

Archaeological Impact Assessment (AIA)

(Part 2 of HIA)

For the Proposed Rehabilitation and Refurbishment of the existing Latimer's Landing jetty
at the Port of East London

Prepared For

Transnet Capital Projects

(Contract number 1125637)

By

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Attachments: Transnet Construction Plans

Pile Layout and Coordinates: 1-125637-000-S-LA-0003-01-0A-SR

Jetty Beam Layout: 1-125637-1-000-S-LA-0004-01-0S-SR

Deck Layout and Detail: 1-125637-1-000-S-LA-0005-01-0B-SR

Upper Landing Sections: 1-125637-1-000-S-SE-0001-01-0A-TD

Lower Landing Sections: 1-125637-1-000-S-SE-0002-01-0B-TD

Executive Summary (AIA)

A Phase 1 Archaeological Impact Assessment was carried out for the proposed rehabilitation and refurbishment of the historical Latimer's Landing jetty at the Port of East London, Eastern Cape. This report is the second of two parts of the Heritage Impact Assessment, covering the period from the Iron Age up to present day, including a specialist report on the jetty.

Despite the fact that the initial assessment of the jetty based on the desktop study is set at Grade II, the current physical condition of the jetty precludes any potential for non-invasive conservation methods as more than 50% of the jetty will have to be replaced to eliminate the safety risk it currently poses. The preliminary assessment, however, is based on its commemorative and context values. Retaining the footprint and historic appearance, yet with clearly identifiable new material, makes it possible to retain the original grading without compromising the values it was based on, provided the recommendations as set out in this document are adhered to. It is further recommended that the jetty is incorporated as part of a nomination for declaration of the entire Latimer's Landing Precinct as a Cultural Heritage Landscape of provincial importance (Grade II).

It is accordingly proposed that positive consideration should be given to the approval of a permit for the development project based on the scope of works as set out by Transnet Capital Works, and stated recommendations in this report.

Abbreviations

AIA	Archaeological Impact Assessment
ASAPA	Association of Southern African Professional Archaeologists
EC PHRA	Eastern Cape Provincial Heritage Resource Authority
EIA	Early Iron Age
GPS	Global Positioning System
HIA	Heritage Impact Assessment
LIA	Late Iron Age
NHRA	National Heritage Resources Act, no 25 of 1999
PIA	Palaeontological Impact Assessment
SAHRA	South African Heritage Resources Agency

1. Background Information

Client: Transnet Capital Projects

Type of development: Section 34 [NHRA]: Rehabilitation and refurbishment of a structure older than 60 years

Terms of reference: To carry out a Heritage Impact Assessment

Legislative requirements: The Heritage Impact Assessment was carried out in terms of the National Heritage Resources Act no 25 of 1999 (NHRA).

The Archaeological Contracts Unit of the National Museum was contracted by Transnet Capital Projects to assess the heritage value of the Latimer's Landing Jetty and provide a specialist report on the structure as well as any other identified heritage concerns that might be affected by the rehabilitation and refurbishment process of the jetty.

Although the structure is older than 100 years, it is in terms of Section 2(ii)(a) of the NHRA, not considered as archaeological as it is still in use¹. For this purpose it is considered a historic structure in terms of Section 34 of the NHRA and would the proposed project require a permit from the Built Environment Unit of the Eastern Cape Provincial Heritage Resources Authority (EC PHRA).

This report will be submitted to the EC PHRA in support of an application for a permit for the proposed work. On account of its archaeological nature, it will also be submitted to the South African Heritage Resources Agency (SAHRA) for review and comment.

The study area is located on the eastern bank of the Buffalo River within the harbour area of East London in the Eastern Cape. The Archaeological Impact Assessment forms part of a Heritage Impact Assessment (HIA) for the proposed project and covers the period starting from the Iron Age to current date. The Palaeontological component (PIA) of the HIA, conducted by Dr Lloyd Rossouw, includes the Stone Age period and forms the first part of the HIA. This report should be read in conjunction with the PIA.

The aim of this study is to identify and document all cultural heritage that might be adversely affected by the project and assess their importance within local, provincial and national context. Appropriate recommendations for preservation and/or mitigation measures are included according to the grading assigned to each identified heritage component.

¹ Due to the instability of the structure it is currently closed to the public in preparation for repairs

1.1 Terms of Reference & Glossary

Archaeological Site

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 [NHRA, Section 2(ii)(a)]

Cultural Heritage

Cultural Heritage refers to all physical artefacts (tangible heritage) and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations. Tangible heritage includes movable (e.g. paintings, sculptures, coins, books, etc.), immovable (e.g. monuments, archaeological sites, buildings, etc.) and underwater (shipwrecks, underwater ruins, etc.) heritage. Intangible heritage includes oral traditions, performing arts, rituals, and so forth.

Cultural Landscape

Cultural landscapes provide a sense of place and identity; they map our relationship with the land over time; and they are part of our national heritage and each of our lives. They are sites associated with a significant event, activity, person or group of people. They range in size from thousands of acres of rural land to historic homesteads. They can be grand estates, farmlands, public gardens and parks, college campuses, cemeteries, scenic highways, and industrial sites. They are works of art, narratives of cultures, and expressions of regional identity.

Cultural Significance

Cultural significance refers to aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance.

Desktop Study

Desktop research refers to seeking facts, general information on a topic, historical background, study results, etc., that have been published or exist in public documents. This information can be obtained from libraries, newspaper archives, government, universities, archives, websites, etc.

Development

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

- Construction, alteration, demolition, removal or change of 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 hoardings;
- 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.

Field Survey

A Field Survey refers to the systematic visual combing of the proposed project area to locate, identify, record, photograph and describe sites and/or artefacts of archaeological, historical or cultural interest visible on the surface. A surface survey cannot detect sites or features that are completely buried under the earth, or overgrown with vegetation. The positions of all relevant finds are recorded by means of a GPS.

Historic Period

AD 1652 to 1955

Historic Structure

Any structure older than 60 years [NHRA, Section 34(1)]

Iron Age Period

± AD 400 - 1840

Improvement

In relation to heritage resources, this includes the repair, restoration and rehabilitation of a place protected in terms the National Heritage Resources Act, no 25 of 1999

Natural heritage

Natural sites with cultural aspects such as cultural landscapes, physical, biological or geological formations

Reporting

Reporting includes the results of the desktop study as well as the field study and an analysis of the effect the development would have on the identified heritage resources. Identified heritage are graded in terms of the NHRA, No. 25 of 1999, and mitigation measures are prescribed according to the allocated grading. It is a comprehensive document that should contain all the relevant data needed for the reader to obtain a clear understanding of the value of the heritage and any required action for its protection.

Scope of Work

The Scope of Work (SOW) is the area in an agreement, or an appendix to an agreement, where the work to be performed is described by the client. It contains any milestones, reports, deliverables, and end products that are expected to be provided by the service provider. It also contains a list of activities that will be undertaken during the construction

process to provide the service provider with a clear understanding of the potential impact the development would have on any resources, cultural or natural.

1.2 Legislative and Regulatory Framework

The National Heritage Resources Act (NHRA), no 25 of 1999

- Protection of Structures older than 60 years – Section 34
- Protection of Archaeological, Palaeontological and Meteor effects – Section 35
- Protection of Burial Grounds and Graves (formal and informal) – Section 36
- Protection of Public Monuments and memorials – Section 37
- Requirements for Heritage Resource Management – Section 38

The Development Facilitation Act (DFA) Act 67 of 1995

- GNR.1 of 7 January 2000: Regulations and rules in terms of the Development Facilitation Act, 1995. Section 31.

The National Building Regulations and Building Standards Act (NBR&BS), No. 103 of 1997 (as amended October 2008)

The Code and Practice of South African National Standards (SANS) 10005:1996 – The Preservative Treatment of Timber

Minimum Standards for Reporting as prescribed by the South African Heritage Resources Agency (SAHRA)

1.3 Description of the Study Area

1.3.1 Location Data

Map reference: 3327BB – East London

Province: Eastern Cape

Local & District Municipality: Buffalo City Metropolitan Municipality

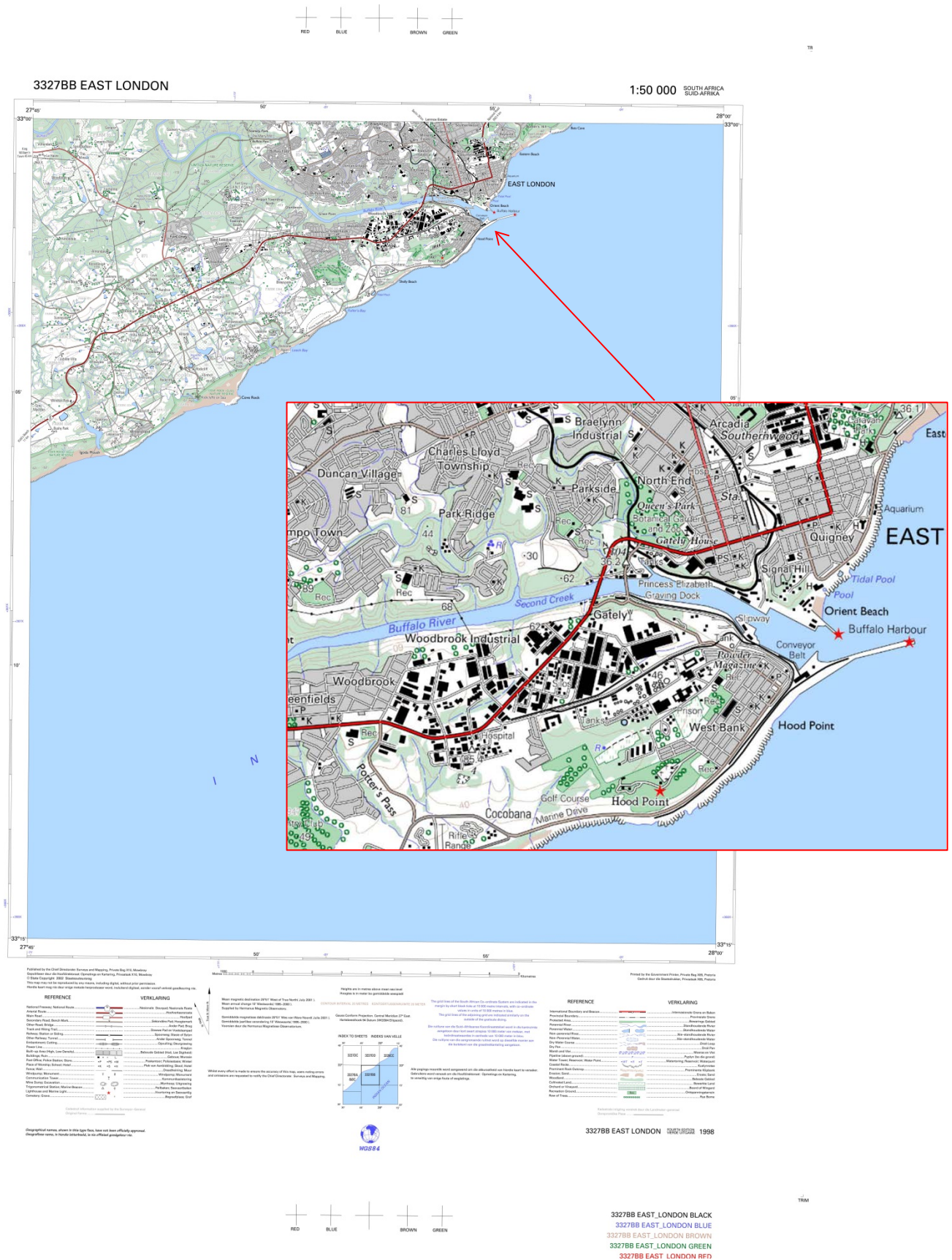
Town/City: East London

Erf Number: 33369

General Site Coordinates: 33° 1'21.49"S; 27°53'44.96"E

The study area is located within the harbour area of East London on the eastern bank of the Buffalo River, immediately adjacent the Pontoon Road bridge crossing the river on its northern side, next to the Princess Elizabeth Graving Dock on the southern side, and \pm 2 kilometres from the mouth of the river.

1.3.2 Locality Map (1:50 000 East London 3327BB)



Map 1: 1:50 000 Map with enlarged insert

1.3.3 Google Map



Map 2: Google image of the East London harbour

2. Approach and Methodology

2.1 Desktop Study

A desktop study was conducted prior to the site visit in order to compile a background history of the area and Latimer's Landing in particular. This included, inter alia, a literature search, consulting the South African Heritage Resources Information System (SAHRIS) on previous studies done in the area, consulting historians at the East London Museum, and archival searches.

2.2 Consultation

EC PHRA was requested to provide information on local heritage organisations that could be contacted for input and opinion on the proposed project but no information was received in this regard.

Mr Kuzo Blauw from the History Department of the East London Museum was consulted for available information on Latimer's Landing and the History Department was invited to comment on the proposed development. Mr Blauw offered to forward the information regarding the development to various heritage groups for commenting. No comments were received.

This project is part of the upgrading of Latimer's Landing precinct and has been reported in several media where the public was invited to provide their input to the Transnet National Ports Authority. Buffalo City 360, a free local quarterly magazine, has placed an article on the development wherein Transnet invited comments from the public. A Facebook page was created in September 2013 to announce the plans for the upgrading of Latimer's Landing precinct, similarly inviting the public to comment on the development and at the same time the page serves as forum to inform the public of all events at Latimer's Landing. The client has provided no information on any potential replies received to the invitations for commenting.

2.3 Site survey

The site survey was focused on Latimer's Landing and conducted on 8-9th July 2015. The results are reported in the site report in point 6 of the current document.

2.4 Restrictions

It was not possible to assess the entire section below the deck of the jetty as all the ladders down to water level were removed. However, photographs taken through the spaces left by missing deck boards and from the floating jetty in front of the Harbour Police building provided sufficient evidence to make a reasonable assessment of the condition of the jetty.

3. Nature of Development

The project entails the rehabilitation and refurbishment of the existing Latimer's Landing jetty at the Port of East London, including reinstallation of the lower deck (pontoon).

The refurbishment will require the replacement of old structures and infrastructure (currently in a critical state of disrepair) with new structures and infrastructure of a similar nature to perform a similar function and will not increase the footprint or the capacity of the jetty. The intention is to maintain the heritage style and form of the structure and, as mentioned below, cladding the concrete deck with salvageable deck boards from the current jetty.

3.1 Technical Details (As per Scope of Works received from the client).

Activities to be undertaken include the following:

- Removal of all existing jetty furniture and services;
- Removal of the existing timber deck and timber piles to below deck level;
- Removal of existing rock armour;
- Levelling of the slope as required;
- Replacement of timber piles with new reinforced concrete piles;
- Re-establishment of the rock revetment using existing rock armour where possible;
- Replacement of the timber deck with a reinforced concrete deck, consisting of precast concrete with in-situ infill;
- Provision of scour protection;
- Re-installation of jetty furniture and services;
- Cladding of the concrete deck with a timber finish using timber from the disassembled timber deck where possible.

Refer to [Transnet Plan No: 1125637-1-000-S-LD-0001-01-0A] for a visual demonstration of the construction sequence. In addition the following plans are attached:

- Pile Layout and Coordinates: 1-125637-000-S-LA-0003-01-0A-SR
- Jetty Beam Layout: 1-125637-1-000-S-LA-0004-01-0S-SR
- Deck Layout and Detail: 1-125637-1-000-S-LA-0005-01-0B-SR
- Upper Landing Sections: 1-125637-1-000-S-SE-0001-01-0A-TD
- Lower Landing Sections: 1-125637-1-000-S-SE-0002-01-0B-TD

4. Assessment Methodology

The site is assessed both before and after the site visit. After completion of the desktop study the site is assessed in terms of point 4.1 (1) to (10) as well as point 4.2. Although all the criteria listed in point 4.1 are inter-related it should be borne in mind that a site could also be of sufficient significance under just one criterion to justify preserving and need not necessarily meet all criteria.

After the site visit (or fieldwork) has been completed, the second assessment takes place taking into consideration point 4.1(11) as well as its physical condition as per point 4.4. Recommendations will be based on the 2nd assessment.

4.1 Criteria for assessing significance

The heritage significance of the development site will be assessed according to the following criteria according to S3(3) of the NHRA as well as criteria stated in the Burra Charter¹ on which the NHRA is largely based:

1. **Historical value:** The extent to which the place reflects important or representative aspects of its local, regional, provincial or national history.
 - a. Is it a representative example of a certain type of historic place?
 - b. Is it a representative example of a certain period?
 - c. Is there an association of this place with important people, groups, individuals, organisations or institutions who have either lived or carried out activities at this place?
 - d. Is this place associated with important events or actions?
2. **Community Association:** The public esteem for the place
 - a. Is it a focal point for community activities?
 - b. Is there evidence of community association with the place or strong feelings for it?
 - c. Does the place illustrate a distinctive aspect(s) of the community's identity, social history and way of life?
 - d. Has the community association with the place been formally recognised in terms of having it listed as a place of importance either through the heritage agencies/authority or local townplanning?
3. **Commemorative value:**
 - a. Does the place commemorate an important person, event, idea or activity?
 - b. Is it a memorial of some specific kind?

¹ The Australia ICOMOS Charter for Places of Cultural Significance 1999

4. **Symbolic value:**
 - a. Does the place symbolise a feature of the area's past history? (e.g. such as a sacred connotation to a specific place)
5. **Educational value:** (potential to be of educational value)
 - a. Does the place provide potential to enhance an understanding and appreciation of the past?
 - b. What is its potential for interpretation of present and future generations?
 - c. Is the place accessible to the public?
6. **Archaeological value:**
 - a. Does it have the potential to define or expand knowledge of earlier human occupation, activities or events through archaeological investigation methods?
 - b. How important is the place as a representative example of a site type, feature or activity?
 - c. What is the research potential of the place?
7. **Technological value:** (in this case it would refer to technological accomplishments in the building industry)
 - a. Is the place important in terms of the development of technology in the building environment?
8. **Architectural value:** (design)
 - a. Does it provide a notable, rare or representative example of an architectural style, type or convention in either the interior or exterior layout?
 - b. Is the place an important example of architectural innovation?
 - c. Is it an important example of a particular method of construction, use of material or design feature?
 - d. Does it exhibit an important example of a particular form of craftsmanship?
 - e. Is the design an important example of the work of a notable architect, designer, engineer or builder?
9. **Context:** (The extent to which the place forms part of a wider historical and cultural context or historical and cultural landscape)
 - a. Is the historical context of the place important in terms of a comparative age, or being part of a particular period?
 - b. Is the place important in terms of historical or cultural continuity?
 - c. Is the place an important component of a group of associated historic places?
 - d. Is the place part of a registered/or scheduled historic area or precinct (i.e. listed on National Heritage Register or recognised as such through the zoning regulations of the town/city)

- e. What is its value as a component of the wider historical or cultural landscape or streetscape?
 - f. What is the importance of the place in terms of visual amenity, or aesthetic value (past or present beauty), or as a landmark?
10. **Rarity:** (The frequency with which this type of historic place can be found)
- a. Is it a rare type of historic place?
11. **Integrity:** (What is the integrity of the place?)
- a. Does the place have integrity in terms of its original form or fabric?
 - b. Does it have integrity in terms of its historical or cultural setting and its relationship with associated structures?
 - c. Is the place located on its original site?
 - d. Has the place been modified, altered or restored in a significant or sensitive way?

4.2 Criteria for assessing credibility of information [adopted from Nel 2012]

The credibility of the resources consulted to obtain background information has a direct impact on the pre-site visit assessment of significance and is assessed as follows

Score	Description	Rating
0 – 10%	Credibility of information cannot be determined: conjecture, unverified, personal opinions, biases evident	None or negligible
11 – 40%	Secondary and tertiary information sources: popular media, newspapers, magazines; ‘information’ websites (e.g. Wikipedia, etc.), individual opinions	Low
41 – 70%	Credible secondary sources: factually correct textbooks, popular publications, official websites, verifiable oral accounts	Medium
71 – 100%	Highly credible information sources: peer reviewed publications, primary sources, verified oral accounts.	High

Table 1: Criteria for assessing credibility of background information

4.3 Criteria for Assessing Field Rating (grading i.t.o. NHRA)

Grade	Administrative level	Description	Recommended mitigation
Grade I	National	Heritage resources with qualities so exceptional that they are of special national significance [S7(1)(a)]	Heritage resource should be nominated as a National site/object and included in the National Estate
Grade II	Provincial	Heritage resources which, although forming part of the	Heritage resource should be nominated as a Provincial

		national estate, can be considered to have special qualities which make them significant within the context of a province or a region [S7(1)(b)]	site/object, and included in the National Estate
Grade III-A	Local	Other heritage resources worthy of conservation [S7(1)(c)] considered to have special qualities which make them significant within local context	Heritage resource should be nominated as a Regional/Local site/object and included in the National Estate
Grade III-B	Local		Heritage resource must be mitigated and partly conserved/preserved
Grade GP-A	Generally Protected	Any structure older than 60 years [S34] or any other heritage resource as described in S3(1)-(2) that does not fulfil the criteria as described in S3(3) of the NHRA to be included in the National Heritage Register.	The heritage resource must be mitigated before destruction
Grade GP-B	Generally Protected		The heritage resource must be recorded before destruction
Grade GP-C	Generally Protected		No mitigation required – application for demolition/destruction may be permitted

Table 2: Criteria for determining field rating (grading i.t.o. the NHRA)

4.4 Criteria for Assessment of Physical Condition

These criteria are only applicable should the initial assessment of the site be deemed worthy of formal protection (i.e. Grade I, II, or III). A negative assessment of one criterion can eliminate the need to consider the remaining two measures, depending on the nature of the heritage effect.

- a. What is the physical state or condition of the place?
 - i. REPAIR NOT POSSIBLE
 - ii. REQUIRES MAJOR REPAIR
 - iii. REQUIRES MINIMAL OR NO REPAIR
- b. Is the place dangerous or does it pose a threat to the health and safety of people?
 - i. YES
 - ii. NO
- c. Is the place vulnerable to modification or destruction? (State reason)
 - i. YES
 - ii. NO

Each of the aforementioned possibilities requires recommendation and/or mitigation according to the effect it would have on the value the first assessment was based on. If, for instance, the grading is based on the architectural value sufficiently important to be graded at a provincial level (Grade II), and it would be vulnerable to modification or destruction due to the development and no mitigation is possible, then it should be recommended that development does not take place. If a permit for development is refused by the relevant authority based on this reason, then it should, in terms of Section 34(2) of the NHRA, No 25 of 1999, within three months of refusal give consideration to the protection of the place concerned in terms of one of the formal grading as provided for by the NHRA.

5. Historical and Archaeological background of the study area

5.1 General Information

Latimer's Landing (referring to both the area and jetty) is situated within the harbour area of East London. The background history is accordingly largely focused on any information relevant to this area as the development will not have a wider impact than the immediate vicinity of the jetty. Information on the prehistory mainly serves to inform on the possibility of subsurface finds related to these periods that might be exposed and unearthed during the construction phase of the project. The brief synopsis of the historical period has the same objective and similarly does not take into account all the Xhosa wars (spanning a 100 year period) or other important events such as the cattle killing episode during 1856-1858 that had such a devastating effect on the region as a whole, but only those directly relevant to the history of East London.

5.2 Prehistory

The term prehistory was coined by Daniel Wilson in 1851 to cover the story of man's development before the advent of writing. Prehistory differs from history in that it deals with the activities of a society or culture, not the individual; it is restricted to the material evidence, and only such of that as has survived; and it is in the strictest sense anonymous, since without records we cannot know the names of people, peoples or places and are forced to invent arbitrary labels to serve instead. Christian Jürgensen Thomsen, a curator of the National Museum of Denmark, was the first to provide a technological subdivision of the prehistoric past based on archaeological finds. These technological periods are referred to as the Stone Age, Bronze Age and Iron Age (later expanded to include more specialised categories) and by the 1920's were widely used throughout the world as a basis for classifying prehistoric sites. These are purely arbitrary technological labels, which do not coincide with any levels of social evolution and are more labels of convenience than precision.

As there is no identified Bronze Period in South Africa, and the **Stone Age component is covered under the Palaeontological Impact Assessment for this project prepared by Dr Lloyd Rossouw**, this report only covers the Iron Age and Historic periods of the region. The Iron Age (\pm AD 400 to 1840) in the context of South Africa is divided into an Early Iron Age Period and a Late Iron Age Period, the latter which overlaps in part with the Historic period (1652-1955).

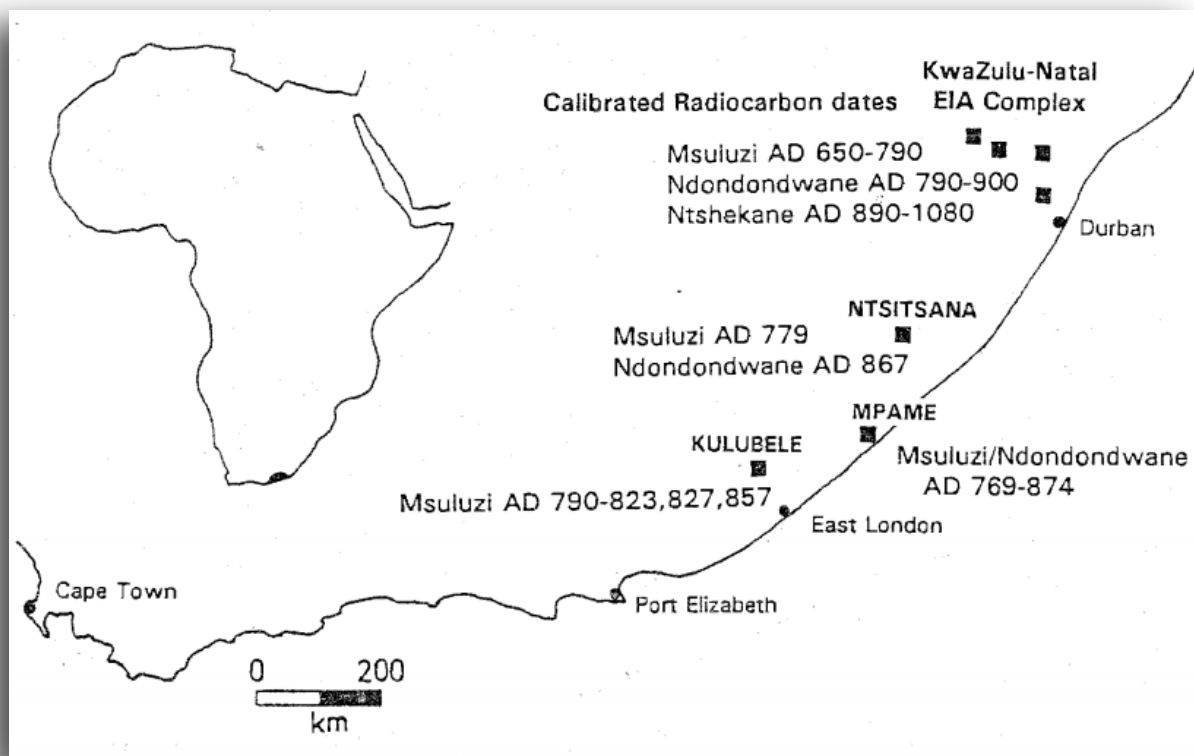
[Fagan 1996; Warwick & Trump 1982]

5.3 Iron Age

The Iron Age is identified by evidence of the smelting of iron and production of ironware products. This marked the onset of an agricultural-based economy as communities were able to produce implements such as axes to clear the vegetation in preparation of a field

and hoes to till the soil. The Early Iron Age (EIA) is differentiated from the Late Iron Age (LIA) in that EIA communities were small and widely scattered. Sites were in general occupied for a single generation as communities simply moved on to new locations when the soil became exhausted. Hunting and gathering activities continued to contribute substantially to their diet, especially in time of crop failure. Division between the different technological periods should not be viewed as being a strict division in time periods as archaeological evidence clearly indicate that the Early Iron Age communities coexisted with the Late Stone Age (LSA) period peoples.

The most southern EIA site that has been identified to date is Canasta Place, approximately 12 km west of East London on the west bank of the Buffalo River. Further inland 60 km north-west of East London the Kulubele EIA site can be found on the west bank of the Great Kei River.



Map 3: Radiocarbon dates for First-Millennium Agriculturist sites in KwaZulu-Natal and Eastern Cape [Binneman, 1996:30]

[Binneman 1996; Fagan 1996; Nogwaza 1993; Thulamela 2003]

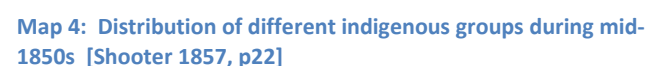
There is, accordingly, a strong possibility that other Early Iron Age sites could also have been along the banks of the Buffalo River in the vicinity of the project area.

Through ethnographic research of the early 1900s indigenous groups encountered by the early colonists were identified as distinct separate cultures with dominance in specific geographical areas. Ceramic analyses of sites dating from the pre-contact period enabled the linking of these sites to specific existing indigenous groups in the post-contact period. As such the amaZulu, amaXhosa and amaFengo (Fingo) were settled along the eastern coast by the time the colonists reached these areas. At the time of the first contact between European settlers and the Xhosa, Xhosa-speaking tribes were spread over a large area along

[Delius 1976; Huffman 2007; Schmidt 1996; Shooter 1857; Theal 1878]

Accordingly, there is a strong possibility of finding archaeological material relating to Late Iron Age peoples in the vicinity of the study area.

This region was also home to several Khoikhoi groups whose land originally spanned from the Buffalo River to the Zwaartkops River (Swartkops River north of Port Elizabeth), but lost most on account of the frontier wars which resulted in their land being given to colonial settlers (area west of the Fish River) and the amaFengu (between



the Fish and Keiskamma Rivers) who sided with the colonists against the amaXhosa during the Xhosa frontier wars. Several of the Khoi kingdoms found protection under the amaXhosa as a subgroup, the ama-Gqunukhwebe, during the reign of the Xhosa king, Tshiwo (1670 to 1702), during the early period of European colonisation.

In 1829 the Commissioner General of the Eastern Districts, Andries Stockenström, facilitated the creation of the 'Kat River' Khoi settlement near the eastern frontier of the Cape Colony – ostensibly to compensate for their restricted civil rights on land ownership in the Cape Colony, but it conveniently also served as buffer zone between the colonists and indigenous tribes further north.

[Backhouse 1844; Rudner 1979; Theal 1878]

There is a strong possibility of finding archaeological material reminiscent of pastoralist presence.

5.5 Historical Period

5.5.1 Regional historical background

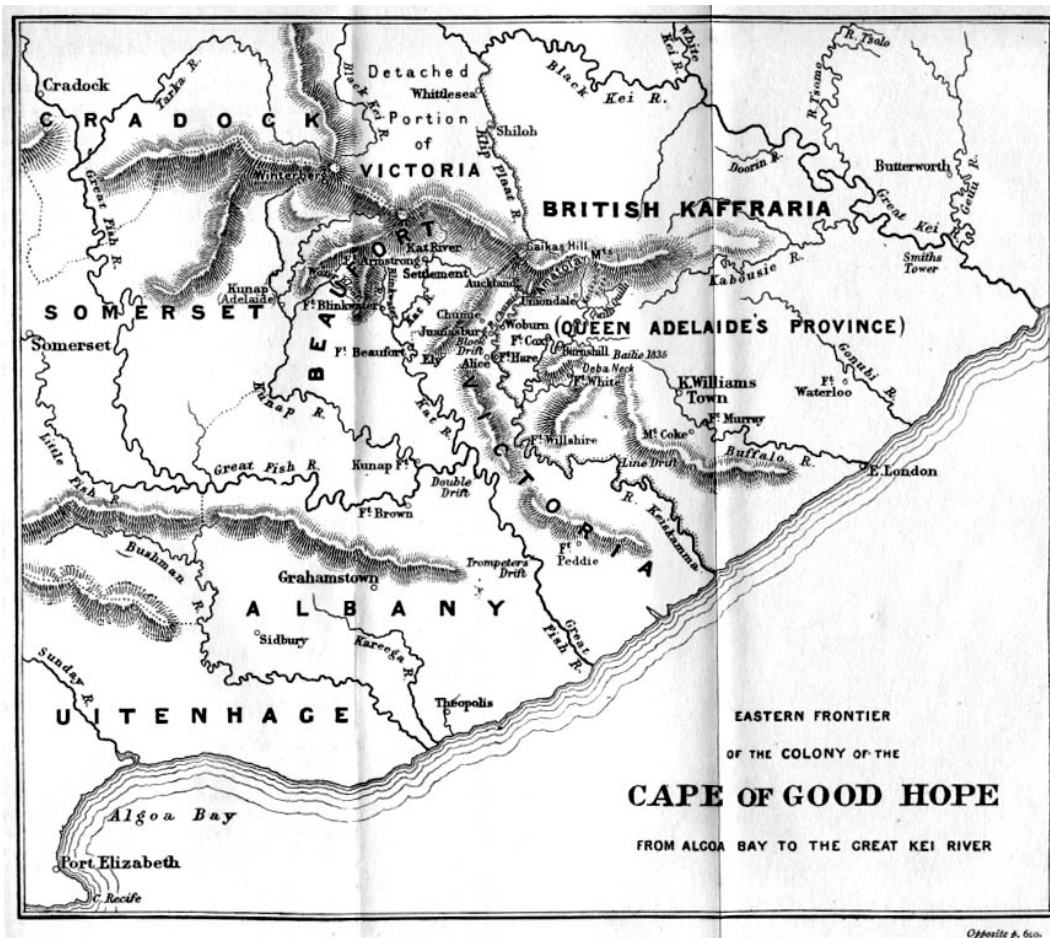
The British expansion along the eastern boundary of the Cape Colony resulted in severe conflict with the indigenous groups in the eastern parts of current-day South Africa and, in particular, the amaXhosa. With regard to the amaXhosa, conflict with European settlers resulted in nine Xhosa Wars over a period of 100 years (1779 to 1879) of which the 4th (1811-1812) to 9th (1877-1878) wars occurred during the period of British rule.

From the time of the first contact between amaXhosa and European settlers, the western border of the Xhosa territory was moved several times. Prior to the Cape being ceded to the British in 1806, the amaXhosa were already expelled from the area between the Fish River and the Sundays River. The area between the Fish and Bushmans River known as the Zuurveld became an unofficial neutral area. By the time the British arrived the amaXhosa have already reinhabited the Zuurveld, which resulted in the 4th and 5th Xhosa Wars. However, it was the 6th Xhosa War [1834 – 1836: The War of Hintsa] that led to the establishment of the Province of Queen Adelaide between the Keiskamma and Kei Rivers in 1835 as British territory with King William's Town as seat of power. The Xhosa were allowed to stay in the Queen Adelaide Province but as British subjects. The area between the Keiskamma and Great Fish Rivers was declared a neutral area.

It is during this time that the first attempts were made at establishing a port at the mouth of the Buffalo River. Sir Benjamin D'Urban ordered Lieutenant-Colonel Harry Smith to investigate the possibility of the mouth of the river as a port for the new British territory. At this time, the area was already inhabited by a small Xhosa community living on the western bank of the Buffalo River. Lt-Col Harry Smith returned with a favourable report, but D'Urban had more pressing matters to attend to and left it at that. Captain John Bailie who was part of the expedition to investigate the port possibility, however, badgered D'Urban for permission to hire a ship on an experimental basis to bring supplies to the troops

stationed in the Province of Queen Adelaide. D'Urban eventually consented and the Knysna arrived at the mouth of the river and successfully offloaded its cargo despite the fact that it was not able to get past the sandbank at the mouth of the river to reach the deep lagoon further in. Unfortunately, D'Urban's plans for the formal establishment of the port were foiled by other events.

The existence of the Province of Queen Adelaide was short-lived as not being satisfied with the way Governor D'Urban handled the situation and not eager to expand British territory with an even larger area to defend, the Colonial Secretary of the State, Charles Grant, Baron Glenelg, in December 1836 nullified D'Urban's declaration of the new Province of Queen Adelaide and returned it to native rule and thus the plans for the Port of East London had to be shelved.



Map 5: Eastern Frontier of the Colony of the Cape of Good Hope from Algoa Bay to the Great Kei River [Smith 1903, p460]

It would be 11 years later, after the 7th Xhosa War (1846-1847 – War of the Axe) that the area between the Keis and Keiskamma Rivers was reabsorbed as British territory at the end of 1847, not as part of the colony but rather a Crown dependency. At this time Fort Glamorgan was erected on the western bank of the mouth of the Buffalo River. The new territory was called The Colony of British Kaffraria. On 14 January 1848, however, a proclamation was issued to declare the Port of East London with a 'two mile rayon' as part

of the Cape Colony and thereby depriving the new colony of much needed revenue. Similarly so the development of the port also suffered under this as the Crown refused to acknowledge it as a British responsibility and accordingly was very reluctant to spend any money on its improvement. It was only in 1859 when the House of Assembly once again refused to incorporate British Kaffraria that the port was handed back to British Kaffraria, but in 1866 British Kaffraria again became part of the Cape Colony.



Figure 1: East London Harbour 1902 [East London Museum]

During the Anglo-Boer War of 1899-1902 East London served as an important harbour for the disembarkation of British troops and provisions and the harbour was a bustling hive of activity. East London also served as the base for the 3rd Division and in time concentration camps for Boer families as well as Uitlander refugees were erected.

In 1910 the Union of South Africa was established by combining four British colonies namely the Cape Colony (of which the Eastern Cape of today was part of), the Natal Colony and the two former independent Boer Republics, the Republic of South Africa, or ZAR as it was known, and the Republic of the Orange Free State, that were defeated during the Anglo Boer War and respectively became the Transvaal Colony and the Orange River Colony.

These colonies became the four original provinces of the Union: Cape Province, Transvaal Province, Natal Province and Orange Free State Province. In 1961 South Africa obtained her independence from Britain and the Eastern Cape continued to be one of the four provinces of the Republic of South Africa. In 1963 the South African government set up specific



Map 6: Bantustan territories created by the government of South African after having gained independence from Britain in 1961 [www.kidsbritanica.com]

areas in the Eastern Province as one of the two homelands for Xhosa-speaking people in the Cape Province, namely Transkei and Ciskei, and was given nominal autonomy in 1963.

The Bantustan territories were reincorporated into the new democratic South Africa on 27 April 1994, and the country divided into nine different provinces. The former Cape Province was split into the Northern Cape, the Western Cape and the Eastern Cape, the latter being the regional focus of the current study.

[Delius 1976; Milton 1983; Peires 1976; Pamphlet 1; Smith 1903; Tankard n.d.; Tankard 1990; Tankard 1999; Tankard 2009; Theal 1878; Webb n.d.]

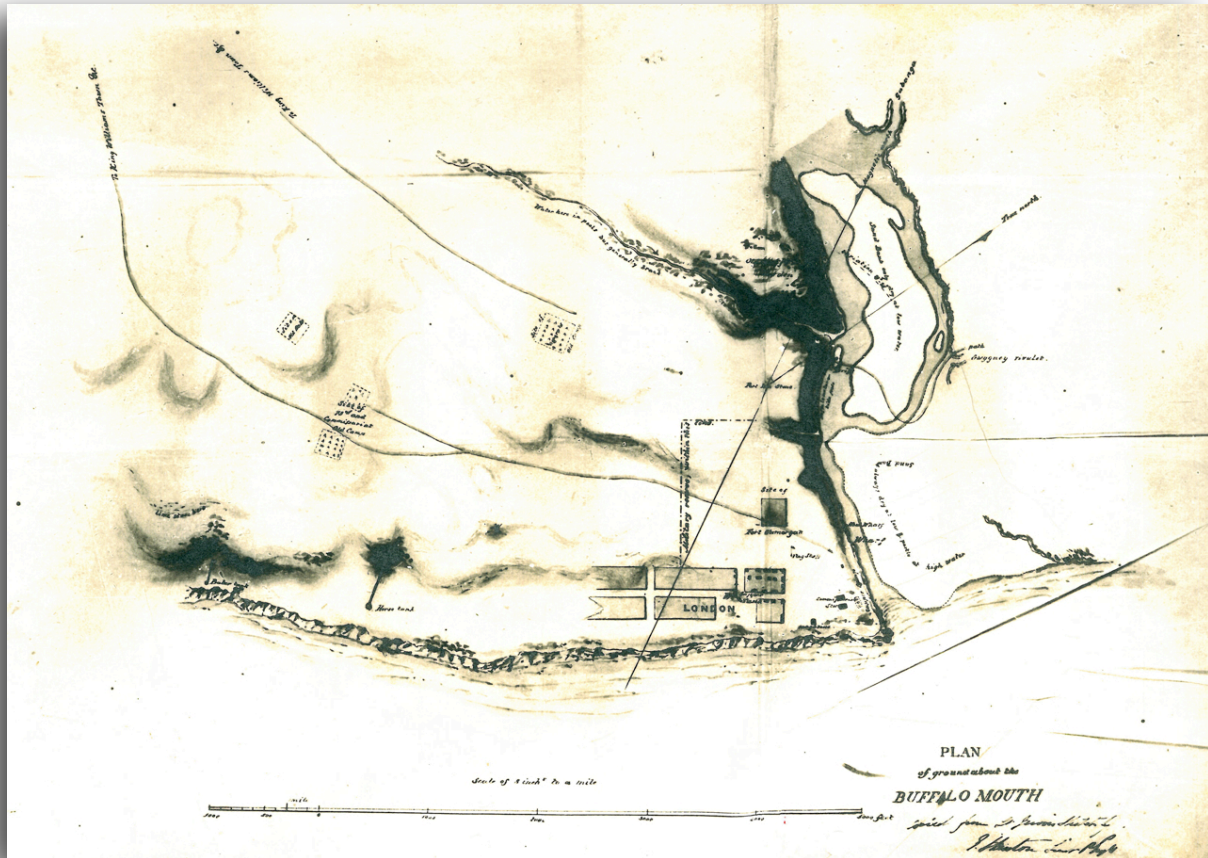
5.5.2 East London

As mentioned, the first ship to lay anchor at the mouth of the river was the brig Knysna. On 5 December the Lieutenant Governor of the eastern districts, Sir Andries Stockenström, visited the port and allegedly named the port after the owner of the Knysna, a Cape Town merchant, John Rex, but according to Tankard [1985] this was merely a joke. Whichever may be the case, the name did not stick as a very early drawing by the Royal Engineers showing the site of Fort Glamorgan confirms that the original settlement of East London was called London. [See Map 7]



Figure 2: Water painting of the Knysna
[www.knysnawoodworkers.co.za]

East London is a city steeped in history so for the sake of brevity only those aspects indicative of its early beginnings will be pointed out. Although the largest section of the early town was laid out on the eastern side of the Buffalo River, the first occupation of this area occurred on the western bank; first by the Xhosa prior to the arrival of the British troops and then by the British in the establishment of a fort. Sir George Berkeley set out to establish various forts beyond the Cape Colony borders and in April 1847 the ship Frederick Heath discharged a cargo of military stores at the western bank of the Buffalo River mouth. Fort Glamorgan was built and in July a regiment arrived aboard the steamship Rosamond.

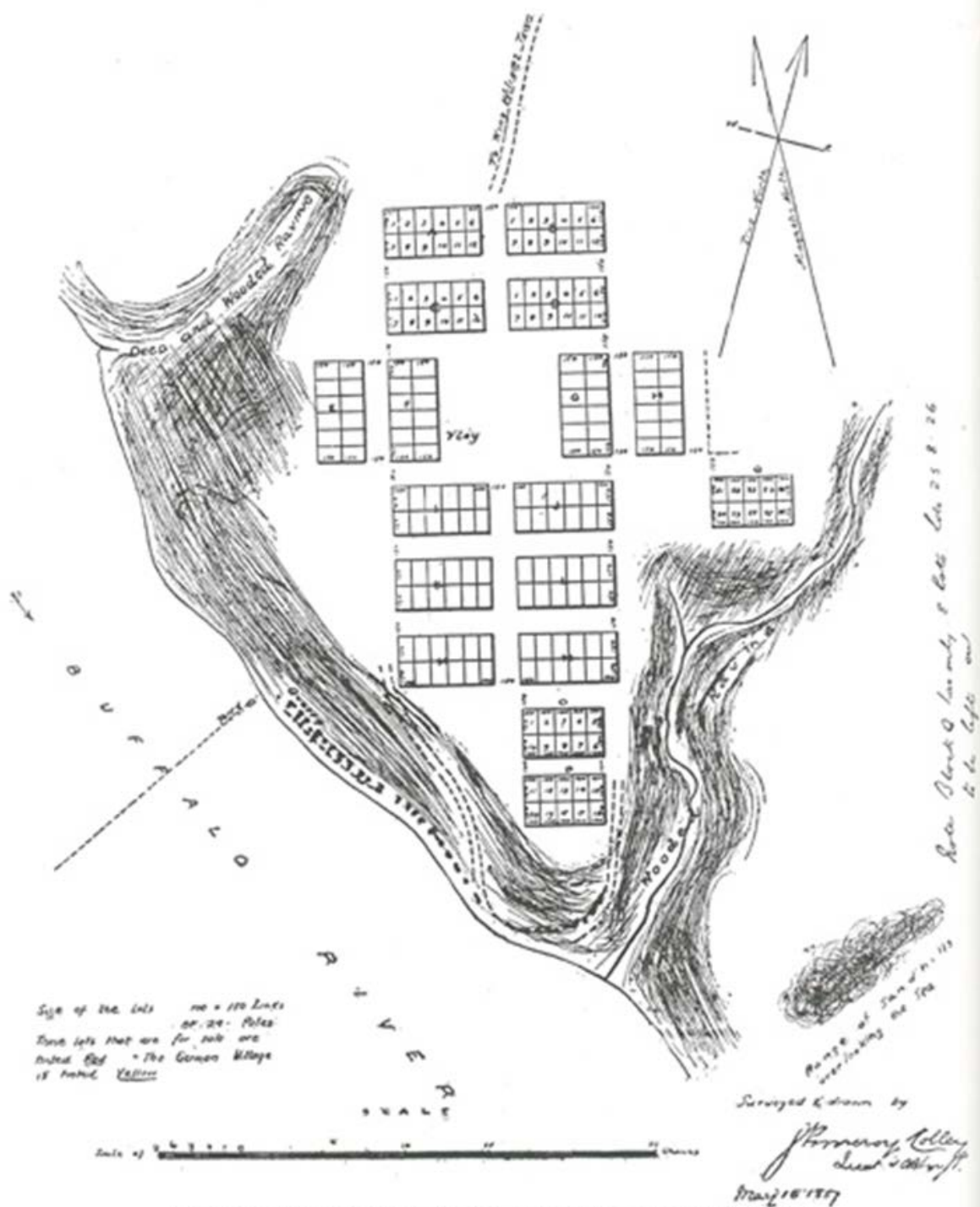


Map 7: Early map of East London by the Royal Engineers [www.artefacts.co.za]

Though the first inhabitants were British, it very soon received a German component by the arrival of first the German Legionnaires in 1857, followed by settlers chosen from the German peasantry who arrived during 1858 to 1865.

The German Legion immigrants were the result of a suggestion by Queen Victoria to find a solution for German soldiers in employ of the Crown during the Crimean War. As the Crimean war drew to a close in 1856 Britain was stuck with what to do with the German soldiers as returning to Germany might lead to being trialled for treason. Queen Victoria therefore suggested that they should be given the option to be taken up in the armies of British colonies. The first ship of German legionnaires arrived in East London in 1857 and after some deliberation on where exactly to erect a settlement for them, the decision fell on the east bank and lots were laid out at Panmure.

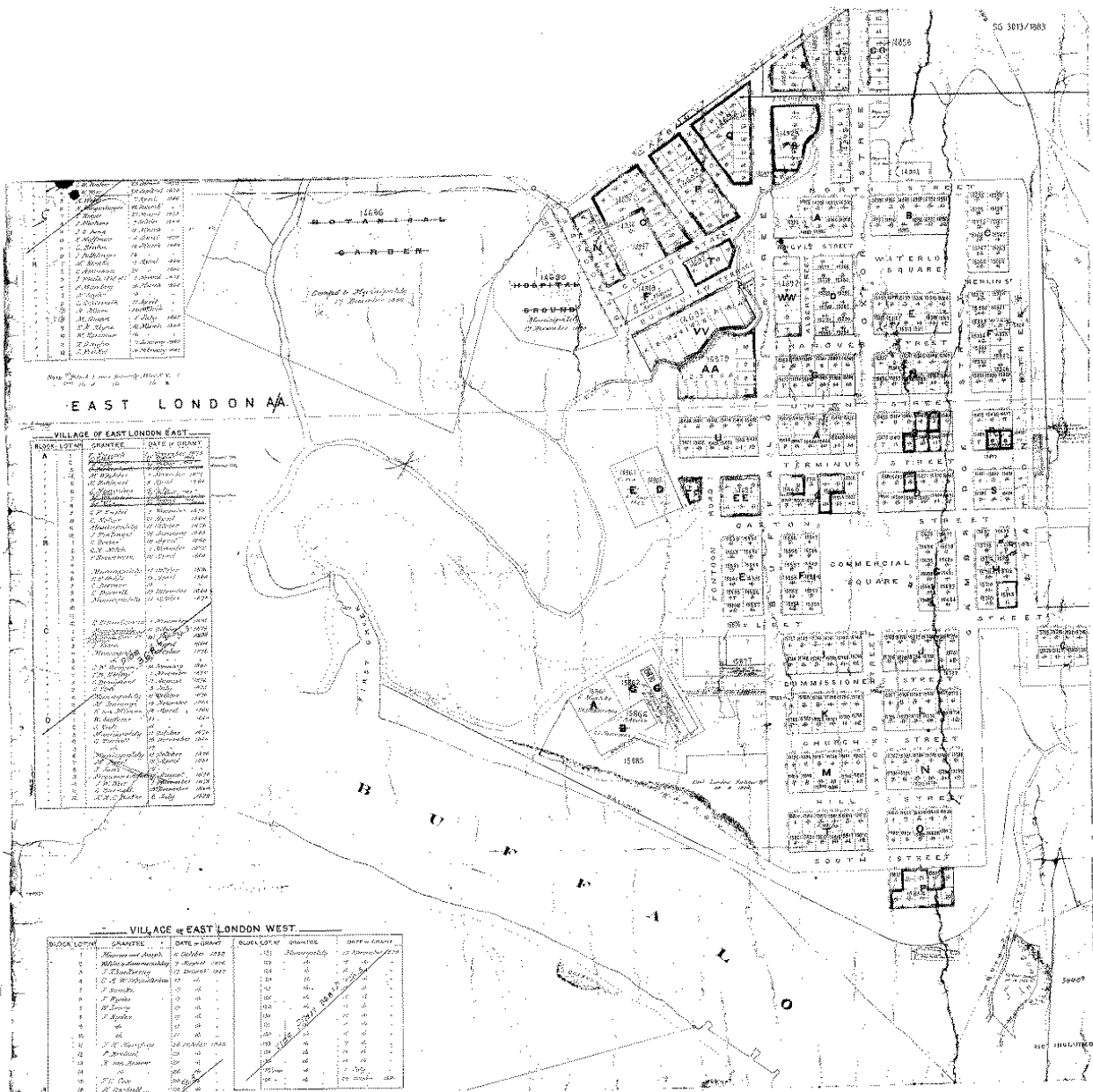
In a contract agreement between the Governor of the Cape and a merchant of Hamburg agricultural labourers from Northern Germany were sent to the Cape Colony. Of these 2081 arrived in East London and were located in various parts of the frontier districts but mainly in the valley of the Buffalo River. In East London they took up residence in Panmure which by then was largely deserted by the legionnaires with only a handful remaining. Refer to maps 8- 12 for a view of East London respectively in 1847, 1857 and 1883.



THE ORIGINAL PLAN FOR THE LAYOUT OF EAST LONDON.

The above is a reproduction of the original plan of East London, surveyed and drawn by Lieut. G. P. Colley (afterwards Sir George Pomeroy Colley) of the Queen's Regiment, who was killed in action at Majuba in 1881. The plan is dated May 16, 1857, and covers that portion of the town lying between the river and what is now Union Street. North of Union Street was the German Village. On the site now occupied by the Market Square, Sir George Colley recorded the presence of a viel and in the very early days citizens shot wild duck and snipe there.

Map 8: Plan of East London dd 1857 [Pamphlet 1]



Sheet 1	Sheet 2
Sheet 3	Sheet 4
Sheet 5	Sheet 6



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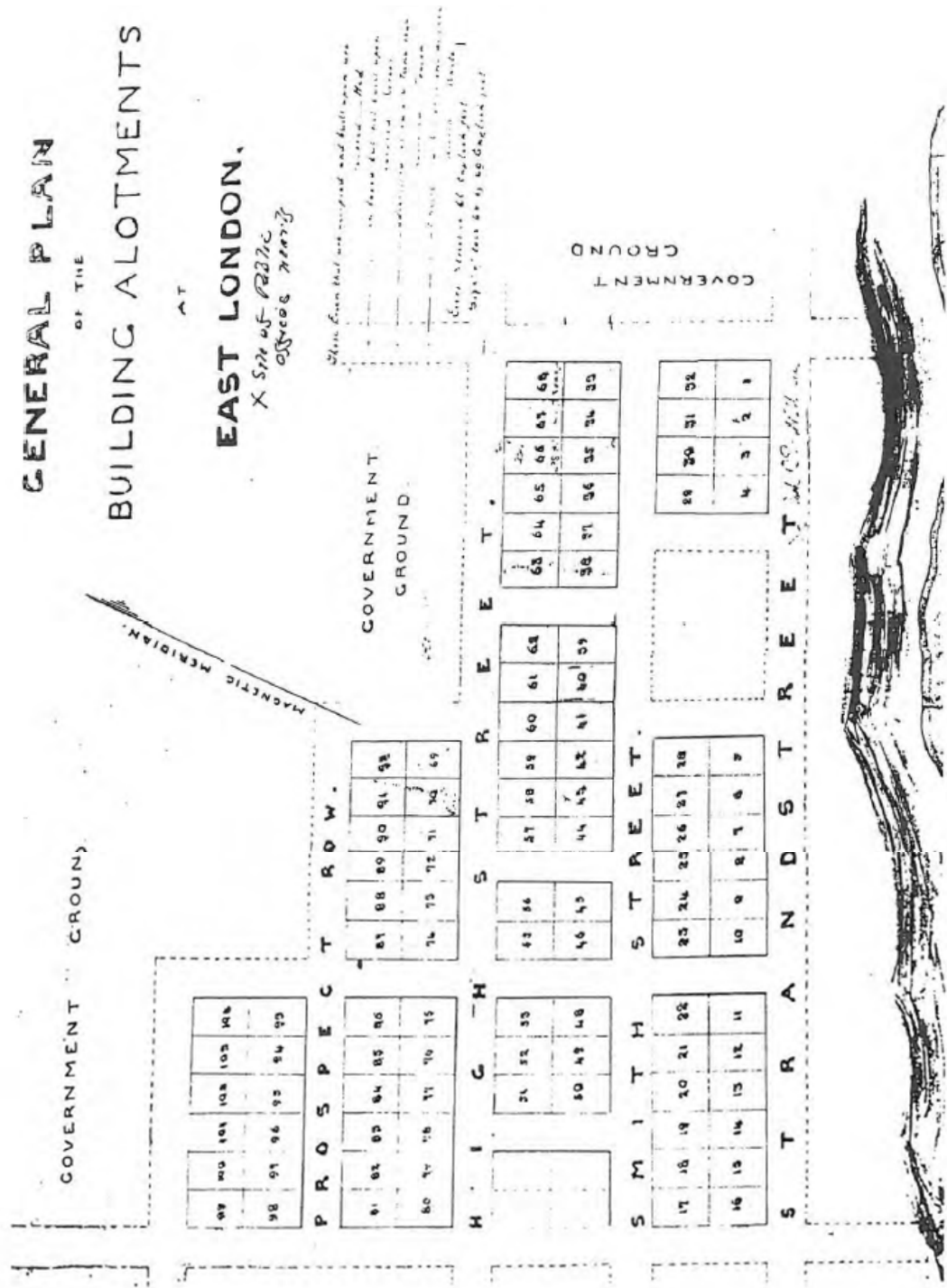
SHEET 2



Sheet 1	Sheet 2
Sheet 3	Sheet 4

Map 11: Section of Panmure dd 1883 [SG Diagram 3013/1883 Sheet 1]

GENERAL PLAN OF THE BUILDING ALLOTMENTS AT EAST LONDON, X Side of R222C of 1872



Map 12: General Plan of allotments on western bank, June 1849 [Tankard 1985, p127a]

Onomastic indications reflecting the British period in the history of East London include, but is not limited to, the following:.

East London - an obvious reference to London

Chislehurst – might refer to the London suburb, Chislehurst

Belgravia – a district in Central London

Highgate – a suburban area in London

Cambridge – a city approximately 80 km north of London

Abbotsford – a settlement in West-Sussex England, now part of Burgess Hill

Saxilby – a large village in the West Lindsey district of Lincolnshire, England

Dorchester Heights – might refer to Dorchester, the county town of Dorset, England

Several street names such as Oxford (a city in the south-east region of England) and Windermere (the largest natural lake in England) and also Brighton, Beaconsfield (Beaconsfield), Moore and Caxton, as well as streets named after famous British colonials such as Jameson and Rhodes, confirm the strong British character of East London.

Events in the history of East London are also reflected in other names such as Orient Beach which was originally Sandy Beach, a swimming area for men, but renamed Orient Beach after the Orient ran ashore at this beach at the entrance of the harbour in 1907. In 1917 the Galway Castle nearly followed a similar fate when it ran ashore at Orient Beach but fortunately escaped when she was able to return to deeper waters.



Figure 4: The passenger ship, Galway Castle, stranded at Orient Beach 1917 [East London Museum]



Figure 3: The Orient stranded at Sandy Beach 1907 [East London Museum]



Figure 5: Quanza Pools [East London Museum]

Quanza Pools created in 1904 is named after the Quanza, a four-masted steamship, that ran ashore in that area in 1872.

[artefacts.com; Tankard 1985; Tankard 2009a & 2009b; Theal 1878]

5.5.3 East London Harbour

The history of the harbour cannot be divorced from the history of East London as it was the very reason for the establishment of the city. After the initial assessment of the mouth of the river in 1835, it was on closer inspection found to be too shallow to allow larger vessels to enter. One of the first casualties on this account was the Lady Kennaway that came to a rest in the mouth of the river in 1858. Although the lagoon further up was sufficiently deep to allow larger vessels to dock there, a sandbank right at the entrance restricted entrance to the lagoon. Several attempts were made to combat this, but it was only with the arrival of the first suction dredgers in 1886 and 1891 that the entrance was sufficiently deepened to



Figure 6: Wreck of the Lady Kennaway at the entrance to the port [East London Museum]

allow larger vessels to enter. Figure 7 is a graphic illustration of the position of the sandbanks compiled by Dr Tankard [2009b] from the notes and sketches of George Gordon McKay who was the Clerk of Works at East London between 1872 until his retirement in 1881. His sketches also include maps from as early as 1835 that he compiled from notes of various people, e.g. Sir J Alexander (1835), Lt Forsyth (1847), the port captain, Capt Walker (1850), and so forth, until his own arrival at East London. Compared to the harbour today (Google Image in Fig 8), it is clear that until the sandbanks were removed there would be no viable harbour. At the same time training walls had to be constructed at the entrance to allow the force of the river to scour the sand bars. Pilkington's first attempts at these failed

but with the arrival of Sir John Coode in 1872 the harbour received its first defence against nature by the construction of breakwater walls at the entrance and training walls along both banks of the river.

In 1874 the first railway was built on the East Bank between the harbour and Queenstown. In 1875 the second wharf (after the previous one was destroyed in a flash flood) was erected along the eastern bank, followed by two more in 1876 and 1877 and in 1882 another two situated along the railway lines. No wharves were erected on the western bank on account of there being no bridges crossing the river. It is only in 1935 that the first road bridge was erected. Before this time a pontoon service between the two banks was in place in the same spot where the bridge is today.

The depth of the harbour, however, remained a problem and initial attempts were made using a crab dredger but this proved to be wholly inefficient. With the arrival of the first suction dredger (the Lucy) in 1886, the harbour underwent a rapid improvement. In 1891 a second suction dredger, Sir Gordon, arrived and the harbour was sufficiently cleared to allow larger ships to enter the port.

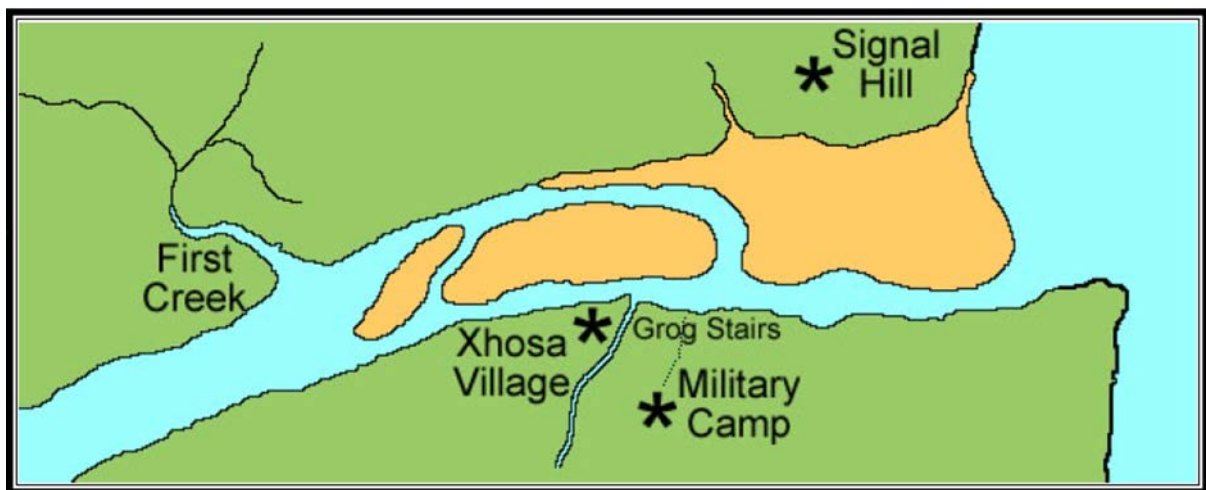


Figure 8: Graphic illustration of the mouth of the Buffalo River in its virgin state compiled by Dr Keith Tankard [Tankard 2009]



Figure 7: Google Image of East London harbour area



Figure 9: Early East London on the Buffalo River [Cape Colony Archives]

In 1894 the Harbour Board was established and several more improvements followed with the establishment of a siding timber yard in 1896 as well as a passenger landing wharf near First Creek. The latter is most likely the same wharf as what is known today as Latimer's Landing as will be seen in the following section.

A patent slipway to facilitate ship-building was constructed in 1896 on reclaimed land on the western bank of the river with walls constructed of hammer dressed dolerite blocks and the cradle using timber. The Victoria Slipway was officially opened by Sir



Figure 10: Victoria slipway [Martinson 2013]

Alfred Milner on 2 September 1897 and is one of several historical landmarks in the harbour area today.

Unfortunately the Harbour Board came to an end in 1908 when the harbour was transferred to the Cape Railways, the latter not having improvements at the East London harbour too

high on its list of priorities as constructing railway lines in the interior to link the various gold and diamond mines with the ports were of greater importance.



Figure 11: King's Warehouse c. 1908 [Martinson]

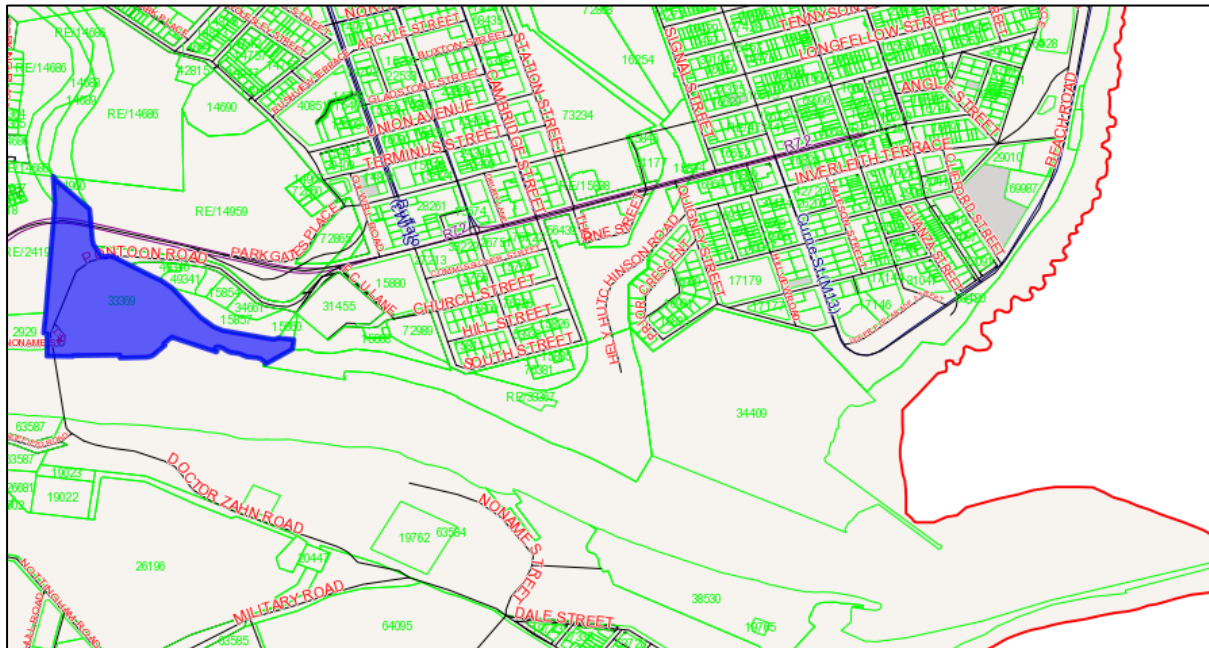
Other historical landmarks within the harbour area, or associated with the harbour, include the King's Warehouse (1905), the Pontoon bridge across the river which denotes the northern border of the harbour area, and the Hood Point Lighthouse (1895).

Cultural heritage falling within Latimer's Landing or are close to Latimer's landing, will be discussed in the following section.



Figure 12: Lighthouse at Hood's Point [Martinson]

5.5.4 Latimer's Landing



Map 13: East London, Erf 33369 (Latimer's Landing) blocked in blue [Cadastral map, Chief Survey General]

The historic Latimer's Landing precinct is situated on the East Bank of the Buffalo River within the harbour area and measures approximately 2, 400 m² in extent. [The section below the Pontoon Rd on the erf marked in blue on Map 13.]



Figure 13: ① Latimer's Landing (jetty-1896)(coelacanth-1938); ② Historical Land Bridge (1946); ③ Princess Elizabeth Dock Memorial (1947); ④ Princess Elizabeth Graving Dock (1947); ⑤ Bruce-Bays Bridge (1935); All red-roofed buildings are older than 60 years.

The first mention of any development in the area today known as Latimer's Landing, is the construction of the passenger wharf at First Creek in 1894. It is highly likely to be the same wharf that is today called Latimer's Landing. The name is derived from the event that turned this humble wharf into a place of importance. It was here that the curator of the local East London Museum, Marjorie Eileen Doris Courtenay-Latimer, identified a 'fossil fish' thought to be extinct for 70 million years among the catch of a local fisherman. This would later be described as the zoological find of the 20th century. The coelacanth was named *Latimeria chalumnae*, after Marjorie as well as the name of the place where the fish was caught.

Marjorie received the freedom of the city of East London in 1974 and an honorary doctorate from Rhodes University in 1971.



Figure 14: Postcard signed by Marjorie Courtenay-Latimer

The jetty is also claimed to be the only remaining wooden jetty in the country. It is situated adjacent (upriver) the Princess Victoria graving dock that was completed in 1946. Behind Latimer's Landing jetty and next to the graving dock is the Princess Elizabeth dock monument erected at the same time as the dock – both were officially opened by Princess Elizabeth (now Queen Elizabeth) in 1947. The land bridge in the area between the jetty and the memorial is also a historical structure, dating to 1946. In addition to this, all the red-roofed buildings in Figure 13 are older than 60 years and accordingly are also protected under the National Heritage Resources Act, No 25 of 1999.

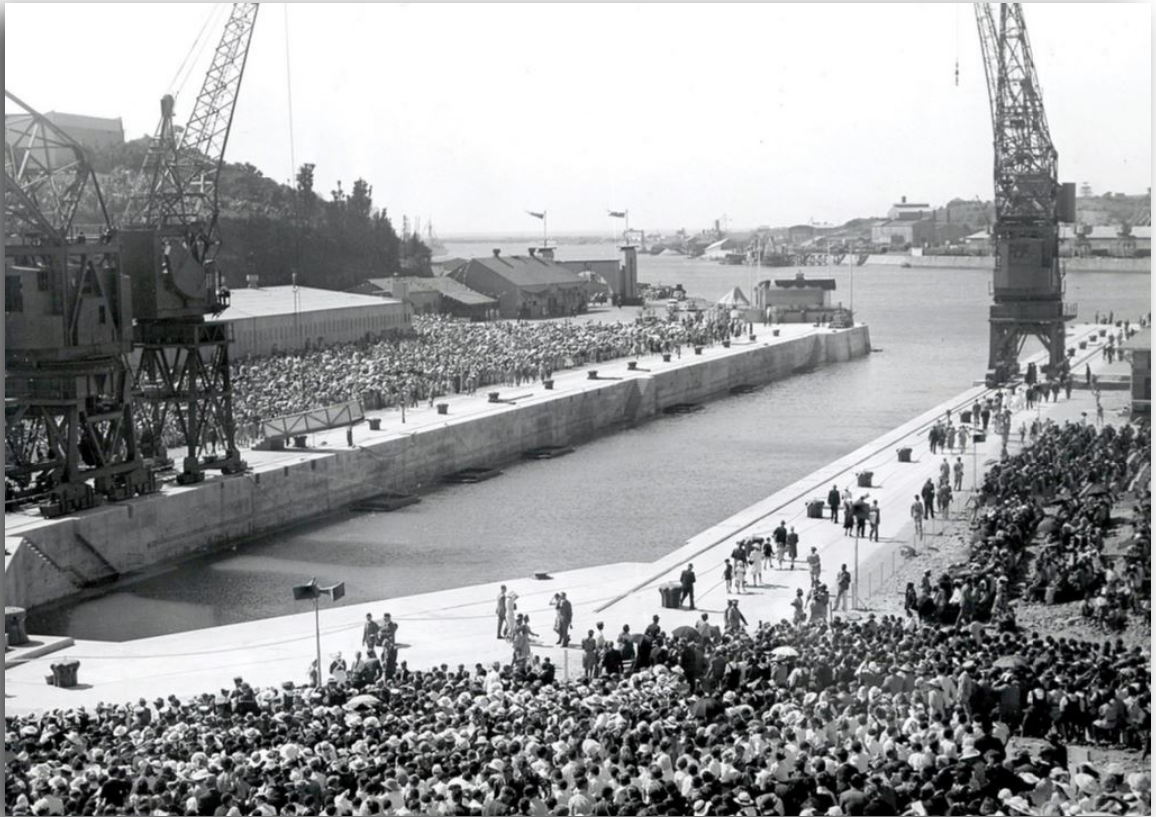


Figure 17: Opening ceremony of the Princess Elizabeth graving dock on 3 March 1947 [SAR&H]



Figure 16: Princess Elizabeth Memorial [Martinson]



Figure 15: Historic land bridge at Latimer's Landing [Martinson]



Figure 18: Original Molteno Bridge over Buffalo Rive(1870s) [SAR&H]



Figure 19: Bruce-Bays Bridge constructed in 1935 [SAR&H]

The historic Pontoon Road or Bruce-Bays double-decker bridge adjacent Latimer's Landing forms the northern border of the harbour. The original bridge was built by the Molteno Government in the 1870s as part of its East London – Queenstown line [See figure 18].

In 1935 it was replaced by the Bruce-Bays bridge (Dr James Bruce-Bays was the mayor at the time), a double-decker bridge carrying rail on the lower deck and a road at the upper deck. [Figure 19]

It is claimed to be the only double-decker bridge in southern Africa.

[Sources for both Harbour and Latimer's Landing: Martinson; Robson 2011; Robson & Oranje 2012; Smith 1903; South African Railway & Harbours Archives; Tanard n.d. & 1985 & 1990 & 1999 & 2009(a) & (b)l Theal 1878; Braby Genealogy]



Figure 20: Bruce-Bays Bridge 2015 [National Museum]

5.6 Heritage significance based on desktop study

The first assessment is based on the results of the desktop study using the criteria as set out on pages 8 – 10 of this report:

Historical Value: The jetty at Latimer's Landing is representative as typical example of early wooden jetties and is purported to be the only remaining one in South Africa. It is also said to be the jetty where Ms Courtney-Latimer identified the 'fossil-fish', the coelacanth, among the catch of a local fisherman and is the jetty named after her. The jetty, as well area, is therefore of historic value.



Figure 21: Plaque erected at Latimer's Landing [Wikipedia Commons]

Community Association:

The jetty is currently closed to the public on account of the instability of the structure. Strong feelings were expressed via the media on the poor condition of the area as a whole. The jetty is, despite its history, not listed as part of the National Estate.

Commemorative value: The jetty has commemorative value in terms of the place where the coelacanth was

identified, but it is also a memorial to the person who made this important discovery.

Symbolic value: No known symbolic value

Educational value: The entire Latimer's Landing precinct has the potential to be of educational value. The landing itself is a good indication of the small scale of passenger ships in the 1800s. The coelacanth connection can be used to bring about a greater knowledge of fossils. As a leisure and entertainment area, the place is accessible to the public.

Archaeological value: In terms of its archaeological value it can be viewed as a representative example of a site type, feature and activity (i.e. its original purpose as passenger wharf).

Technological value: (in this case it would refer to technological accomplishments in the building industry). The wharf is a typical example of a wharf or jetty during the time it was constructed and as such has no outstanding technological value.

Architectural value: (design) As above.

Context: (The extent to which the place forms part of a wider historical and cultural context or historical and cultural landscape). The wharf is important in terms of the early years and history of the harbour and forms part of several other structures dating from the same period within the harbour area. At the same time the coelacanth connection that dates to 1938 ties in with the historic structures in and around Latimer's Landing, i.e. the Bruce-Bays bridge (1935), the graving dock and memorial (1947), and the land bridge (1946) in the area between the jetty and memorial. As such it forms an important component of a whole as cultural heritage landscape. As visual amenity it provides a glimpse of life as it was during the late 1800's/early 1900s. If marketed properly it has the potential to become an important landmark.

Rarity: If claims of this jetty being the only surviving wooden jetty in South Africa prove to be correct, then it would be rare in the context of the country.

Credibility of Resources:

The assessed value is directly related to the credibility of resources consulted for the background study. The late Dr Keith Tankard (historian) is widely recognised as an authority on the history of East London and in this I have relied extensively on his publications, both peer reviewed and from his website on East London (<http://www.eastlondon-labyrinth.com/>), for information. Where possible I have verified facts against other sources and included any relevant sources in the bibliography and below each relevant section. Information on the prehistory of the area was similarly obtained from peer-reviewed articles or publications by acclaimed professionals in their various fields of expertise.

In terms of the assessment criteria for credibility of resources, room is left for gaps in the research where no verifiable information could be found. Despite the importance of the coelacanth find, very little information could be obtained on Ms Courteney-Latimer, nor the wharf where the coelacanth was identified. Photographic material was requested from the East London Museum but none was received. As such the credibility of the information supplied is, in terms of page 10, rated as 80%.

Proposed Grading: [Primarily based on its commemorative and context value]

Grade	Administrative level	Description	Recommended mitigation
Grade II	Provincial	Heritage resources which, although forming part of the national estate, can be considered to have special qualities which make them significant within the context of a province or a region	Heritage resource should be nominated as a Provincial site/object, and included in the National Estate.

6. Site Report

6.1 Jetty Construction Terminology

Piles or posts = a long slender column usually of timber, steel, or reinforced concrete driven into the ground to carry a vertical load

Beam or bearer = A squared-off log or a large, oblong piece of timber, metal, or stone used especially as a horizontal support in construction. In double-bearer construction beams run on both sides of the posts which ensures greater stability of the structure. The bearers typically support the joists.

Joist = a length of timber or steel supporting part of the structure of a building, typically arranged in parallel series to support a floor or ceiling.

Deck Boards are fastened at an angle to the joists to form the floor surface or deck.

Revetment = a retaining wall or facing of masonry or other material, supporting or protecting a rampart, wall, etc

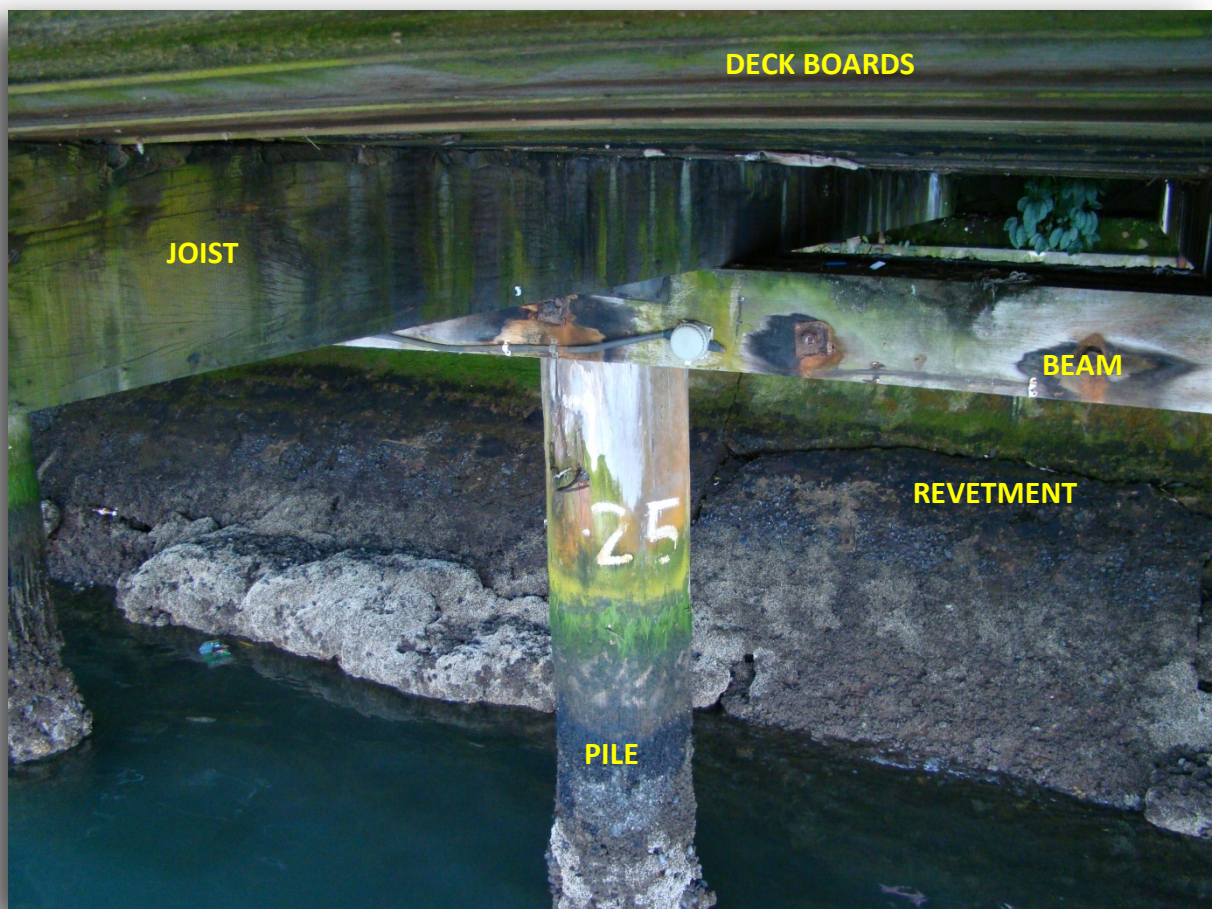


Figure 22: Graphic illustration of various sections of a jetty [National Museum 2015]

6.2 Assessment of physical condition of jetty

The main focus of the site visit was to determine the current condition of the Latimer's Landing jetty and its setting within Latimer's Landing precinct. The jetty is currently closed off and not accessible to the public. It is a wholly timber structure, and particular attention was paid to the condition and stability of the support posts (piles), support beams, joists, deck boards and structural bolts. These are in whole its construction components. The condition of the revetment of the slope does not have a direct influence on the jetty but certainly on the stability of buildings close to the edge of the river and is, therefore, equally important.

The jetty referred to in this study, is, in fact, a wharf. Although jetties and wharves are very similar in their construction, the main difference lies in that jetties are constructed perpendicular to the shoreline whereas wharves are constructed to run parallel with the shoreline. The word comes from the old English word 'hwearf' which means 'bank' or 'shore' which confirms its main orientation. A wharf is also called a landing and as such explains the origin of the name of both the jetty and Latimer's Landing precinct. It is at this jetty that Marjorie Courtenay-Latimer in 1938 spotted the coelacanth among the catch of a local fisherman. It is safe to assume that during the 1930s, at least, the purpose of this landing was for smaller fishing trawlers to offload their catch of the day. Historical records, however, indicate the original purpose at the time it was built (1896) was to serve as passenger landing. In this report, however, it will be referred to as a jetty as called in the Scope of Works document received from the client.

The jetty is a plain wooden structure totally lacking in decorative elements, i.e. built for function rather than aesthetic purposes. It was constructed ten years after the dredging of the sandbanks of the harbour started in 1886. The desktop revealed that the eastern bank originally had very steep sides. The site visit, however, proved the area to be reasonably level at the bank of the river. The same historic documents, however, also mention reclamation of land along the eastern and western banks of the river. Early maps show extensive quarries along both sides of the river and it is presumed that a mixture of gravel and soil dredged from sandbanks by the suction dredgers was used for the build-up of both banks of the river. To prevent soil from the scarp to wash away and form new sandbanks in the harbour, the scarp was treated with a revetment of larger rocks, covered by a layer of concrete similar to the original breakwalls built at the entrance of the mouth.

In a section under the jetty where a storm water outlet feeds water into the river, the concrete has sufficiently eroded to reveal gravel with bigger rocks at the bottom of the scarp. The revetment, therefore, was already in place by the time the jetty was built and all that was required was to put up the structure.

What is of importance in this observation is that the area under the revetment is likely to have originated from either the bottom of the river or the nearest quarry site which would be, as can be seen in this early photograph of First Creek, the hills behind the creek.



Figure 23: The Municipal Power Station in First Creek, 1902. Note the gravel along the banks of the creek and the carved out section of the hill for the road beneath it, Pontoon Road [East London Library]



Figure 24: Exposed gravel at the mouth of the outlet as well as the bottom of the scarp with larger rocks immediately beneath that. [National Museum 2015]

The first stage of the construction of the jetty was, therefore, the planting of the piles; one row parallel with the scarp and a second row in a parallel line with the first to form the waterside pillars. The second stage involves the stabilisation of piles by wedging each row between two beams fixed to the top end of the piles so that all piles in a row are linked to each other. In several sections a back row pile is connected to its corresponding front row

pile by wedging it between two beams at the lower level of the piles. Following that is the laying of the joists at an angle with the beams to link the front and back row of piles with each other and at the same time to form the platform that the board decks would rest on. The board decks in turn are laid at an angle with the joists so that it has the same orientation as the upper beams. Changing the angle of each successive layer of the construction serves to strengthen the final product.

The most likely wood species that was used for the construction of the jetty is Sneezewood, a hardwood indigenous to the Port Elizabeth region. Historical records indicate that Sneezewood (*Ptaeroxylon obliquum*) or umThati in Xhosa, for fence poles and building material for farms and towns in the tree-deprived Free State was obtained from East London. It is an extremely hard and durable wood and as a consequence highly valued as timber for fence posts, buildings and in the past also railway sleepers. It can last almost indefinitely in water and thus makes it ideal for bridge and jetty construction. Any wood product, not only softwood but also hardwood, however, is susceptible to deterioration under favourable conditions which in general are: Fungi (decay), Wood borers, Termites, Fire and Weathering. Decking timbers that are exposed to leaching and weathering are in particular subject to wood-boring insects, drywood termites and decay (fungi). Although termites in general prefer softwoods, water and fungi can make hardwood soft which makes it more attractive to termites.

Piles: The condition of the support posts is of particular concern. Several of the piles show severe deterioration which in itself is sufficient to render the jetty unsafe. At least one post has already collapsed. The culprit in this case is most likely marine borers which can be divided into Molluscs and Crustaceans. Marine borers are found all over the world and are, accordingly, also found along the South African seashore. They are most active in tropic zones and in particular in large river estuaries where the lower salinity is more conducive to their growth. Unlike molluscs which often leave the surface of the wood intact, the damage caused by Crustaceans is not concealed. They work mostly between the high and low water mark and eat the pile away until it develops a typical 'hourglass' appearance [See Fig.26]

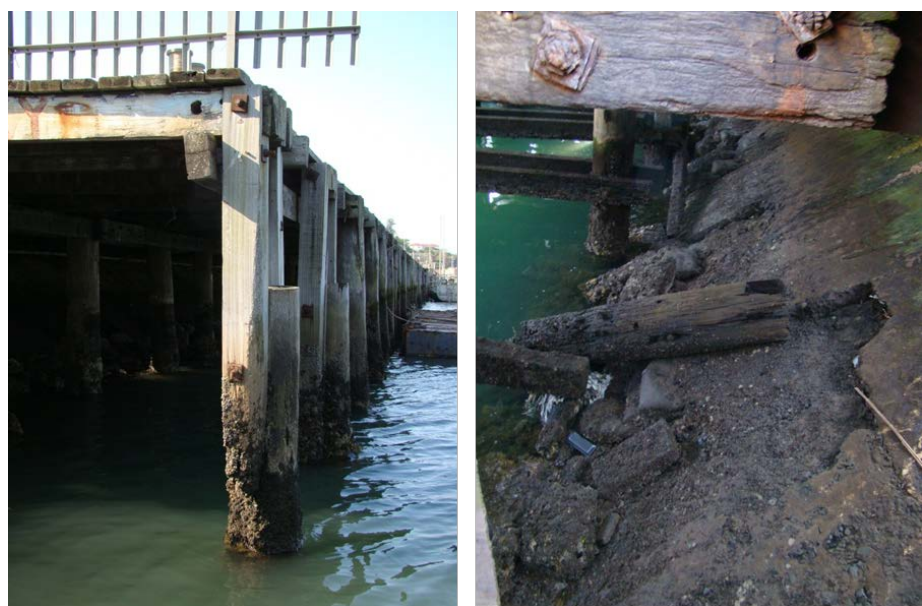


Figure 25: Collapsed pile (right) and reinforced corner pile (left)[National Museum 2015]

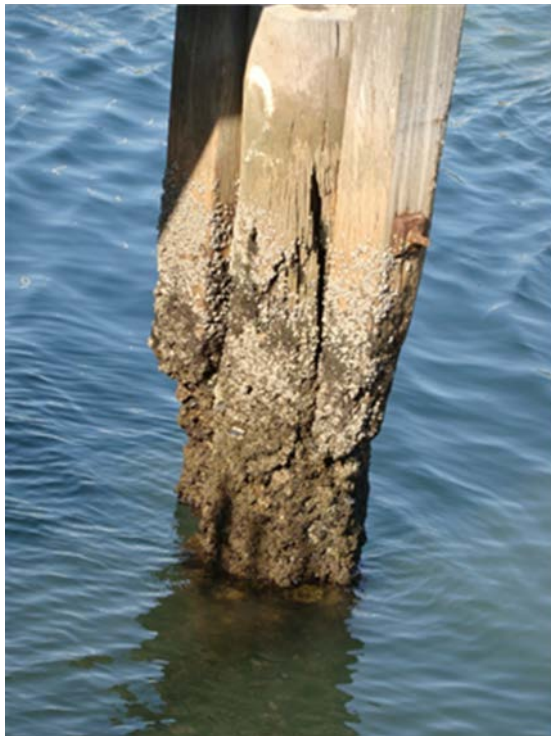


Figure 26: Piles showing varying degrees of deterioration [National Museum 2015]

Support Beams: The upper support beams are least affected which can be attributed to the fact that it is to some extent protected from both heat (sun) and water on account of its location. It would therefore be less susceptible to fungi infection. It should be noted that these sections of the current jetty might be used to cut new sections for the deck to replace those sections which have deteriorated beyond repair. The lower support beams, however, have suffered the same fate as the piles. The piles are supported by double beams on both upper and lower ends although not all piles have lower support beams.

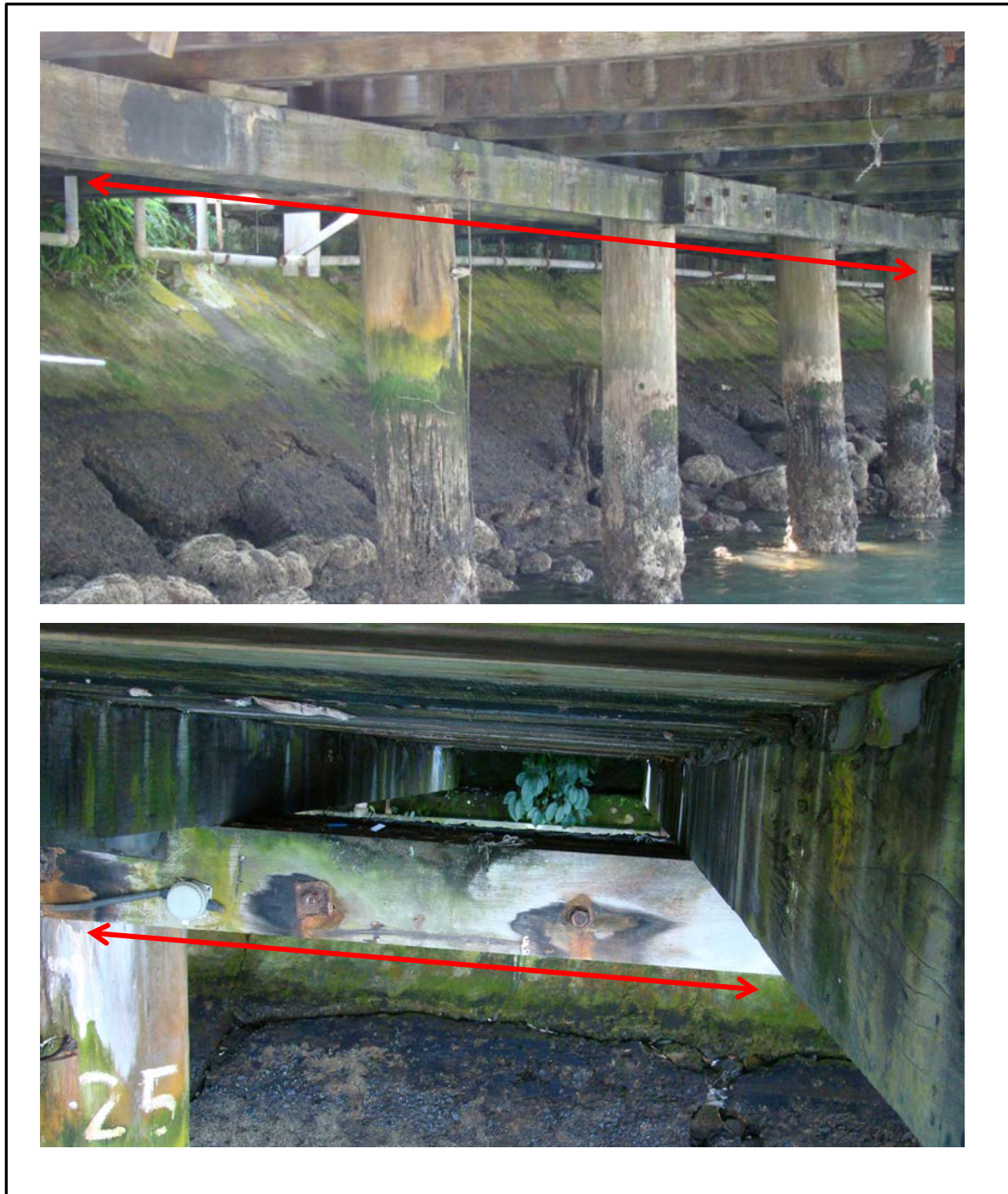


Figure 27: Upper support beams indicated with red line [National Museum 2015]

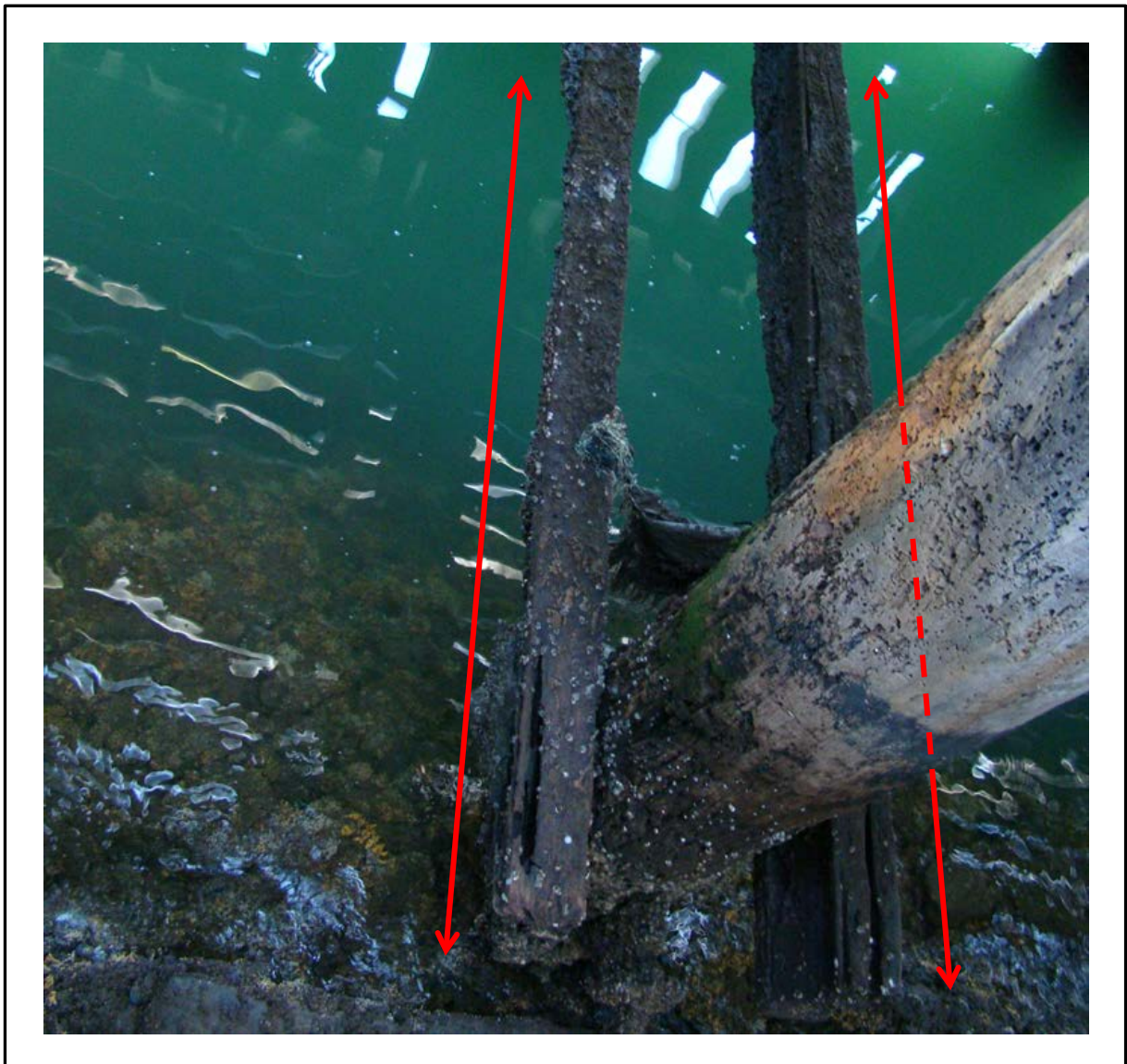


Figure 28: Lower support beams (indicated with red lines) are situated below the high tide water line [National Museum 2015]

Joists: The joists are situated just below the deck and serves as support for it. Several, although not all, joists show signs of deterioration.

The sections of joists closest to the revetment wall on the one end and on the waterside on the other end, seem most affected. Conditions on the revetment side would be more humid during hot days where moist hot air would be trapped and thus create ideal circumstances for fungi growth than it would be, for instance in the middle section where the air can freely circulate to cool it down.

At the water end the joists are exposed to the heat of the sun as well as rain which renders it in the same vulnerable position as the much thinner decking, unless treated.

Joists run parallel to the lower support beams as can be seen in Fig 27.



Figure 29: Joist end on revetment side showing an advanced stage of decay [National Museum 2015]

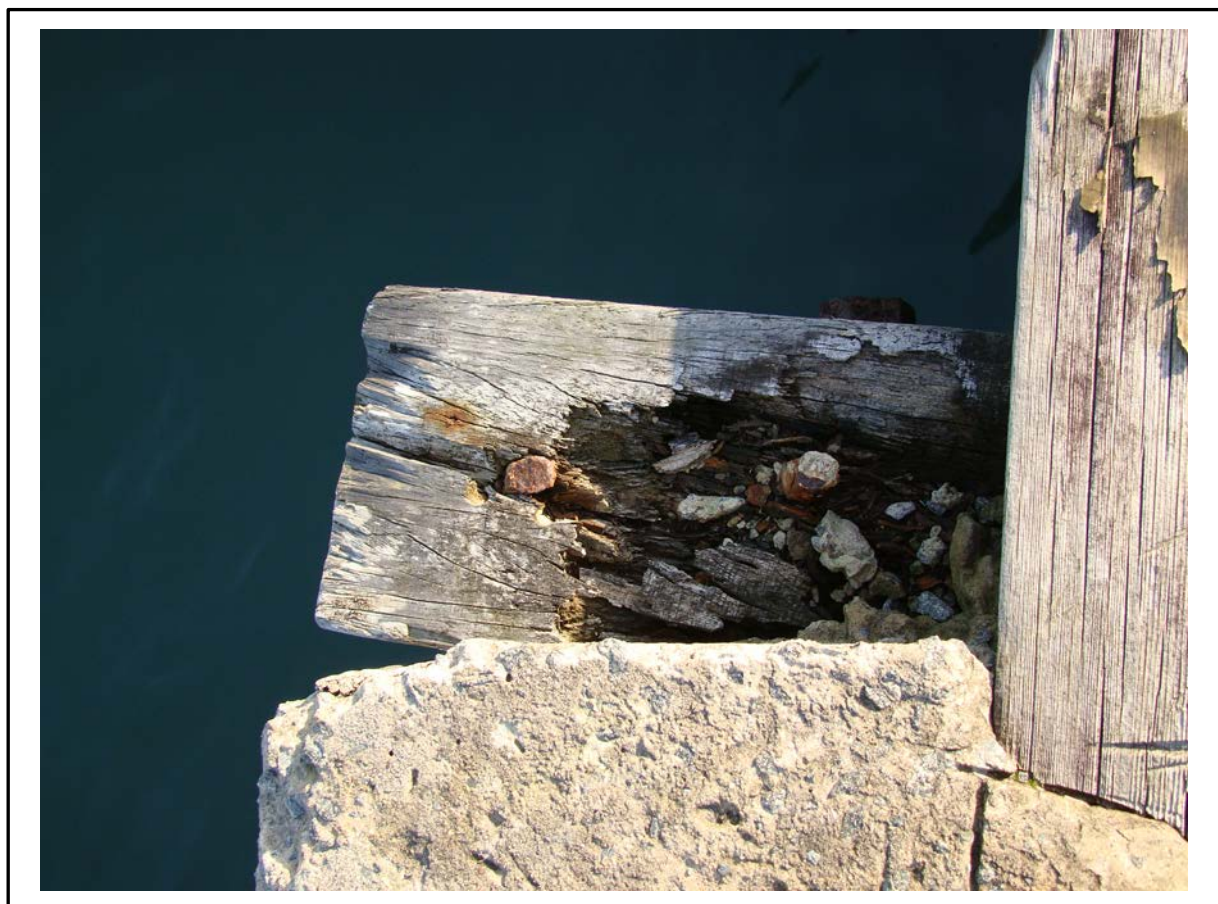


Figure 30: Exposed end of joist on the water side showing an advanced state of decay [National Museum 2015]

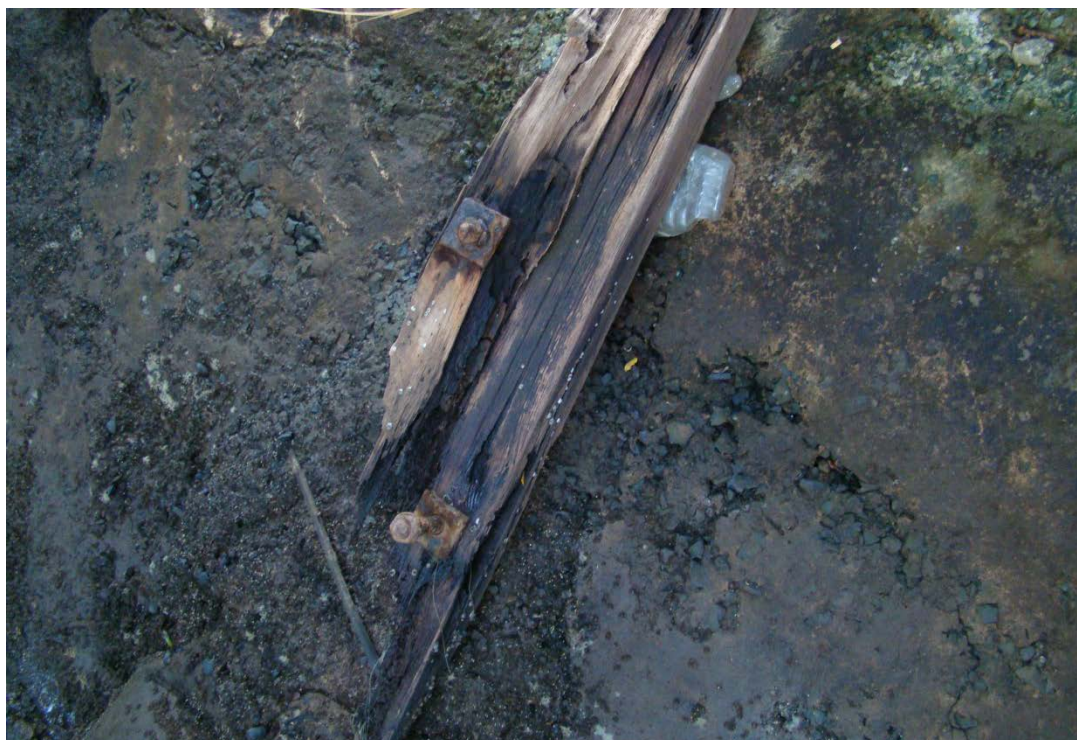


Figure 31: The collapsed pile showed in Fig 23 appears to have taken down a section of the joist it was attached to which indicates that the joist was also infected at the time and thus not able to withstand the gravitational force [National Museum 2015]

Deck: The deck is in a very poor condition. Not only is it the most accessible section of the jetty and therefore the area that could be most thoroughly inspected, but is it also the section that is most exposed to the elements and therefore has the most favourable conditions for decay. Several sections of decking material are missing and the remainder rise and fall from one end to the other to create a ripple effect. The deck is clad with deck boards of varying lengths with an average width of 22 cm and a diameter of 7 cm.

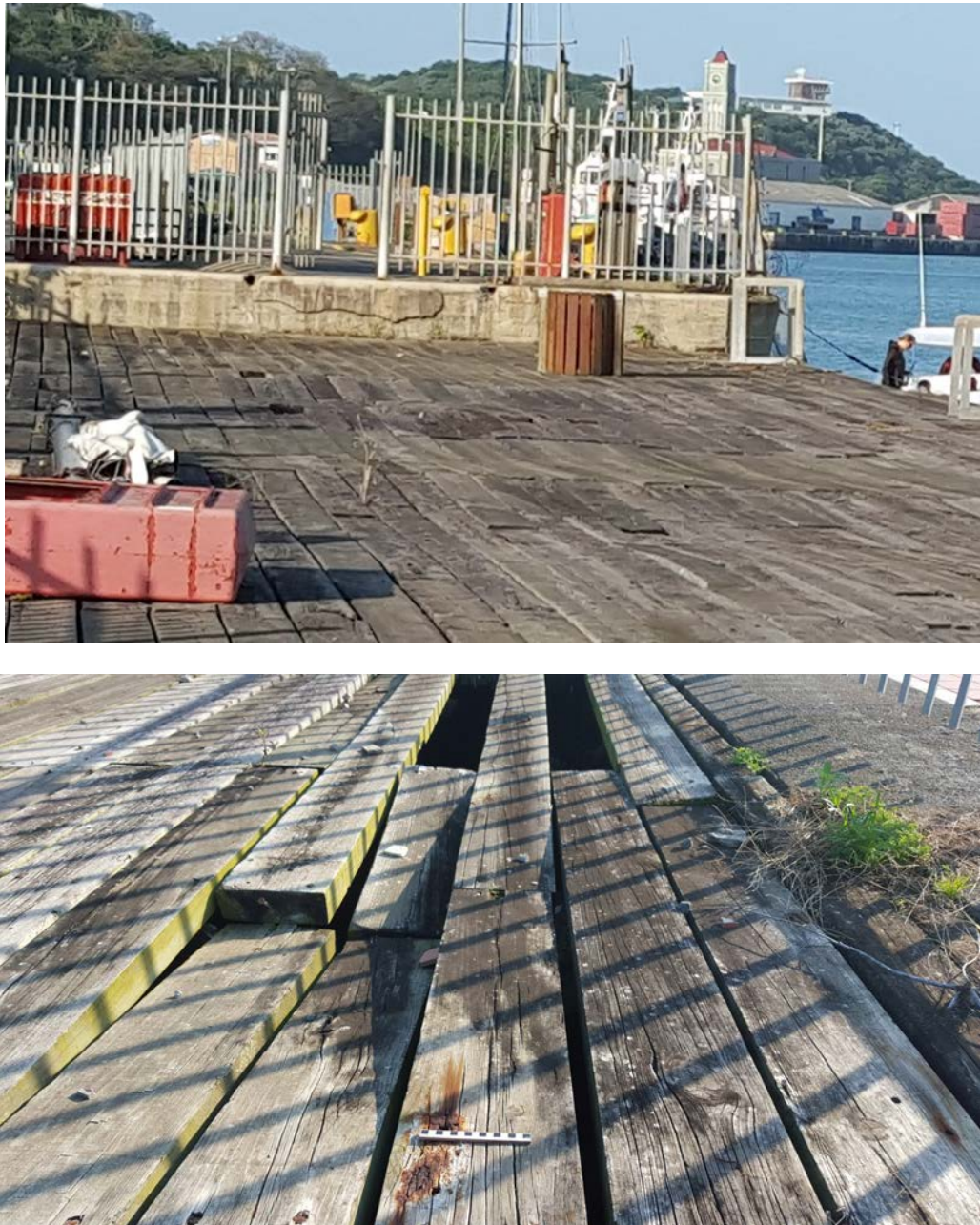


Figure 32: Decking showing sagging and rising sections with missing panels [National Museum 2015]

Unlike the case with the riverbed-lodged piles which have been damaged by marine borers, the likely culprit with the deck boards is fungi and potentially more than one kind. Fungi that can cause decay in timber are mainly classified in two groups namely wood destroying fungi and wood disfiguring fungi, although some fungi can be representative of both groups. With the evidence at hand the focus in this case will be on wood destroying fungi. These fungi feed on the compounds of the cell wall of wood and as a consequence can weaken the structure of the wood to such a degree that the wood breaks and crumbles away. There are mainly three groups of wood destroying fungi namely (1) brown rots, (2) white rots, and (3) soft rots. In advanced stages of decay it could be more readily distinguished from one another but microscopic inspection will confirm any prognosis.

The characteristic feature of brown rot fungi is that the decaying wood is brown and shows brick-like cracking. Softwood and the lighter hardwoods are most often attacked by this type of fungi. In an advanced stage the surface can become badly broken by deep transverse and longitudinal cracks and appears similar to wood that has been charred by a fire.

White rots, on the other hand, does not crack in the same way as brown rots in badly decayed timber and the wood become lighter instead of darker. The timber breaks down in a longitudinal direction and there may be pockets of decayed wood between apparently sound areas.

Soft rot is caused by fungi related to the moulds rather than those responsible for brown and white rot. It is typically very shallow and immediately below the area of rot the wood may be firm. Dried surfaces will show a profusion of cracks and fissures with and against the grain (but not in the same brick-like manner as brown rot). Hardwoods are normally naturally susceptible to this form of decay.

Drywood termites can also cause extensive damage and the *Cryptotermes merwei*, an indigenous species which has only been found infesting outdoor structures, is distributed along the coastal belt from Durban to Port Elizabeth. Termites typically leave a gallery of tunnels just beneath the thin upper surface layer of the wood. A tap of the surface layer will sound hollow and will easily break away to expose the gallery beneath.

Apart from the marine borers there are also other types of borers that might cause damage to wooden structures. Noteworthy is the *Hylotrupes*



Figure 33: A weathered historic Sneezewood fence post

Bajulus located in the coastal areas of South Africa with exceptional seriousness in the Eastern Cape and Western Cape. It attacks the sapwood of softwood with no visible symptoms until exit holes appear. Similarly so, it may also attack hardwood already weakened by fungi. The presence of boring insects is typically indicated by round to oval shaped holes visible on the surface layer of the wood.

Not all deck boards are necessarily infected by fungi, termites or borer insects and could purely be badly weathered as the example of the Sneezewood post in Fig. 31. Although the evidence of infestation to some degree or other from boring insects, fungi and/or termites should be determined by a wood expert, the following photographs indicate the presence of one or perhaps all of them.

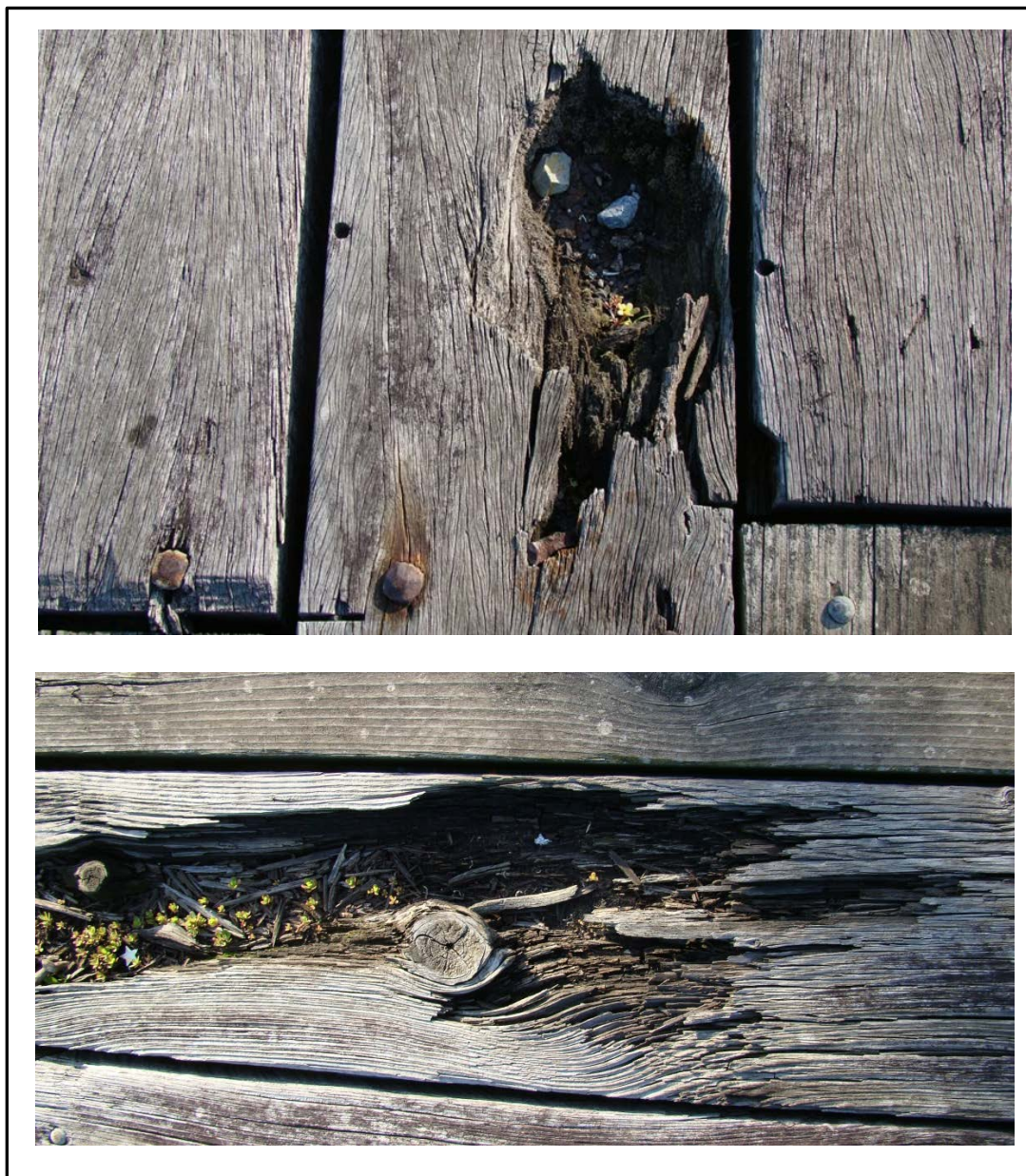


Figure 34: Exposed pockets of decayed wood [National Museum 2015]

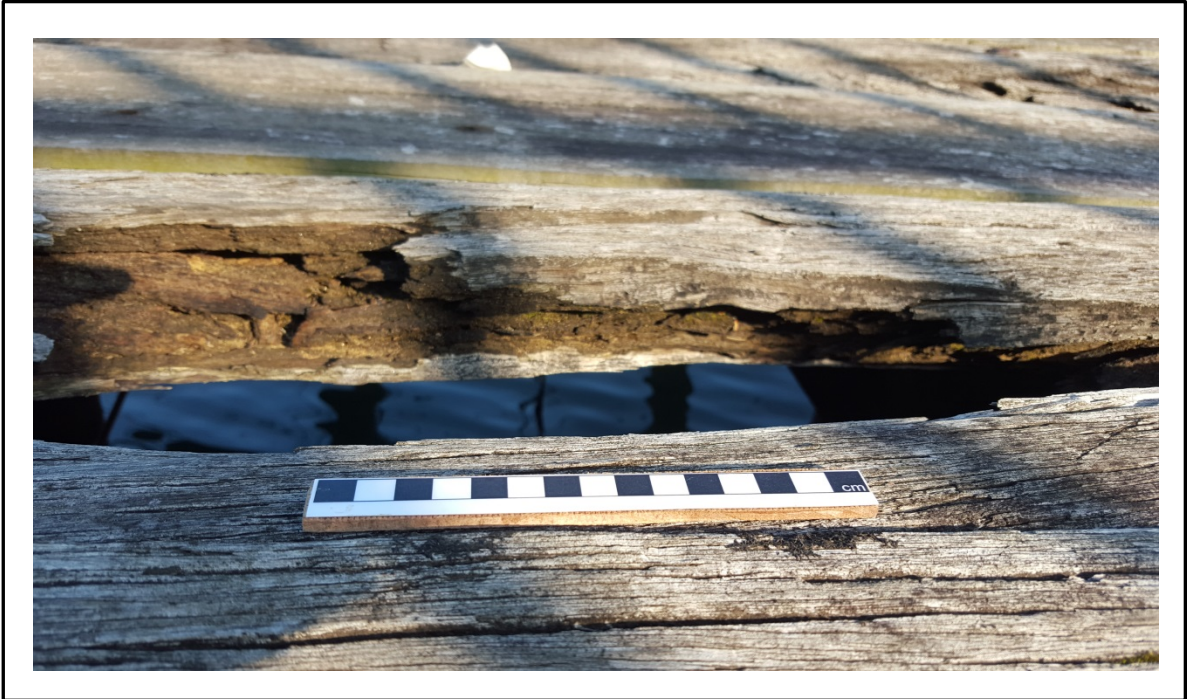


Figure 35: Subsurface tunnelling [National Museum 2015]



Figure 36: Sections of wood (left) showing signs of tunneling, a section of severely decayed wood (middle), and a row of boring holes (right)

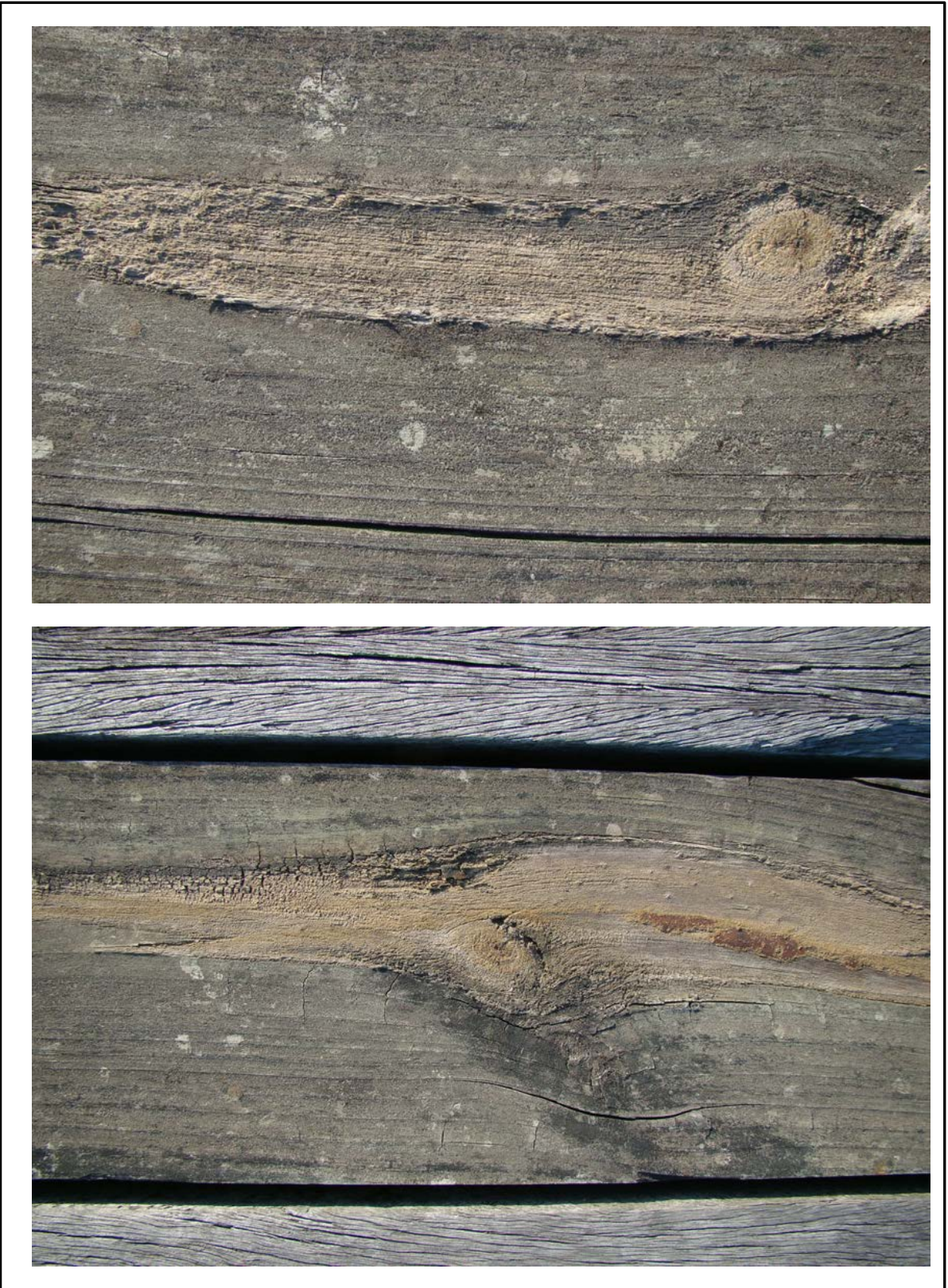


Figure 37: Fungal growth [National Museum 2015]



Figure 38: Slug and Snail trails could be a sign of fungal infection as snails feed on fungi [National Museum 2015]



Figure 39: Rotten interior section resembles burnt wood. Exposed nail indicates this board section to be part of the original jetty [National Museum 2015]

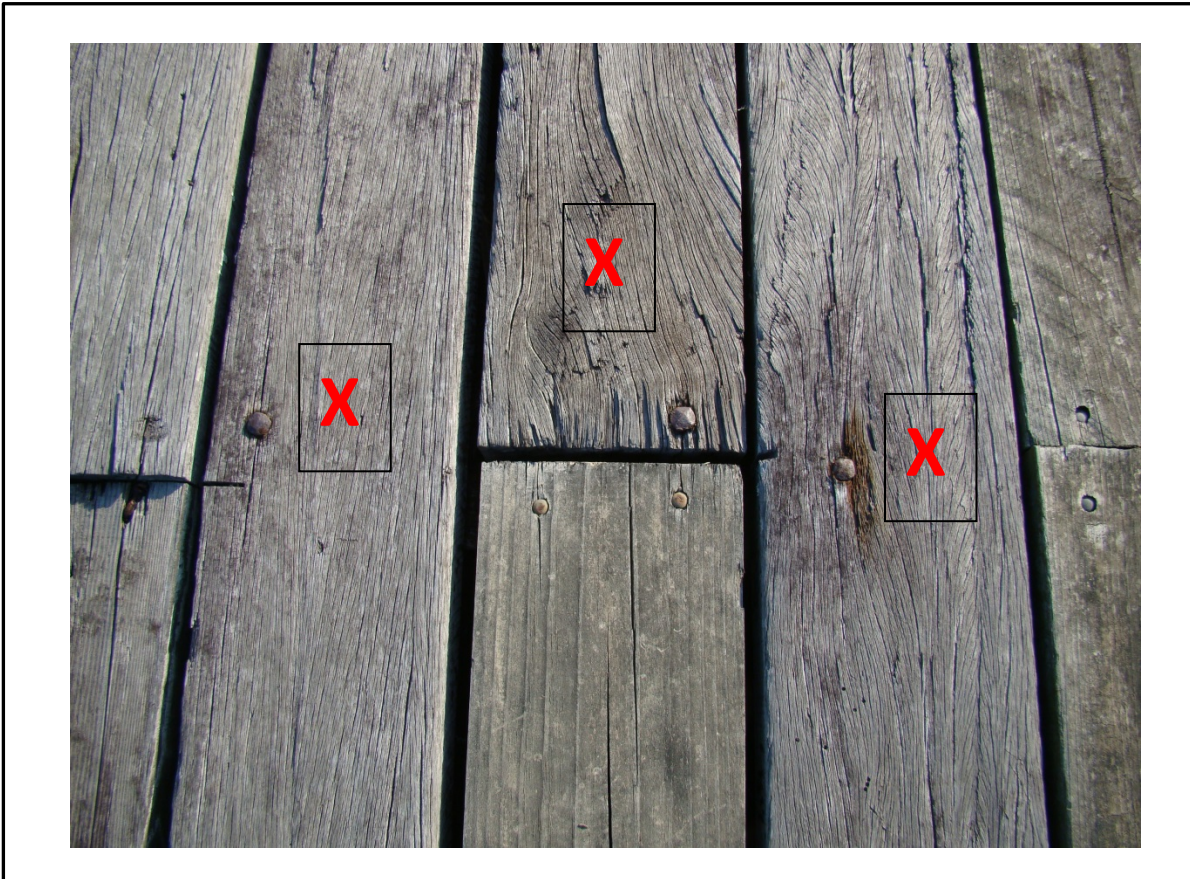


Figure 40: Decking boards marked with an 'X' appear to be older than the unmarked ones. The majority of boards marked with an 'X' are fixed to the joists by older nails and most likely originates from the first construction phase of the jetty in 1898. [National Museum 2015]

The jetty has seen some repair work over the years as difference in wear and weathering on the various deck boards confirm. In Figure 40 this can be deduced from the following signs:

- Deck boards marked with a red X are more weathered than the others.
- All of the X-marked deck boards are fastened to the joists by older type iron nails [see next section]
- Saw marks in line with insert ends as can be seen in the left and right X-marked boards is indicative of sections of a board having been removed in-situ.

Nails, bolts and screws: A variety of screws, nails, nuts and bolts were used on the structure during the past +100 years. Galvanised screws are younger than the normal iron variety. Although screws and bolts have been around for a long time, it is easier to identify broad age groups for nails according to their appearance. Nails from the more weathered sections of wood as indicated in Figure 40 are identified as type B cut nail that dates circa 1810s-1900s. As the jetty was constructed in 1896 this falls within that timeframe.

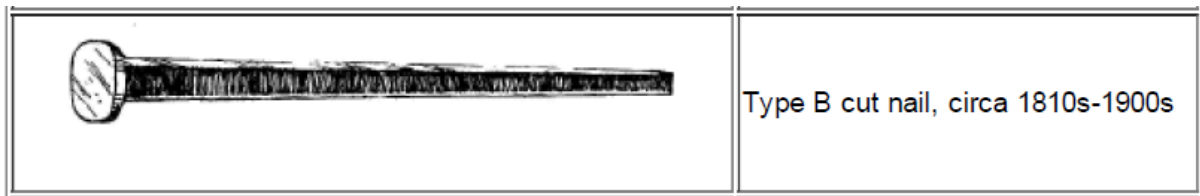


Figure 41: The exposed nails could be identified as Type B cut nails which is a time-fit for the original construction



Figure 42: Exposed joist end with a section of wood attached by both Type B nails and Galvanised nails (dating to a later period) [National Museum 2015]

Bolts used to fix the joists to the piles are domed hex head bolts with square washers and secured on the other end with a hex nut and square washer. All of these are of iron and show varying degrees of rust and flaking.



Figure 43: Fasteners for Joists and beams

Fixtures and Furnishings:



Figure 44: Jetty furniture and fittings [National Museum]

The jetty has two kinds of mooring posts, iron and concrete. The iron mooring posts are likely to be the original mooring posts at the time of its construction in 1896. At some stage cast iron benches were added (bolted to the deck).

Revetment:

The concrete decking of the revetment is crumbling in several sections, revealing the gravel soil underneath. Water movement will in time carry away some of the soil and in that affect the stability of the buildings, in particular the restaurant which is situated right on the edge of the jetty [Fig 46]



Figure 45: Eroded revetment [National Museum]

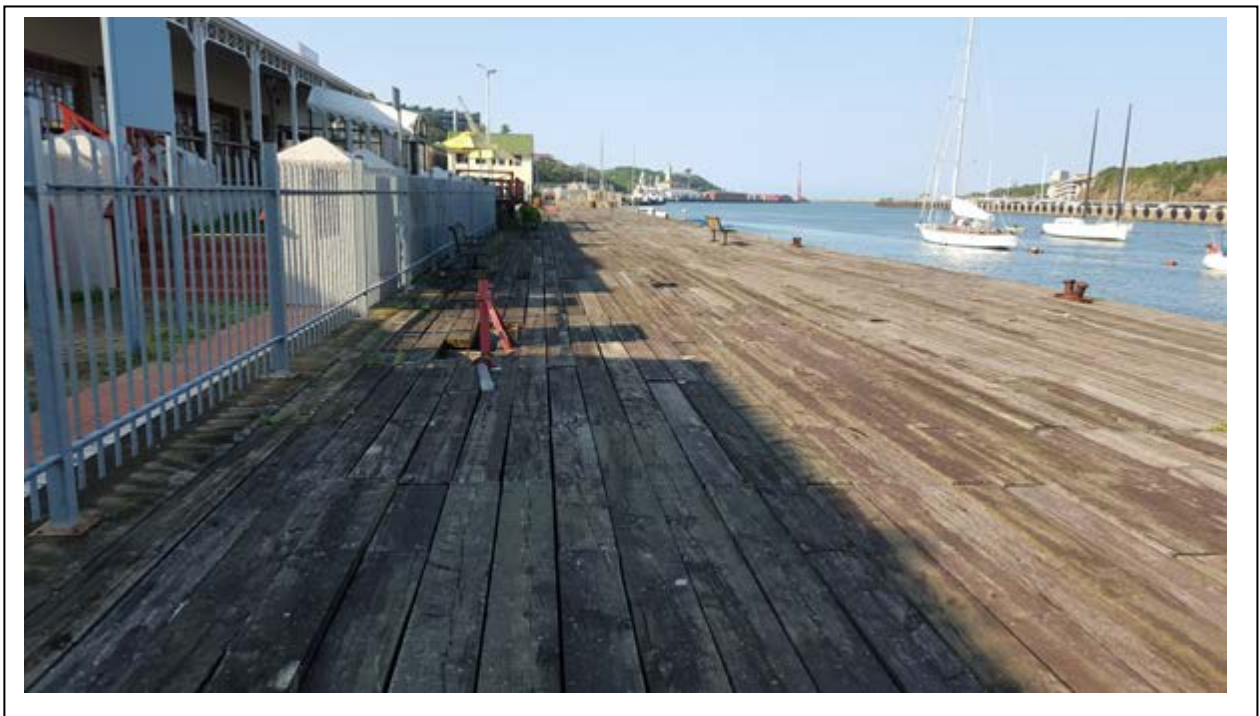


Figure 46: Close proximity of restaurant to edge of jetty [National Museum]

6.3 Conclusion

The jetty is overall in a poor condition. There are several factors that are of particular concern, namely:

- a. The primary support of the structure, the piles, are beyond repair and will have to be replaced
- b. The secondary supports, the joists, are to varying degrees infected by fungi. The degree of infestation will determine whether any of these sections can be salvaged. Certain types of fungi infestations are visible on the surface whilst others can considerably weaken the interior sections without visible signs on the surface.
- c. The stability of the deck boards are affected by the instability caused by deteriorated joists which support it. In addition to this, several of the deck boards also show signs of fungi infestation and have crumbled and caved in which left gaps on the surface.
- d. The revetment is cracked and crumbling in some sections. Although not at a critical point yet, it requires repairing.
- e. The most intense deterioration in both deck boards and joists occur on the landside and riverside ends of the jetty.
- f. The old iron nails, bolts, nuts and washers are rusting away and especially those that attach the support beams to the piles pose a danger to the stability of the jetty.
- g. The only section of the entire construction that appears to be unaffected, or not visibly affected, is the support beams.

The combined effect of all of the above is that the jetty is currently in a very unstable condition and poses a safety threat. Should more than 50% of both the joists and deck boards prove to have deteriorated beyond repair, as is the case with ALL the piles, it effectively means that more than 50% of the current jetty will have to be replaced with new material which will have a severe impact on its current integrity.

7. Assessment of current value

7.1 Integrity

The only dateable (by sight) components of the jetty are the nails used to fasten the deck boards to the joists. As this is the uppermost layer of the construction, it means that all components below the deck boards, in particular, the joists and piles, date to the same period as none of these could have been removed without removing the decking first. The nails indicate a period pre-1900 and the only jetty recorded at First Creek during this period is the one constructed in 1896. The placement and date range of the material indicate this to be the original jetty constructed in 1896.

Visible alterations include replacements of some of the deck boards and the removal of a lower jetty at the southern end of the jetty. The latter is most likely from a later period. The structure is, therefore, still in its original form (at least concerning its footprint as some jetty furniture might have been removed) and at least 85-90% of its fabric date to the time of construction. This is calculated as follows:

Piles – 25% of total construction

Beams – 25% of total construction

Joists – 25% of total construction

Decking – 25% of total construction

If as many as half of the decking boards have been replaced at some undetermined time, 87,5% are still original. However, these decking boards might have been replaced sufficiently long ago for the replacements to have obtained historicity in their own right. It is, for instance, not to say that these replacements could not have occurred prior to Ms Courtenay-Latimer's identification of the coelacanth at this site. For this purpose, the repair logs of reparations to this jetty should be consulted.

There are two periods of importance in the jetty's history. The first being its date of construction as it was during a time when the harbour finally reached a point where it could be fully utilised on account of the removal of the sandbanks within the river. The jetty, therefore, has an important link with the establishment phase of the harbour and serves as only remaining wharf dating from that time. The second period of importance dates to the mid-1930s when the coelacanth fossil fish was noticed among the catch of a local fisherman moored at this jetty. During this same period the double-decker bridge immediately north of the jetty was constructed and some ten years later the Princess Elizabeth Graving dock to the south of the jetty, and the erection of the Princess Elizabeth Memorial behind the jetty. At the same time, the land bridge was constructed west of the Princess Elizabeth Memorial. In addition to this, it is very likely that the majority of the extant buildings in the immediate vicinity also date to this period. The jetty, accordingly, has integrity of its historical setting in one period and its relationship with associated structures in its vicinity in a second period.

7.2 Physical Condition

The jetty is in a critical state of disrepair. Although repair is possible, it would require the entire jetty to be dismantled and a large portion of the original material to be replaced. All the piles will have to be replaced (i.e. 25% of current structure). There is a strong probability that all the joists will have to be replaced if the current footprint of the jetty is to be kept intact (i.e. it would result in the loss of a further 25% of the current structure). Assuming all the beams might be salvageable and a very optimistic estimation of half of the decking boards are salvageable, then it still adds up to a further loss of 12,5 % of the original material which in total would mean that more than half (62,5 % or more) of the current material will have to be replaced by new material. This would have a severe impact on the integrity of the building in terms of its original material.

The preliminary assessment based on the desktop study, however, is based on its commemorative and context values. Retaining the footprint and historic appearance, yet with clearly identifiable new material, makes it possible to retain the original grading (Grade II) without compromising the values it was based on, provided the following recommendations are followed.

8. Recommendations & mitigation measures

The poor condition and advanced state of deterioration of the jetty precludes any recommendation for non-invasive conservation methods. The only motivation for such a recommendation would have been that it is purported to be the only remaining wooden jetty in South Africa.

Section 2(2)(xviii) states that a heritage site refers to '*a place declared to be a national heritage site by SAHRA or a place declared to be a provincial heritage site by a provincial heritage resources authority*'. No proof could be found of the jetty being a declared heritage site.

To this effect, the only remaining option for this jetty lies in retaining as much of the salvageable original material as possible while still retaining the jetty structure as safe for public use.

The importance of the jetty, however, lies in the fact that it is the place where Marjorie Courtenay Latimer recognised the Coelacanth, a fish species thought to be long extinct, among the catch of a fisherman. Retaining the original footprint of the jetty in the new structure and cladding it with wood salvaged from the original structure will conserve the memory of the original jetty, which is under the extenuating circumstances a good second to the original.

Since the whole Latimer's Landing precinct is of historical importance, it is proposed that the jetty forms a component within a larger area, together with the other components already mentioned (double-decker bridge, land bridge, graving dock and memorial) as well as any of

the other structures older than 60 years, to be nominated for declaration as a Cultural Heritage Landscape at Grade II (Provincial) level.

Any salvageable material from the original wooden deck must be properly treated according to the South African Standard Code of Practice for the application of the National Building Regulations which states, inter alia, that:

‘All timber used in the erection of a building shall be treated against termite and wood borer attack and fungal decay in accordance with the requirements of SANS 10005 and shall bear the product certification mark of a body certified by the South African National Accreditation Systems.’

The intent of the applicant, accordingly, is to preserve rather than destroy. The following recommendations are made:

1. The jetty must continue to be used as it was historically, or be given a new use that maximises the retention of distinctive materials, features, spaces, and spatial relationships.
2. The historic character of the jetty must be retained and preserved. Alteration of its features, spaces, and spatial relationships that characterize the jetty must be avoided.
3. Each property is recognised as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historical materials and features must be physically (where possible) and visually compatible, identifiable upon close inspection, and properly documented for future research.
4. Changes to the jetty that have acquired historical significance in their own right must be retained and preserved, e.g. reinstallation of the lower jetty.
5. Distinctive materials, features and finishes that characterize the jetty, i.e. the footprint and wooden deck boards, must be preserved.
6. Before any construction starts, the jetty must be carefully recorded by means of photographs, measured drawings and an analysis of the type of wood(s) used for the original structure for the historical record. A copy of this should, together with this report, be submitted to both the local East London Museum and the Albany Museum for their records of local and provincial history.
7. The deconstruction phase should be conducted in a manner that ensures maximum retention of salvageable material, not only of the deck boards but also of the beams and joists that can serve as base material to cut decking boards to replace those that are not salvageable. This also includes the nails that serve as a time marker; not for re-use in the construction, but to be displayed as part of the jetty's history.
8. All treatment of the salvaged wood should adhere to the standards as set out in the Code and Practice of South African National Standards (SANS) 10005:1996 – The Preservative Treatment of Timber.

9. All processes of the deconstruction and construction phases, including treatment of salvageable material, should be fully recorded by means of a written report (including all the technical details) supplemented with photographs, to be added to the historical record as mentioned in point 6.
10. After completion an on-site information board or boards, or small on-site museum, must be erected providing historical data relating to the erection of the jetty, its history to date, including the rehabilitation and refurbishment, as well as its connection with the rediscovery of the Coelacanth.
11. Further to this it is also recommended that a suitably qualified archaeologist¹ examines the exposed bank once the existing revetment has been removed to inspect it for any potential archaeological evidence. Although this might be severely disturbed through the reclamation process, it still retains the potential to shed light on earlier inhabitants of this area, and equally important might contain palaeontological evidence.

9. Conclusion

Based on the results of this study there are no avoidable significant heritage risks associated with the proposed rehabilitation and refurbishment of the Latimer's Landing Jetty as long as the recommendations as mentioned in point 8 are adhered to. No existing structures in the immediate area of the jetty will be harmed in the process.

It is recommended that the project be approved, and a permit for the refurbishment and rehabilitation of the jetty be issued on condition that the recommendations as stated are incorporated as provisos for the issuing of the permit. It is also recommended that the entire Latimer's Landing Precinct be nominated and declared as a Cultural Heritage Landscape at Provincial level (Grade II).

¹ In the light of potential finds of archaeological material, it is recommended that the Albany Museum, as the official repository for archaeological material in the Eastern Cape, is contacted in this regard. Similarly so, approval for any salvaged material (e.g. the nails) to be used in an on-site museum should be obtained from the Albany Museum.

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