

HERITAGE SCAN OF THE SANDILE WATER TREATMENT WORKS RESERVOIR CONSTRUCTION SITE, KEISKAMMAHOEK, EASTERN CAPE PROVINCE

1. Background and Terms of Reference

AGES Eastern Cape is conducting site monitoring for the construction of the Sandile Water Treatment Works Reservoir at British Ridge near Keiskammahoek approximately 30km west of King Williamstown in the Eastern Cape Province. Amatola Water is upgrading the capacity of the Sandile WTW and associated bulk water supply infrastructure, in preparation of supplying the Ndlambe Bulk Water Supply Scheme.

Potentially sensitive heritage resources such as a cluster of stone wall structures were recently encountered on the reservoir construction site on a small ridge and the Heritage Unit of Exigo Sustainability was requested to conduct a heritage scan of the site, in order to assess the site and rate potential damage to the heritage resources. The conservation of heritage resources is provided for in the **National Environmental Management Act**, (Act 107 of 1998) and endorsed by section 38 of the **National Heritage Resources Act** (NHRA - Act 25 of 1999). The Heritage Scan of the construction site attempted established the location and extent of heritage resources such as archaeological and historical sites and features, graves and places of religious and cultural significance and these resources were then rated according to heritage significance. Ultimately, the Heritage Scan provides recommendations and outlines pertaining to relevant heritage mitigation and management actions in order to limit and avoid further destruction of heritage resources. As such, the Heritage Scan functioned subject to the following **terms of reference for** heritage specialist input:

- Provide a description of archaeological artefacts, structures (including graves) and settlements at the construction site;
- Provide a cultural context and provenience for archaeological artefacts, structures (including graves) and settlements at the construction site and in the surrounding landscape, by means of a detailed desktop background study;
- Assess the nature and degree of significance of such resources within the area;
- Assess any current and future developmental impacts on the archaeological and historical remains;
- Establish heritage informants/constraints through establishing thresholds of impact significance;
- Propose immediate heritage management measures for current phases of heritage mitigation, management and permitting where applicable.
- Proposed general heritage mitigation and management procedures for future development activities at the site.
- Provide a Heritage Note on findings from the Heritage Scan, complying to SAHRA's minimum standards for Heritage Impact Assessment Studies and Reporting and the National Heritage Resources Act, 1999.
- Liaise and consult with the relevant Heritage Resources authority with regards to the current site status and mitigation / management measures.

2. Project Background

As noted above, Amatola Water is upgrading the capacity of the Sandile WTW and associated bulk water supply infrastructure, in preparation of supplying the Ndlambe Bulk Water Supply Scheme. The expansion of the Sandile WTW is done in two phases: Phase 1 upgrading the capacity to 60MI/d (which would make allowance in its works for the next Phase's expansion), and Phase 2 to upgrade the capacity to the ultimate requirement of 90MI/d. As part of Phase 1, a new 16MI reservoir is currently being constructed at British Rich, the site subject to this heritage scan.



3. Site Description 3.1 Site Location

kigo³

A reservoir for the Sandile Water Treatment Works is being constructed on a gradual ridge in the vicinity of British Ridge, approximately 30 km west of King Williamstown in the Eastern Cape Province, generally at **S32.813435° E27.076604°.** The project falls within the jurisdiction of the Buffalo City Municipality (see Figure 1). The village of Rabe occurs directly east of the site and Middledrift is situated approximately 7km to the west. The terrain consists of predominantly high mountains to the north with rolling hills and flatter parcels of developed land one the plateaus and in valleys adjacent to the rivers. The vegetation mainly consists of grassland, with natural bush and forest thicket on hilltops and slopes, and around the watercourses emanating from the mountain slopes. A significant proportion of this area, particularly on the mountain slopes, has rock which is less than one metre below the natural ground level.

3.2 Current Site Status

The footprint area demarcated for the reservoir and access road has been altered in totality where these areas have been excavated and levelled out in preparation for construction. In addition, excavation of topsoil and trenches is evident in places and other infrastructure such as an existing reservoir; pipeline and the foundations of service buildings occur around the site (see Figure 6 – Figure 8). Surface cover and vegetation remain intact around the majority of the surroundings but a number of encroacher species occur throughout the study area, implying minor to major historical surface disturbance across the entire area. Site clearing for the construction of the reservoir commenced in October 2014 and, at the site a high lying neck was utilized as the platform for the construction of the new reservoir.

4. Brief archaeo-historical context

The cultural landscape of the Eastern Cape encompasses a period of time that spans millions of years, covering human cultural development from the Stone Ages up to recent times. It depicts the interaction between the first humans and their adaptation and utilization to the environment, the migration of people, technological advances, warfare and contact and conflict. Contained in its archaeology are traces of conquests by Bantu-speakers, Europeans and British imperialism encompassing the struggle for land, resources and political power.

4.1 Stone Age Occurrences

The earliest evidence for humanity in the Eastern Cape comes from a period known archaeologically as the Early Stone Age. The Early Stone Age sites of the Eastern Cape Province are for the most part open air scatters of stone tools with little other remains. A general problem when studying the Early Stone Age is that is usually only these tools which survive the immense periods of time. However, archaeological sites with good deposits dating back to Early Stone Age times are scarce in the Eastern Cape. Stone tools characteristic of the Early Stone Age have been found on the coastal belt around East London, in the Sundays River Valley closer to the coast, and Geelhoutboom and Amanzi Springs near Uitenhage. According to Binneman (Albany Museum, Grahamstown) some Early Stone Age open air sites have been reported in the foothills of the Sneeuberge Mountains. Amanzi Springs has been the only Early Stone Age site in the Eastern Cape systematically investigated by archaeologists. These springs obviously provided an attractive locality around which early man chose to camp. Sediment deposited by the springs sealed his artefacts within well-defined layers. These artefacts are mostly large, bifacially flaked handaxes and cleavers shaped from locally available quartzite cobbles. Archaeologists agree that these tools were probably used in the hand and were not mounted on shafts in any way. They were most probably used to remove meat from and prepare hides from the carcasses they had either hunted themselves or scavenged from other predators. Although plant material is not preserved, bulbs, roots and berries probably provided the bulk of their food. It is not possible to measure directly the age of the Early Stone Age in the Eastern Cape but comparison between dated sites in Gauteng, and the Northern Cape Provinces as well as Eastern Africa suggests that these sites fall somewhere between 200 000 and 1 million years ago. Little technological change is evident during this long period of time. No human remains have been found in the Eastern Cape which would indicate who the makers of the Early Stone Age tools were. Again evidence from elsewhere in Africa, such as at the Cradle of Humankind near Krugersdorp, suggests that they were an upright walking people called Homo erectus and Homo ergaster. Present archaeological understanding is that an early

Innovation in Sustainability

dispersal of *Homo erectus* out of Africa, around 2 million years ago, led to parts of Eurasia being populated by this hominin. In Western Europe *Homo erectus* eventually developed into *Homo neanderthalensis* whereas this species developed directly into early forms of *Homo sapiens* in Africa.

These archaic Homo sapiens eventually developed into Homo sapiens sapiens (or anatomically modern humans) somewhere in eastern or Southern Africa. In fact, southern Africa boast some of the earliest evidence in the world for the presence of early Homo sapiens sapiens and for early symbolic behaviour and the development of human cognition (Mitchell 2007). The archaeological site industry associated with early Homo sapiens sapiens is called the Middle Stone Age. The start of the Middle Stone Age around 200 000 years ago was marked by technological advances relative to the Early Stone Age. Middle Stone Age Tools are smaller and more refined. Whereas Early Stone Age hand axes were shaped by removing flakes, Middle Stone Age tools were made from flakes and the larger stones or cores from which they were struck were discarded. These flakes are often finely pointed and recent research has indicated that some were mounted on wooden or bone hafts in order to make spears, arrows, and knives. The raw material for these tools was mostly quartzite, except for a brief time around 94 000 years ago, when finer grained silcretes were used to manufacture a wider range of tools. An important feature during the later time periods of the Middle Stone Age, from about 80 000 years ago was the fluctuating but progressive drop in world temperatures. As the ice caps expanded the sea levels dropped and retreated. These cooler conditions would also have brought about changes in the more inland areas such as the project area. During the initial stages of the Middle Stone Age the vegetation would have been similar than today. However, as temperatures dropped the vegetation became more open with large areas been given to grassland. Grazing animals came to dominate the diets of the people located inland from the coastal zones. It was during the Later Stone Age that the full range of material culture which can be readily identified with that made by the Bushmen or San of the historical period, developed. Although skeletal material belonging to the period between 40 000 years and 20 000 years ago are very scarce in South Africa human skulls dated from about 15 000 years ago onwards clearly suggests a Khoisan affinity to the makers of later Stone Age tools. More than 200 Later Stone Age sites are known from the Eastern Cape Province and many more are awaiting discovery. The majority of the known sites have been recorded in the coastal areas, the greater Grahamstown area and the Baviaanskloof by archaeologists from the Albany Museum in Grahamstown. Various caves and rock shelters containing Later Stone Age deposit have been located in the Suurberg and Winterhoekberg extension of the Cape folded mountains around Grahamstown, Alicedale and Uitenhage (Hall 1988). This area has been systematically surveyed by professor Garth Sampson and his team over a period of thirty years. The vast majority of the 16 000 Stone Age sites located here are open air sites. However, Garth Sampson also located a handful of rock shelters that were excavated (1985). These include Driekoppen, Volstruisfontein, Lame Sheep, Leeuhoek, Abbot's Cave, Van Zyl Rus, and Boundary shelter (Close & Sampson 1998). Further south most thoroughly investigated Later Stone Age rock shelters occur at Edgehill and Welgeluk. These sites are situated near Fort Beaufort to the immediate north of the Cape folded mountains. Further north the sites of Fairview and Waterval, situated in the Winterberg, have also been excavated by archaeologists (Hall & Binneman 1985). All the above mentioned sites were inhabited by the San - some as late as the final years of the 19th century. Most archaeological research on the Khoekhoen are focussed on the coastal areas of the Eastern Cape region.

4.2 Rock Art

The central Eastern Cape Province is unique in South Africa in that San rock art here consists of both paintings as well as engravings. The vast majority of rock paintings in the Eastern Cape are attributed to the Later Stone Age period or to the San hunter-gatherers and their immediate predecessors. Nevertheless schematic finger paintings do occur near Queenstown (Derricourt 1971) and these may be attributed to Khoekhoen pastoralists rather than San. Today researchers agree that most of the San art depicts the religious world of the San. The art is highly symbolic rather than narrative and contains metaphors relating to the spirit-world as experienced by San medicine people or shamans.

4.3 Iron Age and Colonial Interaction

The Eastern Cape region is typically viewed by historians as a frontier zone. This area was the meeting place between an aggressively expanding colonial frontier and the southernmost distribution of black Bantu-speaking farming communities in Africa (Huffman 2007). It is well known in the historical literature for the nine frontier wars that were fought here between the



settlers of the Cape colony and the Xhosa nation between 1779 and 1879 (see below). Whereas white colonial settlement expanded north and eastwards from Table Bay, in modern Cape Town, some 350 years ago Bantu-speaking agro pastoralists, the predecessors of the Xhosa nation, inhabited areas to the east of the Sundays river already since 1300 years ago (Binneman et al 1992). For many centuries their movement further west and south were hindered by a climatic frontier that prevented these small-scale subsistence farmers from cultivating summer-rainfall crops, such as millet and sorghum, their main source of food. Adding to climatic constraints, the first Bantu speaking pioneers encountered other indigenous population groups in these more marginal areas as did colonial agents many centuries later. These were the Khoisan - the direct descendants of the first modern people to have emerged in Africa some 200 000 years ago. These people had from the time of van Riebeeck become popularly known as the San or Bushmen and Khoekhoen or Hottentots. Whereas the Khoekhoen typically lived closer to the coastal areas where they could find adequate grazing for their cattle and sheep the San hunter-gatherers lived further inland in areas not favoured by either Khoekhoen pastoralists or Bantu-speaking agropastoralists. Nevertheless, the Eastern Cape became the contact zone between these different cultures both in the historical and prehistoric past.

4.3.1 The Frontier Wars

A series of clashes historically known as, Frontier Wars date back to 1779 when Xhosa people, Boers, Khoikhoi, San and the British clashed intermittently for nearly a hundred years. This was largely due to colonial expansion which in turn dispossessed Xhosa and Khoikhoi people of their land and cattle among other things. Although periods between the wars were relatively calm, there were incidents of minor skirmishes sparked by stock theft. In addition, alleged violations of signed or verbal agreements played a vital role in sparking the incidents of armed confrontations. Colonists also sought to consolidate their gains through the presence of military force as witnessed in the building of forts, garrisons, military posts and signal towers. Resistance from particularly the Xhosa was a cohesive one; other Xhosa ethnic groups cooperated with the colonial government when they felt doing so would advance their own interests.

During the early years before Dutch occupation of the region, the Xhosa, Khoikhoi and San people focused primarily on hunting, agriculture and stock farming. In the 1700s, the lack of sufficient space for proper stock farming forced the farmers to pack their possessions into their ox wagons and move deeper into the interior of the Cape Colony. These farmers were called a "Trek boers" (Migrant farmers). Until 1750 (29 years before the First Frontier War), migrant farmers rapidly advanced rapidly into the interior using force. For instance, the use of superior weapons such as guns quickly subdued resistance from local people. Those people who were subdued and those submitted to Trek Boers as an attempt to protect their livestock and land were employed to tend to the cattle and provide other labour needs of the white famers. However, the Dutch East India Company (V.O.C.) became worried about the migrant farmers moving so far because it became increasingly difficult to exercise any authority over them. In order to maintain its authority, the V.O.C. was forced to follow in their tracks. This constant moving also resulted in the V.O.C. having to continually change the boundaries of the eastern part of the Cape Colony. Eventually, in 1778 less than a year into the First Frontier War, the Great Fish River became the eastern frontier. It was also here that the migrant farmers first experienced problems with the Xhosa. Until that time, the migrant farmers had only experienced serious clashes with the San people when the San attacked them with poisoned arrows and hunted their cattle. The migrant farmers frequently organized hunting parties in reprisal for the San attacks. When the frontier farmers, as they were now called, met with the Xhosa, serious clashes broke out. Each group felt that the other was intruding on their territory and disrupting their livelihood, and both wanted to protected themselves at all costs. The V.O.C. established new districts such as Swellendam and Graaff- Reinet in order to maintain authority over the frontier and to quell the ongoing violence, but to no avail. The frontier farmers kept on moving across the border and the Xhosa vigorously resisted this incursion. A number of wars followed as both groups fought each other over territory and resources.

First Frontier War (1779-1781)

It is widely believed that the First Frontier War which broke out in 1779-1781 was really a series of clashes between the Xhosas and Boers. Around 1779, allegations of cattle theft by Xhosas had become so common on the south-eastern border, forcing the Boers to abandon their farms along the Bushmans River. Subsequently, in December 1779 an armed clash between Boers and

Innovation in Sustainability

Xhosas ensued, apparently sparked by irregularities committed against the Xhosa by certain white frontiersmen. In October 1780 the Government appointed Adriaan van Jaarsveld, a highly experienced commando leader, to be field commandant of the whole eastern frontier, and a commando led by him captured a very large number of cattle from the Xhosa and claimed to have driven all of them out of the Zuurveld by July 1781.

Second Frontier War (1789-1793)

This led to considerable bitterness among the eastern frontiersmen, particularly since war among the Xhosas in 1790 increased Xhosa penetration into the Zuurveld, and friction mounted. In 1793 a large-scale war was precipitated when some frontiersmen under Barend Lindeque, including the lawless Coenraad de Buys who had previously been involved in outrages against the Xhosa, decided to join Ndlambe, the regent of the Western Xhosas, in his war against the Gunukwebe clans who had penetrated into the Zuurveld. But panic and desertion of farms followed Ndlambe's invasion, and after he left the Colony his enemies remained in the Zuurveld. In spite of the fact that two Government commandos under the landdrosts of Graaff-Reinet and Swellendam penetrated into Xhosa territory as far as the Buffalo River and captured many cattle, they were unable to clear the Zuurveld, peace was made in 1793. Frontier discontent over Government policy precipitated revolts in Graaff-Reinet and Swellendam in 1795. Although the northern part of the Zuurveld was re-occupied by Boer farmers by 1798, many Xhosa clans remained in the southern Zuurveld area, some even penetrating into Swellendam, partly as a result of a civil war between the followers of Ndlambe, the acting regent of the Western Xhosas, and his nephew Gaika, the legitimate heir. The Government found it impossible to persuade the Xhosa clans in the Colony to go back across the Fish River. Stock theft and employment of Xhosa servants increased tensions, and in January 1799 a second rebellion occurred in Graaff-Reinet. This precipitated the Third Frontier War (1799-1803).

Third Frontier War (1799-1803)

In January 1799 a second rebellion occurred in Graaff-Reinet necessitating the Third Frontier War. In March of the same year, Government of the First British Occupation sent some British soldiers under Gen T P Vandeleur to crush the Graaff-Reinet revolt. No sooner was this done (April 1799) than some discontented Khoikhoi revolted, joined with the Xhosa in the Zuurveld and began attacking white farms, reaching as far as Oudtshoorn by July 1799. Vandeleur's force on its way back to Algoa Bay was attacked by a Gqunukwebe clan, fearing expulsion from the Zuurveld. Commandos from Graaff-Reinet and Swellendam were mustered, and a string of clashes ensued. The Government dreaded a general Khoi rising, and so made peace and allowed the Xhosas to remain in the Zuurveld. In 1801, another Graaff-Reinet rebellion began, forcing further Khoi desertions. Farms were abandoned en masse, and the Khoi bands under Klaas Stuurman, Hans Trompetter and Boesak carried out widespread raids. Although several commandos took the field, including a Swellendam commando under Comdt Tjaart van der Walt, who was killed in action in June 1802, they achieved no permanent result. Even a 'great commando' assembled from Graaff-Reinet, Swellendam and Stellenbosch could not make any real headway. In February 1803, just before the British government handed over the Cape Administration to the Batavian Republic, and an inconclusive peace was arranged. The Batavian authorities propitiated the resentment of the eastern-frontier Khoi-khoi but could not persuade the Xhosas to leave the Zuurveld (1803-1806).

Fourth Frontier War (1811-1812)

The Fourth Frontier War was neither the direct or indirect consequence of the anger emanated from the three previous frontier wars and the violation of the agreements that declared the Zuurveld region a 'neutral ground'. Ignoring the agreement, the Xhosas occupied the 'neutral ground', an act that prompted the Cape government in 1809 to send Lt-Col Richard Collins to tour the frontier areas. After touring the areas he recommended that the Xhosa be expelled from the Zuurveld, which should be secured by dense white settlement, and that the area between the Fish and the Keiskamma Rivers be unoccupied by black or white. Many historians believe that the Fourth Frontier War came as a surprise to the Xhosa as the opposition troops were well prepared, unlike in three previous encounters. In 1811, Colonel John Graham took the area with a mixed-race army. Subsequently, in January and February 1812, 20 000 Gqunukwebes and Ndlambes were driven across the Fish River by British



troops in conjunction with commandos from Swellendam, George, Uitenhage and Graaff-Reinet under the overall command of Lt-Col John Graham. On the site of Colonel Graham's headquarters arose a town bearing his name Grahamstown. [7] It is one of the first towns to be established by British in South Africa. Post the war, a line of frontier forts was built to hold the frontier, but an attempt to establish a dense Boer settlement behind them botched. Consequently the Governor, Sir Charles Somerset, made a verbal treaty with Gaika, the supposed paramount chief of the Western Xhosas. Unfortunately this agreement between Sir Charles Somerset and Gaika helped provoke a quasi-nationalist movement among the Western Xhosas, led by the 'prophet' Makana, which led to a renewal of the civil war between Gaika and Ndlambe. During the Fifth Frontier War [8] (1818-1819), Lt-Col John Graham never had a direct role as he was at Simonstown where he was a commando. During the dying phase of the Fourth Frontier War, Piet Retief [9] and three commandants of the new Stellenbosch commando went to relieve serving burghers on the eastern frontier. At the end of 1813 Retief moved to the eastern districts, where he married the widow Magdalena Johanna Greyling.

Fifth Frontier War (1818-1819)

Following Gaika's defeat at Debe Nek in 1818, he asked the Cape for help. Subsequently, colonial forces invaded Xhosa territory in December 1818 and triumphed over Ndlambe's warriors. When they left, however, Ndlambe was again able to defeat Gaika, and then continued into the Colony and attacked Grahamstown in April 1819. The attack was repulsed, and Cape forces defeated Ndlambe and marched as far as the Kei River. In October 1819 the Xhosa chiefs were obliged to recognise Gaika as paramount chief of the Western Xhosas, and he and Somerset made a verbal treaty that provided that the whole area between the Fish and the Keiskamma Rivers, except for the Tyume Valley, which remained Xhosa territory, should be a neutral zone closed to both black and white occupation. Behind the Fish River, the 1820 Settlers were established in the Zuurveld in an attempt to provide the dense white settlement that alone could make a frontier line viable.

Sixth Frontier War (1834-1835)

By early 1830s the line of clashes had spread to the Keiskamma River, now regarded as the Cape's eastern frontier. Segregation had broken down. Whites, Khoikhoi and Xhosas lived in the 'neutral', now significantly called the 'ceded', territory, and trade and employment were permitted. Insecurity persisted. The effective extension of the Cape frontier to the Keiskamma River increased overcrowding among the Xhosas beyond, already subject to considerable pressure from other tribes displaced by the Zulu empire. The Government pursued a vacillating policy towards allowing Gaika's sons to occupy land in the Tyume Valley. In 1829 Magoma and his tribe were expelled from the Kat River area (where Khoikhoi were settled) and settled on inferior land farther east, but were allowed to return to the Tyume Valley in 1833, to be expelled again almost immediately. Tyali and Botumane ('Botma'), other Gaika chiefs, were treated in a similar fashion. In 1834 the British government instructed Sir Benjamin D'Urban to institute a civil defence system supplemented by treaties with chiefs paid to keep order and advised by Government agents. Before this could be done, the bitterness aroused by the renewed expulsion of Magoma and Tyali from their Tyume lands in 1833 was exacerbated by drastic reprisals by colonial patrols as a result of increased cattle theft by Xhosas during a period of drought. On 31 December 1834 a large force of some 12 000 Western Xhosas - led by Maqoma, the regent of the Gaika Xhosa tribe, Tyali, other Gaika chiefs, as well as some clans belonging to the Ndlambe branch - swept into the Colony. Raiding parties devastated the country between the Winterberg and the sea. Piet Retief managed to defeat them in the Winterberg, and Lt-Col Harry Smith was immediately sent on his historic six-day ride from Cape Town to Grahamstown to take command of the frontier. Reinforcements were sent by sea to Algoa Bay and burgher and Khoi troops were called out. After a series of engagements, including that of Trompetter's Drift on the Fish River, the chiefs fighting between the Sundays and Bushmans Rivers were defeated, while the others (Magoma, Tyali and Umhala) retreated to the fastnesses of the Amatole Mountains. D'Urban arrived at the frontier on 14 December 1834. He believed Hintsa, the chief of the Eastern Xhosa (Galekas) and presumed paramount over the whole Xhosa nation, to be responsible for the attack on the Colony, and held him responsible for the theft of colonial stock captured during the invasion. Therefore D'Urban led a force of colonial troops across the Kei to Butterworth, Hintsa's residence, and dictated terms to him. They comprised the annexation of the area between the Keiskamma and Kei Rivers as British territory (to be called Queen Adelaide province) and the expulsion across the Kei of all tribes involved in the war. Queen Adelaide would be settled by loyal tribes, by rebel tribes who disowned their chiefs and by Fingos, remnants of



tribes who had been destroyed by the rise of the Zulu empire and who had hitherto been living in Hintsa's territory under Xhosa subjection. However, expulsion of the undefeated Xhosa from Queen Adelaide proved impossible, so in September 1835 D'Urban made treaties with the 'rebel' chiefs, allowing them to remain in locations there on condition of good behaviour as British subjects under the control of magistrates who, it was hoped, would rapidly undermine tribalism with missionary help. But territorial expansion contradicted British desires for economy, and the British government, doubtful of the justice of the war and ignorant of the details of D'Urban's actions because of his long delays in sending explanations, disannexed Queen Adelaide. New treaties made the chiefs responsible for order beyond the Fish River (December 1836).

Seventh Frontier War (1846-1847)

The Seventh Frontier War ('War of the Axe') began in March 1846 with the defeat at Burnshill of a colonial force under Col John Hare. The Colonial force invaded Xhosa territory following the ambush of a patrol sent to arrest a Xhosa accused of stealing an axe. The Xhosas retaliated by invading the Colony and carrying off large numbers of cattle. Although the Mfengus (Fingos) cooperated with the colonial forces, who were able to defeat the Xhosas at the Gwanga (June 1846), drought hampered the movement of troops, and the attempt to defeat the tribes in the Amatole Mountains (July/August 1846) proved unsuccessful. However, burgher forces under Sir Andries Stockenström pushed into the Transkei forced Kreli, the Gcaleka chief, to acknowledge responsibility for the attacks of the Gaikas, restore the stock captured in the war and surrender all land west of the Kei. But the war was not yet over. Its end was delayed by drought, which hampered the movement of colonial forces, by quarrels between the burgher forces and the regular troops, and by the fact that several tribes remained undefeated and able to conduct guerrilla operations, despite the 'scorched earth' tactics of the Cape forces. Only in December 1847 did the last chief submit.

Eighth Frontier War (1850-1853)

In October 1850 Sandile, the principal Gaika chief, was deposed for refusing to attend a meeting of chiefs called by the Governor, subsequently, on 24 December the Gaikas attacked a colonial patrol at Boomah Pass and destroyed three military villages. The Gaikas received support from the Thembus and some Gcalekas. They were later joined by some rebellious 'black police' and some Khoikhoi from the Kat River settlement under Hermanus Matroos and Willem Uithaalder. The Khoi revolt undoubtedly helped to keep the momentum of the war, since the Khoikhoi were experienced in white fighting methods. Military camps such as Fort Beaufort (January 1852) were attacked and caused the Government constant anxiety as to the loyalty of its Khoi auxiliaries. The Kat River revolt also meant that the burghers of the eastern districts did not respond to the call to commando duty, while only 150 burghers from the western areas had gone to the front by February 1851. Towards the end of February 1851, The Kat River rebellion was crushed. Meanwhile Comdt Gideon Joubert began the attack on the rebel Thembus, and a combined force of Thembus and Gcalekas was defeated on the Imvani River by Captain V Tylden in April 1851. Although the Government enjoyed the support of the Mfengus, most of the Ndlambe tribes and a large number of Khoikhoi, its operations were hampered by the paucity of regular troops. For the first time the Gaikas and their allies were using firearms. In addition, fighting was also going on against the Basuto in the Orange River Sovereignty. All these factors contributed to delay the end of the war. By early 1852, Sir George Cathcart arrived at the Cape to replace Sir Harry Smith. Under his command the war was vigorously pursued to its close. A combined force of regular troops, under Generals H Somerset and V Yorke, continued a previous operation started in December 1851 and defeated Kreli. In September 1852 the Amatole region had been cleared of Gaikas, and by November the last Khoi rebels had been defeated. In the new settlement, the rebellious tribes were moved out of the Amatole Mountains to locations in British Kaffraria and their lands given to white settlers. Shortly after, Sir George Grey's vigorous attempt to break down tribalism in British Kaffraria aroused the 'cattle-killing movement' among the Xhosa ethnic groups on both sides of the Kei (1857) and left the Kaffrarian Xhosas destroyed. British Kaffraria was incorporated into the Cape in 1866. In 1858 Sir George Grey, convinced of Kreli's complicity in the cattle-killing episode, sent an expedition to drive the Gcalekas beyond the Bashee River into Bomvanaland. The vacated Transkeian territory was at first administered as a dependency of British Kaffraria, and annexed to it in March 1862. Locations were established there, for Mfengus at Butterworth, and for some Ndlambes at Idutywa. But the British government felt it would be too expensive to hold this new frontier, so disannexation back to the Kei occurred in 1864.



Ninth Frontier War (1877-1878)

Kreli was allowed to return to the Transkei, but the Gcalekas were forced to share their old lands with the Mfengus, whom they despised. In August 1877, when tensions were high between the two tribes, a guarrel arising at a Mfengu wedding party provoked the Ninth (and last) Frontier War. The Cape Frontier Police under Col Charles Griffith crossed the Kei with a volunteer force to protect the Mfengus, and with the aid of the Thembus and Mfengus pushed the Gcalekas beyond the Mbashe River (September 1877). But Sir Bartle Frere, the High Commissioner, overthrown Kreli, and decided that Galekaland should be settled by whites and the Gcalekas disarmed once and for all. One minor Gcaleka clan was chased into the location of Sandile, the Gaika chief. The Gaikas fired on the police, were joined by the Gcalekas in an attack on the Colony and gained support from the Thembus. The war provoked a constitutional crisis at the Cape, which had received responsible government in 1872. The Cape ministry under Molteno insisted that the combined force of regular troops, colonial police and volunteers be under the full command of Comdt Gen Griffith. Sir Bartle Frere insisted that he, as Imperial Commander-in-Chief, take charge of the conduct of the war, subsequently; he dismissed the Molteno cabinet, appointing a new ministry under Gordon Sprigg in its place. The ninth war was soon over. In February 1878 Kreli's forces were defeated at Kentani, and Kreli surrendered in June. By then Sandile had died and an amnesty was granted to his followers. In 1879 Mfenguland and the Idutywa district were annexed to the Cape, and Gcalekaland, though not formally annexed, was administered by the Cape under the chief magistrate of the Transkei. By 1894 the boundaries of the Cape had been peacefully extended to the Mtamvuna River by the piecemeal annexation of the remaining nominally independent tribal areas.

4.3.2 Iron Age Farmer and Historical Period Terracing

With the arrival of Iron Age farmers in Southern Africa came the spread of crop farming. These groups were subsistence farmers which mean that each family had to produce enough for its own needs by its own labour. Crop production also led to a more settled village life and comminutes centralized, typically close to your crop lands. As settlements grew, land occupation continued and competition for arable soil intensified. Terracing land for rainfed agriculture has long been the basic response of farmers to the problems of cropping in hilly and erosion-prone conditions, as well as competition for land. The Eastern Cape Province is home to a number of examples of traditional small and large-scale terracing in South Africa. Historically, Iron Age farmers utilised hill slopes to construct vast terrace systems out of stone across the province, some of which remain today. Sorghum, Millet and other crops would then be cultivated on these terraced feeds, some of which are no more than 5m apart. Today, local farmers continue to invest enormous amounts of voluntary labour in building terraces for their main crop – maize and it is not uncommon for farmers to spend as much as 500 days per hectare creating terraces on the steeper slopes

4.3.3 Fort White

The site of the 19th century Fort White is situated in the plains directly east of British Ridge (see Figure 4 and Figure 5). This was a star-shaped earthwork fort, which was built in 1835 and intended to garrison 10 cavalry and 15 British infantry soldiers as well as 15 Khoi infantry. It was intended to be a link in the line of forts built along the edge of the Amathole Mountains where the Xhosa warriors were able to hide so successfully. The fort was named for Major T.C. White who was killed in an engagement near the Mbhashe River. Fort White was abandoned in the late 1830s but relocated in 1852 with most buildings of wattle and daub, but with a stone magazine. It came under attack but was not taken. The remains of the ditches and earthen mounds are all that remain today.

5. Heritage Assessment

5.1 Previous Heritage Work

Large portions of the Eastern Cape Province have been thoroughly surveyed for heritage sites by the Archaeology Department of the Albany Museum in Grahamstown. However, no heritage assessment was conducted of the Sandile Water Treatment Works Reservoir site.

5.2 Heritage Scan

A site inspection of the Sandile Water Treatment Works Reservoir construction area on 2015-01-30 was conducted by means of a foot survey in accordance with standard archaeological practise by which heritage resources are observed and documented. The visibility at the time of the survey was moderate. By means of field walking with a Garmin E-trex Legend GPS, the landscape and the heritage features in the surrounding landscape were recorded and photographed. Real time aerial orientation, by means of a mobile Google Earth application was also employed to investigate possible disturbed areas during the survey. As most archaeological material occur in single or multiple stratified layers beneath the soil surface, special attention was given to disturbances, both man-made such as roads and clearings, as well as those made by natural agents such as burrowing animals and erosion.

During the survey a number of heritage resources and features of heritage potential were noted (see Figure 3):

- A large number of hillslope terracing and embankments were noted along the more gradual eastern, and south-western slopes of the ridge. At the site, there is a distinct difference in building pattern between stone terrace embankment walls and formal stone walls which also occur here. Embankment walls are constructed of single or multiple stones placed in a rough straight line, typically following the contour of the slope in high succession (in some cases the structures are no more than 5m apart). The slope surface uphill from the wall structure is flattened out with earth fill towards the stonewall to create a level surface. In this area, hillslope terracing often function to create space for agricultural fields, an interpretation with is enforced by the high frequency and density of terracing occurring at the site. No material culture was noted in association with terracing and it is impossible to ascertain a specific temporal range for the features. However, considering similar archaeological occurrences in the surrounding landscape as well as the probable function of the terracing, these structures might well date to the later Iron Age farmer period.
- In addition, some collapsed dry stone walls were identified directly north-east of the reservoir construction site, along the southern periphery of the ride and also directly north of the existing reservoir along steeper inclines. Some of the stone walls also disappear under construction dump heaps which implies that the integrity of the structures had been compromised. These stone walls are constructed out of two built-up lines of stones which are filled in with smaller stones or gravel to enforce the structure. The structures are generally more securely constructed and mostly square and / or facetted stones are used. Unfortunately, the preservation of these stone walls of which mostly foundations remain, is poor. No material culture was noted in association with stone wall structures and it is impossible to ascertain a specific temporal range for the features. However, considering similar historical occurrences in the surrounding landscape, for example Fort White directly east of the site, as well as the frontier history of the area and the strong Colonial presence around the site during the frontier wars in the 18th and 19th centuries, it is possible that the stone walls date to the Historical Period where these features might have acted as defence in British Xhosa conflicts in precious centuries.
- A number of stone heaps and structures were identified around the ridge on its slopes. The function and age of these structures are not known but they are probably culturally related to stone walls and / or terracing found at the site. In addition, an elongated stone cairn, possibly a human burial was noted on the southern periphery of the ridge.

During the survey of the area and following and inspection of the construction site, features of archaeological and/or historical value were noted at the site of the reservoir construction, and elsewhere on the property. It is apparent that some of these heritage resources had, to a lesser or greater degree, been impacted on by construction activities at the site. It is unfortunately also highly likely that heritage resources were present within the impact footprint and that such resources had been destroyed during the course of site preparation.



6. Recommendations

The presence of these heritage resources within the historically important Eastern Cape frontier implies that the British Ridge site is historically significant. It is unfortunately highly likely that heritage resources have already been impacted on by the development of the reservoir and, to avoid further destruction to - or damage of heritage remains, the following recommendations are made pertaining to the construction site and activities:

- It is recommended that the current impact footprint of the development not be increased, especially in the vicinity of heritage resources e.g. directly north-east, and also directly south-west of the construction site.
- It is recommended that a full Phase 1 HIA (Heritage Impact Assessment) as well as a PDA (Palaeontological Desktop Assessment) be conducted for the site. It is also recommended that the local heritage authorities (EC-PHRA) be notified immediately of the development and the presence of heritage receptors in the area.
- A careful watching brief monitoring process is recommended whereby the Heritage Specialist, or an informed ECO inspect the construction site on regular basis in order to monitor impact on heritage resources. Should any further subsurface paleontological, archaeological or historical material or heritage resources be exposed during construction activities, all activities should be suspended and the archaeological specialist should be notified immediately.
- The necessary authorisations and permitting should be obtained from SAHRA prior to the destruction of any heritage remains or structures. This should occur only after such heritage resources have been documented and, if necessary the site sampled by means of Phase 2 Specialist studies.
- Since the intrinsic heritage and social value of graves and cemeteries are highly significant, these resources require special management measures. Should human remains be discovered at any stage, these should be reported to the Heritage Specialist and relevant authorities (EC-PHRA, SAHRA) and construction should be suspended until the site has been inspected by the Specialist. The Specialist will advise on further management actions and possible relocation of human remains in accordance with the Human Tissue Act (Act 65 of 1983 as amended), the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925), the National Heritage Resources Act (Act no. 25 of 1999) and any local and regional provisions, laws and by-laws pertaining to human remains. A full social consultation process should occur in conjunction with the mitigation of cemeteries and burials.
- Due cognisance should be taken of the larger archaeological landscape of the area in order to avoid the destruction of previously undetected heritage sites in the area.
- Cognisance should be taken of the National Heritage Resources Act (Act No. 25 of 1999, section 38) and detailed guidelines pertaining to Cultural Resources Management and prospective developments.

Neels Kruger Archaeologist

Association of Southern African Professional Archaeologists (ASAPA) - Registered Archaeologist & Cultural Resources Practitioner. BA, BA Hons. Archaeology (Pret.)

2015-01-30





7. Maps And Figures

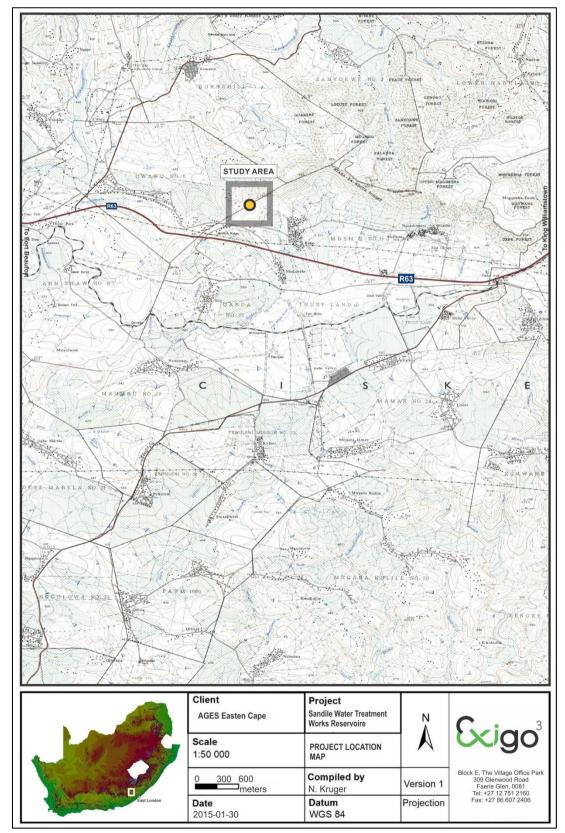


Figure 1: Geographical location of the Sandile Water Treatment Works Project area (1:50 000 Map reference 3227CC)

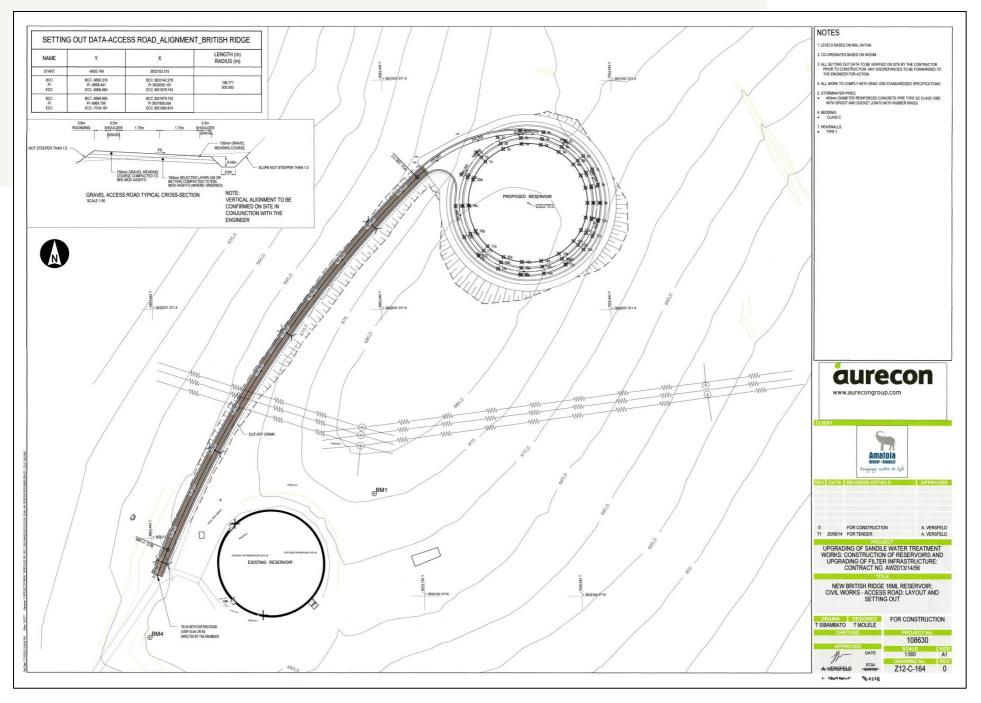


Figure 2: Plan of infrastructure for the reservoir and access road at British Ridge subject to the Sandile Water Treatment Works Project.

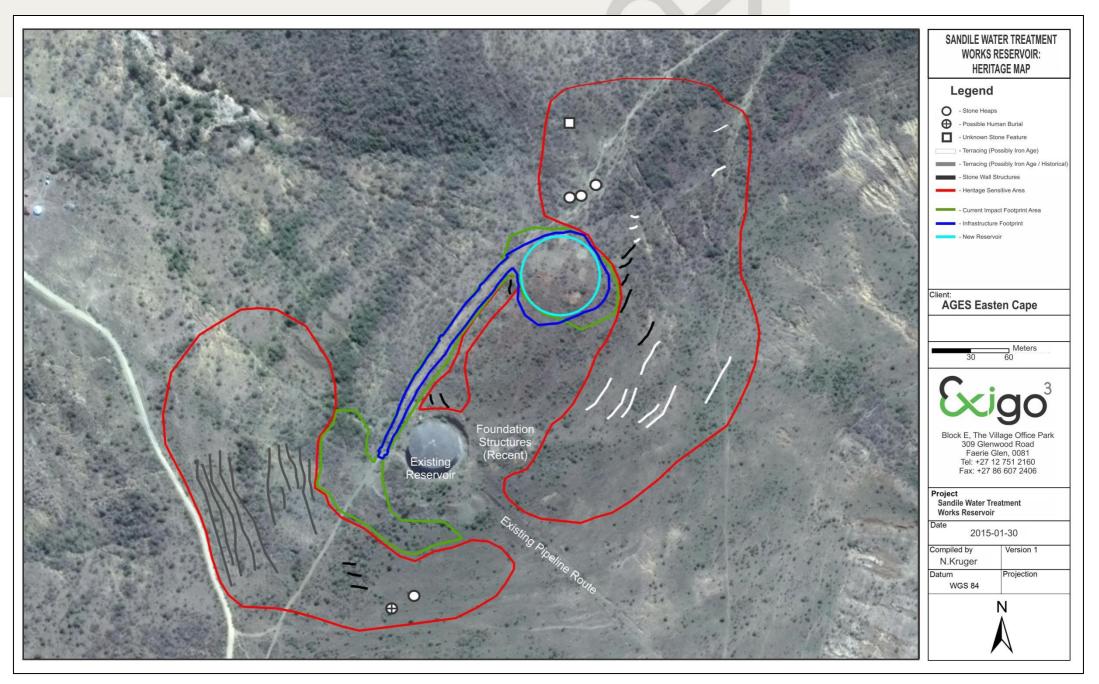


Figure 3: Aerial view indicating the locations of infrastructure, impact footprints, exciting surface features as well as heritage features and sensitive areas at the site of the Sandile Water Treatment Works Reservoir.



Figure 4: Historical photograph of Fort White, directly east of the project area.



Figure 5: An historical cemetery at the remains of Fort White, directly east of the project area.





Figure 6: High altitude panorama view from the north of the general surroundings around the project area (visible on the right).



Figure 7: The Sandile Water Treatment Works Reservoir construction site at the time of the site inspection in January 2015, looking south.





Figure 8: The Sandile Water Treatment Works Reservoir construction site at the time of the site inspection in January 2015, looking north.



Figure 9: Foundation structures of stone walls in the project area.



Figure 10: A series of horizontal hillslope terraces south of the construction site.



Figure 11: A series of horizontal hillslope terraces south of the construction site.



Figure 12: A series of horizontal hillslope terraces west of the of the existing reservoir and the construction dumping site.



Figure 13: Dry stone walling directly north of the construction site.



Figure 14: Dry stone walling directly north of the construction site. Note that the stone wall structure disappears under the dump heap.



Figure 15: Dry stone walling directly north of the construction site. The reservoir site dumping heap is visible in the background. .



Figure 16: Dry stone walling high and a hill directly adjacent to the exiting reservoir.



Figure 17: An unknown stone heap in the project area.



Figure 18: An unknown and irregular stone structure north of the construction site.



Figure 19: A elongated stone heap, possibly a human burial.



Figure 20: Concrete foundations structures near the existing reservoir. The structures probably date to contemporary times.



Figure 21: An unknown circular stone feature in the project area.





LIST OF REFERENCES

Academic Research Publications

Binneman, J. 1994. Preliminary report on the investigations at Kulubele, an Early Iron Age farming settlement in the Great Kei River Valley, Eastern Cape. Southern African Field Archaeology 5:28-35.

Cain, C.R. 2009. Cultural heritage survey of Lesotho for the Maloti-Drakensberg Transfrontier Project, 2005 – 2006: palaeontology, archaeology, history and heritage management. South African Archaeological Bulletin 64: 33-44.

Coetzee, Colin. 1995. Forts of the Eastern Cape : Securing a frontier 1799 - 1878. Grahamstown: Colin G Coetzee. pp 201-207, 438, 508-510, 642.

Critchley W.R.S. and Netshikovhela, 1998. Land degradation in South Africa: conventional views, changing paradigms and a tradition of soil conservation. Development Southern Africa 15 (3), 449-469.

Deacon, J. 1996. Archaeology for Planners, Developers and Local Authorities. National Monuments Council. Publication no. P021E.

Deacon, J.1997. Report: Workshop on Standards for the Assessment of Significance and Research Priorities for Contract Archaeology. In: Newsletter No 49, Sept 1998. Association for Southern African Archaeologists.

Feely, J.M. 1987. The Early Farmers of the Transkei, southern Africa. BAR International Series No. 378.

Feely, J.M & Bell-Cross, S.M. 2011. The distribution of early Iron Age Settlement in the Eastern Cape: Some Historical and Ecological Implications. South African Archaeological Bulletin 66 Number 194: 33-44.

Gon P. 1982. The Last Frontier War. The South African Military Society, Military History Journal Vol 5 No 6, December.

How, M. 1962. The Mountain Bushmen of Basutoland. Pretoria: J. van Schaik.

Huffman, T.N. 2007. Handbook to the Iron Age. Pietermaritzburg: University of Kwazulu-Natal Press

Le Cordeur, B.A. Die Besettings van die Kaap, 1795–1854. 1991. In: Cameron, T. & Spies, S.B. (eds) Nuwe Geskiedenis van Suid Afrika (revised edn): 75–93. Cape Town: Human & Rousseau.

Mitchell, P. 2001. Recent archaeological research in Lesotho: An overview of fieldwork for the years 1988-2001. NUL (National University of Lesotho) Journal of Research 9: 1-24.

Swanepoel, N. et al (Eds.) 2008. Five hundred years rediscovered. Johannesburg: Wits University Press

Vinnicombe, P 1972. Myth, motive, and selection in southern African rock art. Africa: Journal of the International African Institute 42: 192-204

Winter, S. & Baumann, N. 2005. Guideline for involving heritage specialists in EIA processes: Edition 1. CSIR Report No ENV-S-C 2005 053 E. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.





Human Tissue Act and Ordinance 7 of 1925, Government Gazette, Cape Town

National Resource Act No.25 of 1999, Government Gazette, Cape Town

Unpublished CRM Reports

Anderson, G. 1996. Archaeological Survey of the Proposed Route for the Kokstad-Mt. Frere Transmission Line. Umlando Archaeological Tourism & Resource Management

Binneman, J. 2011. A Phase 1 Archaeological Impact Assessment for the proposed low cost housing development at Icwilli settlement near Kei river mouth town, Great Kei River Local Municipality, Amathole district municipality, Eastern Cape Province. East London: Eastern Cape Heritage Consultants

De Jong, Robert. 2011. A Heritage Impact Assessment for the installation of long-haul dark fibre ducting infrastructure along the N2 between Durban and East London, Kwa-Zulu Natal and Eastern Cape Provinces by Cultural Heritage Consulting Services

Van Schalkwyk, L.O. 2008. Heritage Impact Assessment of the Proposed N2 Wild Coast Toll Highway. eThembeni Cultural Heritage.

Van Schalkwyk, L.O. 2010. A Heritage Impact Assessment for the N2 - Mvezo village link road and bridge, Eastern Cape Province, South Africa by Ethembeni Cultural Heritage Bergh, J.S. 1999. Geskiedenisatlas van Suid-Afrika: die vier noordelike provinsies. Pretoria: J.L. van Schaik



GENERAL LEGISLATIVE FRAMEWORK

The National Heritage Resources Act (Act No. 25 of 1999, section 38) provides guidelines for Cultural Resources Management and prospective developments:

"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 300m 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 divisions thereof which have been consolidated within the past five years; or

(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;

(d) the re-zoning of a site exceeding 10 000 m^2 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."

Consequently, section 35 of the Act requires Heritage Impact Assessments (HIA's) or scoping to be done for such developments in order for all heritage resources, that is, all places or objects of aesthetics, architectural, historic, scientific, social, spiritual linguistic or technological value or significance to be protected. Thus any assessment should make provision for the protection of all these heritage components, including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects.

It must also be clear that Archaeological Specialist Reports (AIA's), Heritage Impact Assessment Reports (HIA's) and included motivations and recommendations will be assessed by the relevant heritage resources authority (SAHRA). The final decision as to heritage resources conservation, mitigation and destruction rests with the heritage resources authority. The close vicinity of the existing Fort Jackson cemetery should be regarded and impact on existing graves / burial places should be avoided at all times

