality in the world for the period dating 3.5-1.5Mya which have yielded numerous *Australopithecus*, *Paranthropus* and limited *Homo* fossils (Keyser *et al.* 2000; Tobias 2000); and Makapansgat in the Limpopo Province, where several more specimens believed to be older than most of the Cradle specimens were discovered (Klein 1999).

A. africanus, represented at all 3 sites are believed to have been present on the South African landscape from about 3Mya. From approximately 2.8Mya they shared, at least in the Cradle area, the landscape with *P. robustus* and from roughly 2.3Mya with early forms of *Homo* (Clarke 1999). Global climatic cooling around 2.5Mya may have stimulated a burst of species turnover amongst hominins (Vrba 1992); the approximate contemporary appearance of the first stone tools suggests that this was a critical stage in human evolution. But exactly which early hominin population is to be accredited as the ancestor of *Homo* remains elusive.

H. ergaster is present in the African palaeo-anthropological record from around 1.8Mya and shortly thereafter the first exodus from Africa is evidenced by *H. erectus* specimens from China, Indonesia and even Europe (Klein 1999).

2) The Stone Age

2.1) The Earlier Stone Age

In South Africa the only Earlier Stone Age (ESA) Oldowan lithic assemblage comes from Sterkfontein Cave. The predominant quartz assemblage is technologically very simple, highly informal and inferred to comprise exclusively of multi-purpose tools (Kuman *et al.* 1997). The latter part of the ESA is characterized by the Acheulean Industrial Complex, present in the archaeological record from at least 1.5Mya. Both *H. ergaster* and *P. robustus* may be accredited with the production of these tools. The association between stone tools and increased access to meat and marrow supporting the greater dietary breadth of *Homo* may have been vital to *Homo's* evolutionary success; and the eventual extinction of the robust australopithecines (Klein 1999).

Probably the longest lasting artefact tradition ever created by hominins, the Acheulean is found from Cape Town to north-western Europe and India, occurring widely in South Africa. Despite the many sites it is still considered a 'prehistoric dark age' by many archaeologists, encompassing one of the most critical periods in human evolution; the transition from *H. ergaster* to archaic forms of *H. Sapiens* (Klein 1999).

The Acheulean industry is characterized by handaxes and cleavers as *fosilles directeurs* (signature artefact types), in association with cores and flakes. Handaxes and cleavers were multi-purpose tools used to work both meat and plant matter (Binneman & Beaumont 1992). Later Acheulean

flaking techniques involved a degree of core preparation that allowed a single large flake of predetermined shape and size to be produced. This *Victoria West technique* indicates an origin within the Acheulean for the *Levallois technique* of the Middle Stone Age (Noble & Davidson 1966). The lithic artefact component was supplemented by wood and other organic material (Deacon 1970).

2.2) The Middle Stone Age

The Middle Stone Age (MSA), dating from approximately 500kya to 40-27/23kya is interpreted as an intermediate technology between the Acheulean and the Later Stone Age (LSA) (Goodwin & van Riet Lowe 1929). The MSA is typologically characterized by the absence of handaxes and cleavers, the use of prepared core techniques and the production of blades, triangular and convergent flakes, with convergent dorsal scars and faceted striking platforms, often produced by means of the *Levallois technique* (Volman 1984). The widespread occurrence of MSA technology across Africa and its spread into much of Eurasia in Oxygen Isotope Stage (OIS) 7 is viewed as part of a process of population dispersal associated with both the ancestors of the later Neanderthals in Europe and anatomically modern humans in Africa (Foley & Lahr 1997).

After the riches offered by the Cradle sites and Makapansgat, southern Africa's Middle Pleistocene fossil record is comparatively poor. Early Middle Pleistocene fossil evidence suggests an archaic appearance and fossils are often assigned to *H. heidelbergensis* and *H. sapiens rhodesiensis* (Rightmire 1976). Modern looking remains, primarily from Border Cave (KwaZulu-Natal) and Klasies River Mouth (Eastern Cape) raised the possibility that anatomically modern humans had, by 120kya, originated south of the Sahara before spreading to other parts of the world (Brauer 1982; Stringer 1985). Subsequent studies of modern DNA indicated that African populations are genetically more diverse and probably older than those elsewhere (Cann *et al.* 1994). Combined, the fossil and genetic evidence underpins the so-called *Out of Africa 2* model (arguing that gene flow and natural selection led regional hominin populations along distinct evolutionary trajectories after *Homo's* expansion from Africa in the Lower Pleistocene *Out of Africa 1* model) of modern human origins and the continuing debate as to whether it should be preferred to its *Multiregional* alternative (arguing that modern humans evolved more or less simultaneously right across the Old World) (Mellars & Stringer 1989; Aitken *et al.* 1993; Nitecki & Nitecki 1994).

Persuasive evidence of ritual activity or bodily decoration is evidenced by the widespread presence of red ochre at particularly MSA 2 sites (after Volman's 1984 MSA 1-4 model; Hensilwood & Sealy 1997), while evidence from Lion Cave, Swaziland, indicates that specularite may have been mined as early as 100kya (Beaumont 1973). Evidence for symbolic behavioral activity is largely absent; no evidence for rock art or formal burial practices exists.

2.3) The Later Stone Age

Artefacts characteristic of the Later Stone Age (LSA) appear in the archaeological record from 40/27-23kya and incorporates microlithic as well as macrolithic assemblages. Artefacts were produced by modern *H. sapien* or *H. sapien sapien*, who subsisted on a hunter-gatherer way of life (Deacon 1984; Mitchell 2002).

According to Deacon (1984) the LSA can temporally be divided into 4 broad units directly associated with climatic, technological and subsistence changes:

1. Late Pleistocene microlithic assemblages (40-12kya);
2. Terminal Pleistocene / early Holocene non-microlithic assemblages (12-8kya);
3. Holocene microlithic assemblages (8kya to the Historic Period); and
4. Holocene assemblages with pottery (2kya to the Historic Period) closely associated with the influx of pastoralist communities into South Africa (Mitchell 2002).

Elements of material culture characteristic of the LSA reflect modern behavior. Deacon (1984) summarizes these as:

1. Symbolic and representational art (paintings and engravings);
2. Items of personal adornment such as decorated ostrich eggshell, decorated bone tools and beads, pendants and amulets of ostrich eggshell, marine and freshwater shells;
3. Specialized hunting and fishing equipment in the form of bows and arrows, fish hooks and sinkers;
4. A greater variety of specialized tools including bone needles and awls and bone skin-working tools;
5. Specialized food gathering tools and containers such as bored stone digging stick weights, carrying bags of leather and netting, ostrich eggshell water containers, tortoiseshell bowls and scoops and later pottery and stone bowls;
6. Formal burial of the dead in graves (sometimes covered with painted stones or grindstones and accompanied by grave goods);
7. The miniaturization of selected stone tools linked to the practice of hafting for composite tools production; and
8. A characteristic range of specialized tools designed for making some of the items listed above.

Rock Art

Rock Art is one of the most visible and informative components of South Africa's archaeological record. Research into LSA ethnography (as KhoiSan history) has revolutionized our understanding of both painted and engraved (petroglyph) images, resulting in a paradigm shift in Stone Age archaeology (Deacon & Dowson 2001). Paintings are concentrated in the Drakensberg / Maluti mountains, the eastern Free State, the Cape Fold Mountains, the Waterberg Plateau and the Soutpansberg mountains. Engravings on the other hand are found throughout the Karoo, the western Free State and North-West Province (Mitchell 2002). Both forms of LSA art drew upon a common stock of motifs, derived from widely shared beliefs and include a restricted range of naturalistically depicted animals, geometric imagery, human body postures and non-realistic combinations of human and animal figures (anthropomorphic figurines). LSA Rock Art is closely associated with spiritual or magical significance (Lewis-Williams & Dowson 1999).

Aside from LSA or KhoiSan Rock Art, thus art produced by both hunter-gatherer and pastoralist and agro-pastoralist groups, Rock Art produced by Iron Age populations are known to be present towards the north of the country.

Shell Middens ('Strandloper' Cultures)

South Africa's nearly 3,000km coastline is dotted by thousands of shell middens, situated between the high water mark and approximately 5km inland, bearing witness to long-term exploitation of shellfish mainly over the past 12,000 years. These LSA shell middens are easily distinguishable from natural accumulations of shells and deposits can include bones of animals eaten such as shellfish, turtles and seabirds, crustaceans like crabs and crayfish and marine mammal remains of seals, dolphins and occasionally whales. Artefacts and hearth and cooking remains are often found in shell midden deposits. Evidence exist that fish were speared, collected by hand, reed baskets and by means of stone fish traps in tidal pools (Mitchell 2002).

Shell midden remains were in the past erroneously assigned to 'Strandloper cultures'. Deacon & Deacon (1999) explain that '*no biological or cultural group had exclusive rights to coastal resources.*' Some LSA groups visited the coast periodically while others stayed year round and it is misleading to call them all by the same name. Two primary sources of archaeological enquiry serves to shed more light on the lifestyles of people who accumulated shell middens, one being the analysis of food remains in the middens itself and the other being the analysis of LSA human skeletal remains of people buried either in shell middens or within reasonable proximity to the coast.

Shell middens vary in character ranging from large sites tens of meters in extent and with considerable depositional depth to fairly small ephemeral collections, easily exposed and destroyed by shifting dune action. Shell middens are also found inland, along rivers where fresh water mussels occur. These middens are often fairly small and less common; in the Eastern Cape often dated to within the past 3,000 years (Deacon & Deacon 1999).

In addition shell middens are not exclusively assigned to LSA cultures; shellfish were exploited during the Last Interglacial, indicating that the practice was most probably continuous for the past 120,000 years (MSA shell middens). Along the coast of KwaZulu-Natal evidence exist for the exploitation of marine food resources by Iron Age communities. These shell middens are easily distinguished from Stone Age middens by particularly rich, often decorated ceramic artefact content. Colonial Period shell middens are quite rare and extremely ephemeral in character; primarily the result of European shipwreck survivors and reported on along the coast of KwaZulu-Natal and the Transkei, Eastern Cape.

3) The Iron Age

For close to 2 millennia people combining cereal agriculture with stock keeping have occupied most of southern Africa's summer rainfall zone. The rapid spread of farming, distinctive ceramics and metallurgy is understood as the expansion of a Bantu-speaking population, in archaeological terms referred to as the Iron Age.

3.1) The Early Iron Age

Ceramic typology is central to current discussions of the expansion of iron using farming communities. The most widely used approach is that of Huffman (1980), who employs a multidimensional analysis (vessel profile, decoration layout and motif) to reconstruct different ceramic types. Huffman (1998) argues that ceramics can be used to trace the movements of people, though not necessarily of specific social or political groupings. Huffman's Urewe Tradition coincides largely with Phillipson's (1977) Eastern Stream. A combined Urewe Tradition / Eastern Stream model for the Early Iron Age can be summarized as:

1. The Kwale branch (extending along the coast from Kenya to KwaZulu-Natal);
2. The Nkope branch (located inland and reaching from southern Tanzania through Malawi and eastern Zambia into Zimbabwe); and
3. The Kalundu branch (stretching from Angola through western Zambia, Botswana and Zimbabwe into South Africa).

In southern Africa, recent work distinguishes two phases of the Kwale branch: The earlier Silver Leaves facies (250-430AD) occurring as far south as the Northern Province. The later expression or Mzonjani facies (420-580AD) occurs in the Northern Province as well as along the KwaZulu-Natal coastal belt (Huffman 1998). Since the Silver Leaves facies is only slightly younger than the Kwale type site in Kenya, very rapid movement along the coast, perhaps partly by boat, is inferred (Klapwijk 1974). Subsequently (550-650AD) people making Mzonjani derived ceramics settled more widely in the interior of South Africa.

Assemblages attributable to the Nkope branch appear south of the Zambezi but north of South Africa from the 5th Century. Ziwa represents an early facies, with Gokomere deriving jointly from Ziwa and Bambata. A subsequent phase is represented by the Zhizo facies of the Shashe-Limpopo basin, and by Taukome (Huffman 1994). Related sites occur in the Kruger National Park (Meyer 1988). Zhizo (7th – 10th Century) is ancestral to the Toutswe tradition which persisted in eastern Botswana into the 13th Century.

Kalundu origins need further investigation; its subsequent development is however better understood. A post Bambata phase is represented by the 5th – 7th Century sites of Happy Rest, Klein Africa and Maunatlana in the Northern Province and Mpumalanga (Prinsloo 1974, 1989). Later phases are present at the Lydenburg Heads site (Whitelaw & Moon 1996) and by the succession of Mzuluzi, Ndondonwane and Ntshekane in KwaZulu-Natal (7th – 10th Centuries) (Prins & Grainger 1993). Later Kalundu facies include Klingbeil and Eiland in the northern part of the country (Evers 1980) with Kgopolwe being a lowveld variant in Mpumalanga (10th – 12th Century). Broadhurst and other sites indicate a still later survival in Botswana (Campbell 1991).

Despite the importance accorded to iron agricultural implements in expanding the spread of farming and frequent finds of production debris, metal objects are rare. Metal techniques were simple, with no particular sign of casting, wire drawing or hot working. Jewelry (bangles, beads, pendants etc.) constitute by far the largest number of finds but arrows, adzes, chisels, points and spatulae are known (Miller 1996).

Early Iron Age people were limited to the Miombo and Savannah biomes; excluded from much of the continent's western half by aridity and confined in the south during the 1st millennium to bushveld areas of the old Transvaal. Declining summer rainfall restricted occupation to a diminishing belt close to the East Coast and north of S33° (Maggs 1994); sites such as Canasta Place (800AD), Eastern Cape, mark the southern-most limit of Early Iron Age settlement (Nogwaza 1994).

The Central Cattle Pattern

The Central Cattle Pattern (CCP) was the main cognitive pattern since the Early Iron Age (Huffman 1986). The system can be summarized as opposition between male pastoralism and female agriculture; ancestors and descendants; rulers and subjects; and men and women. Cattle served as the primary means of transaction; they represented symbols exchanged for the fertility of wives, legitimacy of children and appeasement of ancestors. Cattle were also used as tribute to rulers confirming sub-ordination and redistribution as loan cattle by the ruler to gain political support. Cattle represented healing and fertilizing qualities (Huffman 1998; Kuper 1980).

This cognitive and conceptual structure underlies all cultural behavior, including the placement of features in a settlement. The oppositions of male and female, pastoralism and agriculture, ancestors and descendants, rulers and subjects, cool and hot are represented in spatial oppositions, either concentric or diametric (Huffman 1986).

A typical CCP village comprise of a central cattle enclosure (byre) where men are buried. The *Kgotla* (men's meeting place / court) is situated adjacent to the cattle enclosure. Surrounding the enclosure is an arc of houses, occupied according to seniority. Around the outer perimeter of the houses is an arc of granaries where women keep their pots and grinding stones (Huffman 1986). The model varies per ethnic group which helps to distinguish ethnicity throughout the Iron Age, but more studies are required to recognize the patterns.

3.2) The Middle Iron Age

The hiatus of South African Middle Iron Age activity was centered in the Shashe-Limpopo Valley and characterized by the 5-tier hierarchical Mapungubwe State spanning some 30,000km². By the 1st millennium ivory and skins were already exported overseas, with sites like Sofala and Chibueni, Mozambique, interfacing between interior and transoceanic traders. Exotic glass beads, cloth and Middle Eastern ceramics present at southern African sites mark the beginning of the regions incorporation into the expanding economic system that, partly tied together with maritime trading links across the Indian Ocean, increasingly united Africa, Asia and Europe long before Da Gama or Columbus (Eloff & Meyer 1981; Meyer 1998).

Occupation was initially focused at Bambandanyalo and K2. The Bambandanyalo main midden (1030-1220AD) stands out above the surrounding area, reaching more than 6m in places and covering more than 8ha the site may have housed as many as 2,000 people (Meyer 1998). The CCP was not strictly followed; whether this is ideologically significant or merely a reflection of local topography remains unclear. The

midden, the size of which may reflect the status of the settlement's ruler, engulfed the byre around 1060-1080AD, necessitating relocation of the cattle previously kept there. The re-organization of space and worldview implied suggests profound social changes even before the sites' abandonment in the early 13th century, when the focus of occupation moved to Mapungubwe Hill, 1 km away (Huffman 1998).

Excavations at Mapungubwe Hill, though only occupied for a few decades (1220-1290AD), yielded a deep succession of gravel floors and house debris (Eloff & Meyer 1981). Huffman (1998) suggests that the suddenness with which Mapungubwe was occupied may imply a deliberate decision to give spatial expression to a new social order in which leaders physically removed themselves from ordinary people by moving onto more inaccessible, higher elevations behind the stone walls demarcating elite residential areas. Social and settlement changes speak of considerable centralization of power and perhaps the elaboration of new ways of linking leaders and subjects.

At Bambandanyalo and Mapungubwe elite burial grave goods include copper, bone, ivory and golden ornaments and beads. Social significance of cattle is reinforced by their importance among the many human and animal ceramic figurines and at least 6 'beast burials' (Meyer 1998).

Today the drought prone Shashe-Limpopo Valley receives less than 350mm of rainfall per annum, making cereal cultivation virtually impossible. The shift to drier conditions in the late 1200's across the Shashe-Limpopo basin and the eastern Kalahari may have been pivotal in the break-up of the Mapungubwe polity, the collapse of Botswana's Toutswe tradition and the emergence of Great Zimbabwe (1220-1550AD), southern Africa's best known and largest (720ha) archaeological site (Meyer 1998).

South of the Limpopo and north of the Soutpansberg, Mapungubwe derived communities survived into the 14th Century, contemporary with the establishment of Sotho-speaking makers of Maloko pottery.

3.3) *The Later Iron Age*

South African farming communities of the 2nd millennium experienced increased specialization of production and exchange, the development of more nucleated settlement patterns and growing political centralization, albeit not to the same extent as those participating in the Zimbabwe tradition. However, together they form the background to the cataclysmic events of the late 18th / early 19th Century *Mfecane* (Mitchell 2002).

Archaeological evidence of settlement pattern, social organization and ritual practice often differ from those recorded ethnographically. The Moloko ceramic tradition seems to be ancestral to modern Sotho-Tswana speakers (Evers 1980) and from about 1,100AD a second tradition, the Blackburn tradition, appears along South Africa's eastern coastline. Blackburn produced mostly undecorated pottery (Davies 1971), while Mpambanyoni assemblages, reaching as far south as Transkei, includes examples of rim notching, incised lines and burnished ochre slip (Robey 1980). At present, no contemporary farming sites are known further inland in KwaZulu-Natal or the Eastern Cape.

Huffman (1989) argues that similarities between Blackburn and early Maloko wares imply a related origin, presumably in the Chifumbaze of Zambia or the Ivuna of Tanzania, which contains a range of ceramic attributes important in the Blackburn as well as beehive grass huts similar to those made by the Nguni. This is one of the few suggestions of contact between Sotho-Tswana and Nguni speakers on the one hand and farming communities who, if Huffman is correct, were already long established south of the Limpopo. Both ethnographic and archaeological data demonstrate that Sotho-Tswana and Nguni are patrilineal and organize their settlements according to the CCP (Kuper 1980).

From 1,300AD there is increasing evidence for the beginning of agro-pastoralist expansion considerably beyond the area of previous occupation. It is also to this time that the genealogies of several contemporary Bantu speaking groups can be traced (Wilson & Thompson 1969). Associated with this expansion was the regular employment of stone, rather than wood, as building material, an adaptation that has greatly facilitated the discovery and identification of settlements. Maggs (1976) describes 4 basic settlement types all characterized by the use of semi weathered dolorite to produce hard binding *daga* for house floors and a wall building tradition employing larger more regular stones for the inner and outer faces and smaller rubble for the infill. As with the more dispersed homesteads of KwaZulu-Natal and the Eastern Cape, sites tend to be in locally elevated situations, reflecting a deep seated Sotho and Nguni preference for benign higher places rather than supernaturally dangerous riverside localities; another important contrast to both 1st millennium (Maggs 1976) and later Zulu Kingdom settlement patterns (Hall & Maggs 1979).

The lack of evidence for iron production in the interior and eastern part of South Africa emphasize exchange relationships between various groups and associated more centralized polities. By the 19th Century iron production in KwaZulu-Natal was concentrated in particular clans and lineages and associated with a range of social and religious taboos (Maggs 1992). South of Durban comparatively few smelting sites are known (Whitelaw 1991), a trend even more apparent in Transkei (Feely 1987). However, metal remained the most important and archaeologically evident item traded between later farming communities. (Other recorded trade items include glass and ostrich eggshell beads; Indian Ocean seashells; siltstone pipes; *dagga*, and later on tobacco; pigments including ochre, graphite and specularite; hides and salt.)

Rising polity settlements are particularly evident in the north of the country and dated to the 17th Century, including Molokwane, capital of the Bakwena chiefdom (Pistorius 1994) and Kaditshwene, capital of a major section of the Hurutshe, whose population of 20,000 in 1820 almost equals contemporary Cape Town in size (Boeyens 2000). The agglomeration of Tswana settlements in the north of the country was fuelled by both population growth and conflict over access to elephant herds for ivory and long distance trade with the East Coast. During this period ceramic decoration became blander and more standardized than the earlier elaborate decoration that included red ochre and graphite coloring.

The *Mfecane* refers to the wars and population movements of the early 19th Century which culminated in the establishment of the Zulu Kingdom and came to affect much of the interior, even beyond the Zambezi: The late 18th Century was marked by increasing demands for ivory (and slaves) on the part of European traders at Delagoa Bay; as many as 50 tones of ivory were exported annually from 1750-1790. As elephant populations declined, competition increased both for them and for the post 1790 supply of food to European and American whalers calling at Delagoa Bay (Smith 1970). Cattle raiding, conflict over land and changes in climatic and subsistence strategies characterized much of the cultural landscape of the time.

Competition for access to overseas trade encouraged some leaders to replace locally organized circumcision schools and age-sets with more permanently maintained military regiments. These were now used to gain access through warfare to land, cattle and stored food. By 1810 three groups, the Mthethwa, Ndwandwe and Ngwane dominated northern KwaZulu-Natal (Wright 1995). The Mthethwa paramourcy was undermined by the killing of its leader Dingiswayo in *circa* 1818, which led to a brief period of Ndwandwe dominance. In consequence one of Dingiswayo's former tributaries, Shaka, established often forceful alliances with chiefdoms further south. Shaka's Zulu dominated coalition resisted the Ndwandwe who in return fled to Mozambique. As the Zulu polity expanded it consolidated its control over large areas, incorporating many communities into it. Others sought refuge from political instability by moving south of the Thukela River, precipitating a further *domino effect* as far as the Cape Colony's eastern border (Wright 1995).

4) *The Colonial Period*

In the 15th Century Admiral Zheng He and his subordinates impressed the power of the Ming Dynasty rulers in a series of voyages as far afield as Java, Sri Lanka, southern Arabia and along the East African coast, collecting exotic animals *en route*. But nothing more came of his expeditions and China never pursued opportunities for trade or colonization (Mote 1991).

Portuguese maritime expansion began around the time of Zheng He's voyages; motivated by a desire to establish a sea route to the riches of the Far East. By 1485 Diogo Cao had reached Cape Cross, 3 years later Bartolomeu Dias rounded the Cape of Good Hope and less than a decade later Vasco da Gama called at several places along South Africa's coast, trading with Khoekhoen (Khoi) at Mossel Bay before reaching Mozambique and crossing the ocean to India. His voyage initiated subsequent Portuguese bases from China to Iraq. In Africa interest was focused on seizing important coastal trading towns such as Sofala and gaining access to the gold of Zimbabwe. Following the 1510 Portuguese-Khoekhoen battle at Table Bay, in which the viceroy of India was killed, Portuguese ships ceased to call along the South African coast (Elphick 1985).

A number of shipwrecks, primarily along the eastern coast attest to Portuguese activity including the Sao Joao, wrecked in 1552 near Port Edward and the Sao Bento, destroyed in 1554 off the Transkei coast. Survivors' accounts provided the 1st detailed information on Africa's inhabitants (Auret & Maggs 1982).

By the late 1500's Portuguese supremacy of the Indian Ocean was threatened. From 1591 numerous Dutch and English ships called at Table Bay and in 1652 the Dutch East Indian Company (VOC) established a permanent base, with the intent to provide fresh food and water to VOC ships. In an attempt to improve the food supply a few settlers (free burghers) were allowed to establish farms. The establishment of an intensive mixed farming economy failed due to shortages of capital and labor, and free burghers turned to wheat cultivation and livestock farming. While the population grew slowly the area of settlement expanded rapidly with new administrative centers established at Stellenbosch (1676), Swellendam (1743) and Graaf-Reinet (1785). By the 1960's the Colony's frontier was too long to be effectively policed by VOC officials (Elphick 1985).

From the 1700's many settlers expanded inland over the Cape Fold Mountain Belt. The high cost of overland transport constrained the ability to sell their produce while settlement of the interior was increasingly made difficult by resident KhoiSan groups, contributing due to a lack of VOC military support to growing Company opposition in the years before British control of the Cape (1795 / 1806) (Davenport & Saunders 2000).

In 1820 a major British settlement was implanted on the eastern frontier of the Cape Colony, resulting in large numbers of the community moving into the interior, initially to KwaZulu-Natal, and then after Britain annexed Natal (1843), further into the interior to beyond the Vaal River. Disruptions of the *Mfecane* eased their takeover of African lands and the *Boers* (farmers) established several Republics. A few years later the 2nd South African War saw both the South African and Orange Free State Republics annexed by Britain, a move largely motivated by British desire to control the goldfields of the Witwatersrand. With adjacent regions of the sub-continent also falling, directly or indirectly, under

British rule and German colonization of Namibia, European control of the whole of southern Africa was firmly established before the 1st World War (Davenport & Saunders 2000).

❖ **Xhosa Iron Age Cultures meets Colonists in the Eastern Cape**

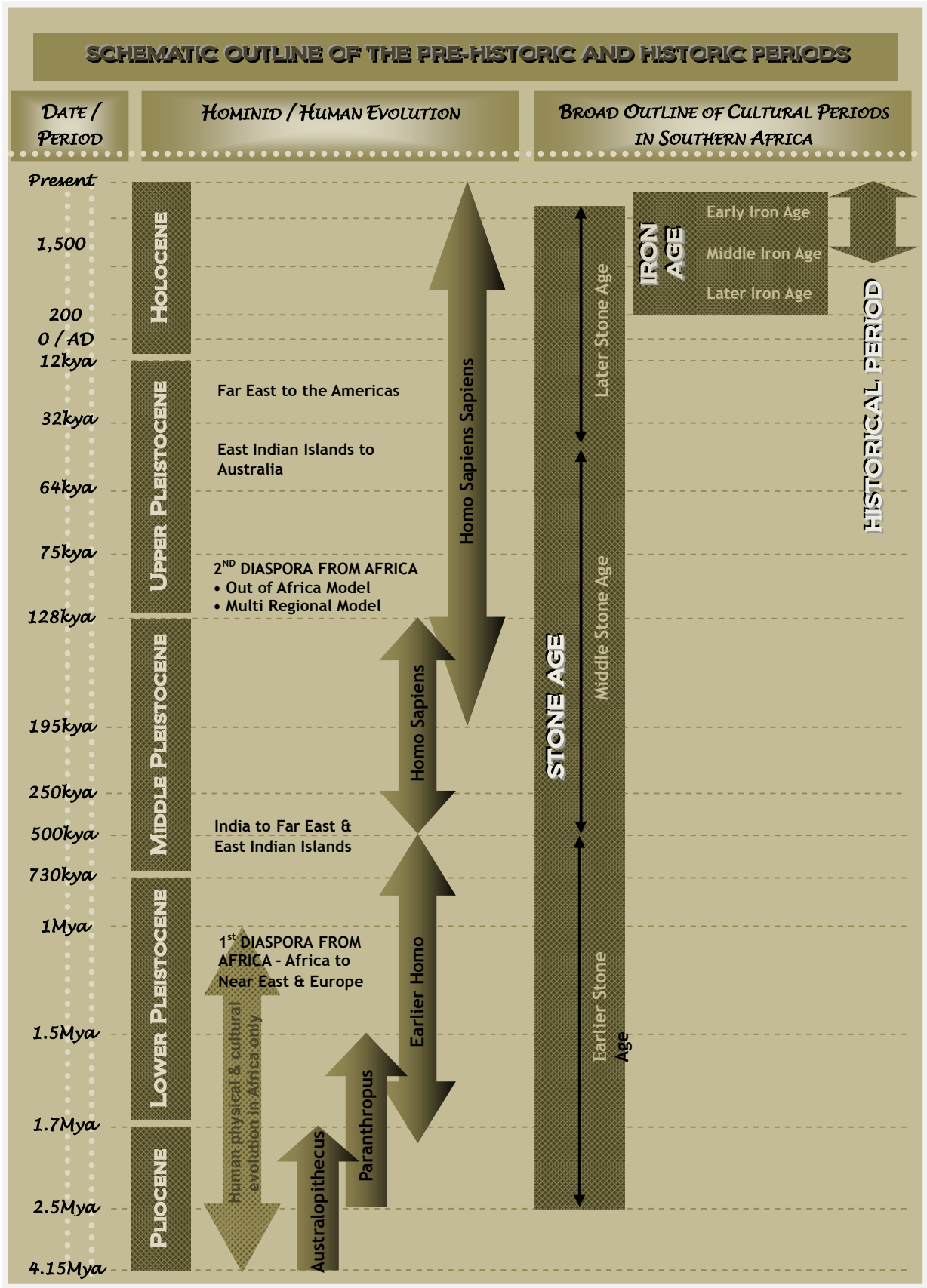
From the late 1600's conflict between migrants from the Cape (predominantly Boers) and Xhosa people in the region of the Fish River were strife, ultimately resulting in a series of 9 Frontier Wars (1702-1878) (Milton 1983). Both cultures were heavily based and reliant on agriculture and cattle farming. As more Cape migrants, and later settlers from Britain (1820) and elsewhere arrived, population pressures and competition over land, cattle and good grazing became intense. Cattle raiding became endemic on all sides, with retaliatory raids launched in response. As missionaries arrived with evangelical messages, confrontations with hostile chiefs who saw them as undermining traditional Xhosa ways of life resulted in conflicts which flared into wars.

As pressures between the European settlers and the Xhosa grew, settlers organized themselves into local militia, counteracted by Xhosa warring skills: But both sides were limited by the demands of seasonal farming and the need for labor during harvest. Wars between the Boers and the Xhosa resulted in shifting borders, from the Fish to the Sundays River, but it was only after the British annexed the Cape in 1806 that authorities turned their attention to the Eastern regions and petitions by the settlers about Xhosa raids. British expeditions, in particular under Colonel John Graham in 1811 and later Harry Smith in 1834, were sent not only to secure the frontier against the Xhosa, but also to impose British authority on the settlers, with the aim to establish a permanent British presence. Military forts were built and permanently manned. Over time the British came to dominate the area both militarily and through occupation with the introduction of British settlers. The imposition of British authority led to confrontations not only with the Xhosa but also with disaffected Boers and other settlers, and other native groups such as the Khoikhoi, the Griqua and the Mpondo. The frontier wars continued over a period of about 150 years; from the 1st arrival of the Cape settlers, and with the intervention of the British military ultimately ending in the subjugation of the Xhosa people. Fighting ended on the Eastern Cape frontier in June 1878 with the annexation of the western areas of the Transkei and administration under the authority of the Cape Colony (Milton 1983).

❖ **The Industrial Revolution**

The Industrial Revolution refers roughly to the period between the 18th - 19th Centuries, typified by major changes in agriculture, manufacturing, mining, transport, and technology. Changing industry had a profound effect on socio-economic and socio-cultural conditions across the world: The Industrial Revolution marks a major turning point in human history; almost every aspect of daily life was eventually influenced in some way. Average income and population size began to exhibit unprecedented growth; in the two centuries following 1800 the world's population increased over 6-fold, associated with increasing urbanization and demand of resources. Starting in the latter part of the 18th century, the transition from manual labor towards machine-based manufacturing changed the face of economic activity; including the mechanization of the textile industries, the development of iron-making techniques and the increased use of refined coal. Trade expansion was enabled by the introduction of canals, improved roads and railways. The introduction of steam power fuelled primarily by coal and powered machinery was underpinned by dramatic increases in production capacity. The development of all-metal machine tools in the first two decades of the 19th century facilitated the manufacture of more production machines in other industries (More 2000).

Effects of the Industrial Revolution were widespread across the world, with its enormous impact of change on society, a process that continues today as 'industrialization'.



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EXTRACTS FROM THE NATIONAL HERITAGE RESOURCES ACT, NO 25 OF 1999

DEFINITIONS**Section 2**

In this Act, unless the context requires otherwise:

- ii. *"Archaeological"* means –
 - a) material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;
 - b) rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10 m of such representation;
 - c) wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic,... and any cargo, debris, or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation.
- viii. *"Development"* means any physical intervention, excavation or action, other than those caused by natural forces, which may in the opinion of a heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including –
 - a) construction, alteration, demolition, removal or change of use of a place or structure at a place;
 - b) carrying out any works on or over or under a place;
 - c) subdivision or consolidation of land comprising, a place, including the structures or airspace of a place;
 - d) constructing or putting up for display signs or hoardings;
 - e) any change to the natural or existing condition or topography of land; and
 - f) any removal or destruction of trees, or removal of vegetation or topsoil;
- xiii. *"Grave"* means a place of interment and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place;
- xxi. *"Living heritage"* means the intangible aspects of inherited culture, and may include –
 - a) cultural tradition;
 - b) oral history;
 - c) performance;
 - d) ritual;
 - e) popular memory;
 - f) skills and techniques;
 - g) indigenous knowledge systems; and
 - h) the holistic approach to nature, society and social relationships.
- xxx. *"Palaeontological"* means any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trance;
- xli. *"Site"* means any area of land, including land covered by water, and including any structures or objects thereon;
- xliv. *"Structure"* means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith;

NATIONAL ESTATE**Section 3**

- 1) For the purposes of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.
- 2) Without limiting the generality of subsection 1), the national estate may include –
 - a) places, buildings, structures and equipment of cultural significance;
 - b) places to which oral traditions are attached or which are associated with living heritage;
 - c) historical settlements and townscapes;
 - d) landscapes and natural features of cultural significance;
 - e) geological sites of scientific or cultural importance
 - f) archaeological and palaeontological sites;
 - g) graves and burial grounds, including –
 - i. ancestral graves;
 - ii. royal graves and graves of traditional leaders;
 - iii. graves of victims of conflict
 - iv. graves of individuals designated by the Minister by notice in the Gazette;
 - v. historical graves and cemeteries; and
 - vi. other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No 65 of 1983)
 - h) sites of significance relating to the history of slavery in South Africa;
 - i) movable objects, including –
 - i. objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;

- ii. objects to which oral traditions are attached or which are associated with living heritage;
- iii. ethnographic art and objects;
- iv. military objects;
- v. objects of decorative or fine art;
- vi. objects of scientific or technological interest; and
- vii. books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1 xiv) of the National Archives of South Africa Act, 1996 (Act No 43 of 1996).

STRUCTURES

Section 34

- 1) No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

ARCHAEOLOGY, PALAEOLOGY AND METEORITES

Section 35

- 3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.
- 4) No person may, without a permit issued by the responsible heritage resources authority –
 - a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
 - b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
 - c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
 - d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- 5) When the responsible heritage resources authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or palaeontological site is under way, and where no application for a permit has been submitted and no heritage resources management procedure in terms of section 38 has been followed, it may –
 - a) serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order;
 - b) carry out an investigation for the purpose of obtaining information on whether or not an archaeological or palaeontological site exists and whether mitigation is necessary;
 - c) if mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph a) to apply for a permit as required in subsection 4); and
 - d) recover the costs of such investigation from the owner or occupier of the land on which it is believed an archaeological or palaeontological site is located or from the person proposing to undertake the development if no application for a permit is received within two weeks of the order being served.
- 6) The responsible heritage resources authority may, after consultation with the owner of the land on which an archaeological or palaeontological site or meteorite is situated, serve a notice on the owner or any other controlling authority, to prevent activities within a specified distance from such site or meteorite.

BURIAL GROUNDS AND GRAVES

Section 36

- 3) No person may, without a permit issued by SAHRA or a provincial heritage resources authority –
 - a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
 - b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
 - c) bring onto or use at a burial ground or grave referred to in paragraph a) or b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.
- 4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction of any burial ground or grave referred to in subsection 3a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources authority.
- 5) SAHRA or a provincial heritage resources authority may not issue a permit for any activity under subsection 3b) unless it is satisfied that the applicant has, in accordance with regulations made by the responsible heritage resources authority –
 - a) made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such grave or burial ground; and
 - b) reached agreements with such communities and individuals regarding the future of such grave or burial ground.

- 6) Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority –
- a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and
 - b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-internment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.

HERITAGE RESOURCES MANAGEMENT

Section 38

- 1) Subject to the provisions of subsections 7), 8) and 9), any person who intends to undertake a development categorised as –
 - a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length;
 - b) the construction of a bridge or similar structure exceeding 50 m in length;
 - c) any development or other activity which will change the character of a site –
 - i. exceeding 5 000 m² in extent; or
 - ii. involving three or more existing erven or subdivisions thereof; or
 - iii. involving three or more erven or subdivisions thereof which have been consolidated within the past five years; or
 - iv. the costs which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
 - d) the rezoning of a site exceeding 10 000 m² in extent; or
 - e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.
- 2) The responsible heritage resources authority must, within 14 days of receipt of a notification in terms of subsection 1) –
 - a) if there is reason to believe that heritage resources will be affected by such development, notify the person who intends to undertake the development to submit an impact assessment report. Such report must be compiled at the cost of the person proposing the development, by a person or persons approved by the responsible heritage resources authority with relevant qualifications and experience and professional standing in heritage resources management; or
 - b) notify the person concerned that this section does not apply.
- 3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection 2a) ...
- 4) The report must be considered timeously by the responsible heritage resources authority which must, after consultation with the person proposing the development decide –
 - a) whether or not the development may proceed;
 - b) any limitations or conditions to be applied to the development;
 - c) what general protections in terms of this Act apply, and what formal protections may be applied, to such heritage resources;
 - d) whether compensatory action is required in respect of any heritage resources damaged or destroyed as a result of the development; and
 - e) whether the appointment of specialists is required as a condition of approval of the proposal.

APPOINTMENT AND POWERS OF HERITAGE INSPECTORS

Section 50

- 7) Subject to the provision of any other law, a heritage inspector or any other person authorised by a heritage resources authority in writing, may at all reasonable times enter upon any land or premises for the purpose of inspecting any heritage resource protected in terms of the provisions of this Act, or any other property in respect of which the heritage resources authority is exercising its functions and powers in terms of this Act, and may take photographs, make measurements and sketches and use any other means of recording information necessary for the purposes of this Act.
- 8) A heritage inspector may at any time inspect work being done under a permit issued in terms of this Act and may for that purpose at all reasonable times enter any place protected in terms of this Act.
- 9) Where a heritage inspector has reasonable grounds to suspect that an offence in terms of this Act has been, is being, or is about to be committed, the heritage inspector may with such assistance as he or she thinks necessary –
 - a) enter and search any place, premises, vehicle, vessel or craft, and for that purpose stop and detain any vehicle, vessel or craft, in or on which the heritage inspector believes, on reasonable grounds, there is evidence related to that offence;
 - b) confiscate and detain any heritage resource or evidence concerned with the commission of the offence pending any further order from the responsible heritage resources authority; and
 - c) take such action as is reasonably necessary to prevent the commission of an offence in terms of this Act.
- 10) A heritage inspector may, if there is reason to believe that any work is being done or any action is being taken in contravention of this Act or the conditions of a permit issued in terms of this Act, order the immediate cessation of such work or action pending any further order from the responsible heritage resources authority.