

ARCHAEOLOGICAL REPORT

Integrated Rapid Transit (IRT) Bus Stops Adderly Street Cape Town



Report prepared for

Heritage Western Cape

In fulfilment of a Permit

Issued in terms of Section 48(2) of the National Heritage Resources Act (Act 25 of 1999)

By

BELINDA MUTTI

Environmental and Heritage Resources Management Branch

City of Cape Town

44 Wale Street

Cape Town, 8001

Tel: (021) 487 2117

Email: belinda.mutti@capetown.gov.za

EXECUTIVE SUMMARY

As a consequence of a Stop Works Order issued by Heritage Western Cape in December 2011 on all works relating to the construction of two bus stops as part of the City of Cape Town's Integrated Rapid Transport (IRT) system, once it was discovered that part of the historic wooden paved road surface in Adderly Street had been damaged, the city of Cape Town's Environmental and Heritage Resources management Branch applied for a permit from Heritage Western Cape to record both sites and monitor all additional construction work that was to take place. This report documents this process and provides visual evidence that satisfies the conditions of the permit.

TABLE OF CONTENTS

page

Executive Summary.....	i
1. Introduction.....	2
2. Background.....	
3. Totem Base FIC 225 SB.....	4
4. Feeder Bust Stop FIC 225 NB.....	8
5. Conclusions.....	13
6. References.....	13
7. Appendices.....	14

List of Figures

Figure 1: Location of FIC 225 SB and FIC 225 NB	2
Figure 2: Position of Totem Base Pole excavation FIC 225 SB	3
Figure 3: Historic Photograph of Adderly Street showing site FIC 225 SB. The Groote Kerk is in the foreground (Ref: City of Cape Town EHRIC)	4
Figure 4: Position of in situ wooden pavers	4
Figure 5: Exposed cobbled road surface with tar capping	5
Figure 6: Remains of paved road surface.....	5
Figure 7: Cemented foundation level after removal of wooden cobbles	5
Figure 8: View north down Adderly Street	6
Figure 9: View south up Adderly Street.....	6
Figure 10: Detail at southern most extent of excavation	6
Figure 11: Plan of work done on FIC 225 SB site	7
Figure 12: Sample of removed wooden pavers from FIC 225 SB	7
Figure 13: FIC 225 NB.....	8
Figure 14: Disturbed section of pavers with detail on the right.....	8
Figure 15: Plan of work done on FIC 225 NB site.....	9
Figure 16: View of the pit looking south	9
Figure 17: Western section of the pit	9
Figure 18: Stratigraphic drawing of the western section of the pit.....	10
Figure 19: Southern section of the pit	10
Figure 20: Stratigraphic drawing of the south section of the pit showing shale foundation slabs for the granite kerbstones	11
Figure 21: Sandstone foundation slab for granite kerbing	11
Figure 22: View down Adderly Street (north).....	12
Figure 23: View up Adderly Street (south).....	12
Figure 24: View towards expanded bus stop	12
Figure 25: Corner of Adderly and Longmarket Streets	13

1. INTRODUCTION

The City of Cape Town's Integrated Rapid Transport (IRT) programme required the construction of several bus stops within the CBD. During the initial construction phase towards the end of 2011, a section of Adderly Street's buried historic wooden paved road surface was damaged. Heritage Western Cape issued a Stop Works Order in December 2011. The City of Cape Town's Environmental and Heritage Resources Branch applied for a permit to accurately record the exposed areas and monitor all additional construction work that was to take place. Construction affected two sites on opposite sides of Adderly Street (named FIC 225 NB and FIC 225 SB), to the south and north of Longmarket Street (Figure 1). This report presents the results of the recording and monitoring exercise.

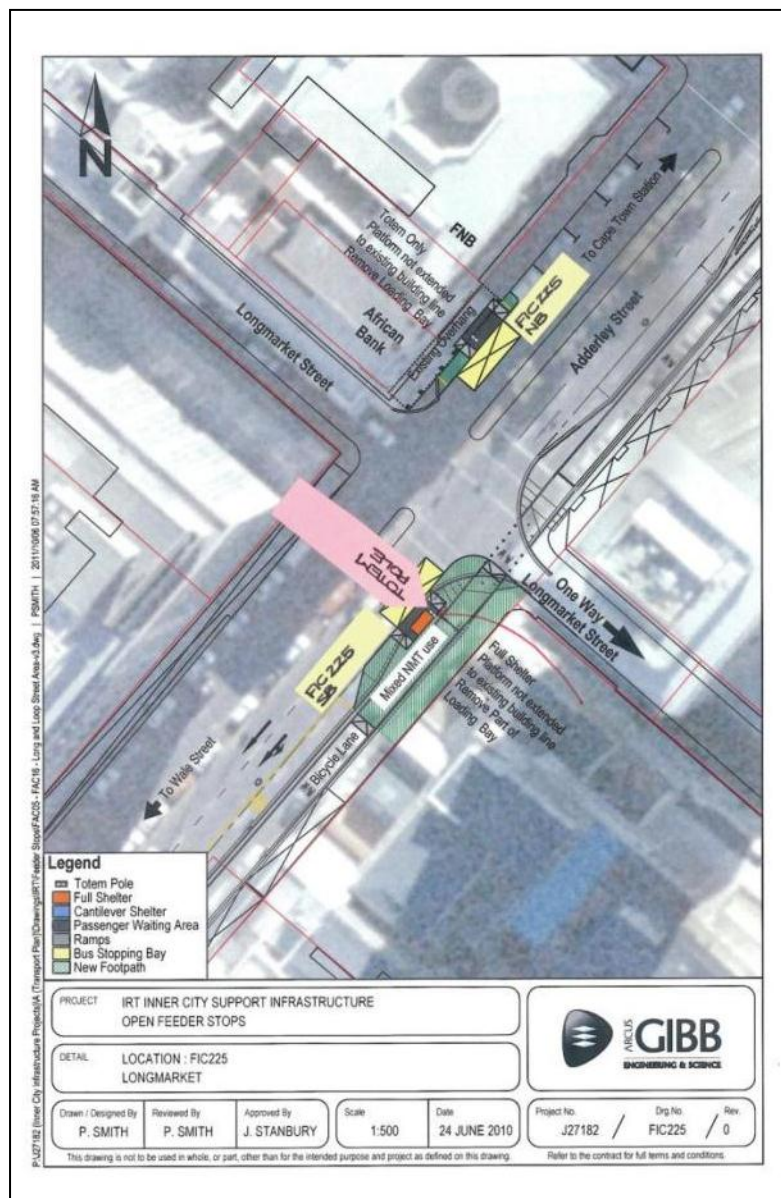


Figure 1: Location of FIC 225 SB and FIC 225 NB

2. Background

Patrick and Poggenpoel (2011) indicated in their report that in 1906, the City Engineer for the Cape Town, John Cook requisitioned hard wood block paving for the resurfacing of Adderly, Darling, St. Georges, Plein and Long Streets. The pavers were cut from *Pinus sylvestris* (commonly known as Baltic Redwood, Red Deal, Red Pine etc.), to uniform sizes: 9 inches, 8 inches and 7 inches long, by 3 inches wide and 5 inches deep. These were treated with creosote (made by distilling coal tar, wood tar or water-gas tar) in order to protect the wood. This was a common practice at the end of the 19th and early 20th centuries and used especially for areas that were to be exposed to a lot of moisture. It was evident when removing the sample at FIC 225 SB that the pavers were still heavily impregnated with creosote and were quite wet when lifted.

A selection of historic photographs showing different views of Adderly Street as a wooden paved roadway and which are part of the City of Cape Town's Environmental and Heritage Resources Information Centre (EHRIC) collection are presented in Appendix 2.

3. Totem Base Site (FIC 225 SB) (33° 55' 26.90" S, 18° 25' 16.15" E)

A Reduced Base Totem Pole was to be installed for bus stop FIC 225 SB within an already raised platform and required the excavation of an area of 470 x 470 mm to a depth of 750mm (Appendix 3). Patrick *et al* (2011) had established that *in situ* wooden paving lay in this location, so it was likely that the excavation for the installation of the pole would impact the paved road surface below. As part of their monitoring brief, this section of Adderly Street was accurately recorded, but it was decided that the City would excavated the proposed site accurately and record the findings. The pole had to be secured in the ground at a depth below that of any *in situ* wooden paving and hence they would need to be removed. On 16 February 2012, the brick work in the raised island was removed for the installation of the Totem Pole base (12.6m from the curb edge of Longmarket Street) and the sand fill removed. This exposed a 2cm thick layer of tar below which lay the wooden setts. These were on average 120mm in thickness and rested upon a cemented surface. Only part of the opened area still contained pavers



Figure 2: Position of Totem Base Pole excavation FIC 225 SB

(Figures 4&6). Earlier works (date unknown) had already disturbed the roadway (see figure x). The pavers were removed and the cemented surface photographed (Figure x). It is evident from the impressions which remain in the cemented foundation surface, that the pavers were laid whilst this was wet (Figure x). The contractors removed the cemented layer in order to install the totem pole.



Figure 3: Historic Photograph of Adderley Street showing site FIC 225 SB. The Groote Kerk is in the foreground (Ref: City of Cape Town EHRIC)



Figure 4: Position of in situ wooden pavers

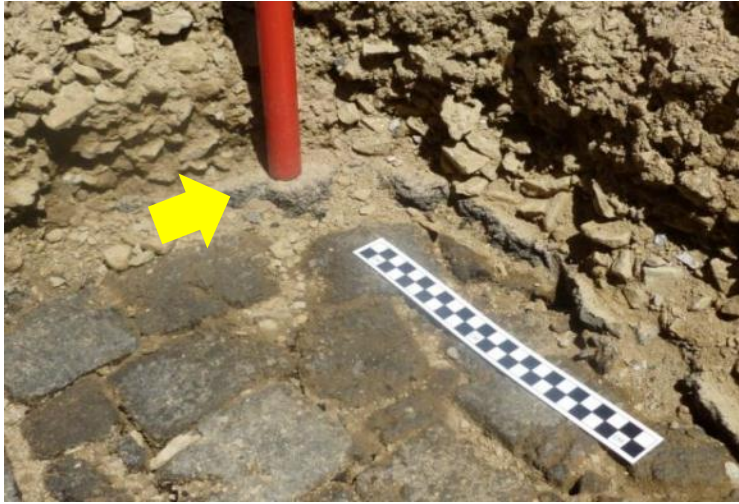


Figure 5: Exposed cobbled road surface with tar capping



Figure 6: Remains of paved road surface



Figure 7: Cemented foundation level after removal of wooden cobbles

It was later decided by the civil engineers that an additional section of Adderly Street to the west of the constructed bus stop had to be reinforced to accommodate the frequent stops of the My Citi busses (Figure 8,9,10 & 11). This necessitated the exposure and removal of 1.3m x 13.1m of the historic road. A small collection of the *in situ* setts was made and photographed (Figure 12). A sample will be stored at the IZIKO South African Museum.



Figure 8: View north down Adderly Street



Figure 9: View south up Adderly Street



Figure 10: Detail at southern most extent of excavation

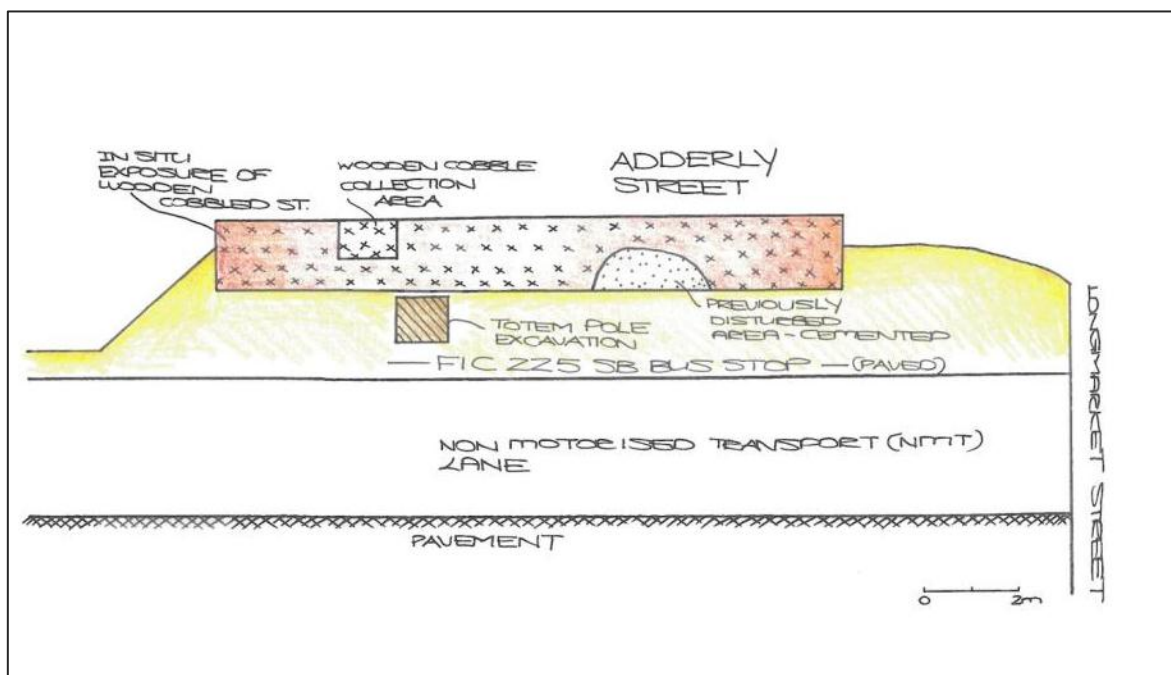


Figure 11: Plan of work done on FIC 225 SB site



Figure 12: Sample of removed wooden pavers from FIC 225 SB

4. Feeder Bus Stop (FIC 225 NB): 33° 55' 25.17" S, 18° 25' 16.76" E

FIC 225 NB is a full feeder bus stop which had to be constructed to “bump out” into Adderly Street (Appendix 4) (Figure 13).

When work was stopped on the site in November 2011, all of the wooden pavers which had been disturbed were removed by the contractor (and were not seen by either City of Cape Town officials or Heritage Western Cape officials) and all that remained was a cut section through pavers in the south eastern corner of the site (Figure 14). It is



Figure 13: FIC 225 NB

unclear how much *in situ* paving had existed when construction began. The site had however been disturbed during previous road working episodes. This was apparent when the site was cleaned up by us. The filled trench which ran almost the entire length of the site area had lain below the current tarred road surface. A plan of the site is presented below (Figure 15).

What was evident on either side of the trench was the cemented platform into which the wooden pavers had been set and in which the impressions of the pavers were clearly visible (Figure 14). A pit had also been dug by the construction team as part of the bus stop construction (Figure 16). The western and southern sections of this pit were cleaned up, photographed and drawn (Figures 17, 19, 19 & 20).

Earlier road surface material which predated the laying of the wooden pavers was exposed in the pit sections. Immediately below the cemented foundation for the paved street was a layer of slate pieces which appear to have been randomly laid as a base layer. Below this level was a red clay unit containing stone chips and below that two clay levels containing pieces of decomposed brick lay (Figures 18 & 20).



Figure 14: Disturbed section of pavers with detail on the right

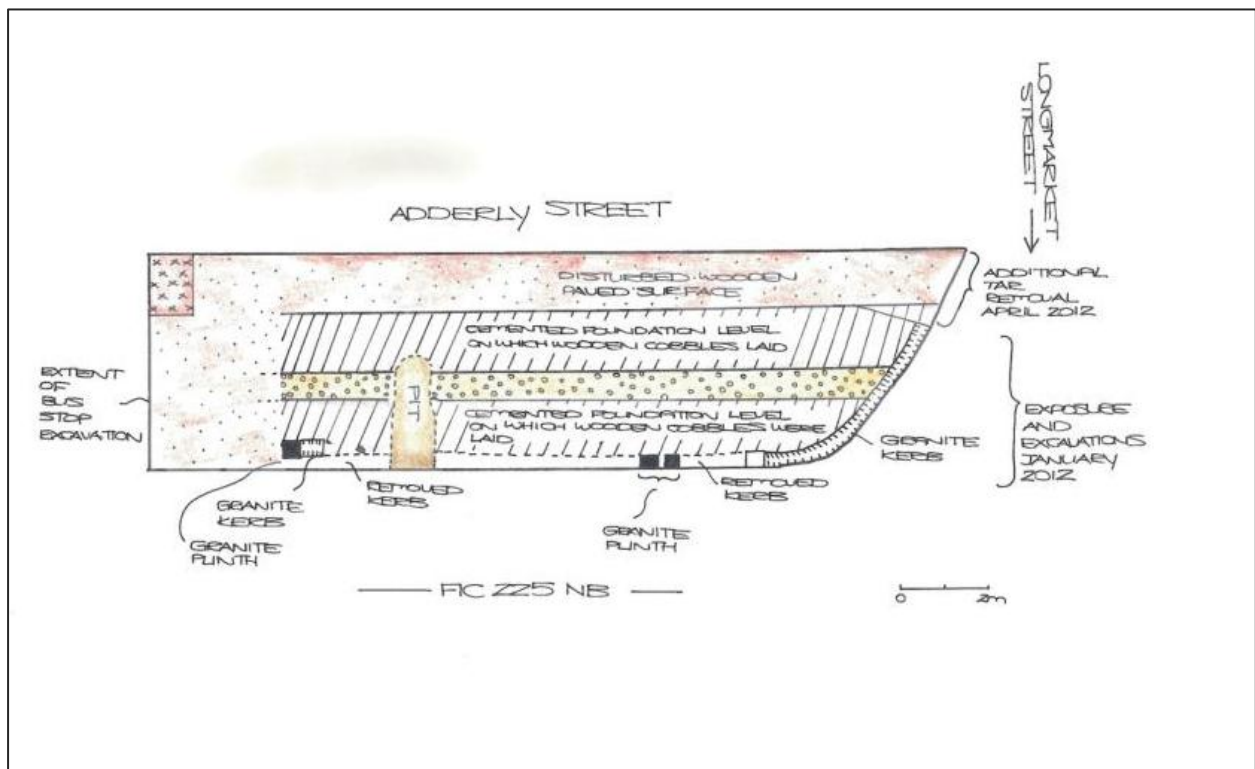


Figure 15: Plan of work done on FIC 225 NB site



Figure 16: View of the pit looking south



Figure 17: Western section of the pit

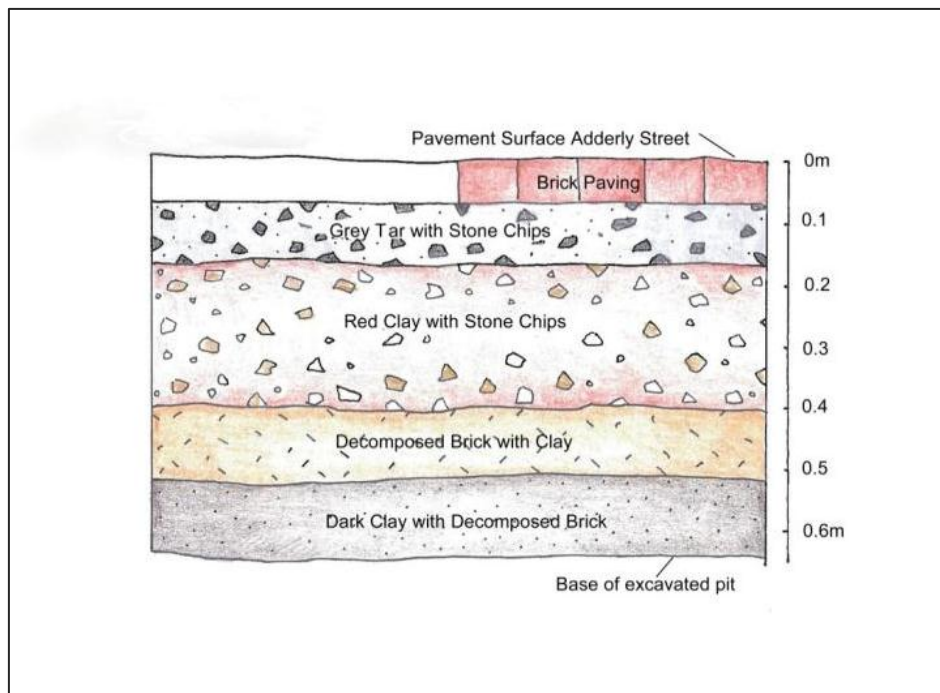


Figure 18: Stratigraphic drawing of the western section of the pit



Figure 19: Southern section of the pit showing shale foundation slabs for the granite kerbstones

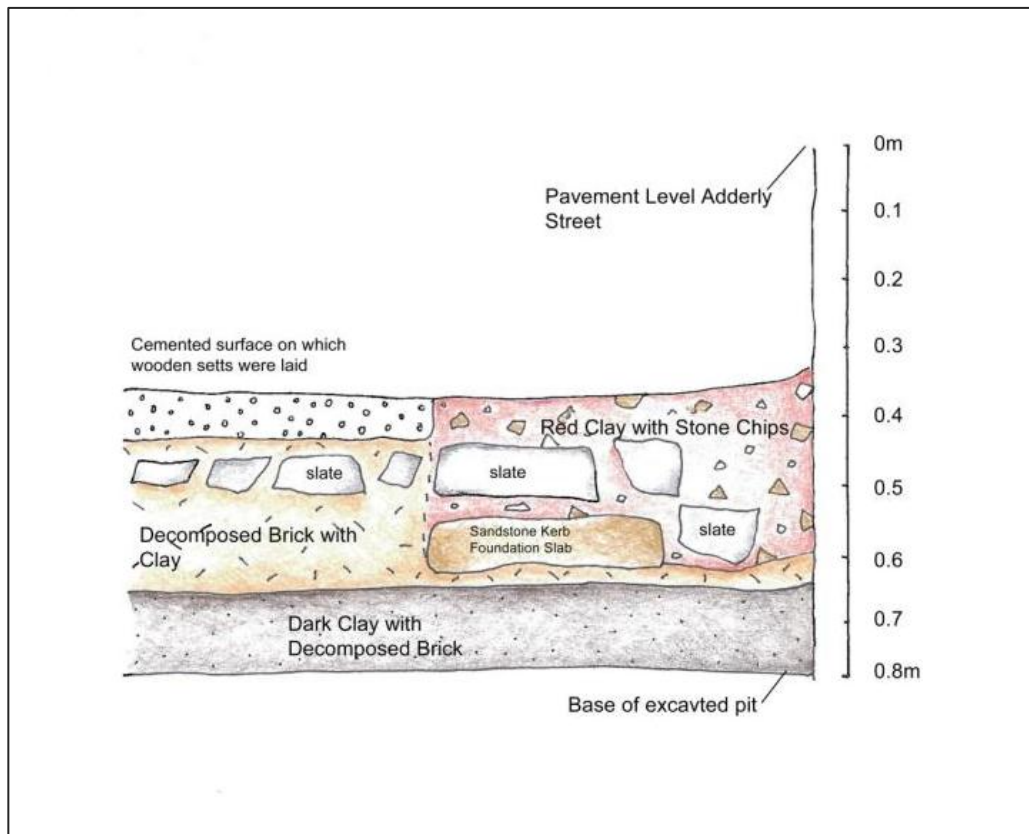


Figure 20: Stratigraphic drawing of the south section of the pit



Figure 21: Sandstone foundation slab for granite kerbing

In April 2012, after the feeder bus stop had been constructed, it was decided by the civil engineers to again reinforce the subsurface levels of Adderly Street immediately adjacent to the bus stop. This necessitated the removal of the tarred surface and exposure, followed by excavation of an

additional 3m x 18.5m strip east of the stop. The site was inspected and it was clear, that aside from a small 1m x 1.5m *in situ* area in the north eastern corner of the exposure, that only disturbed patches of paved road surface remained (Figures 22, 23, 24 & 25).



Figure 22: View down Adderly Street (north)



Figure 23: View up Adderly Street (south)



Figure 24: View towards expanded bus stop



Figure 25: Corner of Adderly and Longmarket Streets


4. Conclusion

The monitoring and recording exercise undertaken by the City of Cape Town during the construction of FIC 225 NB and FIC 225 SB is a satisfactory record of both the *in situ* and disturbed portions of the historic paved sections of Adderly Street which remain below the current tarred road surface in these two locations. More of the paved surface does still remain buried and future construction work will need to be mindful thereof and the appropriate monitoring and recording be undertaken.

5. Reference

Patrick, M., and Poggenpoel, C. 2011. *Final Report on an Archeological Monitoring Brief: Adderly Street, Central Business District, Cape Town*. Unpublished report prepared for Arcus (Gibb Pty) Ltd.

Appendix 1: Excavation Permit

Our Ref: HMCAPE TOWN METROPOLITAN CITY CENTRE CBD/RT BUS STATION ADDERLEY STREET/CNR LONGMARKET AND ADDERLY		 iXhala iMvelo iNtshona Kuzo Ertenta Wesi Koozi Heritage Western Cape
Enquiries: Justin Bradfield	Date: 27/01/2012	
Tel: 021 483 9543	Case No: 120126JB23	
Email: justin.bradfield@pgwc.gov.za	Auto IDs: 1710 - 1703	

PERMIT
 In terms of section 48(2) of the National Heritage Resources Act (Act 25 of 1999)
 and the Western Cape Provincial Gazette 6061, Notice 298 of 2003

Attention: Ms Belinda Mutti
 P.O. Box 18548
 Vlaeberg
 8018

CASE NUMBER: 120126JB23
SECTION 35 PERMIT APPLICATION: INTEGRATED RAPID TRANSPORT SYSTEM, ADDERLY STREET, CAPE TOWN

The matter above has reference:

To: Ms Belinda Mutti
 of: City of Cape Town (Environmental and Heritage Management)
 for: Excavation, disturbance and removal from original position
 of: Wooden cobble sets
 from: Historic road surface
 at: Adderly Street, Cape Town


This permit is valid until 31 January 2015.

Terms and Conditions:

1. If the permit holder is not to be present on the site at all times then HWC must be provided with the names and qualifications of the authorized representatives.
2. Appropriate recording methods as specified in the Regulations and Guidelines pertaining to the National Heritage Resources Act must be used.
3. A final report, in both digital and hardcopy format, MUST be submitted to HWC on or before 31 March 2015. An extension to this permit can be granted on submission of a progress report (if work was initiated) and a letter stating reasons for the extension. HWC reserves the right to withhold further permits if progress is not deemed satisfactory.
4. All material collected and excavated, as well as field notes and records, will be curated by the Iziko South African Museum.
5. Reprints of all published papers or copies of theses or reports resulting from this work must be lodged with HWC.
6. If a published report has not appeared within three years of the lapsing of this permit, the report in terms of the permit will be made available to researchers on request.
7. It is the responsibility of the permit holder to obtain permission from the landowner for each visit, and conditions of access imposed by the landowner must be observed.
8. HWC shall not be liable for any losses, damages or injuries to persons or properties as a result of any activities in connection with this permit.
9. HWC reserves the right to cancel this permit by notice to the permit holder.

Should you have any further queries, please contact the official above and quote the case number above.

Yours faithfully



Andrew B Hall
 Chief Executive Officer
 Heritage Western Cape

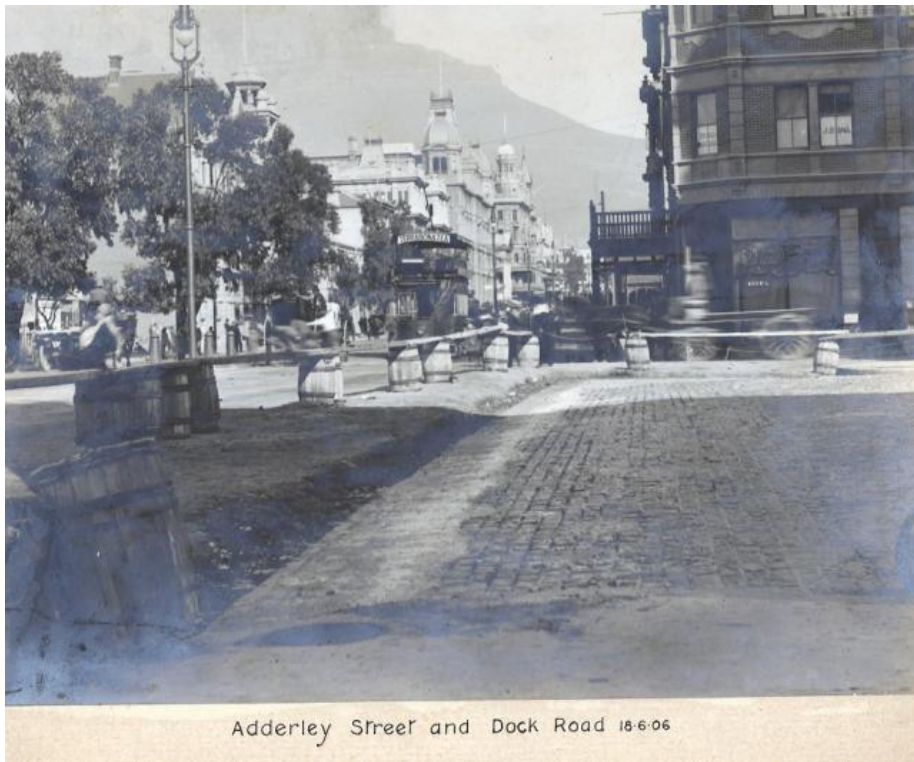
Page 1 of 1

www.capengovwv.gov.za/eultic18_sport

Steen Aardrys: P.O. Box 10000, 7800, Stellenbosch, Cape Town, 7800 • Postal Address: P.O. Box 2850, Stellenbosch, 7800
 • Fax: +27 (0)21 481 8142 • E-mail: hw@steengovwv.co.za

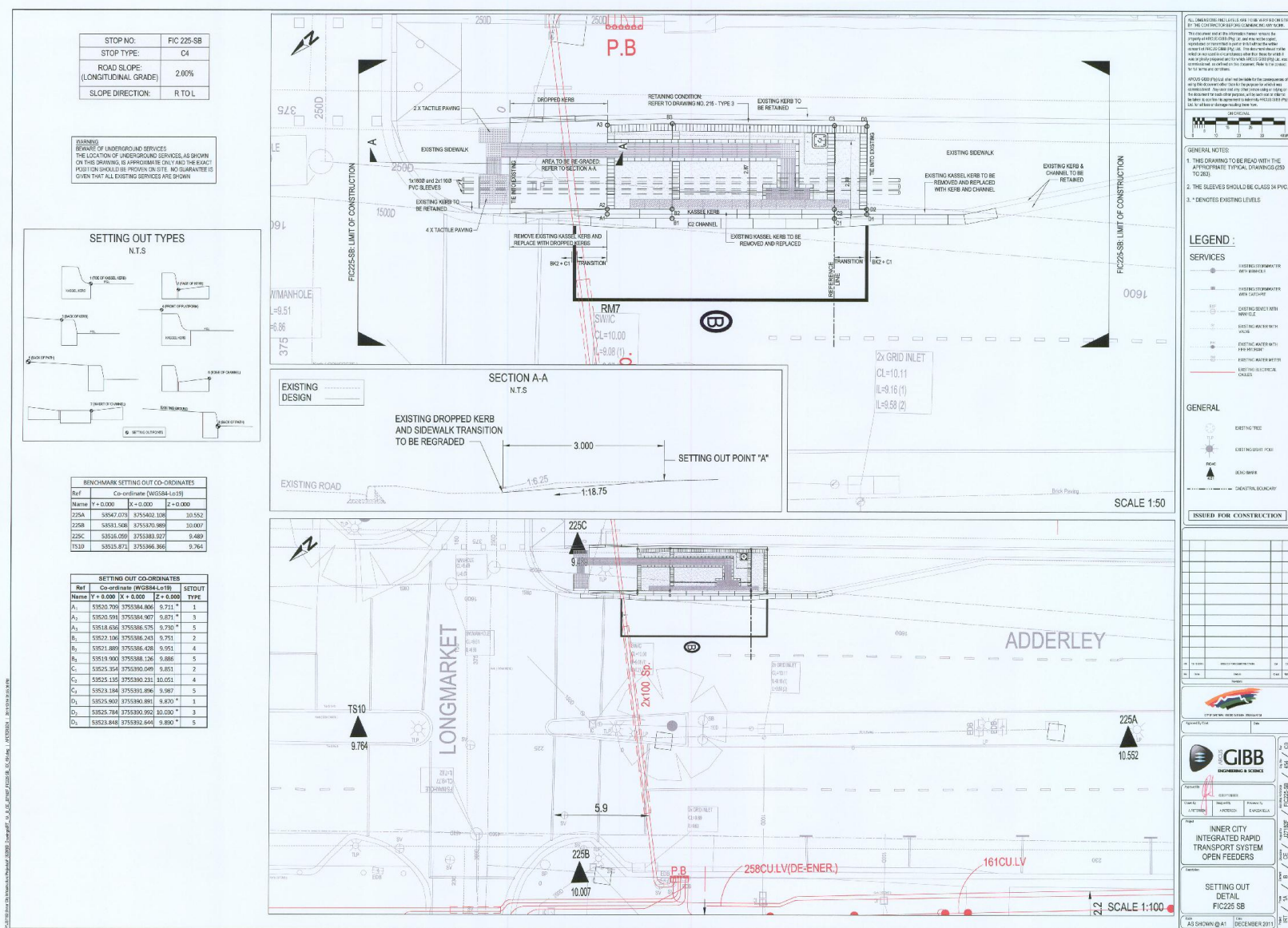
Ekurhuleni: P.O. Box 10000, 1600, Ekurhuleni, 1600 • Postal Address: P.O. Box 2850, Stellenbosch, 7800
 • Fax: +27 (0)21 481 8142 • E-mail: hw@ekurhuleni.gov.za

Appendix 2: Historic Images of Adderley Street Showing Wooden Paving





Appendix 3: Plan Drawing for FIC 225 SB



Appendix 4: Plan Drawing for FIC 225 NB

