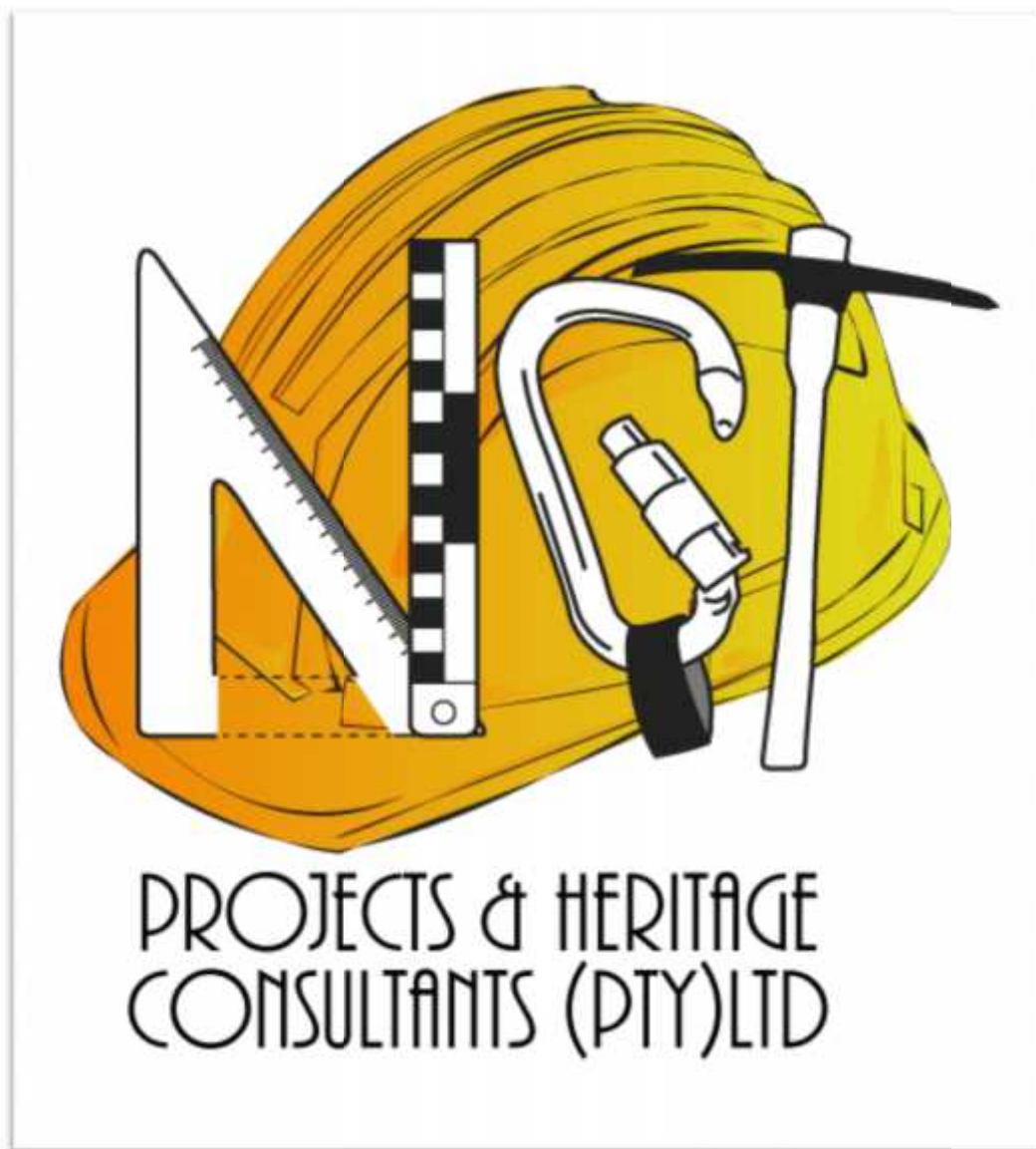


A PHASE 1 HERITAGE IMPACT ASSESSMENT STUDY FOR THE PROPOSED
CHARLESTOWN HOUSING DEVELOPMENT, KWAZULU-NATAL, SOUTH AFRICA.
PROJECT NO: K12020009



VERSION: 01

20 MARCH 2013

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DECLARATION OF INDEPENDENCE

This report has been compiled by Nkosinathi Tomose, leading archaeologist and heritage consultant for NGT Project & Heritage Consultants. The views expressed in this report are entirely those of the author and no other interest was displayed during the decision making process for the project.

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EXECUTIVE SUMMARY

NGT Projects & Heritage Consultants (Pty) Ltd was appointed by ENPROCON cc in terms of NEMA, 107 of 1998 (as amended & applicable EIA Regulations of 2010) as an independent CRM firm to conduct a HIA study (exclusive of Palaeontological desktop study), as required by Section 38 of the NHRA, No. 25 of 1999 (and other applicable legislations) for the proposed housing development in Charlestown, Newcastle Local Municipality, Amajuba District Municipality, KwaZulu-Natal.

The following results, conclusions and recommendations are made about heritage resources based on existing literature about the project area, the physical site survey, SAHRA minimum standards for evaluation and grading of archaeological (and other heritage) resources as well as the NHRA, No 25 of 1999 for the protection, conservation and management of the Nation Estate (Section 3 of the NHRA, No 25 of 1999), the KZNA, No. 10 of 1997 (at a provincial level), and the KNHB, 21 February 2008.

The study yielded a total of 9 heritage sites within and immediately outside the PDAFP. Out of the 9 sites identified, only 3 sites fall directly within the PDAFP (Figure 47) and they include: CHST-1, CHST-2 and CHST-3 (Figure 48). The rest of the sites all fall outside the PDAFP (Figure 2 (and Figures 46 & 48 area marked in brown ink)).

Based on the above mentioned integrated processes varying from literature review, surveys, assessment of sites significance and impacts evaluation and calculations the author arrived at the following conclusions and recommendation:

- Sites CHST-1 and CHST-3 should be fenced off from the rest of construction activities and a cemetery management plan should be developed to manage these sites during and post the construction phase of the project.
- Site CHST-2 should be relocated to a municipal proclaimed/declared cemetery to avoid any potential impacts to the site prior to the commencement of project construction phase. A permit should be applied for with Amafa aKwaZulu-Natali before this process can be undertaken by an accredited and qualified archaeologist and heritage consultant.

There were no Stone Age, Iron Age, Rock Art and some historic period archaeological resource found within the PDAFP with exception to the stone kraal. Because of the nature of some archaeological resources which are often found buried underneath the earth surface. It is

recommended that the developer and the appointed ECO should pay special attention to these resources during the construction phase of the project. In the case that such resources are unearthed and brought to the surface of the earth by the project construction activities the project construction activities in and around the area in which resources are found need to stop and the ECO and the environment consultant should consult an archaeologist and heritage consultant to immediately come to the site and investigate the finds and make necessary recommendations. Amafa aKwaZulu-Natali should also be informed of such finds.

In terms of heritage resources management it is concluded that Amafa aKwaZulu-Natali should grant the project a positive Review Comment for the project to proceed as planned provided that the environmental consultant and developer agree to the above project recommendations on the state and management of the identified heritage resources. This should also include the recommendation on the management of potential archaeological finds.

TABLE OF CONTENTS

ACKNOWLEDGEMENT OF RECEIPT	2
COPYRIGHT	3
DECLARATION OF INDEPENDENCE	3
EXECUTIVE SUMMARY.....	4
LIST OF TABLES	10
ABBREVIATIONS	11
TERMS & DEFINITION	12
1. INTRODUCTION.....	13
1.1. Project Background	13
1.1.1. Developer and Summary of the Proposed Project	13
1.1.2. Proposed Project Aims	14
1.1.3. Terms of Reference for the Appointment of Archaeologist and Heritage Specialist	14
2. BACKGROUND OF THE STUDY AREA.....	17
2.1. Description of the affected environment	17
2.2. Desktop Study: Archaeological and Heritage	28
2.2.1. Archaeology of KwaZulu-Natal:	28
2.2.3. The Historic period – the last 200 years to date	31
The establishment of the town-	31
Who Are Historic Residents of Charlestown –	36
Battle of Majuba-	39
3. METHODOLOGY	42

3.1. Legislative Requirements	42
3.2. Methodology	43
3. 2.1. Step I – Literature Review (Desktop Phase):	43
3.2.2. Step II – Physical Survey:	43
3.2.3. Step III – Data Consolidation and Report Writing:	44
3.3. Assessment of Site Significance in Terms of Heritage Resources Management Methodologies.....	44
3.4. Methodology for Impact Assessment in terms of Environmental Impact Assessment Methodologies including Measures for Environmental Management Plan Consideration:	46
4. ASSUMPTIONS AND LIMITATIONS	51
5. FINDINGS.....	52
Anticipated Heritage Resources and Sites within Charlestown PDAFP –	52
5.1. Results ofDesktop Search-	53
Summary: -	55
5.2. Cadastral Search:	55
Summary –	61
4.3. Deeds Search:	62
4.4. Field Survey:	63
5. DISCUSSION	90
6. CONCLUSIONS AND RECOMMENDATIONS.....	92
7. REFERENCES.....	97

TABLE OF FIGURES

Figure 1 –Location of Charlestown as indicated by a red circle within Newcastle Local Municipality and Amajuba District Municipality @ KZN Planning Commission.....	16
Figure 2 - Proposed development area footprint (PDAFP). Note the street scape of the historic town of Charlestown , west of the current PDSFP. @ ENPROCON cc.	21
Figure 3 – Google Earth photo showing the previous proposed development area footprint (PDAFP) before the final one as shown in figure 2. Note the street scape of the historic town of Charlestown and the N11 on the western end of the town. @ ENPROCON cc.	21
Figure 4 - Charlestown industrial zone/node. Note cattle and goat –the roam around open grasslands and fields. Also note formalised structures/houses in the back as indicated by the yellow arrow as well as none formalised houses as indicated by the red arrow.....	22
Figure 5 - Example of traditional houses, rondavals and beehive structures. The beehive structure is a typical tradition Zulu people dwelling dating to the Iron Age period in archaeological records.....	23
Figure 6 - Shacks (tin-house) and mud houses.....	23
Figure 7 - Unfinished housed within the PDAFP.....	23
Figure 8 - example of powerlines that criss-cross the PDAFP.....	24
Figure 9–Example of Charlestown water works.....	24
Figure 10- Example of Charlestown water works.....	25
Figure 11 - Open fields used for grazing purposes.....	25
Figure 12 – open fields within the PDAFP (as indicated in figures 2& 3) used for grazing purposes.....	26
Figure 13 - Muslim place of burial as indicated by the red arrow.....	26
Figure 14 - A single grave located near the Muslim place of burial.....	27
Figure 15 - Old Charlestown municipal cemetery.....	27
Figure 16- Site of Moor Park; picture taken from T, N. Huffman (2007) to illustrate the C.C.P stonewalling (see also Davies 1974 from which the picture was initial taken).....	30
Figure 17 - Portrait of Sir Charles Bullen Hugh Mitchell. @ Wikipedia (2012).....	33
Figure 18 – Schematic layout of Charlestown, Clavis and Clavis Extension. This all forms part of Charlestown today. @ Paton (1961).....	34
Figure 19 – Schematic presentation of Charlestown in relation to Volksrust in the north and Newcastle in the south @ Paton (1961).....	35
Figure 20 - A family photo of one of the families who once stayed in Charlestown.....	38

Figure 21 - A photo showing a man point to the ruins of his house following its demolition by the Nationalist Government in Charlestown to make way for white residents39

Figure 22c-A memorial of the Battle of Majuba 188142

Figure 23 – A 1916 picture showing pupils and teachers at the Charlestown Government School, declared heritage site. The Larsen family seem to dominate the crown.54

Figure 24 - Picture showing pupils at the Charlestown Government School.54

Figure 25- A 1901 Major Jackson Series Map showing the location of Charlestown. Note the position of the railway line, the N11, the area in which the junction was located and Volksrust north of Charlestown. @ Wits Cullen Library, Map Archives, 2012.57

Figure 26- A 1905 Charlestown showing Charlestown as indicated by yellow circle in relation to Volksrust (north) and Newcastle (south). Note the position of Majuba Battlefield Site as indicated by the yellow arrow. Also note the Majuba Hill and Laing’s Nek. W & A. K. Johnston’s Map to Illustrate the Transvaal Question.@ Wits Cullen Library, Map Archives, 2012.58

Figure 27 - Transvaal Geological Map showing Charlestown, Volksrust and Newcastle. The geology of the area in which Charlestown is situated, as mapped in faded yellow form part Highveld rock formation, the Karoo System. No date of Map publication is included. But, the map is labelled the Geological Map of the Transvaal. @Wits Cullen Library, Map Archives, 2012.59

Figure 28 - A 1906 map showing the position of Charlestown (yellow circle) in relation to Volksrust (north) and Wakkerstroom in the north-east. Note the single railway line from as indicated by the red arrow. Transvaal Maps, War Office, 1906. @ Wits Cullen Library, Map Archives, 2012.60

Figure 29 - 1938 Topographic Map showing Charlestown located south of the Transvaal-Natal border (in red shade). Note the N11 west of Charlestown and a single railway line. The railway line junction is shown on this map located in Volksrust (red circle).....61

Figure 30 - Picture showing the cemetery division area as indicated by the red line. The yellow arrow indicate the Whites section of the cemetery and the blue arrow show the African section of the cemetery.....68

Figure 31 - Type of dressing and headstones, predominantly granite – white section of the cemetery.....68

Figure 32 - Mixt of cement dressing and headstone, with rubble mounds, stone mounds and some granite headstone and dressing - Black section of the cemetery68

Figure 33 - Memorial of 5 Police Officers suggested to have lost their lives in a tragedy in the 1930s.....69

Figure 34 - Photos showing the single grave.....73

Figure 35 - Picture showing the place of prayers and grave with soil mounds. The graves are orientated south-north.	77
Figure 36 - Graves with the Mausoleum. Note the active grave-pits as indicated by the red arrow and the cement and brick dressing, as well at the cross headstone.	78
Figure 37- Picture showing soil and stone dressing and headstones from CHST-4.	80
Figure 38 - Photo showing the type of granite dressing and headstone at CHST-4.....	81
Figure 39 - Photo showing a position of a potential gravesite.....	82
Figure 40 - Photos showing the historic corrugated iron sheet shed - front and back facades as well as sides.	84
Figure 41 - Picture showing a historic house located close to the corrugated iron sheet shed. The house had been added on and altered.	85
Figure 42 - Dilapidated structure.....	86
Figure 43 -Stone kraal.....	86
Figure 44 - Historic house.....	88
Figure 45 - Photo showing CHST-9, the site has a grave with granite dressing and headstone. The rest of the graves are faded soil mounds with small stones used as headstones.	89
Figure 46 - Distribution of heritage sites in and around Charlestown PDAFP (areas marked with brown ink) – green dots.....	94
Figure 47 - Distribution of heritage sites within the PDAFP (areas marked with brown ink)- green dots.....	95
Figure 48 – Ground position of the identified heritage resource – green dots.....	96

LIST OF TABLES

Table 1: Site significance classification standards as prescribed by SAHRA.....	45
Table 2-Example of Impact table summarising the significance of impacts (with and without mitigation).....	50
Table 3 -Measures for inclusion in the draft Environmental Management Plan:	51
Table 4- List of KZN Provincial Heritage Sites Located in and Around Charlestown	53

ABBREVIATIONS

Acronyms	Description
AIA	Archaeological Impact Assessment
AMAFA	Amafa aKwaZulu-Natali
ASAPA	Association of South African Professional Archaeologists
CRM	Cultural Resource Management
DEA	Department of Environmental Affairs
DoE	Department of Energy
EIA practitioner	Environmental Impact Assessment Practitioner
EIA	Environmental Impact Assessment
ESA	Early Stone Age
GIS	Geographic Information System
GPS	Global Positioning System
HIA	Heritage Impact Assessment
I&AP	Interested & Affected Party
KZNHA	KwaZulu-Natal Heritage Act
KZNHB	KwaZulu-Natal Heritage Bill
K.y.a	Thousand years ago
LSA	Late Stone Age
LIA	Late Iron Age
MSA	Middle Stone Age
MIA	Middle Iron Age
NERSA	National Energy Regulator of South Africa
NHRA	National Heritage Resources Act
NEMA	National Environmental Management Act
PHRA	Provincial Heritage Resources Agency
PSSA	Palaeontological Society of South Africa
ROD	Record of Decision
PDAFP	Proposed Development Area Footprint
SADC	Southern African Development Community
SAHRA	South African Heritage Resources Agency
SPV	Special Purpose Vehicle

TERMS & DEFINITION

Archaeological resources

This includes:

- 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;
- 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 10m of such representation;
- 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 as defined in the Maritimes Zones Act, 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;
- Features, structures and artefacts associated with military history which are older than 75 years and the site on which they are found.

Cultural significance

This means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance

Development

This means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of the heritage authority in any way result in the change to the nature, appearance or physical nature of a place or influence its stability and future well-being, including:

- construction, alteration, demolition, removal or change in use of a place or a structure at a place;
- carrying out any works on or over or under a place;

- subdivision or consolidation of land comprising a place, including the structures or airspace of a place;
- constructing or putting up for display signs or boards;
- any change to the natural or existing condition or topography of land; and
- any removal or destruction of trees, or removal of vegetation or topsoil

Heritage resources

This means any place or object of cultural significance

1. INTRODUCTION

1.1. Project Background

1.1.1. Developer and Summary of the Proposed Project

Dovecall Properties (Pty) Ltd is proposing a housing development as well as the associated infrastructure on behalf of Newcastle Local Municipality in Charlestown. Charlestown is one of KwaZulu-Natal towns situated on the border of KwaZulu-Natal (KZN) and Mpumalanga Province. It is ensconced between the towns of Newcastle and Volksrust along and east of the N11 (e.g. Figure 2 for N11). The town forms part of Newcastle Local Municipality, thus the reason why this local municipality is the one developing it. The 2011/12 Strategic Plan of KwaZulu-Natal, a plan developed by the KwaZulu-Natal Provincial Planning Commission (published on the 20th of October 2011 (version 6)) defines Charlestown and other small towns such as Manguzi and Msinga etc. as towns that are in need of formalization to ensure appropriate proclamation and formal settlement (SOPA 2011). The proposed Charlestown development can therefore be seen within this context – formalisation of Charlestown as an emerging rural town to ensure its proclamation and formalisation of its settlement. There is no doubt that the town is in need of development (e.g. Figure 4-7).

During the 2009 auditing of Newcastle Local Municipality operations, in particular uThukela Water, it was found that the water quality of Charlestown in term of the 2010 Municipality Blue Drop Score was negative – it scored low. This was attributed to lack planning and non-commitment of Gert Sibande Local Municipality to among other things the development and maintenance of water supply system in compliance with Reg. 2834 and assets management.

As a result of this, it was decided that dedicated efforts are needed to develop water safety for the Charlestown system with clearly defined roles and responsibilities. This included the consideration of water chemical compliance monitoring which is argued that Charlestown water system is in need of expansion to include health parameter listed in the South African Nation Standard. For a town to be able to comply with these standards there is a need of proper and formalised infrastructure development. Thus the proposed housing and associated infrastructure development proposed for Charlestown in the context of formalisation and proclamation of it as small emerging rural towns.

1.1.2. Proposed Project Aims

The objective of the proposed project is to contribute to the formalisation and proclamation of Charlestown as a small emerging and formal rural town of KwaZulu-Natal – in line with the objectives of the Department of Agriculture and Rural Development. Whereby small and none formalised towns are developed and formalised and re-proclaimed. The other, is to contribute to formalised housing development and provision of necessary and basic infrastructure such as water, sanitation and electrification of areas that previously lacked such resources. For example, the area under consideration for the proposed Charlestown housing and infrastructure development is currently devoid of formal houses, streets, in-house water supply (communal taps are currently found), abolition facilities, electricity etc (e.g. Figure 3-7).

The project basic aim is, therefore, to contribute to the development of formalised housing and associated infrastructure as described above -in line with the development, formalisation and proclamation of Charlestown as a small and emerging rural town of KwaZulu-Natal.

1.1.3. Terms of Reference for the Appointment of Archaeologist and Heritage Specialist

Because of the nature and size of the proposed development -housing development and associated infrastructure exceeding a total area of 5000m² on an area covering approximately 120ha a need to conduct an EIA developed. In terms of the EIA Regulations of June 2010 (Government Notice 543-546 published in terms of the NEMA, No 107 of 1998) the construction of the proposed facilities is listed as an activity that requires environmental

authorisation. This is because the project comprises development of houses and bulk infrastructure such as roads, water supply and electrification – a development that occupies an area of more than 20ha. Undertaking an EIA process is therefore a requirement. The current process comprises of an EIA and it involves the identification and assessment of environmental impacts through specialist studies, as well as public participation.

ENPROCON cc was appointed by Dovecall Property (Pty) Ltd as a lead Environmental Impact Practitioner to manage the EIA process and associated impact studies for the proposed development project. ENPROCON facilitated the appointment of NGT Projects & Heritage Consultants (Pty) Ltd by Dovecall Property (Pty) Ltd as an independent and lead CRM firm to conduct an HIA (exclusive of Palaeontological desktop study) for the proposed development as part of specialists (inputs) impact assessment studies required to fulfil the EIA process and its requirements. Nkosinathi Tomose, the lead archaeologist & heritage consultant for NGT Projects & Heritage Consultants, conducted the HIA study for the proposed Charlestown housing development proposed in Charlestown, Newcastle Local Municipality, within Amajuba District Municipality, KwaZulu-Natal Province, South Africa (Figure 1).

The appointment of NGT Projects & Heritage Consultants (as an independent CRM firm) is in terms of the KZNHA, No. 10 of 1997 (at a provincial level), NHRA, No. 25 of 1999 (as amended), the NEMA, No.107 of 1998 (as amended & the applicable 2010 Regulations), as well as other applicable legislations and bills such as the KZNHB of 21 February 2008.

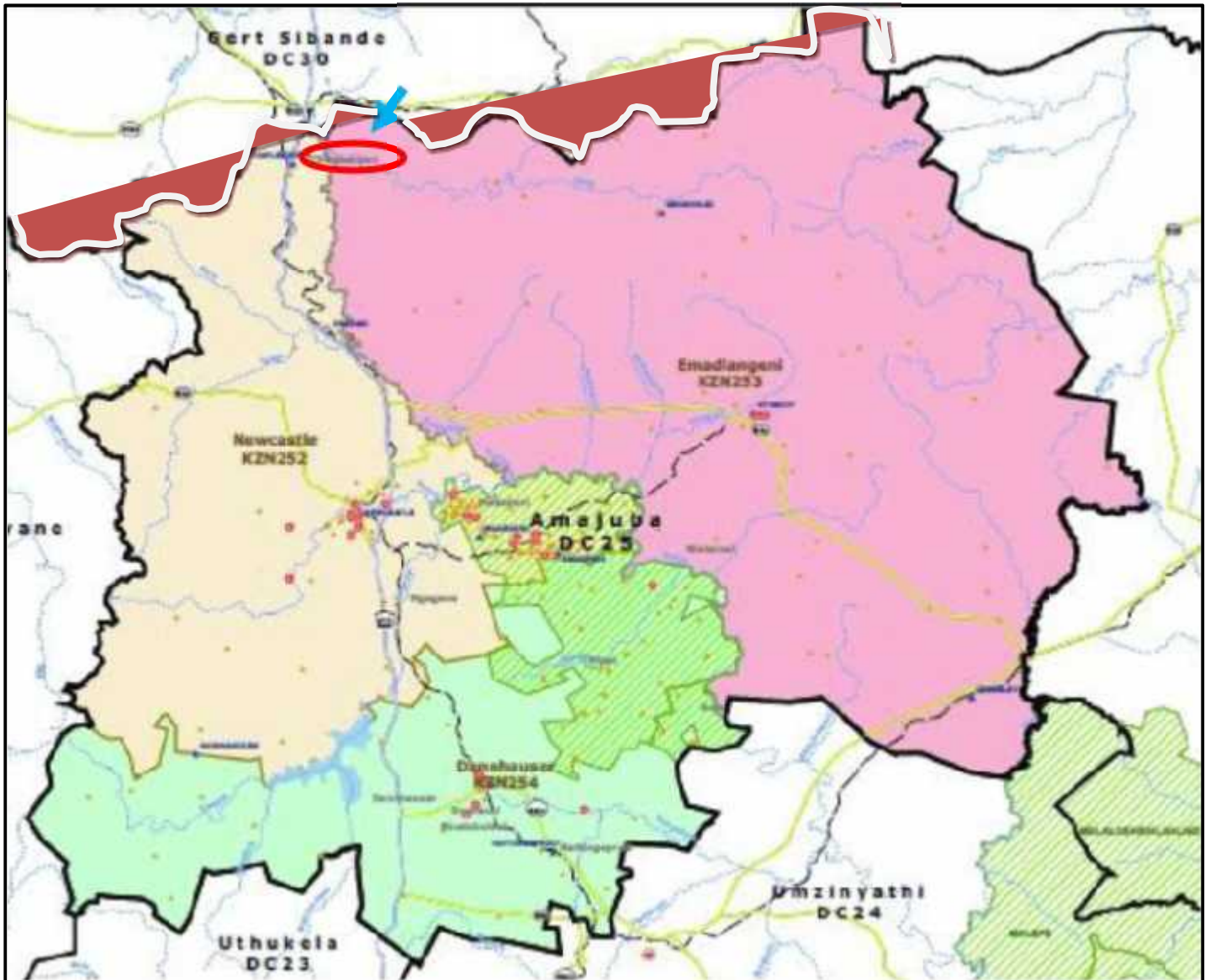



Figure 1 –Location of Charlestown as indicated by a red circle within Newcastle Local Municipality and Amajuba District Municipality @ KZN Planning Commission.

This marks the border between-n KwaZulu-Natal and Mpumalanga Province



2. BACKGROUND OF THE STUDY AREA

2.1. Description of the affected environment

Charlestown is located south of the town of Volksrust which falls under Gert Sibande Local Municipality in Mpumalanga Province and north of the town of Newcastle which falls under Newcastle Local Municipality and Amajuba District Municipality in KwaZulu-Natal Province (Figure 1). It is situated on the border of KwaZulu-Natal and Mpumalanga as is found on the KwaZulu-Natal side. The town has long history dating back to the 1890s. The proposed development area footprint (PDAFP) is located on the eastern and northern edges of Charlestown (Figure 2).

The town can generally be defined as mixed used landscape with formal and none formalised housing, semi-industrial zone, and semi-rural areas (Figures: 4, 5, 6 & 7). The infrastructure can also be characterised according to these types of land uses. The areas with formal housing and the semi-industrial zone have resources such as semi-tarred roads and formal roads, water and sanitation as well as electrification. Whilst on the other hands, the semi-rural sections of Charlestown are devoid of such resources – proper housing or street scape, electrification and formalised roads. Figures 2 and 3 clearly show the contrast between the formalised section of Charlestown and none-formalised section - note the street scape pattern in the formalised section of the town. Semi-formalised street scapes are also found within the PDAFP as marked in pink and green in figures 2 and 3.

The water supply within the PDAFP is through communal taps. There are no formal abolition facilities in terms of municipal standards etc. This area is also not electrified, but there are powerlines that criss-cross it (e.g. Figure 8). The Charlestown water works are found of the south-eastern end of the PDAFP (Figure 9 & 10). The rest of the study area (the PDAFP) is characterised by open fields used for grazing purposes by the locals (e.g. Figure 3, 11 & 12). Within the PDAFP which is the semi-rural section of Charlestown we find burial sites – indicative that this section was in the past not formally developed but rather used for burial activities (e.g. Figures 13, 14 & 15)

Figure 2 - Proposed development area footprint (PDAFP). Note the street scape of the historic town of Charlestown , west of the current PDSFP. @ ENPROCON cc.

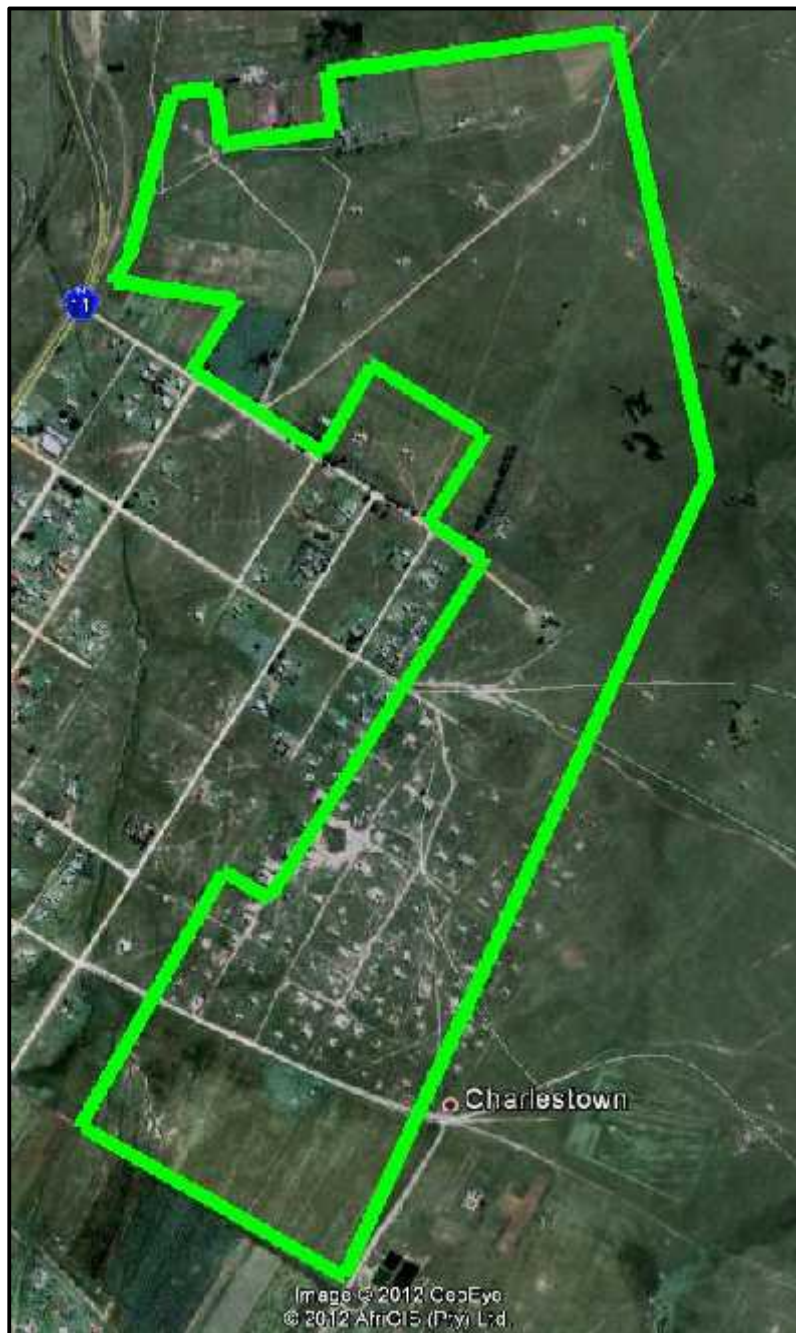


Figure 3 – Google Earth photo showing the previous proposed development area footprint (PDAFP) before the final one as shown in figure 2. Note the street scape of the historic town of Charlestown and the N11 on the western end of the town. @ ENPROCON cc.



Figure 4 - Charlestown industrial zone/node. Note cattle and goat –the roam around open grasslands and fields. Also note formalised structures/houses in the back as indicated by the yellow arrow as well as none formalised houses as indicated by the red arrow.



Figure 5 - Example of traditional houses, rondavals and beehive structures. The beehive structure is a typical tradition Zulu people dwelling dating to the Iron Age period in archaeological records.



Figure 6 - Shacks (tin-house) and mud houses.



Figure 7 - Unfinished housed within the PDAFP.



Figure 8 - example of powerlines that criss-cross the PDAFP



Figure 9—Example of Charlestown water works



Figure 10- Example of Charlestown water works



Figure 11 - Open fields used for grazing purposes



Figure 12 – open fields within the PDAFP (as indicated in figures 2& 3) used for grazing purposes



Figure 13 - Muslim place of burial as indicated by the red arrow



Figure 14 - A single grave located near the Muslim place of burial



Figure 15 - Old Charlestown municipal cemetery

2.2. Desktop Study: Archaeological and Heritage

KwaZulu-Natal province provides palaeoscientists and cultural scientists alike with rich canvas of heritage resources varying from natural to manmade or human influenced or altered resources. The natural heritage resources of the area in which Charlestown is located are geological feature that characterise the Highveld-formation of the Karoo System with all its diverse forms and features.

The man made environment of KwaZulu-Natal dates from prehistoric to historic times (time of written documents). Among archaeological (and heritage) time periods it includes: the ESA (Early Stone Age)– 2.6 m.ya to 250 k.y.a.; MSA (Middles Stone Age)–250 k.y.a to about 35 k.y.a.; LSA (Late Stone Age)– 25 k.y.a to about 2000 k.y.a; 2 Iron Age periods (i.e. Early Iron Age & Late Iron Age)– 2000 k.y.a ; Colonial period and historic period 1800s.

This HIA assesses the range of all the manmade or human influenced/alterd resources within the Charlestown PDAFP, and immediate outside but within the proposed EIA project area as marked by figure 2 and 3. It makes recommendations on how to best manage them within a legal framework as stipulated in the NHRA, No. 25 of 1999, KZNHA, No. 10 of 1997 and KZNHB, 2008. This HIA, therefore, has one component which covers various periods of archaeology to the recent historic and cultural heritage/landscape of the area under consideration. There was no Palaeontological desktop study carried out as part of this HIA study because of the nature and scope of development, but also because the proposed development does not occur within an area known for dolomitic formation.

2.2.1. Archaeology of KwaZulu-Natal:

The archaeology of KwaZulu-Natal like that of most parts of southern Africa covers four archaeological periods, namely – the Stone Age (Early, Middle & Late), the Iron Age and Historic Archaeology (the last 500 years). The study area falls with a region mostly known for Iron Age Archaeology. The focus of this study will be given to Iron Age and Historic Period, but without neglecting or excluding the different Stone Age periods.

The Iron Age of southern Africa dates to the first millennium AD. The site of Mzonjani, located some 15 km from Durban is the oldest known Iron Age site in KwaZulu-Natal dating to the

third millennium AD. By 1050 AD the Natal area is known to have been occupied by the Zulu people and this the area in which Charlestown is located (former Natal) and within the former Zululand further north east. Approaches used to arrive at these conclusions include drawing upon history, oral traditions, linguistics, anthropological, and archaeological data as presented through material culture and artefacts. The defining archaeological traits of the Iron Age people in this region and other parts of southern Africa is represented through distinct ceramic traditions, stone walls and other structural features such as grain bins and hut floor remains, kraals and often vitrified cattle dung (& often goat). The KwaZulu-Natal region of southern Africa is known to have been occupied by the Nguni language speakers of the Eastern Bantu Language Stream. Iron Age structural features characterised this region include stone wall structures defined as the Central Cattle Pattern (C.C.P) (e.g. Huffman, 2007). The earliest known “stonewalling type” in this region is known as Moor Park and it dates from 14th to 16th Centuries AD (Figure 16). The site of Moor Park is located in the defensive position on the hilltops in the Midlands, from Bergville to Dundee just south of the town of Newcastle (see Huffman, 2010, 2007). This is some distance south of the study area. Different theories or hypothesis have been argued for and against regarding the potential use of the site of Moor Park.

Huffman (2007:33), for example argues that the wall served defensive purposes based on the location and setting of the walling - it is “located on the spurs and ends of hills, stone walls cut the settlement off from remaining terrain perimeter walls enclose about two thirds of the settlement, leaving the back free”. However, it has to be noted that the C.C.P and other forms of Iron Age stonewalling features are not restricted and/or endemic to the eastern Bantu Language Speaking groups or the Nguni people whom the Zulu people form part of. Stone walling is found elsewhere in the country – in regions such as Limpopo Province, North West Province and Gauteng Province in South Africa and in other southern African countries such as Zimbabwe and Botswana etc. For example, Huffman argues that, “Iron Age stonewalling occurs over much of Southern Africa “and that “as the most visible sign of agro-pastoral settlement, there are several classifications, mostly for specific areas and few for larger regions” (Huffman 2007: 31).

Other prehistoric archaeological evidence of the occupation of KwaZulu-Natal comes from Stone Age in Sibudu Cave (coast of KwaZulu-Natal e.g. early human behavioural patterns in the Middle Stone Age period of South Africa) and in the plains, valleys and hills that were once occupied by the San people. This archaeological evidence includes stone tools of different

shapes and forms and/or traditions and an abundance of rock art sites, predominantly inform of rock paintings with few known engravings sites. The nearest district to Amajuba District Municipality and its surrounding where rock art sites are found is Escourt. However, it is far from the study area. In terms of stonewalling, other known stonewall features in the former Natal region resulted during the times of war - for example, during the South African Wars (i.e. Anglo-Boer Wars), the prehistoric wars such as Mfecane, and Anglo-Zulu and Zulu and Boer wars.

The KwaZulu-Natal region is known to have been characterised by historical wars and battles. These wars and battles were within and between the different Zulu clans, Zulu's and other 'tribal groups' such as the Swati and Ndebele, the Zulu's and the Boers, the Zulu's and the British (e.g. Anglo-Zulu War), and the British and the Boers with participation from local Zulu's ,Indian and other groups (e.g. the South African War a.k.a the Anglo-Boer War). This gives a different layer to the history of the region and in particular of the region between Newcastle, Wakkerstroom and Volksrust and Charlestown.

Results of the Prehistoric Research in the Study Area/Site and its surrounding-

From consulted archaeological sources, no archaeological sites have been identified in the study area on its close proximity. From known archaeological of the former Natal area archaeological sites are known to occur in farms around Heilbron 4281 and Langlaagte 6898.

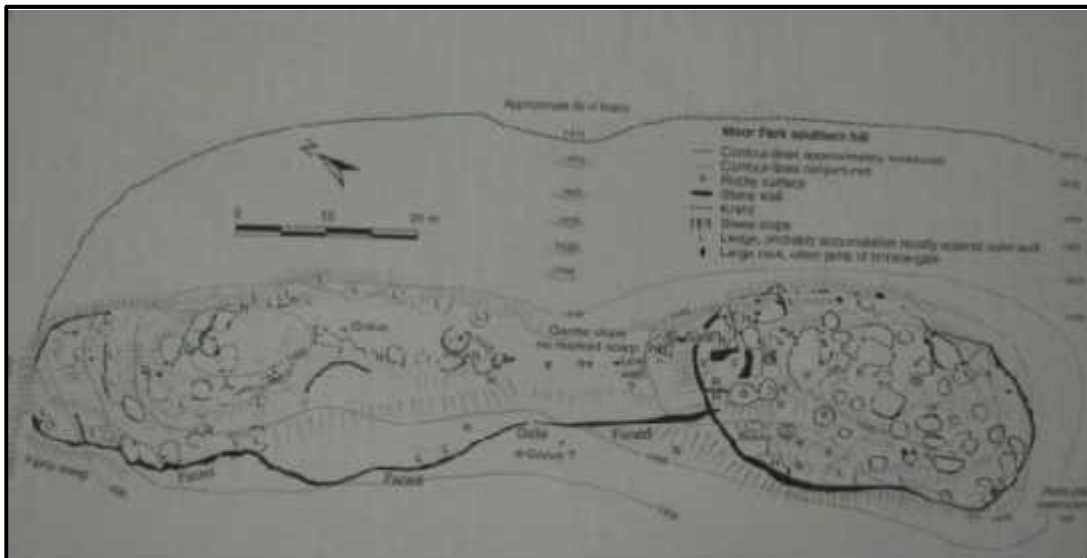


Figure 16- Site of Moor Park; picture taken from T, N. Huffman (2007) to illustrate the C.C.P stonewalling (see also Davies 1974 from which the picture was initial taken).

2.2.3. The Historic period – the last 200 years to date

The establishment of the town-

Charlestown, like many of South African old town has a rich, complex and dynamic history. It's history is interweaved into that of present day South Africa, spanning four socio-economic and political landscapes: the Colonial South Africa (1800s to 1910), the Union South Africa (1910-1962), the Apartheid State (1962-1993), and the post-Colonial and post-Apartheid dispensation as marked by the 1994 first South African democratic elections (1994-2012) (Tomose, 2008; Fourie, 2010). Its history is routed in the socio-economic and political processes of South Africa. The economic (or commerce) processes include the industrial processes such as the discovery and the beneficiation of South Africa's mineral wealth such as diamonds and gold which prompted the development of small trade towns and the railway industry to transport goods and resources to and from the mines. The small trade towns referred to primarily served as a link between South African mines and mining town like Johannesburg and the ports which were used to export mineral resources. They are served as rest-posts in transportation of goods and resources such as technological and mechanical tools to the mines. To name a few strategic junctions that were used for such purposes in South Africa is Noupoot (Northern Cape) and De Aar (Northern Cape), Stormberg (Eastern Cape) and Charlestown (KwaZulu-Natal).

Charlestown officially developed in 1890s with the development of trade between three major city ports of Cape Town, Durban and Port Elizabeth. Following the discovery of diamonds in the Orange River (i.e. in 1867), Vaal River, Dutoitspan and Bultfontein (i.e. in 1870) and Kimberly (i.e. in 1871), later the discovery of gold in the Witwatersrand (i.e. in 1886) there was a surge to develop and complete a railway linkage between British Colonies of the Cape Colonies (e.g. present day Western & Northern Cape Provinces; Cape Province (e.g. present day Eastern Cape Province)), the Natal Colony (i.e. parts of present day KwaZulu-Natal) and the Transvaal which then formed part of one of the two Boer Republieks - the Zuid Afrikansche Republiek. The other Boer Republiek being the Orange Free State. Charlestown developed around a railway junction that linked the Natal Colony and the Transvaal. It developed just after President Paul Kruger of the Transvaal halted the Durban railway leading to the Transvaal. President Kruger had refused to grant permission to bothy the Natal Colony and Cape Colony administration for their planned Port-Natal to Transvaal railway line to enter the Transvaal until his Pretoria to Lourenco Marques (present day Maputo) line was completed. This resulted because the Pretoria to Lourenco Marques railway line was one of the significant

projects that the Transvaal administration had ever embarked on. It was called the Nederlandsche Zuid-Afrikaansche Spoorweg Maatschappij (a.k.a N.Z.S.M). Following the refusal of the Port-Natal railway line to enter the Transvaal, there was a need for a trade post that would link the two geographic landscapes, consequently the development of a railway junction on the border of Transvaal and Natal Colony which necessitated trade and transportation of goods and resources between these two states. Charlestown grew out of this junction and was named in honour of Sir Charles Bullen Hugh Mitchell, G.C.M.G., R.M (1836-7 December 1899) (Figure 17). Sir Charles Mitchell was one of the Governors of the British Colony of Natal and Zululand between years 1881 and 1882. In its early days it developed as a railway station and customs post between the Natal Colony and the Transvaal Republiek (e.g. Paton, 1961).

In its early days Charlestown consisted of three portions: Charlestown, Clavis and Clavis Extension (ibid) (Figure 18). According to Alan Parton, "In 1895 Clavis was acquired by the South African Mutual Life Assurance Society and laid out as a township" (1961: 5). This would date Charlestown to early 1890s because it predates Clavis.

With the proclamation of the Union of South Africa in 1910 and the abolishment of customs tariffs, Charlestown ceased to operate as the customs post. Because of its initial use as a post, it shares similarities with its neighbouring towns of Newcastle and Volksrust. For example, Newcastle started off as Post Halt on the journey between Port-Natal (present day Durban) and the Zuid Afrikaansche Republiek (which then constituted the Transvaal, Northern & Eastern Transvaal). Whilst on the other hand, the name Volksrust denotes a place of rest – a name which it possibly acquired following the settlement of the area in which the town of is laid by the Afrikaans Communities of Dutch (the burghers) descendent after the Battle of Amajuba. The burghers are suggested to have rested in there after the Battle of Majuba in 1881. Like Charlestown Volksrust was proclaimed a town in 1889 and it got its municipality status in 1904. However, as much there are similarities in these towns there are also differences. For example, in terms of their geographic locality and history of settlement from the times of the Union of South Africa to the Apartheid South Africa and the post-Colonial/Apartheid political dispensation.

In terms of its geographic locality, the town is situated on the border of KwaZulu-Natal and Mpumalanga Province and fall within the KwaZulu-Natal side (Figure 1). In the old maps it would be on the border between Natal and the Transvaal (e.g. Figure 19). It is ensconced between the towns of Newcastle and Volksrust, along the N11 (eastern side) linking the two towns (e.g. Figure 2 for the position of the N11). The town is situated some 37.39km north of

Newcastle and 5.56km south of Volksrust (Figure 19). It is located within Amajuba District Municipality and forms part of Newcastle Local Municipality (NLM) (Figure 1). Other towns under NLM include: " Ballengeich, Ingogo, Newcastle, Normandien, Osizweni and Welbedacht (Figure 1).



Figure 17 - Portrait of Sir Charles Bullen Hugh Mitchell. @ Wikipedia (2012)

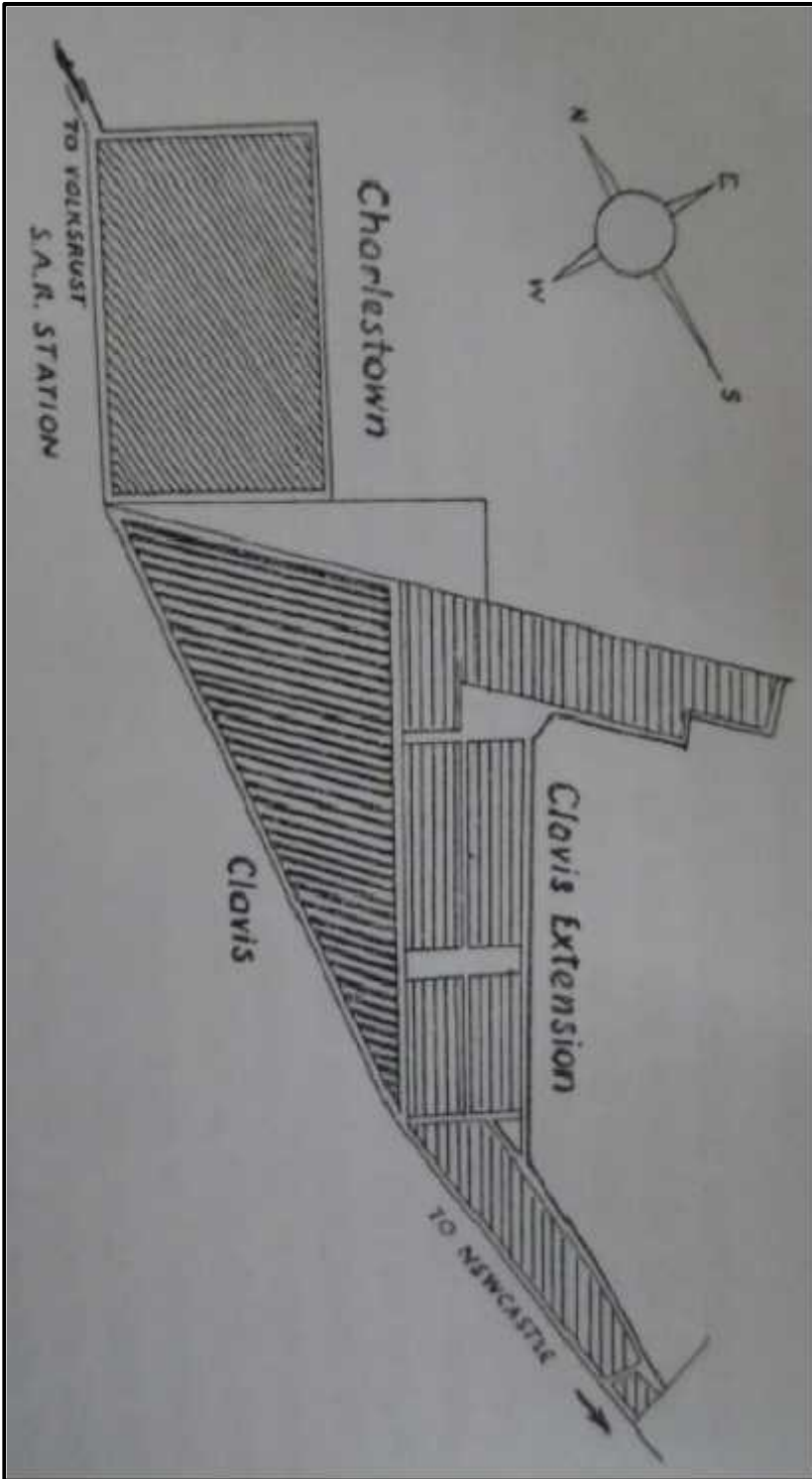


Figure 18 – Schematic layout of Charlestown, Clavis and Clavis Extension. This all forms part of Charlestown today. @ Paton (1961).

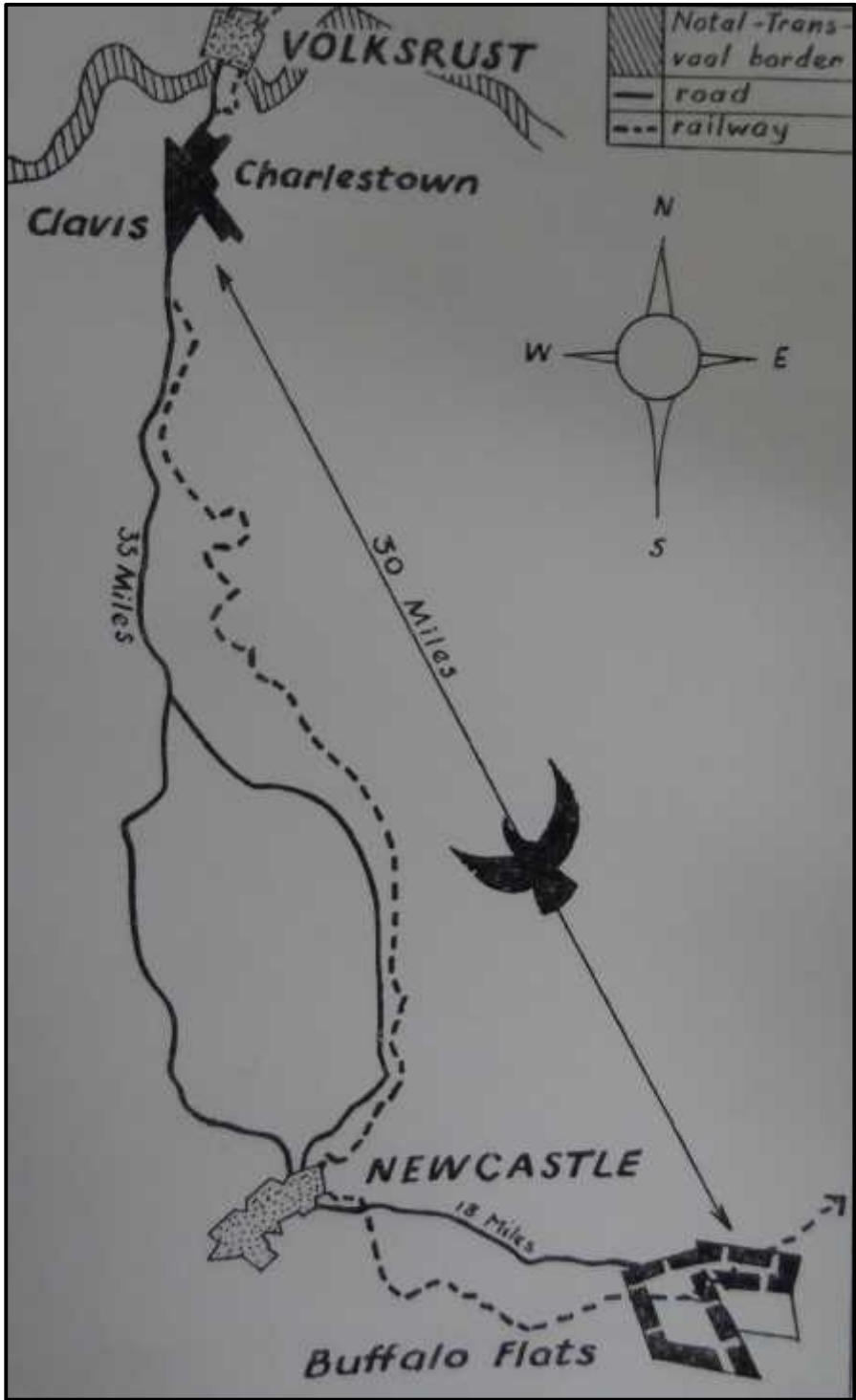


Figure 19 – Schematic presentation of Charlestown in relation to Volksrust in the north and Newcastle in the south @ Paton (1961).

Who Are Historic Residents of Charlestown –

From historic records and other material consulted and available about the history of Charlestown, it is not clear as to whom were early settlers of Charlestown after it had been established as a town by then Natal government. What is clear, however, is that those who settled here settled because they saw a need and opportunity represented by the railway outpost. From this one therefore deduce that the early settlers of Charlestown were merchants and railway traders who saw a need to formalise residence near a railway junction that was established in Charlestown. Although not clearly defined, these merchants would have been South Africans of European Origin – White South Africans. African and/or Indian traders and merchants would have settled in Charlestown later on. The mausoleum located north of the historic Charlestown cemetery is testimony to the existence or influence of Islam in the town.

Three things become apparent when one reads the history of Charlestown. For example, it developed in three separate portions. First is the development of Charlestown proper established as a township under the Natal Law with its boundaries only defined in 1906. Second is the establishment of Clavis as a township in 1895 by the South African Mutual Life Assurance Society. Thirdly is the selling of lots in Clavis by Messrs. Walton & Totham Auctioneers on the 15th of October 1899 which suggests the extension of this township. This chronological development helps us understand the settlement question about Charlestown. For example, it is a known fact that before the Union Charlestown was a frontier town on the Natal side of the Transvaal border – this would mean that many of the town residents would have been a composition of Afrikaans and English speaking communities. Formerly known as a flourishing railhead and customs post, status and future of Charlestown change after the proclamation of the Union of South Africa in 1910 (e.g. Paton, 1961). This resulted because during the Union customs were abolished and the railway workshops that previously characterised Charlestown were moved across into the Transvaal border to Volksrust. With this move the majority of Charlestown residents, suggested to have been White, are argued to have also relocated across (Paton, 1961). As a result of this move, houses in Charlestown are suggested to have been deserted and that any prospects of selling land or any property to White buyers disappeared. This culminated to the Charlestown Town Board losing income as a result of majority of the Whites moving across to Volksrust. This suggests that the future of Charlestown was now becoming bleak. The Town Board had to now devise a strategy on how they could now pay their rates and taxes. The result was the persuasion of African to purchase land in Charlestown. The proponent of this is suggested to have been Mr S. R. Higgins who was one of Charlestown landowners, a butcher and a member of Charlestown Town Board

(Ibid). By 1911 Charlestown had its first African landowner by the name of Mr Abraham Ngwenya and by 1914 African landowners in Charlestown included Mr Amos Coka. During this time only 12 White families are recorded in Charlestown -making Charlestown one of the earliest known interracial settlement townships in KwaZulu-Natal then Natal. Mr Higgins continued to persuade many Africans to purchase land in the area. By 1912, the first recorded African in Clavis is Mr Gama. This suggests that land was not only sold to Africans in Charlestown proper but also in other townships in the area such as Clavis. In Clavis the land was not only sold but some leased to Africans. One of landowners mentioned to have played a role in the Clavis land sales is Mrs Taylor. By 1934, the land was sold to African in Clavis Extension and this portion of Charlestown is recorded as the area with much African freehold land (Paton, 1961). The reasons for this are not clear because by 1934 both Clavis and Clavis Extension had already been incorporated into Charlestown. For example, in 1930 Clavis was absorbed into Charlestown Township and in 1932 Clavis Extension was also incorporated into Charlestown Township (ibid). Judging from the above White surnames, it would seem that Charlestown remaining White residents were of English/British origin. However, one would need a detailed archival search of the composition of Charlestown Town Board to conclusively argue for that. What becomes important from the above is that we know that the town had expanded its boundaries between 1930 and 1932 with the incorporation of Clavis and Clavis Extension to what is today known as Charlestown.

The occupation of Charlestown by Africans as one of Natal black spots became an issue with the election of the National Party in power in 1948. Using the existing land laws developed during the Union of South Africa such as the 1913 Native Land Act, and the 1913 and 1936 Land Act the National Party government with its Nationalist ideals set on a mission to create areas that would be declared according to the racial or colour bar. The land issue question for areas that were initially occupied by the whites and those deemed important to be occupied by whites surfaced. In Charlestown, for example, the presence of African freehold owners which had been offensive to some White local opinion emerged as one of problems that needed to be addressed under the Nationalist Government. With the institutionalisation of the Nationalist Government Apartheid Policy in the early 1960s (i.e. between 1961 and 1962), the Charlestown African and other none-White landowners and residents had to go to new areas reserved by Africans and other none-White such as Indians. For Africans of Charlestown, they had to move to Madadeni formally known as the Ducks ponds and some to Newcastle. Their house and property was destroyed leaving as sense of dispossession to many who had to experience these forceful removals. Charlestown was once again demarcated as a Whites residential node of the Natal. This resulted because the Nationalist Government Apartheid

Policy aim was "...to separate Whites from non-Whites whenever possible, in offices, entrances, exits, cinemas, halls, restaurants, hotels, schools, universities, churches, in residential areas and on land" (Paton, 1961:1). The result was the dispossession of many of Charlestown former non-White residents who both owned and leased land in Charlestown – in all its portions. This process of dispossession mainly occurred during the Apartheid political landscape, the periods between the 1960s, 70s, 1980s (early and late) up to the early 1990s with the eradication of the Apartheid Policy and all its associated structures. During the early 1990s to Mid-1990s some of the people who have been dispossessed returned to Charlestown and form residents of town today. These people include those that are found both within formalised and none formalised sections of Charlestown as argued in the Affected Environment section of this report.



Figure 20 - A family photo of one of the families who once stayed in Charlestown



Figure 21 - A photo showing a man point to the ruins of his house following its demolition by the Nationalist Government in Charlestown to make way for white residents

Battle of Majuba-

The Battle of Majuba is the closest known battlefield site located within the close proximity of Charlestown. The battle was fought between the British under the leadership of Major-General Sir George Colley and the Boers in the case the Transvalers under the leadership of Kruger, M.W. Pretorius and Piet Joubert who had rebelled against the British authorities. The Transvalers defeated the British invading forces at Laing's Nek, Ingogo, and Majuba Hill in 1881. During this time the Transvalers were under the command of Piet Joubert and his forces are known as Joubert burghers. The Battle of Majuba (mountain of doves), before that time also known as Spitskop, took place on the 27 of February 1881. The battles were won by the Transvalers some of whom later settled in Volksrust. There is no doubt that the area in which Charlestown is located was affected by these battles or even formed part of. Therefore these battles form an important and integral component of the history of the region and area in which Charlestown was established. Fortunately, the current study falls outside Charlestown and PDAFP. The battle site has also been proclaimed KZN Provincial Heritage Site (refer Table-4). This battle site is one of significant sites in the history of South Africa and has been

declared the main battle of the First South African War (a.k.a 1st Anglo-Boer War). Its first declaration as a national monument took place in 1941 (Figure 22c).

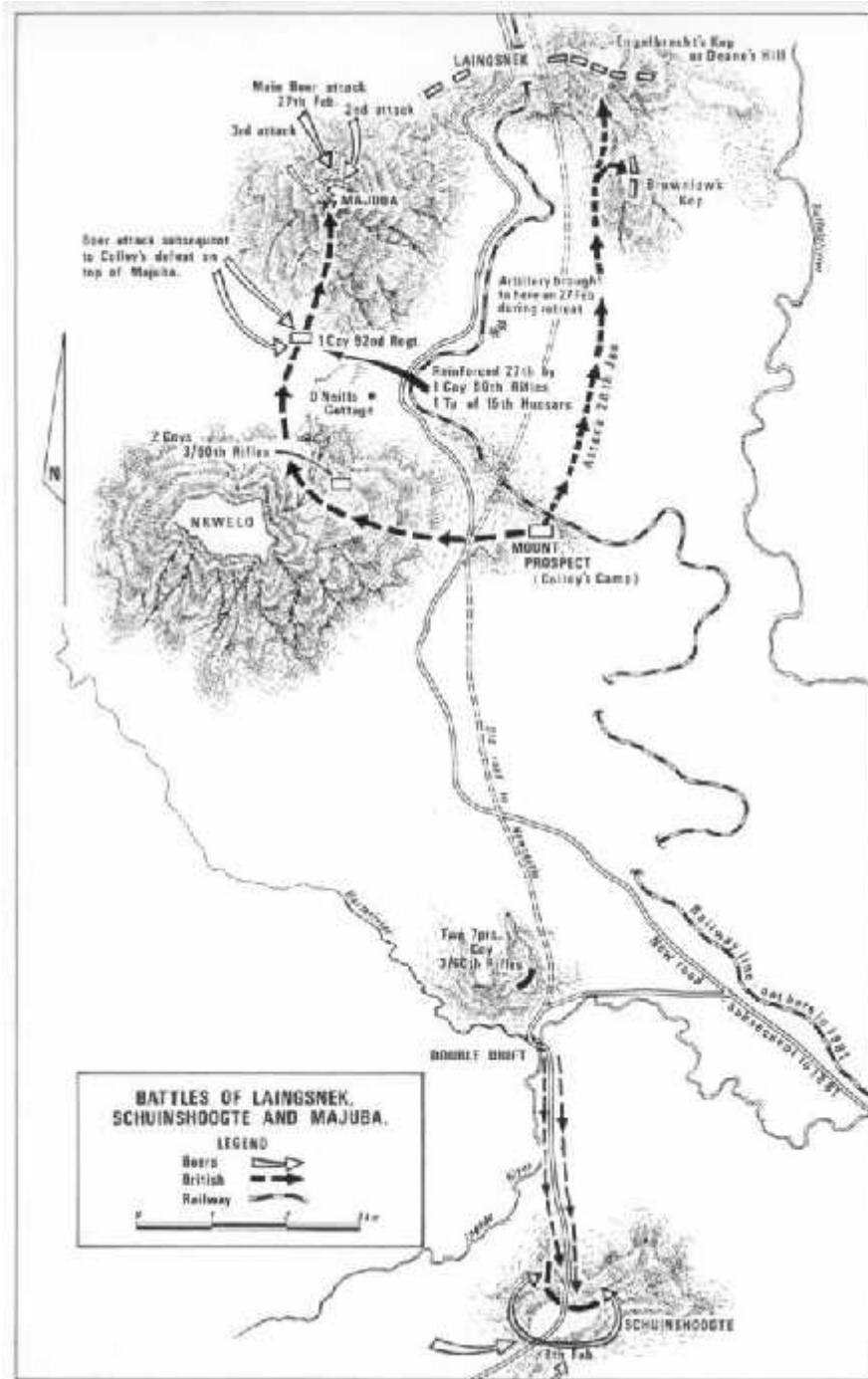


Figure 22a. Schematic representation of Battles of Langesnek, Schuinshoogte and Majuba.

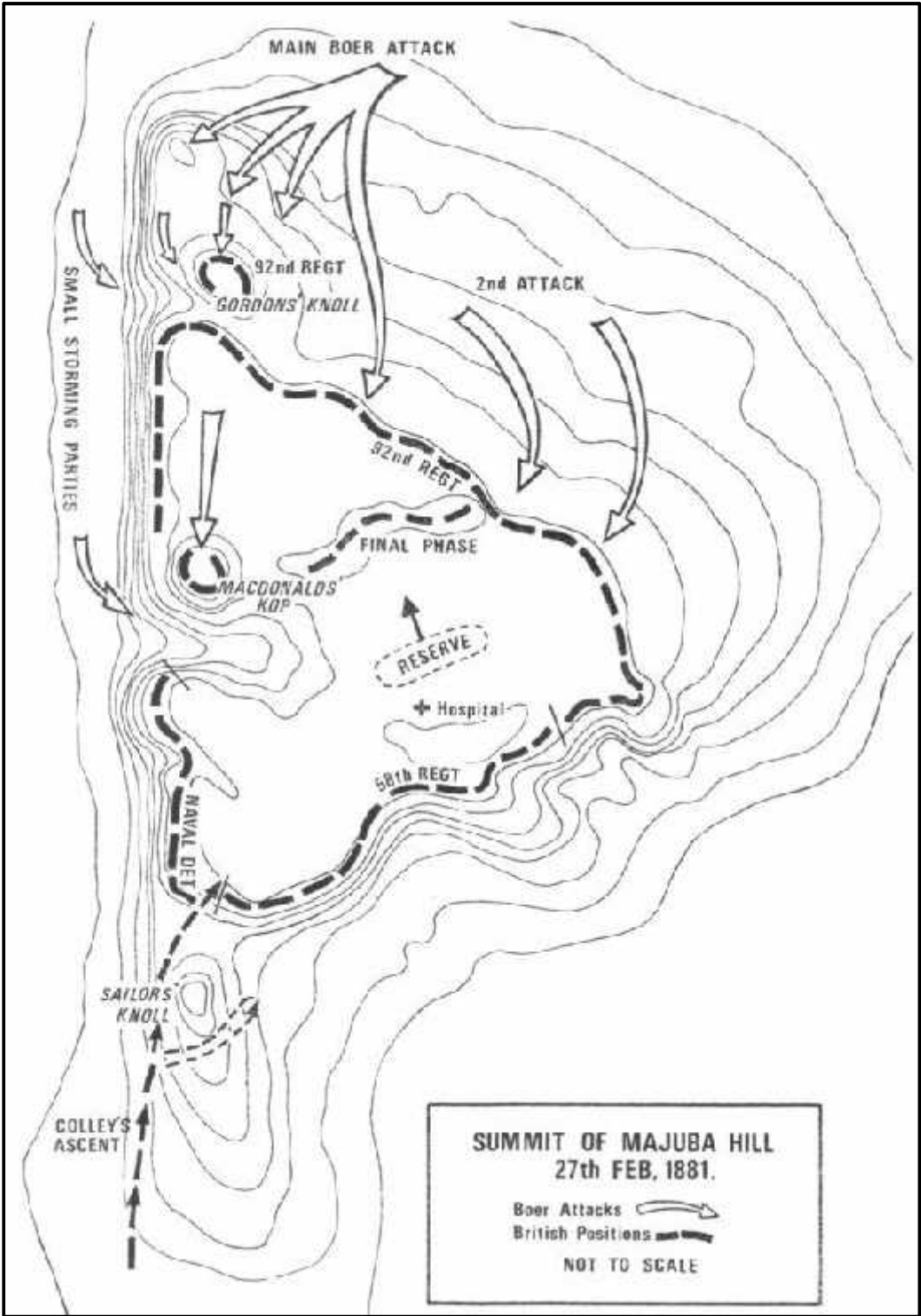


Figure 22b - Schematic representation of Battles of Langesnek, Schuinshoogte and Majuba.



Figure 22c-A memorial of the Battle of Majuba 1881

3. METHODOLOGY

3.1. Legislative Requirements

The NEMA, No. 107 of 1998 stipulated that for any development in South African to be granted permission to go ahead an assessment of the potential impacts of the proposed development on both the natural and cultural environment need to be conducted. As such, this HIA fulfils the requirements of NEMA and is conducted in-line with Section 38 (1) of the NHRA, No. 25 of 1999 and the KwaZulu-Natal Heritage Act, No. 10 of 1997 (various sections as applicable) as well as applicable 2010 EIA Regulations.

3.2. Methodology

This chapter outline the methodologies used in conducting the study. This HIA report was compiled by Nkosinathi Tomose, lead archaeologist and heritage consultant for NGT Projects & Heritage Consultants, for the proposed Charlestown Housing Development, Charlestown, Newcastle Local Municipality, within Amajuba District Municipality, KwaZulu-Natal Province.

3. 2.1. Step I – Literature Review (Desktop Phase):

- The background information of the proposed area of development following the receipt of appointment letter and sites maps from the client. Sources used included, but not limited to published academic papers and HIA studies conducted in and around the region where the current development will take place.
- Map Archives - Historical maps of the proposed area of development and its surround were assessed to aid information about the proposed area of development and its surround.
- This also included a review and assessment of relevant environmental and heritage legislations, and Bills such as the KwaZulu-Natal Heritage Bill, 21 February 2008.
-

3.2.2. Step II – Physical Survey:

- The physical survey of the proposed development area footprint (PDAFP) was conducted by a qualified archaeologist and general heritage specialist on the 20th of November 2012. The survey covered the PDAF on foot and track logs were recorded. The objective of the survey was to locate and identify archaeological and heritage resources and/or sites in the PDAFP area, record them using necessary and applicable tools and technology. The physical survey was deemed necessary since the desktop phase of the project yielded no archaeological resources and yielded many heritage/historic resources about the Charlestown.
- The survey also paid special attention to disturbed and exposed layers of soils as such as eroded surfaces because these areas are more likely to exposed or yield archaeological and other heritage resources that may be buried underneath the soil and brought to the earth surface by animal and human activities. Such as animal barrow pits and human excavated grounds. The dirty roads edges/sides were also inspected

for possible Stone Age scatters as well as exposed Iron Age implements and other resources.

- The following technological tools were deemed important for documenting and recording located and/or identified sites:
 - Garmin GPS (i.e. Garmin 62s) – to take Lat/Long coordinates of the identified sites and to track the site.
 - Lenovo ThinkPad aided Garmin Basecamp Software, Google Earth – to plot the propose project footprint. If any site or resources were identified - ArcGIS Software was used to map them in the landscape.
 - Maps provided by the client during the physical survey of the PDAFP proved invaluable
 - Shapefiles provided by the client were used were used to map the project area and sites located in and around the PDFP site
 - Samsung – to take photos of the affected environment and identified sites (if any were to be located within the PDAFP)

3.2.3. Step III – Data Consolidation and Report Writing:

- The final step involved the consolidation of the data collected using the various sources as described above.
- This involved the manipulation Shapefiles/KMZ files through ArcGIS
- Assessing the significance and potential impact of the identified sites, discussing the finds, report writing and making recommendation on the management and mitigation measures of the identified sites and resources as well as the impact and influence of these sites and resources on the proposed development project and project area.

3.3. Assessment of Site Significance in Terms of Heritage Resources Management Methodologies

The significance of heritage sites was based on four main criteria:

- Site integrity (i.e. primary vs. secondary context)
- Amount of deposit, range of features (e.g., stonewalling, stone tools and enclosures)
 - Density of scatter (dispersed scatter)
 - Low - <10/50m²

- Medium - 10-50/50m²
- High - >50/50m²
- Uniqueness and
- Potential to answer present research questions.

Management actions and recommended mitigation, which will result in a reduction in the impact on the sites, will be expressed as follows:

- A - No further action necessary;
- B - Mapping of the site and controlled sampling required;
- C - No-go or relocate pylon position
- D - Preserve site, or extensive data collection and mapping of the site; and
- E - Preserve site
- Impacts on these sites by the development will be evaluated as follows:

Site Significance

The following site significance classification minimum standards as prescribed by the SAHRA (2006) and approved by the ASAPA for the SADC region were used for the purpose of this report.

Table 1: Site significance classification standards as prescribed by SAHRA

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATION
National Significance (NS)	Grade 1	-	Conservation; National Site nomination
Provincial Significance (PS)	Grade 2	-	Conservation; Provincial Site nomination
Local Significance (LS)	Grade 3A	High Significance	Conservation; Mitigation not advised
Local Significance (LS)	Grade 3B	High Significance	Mitigation (Part of site should be retained)
Generally Protected A (GP.A)	-	High / Medium Significance	Mitigation before destruction
Generally Protected	-	Medium	Recording before destruction

B (GP.B)		Significance	
Generally Protected C (GP.A)	-	Low Significance	Destruction

3.4. Methodology for Impact Assessment in terms of Environmental Impact Assessment Methodologies including Measures for Environmental Management Plan Consideration:

The Basic Assessment Methodology assists in evaluating the overall effect of a proposed activity on the environment. The determination of the effects of environmental impact on an environmental parameter is determined through a systematic analysis of the various components of the impact. This is undertaken using information that is available to the environmental practitioner through the process of the Basic Assessment & Environmental Impact Assessment. The impact evaluation of predicted impacts was undertaken through an assessment of the significance of the impacts:

The Basic Assessment included:

- an indication of the methodology used in determining the significance of potential environmental impacts
- a description of all environmental issues that were identified during the environmental impact assessment process
- an assessment of the significance of direct, indirect and cumulative impacts in terms of the following criteria:
 - the nature of the impact, which shall include a description of what causes the effect, what will be affected and how it will be affected
 - the extent of the impact, indicating whether the impact will be local (limited to the immediate area or site of development), regional, national or international
 - the duration of the impact, indicating whether the lifetime of the impact will be of a short-term duration (0–5 years), medium-term (5–15 years), long-term (> 15 years, where the impact will cease after the operational life of the activity) or permanent

- the probability of the impact, describing the likelihood of the impact actually occurring, indicated as improbable (low likelihood), probable (distinct possibility), highly probable (most likely), or definite (impact will occur regardless of any preventative measures)
 - the severity/beneficial scale, indicating whether the impact will be very severe/beneficial (a permanent change which cannot be mitigated/permanent and significant benefit, with no real alternative to achieving this benefit), severe/beneficial (long-term impact that could be mitigated/long-term benefit), moderately severe/beneficial (medium- to long-term impact that could be mitigated/ medium- to long-term benefit), slight or have no effect
 - the significance, which shall be determined through a synthesis of the characteristics described above and can be assessed as low, medium or high
 - the status, which will be described as either positive, negative or neutral
 - the degree to which the impact can be reversed
 - the degree to which the impact may cause irreplaceable loss of resources
 - the degree to which the impact can be mitigated
- a description and comparative assessment of all alternatives identified during the environmental impact assessment process
 - recommendations regarding practical mitigation measures for potentially significant impacts, for inclusion in the Environmental Management Plan (EMP)
 - an indication of the extent to which the issue could be addressed by the adoption of mitigation measures
 - a description of any assumptions, uncertainties and gaps in knowledge
 - an environmental impact statement which contains:
 - a summary of the key findings of the environmental impact assessment;
 - an assessment of the positive and negative implications of the proposed activity (one alternative only in EIA phase);
 - a comparative assessment of the positive and negative implications of identified alternatives

Assessment of Impacts

Direct, indirect and cumulative impacts of the issues identified through the scoping study, as well as all other issues identified in the EIA phase must be assessed in terms of the following criteria:

- The nature, which shall include a description of what causes the effect, what will be affected and how it will be affected.
- The extent, wherein it will be indicated whether the impact will be local (limited to the immediate area or site of development) or regional, and a value between 1 and 5 will be assigned as appropriate (with 1 being low and 5 being high):
- The duration, wherein it will be indicated whether:
 - the lifetime of the impact will be of a very short duration (0–1 years) – assigned a score of 1;
 - the lifetime of the impact will be of a short duration (2-5 years) - assigned a score of 2;
 - medium-term (5–15 years) – assigned a score of 3;
 - long term (> 15 years) - assigned a score of 4; or
 - permanent - assigned a score of 5;
- The magnitude, quantified on a scale from 0-10, where 0 is small and will have no effect on the environment, 2 is minor and will not result in an impact on processes, 4 is low and will cause a slight impact on processes, 6 is moderate and will result in processes continuing but in a modified way, 8 is high (processes are altered to the extent that they temporarily cease), and 10 is very high and results in complete destruction of patterns and permanent cessation of processes.
- The probability of occurrence, which shall describe the likelihood of the impact actually occurring. Probability will be estimated on a scale of 1–5, where 1 is very improbable (probably will not happen), 2 is improbable (some possibility, but low likelihood), 3 is probable (distinct possibility), 4 is highly probable (most likely) and 5 is definite (impact will occur regardless of any prevention measures).
- the significance, which shall be determined through a synthesis of the characteristics described above and can be assessed as low, medium or high; and
- The status, which will be described as positive, negative or neutral.
- The degree to which the impact can be reversed.

- The degree to which the impact may cause irreplaceable loss of resources.
- The degree to which the impact can be mitigated.

The significance is calculated by combining the criteria in the following formula:

$$S = (E + D + M) P$$

S = Significance weighting

E = Extent

D = Duration

M = Magnitude

P = Probability

The significance weightings for each potential impact are as follows:

- < 30 points: Low (i.e. where this impact would not have a direct influence on the decision to develop in the area),
- 30-60 points: Medium (i.e. where the impact could influence the decision to develop in the area unless it is effectively mitigated),
- > 60 points: High (i.e. where the impact must have an influence on the decision process to develop in the area).

Assessment of impacts must be summarised in the following table format. The rating values as per the above criteria must also be included.

Table 2-Example of Impact table summarising the significance of impacts (with and without mitigation).

Nature:		
	Without mitigation	With mitigation
Extent	High (3)	Low (1)
Duration	Medium-term (3)	Medium-term (3)
Magnitude	Moderate (6)	Low (4)
Probability	Probable (3)	Probable (3)
Significance	36 (Medium)	24 (Low)
Status (positive or negative)	Negative	Negative
Reversibility	Low	Low
Irreplaceable loss of resources?	Yes	Yes
Can impacts be mitigated?	Yes	
Mitigation: Mitigation Measures		
Cumulative impacts: Cumulative Impacts		
Residual Impacts: Residual Impacts		

Table 3 -Measures for inclusion in the draft Environmental Management Plan:

OBJECTIVE: Description of the objective, which is necessary in order to meet the overall goals; these take into account the findings of the environmental impact assessment specialist studies		
Project component/s	List of project components affecting the objective	
Potential Impact	Brief description of potential environmental impact if objective is not met	
Activity/risk source	Description of activities which could impact on achieving objective	
Mitigation: Target/Objective	Description of the target; include quantitative measures and/or dates of completion	
Mitigation: Action/control	Responsibility	Timeframe
List specific action(s) required to meet the mitigation target/objective described above	Who is responsible for the measures	Time periods for implementation of measures
Performance Indicator	Description of key indicator(s) that track progress/indicate the effectiveness of the management plan.	
Monitoring	Mechanisms for monitoring compliance; the key monitoring actions required to check whether the objectives are being achieved, taking into consideration responsibility, frequency, methods and reporting	

4. ASSUMPTIONS AND LIMITATIONS

The following assumptions and limitations exist in terms of the present study:

- The current study is a Phase 1 Heritage Impact Assessment. As such, a historical and archival desktop study as well as a field survey were undertaken to identify tangible heritage resources located in and around the proposed development area footprint. No formal heritage social consultation took place with. Informal question were asked from some of the residents about graves in their yards.
- The Deed search is limited to the synopsis given in Allan Paton (1961) book titled the Story of Charlestown. No deed search was conducted with the Registry of Deeds or

National Archives– this may limit the study in terms of understanding the different cultural activities that took place in the affected farms and why such activities took place. As such some of the area's intangible heritage and stories maybe be missing.

5. FINDINGS

The findings of this study are presented in three ways as per the search and other methodological methods used in conducting it. Such as desktop study, map and deeds search as well as the physical survey of the proposed development area footprint (PDAFP).

Anticipated Heritage Resources and Sites within Charlestown PDAFP –

Based on the known archaeological and historical events that took place within this region of Natal, the following archaeological and heritage resources sites are anticipated to occur within the PDAFP and in Charlestown in general:

- Iron Age implements or ceramics
 - Iron Age graves and burials
 - Historic monuments – some associated with the War
 - Historical cemeteries and graves dating as far back to the establishment of Charlestown
 - Historic houses/buildings dating to the early days of Charlestown
 - Historic artefacts associated with the railway industry because of the Charlestown junction
 - There is also a likely hood of founding Stone Age artefacts, but chance are very slow
-
- Iron Age implements or ceramics; Iron Age graves and burials; Historic monuments – some associated with the War; Historical cemeteries and graves dating as far back to the establishment of Charlestown; Historic houses/buildings dating to the early days of Charlestown; Historic artefacts associated with the railway industry because of the Charlestown junction; There is also a likely hood of founding Stone Age artefacts, but chance are very low

5.1. Results of Desktop Search-

The following provincial heritage sites were yielded by the desktop study of Charlestown and its surrounding. These sites are proclaimed provincial heritage sites in term of The KwaZulu-Natal Heritage Act, No. 10 of 1997, and they include:

Table 4- List of KZN Provincial Heritage Sites Located in and Around Charlestown

Heritage Resource	Landmark Status Heritage (Section 44):Provincial (Section 45)	Erf/Farm No.	Title Deed Description	GPS Coordinates
Old State School, Albert (Cnr Havelock) Street (Figures 23 & 24)	Provincial	Lot 199 Charlestown	T2224/1996	S27o 24.585 E29o 52.622
Old Court House, Holland Street	Provincial	Remainder of Lot 312 Charlestown	G34/1951; T10372/1953; T6840/2002	S27o 24.585 E29o 52.622
Battlefield, Farm Majuba North 11267 (Figure 22)	Heritage	Farms Majuba North No.11267, Majuba South	T2755/1998 T40379/2004	S27 28.617 E29 50.911

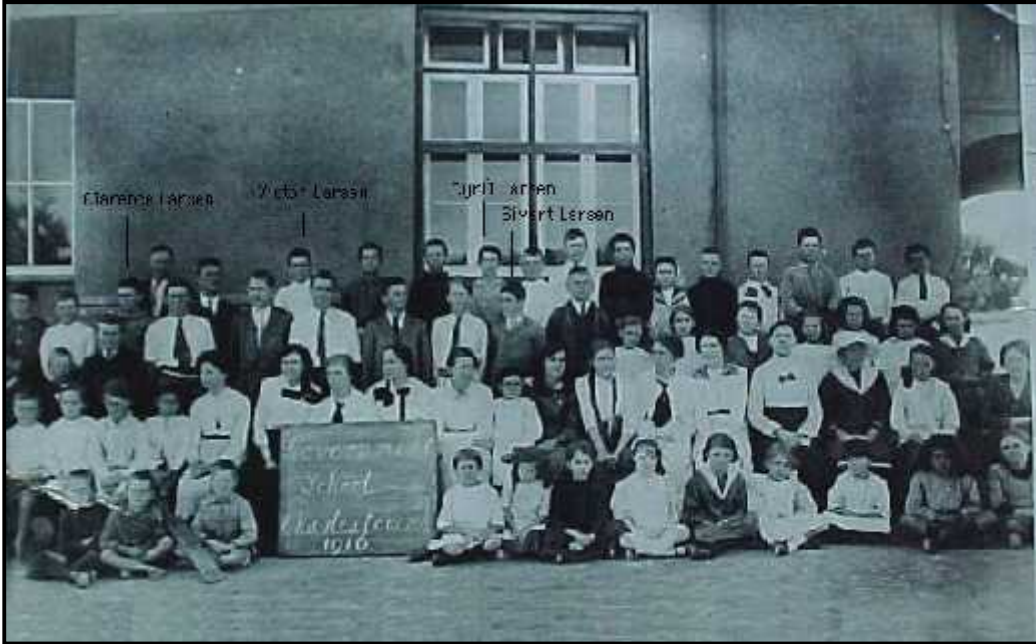


Figure 23 – A 1916 picture showing pupils and teachers at the Charlestown Government School, declared heritage site. The Larsen family seem to dominate the crown.



Figure 24 - Picture showing pupils at the Charlestown Government School.

Summary:-

Out of the 3 provincial sites yielded by the desktop study – 2 (i.e. Government School & Old Court House) are located within Charlestown boundary area, but outside the PDAFP. The other (Majuba Battlefield and memorial) fall outside Charlestown municipal boundary.

5.2. Cadastral Search:

A number of observations are made about the evolution of the landscape in and around Charlestown:

1. The 1901 Major Jackson Series shows a railway line passing Charlestown from the west. Also shown in this map is the railway junction, the round circle west of Charlestown as indicated by the green arrow. This map also shows the position of what is today defined as the N11, east of the railway line and the junction. There are not many structures shown in Charlestown on this map – but this is typical of the Jackson Series. The town of Volksrust is shown north of Charlestown (Figures – 25 & 26).
2. 1906 Johnston Map illustrating the Transvaal Question – shows the town of Charlestown on the border (in green) of the Transvaal and Natal. The position of the battle of Majuba is indicated using a pair of scissor. This shows that the Battle site of Majuba was already recognised as an important landmark site of Natal as early as 1906. The Durban to Johannesburg railway line is also included on the map. Also included is Laing's Neck and Majuba Hill (Figure 26).
3. The Geological Map of the Transvaal shows Charlestown situated within an area that form part of the Highveld-Formation within the Karoo System (Figure 27). The date on the map was faded on the map, but based on the depiction of the railway line as a fully flagged railway line instead of a single line as indicated in the later maps (1905 and 1906 onward) – this map is more likely a late 1890s or early 1900s (around 1901/1902).

4. The 1906 Transvaal Map showing the position of Charlestown (yellow circle) in relation to Volksrust (north) and Wakkerstroom in the north-east. Note the single railway line from as indicated by the red arrow. Unlike earlier maps dating from 1905 onwards show the Durban –Johannesburg line passing through Charlestown as a single line (Figure 28).

5. The 1938 Topographic Map of the Transvaal, Sheet Wakkerstroom, shows a full layout plan of Charlestown. The Durban-Johannesburg railway line shown as a full line in the 1890/1900s maps and 1901 map is shown as a single railway line with full railway lines located in Volksrust further north. Here both full lines and single lanes create a junction as indicated by the red circle in Figure 29.



Figure 25- A 1901 Major Jackson Series Map showing the location of Charlestown. Note the position of the railway line, the N11, the area in which the junction was located and Volksrust north of Charlestown. @ Wits Cullen Library, Map Archives, 2012.



Figure 26- A 1905 Charlestown showing Charlestown as indicated by yellow circle in relation to Volksrust (north) and Newcastle (south). Note the position of Majuba Battlefield Site as indicated by the yellow arrow. Also note the Majuba Hill and Laing's Nek. W & A. K. Johnston's Map to Illustrate the Transvaal Question. @ Wits Cullen Library, Map Archives, 2012.



Figure 27 - Transvaal Geological Map showing Charlestown, Volksrust and Newcastle. The geology of the area in which Charlestown is situated, as mapped in faded yellow form part Highveld rock formation, the Karoo System. No date of Map publication is included. But, the map is labelled the Geological Map of the Transvaal. @Wits Cullen Library, Map Archives, 2012.



Figure 28 - A 1906 map showing the position of Charlestown (yellow circle) in relation to Volksrust (north) and Wakkerstroom in the north-east. Note the single railway line from as indicated by the red arrow. Transvaal Maps, War Office, 1906. @ Wits Cullen Library, Map Archives, 2012.

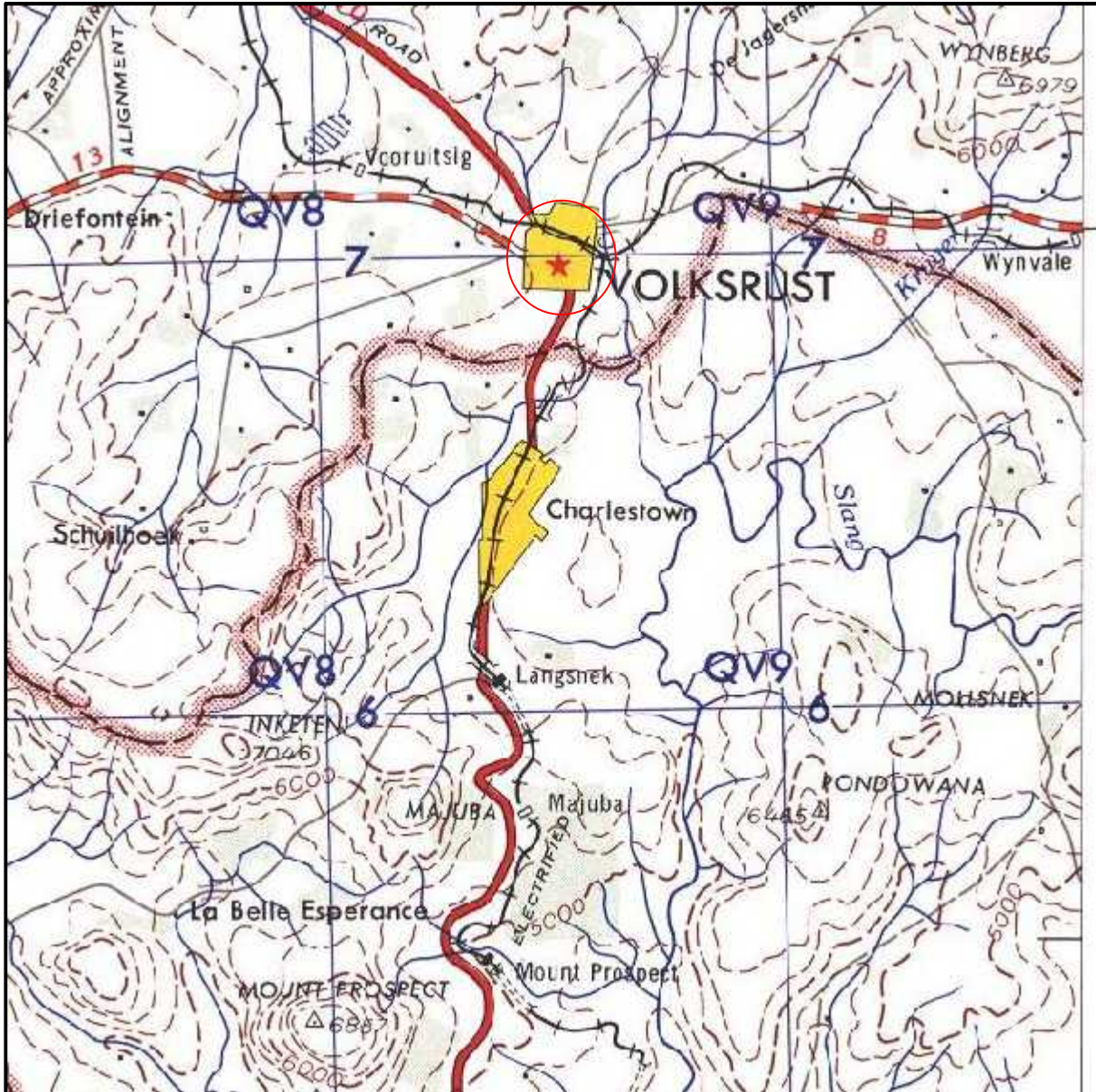


Figure 29 - 1938 Topographic Map showing Charlestown located south of the Transvaal-Natal border (in red shade). Note the N11 west of Charlestown and a single railway line. The railway line junction is shown on this map located in Volksrust (red circle).

Summary –

The above maps show the evolution of the landscape/ area in and around Charlestown and some of the development that took place such as the development of the railway industry. Also worth noting is the inclusion of site of Majuba in the 1905 map – this shows the significance of this battle site.

4.3. Deeds Search:

The Alan Paton book on Charlestown is used as a primary source for deeds information search in order to provide background to the study area.

Parts or portions of the land in which the town of Charlestown is laid seem to have belonged to Mr S. R. Higgins. This becomes apparent when one reads the Story of Charlestown by Allan Paton. In his book Paton argues that following the abolishment of customs during the Union of South Africa and with the transfer of railway workshop from Charlestown across the border to Volksrust (1961). Charlestown was deserted by White population as they moved across to Volksrust and any prospects of selling property to White in this town is said to have disappeared (ibid). The period would have been 1910 since the Union of South Africa was proclaimed that year (i.e. 1910). With this move, the Town Board is suggested to have experienced loss of income as a result of ratepayers moving across to the Transvaal Province, former Zuid Afrikansche Republiek. To remedy this situation Mr Higgins, who was a landowner, a butcher and member of the Town Board, is argued to have deliberately set out to pursue Africans to purchase land in Charlestown (ibid). The following people are suggested to have been the first African landowners of Charlestown:

- Mr Abraham Ngwenya – 1911
- Mr Amos Coka – 1914 (during this period (1914) Mr Coka in Paton 1961 suggested that there were only 12 White families when he moved to Charlestown)

In Clavis the first recorded land registration to African dates to 1912

- Mr Gama – 1912

By 1931 most of the Charlestown, Clavis and Clavis Extension land was bought by the Charlestown Town Board. During the same period Clavis was incorporated into Charlestown and later Clavis Extension (1934). The other land owner whose name appear during this period is a lady simple referred to as Mrs Taylor. After 1948, the deed question became an issue in Charlestown as many of none-White residents of Charlestown were ask to leave Charlestown- some relocated to Newcastle and Madadeni.

4.4. Field Survey:

The physical survey of Charlestown PDFP made a number of observations about the site and its surrounding landscape as described in the 'affected environment' section above. However, no archaeological resources were identified within the PDFP. The 8 sites identified and recorded during the physical survey of Charlestown PDFP are cultural and historic in nature and they include:

- 3 cemeteries
- 1 Possible cemetery/burial site
- 1 isolated grave
- 1 Farmstead
- 1 Kraal and old structure ruins possible of the same complex with the kraal
- A historic house on the boundary of the PDFP

Below is the description and field assessment of each of the 8 identified sites:

Site	CHST-1
Type	Cemetery
Density	Approximately 850 graves
Location/Coordinates	S 27° 24' 38.6" E 029° 53' 02.5"
Approximate Age (More than 60 Or Less than 60 years old)	From 10, 60 to 120 years old
Applicable Section of the NHRA, No 25 of 1999:	Section 36
Applicable Sections of the KZNHA, No.10 of 1997	Section 26 (3 & 4)
Applicable Sections of the KZNHB, 2008	Chapter 8 Sections 40 and 41

Site Description:

This is the old Charlestown municipal cemetery with graves dating to the early 1900s. The Cemetery has two sections – the Whites and Africans section (Figure 30). The two sections seem to have been demarcated through the use of a fence in the past (Figure 30). Most graves have grave markers in the form of granite dressing and headstones as well as cement dressing and headstone (Figure 31 & 32). Some graves are not visible marked in both the White and African section of the cemetery – while others have stone and brick mounds as markers. The cemetery or graves in the cemetery are in a state of disrepair – grave headstones have fallen as a result of animal activities, such as being trampled over by goat and possible cattle. The cemetery look to have been fenced- but the fence has fallen off and in some sections it is missing

Nature of Impacts, Assessments & Predictions in terms of Standard Heritage & Basic Assessment (i.e. adopted from Standard Environmentally Basic Assessment Guidelines):

Field Rating	Grade	Impact	Impact Significance	Heritage Significance	Certainty of Impacts	Duration	Mitigation
LS	3A	Localised	Low	High significance	Improbable	Long-term : Construction & operational phases	E – mitigate by fencing it off

Nature: Construction activities (& development of associated infrastructure) will impact on the identified cemetery by destructing the cemetery markers, exposing the remains and creating access challenges for the relatives of the deceased.

	Without mitigation	With mitigation
Extent	Local (3)	Local (1)
Duration	Short duration (2)	Short duration (2)
Magnitude	Moderate (6)	Minor (2)

Probability	Improbable (2)	Improbable (1)
Significance	(22) Low	(5) Low
Status (positive or negative)	Negative	Positive
Reversibility	Low	Medium
Irreplaceable loss of resources?	No	No
Can impacts be mitigated?	Yes	
Mitigation: The cemetery must be fence-off from the rest of construction activities (& associated infrastructure development). A cemetery management plan must be developed to manage the graves and access to the grave site by the descendants of the deceased during the construction and operational phases of the project.		
Cumulative impacts: cumulative impacts are predicated to result from the construction activities (& associated infrastructure development) and from the operational phase of the projects. The operational phase impacts are in terms of access to the cemetery by the descendants of the deceased.		
Residual Impacts: Access to the cemetery will be the only impact that remains after the construction phase of the project		

Measures for inclusion in the draft Environmental Management Plan:

OBJECTIVE:

The overall goal is to identify, manage and conserve heritage resources within and immediately outside the proposed development area footprint. In order to achieve this goal it is recommended that the cemetery with approximately 850 graves be fenced-off from the rest of the construction activities (& associated infrastructure development). A cemetery management plan should be developed to manage the gravesite during both the construction and operation phases of the project.

Project

Construction and operational phases of the project

component/s		
Potential Impact	In case where the identified cemetery is not fenced-off from construction and operational activities and the management plan is not developed as recommended above, the following impacts are predicted: disturbance of the cemetery/gravesite (e.g. exposure of the remains as a result of machinery excavation activities; destruction of grave markers/headstones/dressers – making it difficult for the deceased families to recognise their graves resulting <u>to legal disputes between the developer and affected families</u>), uncontrolled access to the gravesite may also pose security threat to the newly developed residential area.	
Activity/risk source	Exclusion of the above objectives from the overall Environmental Management Plan	
Mitigation: Target/Objective	The cemetery management plan should be developed prior to the construction phase of the project; this should also include the physical construction of the fence around the cemetery leaving a buffer (+/- 5m buffer) between the cemetery and construction activities. An access gate to the cemetery should also be developed with the construction of the fence. The dates (e.g. days/months/years) for the project life span are not yet known	
Mitigation: Action/control	Responsibility	Timeframe
With the approval of the project, the Environmental Consultant and/or ECO should consult with the appointed archaeologist/heritage consultant (preferable the one already familiar with the project) to develop the cemetery management plan (including recommendation on control measures for access to the cemetery by the families of the deceased) and advise on the fencing process and procedures	Environmental Control Officer in consultation with the appointed archaeologist/heritage consultant	Prior to the construction phase, during and post the construction phase to project operational phase.
Performance Indicator	The type of indicator used here will be Actionable Indicators – this will measure action/progress in terms of completion of the above objectives with	

	the approval of the project against their actual implementation.
Monitoring	<p>With the approval of the project the Environmental Consultant and appointed ECO should consult with the appointed archaeologist/heritage consultant (preferable the one already familiar with the project) to develop the cemetery management plan prior to the commencement of the project construction activities. The cemetery management plan should include a plan/strategy on how to best manage issues of access to the cemetery by relatives of the deceased during the project construction and operational phases. The cemetery management plan should then be incorporated into the project Environmental Management Framework. Once included, during the project construction phase the ECO should do weekly monitoring of the cemetery/gravesite disturbances and record the visitor's numbers to the cemetery and report to the Environmental Consultant. A bi-weekly report on the state of the identified heritage resources should be developed and submitted to the Environmental Consultant by the ECO – this should be done in the first 3 months of the project commencement of construction activities, thereafter a monthly report. However, should any graves or burials previously unidentified around the cemetery/gravesite be exposed during the construction phase the ECO should report these urgently.</p>



Figure 30 - Picture showing the cemetery division area as indicated by the red line. The yellow arrow indicate the Whites section of the cemetery and the blue arrow show the African section of the cemetery



Figure 31 - Type of dressing and headstones, predominantly granite – white section of the cemetery.



Figure 32 - Mixt of cement dressing and headstone, with rubble mounds, stone mounds and some granite headstone and dressing - Black section of the cemetery



Figure 33 - Memorial of 5 Police Officers suggested to have lost their lives in a tragedy in the 1930s

Site	CHST-2
Type	Grave
Density	Single grave
Location/Coordinates	S 27° 24' 33.6" E 029° 53 08.4"
Approximate Age (More than 60 Or Less than 60 years old)	More than 60 years old
Applicable Section of the NHRA, No 25 of 1999:	Section 36
Applicable Sections of the KZNHA, No.10 of 1997	Section 26 (3 & 4)
Applicable Sections of the KZNHB, 2008	Chapter 8 Sections 40 and 41
Description: The single grave is located east of the Charlestown Mausoleum (Muslim cemetery). Its headstone and dressing are made of cement and bricks (Figure 34). Unlike common burial orientation – this grave has north-south orientation (Figure 34). This is peculiar because the common burial	

orientation is east-west.

Nature of Impacts, Assessments & Predictions in terms of Standard Heritage & Basic Assessment (i.e. adopted from Standard Environmentally Basic Assessment Guidelines):

Field Rating	Grade	Impact	Impact Significance	Heritage Significance	Certainty of Impacts	Duration	Mitigation
GP.A	-	Localised	High/Medium	High significance	Definite	Long-term : Construction & operational phases	B – apply for a permit with Amafa AKwaZulu-Natali to relocate the single grave into municipal declared cemetery

Nature: Construction activities (& development of associated infrastructure) will impact on the identified grave by destructing the grave markers, exposing the remains and creating access challenges for the relatives of the deceased.

	Without mitigation	With mitigation
Extent	High (5)	Medium (3)
Duration	Permanent (5)	Permanent (5)
Magnitude	Moderate (6)	Moderate (6)
Probability	Highly probable (4)	Highly probable (4)
Significance	(64) High	(56) Medium

Status (positive or negative)	Negative	Positive
Reversibility	Low	Medium
Irreplaceable loss of resources?	Yes	No
Can impacts be mitigated?	Yes	
<p>Mitigation: The grave should be relocated into a municipal declared cemetery within Charlestown before the commencement of the project. Fencing of the grave will not contribute positively to its management as it will be ensconced between houses. This may also negatively contribute to the development because not many people would like to build a house next to a grave. As such a permit to relocate this grave should be applied for with Amafa AKwaZulu-Natali</p>		
<p>Cumulative impacts: cumulative impacts are predicated to result from the construction activities (& associated infrastructure development) and from the operational phase of the projects. The operational phase impacts are in terms of access to the grave by the descendants of the deceased.</p>		
<p>Residual Impacts: Access to the grave site will be the only impact that remains after the construction phase of the project. But this can be mitigated by relocating the grave.</p>		

Measures for inclusion in the draft Environmental Management Plan:

<p>OBJECTIVE:</p> <p>The overall goal is to identify, manage and conserve heritage resources within and immediately outside the PDAFP. In order to achieve this goal it is recommended that the single grave be relocated into a municipal proclaimed cemetery within Charlestown prior to the commencement of development.</p>	
Project component/s	Construction and operational phases of the project
Potential Impact	In case where the identified grave is not relocated the grave will be negatively impacted by the development and it may also negatively impact on the development since it is believed that none of the new residents will enjoy

	residing near a single unknown grave. The construction activities will also cause destruction to the grave - destruction of grave markers/headstones/dressers making it difficult for the deceased families to recognise their graves resulting to legal disputes between the developer and affected families), uncontrolled access to the gravesite may also pose security threat to the newly developed residential area.		
Activity/risk source	Exclusion of the above objectives from the overall Environmental Management Plan		
Mitigation: Target/Objective	The single grave needs to be relocated prior to the commencement of development activities. Before this process a permit needs to be applied for with relevant heritage statutory body such as Amafa AKwaZulu-Natali . The dates (e.g. days/months/years) for the project life span are not yet known		
Mitigation: Action/control	Responsibility	Timeframe	
With the approval of the project, the Environmental Consultant should consult with the appointed archaeologist/heritage consultant (preferable the one already familiar with the project) to applied for a permit to relocate the grave. The permit should be applied for with Amafa AKwaZulu-Natali .	Accredited archaeologist and heritage consultant working with a local funeral undertaker.	Prior to the construction and operation phases of the project.	
Performance Indicator	The type of indicator used here will be Actionable Indicators – this will measure action/progress in terms of completion of the above objectives with the approval of the project against their actual implementation.		
Monitoring	With the approval of the project the Environmental Consultant and appointed ECO should consult with the appointed archaeologist/heritage consultant (preferable the one already familiar with the project) to apply for grave relocation permit with Amafa AKwaZulu-Natali to relocate the grave assisted by a local funeral undertaker. During this process a police officer from the local police station often observe the process.		



Figure 34 - Photos showing the single grave

Site	CHST-3
Type	Mausoleum
Density	Approximately 60 graves
Location/Coordinates	27 24' 31.7" 029 53' 06.4"
Approximate Age (More than 60 Or Less than 60 years old)	More recent to more than 60 years old
Applicable Section of the NHRA, No 25 of 1999:	Section 36 (graves) and 34 (associated built environment and landscape features)
Applicable Sections of the KZNHA, No.10 of 1997	Section 26 (3 & 4) (graves) and Section 26 (1) (built environ...)
Applicable Sections of the KZNHB, 2008	Chapter 8 Sections 40 and 41 (graves) and Chapter 7 and section 29 (1) (built environment and landscape features –Mosque)
<p>Description:</p> <p>This is Charlestown Muslim burial site. The mausoleum contains graves that have cement/brick dressing and headstone as well as graves marked using crosses and zinc plates (Figure 36). Some graves are just soil mounds. Graves in this mausoleum are oriented in different directions. Some have typical/traditional graves orientation which is east-west (Figure 36) whilst others have south-north orientation (Figure 35). Like CHST-2 the south-north orientation is peculiar.</p> <p>This Muslim place of burial is still actively used by Muslims –either in Charlestown or nearby</p>	

Volkstrust. The Mausoleum contains approximately 60 graves.

Nature of Impacts, Assessments & Predictions in terms of Standard Heritage & Basic Assessment (i.e. adopted from Standard Environmentally Basic Assessment Guidelines):

Field Rating	Grade	Impact	Impact Significance	Heritage Significance	Certainty of Impacts	Duration	Mitigation
LS	3A	Localised	Low	High significance	Improbable	Long-term : Construction & operational phases	E – mitigate by fencing it off

Nature: Construction activities (& development of associated infrastructure) will impact on the identified cemetery by destructing the cemetery markers, exposing the remains and creating access challenges for the relatives of the deceased.

	Without mitigation	With mitigation
Extent	Local (3)	Local (1)
Duration	Short duration (2)	Short duration (2)
Magnitude	Moderate (6)	Minor (2)
Probability	Improbable (2)	Improbable (1)
Significance	(22) Low	(5) Low
Status (positive or negative)	Negative	Positive
Reversibility	Low	Medium
Irreplaceable loss of resources?	No	No

Can impacts be mitigated?	Yes
Mitigation: The cemetery must be fence-off from the rest of construction activities (& associated infrastructure development). A cemetery management plan must be developed to manage the graves and access to the grave site by the descendants of the deceased during the construction and operational phases of the project.	
Cumulative impacts: cumulative impacts are predicated to result from the construction activities (& associated infrastructure development) and from the operational phase of the projects. The operational phase impacts are in terms of access to the cemetery by the descendants of the deceased.	
Residual Impacts: Access to the cemetery will be the only impact that remains after the construction phase of the project	

Measures for inclusion in the draft Environmental Management Plan:

<p>OBJECTIVE:</p> <p>The overall goal is to identify, manage and conserve heritage resources within and immediately outside the proposed development area footprint. In order to achieve this goal it is recommended that the cemetery with approximately 850 graves be fenced-off from the rest of the construction activities (& associated infrastructure development). A cemetery management plan should be developed to manage the gravesite during both the construction and operation phases of the project.</p>	
Project component/s	Construction and operational phases of the project
Potential Impact	In case where the identified cemetery is not fenced-off from construction and operational activities and the management plan is not developed as recommended above, the following impacts are predicted: disturbance of the cemetery/gravesite (e.g. exposure of the remains as a result of machinery excavation activities; destruction of grave markers/headstones/dressers – making it difficult for the deceased families to recognise their graves resulting to <u>legal disputes between the developer and affected families</u>), uncontrolled access to the gravesite may also pose security threat to the newly developed

	residential area.	
Activity/risk source	Exclusion of the above objectives from the overall Environmental Management Plan	
Mitigation: Target/Objective	The cemetery management plan should be developed prior to the construction phase of the project; this should also include the physical construction of the fence around the cemetery leaving a buffer (+/- 5m buffer) between the cemetery and construction activities. An access gate to the cemetery should also be developed with the construction of the fence. The dates (e.g. days/months/years) for the project life span are not yet known	
Mitigation: Action/control	Responsibility	Timeframe
With the approval of the project, the Environmental Consultant and/or ECO should consult with the appointed archaeologist/heritage consultant (preferable the one already familiar with the project) to develop the cemetery management plan (including recommendation on control measures for access to the cemetery by the families of the deceased) and advise on the fencing process and procedures	Environmental Control Officer in consultation with the appointed archaeologist/heritage consultant	Prior to the construction phase, during and post the construction phase to project operational phase.
Performance Indicator	The type of indicator used here will be Actionable Indicators – this will measure action/progress in terms of completion of the above objectives with the approval of the project against their actual implementation.	
Monitoring	With the approval of the project the Environmental Consultant and appointed ECO should consult with the appointed archaeologist/heritage consultant (preferable the one already familiar with the project) to develop the cemetery management plan prior to the commencement of the project construction activities. The cemetery management plan should include a plan/strategy on how to best manage issues of access to the cemetery by relatives of the deceased during the project construction and operational phases. The cemetery management plan should then be incorporated into the project Environmental Management Framework. Once included, during the project	

construction phase the ECO should do weekly monitoring of the cemetery/gravesite disturbances and record the visitor's numbers to the cemetery and report to the Environmental Consultant. A bi-weekly report on the state of the identified heritage resources should be developed and submitted to the Environmental Consultant by the ECO – this should be done in the first 3 months of the project commencement of construction activities, thereafter a monthly report. However, should any graves or burials previously unidentified around the cemetery/gravesite be exposed during the construction phase the ECO should report these urgently.



Figure 35 - Picture showing the place of prayers and grave with soil mounds. The graves are orientated south-north.



Figure 36 - Graves with the Mausoleum. Note the active grave-pits as indicated by the red arrow and the cement and brick dressing, as well as the cross headstone.

Site	CHST-4
Type	Cemetery
Density	Approximately 24 graves
Location/Coordinates	S 27° 23' 44.8" E 029° 52' 46.3"
Approximate Age (More than 60 Or Less than 60 years old)	More recent/active gravesite/cemetery
Applicable Section of the NHRA, No 25 of 1999:	Section 36
Applicable Sections of the KZNHA, No.10 of 1997	Section 26 (3 & 4)
Applicable Sections of the KZNHB, 2008	Chapter 8 Sections 40 and 41
Description:	
This is an active cemetery local and none municipal formalised cemetery located on the northern parts of Charlestown – just before the river. The cemetery contains approximately 24 graves. Most	

graves have soil and stone dressing and headstones (Figure 37) and two graves have granite dressing (Figure 38).

Nature of Impacts, Assessments & Predictions in terms of Standard Heritage & Basic Assessment (i.e. adopted from Standard Environmentally Basic Assessment Guidelines):

Field Rating	Grade	Impact	Impact Significance	Heritage Significance	Certainty of Impacts	Duration	Mitigation
LS	3A	Localised	Low	High significance	Improbable	None –this cemetery fall outside the PDAFP	A – this cemetery falls outside the PDAFP

Note! – All graves are important and should be treated with respect regardless of them falling within or outside municipal proclaimed cemeteries. There are no further actions recommended for this cemetery because it falls outside the PDAFP (Figure 46, 47 & 48).



Figure 37- Picture showing soil and stone dressing and headstones from CHST-4.



Figure 38 - Photo showing the type of granite dressing and headstone at CHST-4

Site	CHST-5
Type	Possible Cemetery
Density	No visible graves identified just cement poles as shown in Figure 39
Location/Coordinates	S 27° 23' 58.7" E 029° 52' 40.6"
Approximate Age (More than 60 Or Less than 60 years old)	More than 60 years old if they are graves
Applicable Section of the NHRA, No 25 of 1999:	Section 36 if this is a gravesite
Applicable Sections of the KZNHA, No.10 of 1997	Section 26 (3 & 4)
Applicable Sections of the KZNHB, 2008	Chapter 8 Sections 40 and 41
<p>Description:</p> <p>This is a possible cemetery based on the arrangement of cement poles that are meant to protect something (Figure 39). The site falls just outside the PDAFP and if it was within the EIA project area the EIA Social Consultation phase would have been required to ask question about the possibility of graves in CHST-5.</p>	

Note! No field rating and impact significance and site significance is not given for this site because it is not confirmed as a gravesite, as such -it is marked as a possible site. This site also falls just outside the project area(refer Figures: 45 – 47)



Figure 39 - Photo showing a position of a potential gravesite

Site	CHST-6	
Type	Old farmstead	
Density	2 historic structures	
Location/Coordinates	S 27° 24' 03.4"	E 029° 52' 49.8"
Approximate Age (More than 60 Or Less than 60 years old)	More than 60 years old	
Applicable Section of the NHRA, No 25 of 1999:	Section 34	
Applicable Sections of the KZNHA, No.10 of 1997	Section 26 (1)	
Applicable Sections of the KZNHB, 2008	Chapter 8 and section 29 (1)	

Description:

The site consists of two historic structures that once formed part of a single homestead – based on their close proximity. One of the two structures is a corrugated (IRB) iron sheet shed (Figure 40). The shed consist of 3 windows: 1 is the south and the other 2 in the eastern side facade. 2 doors are found – 1 is located on the western facade and the main door is facing north.

The other structure is a pitched roof house. No detailed inspection or recording of this structure took place because the residents of the house suggested that it would be best to obtain permission from their parents to either take photos or inspect the architectural fabric of the house. But, from a distant inspectoral point of view the house, it is definitely older than 60 years and definitely forms part of a homestead with the shed (Figure 41)

Nature of Impacts, Assessments & Predictions in terms of Standard Heritage & Basic Assessment (i.e. adopted from Standard Environmentally Basic Assessment Guidelines):

Field Rating	Grade	Impact	Impact Significance	Heritage Significance	Certainty of Impacts	Duration	Mitigation
LS in terms of architectural vernacular	3A	Localised	Low	High/Medium	Improbable	N/A -site is outside the PDAFP	A -avoid site fall outside the PDAFP

Note! – There are no further actions recommended for this site because it falls outside the PDAFP (Figures- 46, 47 & 48).



Figure 40 - Photos showing the historic corrugated iron sheet shed - front and back facades as well as sides.



Figure 41 - Picture showing a historic house located close to the corrugated iron sheet shed. The house had been added on and altered.

Site	CHST-7
Type	Kraal & old Structure
Density	2 structures that form part of one complex
Location/Coordinates	S 27° 24' 17.2" E 029° 52' 48.5"
Approximate Age (More than 60 Or Less than 60 years old)	More than 60 years old
Applicable Section of the NHRA, No 25 of 1999:	Section 34 and 35 (kraal)
Applicable Sections of the KZNHA, No.10 of 1997	Section 26 (1) and Section 26 (6)
Applicable Sections of the KZNHB, 2008	Chapter 7 and section 29 (1) and Chapter 8 section 42
<p>Description:</p> <p>The site consists of stone kraal and a dilapidated structure, which looks to have been a garage or some sort of storage facility. Next to the structures modern structures which were presumably used to keep small stock (Figure 42). The stone kraal is not complete some sections of stone walling look to have been salvaged to be used elsewhere. As such the kraal is current completed through the use of a fence (Figure 43).</p>	

Note! – There are no further actions recommended for this site because it falls outside the PDAFP (Figures- 46, 47 & 48).



Figure 42 - Dilapidated structure



Figure 43 -Stone kraal

Site	CHST-8
Type	Historic house
Density	
Location/Coordinates	S 27° 24' 29.0" E 029° 52' 57.2"
Approximate Age (More than 60 Or Less than 60 years old)	More than 60 years old
Applicable Section of the NHRA, No 25 of 1999:	Section 34
Applicable Sections of the KZNHA, No.10 of 1997	Section 26 (1)
Applicable Sections of the KZNHB, 2008	Chapter 8 and section 29 (1)
Description: The site is a historic house. The house in a good state and well maintained (Figure 44).	

Nature of Impacts, Assessments & Predictions in terms of Standard Heritage & Basic Assessment (i.e. adopted from Standard Environmentally Basic Assessment Guidelines):

Field Rating	Grade	Impact	Impact Significance	Heritage Significance	Certainty of Impacts	Duration	Mitigation
LS	3A	Localised	Low	High significance	Improbable	None –the historic falls outside the PDAFP	A – this historic house falls outside the PDAFP

Note! – There are no further actions recommended for this site because it falls outside the PDAFP (Figures- 46, 47 & 48).



Figure 44 - Historic house

Site	CHST-9
Type	Cemetery
Density	Approximately 34 graves
Location/Coordinates	S 27° 25' 13.6" E 029° 52' 38.4"
Approximate Age (More than 60 Or Less than 60 years old)	More than 60 years old
Applicable Section of the NHRA, No 25 of 1999:	Section 36
Applicable Sections of the KZNHA, No.10 of 1997	Section 26 (3 & 4)
Applicable Sections of the KZNHB, 2008	Chapter 8 Sections 40 and 41
<p>Description:</p> <p>The site is an old cemetery containing approximately 34 graves. Most graves a soil mounds with small stone used as headstones. One grave has a granite dressing and headstone (Figure 45). The cemetery is un-fenced and is located south of the PDAFP.</p>	

Nature of Impacts, Assessments & Predictions in terms of Standard Heritage & Basic Assessment (i.e. adopted from Standard Environmentally Basic Assessment Guidelines):

Field Rating	Grade	Impact	Impact Significance	Heritage Significance	Certainty of Impacts	Duration	Mitigation
LS	3A	Localised	Low	High significance	Improbable	None –this cemetery falls outside the PDAFP	A – this cemetery falls outside the PDAFP

Note! – All graves are important and should be treated with respect regardless of them falling within or outside municipal proclaimed cemeteries. There are no further actions recommended for this cemetery because it falls outside the PDAFP (Figure- 46, 47 & 48).



Figure 45 - Photo showing CHST-9, the site has a grave with granite dressing and headstone. The rest of the graves are faded soil mounds with small stones used as headstones.

5. DISCUSSION

The physical survey of the PDAFP yielded 9 heritage sites that consists of 4 definable burial sites and/or cemeteries (CHST-1, CHST-2, CHST-3, CHST-4 and CHST-9), 1 possible burial site (CHST-5) and 4 built environment and landscape features (CHST-6, CHST-7 and CHST-8). The identified and recorded heritage resources form part of predicated resources in the introductory section of chapter 5 of this report, titled - Anticipated Heritage Resources and Sites within Charlestown PDAFP. From a heritage management point of view the following NHRA, No. 25 of 1999 sections are applicable:

- Section 34 for the built environment and landscape features which include the historic building in this case
- Section 35 for the stone kraal
- And Section 36 for the cemeteries and burial sites

In accordance to the KZNHB, 21 February 2008 - the management of structures which in the report are referred as built environment and landscape feature will fall under Chapter 8 and Section 39 (1). These are managed under Section 26 (1) of the KZNHA, No. 10 of 1997. Chapter 8 of the KZNHB, Sections 40 and 41 becomes applicable for the management of the identified graves and cemeteries. These are managed under Section 26 (3 & 4) of the KZNHA, No. 10 of 1997. The management of the stone kraal which is typically associated with archaeological resources will in this case be managed in accordance to Chapter 8 and Section 42 of the KZNHB. It is managed in terms of Section 26 (6) in accordance to the KZNHA, No. 10 of 1997. Chapter 9 of the KZNHB also assist to give guidance on the processes followed in managing the heritage resources in terms of General Protection.

The yielded heritage resources were assessed and evaluated in terms of the above heritage legislations and bill and their impact significance as well heritage significance conducted in accordance to impact evaluation methods given in the methodology chapter of this report. As a result of the above mentioned integrated processes:

CHST-1 was found to be a site of high heritage significance, but because the site is located in a cemetery demarcated area the impact potential of the proposed development project is calculated to low provided that the developer mitigate the cemetery by fencing it off from the rest of the construction prior to project development phase. This cemetery is older than 60 year and as such a cemetery management plan will need to be developed in consultation with a professional archaeologist and heritage consultant (Figures: 31 -33). The cemetery also falls

directly within the proposed Charlestown PDAFP (Figure 48) - also refer to figure 46 and 47 of the relation of this cemetery to other heritage resources sites within the project area.

CHST-2 is a single grave located north east of CHST-1 and east of CHSt-3 (Figure 34). Because of the nature of the proposed development and based on the impact assessment calculations and heritage significance. It is proposed that this be relocated to a municipal declared cemetery. This is to avoid having multiple cemeteries within the housing scheme, but also based on experience of the author – it is often easy to accidental destruct a single grave site in any construction and development activities. A permit will therefore need to be applied with Amafa aKwaZulu-Natali in terms of Section 28 of the the KZNHA, No. 10 of 1997. The site is of high heritage significance and falls within the project area (Figure 48) - also refer to figure 46 and 47 of the relation of this cemetery to other heritage resources sites within the project area.

CHST -3 is another important heritage site within the project area; it has high heritage significance (Figure 48). This site consists of different types of heritage resources varying from graves to places of worship or prayer (Figures: 35-36). This site is located within a cemetery that is already fenced off from the rest of the project area – this resulted to low potential impacts in terms of impact assessment calculations. On these bases it would be in the best interest of the developer to leave the site in its current location – instead develop a cemetery management prior to project development phase as with site CHST-1. This is the best mitigation measures for this as is with CHST-1. For its location in relation to other heritage sites refer to figures 46 and 47.

CHST-4 is another site of high heritage significance in terms of the applicable heritage legislations and bill (Figures: 37 & 38). The site is, however, located outside the PDAFP and as such will not be impacted by the proposed development (Figure 48). Also refer to figure 46 and 47 for its location in relation to other heritage site within and immediate of the PDAFP.

CHST-5 is a potential burial site or an important place base on the arrangement of cement pillars as shown in figure 39. During the physical survey there were no people in the immediate vicinity to interview regarding the site to determine its exact nature. As such it was recorded as a potential burial site based on the authors experience of the type of pole/pillar arrangement from other areas. As such there were no impact evaluations for this because it is not yet confirmed as a burial site. The site also falls outside the proposed development area as shown in figure 2 - also refer to figure 48 for its location in relation to the PDAFP.

CHST -6 is a built environment and landscape site. In terms of heritage significance evaluation the site is rated High/Medium because of its current state – it has been added on and its architectural integrity compromised, this is particular true for the house (Figure 41). The shed on the other had is still in its original condition (Figure 40). The site is, however, located outside the PDAFP and as such will not be impacted by the proposed development (Figure 48). Also refer to figure 46 and 47 for its location in relation to other heritage site within and immediate of the PDAFP

CHST-7 is a site of low heritage significance and the impact significance of this site was also calculated to low (Figures: 42 -43). The site is, however, located outside the PDAFP and as such will not be impacted by the proposed development (Figure 48). Also refer to figure 46 and 47 for its location in relation to other heritage site within and immediate of the PDAFP

CHST-8 is a historic house which is still is a good state (Figure 44). However, the site falls outside of the PDAFP as such it will not be impacted by the proposed development (Figure 48). Also refer to figures 46 and 47 for its position in relation to other heritage sites yielded by the physical survey.

CHST-9 is another site of high heritage significance, a place of burial (Figure 45). The site falls outside the PDAFP and will therefore not be impacted by the proposed development (Figure 48). Refer to figures 46 and 47 for its position in relation to other heritage sites yielded by the physical survey.

6. CONCLUSIONS AND RECOMMENDATIONS

In conclusion, this Phase 1 HIA has covered all aspects that should be covered by a Phase 1 HIA. This included a desktop survey of the project area Charlestown in the case, cadastral sources search, a deeds search which was in the case focused on “The Charlestown Story” a 1961 Allan Pan book on Charlestown. The physical survey of the PDAFP to locate and identify site on the landscape was conducted – this was followed by consolidation of data and completion of this report. Following all these important steps in an integrated manner – a total of 9 heritage sites were identified within and immediately outside the PDAFP. These sites included: CHST-1, CHST-2, CHST-3, CHST-4, CHST-5, CHST-6, CHST-7, CHST-8 and CHST-9.

Out of the 9 sites identified, only 3 sites fall directly within the PDAFP (Figure 47) and they include: CHST-1, CHST-2, CHST-3 (Figure 48 - PDAFP, area marked in brown ink). The rest of the sites all fall outside the PDAFP (Figure 2).

Based on the above mentioned integrated processes varying from literature review, surveys, assessment of sites significance and impacts evaluation and calculations the author arrived at the following conclusions and recommendation:

- Sites CHST-1 and CHST-3 should be fenced off from the rest of construction activities and a cemetery management plan should be developed to manage these sites during and post the construction phase of the project.
- Site CHST-2 should be relocated to a municipal proclaimed/declared cemetery to avoid any potential impacts to the site prior to the commencement of project construction phase. A permit should be applied for with Amafa aKwaZulu-Natali before this process can be undertaken by an accredited and qualified archaeologist and heritage consultant.
- The rest of the sites (i.e. CHST-4, CHST-5, CHST-6, CHST-7, CHST-8 and CHST-9) fall outside the PDAFP and will not be impacted by the proposed development. The developer should avoid these sites by all means.

There were no Stone Age, Iron Age, Rock Art and some historic period archaeological resource found within and immediately outside the PDAFP with exception to the stone kraal. Because of the nature of some archaeological resources which are often found buried underneath the earth surface. It is recommended that the developer and the appointed ECO should pay special attention to these resources during the construction phase of the project. In the case that such resources are unearthed and brought to the surface of the earth by the project construction activities the project construction activities in and around the area in which resources are found need to stop and the ECO and the environment consultant should consult an archaeologist and heritage consultant to immediately come to the site and investigate the finds and make necessary recommendations. Amafa aKwaZulu-Natali should also be informed of such finds.

In terms of heritage resources management it is concluded that Amafa aKwaZulu-Natali should grant the project a positive Review Comment for the project to proceed as planned provided that the environmental consultant and developer agree to the above project recommendations on the state and management of the identified heritage resources. This should also include the recommendation on the management of potential archaeological finds.

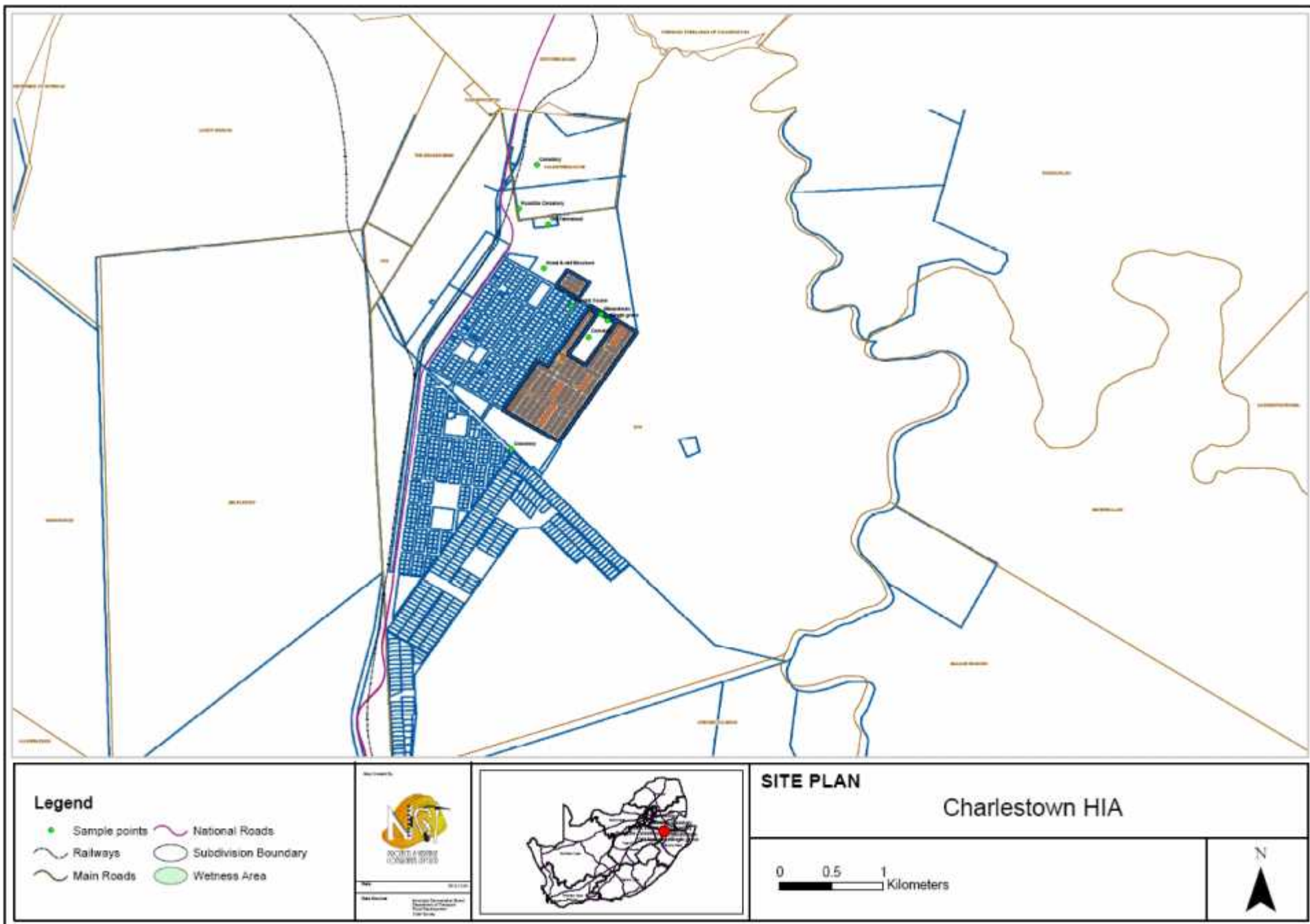


Figure 46 - Distribution of heritage sites in and around Charlestown PDAFP (areas marked with brown ink) – green dots

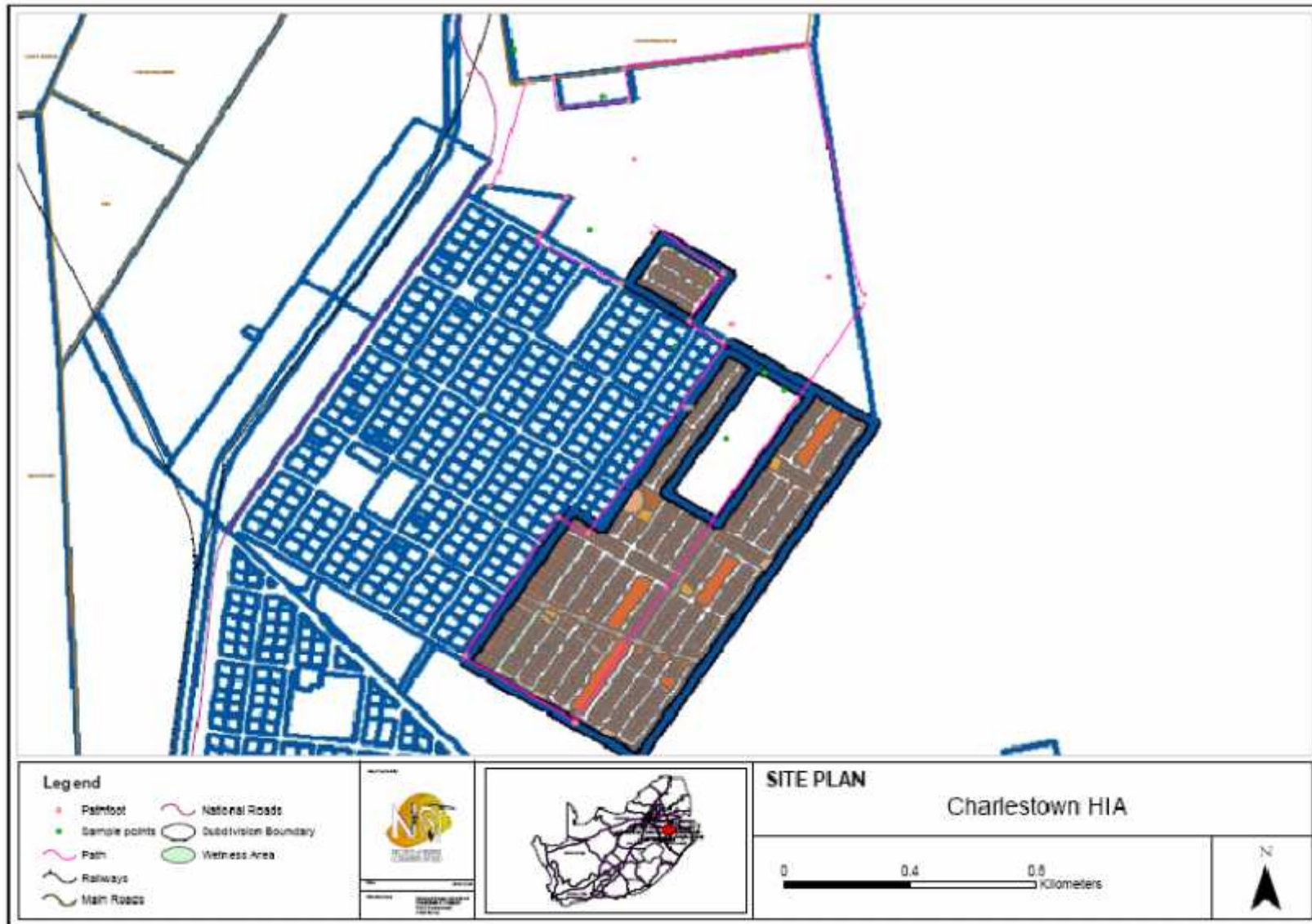


Figure 47 - Distribution of heritage sites within the PDAFP (areas marked with brown ink)- green dots

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