HERITAGE SURVEY OF THE PORT DURNFORD STATE FOREST

For: Exxaro (Pty) Ltd

Date: 29 November 2007

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INTRODUCTION

Umlando was contracted by Exxaro (Pty) Ltd to undertake the heritage survey of the Port Durnford State Forest (fig. 1). Umlando also subcontracted an architect historian to survey the buildings that were recorded. The state forest is managed by Siyaqubheka. Exxaro (Pty) Ltd intends to apply for mineral rights to mine the area. The survey area is currently covered by commercial forestry and some indigenous forest.

A total of 39 archaeological and/or historical sites were recorded during the course of the survey. Most of the sites are of low to medium significance and can be mitigated. Two areas appear to be of high significance in terms of uniqueness, scientific value and aesthetics. These sites are the old tree areas of pine and blue gums. Another area of high significance will require the relocation of human remains. Most of the buildings that were recorded during the survey predate 1937. They have however been demolished without a permit from Amafa KZN (or the then National Monuments Council).

Marwick (1973) gives an account of the history of the Port Durnford Forest. The area was originally lala palm and scrub trees. These were later destumped and the ground was ploughed. The area began as a test plantation in 1912 - 1913. The first residence was erected in 1915 and consisted of a wattle and daub construction. The nursery was started in 1916. Commercial forestry began in 1915 – 1916 and a sawmill was built in *c*. 1917. The area also received its first constructed lavatory in 1920-1921 as a forester and his wife had arrived. Unfortunately no mention is made of when the houses of the foresters and other workers were built. Mention is made of constructed houses in blocks A and D as early as the 1920s.

The above history suggests that even if afforestation had damaged archaeological sites, by means of destumping, there would be at least areas of

historical interest. This held true in that most of the 39 recorded archaeological sites were ephemeral scatters, and only one sites appears to be in tact.

Unfortunately all of the (historical) buildings have been demolished to some degree.

METHOD

The method for Heritage assessment consists of several steps. The first step forms part of the desktop assessment. We consulted the database for previously recorded sites in the area (Anderson and Anderson 2007). This assessment noted that sites do occur in the general area outside of the Port Durnford Forest; however none had been recorded inside the Forest.

The initial archaeological survey consisted of a survey along the selected parts of the forest. The vegetation is very dense, resulting in poor archaeological visibility. We thus concentrated on the roads and areas where trees had been felled and the area was generally clear. We also surveyed open land adjacent to the proposed mining area. This was done on the assumption that if sites occurred outside of the proposed area, then they should occur inside as well. This was to counter the negative effects of the dense vegetation.

The architectural survey occurred after the heritage survey. The method for this survey is described in Appendix A

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FIGURE 1: LOCATION OF SITES IN THE STUDY AREA

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Permit_PORT_DURNFORD_FOREST_Anderson_G_Nov07,doc

We also consulted one of the older maps at the offices of Siyaqubheka. This map indicated when trees were planted and more importantly the location of the various houses. These houses correspond with the houses mentioned my Marwick (1973). The map is undated, however it is handwritten and measurements are in inches and yards.

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

Defining significance

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

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These criteria are:

- 1. State of preservation of:
- 1.1. Organic remains:
- 1.1.1. Faunal
- 1.1.2. Botanical
- 1.2. Rock art
- 1.3. Walling

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- 1.4. Presence of a cultural deposit
- 1.5. Features:
- 1.5.1. Ash Features
- 1.5.2. Graves
- 1.5.3. Middens
- 1.5.4. Cattle byres
- 1.5.5. Bedding and ash complexes

2. Spatial arrangements:

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

3. Features of the site:

3.1. Are there any unusual, unique or rare artefacts or images at the site?

3.2. Is it a type site?

3.3. Does the site have a very good example of a specific time period, feature, or artefact?

4. Research:

4.1. Providing information on current research projects

4.2. Salvaging information for potential future research projects

5. Inter- and intra-site variability

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

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

6. Archaeological Experience:

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

7. Educational:

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

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

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

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

A Phase 2 may yield enough material so that further excavations are not required. However, if significant material occurs in the archaeological deposit then it is likely that a Phase 3 will be required.

RESULTS

Table 1 summarises the results of the survey. Te results of the architectural survey are in Appendix A.

PD1

PD1 is a scatter of pottery sherds and Late Stone Age (LSA) stone tools. The area is very disturbed. The pottery fragments are adiagnostic but probably date to the Late Iron Age or Historical Period. The stone tools are standard flakes.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD2

PD2 is a scatter of pottery sherds and Late Stone Age (LSA) stone tools. The area is very disturbed. The pottery fragments are adiagnostic but probably date to the Late Iron Age or Historical Period. The stone tools are standard flakes.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.



TABLE 1: SUMMARY OF SITES

SITE	TYPE	PERIOD ¹	SIGNIFICANCE	MITIGATION
PD01	Stone tools and pottery	LSA, LIA, HP	low	monitor
PD02	Stone tools and pottery	LSA, LIA, HP	low	monitor
PD03	Stone tools and pottery	LSA, LIA, HP	low	monitor
PD04	Stone tools and pottery	LSA, LIA, HP	low	monitor
PD05	Stone tools and pottery	LSA, LIA, HP	low	monitor
PD06	Pottery	LIA, HP	low	monitor
PD07	Stone tools and pottery	LSA, LIA, HP	low	monitor
PD08	Pottery	LIA, HP	low	monitor
PD09	Pottery	LIA, HP	low	monitor
PD10	Pottery	LIA, HP	low	monitor
PD11	Pottery	LIA, HP	low	monitor
PD12	Pottery	LIA, HP	low	monitor
PD13	Pottery	LIA, HP	low	monitor
PD14	Pottery	LIA, HP	low	monitor
PD15	Blue Gum trees	HP	high	sample
PD16	Stone tools and pottery	LSA, LIA, HP	low	monitor
PD17	Building/ruins	HP	low	low; monitor & sample
PD18	Possible grave	HP	high	low; monitor & sample
PD19	Building/ruins	HP	medium	low; monitor & sample
PD20	Building/ruins	HP	medium	low; monitor & sample
PD21	Graves	HP	high	relocation
PD22a-b	Old Sawmill	HP	medium	low; monitor & sample
PD23	Building/ruins	HP	medium	low; monitor & sample
PD24	Kauri pine trees	HP	high	low; monitor & sample
PD25	Stone tools	LSA	low	monitor
PD26	Stone tools and pottery	LSA, LIA, HP	low	monitor
PD27	Building/ruins	HP	medium	low; monitor & sample
PD28	Pottery, slag, animal bone	LIA,HP	low	monitor
PD29	Pottery	LIA, HP	low	monitor
PD30	Pottery	LIA, HP	low	monitor
PD31	Pottery, grinding stone	LIA, HP	low	monitor
PD32	Pottery slag	LIA, HP	low	monitor
PD32	Furnaces	LIA, III LSA, LIA	medium	excavation
PD33 PD34	Pottery	LSA, LIA LSA	low	monitor
PD34 PD35	Pottery	LIA, HP	low	monitor
PD35 PD36	Pottery	LIA, HP LIA, HP		monitor
PD36 PD37		HP	low	
	Building/ruins		medium	low; monitor & sample
PD38	Pottery	LIA, HP	low	monitor
PD39	Building/ruins	LIA, HP	medium	low; monitor & sample

PD3 occurs on land owned by Mondi. PD3 is a scatter of pottery sherds and Late Stone Age (LSA) stone tools. The area is very disturbed. The pottery fragments are adiagnostic but probably date to the Late Iron Age or Historical Period. The stone tools are standard flakes.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD4

PD4 occurs on Land owned by Mondi. PD4 is a scatter of pottery sherds, one slag fragment and Late Stone Age (LSA) stone tools. The area is very disturbed. The pottery fragments are adiagnostic but probably dates to the Late Iron Age or Historical Period. The occurrence of slag suggests that the area predates 1890s. The stone tools are standard flakes.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD5

PD5 occurs on Land owned by Mondi. PD5 is a scatter of pottery sherds and Late Stone Age (LSA) stone tools. The area is very disturbed. The pottery fragments are adiagnostic but probably date to the Late Iron Age or Historical Period. The stone tools are standard flakes.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD6 occurs on Land owned by Mondi. PD6 is a scatter of pottery sherds. The area is very disturbed. The pottery fragments are adiagnostic but probably date to the Late Iron Age or Historical Period.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD7

PD7 occurs on Land owned by Mondi. PD7 is a scatter of pottery sherds, a few fragments of slag. The area is very disturbed. The pottery fragments are adiagnostic but probably dates to the Late Iron Age or Historical Period. The occurrence of slag suggests that the area predates 1890s.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD8

PD8 is a scatter of pottery sherds and Late Stone Age (LSA) stone tools. The area is very disturbed. The pottery fragments are adiagnostic but probably date to the Late Iron Age or Historical Period. The stone tools are standard flakes.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD9

PD9 is a scatter of pottery sherds. The area is very disturbed. The pottery fragments are adiagnostic but probably date to the Late Iron Age or Historical Period.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD10

PD10 is a scatter of pottery sherds. The area is very disturbed. The pottery fragments are adiagnostic but probably date to the Late Iron Age or Historical Period.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD11

PD11 is a scatter of pottery sherds. The area is very disturbed. The pottery fragments are adiagnostic but probably date to the Late Iron Age or Historical Period.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD12

PD12 is a scatter of pottery sherds. The area is very disturbed. The pottery fragments are adiagnostic but probably date to the Late Iron Age or Historical Period.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

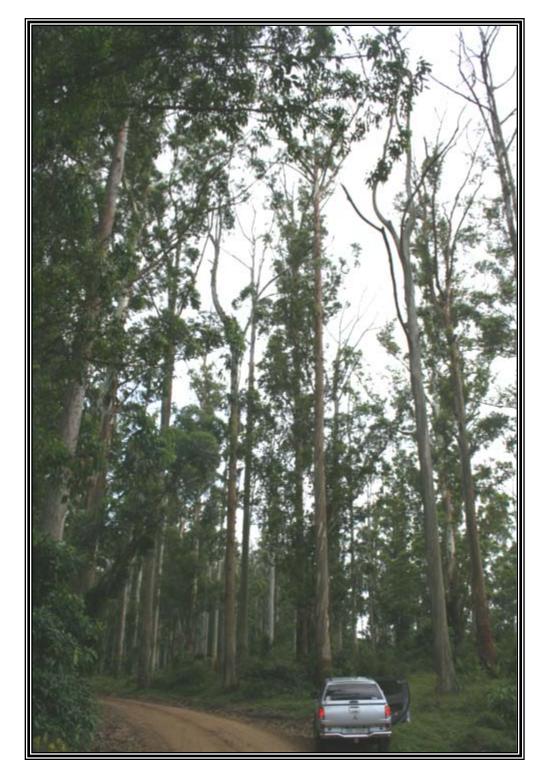


FIGURE 2: SELECTION OF BLUE GUMS AT PD15

PD13 is a scatter of pottery sherds and an upper grinding stone. The pottery fragments are adiagnostic but probably date to the Late Iron Age or Historical Period.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD14

PD14 is a scatter of pottery sherds and an upper grinding stone. The pottery fragments are adiagnostic but probably date to the Late Iron Age or Historical Period.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD15

PD15 Site is the location of blue gum trees planted in the early 1920s. Some of these are ~60m tall (fig. 2). These trees form part of the history of early afforestation and are a legacy to these foresters.

Significance: The trees appear to have high significance amongst the current afforestation and birding communities and there have been several programs to conserve these trees (W. von Mollendorff, pers. comm.). We do not believe that these trees should be removed for the sake of mining, and would not support this option. The site may be protected under the sub-section of sites that are "Landscapes and natural features of scientific and cultural importance" and be listed as a Heritage Landmark (KZN Heritage Act 1997). Required mitigation: There is currently no attempt to have these trees declared. Exxaro can obtain good public relations from these trees and also set up an environmental/educational centre regarding these trees and their history. If these trees are removed for mining, then we suggest that samples are taken from several trees to be used for dendrochronology. These should be donated to various museums.

PD16

PD16 occurs in the sugar cane fields outside of the affected area. PD16 is a scatter of adiagnostic pottery and LSA stone tools on the top of a small hill.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD17

PD17 occurs on land owned by Mondi. PD17 is a demolished house that probably dates to at least the 1970s. The pool had a 70s style of decoration.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD18

PD18 is a small area of *Euphorbia spp*., that appears to be a grave (fig. 3). There are no definite signs etc. around it, however, it stands out as being different. This may be a natural phenomenon.

Significance: if the area is a grave then it is f high significance

Required mitigation: if it is a grave then the human remains will need to be removed. Consultation with the community would need to occur. FIGURE 3: EUPHORBIAS AND POSSIBLE FEATURE AT PD18



PD19 may be one of the early forester's houses. There are some old bottles and plates on the surface. The house has been recently bulldozed however the foundations and rubbish dump may still remain. The bricks are Coronation bricks. Coronation changed to Corobrik in 1977, and thus all these buildings predate 1977. We contacted Corobrik (Avoca office); however they were not able to give us details on the various types of brick. They suggested that we visit the main offices in Durban to view the photographs and archives of the various bricks, and thus get a better estimate of the age. The earliest type of this brick occurs at Bamboo Square, Durban, possibly from the late 1890s onwards (Anderson 200).

Parts of the building predate 1937. No permit was given for the demolition of this building (see Appendix A). The structure has been occupied up to more recent times as well.

Significance: The site is of low-medium significance in that it can give information of the people in the early days of afforestation in KwaZulu-Natal. Architecturally it is of low significance.

Required mitigation: Whilst the building has been destroyed, the foundations and rubbish dump may be in tact. These foundations should be mapped and the rubbish dump should be partially excavated or sampled.

PD20

PD20 is part of the area of the forester's encampment from 1920s. There are some old bottles, plates, etc. on the surface and underneath the ground (fig. 4). The house has been recently bulldozed however the foundations and rubbish dump still remain. The bricks are Coronation bricks. Parts of the building predate 1937. No permit was given for the demolition of this building (see Appendix A). The structure has been occupied up to more recent times as well.

Significance: The site is of medium significance in that it can give information of the people in the early days of afforestation in KwaZulu-Natal. Furthermore it differs from PD19, in that it is a much larger structure. In theory, there is thus a suggestion of difference in use, if not the users themselves, and thus there should be a difference in types of artefacts. The site is of low architectural significance.

Required mitigation: Whilst the building has been destroyed, the foundations and rubbish dump may be in tact. These foundations should be mapped and the rubbish dump should be partially excavated or sampled.



FIGURE 4: RUINS AT PD20 AND ARTEFACTS IN THE GROUND



PD21 is the possible location of graves. We were informed that ancestral graves occur in this general area and that the family still pays their respect to the ancestors at these graves. We could not locate the exact location of the graves as they are not clearly demarcated with tombstones. However, we did note an area that appears to have been flattened, and it is demarcated with danger tape in various locations. The Manager of the Port Durnford Forest knows the exact location of the graves and the contact details of the relatives.

Significance: The site is of high significance.

Required mitigation: The ancestral remains will need to be removed. The relocation of all graves should be undertaken by an organisation experienced in these matters.

PD22a-b

PD22a-b is in the area of the sawmill (fig. 5). The original sawmill occurred in the general area as early as 1915. It has relocated since then, and the current sawmill (ruins) are the remains of the last sawmill, dating to the 1950s. There are some old oak trees on the border of the saw mill area. See Appendix A for further historical details. FIGURE 5: PD22a AND PD22b – OLD SAW MILL





FIGURE 6: KAURI PINES (Agathis robusta) AT PD24



Significance: The site is of low significance in terms of industrial archaeology and as historical buildings.

Required mitigation: No further mitigation is required; however the area should be monitored for potential structures and middens dating to the early 20th century.

PD23

PD23 is a recent house that has been demolished. Only the (overrun) garden remains. We are not sure of the age of the buildings, however most of the rubbish from the house appears to be within the last 30 years, e.g. all the bottles had screw-tops.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD24

PD24 is a small plantation of Kauri Pine (*Agathis robusta*), presumably from the 1920s (fig. 6). Some of these are ~60m tall. These trees form part of the history of early afforestation and are a legacy to these foresters.

Significance: The trees appear to have high significance amongst the current afforestation and birding communities and there have been several programs to conserve these trees (W. von Mollendorff, pers. comm.). We do not believe that these trees should be removed for the sake of mining, and would not support this option. The site may be protected under the sub-section of sites that are "Landscapes and natural features of scientific and cultural importance" and be listed as a Heritage Landmark (KZN Heritage Act 1997).

Required mitigation: There is currently no attempt to have these trees declared. Exxaro can obtain good public relations from these trees and also set

up an environmental/educational centre regarding these trees and their history. If these trees are removed for mining, then we suggest that samples are taken from several trees to be used for dendrochronology. These should be donated to various museums.

PD25

PD25 is scatter of LSA stone tools mostly on quartz.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD26

PD26 is a scatter of pottery sherds and LSA stone tools. The area is very disturbed. The pottery fragments are adiagnostic but probably date to the Late Iron Age or Historical Period. The stone tools are standard flakes.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD27

PD27 is an old (bricked) homestead in the indigenous forest. Most of the buildings have been damaged; however some walling still remains (fig. 7). The houses appear to have been occupied up to recent times. The remains of a garden, water tanks, and other features still occur and these are probably recent.

Parts of the building predate 1937. No permit was given for the demolition of this building (see Appendix A). The structure has been occupied up to more recent times as well.

Significance: The site appears to be of low significance.

Required mitigation: No further mitigation is required; however the site should be monitored.

PD28

PD28 is a concentration of pottery, slag and some bone. The occurrence of bone suggests that the site dates to the later part of the Late Iron Age or the early part of the Historical Period.

Significance: The site is of low significance.

Required mitigation: The site should be monitored and resurveyed after bush clearance.

PD29

PD29 is an ephemeral scatter of adiagnostic pottery. The pottery dates to the Late Iron Age or Historical Period

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD30

PD30 is an ephemeral scatter of pottery

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

FIGURE 7: RUINS OF HOUSE AT PD27



PD31 is an ephemeral scatter of pottery and one upper grinding stone.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD32

PD32 is a concentration of pottery some with black burnish and some slag. The black burnish and slag suggests that the site may date to the Historical Period.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD33

PD33 runs across the entire hill for 1.2km (fig.8). There are at least five concentrations of metalworking activity. In these areas are slag concentrations that occur in pairs directly opposite each other, tuyeres, hammer stones, some iron ore and undecorated pottery. We believe that furnaces may be present, but are subsurface. The pottery from the site is undecorated and it is thus unlikely to date to the Early Iron Age. However, considering the weathering on some of the sherds, parts of the site may date to the early part of the Late Iron Age. This is the highest concentration of metal working activity that we have recorded in the general area. It is surprising that afforestation has not damaged the area to a greater degree.

Significance: The site is of medium significance.

Required mitigation: The site will need to be (partially) excavated. The site information needs to be passed onto Siyaqubekha so that they do not damage the site.

PD34

PD34 is an ephemeral scatter of pottery probably dating to the Historical Period.

Significance: The site is of low significance Required mitigation: No further mitigation is required.

PD35

PD35 is ephemeral scatter of pottery and one small piece of slag. The site dates to the Late Iron Age or the early part of the historical Period.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD36

PD36 is an ephemeral scatter of adiagnostic pottery. The site dates to the Late Iron Age or the early part of the historical Period.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.



FIGURE 8: SMELTING ACTIVITY AT PD33

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We were informed that PD37 is the approximate area of the original railway houses that still exist, and are still being used. PD37 should also include the entire building complex as many of these buildings are likely to be more than 60 years old and thus protected by the KZN Heritage Act (see Appendix A).

Significance: The site is of low significance.

Required mitigation: No further mitigation is required.

PD38

PD38 is an ephemeral scatter of pottery. The site dates to the Late Iron Age or the early part of the historical Period.

Significance: The site is of low significance

Required mitigation: No further mitigation is required.

PD39

PD39 is a series of ruins that date possibly from the 1920s. This area was part of the initial forester's houses. Parts of the building predate 1937. No permit was given for the demolition of this building (see Appendix A).

Significance: The site is of low significance.

Required mitigation: The area should be monitored and sampled if any middens occur. There will need to be vegetation clearance before a proper sample can be undertaken. The artefacts should be compared with the remains from the other houses.

CONCLUSION AND MANAGEMENT PLAN

A total of 39 sites were recorded during the course of the survey. Most of the sites are of low significance; however there is one site of medium significance, and three of high significance. The sites of low significance do not require any further mitigation. The site of medium significance would require excavation before mining and protection from the current afforestation infrastructure. We will liaise with Siyaqubheka regarding this site.

There are various structures in the affected area that have been recently demolished. These have been surveyed by an architect-historian. These structures occur in the same area as the early encampments, or dwellings. Many of them have rubbish dumps that would provide an interesting aspect to the early times of afforestation in the area. We suggest that test pit excavations are undertaken in these areas. The KZN Heritage Act does protect built structures older than 60 years: these tend to predate 1937. Most of these buildings have thus been demolished without a permit from Amafa KZN (or the then National Monuments Council)

There is one confirmed grave, or area of graves, in the proposed mining lease. The process of exhuming and re-interring human remains is lengthy and complicated requiring various permits. We suggest that an organisation competent in this matter is approached ahead of mining. We also located an area that may be a grave. The Port Durnford manager was not aware of a grave in this area. The local community would need to be approached and/or test-pit excavations will need to be undertaken to (dis-)confirm the site.

The other two sites of high significance are natural heritage sites and probably date back to the 1920s as they were planted by the first foresters. These trees have been given a conservation status within Siyaqubheka. The trees may be protected by the KZN Heritage Act as a Heritage Landmark. We

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suggest that Exxaro does not fell the trees but rather use them as an educational and/or environmental resource. We also believe that the trees should become listed as a Heritage Site.

Exxaro should adopt a monitoring program for the duration of the mining activity. The monitoring program would entail regular site visits as new ground is cleared of vegetation. Monitoring may also require excavations and/or sampling of artefacts.

REFERENCES

Anderson, G. 2004. Ushaka Island Marine Park, The Point, Durban. Survey Of The Development Area And Excavations Of Bamboo Square. Report to Durban Marine Theme Park Pty (Ltd.).

Marwick, C. 1973 Kwamahlati: The Story Of Forestry In Zululand' Pretoria: The Government Printer

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APPENDIX A ARHCITECTURAL IMPACT ASSESSMENT REPORT

Historical and Architectural Impact Assessment Report for the Port Durnford State Forest, Umhlatuze, Uthungulu District Municipality



Prepared for:

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architecture: research: conservation: anthropology: impacts consulting

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Historical and Architectural Impact Assessment Report for the Port Durnford State Forest, Umhlatuze, Uthungulu District Municipality

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1. Introduction:

Debbie Whelan from Archaic Consulting was approached by Gavin Anderson from Umlando: Archaeological Tourism and Resource Management, with the view to assessing the architectural sites or their remains that currently form part of the Port Durnford State Forest, administered by SiyaQubheka. The intention of the report is to dovetail into the larger Historical Impact Assessment documenting the archaeology which is compiled by the abovementioned company, for Exxaro (Pty) Ltd.

2. Statement of expertise and methodology:

Debbie Whelan of Archaic Consulting is an experienced researcher and has worked in the field of architectural conservation for over a decade. The limits of this report resulted in largely historical work, and appropriate channels were investigated.

A site inspection was carried out, led by Gavin Anderson, on 15 February 2008. This visited the main points of architectural interest. Many of the sites were reduced to overgrown rubble, and these were photographed. The sites were geographically located, forming part of the main document compiled by Umlando: Archaeological Tourism and Resource Management. Archaic Consulting has investigated the library at Cedara, various published documents and the Provincial Archives Repository in Pietermaritzburg.

3. Executive Summary:

Not much structure exists on the site in question, except for the clusters of occupied, functional buildings that form reception, accommodation and technical support on the south westerly portion of the Port Durnford Forest Reserve. This is because many of the structures that were on the site, viz the old Sawmill, and foresters houses, have been demolished, ostensibly to prevent squatters moving in to the buildings, or removing the materials incrementally.

The author is aware of the practicalities of maintaining buildings that are not in use, as well as the security issue that is often posed when remote structures on large pieces of land are left vacant. However, this is also a management issue, and the corporate organizations that have the privilege to own or manage these large tracts of land should also be responsible for the retention, documentation and habitation/maintenance of these structures.

The **general recommendation** emanating from this report is that:

Amafa aKwaZulu-Natali should actively approach corporate bodies involved in large, monoculture farming in the rural areas, with the view towards developing a memorandum of understanding with regards to documentation of the sites, and developing management plans which provide for the continued, practical retention of these structures, or, alternatively, official sanction for their demolition once and environmental impact assessment and other documentation has been forthcoming.

The specific recommendations for this site are:- given that this report is compiled with a view towards total demolition in a future mining venture.

The *structures that do exist* have been assessed and do not contribute in a large manner to the heritage of the Province of KwaZulu-Natal. They are largely solitary, of modest form and construction, and whilst they contribute in part to the history of experimental tree planting in the province, the extant stands of Kauri Pines and Euclaypts give a louder testimony. Their value from a local, regional, national and international level is low on every account.

The *structures that don't exist* (ie demolished structures) have little record, and it is unlikely that excavation of the foundations will be telling of anything other than the plan form. As Marwick noted, many of the early buildings were wattle and daub, and the possibility of much artifact from this construction is limited. However, with regards to the first house, site PD 39, the presence of a suitably qualified archaeologist during initial site clearing is suggested, with the view towards identifying any midden sites which can add material artifact to the historical period.

The author wishes to **elicit the support** of *Amafa aKwaZulu Natali* for the **provisional protection of the large stand of** <u>Queensland Kauri Pine</u> (Agathis Robusta) which were among the first trees planted at this plantation, before 1920 and which form a unique feature in the history of forestry.

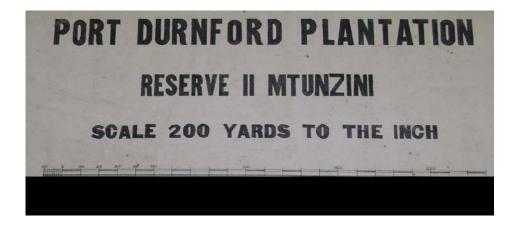
4. History of the site:

Information on Port Durnford Reserve is sketchy, relying heavily on some archival sources and the booklet, '*KwaMahlathi- the story of forestry in Zululand*.' Its demarcation as a Forest Reserve falls in with the Delimitation of Zululand, and the freeing up of land for European Settlement. With reference to the general area, Lugg mentions that Port Durnford is 'Ten miles south of Point Durnford, and about six miles north of the Umlalazi mouth, (and) was used during the Zulu War as a base for disembarking troops and supplies, and was established by the gunboat HMS *Forester*. The fort by this name is situated a few miles inland from this point. Port Durnford was named after an officer engaged on a marine survey of the Zululand coast in 1822. It was also at Port Durnford that Cetswayo was taken on board the transport *Natal* and conveyed to Capetown after his capture in 1879. (Lugg:1948:136-7)

Certainly, the forests around that which forms Port Durnford, Ungoye and Mzingwenya form part of a combined history. From the extract from the 1930 map below, the Ungoye Norwegian Mission (1882) is evident. This is corroborated in the later document dicussing this. (CNC /1731914/898 Norwegian mission station on Port Durnford forest reserve.) Archival evidence also points to the lengthy process that established it as a railway sleeper reserve in 1911. (SGO/III/1/304/SG2311/1911)

Marwick notes that the first permanent forester only moved onto the site in 1915- prior to this it was run out of Ngoye Forest, which is close by. Extensive clearing of Lala palm forest had to be done before planting. Indeed, the Mzingwenya forest adjacent to Port Durnford was used for a while felling the Umdoni trees.

Much experimentation took place at Port Durnford, and the maps on Fig 2 and 3 bear testament to the manner in which this was handled.



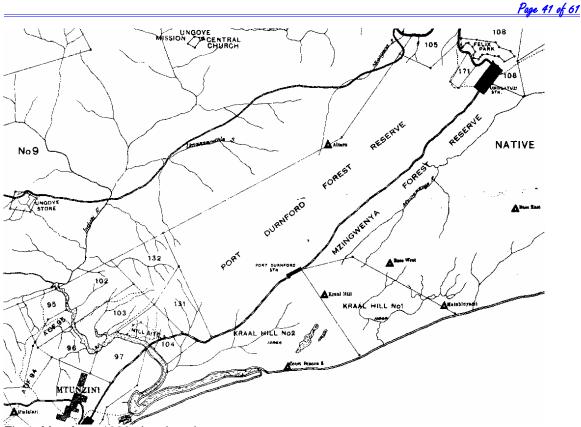


Fig 1: Map from 1930 showing site



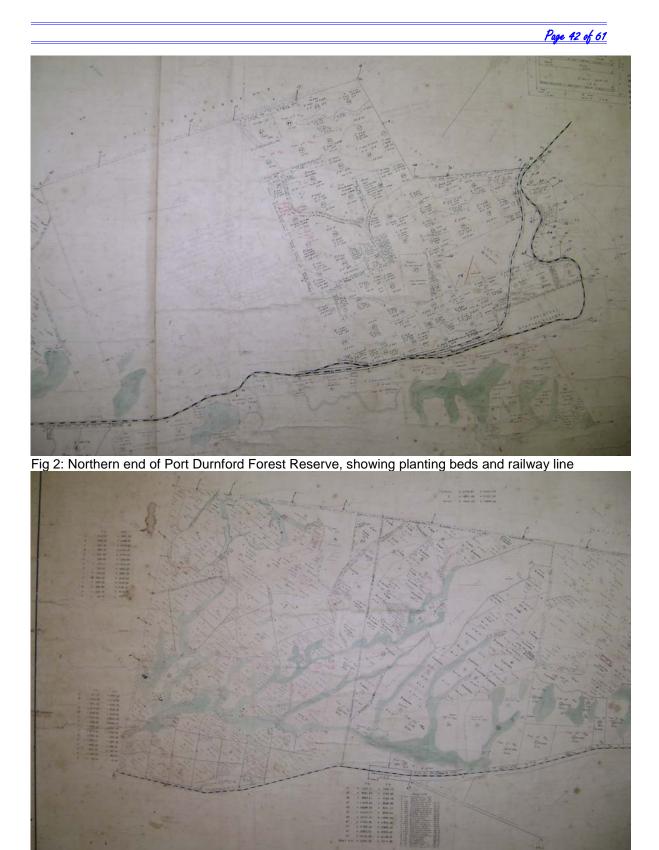


Fig 3: Southerly end of the Port Durnford Forest Reserve compiled in 1934.

5. Individual Sites

5.1 site 1 (Umlando reference PD 39)

This is the first of the sites which has been demolished and bulldozed, and is really only evident from the uneven ground covering foundations, and the established trees. It appears as an early site from two pieces of evidence: the map above compiled in 1934, shows the forester's house in between the rail reserve and the adjoining Lot 171. In addition, Marwick notes in his volume, *KwaMahlathi*, that Forester F Noffke took up residence in Block A (this site) in 1915. However, what the material condition of this building was is uncertain, particularly as Marwick talks of the early foresters living in wattle and daub huts. "This officer eventually took up residence at Block A on 1 September 1915.'(Marwick:1984:42) The 1937 Aerial photographs shows an indistinct but substantial building at this spot, and also a collection of buildings at the position on Fig A which shows the Umhlatuze Station. In addition, there exists a potential site which would also have been demolished, as seen on Fig 7.





Fig 4: Showing site



Fig 6: Showing site overgrown with grass

Fig 5: Showing site and vegetation

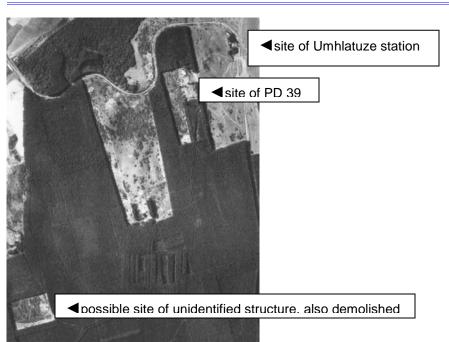


Fig 7: 1937 Aerial photo showing sites correlating to 1930 map in fig 1.

In any event, structures that were demolished and bulldozed on the site date back to pre-1937 (being evident on the photo's) and should not have been demolished without a permit from either *Amafa*, or its progenitor, the National monuments Council.

Condition of site: ruin

Recommendations: since this seems to be the oldest habitation site, the presence of an archaeologist during site clearing is recommended.

Site 1	Local value	Regional value	National value	International value
Architectural	Not known	low	low	low
Historical	low	low	low	low
Technical	low	low	low	low
scientific	low	low	low	low
Social	low	low	low	low

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5.2 site 2 (Umlando reference PD 27)

The remains of a dwelling, and concealed rainwater tanks are what is left of this site. The building has been largely destroyed, but some walls still remain to eaves level. The building is of conventional brick and mortar construction, and gauged from the occasional coursing built pre-World War II. No evidence has been found as to what this structure looked like, although its position may be seen on the 1937 aerial photo. (Fig 8)

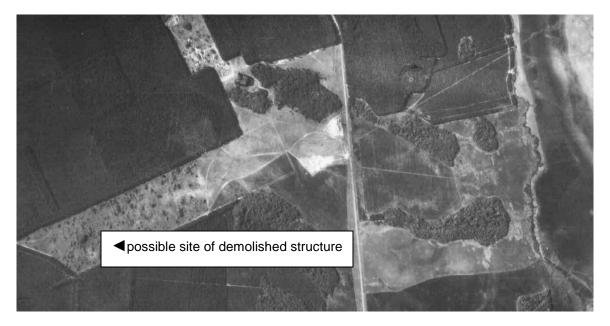


Fig 8: 1937 Aerial photograph showing possible site of PD27



Fig 9: ruined walls as remains of domestic structure



Fig 10: showing walls

Fig 11: rainwater tanks

In any event, structures that were demolished and bulldozed on the site date back to pre-1937 (being evident on the photo's) and should not have been demolished without a permit from either *Amafa*, or its progenitor, the National Monuments Council.

Condition of site: ruin except for water tanks

Recommendation: none and demolition of the rainwater tanks is recommended

site 2	Local value	Regional value	National value	International value
Architectural	Not known	low	low	low
Historical	low	low	low	low
Technical	low	low	low	low
scientific	low	low	low	low
Social	low	low	low	low

5.3 old sawmill site (Umlando reference PD 22a and 22b)

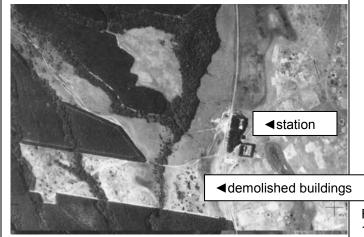


Fig 12: Showing an excerpt from the 1937 aerial photo of the site

The site of the 'sawmill' appears to have moved across the railway line from time to time. In the 1937 aerial photos, no substantial structures exist on the Port Durnford side (as opposed to the Umsingwenya plantation) which indicate that the sawmill was on this portion, yet across what was



the railway line at that time, in the 1937 photos, a distinct development is seen. Marwick notes that the first sawmill was set up at Port Durnford as early as 1915, and this was carried out by Gray Bros, the people who ran Eshowe sawmills. As the majority of these logs were 'Mdoni logs from the Umsingwenya swamp forests which were converted into light sleepers sold mostly to the sugar mills' the position of the development on the Umsingwenya side is plausible. (Marwick;1984:48) The lack of development on the Port Durnford side is also explained by the phrase; 'the firm decided to build a mill at Port Durnford and this was completed towards the end of 1938 and continued in operation until the end of 1952 when it was replaced' (ibid:50)

Evidence of the scattered buildings to the south of the old sawmill site is seen on the 1937 photo as 'demolished buildings' and this is possibly the remains of the following; 'In 1925 a contract was entered into with the Rand Mining Timber Co. for the purchase of 7000 tons of mining timber and 12 000 tons of firewood. The company laid down tracks and erected a sawbench. These were, however, badly located and were never used to full capacity.'(Ibid:48)



Fig 13: remnant of sawmill- loading ramps



Fig 14: concrete platform and ramp (right)



Fig 15: looking towards elevated road level





Fig 17: concrete block



Fig 18: debris on site

Fig 19: view back towards site of sawmill

The structures that were demolished and bulldozed on the site date back to pre-1937 (being evident on the photo's) and should not have been demolished without a permit from either *Amafa*, or its progenitor, the National Monuments Council.

Condition of site: ruin except for loading ramps

Recommendation: none and demolition of the loading ramps is recommended

Site 3	Local value	Regional value	National value	International value
Architectural	low	low	low	low
Historical	low	low	low	low
Technical	low	low	low	low
scientific	low	low	low	low
Social	low	low	low	low

5.4 site of possible house (Umlando reference PD 23)

This site was identified by Umlando on the prevalence of established garden trees as well as a midden that was partially excavated during the investigation.



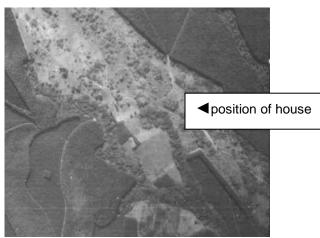


Fig 20: possible position of house

Condition of site: overgrown ruin

Recommendation: none

Site 4	Local value	Regional value	National value	International value
Architectural	Not known	low	low	low
Historical	low	low	low	low
Technical	low	low	low	low
scientific	low	low	low	low
Social	low	low	low	low

5.5 site 5 (Umlando reference PD 19)



Fig 21: site of demolished house



Fig 22: view from road

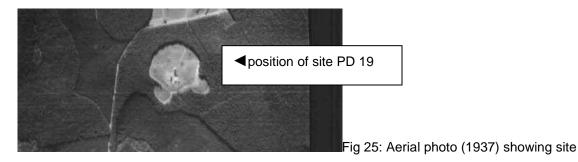
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Fig 23: remnant of pillar in undergrowth

Fig 24: edge of foundation below soil

The structures that were demolished and then bulldozed on the site date back to pre-1937 (being evident on the photo's) and should not have been demolished without a permit from either *Amafa*, or its progenitor, the National Monuments Council.



Condition of site: overgrown ruin

Recommendation: none

Site 5	Local value	Regional value	National value	International value
Architectural	Not known	low	low	low
Historical	low	low	low	low
Technical	low	low	low	low
scientific	low	low	low	low
Social	low	low	low	low

5.6 site 6 (encampment) (Umlando reference PD 20)

This site is identified as a Forester's encampment on the maps in Fig 2 and 3. Extensive bits of brick walling exist on the surface which has been extensively bulldozed. A water tower still stands.

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Fig 26: bulldozed foundations with rubble on top



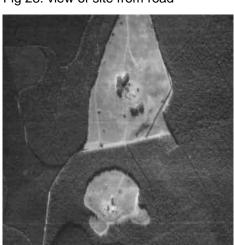
Fig 28: view of site from road



Fig 27: remaining water tower



Fig 29: close up of foundation rubble



The aerial photo to the left (fig 30) shows site PD 19 below and the structure on PD 20 above.

The structures that were demolished and bulldozed on the site date back to pre-1937 (being evident on the photo's) and should not have been demolished without a permit from either *Amafa*, or its progenitor, the National Monuments Council.

Fig 30: showing site PD 20

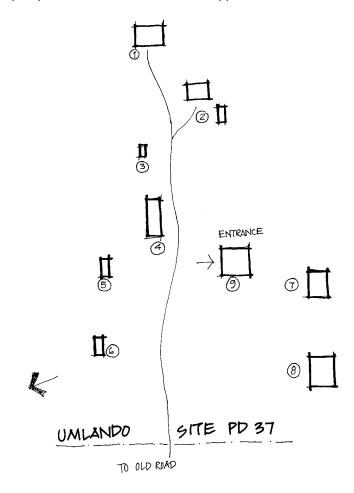
Condition of site: overgrown ruin

Site 6	Local value	Regional value	National value	International value
Architectural	Not known	low	low	low
Historical	low	low	low	low
Technical	low	low	low	low
scientific	low	low	low	low
Social	low	low	low	low

Recommendation: none

5.7 entrance site (Umlando reference PD 37)

This consists of a collection of functional buildings, largely well maintained, which form the entrance complex comprising forester's houses, manager's houses, technical workshops and reception/company spaces. The buildings are of conventional construction, well built, and modest. None of the buildings are particularly meritorious, and are largely dissociated as a group. Should demolition be required, there is little from an architectural, historical, technical or social perspective that should affect the application.



Buildings no 1, 2, 7 and 8 are enclosed housing complexes, largely of latter construction but no 7 likely to fall in within Amafa protection. Building no 3 is a small cottage, possibly built in the 1950's. Building no 4 is a garage complex and has little to merit if except for a large shed. Buildings no 5 and 6 are illmaintained, ill-inhabited and have little merit, although they are likely to be older than 60 years.

Building no 9 is the entrance building, and is a solid brick structure under Marseille tile. It is also likely to fall within the protection of the Heritage Act no 10 of 1997.

There is no evidence of any of these structures on the 1937 aerial photos.

Fig 31: rough sketch showing the layout of the entrance complex

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Fig 32: showing part complex 1



Fig 34: showing part of complex 2

Fig 33: showing part of complex 2

Fig 35: showing part of complex 2

Fig 36: part of complex no 2



Fig 37:Showing building 3

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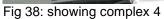




Fig 39: complex no 4 from the south



Fig 40: showing the north western elevation of the shed in complex 4



Fig 41: complex no 7



Fig 42: complex no 8



Fig 43: complex number 7



Fig 44: main entrance from the east

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Fig 45: Main entrance building from North



Fig 46: derelict building no 5

Fig 47: derelict building no 6

Condition of site: the buildings are generally in good order. They are architecturally not significant, although they are good examples of functional buildings. They do not operate as a group, do not form streetscape, and are not associated with any major event nor person. They are remote from Empangeni and Mtunzini and their situation limits alternative uses.

Recommendation: should demolition be requested, this group of buildings is not significant with regards to the heritage of the province of KwaZulu-Natal.

Site 7	Local value	Regional value	National value	International value
Architectural	low	low	low	low
Historical	low	low	low	low
Technical	low	low	low	low
scientific	low	low	low	low
Social	low	low	low	low

6. Other buildings

6.1 house outside entrance complex



Fig 48: view from south west



Fig 49: view from dirt road



Fig 50: view from driveway

This structure was not identified in the Umlando report but does form part of the architectural impact assessment. It is of the same period as complex no 7 in the previous section, a simple tiled, saddled roof over a masonry structure. It is suspected that the building is either older than 60 years, or constructed soon after World War II.

Condition of site: the building is generally in good order. It is architecturally not significant. It does not operate as part of a group, nor does it form streetscape. It is not associated with any major event nor person.

Recommendation: should demolition be requested, this building is not deemed significant with regards to the heritage of the province of KwaZulu-Natal.

Site 8	Local value	Regional value	National value	International value
Architectural	low	low	low	low
Historical	low	low	low	low
Technical	low	low	low	low
scientific	low	low	low	low
Social	low	low	low	low



6.2 ruin on road to labour camp



Fig 51: ruined structure

This is a partly demolished structure south of the main entrance. It was no identified as part of the archaeological impact assessment. It was built in around 1940.

Condition of site: ruin

Recommendation: should demolition be requested, this ruin is not significant with regards to the heritage of the province of KwaZulu-Natal.

Site 9	Local value	Regional value	National value	International value
Architectural	low	low	low	low
Historical	low	low	low	low
Technical	low	low	low	low
scientific	low	low	low	low
Social	low	low	low	low

6.3 labour camp

As with the previous structure, this was not identified under the archaeological impact assessment. It is a workers camp, of itinerant construction, with some of the older buildings being constructed out of asbestos sheeting. They are constructed of concrete block with steel windows.



Fig 52: view of group from road



Fig 53: view of unit





Fig 54: view of ablution block

Condition of site: the buildings are generally in good order. They are architecturally not significant, although they are good examples of functional buildings. They do operate as a group, but not as a streetscape, and are not associated with any major event nor person. They are remote from Empangeni and Mtunzini and their situation limits alternative uses. They are constructed of mixed materials, but largely concrete block and asbestos. It is suggested that they were constructed post-war.

Recommendation: should demolition be requested, this group of buildings is not significant with regards to the heritage of the province of KwaZulu-Natal.

Site 10	Local value	Regional value	National value	International value
Architectural	low	low	low	low
Historical	low	low	low	low
Technical	low	low	low	low
scientific	low	low	low	low
Social	low	low	low	low

6. Commentary on trees

The author wishes to elicit the support of *Amafa aKwaZulu Natali* for the provisional protection of the large stand of <u>Queensland Kauri Pine</u> (<u>Agathis Robusta</u>) which were among the first trees planted at this plantation, before 1920 and which form a unique feature in the history of forestry.



Fig 55: Kauri pines



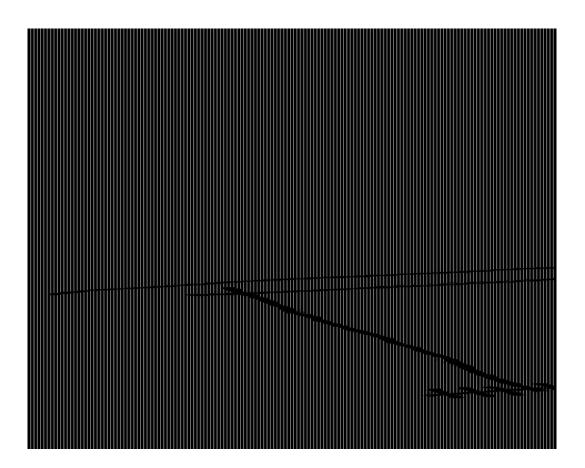
7. References

Lugg, H	(1948)	<i>Historic Natal and Zululand</i> Pietermaritzburg, Natal Witness
Marwick, C	(1973)	<i>KwaMahlathi- the Story of Forestry in Zululand</i> Pretoria, Secretary for Forestry
Marwick, C	(1984)	<i>Green Shadows</i> Pretoria, Secretary for Forestry
Simensen, J(eo	d)(1984)	Norsk Misjon og Afrikanske Samfunn: Sør Afrika ca 1850-1900 Trondheim, Tapir

Provincial Archives Repository:

CNC /1731914/898 Norwegian mission station on **Port Durnford** forest reserve. CNC/186/1914/1614 Application Of The Ngoye Forest Co For Permission To Erect An Aerial tramway From Ngoye To **Port Durnford** SGO/III/1/304/SG2311/1911 **Port Durnford** And Umhlatuzi Railway Sleeper Plantation.

9. Appendix: sketch map of sites discussed



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