

'JAI'

ROUND ROBIN RESOLUTION OF THE TRUSTEES OF THE LIESBEEK LEISURE PROPERTIES TRUST

(Master's Reference Number IT 000248/2015(N))

("the Trust")

IT WAS RESOLVED THAT:

1. In accordance with the powers of the trustees determined in the Trust Deed and law:

The trustees of the Trust hereby nominate, authorise, constitute and appoint Nicholas Smith of the firm:



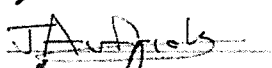

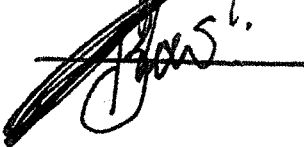
Nicholas Smith Attorney
Physical Address: 2nd Floor, 114 Bree Street Cape Town
Tel: +27(0)21 424 5826

and/or any director, partner and/or any employee thereof (of Nicholas Smith) as designated by the Trust in writing, to be our representative and agent with full authority to act on behalf of the Trust in the matter in the High Court of South Africa (Western Cape) under case number 12994/21 for the purpose of opposing the relief as claimed by the First and Second Applicants against the Trust (as First Respondent) in the Notice of Motion dated 2 August 2021; and address and respond to any objections, points of dispute, reviews and appeals in this matter and to attend to matters ancillary thereto; and pursuing any other relief or remedy and taking all necessary and incidental steps on behalf of the Trust in these proceedings.

(The actions referred to above to be collectively referred to as the "Approved Actions").

2. JODY AUFRICHTIG or any one of Trustees of the Trust acting in his capacity as trustee of the Trust, be and is hereby authorised and empowered to –
 - a. to depose to any affidavits on behalf of the Trust, and execute all documents, agreements or deeds on behalf of the Trust, and any ancillary documents thereto, required to give effect to the Approved Actions.
 - b. generally to do everything that may be necessary for the implementation of the Approved Actions.

ALL TRUSTEES

| | |
|--|--------------------------------------|
| Signature:  | Date: 3/8/2021 |
| Signature:  | Date: 03/08/2021 |
| Signature:  | Date: 8/3/2021 |
| Signature:  | Date: 3 rd of August 2021 |
| Signature:  | Date: 3/8/2021 |



" J42 "



Goringhaicona Khoi Khoin Indigenous Traditional Council
2 Birdwood Street
PO BOX 345
Athlone
7760

Ministerial Appeal Tribunals
Ministry of Cultural Affairs & Sport
Western Cape Government
8th Floor, Protea Assurance Building,
Greenmarket Square, Cape Town, 8001

FOR ATTENTION : Adv. Michael Petersen

SUBJECT : Comments on Appeals regarding HWC declaration of a Protected Area Erf 151832

On behalf of Paramount Chief Aran, I would like to cordially request that we, the Goringhaicona Khoi Khoin Indigenous Traditional Council (GKKITC) submit our comments regarding this issue, as well as, for an opportunity to verbally present at the Tribunal Hearing.

The appropriate permission and mandate for such a submission has now been attained, which has taken time.

We feel it is imperative for the voice of the first indigenous people that are historically linked to the precinct be heard. This is an historical comment, as it will be the first time a legitimate, embodied and formal presentation on the TRUP be submitted by the Goringhaicona on this issue. Indeed, this can be said on behalf of the Goringhaicona, from whom the Goringhaicona is derived, as inhabitants on the banks of the Liesbeeck, who fought the battle against the Portuguese Viceroy D'Almeida in 1510. The Goringhaicona includes within our history, figures such as Chief Trosoa, Austumato (Harry the Strandloper) and Krotoa.

We will furnish you with our collated comment by Friday, 21 of September, 2018, for the latest. We trust this is in order, and deeply appreciate the opportunity to voice our comment.

On behalf of Paramount Chief Aran,
Tauriq Jenkins : High Commissioner

tauriqishere@gmail.com (cell: 0647342669)

Registered as the Goringhaicona First Nation Indigenous Trust IT 51/2017

Contact Person: Paramount Chief Delrique Dextery Aran (Impose Arendse)

Tel: 021 696 3663 / 021 839 4093 **Fax:** 086 516 0702 / 021 696 3663 **Cell:** 081 311 3382/ 081 308 4945

Email: wckhoi.koin.cil@gmail.com **Address:** No 2 Birdwood Street, Athlone, 7764 P.O. Box 345, Athlone, 7760

NPC 2011/131755/08

NPO 196-011

NPO TRADEMARK 2013/24675

PBO NO: 930038913

Nick Smith

From: Michael Petersen <Michael.Petersen@westerncape.gov.za>
Sent: 18 September 2018 06:54 AM
To: Jacqui Gooch; Craig Alexander; Gerhard Gerber; Pieter Van Zyl; 'Nick Smith'; Ceoheritage; Penelope E Meyer; Waseefa Dhansay; Colette M Scheermeyer; Peter Kantor (kantorcc@iafrica.com)
Subject: FW: Goringhaicona Traditional request and notice of comment regards TRUP
Attachments: Request and Notice to Comment by Goringhaicona Traditional Council(1).pdf

Dear Colleagues

Please see request from Mr. Tauriq.

Kind Regards.

Adv. Michael Petersen
Legal Assistant: Ministerial Appeal Tribunals
Ministry of Cultural Affairs & Sport
Western Cape Government

8th Floor, Protea Assurance House, Greenmarket Square, Cape Town, 8001.

Tel: 021 483 9522
Fax: 021 483 9801
E-mail: Michael.Petersen@westerncape.gov.za
Website: www.westerncape.gov.za



From: Tauriq Jenkins [mailto:tauriqishere@gmail.com]
Sent: 17 September 2018 03:08 PM
To: Michael Petersen <Michael.Petersen@westerncape.gov.za>
Cc: Delrique Dextry Aran <wckhoi.koin.cil@gmail.com>; DESMOND DREYER <desmondreyer@gmail.com>
Subject: Goringhaicona Traditional request and notice of comment regards TRUP

Dear Michael

Please find attached document re: Goringhaicona Khoi Khoin Indigenous Traditional Council (GKKITC) comment on appeals regarding HWC declaration of a Protected Area Erf 151832

Kind Regards, on behalf of Paramount Chief Aran,
Tauriq Jenkins
High Commissioner, GKKITC

MFA, School of the Arts, Columbia University

A handwritten signature in black ink, appearing to be 'Tauriq Jenkins', located in the bottom right corner of the page.

nulli secundus

A handwritten signature or scribble in the bottom right corner of the page, consisting of several overlapping, stylized lines.

**RESOLUTION
OF THE
OBSERVATORY CIVIC ASSOCIATION**

1. **WHEREAS** the Constitution of the Observatory Civic Association (OCA) states that the OCA's objectives are (*inter alia*):
 - to identify, express and address the concerns of the community within the boundaries of the Association;
 - to represent the interests of the community in civic matters; and
 - to promote an active interest in, and to consider the policies and affairs of the City of Cape Town and of the sub-council of which Observatory is part; and

2. **WHEREAS** on 20 August 2020 the Department of Environmental Affairs and Development Planning (DEADP) granted an environmental authorisation for the proposed River Club Development on erf 151832, Liesbeeck Parkway, which is bounded by Liesbeeck Parkway and Observatory roads, (DEA&DP Reference Number: 16/3/3/1/A7/17/3001/20); and

3. **WHEREAS** on 18 September 2020 the City of Cape Town's North Western Municipal Planning Tribunal (MPT) resolved to approve the application for rezoning, approval of council and deviations from City policies in terms of the Municipal Planning By-law, 2015, to enable the proposed River Club Development to proceed (case number 70396369); and

4. **WHEREAS** the OCA views the River Club development as harmful to the interests of the members of the OCA and consequently:
 - (a) lodged an appeal against the environmental authorisation on 9 September 2020; and
 - (b) instructed attorneys (Cullinan and Associates Incorporated) to lodge an appeal against the MPT's decision, on behalf of the OCA, to the City of Cape Town Planning Appeals Panel, which appeal was lodged on the 26th October; and

5. **WHEREAS** the OCA is aware that if these appeals are unsuccessful, it will be necessary to institute a High Court review to prevent the River Club Development from going ahead as soon as reasonably possible, and that it may be necessary to instruct attorneys urgently to take the necessary action to safeguard the interests of the OCA; and



6. **WHEREAS** the Management Committee will ensure that funding to support any such legal action will have been secured or is likely to have been secured by the time court action begins;
7. **NOW THEREFORE** this AGM of the OCA on 24th November 2020 resolves:
- a. to reaffirm the OCA's opposition to the River Club development as damaging to the environment, destructive of the heritage significance of the site and a violation of civic democracy; and
 - b. to authorise the Management Committee of the OCA:
 - i. to engage the paid services of attorneys to advise on the prospects of succeeding in any proposed High Court Review of the MPT's decision to approve the rezoning application for the River Club Development and/or, the DEADP Environmental Authorisation for the River Club Development; and
 - ii. to institute any legal proceedings to stop the River Club Development as may, in the opinion of the Management Committee, be expedient and desirable, and to continue with that litigation until it is finally concluded; and
 - iii. to grant any power of attorney and sign any documents on behalf of the OCA as may be necessary or desirable to give effect to this resolution.

Proposed: Leslie London

Seconded: Sheila Barsel

14th November 2020

A handwritten signature in black ink, appearing to be 'LS', with a large, stylized flourish or scribble extending from the bottom right.

"J144"

Nick Smith

From: Michelle Couzyn-Rademeyer <michelle@zenprop.co.za>
Sent: 12 May 2021 11:22 AM
To: Hercules@greencounsel.co.za
Cc: Jody Aufrichtig; Nikita@greencounsel.co.za; Cormac@greencounsel.co.za
Subject: FW: REQUEST FOR UNDERTAKING TO DELAY ALTERATION OF RIVER CLUB SITE
Attachments: 210511 OCA - LLPT.pdf

Dear Sirs

We acknowledge receipt of your letter of 11 May 2021 and note the contents. We are not in a position to furnish the undertaking you require. We reserve our rights to deal with the contents of your letter in due course and should that be required.

Yours faithfully

Obo the Trustees of the Liesbeek Leisure Properties Trust

From: Hercules Wessels <Hercules@greencounsel.co.za>
Sent: Tuesday, May 11, 2021 5:22 PM
To: jody@orangestreet.co.za
Cc: Nikita Kekana <Nikita@greencounsel.co.za>; Cormac Cullinan <Cormac@greencounsel.co.za>
Subject: RE: REQUEST FOR UNDERTAKING TO DELAY ALTERATION OF RIVER CLUB SITE

Dear Sir,

With reference to the above matter and the attached urgent correspondence for your attention, which we are sending on the instructions of our client, the Observatory Civic Association.

Please provide a response to our correspondence by noon, **Monday 17 May 2021**.

Note further that we have sent a copy of the attached correspondence to the fax number of the Liesbeek Leisure Property Trust. Please confirm receipt of the correspondence sent via fax and this email as well.

Regards,

Hercules Wessels BA (Law) & LLB
Senior Associate

18a Ascot Road
Kenilworth
Cape Town, 7708
t (general) +27 (0)21 671 7002
f +27 (0)21 671 7003
m +27 (0)61 566 5996
www.cullinans.co.za



The information contained in this document is confidential and intended for the exclusive attention of the addressee. Unauthorised disclosure or distribution of the information is prohibited. Please advise us immediately should you have received this document in error.

Please consider the environment before printing this email • Nceda ubonakalise ukuba unenkathalo ngongcoliseko lwendalo phambj kokuba ushicilele

"JA5"

Nick Smith

From: Hercules Wessels <Hercules@greencounsel.co.za>
Sent: 12 May 2021 12:26 PM
To: Michelle Couzyn-Rademeyer
Cc: Jody Aufrichtig; Nikita Kekana; Cormac Cullinan
Subject: RE: REQUEST FOR UNDERTAKING TO DELAY ALTERATION OF RIVER CLUB SITE

Dear Ms Couzyn – Rademeyer,

Thank you for your prompt response.

We will advise our client accordingly.

Yours sincerely,

Hercules Wessels BA (Law) & LLB
Senior Associate

18a Ascot Road
Kenilworth
Cape Town, 7708
t (general) +27 (0)21 671 7002
f +27 (0)21 671 7003
m +27 (0)61 566 5996
www.cullinans.co.za



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From: Michelle Couzyn-Rademeyer <michelle@zenprop.co.za>
Sent: Wednesday, 12 May 2021 11:22
To: Hercules Wessels <Hercules@greencounsel.co.za>
Cc: Jody Aufrichtig <jody@orangestreet.co.za>; Nikita Kekana <Nikita@greencounsel.co.za>; Cormac Cullinan <Cormac@greencounsel.co.za>
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Obo the Trustees of the Liesbeek Leisure Properties Trust

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Note further that we have sent a copy of the attached correspondence to the fax number of the Liesbeek Leisure Property Trust. Please confirm receipt of the correspondence sent via fax and this email as well.

Regards,

Hercules Wessels BA (Law) & LLB

Senior Associate

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"JAG"

Nick Smith

From: Sean Lamprecht <sean@zenprop.co.za>
Sent: 03 August 2021 01:46 PM
To: Michelle Couzyn-Rademeyer
Subject: RE: GORINGHAICONA deregistered as NPC

Hi Michelle

According to CIPC this entity is still "In Business" as per below.

COMPANY DETAILS

Enterprise Number **K2011131755**
Enterprise Name **GORINGHAICONA KHOI-KHOIN INDEGINIOUS AND TRADITIONAL COUNCIL**
Enterprise Type **Non Profit Company**
Enterprise Status **In Business**

Director / Member details for: K2011131755 [GORINGHAICONA KHOI-KHOIN INDEGINIOUS AND TRADITIONAL COUNCIL]

| ID Number | Name(s) | Surname | Type | Status |
|------------------|-----------------------|------------|----------|--------|
| 610818 XXXX 08 X | DELROQUE DEXTRY | ARENDESE | Director | Active |
| 580122 XXXX 08 X | PATRICIA | ARENDESE | Director | Active |
| 710808 XXXX 08 X | EDWARD | WILLIAMS | Director | Active |
| 361101 XXXX 08 X | PETER FORTUIN LUDOLPH | | Director | Active |
| 830428 XXXX 08 X | CHEVONNE | DU PLESSIS | Director | Active |
| 590316 XXXX 08 X | EDMEN MICHAEL | HANSEN | Director | Active |
| 661013 XXXX 08 X | ALFREDA BERNADETTE | SIRMONPONG | Director | Active |
| 620911 XXXX 08 X | ULANDA | MCLANE | Director | Active |
| 691022 XXXX 08 X | JONATHAN | DAVIDS | Director | Active |

Kind Regards
Sean Lamprecht



Switchboard +27 (0)11 217 7700
Tel Direct +27 (0)11 217 7780
Fax Direct +27 (0)11 217 7880
E-Mail sean@zenprop.co.za
Web Site www.zenprop.co.za
Address 6th Floor, 4 Sandown Valley Crescent,
Sandton, 2146

From: Michelle Couzyn-Rademeyer <michelle@zenprop.co.za>
Sent: Tuesday, 03 August 2021 13:23

A handwritten signature in black ink, appearing to be 'MJ', is located in the bottom right corner of the page.

To: Sean Lamprecht <sean@zenprop.co.za>
Subject: FW: GORINGHAICONA deregistered as NPC

please can you double check and do a CIPCS search on entity 81 on the attached list ?

thanks Michelle

From: Rudewaan Arendse <rudewaan.arendse@gmail.com>
Sent: Tuesday, 03 August 2021 13:11
To: Michelle Couzyn-Rademeyer <michelle@zenprop.co.za>; Jody Aufrichtig <jody@orangestreet.co.za>
Subject: GORINGHAICONA deregistered as NPC

GORINGHAICONA KHOI-KHOIN INDEGINIOUS AND TRADITIONAL COUNCIL deregistered by CIPC in 2016

See page 81 of attached doc.

Rudewaan

A handwritten signature in black ink, appearing to be 'Rudewaan Arendse', located in the bottom right corner of the page.



Companies and Intellectual
Property Commission

a member of the dti group

CIPC PUBLICATION

16 December 2016

Publication No. 201619

Notice No. 48 B

**(AR DEREGISTRATIONS – Non Profit
Companies)**

| | |
|-------------|--|
| K2011107802 | MAIN-STREAM CHURCH |
| K2011107880 | INSTITUUT VIR CHRISTELIKE HOER ONDERWYS |
| K2011138357 | SKILLED ONES DEVELOPMENT |
| K2011115251 | REKOPANE JOINT BODY |
| K2011148233 | TSWARANG DEVELOPMENT |
| K2011139631 | PARADISE CRUSADE FOR ALL NATIONS PARISH |
| K2011118633 | MONYETLA BURSARY PROJECT |
| K2011119068 | GOSPEL COMMUNICATIONS |
| K2011144848 | JEHOVAH REIGNS WORSHIP CENTRE |
| K2011103449 | MANYAMALALA SCHOOL OF AGRICULTURE |
| K2011145183 | TOTAL CHRISTIAN ASSEMBLY |
| K2011104136 | K2011104136 |
| K2011145855 | SAVUKASAZENZELA DEVELOPMENT AND TRAINING PROGRAM |
| M2011001227 | AKANANI CHILDREN FOUNDATION BA-PHALABORWA |
| K2011106067 | DIVINE ORDER CHRISTIAN CENTRE |
| K2011148684 | GREEN WORX SOCIAL RESPONSIBILITY CENTRE |
| K2011149117 | SABETHE FOUNDATION |
| K2011149267 | NIGERIANS ASSOCIATION IN BRITS SOUTH AFRICA |
| K2011108574 | K2011108574 |
| K2011126941 | ASCENSION CHRISTIAN CHURCH |
| K2011112537 | MALAPA GA LEKANE COMMUNITY CARE CENTRE |
| K2011134205 | THABANG EARLY LEARNING CENTRE |
| K2011134276 | SOCIKWA HUMANITARIAN FUND |
| M2011001714 | SIFEZA KONKE ORGANISATION |
| K2011135144 | THE NEW JERUSALEM OF JESUS IN ZION CHURCH |
| K2011136858 | WOLF ROCK FESTIVALS OF ROCK FOR WILDLIFE |
| K2011119561 | THE RODNEY HARTMAN FOUNDATION |
| K2011120280 | HENDRIK POTGIETER HOME OWNERS ASSOCIATION |
| K2011139946 | IMS CHILDREN CHRISTIAN SCHOOL |
| K2011124469 | STAND FIRM INTERNATIONAL MINISTRY (S F I M) |
| K2011125413 | UMSINDISI FOUNDATION |
| K2011105206 | KOB HEALTH INITIATIVE |
| K2011128690 | SIZANANI EMPILWENI SOCIAL BENEFITS PROJECTS |
| K2011129781 | CONFIDENCE IN MOTION DEVELOPMENT |
| K2011130220 | GRACECOURT MEGA CHURCH |
| | |
| K2011131755 | GORINGHAICONA KHOI-KHOIN INDEGINIOUS AND TRADITIONAL COUNCIL |
| K2011108793 | FOLLOWERS OF CHRIST MINISTRY |
| K2011132678 | EZIAHA WELFARE ASSOCIATION |
| M2011005595 | ANIMAL WILDLIFE SERVICES |
| K2011109902 | DIVINE CHOSEN VINE MINISTRIES |
| K2011134790 | CARING FOR DIABETES |
| K2011136846 | HOUSEHOLD OF GRACE WORSHIP CENTRE |
| K2011136932 | VALSTEAD PARENTAL GUIDANCE |
| K2011138348 | JUST WAYS DEVELOPMENT |
| K2011138799 | KAGISANO HOUSING |
| K2011115536 | TOTAL REDEMPTION MISSIONS |

"JA7"

The Redevelopment of the River Club, Observatory, Cape Town

Basic Assessment Report

Report Prepared for

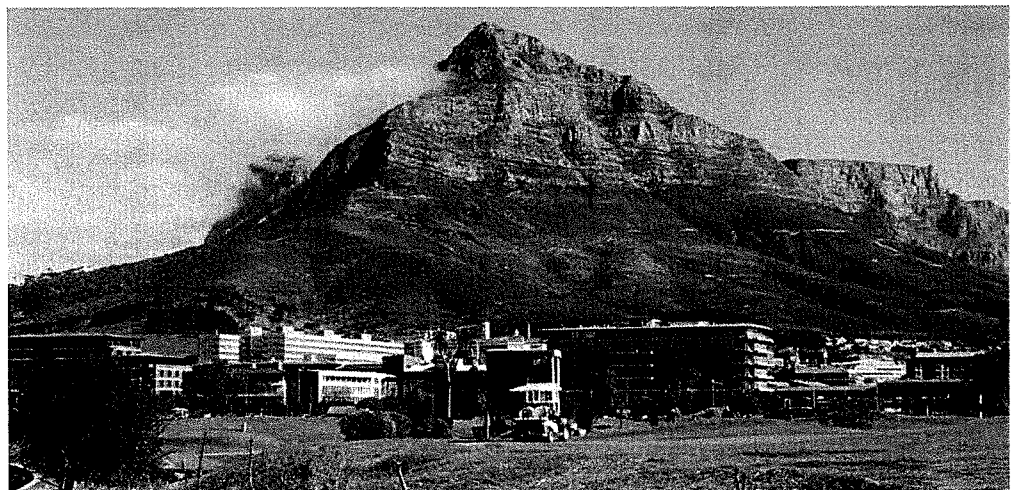
Liesbeek Leisure Properties Trust

Report Number 478320/04

DEA&DP Reference Number: 16/3/3/6/7/1/A7/17/3217/19

DWS Reference Number: 16/2/7/G22/A/11

HWC Case Number: 15112504WD1217E



Report Prepared by

 **srk** consulting

January 2020



TABLE OF CONTENTS:

| Section | Page(s) |
|--|------------|
| Section A: Project Information | <u>6</u> |
| Section B: Description of the Receiving Environment | <u>82</u> |
| Section C: Public Participation | <u>133</u> |
| Section D: Need and Desirability | <u>138</u> |
| Section E: Details of all the Alternatives considered | <u>149</u> |
| Section F: Environmental Aspects Associated with the Alternatives | <u>163</u> |
| Section G: Impact Assessment, Impact Avoidance, Management, Mitigation and Monitoring Measures | <u>172</u> |
| Section H: Recommendations of the EAP | <u>184</u> |
| Section I: Appendices | <u>189</u> |
| Section J: Declarations | <u>192</u> |

ACRONYMS USED IN THIS BASIC ASSESSMENT REPORT AND APPENDICES:

| | |
|----------|---|
| ADWF | Average Dry Weather Flow |
| BAR | Basic Assessment Report |
| CBA | Critical Biodiversity Area |
| CBD | Central Business District |
| CFR | Cape Floral Region |
| CoCT | City of Cape Town |
| DEA | National Department of Environmental Affairs |
| DEA&DP | Western Cape Government: Environmental Affairs and Development Planning |
| DPZs | Development Priority Zones |
| DMS | Development Management Scheme |
| DWS | National Department of Water and Sanitation |
| ECO | Environmental Control Officer |
| EGS | Economic Growth Strategy (2013) |
| EIA | Environmental Impact Assessment |
| EMF | Environmental Management Framework |
| EMPr | Environmental Management Programme |
| EN | Endangered |
| ESA | Ecological Support Area |
| FIA | Faunal Importance Assessment |
| GLA | Gross Leasable Area |
| HWC | Heritage Western Cape |
| I&APs | Interested and Affected Parties |
| IACOM | Impact Assessment Committee |
| IDP | Integrated Development Plan |
| LC | Least Concern |
| LLPT | Liesbeek Leisure Properties Trust |
| LUPA | Land Use Planning Act |
| LUPO | Land Use Planning Ordinance |
| Mamsl | Metres above mean sea level |
| MBPL | Municipal Planning Bylaw (2015) |
| NEMA | National Environmental Management Act 107 of 1998 |
| NEM:AQA | National Environmental Management: Air Quality Act 39 of 2004 |
| NEMBA | National Environmental Management Biodiversity Act 10 of 2004 |
| NEM:ICMA | National Environmental Management: Integrated Coastal Management Act 24 of 2008 |
| NEM:WA | National Environmental Management: Waste Act No. 59 of 2008 |
| NHRA | National Heritage Resources Act 25 of 1999) |
| NID | Notice of Intent to Develop |
| NMT | Non-motorised Transport |
| NT | Near Threatened |
| NWA | National Water Act 36 of 1998 |
| NRF | National Research Foundation |
| PDWF | Peak Dry Weather Flow |
| PES | Present Ecological State |
| PRASA | Passenger Rail Agency of South Africa |
| PSDF | Provincial Spatial Development Framework |
| PWWF | Peak Wet Weather Flow |
| PPP | Public Participation Process |
| S&EIR | Scoping and Environmental Impact Reporting |
| SAAO | South African Astronomical Observatory |
| SDF | Spatial Development Framework |
| SDP | Spatial Development Plan |
| SoW | Scope of Work |

| | |
|--------|--|
| TBDP | Table Bay District Plan (2012) |
| TCT | Transport for Cape Town |
| TDA | Transport and Urban Development Authority |
| TOD | Transport Orientated Development |
| TMNP | Table Mountain National Park |
| TRUP | Two Rivers Urban Park |
| TRUPFC | Two Rivers Urban Park Contextual Framework and Phase 1 Environmental Management Plan |
| VU | Vulnerable |
| WLT | Western Leopard Toad |
| WUL | Water Use Licence |
| WULA | Water Use Licence Application |
| WWTW | Waste Water Treatment Works |

DETAILS OF THE APPLICANT

| | | | |
|--|--|--------------|--------------|
| Applicant / Organisation / Organ of State: | Liesbeek Leisure Properties Trust (LLPT) | | |
| Contact person: | Jody Aufrichtig | | |
| Postal address: | P.O. Box 786739, Sandton | | |
| Telephone: | (021) 486 5999 | Postal Code: | 2164 |
| Cellular: | 083 356 8084 | Fax: | 021 421 0219 |
| E-mail: | jody@ornagestreet.co.za | | |

DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

| | | | |
|----------------------------------|---|--------------|--------------|
| Name of the EAP organisation: | SRK Consulting (South Africa) (Pty) Ltd | | |
| Person who compiled this Report: | Matthew Law | | |
| EAP Reg. No.: | CEAPSA (Certified Environmental Assessment Practitioner of South Africa) | | |
| Contact Person (if not author): | Matthew Law | | |
| Postal address: | P Bag X18 Rondebosch | | |
| Telephone: | (021) 6593088 | Postal Code: | 7701 |
| Cellular: | 082 471 7544 | Fax: | 021 685 7105 |
| E-mail: | mlaw@srk.co.za | | |
| EAP Qualifications: | MCom, Resource Economics, 2007 BSc (Hons), Economics, 2005 BSc, Environmental Science and Economics, 2004 | | |

Please provide details of the lead EAP, including details on the expertise of the lead EAP responsible for the Basic Assessment process. Also attach his/her Curriculum Vitae to this BAR.

Matthew Law is a principal consultant with more than 13 years' experience in the environmental field. He has significant experience in Environmental Impact Assessment (throughout Southern Africa), the drafting of Environmental Management Plans and as an Environmental Control Officer. Matthew has detailed knowledge of and practical experience with legislation governing applications relating to environmental authorisations, mining right applications and waste management and water use licensing. Matthew is also a qualified and experienced environmental economist.

EXECUTIVE SUMMARY OF THE BASIC ASSESSMENT REPORT:

Please see Appendix K7.

SECTION A: PROJECT INFORMATION

1. ACTIVITY LOCATION

| | |
|--|--|
| Location of all proposed sites: | Observatory Rd, Observatory Cape Town 7925 |
| Farm / Erf name(s) and number(s) (including Portions thereof) for each proposed site (see Figure 2): | 1. 151832 |
| | 2. 26426 |
| | 3. 108936 |
| | 4. 26427 |
| | 5. 15326 Rem |
| | 6. 26169 |
| | 7. 26170 |
| | 8. 26171 |
| | 9. 26172 |
| | 10. 26173 |
| | 11. 26174 |
| | 12. 26175 |
| Land Ownership | 1. LLPT |
| | 2. The City of Cape Town (CoCT) |
| | 3. CoCT |
| | 4. CoCT |
| | 5. CoCT |
| | 6. CoCT |
| | 7. CoCT |
| | 8. CoCT |
| | 9. CoCT |
| | 10. CoCT |
| | 11. CoCT |
| | 12. CoCT |
| Property size(s) in m ² for each proposed site: | 1. 148 425 m ² |
| | 2. 5 092 m ² |
| | 3. 134 m ² |
| | 4. 509 m ² |
| | 5. 208 981 m ² |
| | 6. 18 900 m ² |
| | 7. 2 072 m ² |
| | 8. 2 024 m ² |
| | 9. 2 043 m ² |
| | 10. 2 006 m ² |
| | 11. 3 812 m ² |
| | 12. 3 840 m ² |
| Development footprint size(s) in m ² : | 210 000 m ² |
| Surveyor General (SG) 21 digit code for each proposed site: | 1. C01600070015183200000 |
| | 2. C01600070002642600000 |
| | 3. C01600070010893600000 |
| | 4. C01600070002642700000 |
| | 5. C01600070001532600000 |
| | 6. C01600070002616900000 |
| | 7. C01600070002617000000 |
| | 8. C01600070002617100000 |
| | 9. C01600070002617200000 |
| | 10. C01600070002617300000 |
| | 11. C01600070002617400000 |
| | 12. C01600070002617500000 |
| Zoning | 1. Open Space 3 |
| | 2. Open Space 2 |
| | 3. Open Space 2 |
| | 4. Open Space 2 |
| | 5. Community 1 / Open Space 2 / Transport 2 |
| | 6. Transport 2 |
| | 7. Transport 2 |
| | 8. Transport 2 |
| | 9. Transport 2 |
| | 10. Transport 2 |
| | 11. Transport 2 |
| | 12. Transport 2 |

2. PROJECT DESCRIPTION

(a) Is the project a new development? If "NO", explain:

YES

NO

The proposed development is a new development.

(b) Provide a detailed description of the scope of the proposed development (project).

The LLPT (i.e. the proponent) operates the River Club in Observatory, Cape Town (which, together with portions of adjacent properties, is collectively referred to as the site¹ - refer to Figure 1, Figure 2 and Section A1). The River Club is currently operated by the proponent as a rental enterprise, mainly for recreational (golfing) activities and conferencing.

The site is bordered to the west and north-west by an excavated and unlined channel of the Liesbeek River (the unlined course of the Liesbeek River - see Figure 48), and to the east by the Liesbeek River Canal and the Black River (see Figure 46). The site therefore forms a virtual "island" surrounded by these transformed freshwater systems and is located in the floodplain of the Black and Liesbeek Rivers. The River Club property itself is either mostly, or entirely, an infill site and is degraded (see Figure 48).

The site is in a strategically important location within the City – it is a highly accessible site in close proximity to agglomerated places of work such as the Central Business District (CBD), the Voortrekker Road activity corridor and Paarden Eiland, and is also within relatively close proximity to the metropolitan south-east. The site is also located close to public transport networks and falls on the north-western edge of the Two Rivers local area².

The Black River and M5 motorway have historically been barriers between communities to the east and west of the river, and the area around the river has become an unattractive edge, derelict and inaccessible to pedestrians (this includes the current access to The River Club along Observatory Road). This is largely due to the presence of two high security institutions (Valkenberg Hospital and the South African Astronomical Observatory [SAAO]), and limited public access to and through the River Club site and to the east of the Black River and the M5.

Furthermore, the site has been the subject of revitalisation initiatives for over a quarter of a century, but none have been financially viable, leading to the persistent under-utilisation of the site.

The LLPT is now proposing to redevelop the site for residential, retail, commercial, institutional and associated uses. The majority of the site is owned by the proponent.

It is the proponent's intention to develop the site as a "destination place"³ within Cape Town and as the western gateway to the Two Rivers local area. The proponents would like to see this gateway development accommodate a medium to high density, mixed-use agglomeration of uses which supports the vision of 'live, work, play' while retaining certain recreational and ecological aspects. In this way the proponents hope that River Club can act as a catalyst project that can be used to help to implement the greater Two Rivers local area.

At least 20% of the leasable area at the development will be allocated to residential use, and 20% of the residential area at the development will be inclusionary accommodation (see Section A2(e)).

Numerous layout and activity alternatives have been considered during planning for the development (see Section E). Two layout alternatives are comparatively assessed in this Basic Assessment (BA) Report (BAR):

- The preferred development alternative (or the Riverine Corridor Alternative - see Figure 3) where the unlined course of the Liesbeek west of the property is infilled, development is setback from the existing Liesbeek canal, which would be rehabilitated to function as a natural watercourse;
- The second development alternative (or the Island Concept Alternative see Figure 3) where the development is setback from the unlined course of the Liesbeek and the canal is retained; and
- The No-Go Alternative where commercial recreation and conferencing would continue at the site, and no rehabilitation of watercourses would take place by the developer.

Both development alternatives include two precincts located on podium basement parking levels (see Figure 3 and Figure 4, and Section A2(e)) separated by a park (with ecological function) that crosses the site in an west-east direction.

As well as numerous intersection upgrades, two new river crossings will be built to access the development, one over the Black River and another over the unlined course of the Liesbeek River, and the developers will widen the Liesbeek Parkway

¹ The site comprises portions of twelve properties (see Section A1). LLPT proposes to rezone Erf 151832 (the property that LLPT owns) from Open Space Zoning 3 to Sub-Divisional Area Zoning, subdivide and develop the site in six main phases.

² In terms of sections 12 to 14 of the MPBL, a Local Spatial Development Framework (LSDF) has been compiled for the Two Rivers local area to align proposals for the area with the new 2018 MSDF and the principles outlined in the Spatial Planning and Land Use Management Act, 2013. This area extends from Hartleyvale and Malta sportsfields to Alexandra Road, including Ndabeni Triangle and Pinelands Station. The draft Two Rivers LSDF provides direction for short, medium and long term spatial and investment planning in the Two Rivers area, previously known as Two Rivers Urban Park (TRUP).

³ A "destination place" is defined in the Cape Town Spatial Development Framework as "a place that forms a significant landmark or area of attraction and is part of the unique identity of Cape Town".

between Station Road and Link Road to accommodate additional traffic anticipated from the redevelopment of the River Club.

Although not specifically required to service the development, but to address infrastructure backlogs, and to implement long term City planning, the CoCT have indicated that they intend to dual Liesbeek Parkway between Link Road and Malta Road, and to upgrade the Berkley Road Extension to the site (including widening the proposed Berkley Road bridge over the Black River, and to extend Berkley Road across the site and over the unlined course of the Liesbeek River to link Berkley Road (and the M5) with Malta Road and Liesbeek Parkway at some point in the future. The CoCT have requested that this infrastructure be included in all applications for environmental approval for the redevelopment of the River Club.

The redevelopment of the River Club, the construction of road infrastructure required for the development of the River Club, and future road infrastructure upgrades proposed at and adjacent to the site by the CoCT are collectively referred to as the project or the development - see Section A2(e).

The development will be constructed in several phases: major roads and bridges required for the development will be constructed in the first phase, Precinct 1 will be developed in the south of the site, and Precinct 2 will be developed in the north. It is currently anticipated that most of the northern precinct will be developed in Phase 2, and the southern precinct and remainder of the northern precinct developed subsequently in Phase 3 to 5, but not necessarily in sequence (see Figure 8). Phase 6, which will be implemented by the CoCT will take place at some stage in the future. It is likely that Phase 1 and Phase 2 will be developed at the same time, and that subsequent phases will be developed as demand is realised into the future. Construction activities will take seven years in total.

The Scope of Work (SoW) or "battery limits" considered and assessed by the BA process includes:

- Redevelopment of the site south of the proposed Berkley Road Extension, including infilling portions of the site above the 1:100 year floodplain and an upgrade of the existing road entrance;
- The two-lane extension of Berkley Road over the Black River (required for the development, to be built by the proponent, and funded by offsets against required development contributions);
- The widening of the Berkley Road Bridge over the Black River, the widening of the Berkley Road extension, and the extension of Berkley Road from the site entrance to the west over the unlined course of the Liesbeek River to join Malta Road and the Liesbeek Parkway (not required for the development, to be built by the CoCT);
- A new bridge linking the site to the Liesbeek Parkway at Link Road over the unlined course of the Liesbeek River (required for the development, to be built by the proponent);
- The widening of the Liesbeek Parkway into the unlined course of the Liesbeek River, between Station Road and Link Road (required for the development, to be built by the proponent);
- The widening of the Liesbeek Parkway into the unlined course of the Liesbeek River, between Malta Road and Link Road (not required for the development, to be built by the CoCT);
- The infilling of portions of the site in the floodplain, and rehabilitation of river banks and the installation of service infrastructure (by the proponent); and
- The infilling of a channel excavated into the Raapenberg Wetland by a 3rd party (which has effectively increased the frequency of inundation and decreased the time that the wetland takes to drain with negative ecological consequences) and the reinstatement of the berm as recommended by the freshwater ecologist.

The proponents are making the following proposal for the following portions of the site not owned by the proponent (see Figure 2):

- Remainder of Erf 15326 (208 981 m²). This property is owned by the CoCT and includes the Berkley Road extension and the Raapenberg Wetland. The Berkley Road extension is integral to the City's transport network plan and will be developed by both the CoCT and LLPT.
- Erf 26426 Cape Town (5 092 m²). This property is owned by CoCT and accommodates the canal running along the eastern border of Portion 2 of Erf 26423 Cape Town (i.e. the NRF site). Only 1 480 m² falls on The River Club 'site', which, with the consent of the landowner, will be rehabilitated and incorporated into the buffer area abutting the eastern portion of the development and landscaped accordingly, or alternatively this land can be leased from CoCT on a long-term basis.
- Erf 26427 Cape Town (509 m²). This property is owned by CoCT and abuts Observatory Road, the old Liesbeek channel and the NRF site. With the consent of the landowner, it will be incorporated into a river buffer and landscaped accordingly. It is likely that an application to lease / purchase this land will be submitted to the CoCT's Property Management Department.
- Erf 108936 Cape Town (134 m²). This property is owned by CoCT and abuts the old Liesbeek canal and the NRF site. With the consent of the landowner, it will be incorporated into a river buffer and landscaped accordingly. It is likely that an application to lease / purchase this land will be submitted to the CoCT's Property Management Department.
- Erven. 26169, 26170, 26171, 26172, 26173, 26174 and 26175 Cape Town (34 697 m²): these properties are owned by CoCT, constitute the unlined course of the Liesbeek River, are considered to be the road reserve of the Liesbeek Parkway, and are zoned for Transport. The Liesbeek Parkway will be widened into these properties, and the unlined course of the river will be infilled or rehabilitated (depending on the alternative selected) and landscaped accordingly. It is likely that an application to lease / purchase this land will be submitted to the CoCT's Property Management Department.

Please note: This description must relate to the listed and specified activities in paragraph (d) below.

(c) Please indicate the following periods that are recommended for inclusion in the environmental authorisation:

| | | |
|-------|---|-----------------|
| (i) | the period within which commencement must occur, | 5 years |
| (ii) | the period for which the environmental authorisation should be granted and the date by which the activity must have been concluded, where the environmental authorisation does not include operational aspects; | 15 years |
| (iii) | the period that should be granted for the non-operational aspects of the environmental authorisation; and | 15 years |
| (iv) | the period that should be granted for the operational aspects of the environmental authorisation. | N/A |

Please note: The Department must specify the abovementioned periods, where applicable, in an environmental authorisation. In terms of the period within which commencement must occur, the period must not exceed 10 years and must not be extended beyond such 10 year period, unless the process to amend the environmental authorisation contemplated in regulation 32 is followed.

(d) List all the listed activities triggered and being applied for.

Please note: The onus is on the applicant to ensure that all the applicable listed activities are applied for and assessed as part of the EIA process. Please refer to paragraph (b) above.

EIA Regulations Listing Notices 1 and 3 of 2014 (as amended):

| Listed Activity No(s): | Describe the relevant Basic Assessment Activity(ies) in writing as per Listing Notice 1 (GN No. R. 983) | Describe the portion of the development that relates to the applicable listed activity as per the project description. | Identify if the activity is development / development / operational / decommissioning / expansion / expansion and operational. |
|------------------------|---|--|--|
| 19 | The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse. | The construction of the following infrastructure: <ul style="list-style-type: none"> • Environmental setbacks at the interfaces with rivers and the site; • Infilling of the <u>unlined</u> course of the Liesbeek River; • Two culverted crossings or bridges (depending on the alternative selected), over the <u>unlined</u> course of the Liesbeek River (to extend Link Road into the site, and the extend Berkley Road to Malta Road); • A two-lane bridge over the Black River; • The widening of the Liesbeek Parkway into the <u>unlined</u> course of the Liesbeek River; • Construction of footbridges, boardwalks and other recreational / non-motorised transport infrastructure in ecological setbacks; • The widening of the new bridge over the Black River; • The (possible) infilling of the <u>unlined</u> course of the Liesbeek River adjacent to the site (depending on the alternative selected); • <u>The infilling of a channel excavated into the Raapenberg Wetland by a 3rd party (which has effectively increased the frequency of inundation and decreased the time that the wetland takes to drain with negative ecological consequences) and the reinstatement of the berm as recommended by the freshwater ecologist;</u> and • The (possible) rehabilitation of the Liesbeek Canal east of the site. | Development |
| 27 | <u>The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation.</u> | <u>A survey of terrestrial areas at the site concluded that the River Club site "has no indigenous vegetation, being located on old fill material" (see Appendix G2 to the BAR), however, stands of common reed (Phragmites australis) would be</u> | <u>Development</u> |

| | | | |
|-------------------------------|---|--|---|
| | | <p><u>cleared for the construction of the Black River bridge (conservatively estimated at 0.35 ha), for the infilling of the unlined course of the Liesbeek River (estimated at 0.37 ha based on the extent of the wetland here reported in the City of Cape Town biodiversity network) and for the construction of the Berkley Road crossing over the Liesbeek River (conservatively estimated at 0.15 ha). No other indigenous vegetation would be cleared for the project.</u></p> <p><u>Therefore, it is calculated that less than 0.9 ha of indigenous vegetation would be cleared for the project. However, noting the uncertainty of the extent of common reed in the unlined course of the Liesbeek River which the LLPT propose to infill, this activity has been conservatively included in the application.</u></p> | |
| Listed Activity No(s): | Describe the relevant Basic Assessment Activity(ies) in writing as per Listing Notice 3 (GN No. R. 985) | Describe the portion of the development that relates to the applicable listed activity as per the project description. | Identify if the activity is development / development and operational / decommissioning / expansion / expansion and operational. |
| 15 | The transformation of land bigger than 1000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, such land was zoned open space, conservation or had an equivalent zoning, on or after 02 August 2010 in areas zoned for conservation use in urban areas in the Western Cape. | <p>The transformation of a portion of 15326-RE (only) for the extension of Berkley Road.</p> <p>Although this property is zoned as Community 1, Transport 2 and Open Space 2, a portion of the project footprint (the Berkley Road Extension) is located in an area categorised as "Buffer 1" and "Core 2" in the Table Bay District Plan (TBDP) and as "Biodiversity Protection Spatial Planning Category" in the CoCT Spatial Development Framework (SDF) although no natural vegetation exists in this area (refer to Figure 56 and Figure 57).</p> <p>This activity has therefore been conservatively included in the application.</p> | Development |
| 18 | The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre in urban areas zoned for conservation use in the Western Cape. | <p>The ~750m extension of Berkley Road on of a portion of 15326-RE which is zoned as Community 1, Transport 2 and Open Space 2.</p> <p>A portion of the project footprint is located in an area categorised as "Buffer 1" and "Core 2" in the TBDP and as "Biodiversity Protection Spatial Planning Category" in the CoCT SDF although no natural vegetation exists in this area (refer to Figure 56 and Figure 57).</p> <p>This activity has therefore been conservatively included in the application.</p> | Development |

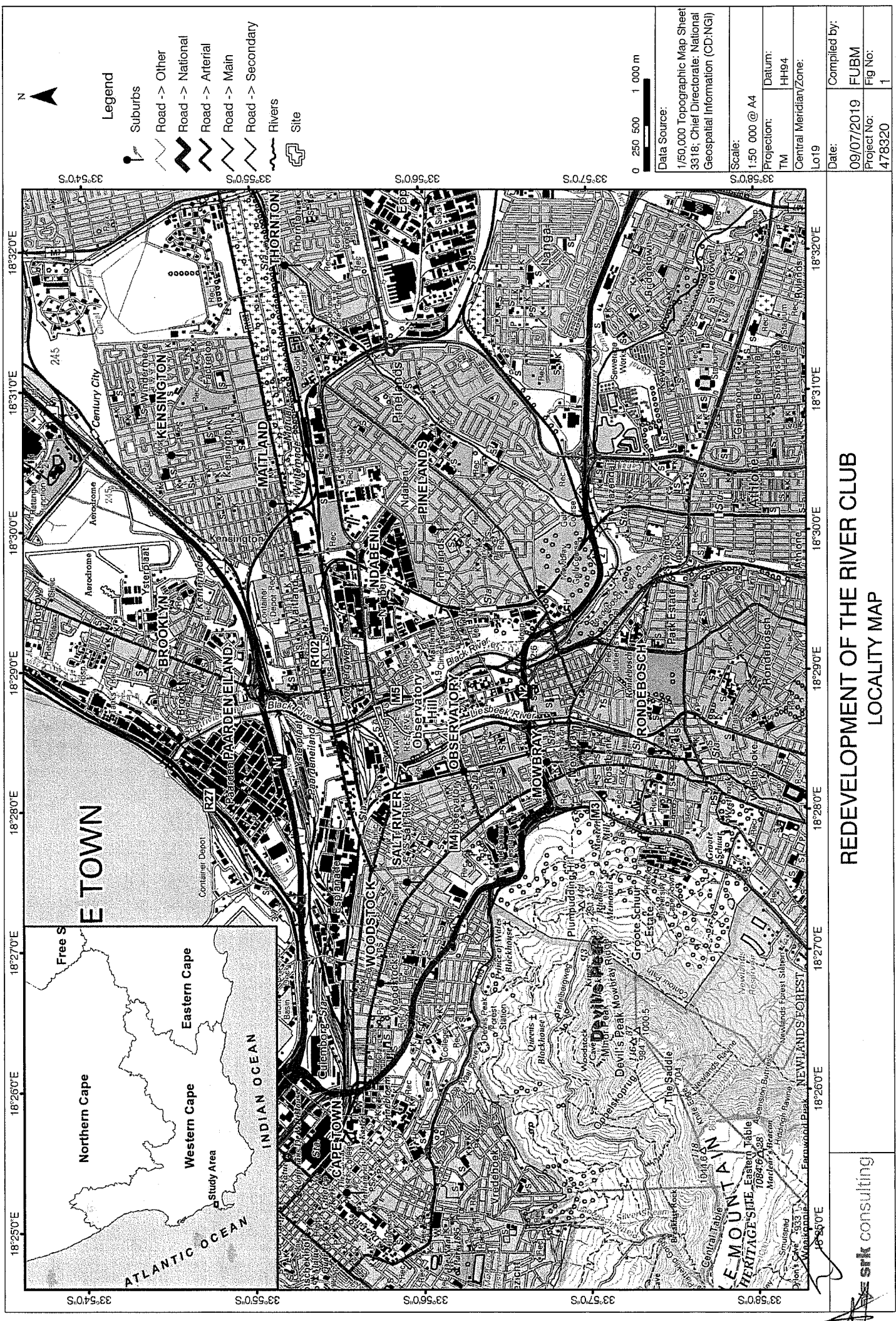
Waste management activities in terms of the NEM: WA (GN No. 921):

| Category A Listed Activity No(s): | Describe the relevant <u>Category A</u> waste management activity in writing as per GN No. 921 | Describe the portion of the development that relates to the applicable listed activity as per the project description |
|-----------------------------------|--|---|
| | | |

Note: If any waste management activities are applicable, the **Listed Waste Management Activities Additional Information Annexure** must be completed and attached to this Basic Assessment Report as **Appendix I**.

Atmospheric emission activities in terms of the NEM: AQA (GN No. 893):

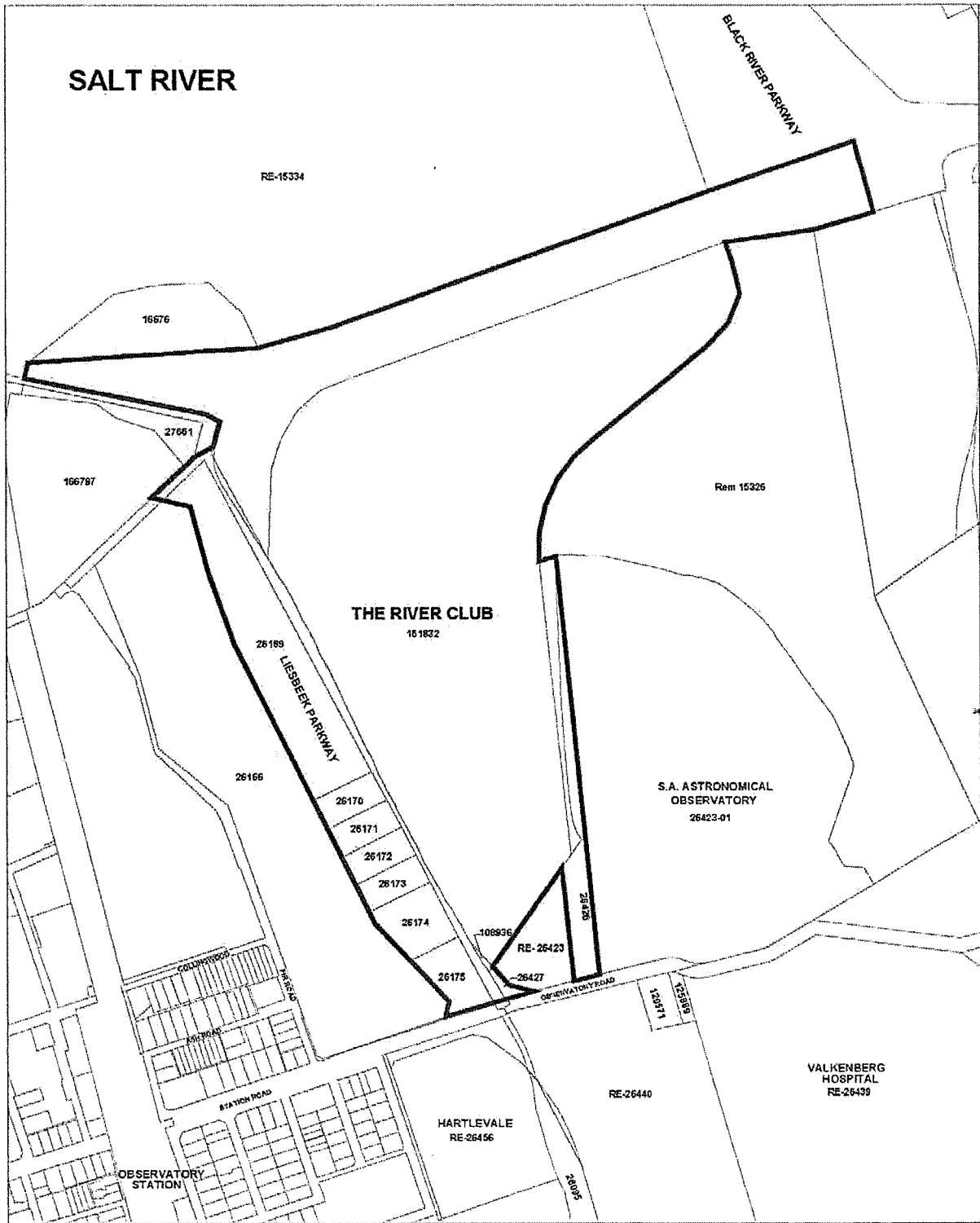
| Listed Activity No(s): | Describe the relevant atmospheric emission activity in writing as per GN No. 893 | Describe the portion of the development that relates to the applicable listed activity as per the project description. |
|------------------------|--|--|
| | | |



REDEVELOPMENT OF THE RIVER CLUB LOCALITY MAP

srk consulting

| | | | |
|--------------|------------|--------------|------|
| Date: | 09/07/2019 | Compiled by: | FUBM |
| Project No.: | 478320 | Fig No.: | 1 |



| | | |
|--|---------------------------------------|-----------------|
| | THE RIVER CLUB OBSERVATORY | |
| | CADASTRAL | |
| | SCALE 1:5000 | |
| | AUGUST 2018 | Figure 2 |

Figure 2: Cadastral Map

- (e) Provide details of all components (including associated structures and infrastructure) of the proposed development and attach diagrams (e.g., architectural drawings or perspectives, engineering drawings, process flowcharts, etc.).

| Buildings Provide brief description below: | YES | NO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <p>Portions of the site fall below the 1 in 100 year floodline elevation, which has been assessed to be <u>5.81 metres above mean sea level (mamsl)</u> at the site. The ground levels of buildings proposed at the site will therefore be raised above this level, <u>plus an additional 600 mm safety factor – i.e. to 6.4 mamsl</u> (but basements will be below this level).</p> <p>The following 18 buildings are currently anticipated for the Riverine Corridor Alternative (refer to Figure 3):</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Precinct:</th> <th>Building:</th> <th>Anticipated Floor Area</th> <th>Maximum Floors</th> <th>Anticipated Height (masl)</th> </tr> </thead> <tbody> <tr><td>1</td><td>1</td><td></td><td>4</td><td>21.5</td></tr> <tr><td>1</td><td>2</td><td></td><td>4</td><td>19.9</td></tr> <tr><td>1</td><td>3</td><td></td><td>4</td><td>19.9</td></tr> <tr><td>1</td><td>4</td><td></td><td>4</td><td>19.9</td></tr> <tr><td>1</td><td>5</td><td></td><td>6</td><td>29.9</td></tr> <tr><td>1</td><td>6</td><td></td><td>5</td><td>23.4</td></tr> <tr><td>1</td><td>7</td><td></td><td>4</td><td>19.9</td></tr> <tr><td>1</td><td>8</td><td></td><td>7</td><td>33.4</td></tr> <tr><td>1</td><td>9</td><td></td><td>7</td><td>33.4</td></tr> <tr><td>1</td><td>10</td><td></td><td>9</td><td>43.9</td></tr> <tr><td>1</td><td>11</td><td></td><td>8</td><td>33.5</td></tr> <tr><td colspan="2">Subtotal Precinct 1:</td><td>~60 000 m²</td><td>N/A</td><td>N/A</td></tr> <tr><td>2</td><td>12</td><td></td><td>6</td><td>36.4</td></tr> <tr><td>2</td><td>13</td><td></td><td>5</td><td>31.9</td></tr> <tr><td>2</td><td>14</td><td></td><td>10</td><td>44.7</td></tr> <tr><td>2</td><td>15</td><td></td><td>6</td><td>36.4</td></tr> <tr><td>2</td><td>16</td><td></td><td>8</td><td>42.6</td></tr> <tr><td>2</td><td>17</td><td></td><td>10</td><td>46.6</td></tr> <tr><td>2</td><td>18</td><td></td><td>10</td><td>46.6</td></tr> <tr><td colspan="2">Subtotal Precinct 2:</td><td>~90 000 m²</td><td>N/A</td><td>N/A</td></tr> <tr><td colspan="2">Total Precinct 1 and 2:</td><td>150 000 m²</td><td>N/A</td><td>N/A</td></tr> </tbody> </table> <p><i>Although the floor area of 150 000 m² will not be exceeded, the above table represents the anticipated height and floor area for each building for the Riverine Corridor Alternative only.</i></p> <p><u>A cultural, heritage and media centre is planned at building 9.</u></p> <p>Basement parking at Precinct 1 and Precinct 2 will be built on the current ground level of the site to create a podium at each precinct at ~6.4 mamsl – between ~3.5 and ~1.5 m above current ground level. The total extent of the podium (or basement) will be 79 500 m² (~ 8 ha).</p> <p><u>Buildings at the entrances to the site off Berkley Road extension and off Liesbeek Parkway will be designed as gateway buildings (see Figure 71, Figure 6 and Figure 7).</u></p> <p>More than 60% of the River Club property will be retained as open space (~9.4 ha – see Figure 5) and will include both soft landscaping (i.e. <u>soft open spaces / lawns</u>, the park or ecological corridor, and setbacks at the interfaces of rivers – <u>6.6 ha</u>) and hard open spaces (i.e. including covered pedestrian space, foot and cycle paths, and service infrastructure – <u>2.8 ha</u>).</p> <p>Within the two podium areas, buildings will occupy a footprint of ~ 3.4 ha (23% of the River Club property) and internal roads will occupy ~1.5 ha.</p> <p>Additional landscaped open areas will be created by infilling the <u>unlined</u> course of the Liesbeek and rehabilitating the canal, <u>and when one considers the site beyond the River Club property 15.6 ha of high quality open space would be created through the development, including 5 ha available to the public for active and passive recreational activities.</u></p> <p>In total, both hard and soft open spaces at the site will extend approximately 156 000 m² (~15.6 ha / 63% of the site).</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="3">River Club Property Footprints</th> <th colspan="3">NEMA Site Footprints</th> </tr> <tr> <th>Item:</th> <th>ha</th> <th>%</th> <th>Item:</th> <th>ha</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Building footprints</td> <td>3.4</td> <td>23</td> <td>Building footprints</td> <td>3.4</td> <td>14</td> </tr> <tr> <td>Unassigned</td> <td>0.4</td> <td>3</td> <td>Unassigned</td> <td>1.5</td> <td>6</td> </tr> <tr> <td>Internal roads and bridges</td> <td>1.5</td> <td>10</td> <td>All roads and bridges</td> <td>4.3</td> <td>17</td> </tr> <tr> <td>Open Space</td> <td>9.4</td> <td>64</td> <td>Open Space</td> <td>15.6</td> <td>63</td> </tr> <tr> <td>Total</td> <td>14.7</td> <td>100</td> <td>Total</td> <td>24.8</td> <td>100</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>River Club Property Open Space:</th> <th>% of RC property</th> <th>ha</th> </tr> </thead> <tbody> <tr> <td>Areas available for active and passive recreation:</td> <td>24</td> <td>3.5</td> </tr> <tr> <td>- Hard landscaping</td> <td>19</td> <td>2.8</td> </tr> </tbody> </table> | | | Precinct: | Building: | Anticipated Floor Area | Maximum Floors | Anticipated Height (masl) | 1 | 1 | | 4 | 21.5 | 1 | 2 | | 4 | 19.9 | 1 | 3 | | 4 | 19.9 | 1 | 4 | | 4 | 19.9 | 1 | 5 | | 6 | 29.9 | 1 | 6 | | 5 | 23.4 | 1 | 7 | | 4 | 19.9 | 1 | 8 | | 7 | 33.4 | 1 | 9 | | 7 | 33.4 | 1 | 10 | | 9 | 43.9 | 1 | 11 | | 8 | 33.5 | Subtotal Precinct 1: | | ~60 000 m² | N/A | N/A | 2 | 12 | | 6 | 36.4 | 2 | 13 | | 5 | 31.9 | 2 | 14 | | 10 | 44.7 | 2 | 15 | | 6 | 36.4 | 2 | 16 | | 8 | 42.6 | 2 | 17 | | 10 | 46.6 | 2 | 18 | | 10 | 46.6 | Subtotal Precinct 2: | | ~90 000 m² | N/A | N/A | Total Precinct 1 and 2: | | 150 000 m² | N/A | N/A | River Club Property Footprints | | | NEMA Site Footprints | | | Item: | ha | % | Item: | ha | % | Building footprints | 3.4 | 23 | Building footprints | 3.4 | 14 | Unassigned | 0.4 | 3 | Unassigned | 1.5 | 6 | Internal roads and bridges | 1.5 | 10 | All roads and bridges | 4.3 | 17 | Open Space | 9.4 | 64 | Open Space | 15.6 | 63 | Total | 14.7 | 100 | Total | 24.8 | 100 | River Club Property Open Space: | % of RC property | ha | Areas available for active and passive recreation: | 24 | 3.5 | - Hard landscaping | 19 | 2.8 | | |
| Precinct: | Building: | Anticipated Floor Area | Maximum Floors | Anticipated Height (masl) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1 | | 4 | 21.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | | 4 | 19.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3 | | 4 | 19.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 4 | | 4 | 19.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 5 | | 6 | 29.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 6 | | 5 | 23.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 7 | | 4 | 19.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 8 | | 7 | 33.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 9 | | 7 | 33.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 10 | | 9 | 43.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 11 | | 8 | 33.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subtotal Precinct 1: | | ~60 000 m² | N/A | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 12 | | 6 | 36.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 13 | | 5 | 31.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 14 | | 10 | 44.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 15 | | 6 | 36.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 16 | | 8 | 42.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 17 | | 10 | 46.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 18 | | 10 | 46.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subtotal Precinct 2: | | ~90 000 m² | N/A | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Precinct 1 and 2: | | 150 000 m² | N/A | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| River Club Property Footprints | | | NEMA Site Footprints | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Item: | ha | % | Item: | ha | % | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Building footprints | 3.4 | 23 | Building footprints | 3.4 | 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unassigned | 0.4 | 3 | Unassigned | 1.5 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Internal roads and bridges | 1.5 | 10 | All roads and bridges | 4.3 | 17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Open Space | 9.4 | 64 | Open Space | 15.6 | 63 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 14.7 | 100 | Total | 24.8 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| River Club Property Open Space: | % of RC property | ha | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Areas available for active and passive recreation: | 24 | 3.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| - Hard landscaping | 19 | 2.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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|---|-----------|------------|
| - Soft open space | 5 | 0.7 |
| Ecological and other open areas: | 40 | 5.9 |
| - Soft landscaping | 8 | 1.2 |
| - Dedicated ecological areas | 13 | 1.9 |
| - Eco corridor and buffer | 19 | 2.8 |
| Total: | 64 | 9.4 |

| | | |
|---|------------------|-------------|
| NEMA Site Open Space: | % of Site | ha |
| Areas available for active and passive recreation: | 19 | 4.8 |
| - Hard landscaping | 16 | 4.1 |
| - Soft open space | 3 | 0.7 |
| Ecological and other open areas: | 44 | 10.8 |
| - Soft landscaping | 14 | 3.4 |
| - Dedicated ecological areas | 8 | 2 |
| - Eco corridor and buffer | 20 | 4.9 |
| - Stormwater detention and treatment | 2 | 0.5 |
| Total: | 63 | 15.6 |

Types of land use envisaged for the development are as follows:

- **Commercial:** offices that will be provided to cater for, e.g. financial services, general business and sales and marketing.

A 200 key hotel is currently planned. It is anticipated that the hotel may serve both business and leisure travellers.

- **Retail:** the retail offering will consist of typical line shops as well restaurants, food and beverage outlets and a gym in keeping with the tenant mix focus.

Retail facilities will be configured as a "high street", with the appearance of a group of buildings lining a (pedestrian) high street. The high street will have open and covered areas.

- **Residential:** residential units will consist of studio / one-bedroom and two-bedroom units with an average floor area (gross leasable area [GLA]) of between 25 m² and 77 m². Residential floor area will comprise at least 20% of the development. At this stage, the LLPT envisages a rental-only model for residential units.

Although the majority of residential units will be priced according to market dynamics, the proponent has committed to include a component of "inclusionary housing" in the development scheme. 20% of residential floor area will be for inclusionary housing (but the LLPT cannot, at this stage, confirm the number of inclusionary [or market] housing units that will be provided, the market sector of tenants, or the financial subsidisation structure).

Inclusionary housing units will be integrated into apartment blocks as far as possible. The LLPT will be offering these units at below their market rental value.

Tenants in inclusionary houses will be selected by the LLPT on an application basis – at this stage the LLPT envisages that beneficiaries will be households of employed civil servants (teachers, nurses, policemen etc.) earning between R22 000 – R30 000/month (in 2019 prices).

The LLPT envisage that a Mixed Use Association Agreement will govern and control the rights of use, similar to Sectional Title Rules for residential sections (when combined in a Mixed Use development), but with very specific rules to govern the use of the inclusionary units so as to avoid abuse of the subsidy programme. The rules will comply with all current legislation, including the new Ombud Act of Collective Schemes.

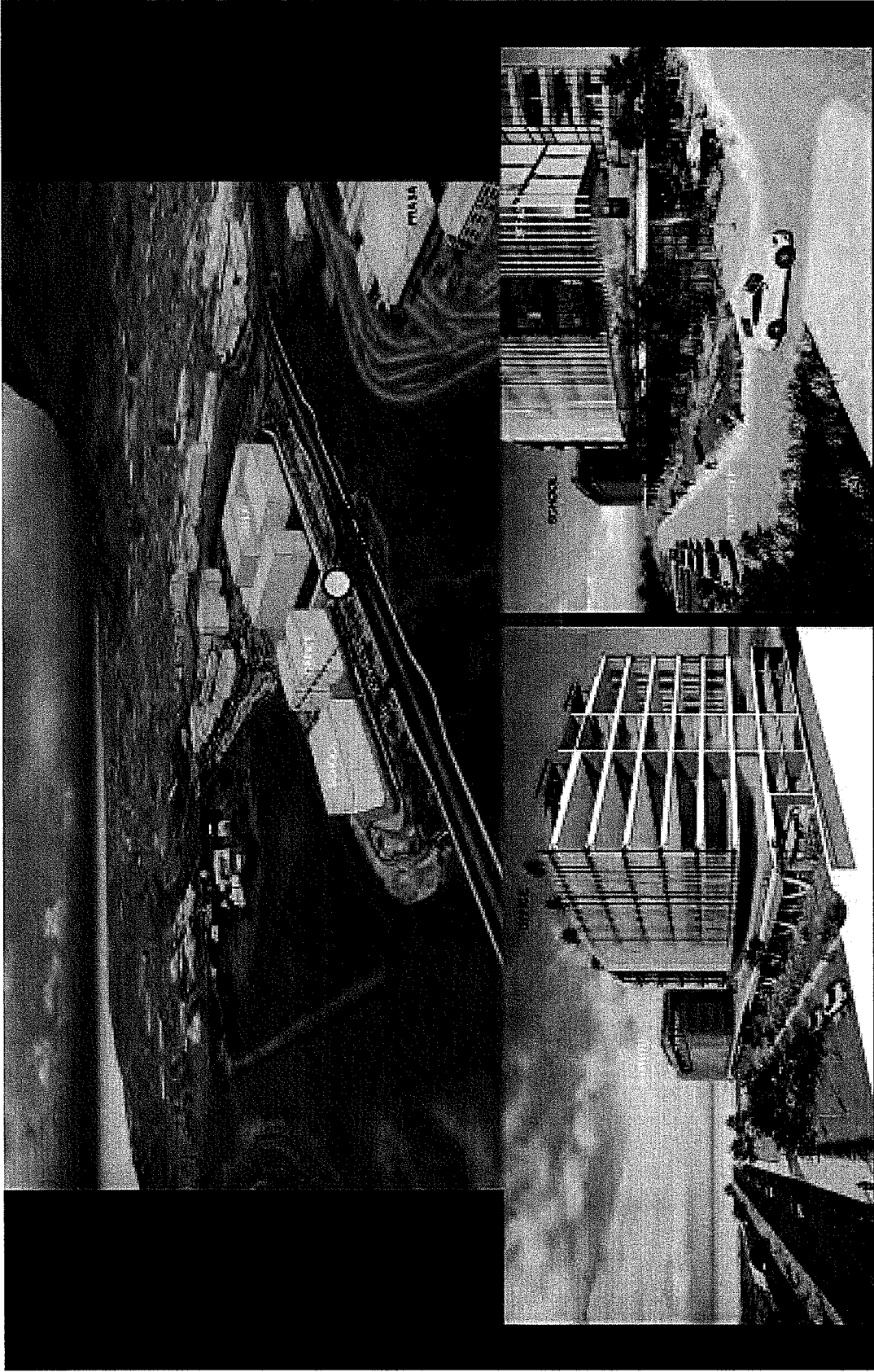
- **Associated Uses:** Uses associated with the above are also possible such as community facilities and schools.

A breakdown of the land uses proposed for the development is presented in the table below (see Figure 66).

| Land Use | Anticipated Floor Area (m ²) |
|--|--|
| Retail (including restaurants, etc.) | 16 000 |
| Residential (including subsidised component) | 30 000 |
| Office | 80 000 |
| Ancillary (including gym, hotel conference facilities, <u>school</u> , etc.) | 24 000 |
| Total: | 150 000 |

Precinct 1 will include ~60 000 m² of floor area, and Precinct 2 will include ~90 000 m² of floor area.

Although the floor area of the development will not exceed 150 000 m², and the proponents are committed to allocating at least 20% of the development to residential use (of which 20% will be offered at below the market rate for rental properties), the proponents require a level of flexibility to respond to market conditions. The precise land use mix (residential, commercial and retail) and height and bulk of each building can therefore not be precisely confirmed at this stage.



View of Gateway Building at Berkeley Road

V

Figure 6: View of the two gateway buildings at Berkeley Road

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| Infrastructure (e.g., roads, power and water supply/ storage) Provide brief description below: | YES | NO |
|--|-----|----|
| <p>Roads and Bridges</p> <p>Access to the site is currently from Observatory Road in the south of the site (see Figure 1). This access will be used to allow emergency access in the short term. In future, this access will provide a physical connection to future <u>Two Rivers local area</u> developments, and possibly as a service entrance to the River Club.</p> <p>During the initial phase of development (Phase 1), a ~530 m long two-lane internal link road between Liesbeek and Parkway and Berkley Road extension, including a two-lane crossing (preferred alternative) or bridge (alternative 1) over the <u>unlined</u> course of the Liesbeek River into the development (see Figure 12) and a ~450m two-lane extension of Berkley Road (from east of the site, including a two lane, ~80m long bridge over the Black River – see Figure 14) are proposed to provide access to the development. The new internal Link Road and the Berkley Road extension will provide access to the site during all phases of development and into the future <u>(see Figure 15)</u>. Liesbeek Parkway will initially also be widened between Station Road and Link Road to four lanes to accommodate development traffic.</p> <p>The full Berkley Road Extension is an approved scheme within a right of way proclaimed and set aside for this purpose⁴. The land vests in the CoCT, who, along with the <u>Two Rivers local area</u> initiative, view the extension as an important infrastructure project. The proponent will extend Berkley Road as proposed above and widen Liesbeek Parkway between Station Road and Link Road, funded by offsets against the required development contribution payable to the CoCT. The CoCT will be responsible (at some stage in the future or concurrently with the initial phases for practical reasons and/or if funding is available) for the widening of the Berkley Road extension to a six lane road (including the bridge over the Black River) and the construction of the remainder of the Berkley Road extension, including the construction of a crossing over the <u>unlined</u> course of the Liesbeek River to connect this road and the remainder of the internal link road with Malta Road / Liesbeek Parkway. The proponent will be responsible for widening the Link Road crossing over the <u>unlined</u> course of the Liesbeek River and the remainder of the internal link road when development traffic volumes require this upgrade. The CoCT will, at some stage in the future when required, widen the Liesbeek Parkway between Link Road and Malta Road, and between Station Road and the N2.</p> <p>The full extension of Berkley Road, including the crossings of both the Black River (see Figure 14) and Liesbeek River (see Figure 19), the widening of the Black River Bridge, the full four lane Link Road Crossing of the <u>unlined</u> course of the Liesbeek River (see Figure 12) and the widening of the Liesbeek Parkway from Station Road to Malta Road (see Figure 20) are all subject of the applications for the development of the River Club.</p> <p><u>The link road through the development will also include a substantial crossing over the ecological corridor which separates the southern and northern precinct of the development (see Figure 16).</u></p> <p>Should the preferred development alternative (the Riverine Corridor Alternative) be selected, the crossings over the (infilled) <u>unlined</u> course of the Liesbeek River will include box culverts for faunal movement (see Figure 12 and Figure 19). Ramps to the bridge over the Black River will each also include two box culverts for faunal movement (see Figure 14). Should Alternative 1 (the Island Concept Alternative) be selected, crossings over the Liesbeek River will be bridge structures, and ramps to bridges over the Liesbeek and Black Rivers will all include culverts for faunal movements.</p> <p>Allowance will be made for pedestrian walkways on all river crossings.</p> <p>Site egress during high order flood events will be via the proposed Berkley Road Bridge to the east.</p> <p>The following additional upgrades to the public road network are proposed by the developer to accommodate additional traffic from Precinct 1 (and other developments in the area):</p> <ul style="list-style-type: none"> • Upgrade of the signalised intersection of Link Road and Liesbeek Parkway (see Appendix G1); • Upgrade of the un-signalised intersection of the M5 and Berkley Road to a signalised intersection (see Appendix G1); • The provision of new access from Berkley Road to the development; • The provision of a new intersections on the internal Link Road to provide access to Precincts 1 and 2 of the development; • The widening of a portion of Liesbeek Parkway between Link road and Station Road intersections; and • Signal optimisation at the intersection of Station Road and Liesbeek Parkway. <p>The traffic impact assessment has found that the Liesbeek Parkway south of the development has a poor level of service at current traffic volumes, and therefore, that this portion of the road must be widened by the CoCT regardless of whether the development of the River Club proceeds or not. Furthermore, the traffic impact assessment found that the development will not significantly alter the (already poor) level of service of this road. The CoCT must therefore widen Liesbeek Parkway between the N2 and Station Road and upgrade the intersection between the N2 and Liesbeek Parkway in order to improve the current service levels on this part of public road network, but not as a result of, or precondition for the development of the River Club.</p> | | |

⁴ Berkley Road extension was originally indicated as a Proclaimed Main Road (MR149), in terms of the Roads Ordinance 1949 (Ordinance 12 of 1949), in Provincial Gazette 385 of 1968 (i.e. item 27 in an extract of the Provincial Gazette). The Berkley Road extension has since appeared on the CoCT's Road Network Plan on numerous occasions, including that adopted in 1997, as well as the latest version published in the Comprehensive Integrated Transport Plan (CITP) 2018 – 2023.

During the development of Precinct 2, two additional left-in left-out accesses will be provided on the Berkley Road Extension by the River Club developer, and this road will be extended by a further 180 m.

In order to accommodate additional traffic on the public road network from Precinct 2, the developer must (see Appendix G1) upgrade the intersection at the main entrance to the development on Berkley Road to accommodate the traffic using the second access.

The proposed internal road network is illustrated in Figure 3, Figure 4 *and* Figure 15. All internal roads will have a single lane in each direction (other than at intersections). The road over the ecological corridor separating the two development precincts includes a 1.5 m span at the ecological corridor to allow faunal movement (see Figure 16).

Prior to the full extension of Berkley Road, measures to discourage private vehicle movements through the site (i.e. linking Liesbeek Parkway to Berkley Road) are essential to ensure that this road through the development functions at acceptable levels of service during peak periods (i.e. does not operate beyond full capacity).

Parking

The site is located in a Standard Area in terms of the CoCT Parking Scheme. Based on the current land use mix anticipated, this would require that 5849 bays are provided at the development.

The CoCT is promoting a development strategy referred to as Transit Orientated Development (TOD), where a greater reliance on public transport is promoted, and the use of private vehicles is discouraged. Strategies to promote TOD include the reduced provision of parking at new developments, or the provision of parking areas that can be repurposed as public transport becomes more viable. The Two Rivers local area development also envisage a future with a far lower reliance on private vehicles (and therefore on-site parking bays).

At this stage it is not practical to not cater for on-site parking. However, the LLPT have agreed to reduce their parking requirements at the site to 4 801 bays (refer to Appendix G1), to allow for the repurposing of above ground parking areas into other uses in the design of buildings and to promote shared parking in the Two Rivers local area (at the River Club) as this broader development proposal is realised.

Precinct 1 and 2 will both include one basement parking level. 60 surface parking bays will be provided in each precinct (i.e. a total of 120 surface parking bays).

Basement parking structures will be designed to prevent water ingress. A tanked basement structure will be selected, and ingress will be limited to minor seepage. Minimal amounts of seepage shall be pumped into detention ponds and then discharged into adjacent watercourses.

Public Transport

Public transport to the site will be predominantly rail and road based. The Observatory Station is within walking distance, while Liesbeek Parkway and Station Road are on bus routes (Golden Arrow – although no bus stops are provided) and Liesbeek Parkway, Station Road, Main Road and Voortrekker Road are all served by minibus taxis (see Figure 9).

The Two Rivers Local Area SDF has also proposed a public and non-motorised transport (NMT) transport corridor to the south of the site on Station Road which may also serve the development in the future.

It is anticipated that approximately 39% of the population at the development will make use of public transport services in the future, and despite the extent of the public transport network at the site, the capacity of the public transport services will need to be expanded, or additional public transport facilities will need to be provided by the CoCT in the future.

In the future, a MyCiti Bus route will run along Main Road to the west of the development, and may turn into the development.

In order to access the surrounding public transport network the developers will:

- Provide a high quality NMT network (see below);
- Facilitate the movement of public transport routes through the development (see Figure 17);
- Provide taxi drop-off points; and
- Provide Uber bays.



Figure 18: Widening of the Liesbeek Parkway

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 PROJECT: RIVER CLUB REDEVELOPMENT
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RIVER CLUB REDEVELOPMENT

PROJECT NO: RCLUB/01/01/01
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CITY OF CAPE TOWN
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 STAD KAAPSTAD

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Ecological Setbacks and Movement Corridors

The development will be set back from watercourses, and the interfaces between the development and adjacent freshwater ecosystems will be rehabilitated (the ecological setbacks), and a faunal movement corridor is provided through the development (the ecological corridor - see Figure 3, Figure 4, Figure 22, and Figure 23). Roads through ecological setbacks will incorporate box culverts to allow faunal movements (see Figure 12, Figure 14, Figure 16 and Figure 19). The bridge over the ecological corridor will span at least 15 m (see Figure 16).

Ecological setbacks will consist of a bank with a maximum average slope of 1:5, planted with suitable wetland vegetation. Abutting this zone, and depending on the alternative selected (see below) would be a locally indigenous fynbos planted buffer strip, followed by park space with amenities such as pedestrian and cycle pathways, extensive tree planting and large lawned banks. Stormwater detention and treatment facilities will also be positioned in setbacks.

For the preferred development alternative / Riverine Corridor Alternative (see Figure 21) the western bank of the canal edge would be removed, and a stepped gabion wall would be installed on the eastern bank of the canal (see Figure 22, Figure 23, Figure 24 and Figure 25). A buffer of 40 m (except for a single pinch point where the buffer will narrow to a minimum of 20 m where the link road encroaches into this setback – see Figure 21) will be located to the west of the modified river course, including riverine vegetation (~22 m) at slope angles that will accommodate various flow levels and areas of refuge for fauna during high flows (see Figure 21, Figure 22, Figure 23, Figure 24, Figure 25 and Figure 26). The setback will also include a 7.5 m grassed bank with pockets of riverine vegetation, and walking and cycle trails (see Figure 22, Figure 23 and Figure 24).

If the preferred development alternative is authorised, the unlined course of the Liesbeek River to the west of the development will be infilled. A stormwater swale would be retained, and a stormwater pipeline will be installed to direct stormwater from urban areas to the west (and the development itself) further north into the remaining channel of the unlined course of the Liesbeek, and ultimately the Black River (see Figure 27). This infilled area will be lawned and trees will be planted, stormwater detention facilities will be located in this area, which will also serve as faunal refuges including standing water ponds which would retain stormwater into the early summer, thus supporting Western Leopard Toad breeding cycles, without exposing them to predation from carp, as per the existing backwater system, that links to the Black River.

For development alternative 1 / Island Concept Alternative (Figure 29, Figure 30 and Figure 31), the unlined course of the Liesbeek River west of the site would be rehabilitated on the River Club property, with the implementation of a 30 – 35 m ecological corridor, including sloped banks planted with wetland vegetation and locally indigenous fynbos (15 m) and a public realm (~20 m). The public realm would include lawned areas, patches of riverine vegetation, stormwater abatement infrastructure, and foot and cycle paths. Under this alternative, the western bank of the canal edge would be retained and activated by the removal of portions of the canal wall, and the installation of gabion structures to enhance the faunal and floral habitat value of this fairly sterile freshwater environment. Foot and cycling paths would be installed immediately west of the canal, and a strip of locally indigenous fynbos would be planted to the west of this path. A lawned public area is planned further to the west abutting buildings.

Landscaping and Open Space

Open spaces are intended for use by occupants of the development and their customers and/or guests as well as the public.

Provision is made for 15.6 ha of open space in a number of open space areas throughout the site (including 9.4 ha at the River Club property itself). These areas will include a park (the ecological corridor), open spaces adjacent to boulevards along major access routes at the site and in the ecological setbacks abutting the Liesbeek and the Liesbeek Canal.

The open space provided is considered sufficient for a development of this nature noting that:

- The site is currently privately owned, plays a limited role in accommodating people seeking recreational open space, and the right of admission is reserved.
- The development will be publicly accessible, ~65% of the site and River Club property would be retained as open space if developed as proposed (excluding roads, which occupy an additional 17% of the site), and ~25% of the River Club property would be made available for recreational activities in open space areas.
- The development would allow the public to enjoy open space vistas associated with the Raapenberg Bird Sanctuary more meaningfully.
- The wider open space system of which the site forms part contains campus style development (e.g. Observatory and Valkenberg). These institutions illustrate that development can be accommodated within the Two Rivers local area, provided that pockets of green space and ecological connectivity are retained (as per the development proposal).
- There are very extensive open space areas in the immediate vicinity, comprising active open spaces such as sports fields and passive open spaces including parks and environmental areas.
- Within the greater the Two Rivers local area there remain very large areas in public ownership which cannot be developed and (along with open spaces that have been included in the development proposal) will continue to form part of the public open space system.
- Further afield, there are other significant open space areas that are accessible to the public (such as the Table Mountain National Park).
- Considerable social (as well as heritage and ecological) benefits are anticipated from extending the public movement corridor along the "new" Liesbeek River corridor should the Riverine Corridor Alternative be selected for development (see Impacts SE7, FE3 and H4 in Appendix J to the BAR).

Soft landscaped areas will include tree-lined vehicular and pedestrian avenues, plazas and parking areas (see Figure 32). Shrub, groundcover and lawns will be planted throughout the development to aesthetically soften buildings, walls and roads.

The following principles will apply to landscaping in ecologically important areas:

- Plants used in setbacks / buffer areas will be carefully selected with the help of the fresh water ecologist;
- Tree species may include some specimens originally found in the wider South African context;
- A locally indigenous planting palette will be used for all understorey planting, including lawns, which will be limited to Kweek or Buffalo (both hardy indigenous species); and
- Sustainable stormwater drainage systems will be landscaped with locally indigenous wetland plant species.

Maintenance of the extensive landscaping on the site will be for the responsibility of the Body Corporate / Developer.

Leisure Facilities

The development will be publicly accessible, ~65% of the site would be retained as open space (excluding roads) if developed as proposed, and ~25% of the River Club property (20% of the site) would made available for recreational activities in open space areas. In this regard the development proposal includes:

- The rehabilitation of the surrounding water courses which will make them (as well as surrounding areas such as the Raapenberg Wetland and SAAO) more accessible and aesthetically pleasing for visitors to the site;
- Open spaces would comprise ~65% of the site, of which ~20% will be lawned for passive recreation, and all open space areas will be publicly accessible (e.g. on pathways);
- Pedestrian and cycle paths in the ecological setbacks to the west and east of the site (see Figure 21, Figure 22, Figure 23, Figure 24, Figure 25, Figure 26, Figure 27, Figure 30 and Figure 31); and ecological setbacks and the ecological corridor that will be open to the public for recreation and leisure use (see Figure 33 for a layout of hard landscaping for the Riverine Corridor Alternative); and
- Lawned open areas for passive open space.

The following design principles will apply to the design of footpaths, boardwalks and footbridges:

Footbridges and boardwalks in ecological setbacks:

- Deck planks and balustrades will be manufactured from locally sourced (Elgin/Grabouw area) Sugar Gum (Eucalyptus cladocalyx) and substructure (beams/posts/joists) will be manufactured from Tanalith treated SA Pine timber;
- Designed to be ~40cm above ground, and 3m in width in key NMT routes (as indicated in Figure 11), and 1.5 m wide elsewhere; and
- Beams will be anchored on in-situ cast pier blocks.

Footpaths:

- Manufactured from exposed aggregate concrete segmented pavers or similar, laid on G5 material where required, otherwise on compacted in situ material,
- Designed to be ~3m wide in key NMT routes and ~1.5m wide where only pedestrian use is anticipated.
- Ramps sloped at a maximum grade of 1:12.

It is possible that additional applications will be made at a later stage for other infrastructure in aquatic areas, such as walkways / boardwalks, artificial islands for waterfowl and bird hides.

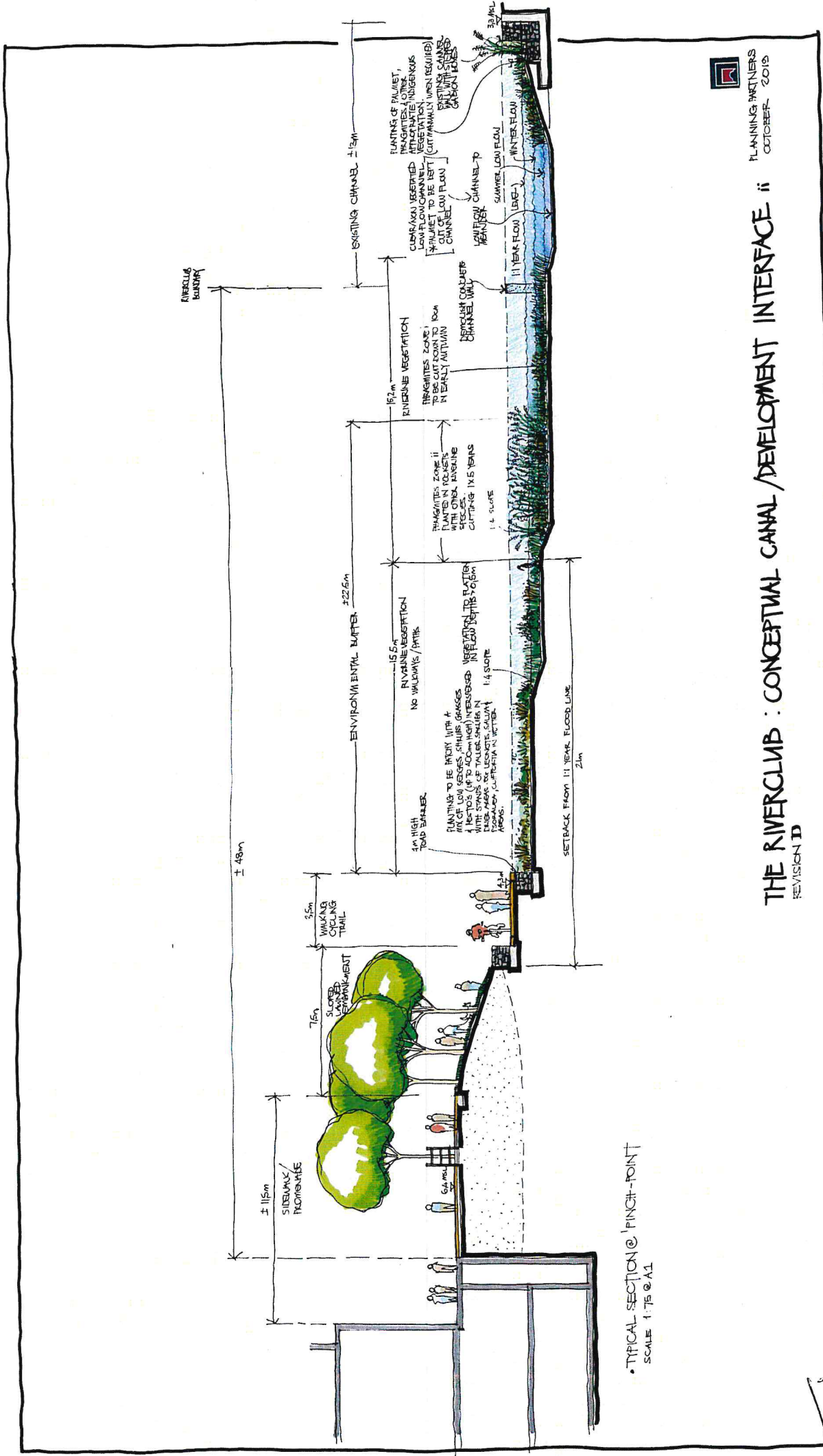
The existing bird hide (which is in a poor condition), driving range and mashie golf course will not be retained if approval for the development is granted.

Regarding the current recreational value of the site:

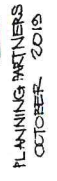
- The River Club property plays a limited role in accommodating people seeking recreational open space (mainly golfers and some birders);
- People do not generally visit the site to run, walk, cycle or play games;
- The site is privately owned, and active use of the site for recreation is ultimately at the discretion of the owners (i.e. the right of admission is reserved);
- The green public movement corridor along the Liesbeek River terminates south of the site; and
- The proponents therefore hope to achieve a net improvement in recreational value of the site through its development.



Figure 21: Setback Distances – Preferred Development Alternative



• TYPICAL SECTION @ PINCH-POINT
SCALE 1:75 @ A1



THE RIVERCLUB : CONCEPTUAL CANAL / DEVELOPMENT INTERFACE ii
REVISION D
PLANNING PARTNERS
OCTOBER 2015

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Stormwater Infrastructure

Since a large portion of the site is bounded by the unlined course of the Liesbeek River and Liesbeek Canal, very little (if any) overland flow from adjacent areas pass through the site, and therefore only stormwater generated at the site itself needs to be managed through the proposed stormwater system.

The River Club site is located within the floodplain and in order to permit development, the site will be raised to above the 1:100 year flood line. However, since the site is located within a floodplain and its surrounds are inundated even during low order storm events, attenuation of stormwater adds no significant value (i.e. will not prevent flooding) and thus the rate at which runoff is released from the development is irrelevant. A departure from the CoCT Stormwater Policy will therefore be requested. Requirements with respect to the quality of stormwater discharged from the site will be adhered to.

Currently the site drains towards the Liesbeek Canal to the east, and to the unlined course of the Liesbeek River to the west. Buildings at the development will be raised above the 1:100 year floodline, and the site will continue to drain to the east and west following the redevelopment.

In terms of stormwater quality, the developers are required to retain stormwater that would be generated on-site during a 1:0.5 year storm event over 24 hours, reduce suspended solids in stormwater retained on site by 80%, reduce the phosphate content of stormwater by 45% and trap litter and grease at pollutant sources.

In order to achieve these requirements, vegetated stormwater swales underlain by a piped drainage network will provide stormwater storage capacity (see Figure 37 and Figure 38), reduce flow velocities (lengthening the catchment response time and decreasing peak flows) and provide pre-treatment of stormwater through vegetation to remove coarse to medium sediments. Bioretention systems will be installed in trenches under the full length of all swales (see Figure 38). This bioretention system will remove finer particulates, nutrients and associated contaminants through fine filtration. Bioretention swales also provide flow retardation for frequent storm events. Pocket wetlands will be provided in the swale between the Liesbeek Parkway and the development (see Appendix K4b).

Scouring will be reduced at outlets by ensuring the slope and hydraulic roughness of the overlying swale reduces flow velocities by creating shallow temporary ponding (i.e. extended detention) over the surface of the bioretention filter media via the use of check dams (where required).

Sustainable Urban Drainage systems proposed at the site will also combine with water sensitive reduction strategies and other broader sustainable strategies in the following manner:

- Green (planted) roofs are proposed which will assist in reducing post development peak flows (as well mitigate against heat island effect);
- Rainwater harvesting will contribute to SUDS by reducing post development peak flows whilst also removing contaminants and improving the quality of the runoff;
- The constructed wetlands are proposed to treat stormwater runoff; and
- The constructed wetlands will create habitat for various species of fauna most notably the Western Leopard Toad.

Plant species to be used in wetlands, ecological setbacks, and other areas of the site are presented in Appendix K7.

Bulk Earthworks

The proposed project requires bulk earthworks, primarily to raise portions of the site above the 1 in 100 year floodplain, i.e. to ~ 6.4 mamsl (the 1 in 100 year floodplain has been calculated to be 5.81 mamsl, and a 600 mm factor of safety has been allowed for).

Approximately 260 000 m³ of imported fill material will be needed for the development. The fill material will be sourced primarily from commercial sources and sorted and crushed builders' rubble.

A geotechnical investigation has indicated that numerous soil improvement techniques to mitigate against poor bearing capacity and settlement will be required. In principle almost all structures will utilise piles.

During the construction, approximately 20 000 m³ of topsoil will be stripped from areas to be developed. As topsoil is contaminated with kikuyu grass it may not be possible to harvest this topsoil for rehabilitation and landscaping. If topsoil cannot be harvested for landscaping and rehabilitation this material will be imported from commercial sources.

3. PHYSICAL SIZE OF THE PROPOSED DEVELOPMENT

| | | | |
|--|-----------|----------|----------------|
| (a) Property size(s): Indicate the size of all the properties (cadastral units) on which the development proposal is to be undertaken | 151832 | 148 425 | m ² |
| | 26426 | 5 092 | m ² |
| | 108936 | 134 | m ² |
| | 26427 | 509 | m ² |
| | 15326 Rem | 208 981 | m ² |
| | 26169 | 18 900 | m ² |
| | 26170 | 2 072 | m ² |
| | 26171 | 2 024 | m ² |
| | 26172 | 2 043 | m ² |
| | 26173 | 2 006 | m ² |
| | 26174 | 3 812 | m ² |
| | 26175 | 3 840 | m ² |
| (b) Size of the facility: Indicate the size of the facility where the development proposal is to be undertaken | | N/A | m ² |
| (c) Development footprint: Indicate the area that will be physically altered as a result of undertaking any development proposal (i.e., the physical size of the development together with all its associated structures and infrastructure) | | ~248 000 | m ² |
| (d) Size of the activity: Indicate the physical size (footprint) of the development proposal | | ~248 000 | m ² |
| (e) For linear development proposals: Indicate the length (L) and width (W) of the development proposal | | | |
| (f) For storage facilities: Indicate the volume of the storage facility (l) | | | |
| <i>Sewage storage facilities – total volume in both facilities located in building basements</i> | | 374 | m ³ |
| <i>Diesel storage facilities for emergency power generators located above the 1:100 year floodline</i> | | <30 | m ³ |
| (g) For sewage/effluent treatment facilities: Indicate the volume of the facility (Note: the maximum design capacity must be indicated) | | | |

4. SITE ACCESS

| | | |
|--|-----------|----|
| (a) Is there an existing access road? | YES | NO |
| (b) If no, what is the distance in (m) over which a new access road will be built? | See below | |

(c) Describe the type of access road planned:

Access to the site is currently from Observatory Road in the south of the site (see Figure 1). This access will be used to allow emergency access in the short term. In future, this access will provide a physical connection to future Two Rivers local area developments, and possibly as a service entrance to the River Club.

During the initial phase of development, a ~530 m long, two-lane link road (including crossing over the unlined course of the Liesbeek River into the development – see Figure 8) and a ~450 m two-lane extension of Berkley Road (from east of the site, including a ~80m long bridge over the Black River – see Figure 14) are proposed to provide access to the development. The new internal Link Road and the partial (two lane) Berkley Road extension will provide access to the site during all phases of development and into the future.

At a later stage, the CoCT will widen the Berkley Road extension (including widening the bridge over the Black River) and extend Berkley Road to Malta Road / Liesbeek Parkway over the unlined course of the Liesbeek River.

Please note: The position of the proposed access road must be indicated on the site plan.

5. DESCRIPTION OF THE PROPERTY(IES) ON WHICH THE LISTED ACTIVITY(IES) ARE TO BE UNDERTAKEN AND THE LOCATION OF THE LISTED ACTIVITY(IES) ON THE PROPERTY

5.1 Provide a description of the property on which the listed activity(ies) is/are to be undertaken and the location of the listed activity(ies) on the property, as well as of all alternative properties and locations (duplicate section below as required).

The site is located in the suburb of Observatory in Cape Town (see Figure 1) and consists of the properties listed in Section A1 and indicated in Figure 2. The site is bordered to the west and north-west by the (former) channel of the Liesbeek River (the unlined course of the Liesbeek River), and to the east by the Liesbeek River Canal and the Black River (see Figure 42). The site therefore forms an "island" surrounded by these freshwater systems and is positioned in the floodplain of the Black and Liesbeek Rivers. The majority of the site is owned by the proponent; however, a number of other entities also own various smaller portions of the site (see Section A1).

The following activities will take place partially on land that is not owned by the proponent:

- The extension of Berkley Road (including a bridge over the Black River and a crossing over the unlined course of the Liesbeek River): Erf 15326 Rem
- The widening of the Berkley Road bridge at some stage in the future by the CoCT: Erf 15326 Rem
- The construction of Link Road into the development across the unlined course of the Liesbeek River: Liesbeek Parkway Road Reserve, Erf 26169
- The widening of the Liesbeek Parkway between Station Road and Malta Road: Liesbeek Parkway Road Reserve, Erf 26169, Erf 26170, Erf 26171, Erf 26172, Erf 26173, Erf 26174 and Erf 26175
- Infilling or rehabilitating the unlined course of the Liesbeek River west of the development: Liesbeek Parkway Road Reserve, Erf 108936, Erf 26427, Erf 26169, Erf 26170, Erf 26171, Erf 26172, Erf 26173, Erf 26174 and Erf 26175.
- Rehabilitating, restoring or upgrading the western banks of the Liesbeek canal, east of the development: Erf 151832, Erf 26426 and Erf 15326 Rem

The site is located in a strategically important location within the City – it is a highly accessible site in close proximity to agglomerated places of work such as the CBD, the Voortrekker Road activity corridor and Paarden Eiland, and is also within relatively close proximity to the metropolitan south-east. The site also falls on the north-western edge of Two Rivers local area.

The Black River and M5 motorway have historically been barriers between communities to the east and west of the river banks, and the area around the river has become an unattractive edge, derelict and inaccessible to pedestrians (this includes the current access to The River Club along Observatory Road). This is largely due to the presence of two high security institutions (Valkenberg Hospital and the SAAO), and limited public access to and through the River Club site and to the east of the Black River and the M5.

The site is currently predominantly used by the proponent as a commercial rental enterprise with tenants comprising a golf driving range with a "mashie" 9-hole golf course in the north-east of the site, conference and function venue, restaurant and bar, and other tenants (see Figure 41). A bird hide (that is currently in a poor state of repair) is located on the site which overlooks the new Liesbeek River channel and current confluence with the Black River. Beyond the mashie course is vacant land owned by the Passenger Rail Agency of South Africa (PRASA).

The River Club building (the main building), built in 1939, has been converted into a recreational and conference facility. A number of surrounding buildings on the property are rented to businesses for commercial use. The River Club parking area is to the south of the building, and the main access to the River Club is from the south off Observatory Road (see Figure 41).

Undeveloped portions of the site are mostly grassed (lawn) or open ground, with scattered trees. Dense reed beds are located on the eastern edge of the site along the Black River. Cape Flats Dune Strandveld, Cape Flats Sand Fynbos and Peninsula Shale Renosterveld would historically have occurred at the site. However, other than the interfaces with the Black and Liesbeek Rivers, the site is now transformed from an ecological perspective.

Liesbeek Parkway (south), Albert Road (north-west) and Station Road (west) provide access to the site (see Figure 42). Although the M5 runs almost parallel to the eastern boundary of the site, access from the M5 is not currently possible.

| Coordinates of all the proposed activities on the property or properties (sites): | Latitude (S): (deg.; min.; sec) | | | Longitude (E): (deg.; min.; sec.) | | |
|---|---------------------------------|------|---------|-----------------------------------|------|---------|
| | 33 ° | 55 ' | 58.20 " | 18 ° | 28 ' | 28.18 " |

Note: For land where the property has not been defined, the coordinates of the area within which the development is proposed must be provided in an addendum to this report.

5.2 Provide a description of the area where the aquatic or ocean-based activity(ies) is/are to be undertaken and the location of the activity(ies) and alternative sites (if applicable).

| |
|---|
| The following infrastructure or activities will take place in aquatic environments at the site (refer to Figure 3 and Figure 4): |
| <ul style="list-style-type: none"> • The extension of Berkley Road (including a two lane bridge over the Black River) to the entrance of the development: Erf 15326 Rem (33°55'44.77"S; 18°28'39.80"E) – see Figure 14 and Figure 20. • The widening of Berkley Road, and the extension of this road from the site entrance over the <u>unlined</u> course of the Liesbeek River: Erf 15326 Rem (33°55'51.71"S; 18°28'20.30"E) – see Figure 14 • The widening of the Berkley Road bridge over the Black River: Erf 15326 Rem (33°55'44.77"S; 18°28'39.80"E) – see Figure 14. • The construction of Link Road into the development across the unlined course of the Liesbeek River: Erf 26169, Erf 151832, and Liesbeek Parkway Road Reserve (33°56'2.13"S; 18°28'23.20"E) – see Figure 12. • Widening of the Liesbeek Parkway between the Station Road and Malta Road into the <u>unlined</u> course of the Liesbeek River: Liesbeek Parkway Road Reserve, Erf 26169, Erf 26170, Erf 26171, Erf 26172, Erf 26173, Erf 26174 and Erf 26175 – see Figure 18. • Infilling or rehabilitating the <u>unlined</u> course of the Liesbeek River west of the development: Liesbeek Parkway Road Reserve, Erf 108936, Erf 26427, Erf 26169, Erf 26170, Erf 26171, Erf 26172, Erf 26173, Erf 26174 and Erf 26175 (33°56'2.94"S; 18°28'24.84"E) – see Figure 27 and Figure 31. • Rehabilitating, restoring or upgrading the western banks of the Liesbeek canal (including the removal of the base of the canal), east of the development: Erf 151832, Erf 26426 and Erf 15326 Rem (33°56'3.07"S; 18°28'33.40"E) - see <u>Figure 25</u> and Figure 30. • <u>The infilling of a channel excavated into the Raggenberga Wetland by a 3rd party (which has effectively increased the frequency of inundation and decreased the time that the wetland takes to drain with negative ecological consequences) and the reinstatement of the berm as recommended by the freshwater ecologist: Erf 15326 (33°55'55.3"S 18°28'34.0"E).</u> |

| Coordinates of the boundary /perimeter of all proposed aquatic or ocean-based activities (sites) (if applicable): | Latitude (S): (deg.; min.; sec) | | Longitude (E): (deg.; min.; sec) | |
|---|---------------------------------|--|----------------------------------|--|
| | See above | | | |

5.3 For a linear development proposal, please provide a description and coordinates of the corridor in which the proposed development will be undertaken (if applicable).

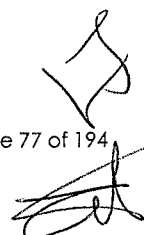
| |
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| N/A |
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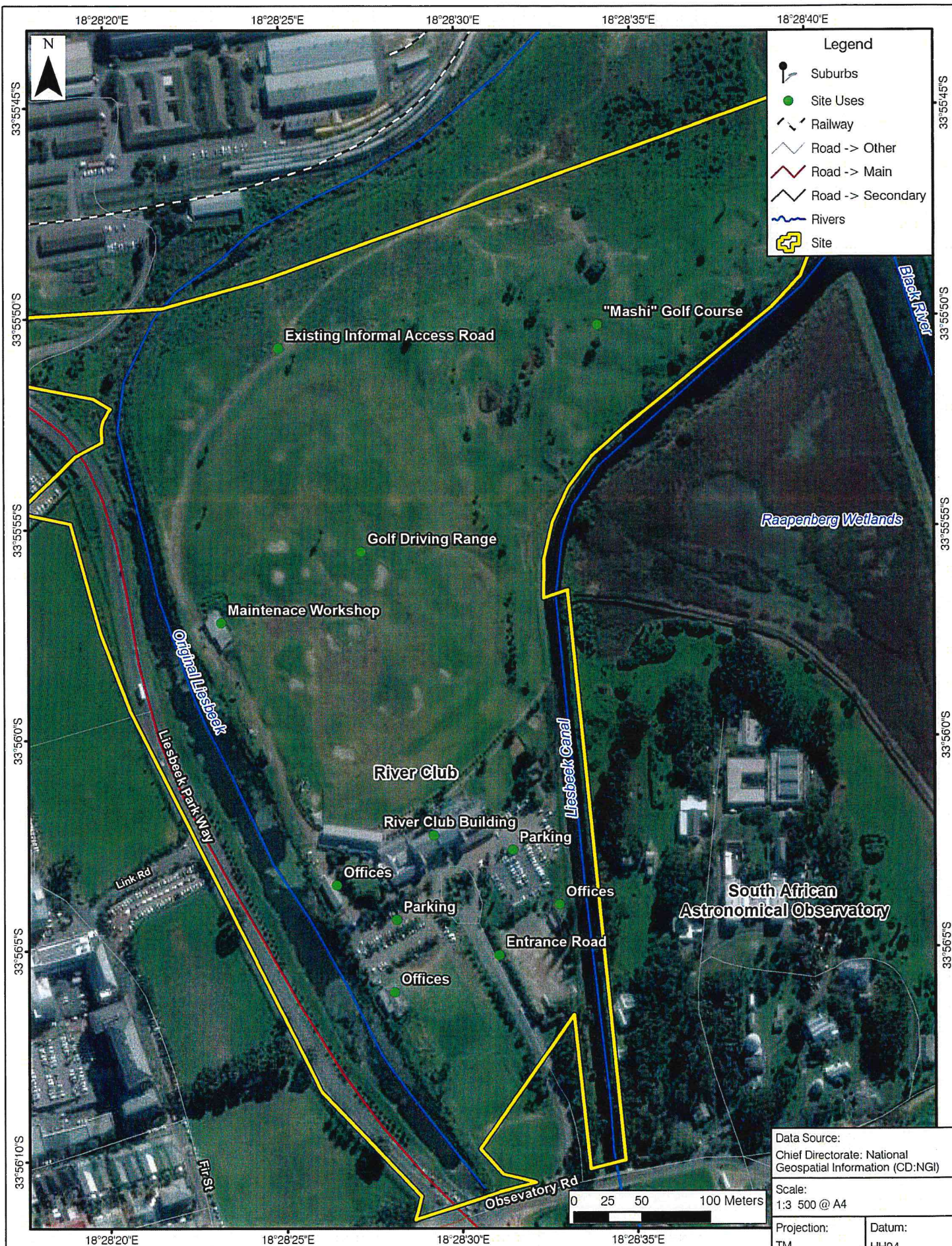
| For linear activities: | Latitude (S): (deg.; min.; sec) | | Longitude (E): (deg.; min.; sec) | |
|---|---------------------------------|--|----------------------------------|--|
| <ul style="list-style-type: none"> • Starting point of the activity • Middle point of the activity • End point of the activity | | | | |

Note: For linear development proposals longer than 1000m, please provide an addendum with co-ordinates taken every 250m along the route. All important waypoints must be indicated and the GIS shape file provided digitally.

5.4 Provide a location map (see below) as **Appendix A** to this report that shows the location of the proposed development and associated structures and infrastructure on the property; as well as a detailed site development plan / site map (see

below) as **Appendix B** to this report; and if applicable, all alternative properties and locations. The GIS shape files (.shp) for maps / site development plans must be included in the electronic copy of the report submitted to the competent authority.

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the bottom.



Data Source:
Chief Directorate: National Geospatial Information (CD:NGI)

Scale:
1:3 500 @ A4

Projection: TM Datum: HH94

Central Meridian/Zone:
Lo19

Date: 07/01/2020 Compiled by: FUBM

Project No. 478320 Fig No. 41

Revision: A Date: 07/01/2020



REDEVELOPMENT OF THE RIVER CLUB CURRENT SITE USE AND INFRASTRUCTURE



Data Source:
Chief Directorate: National Geospatial Information (CD:NGI)

Scale:
1:12 000 @ A4

| | |
|-------------------|----------------|
| Projection: TM | Datum: HH94 |
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Central Meridian/Zone:
Lo19

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| Date: 07/01/2020 | Compiled by: FUBM |
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| Project No. 478320 | Fig No. 42 |
|-----------------------|---------------|

Revision: A Date: 07/01/2020



REDEVELOPMENT OF THE RIVER CLUB SURROUNDING LAND USE

| | |
|-------------------------------------|---|
| <p>Locality Map: Appendix A</p> | <p>The scale of the locality map must be at least 1:50 000. For linear development proposals of more than 25 kilometres, a smaller scale e.g., 1:250 000 can be used. The scale must be indicated on the map. The map must indicate the following:</p> <ul style="list-style-type: none"> • an accurate indication of the project site position as well as the positions of the alternative sites, if any; • road names or numbers of all the major roads as well as the roads that provide access to the site(s) • a north arrow; • a legend; • a linear scale; • the prevailing wind direction (during November to April and during May to October); and • GPS co-ordinates (to indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection). <p>For an ocean-based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken.</p> <p>Coordinates must be provided in degrees, minutes and seconds using the Hartebeesthoek94; WGS84 co-ordinate system.</p> |
|-------------------------------------|---|

| | Item | Reference |
|--|---|--|
| Site Plan: | Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following: | |
| | <ul style="list-style-type: none"> • The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be indicated on the plan, preferably together with a linear scale. | Appendix B |
| | <ul style="list-style-type: none"> • The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan. | Figure 2 |
| | <ul style="list-style-type: none"> • The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be indicated on the site plan. | Figure 2 and Section A1, Figure 41 |
| | <ul style="list-style-type: none"> • The position of each element of the application as well as any other structures on the site must be indicated on the site plan. | Appendix B |
| | <ul style="list-style-type: none"> • Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the development <u>must</u> be indicated on the site plan. | Figure 34 – Figure 40 |
| | <ul style="list-style-type: none"> • Servitudes and an indication of the purpose of each servitude must be indicated on the site plan. | N/A as servitudes will only be formalised when the subdivision plan is submitted |
| | <ul style="list-style-type: none"> • Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to): <ul style="list-style-type: none"> o Watercourses / Rivers / Wetlands - including the 32 meter set back line from the edge of the bank of a river/stream/wetland; | Figure 21, Figure 45 and Figure 46 |
| | <ul style="list-style-type: none"> o Flood lines (i.e., 1:100 year, 1:50 year and 1:10 year where applicable); | Figure 73 |
| | <ul style="list-style-type: none"> o Ridges; | Figure 43 |
| | <ul style="list-style-type: none"> o Cultural and historical features; | Figure 74 |
| | <ul style="list-style-type: none"> o Areas with indigenous vegetation (even if degraded or infested with alien species). | Figure 50 and Figure 73 |
| | <ul style="list-style-type: none"> • Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted. | N/A |
| | <ul style="list-style-type: none"> • North arrow | Appendix B, Appendix D and various |
| | A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas. | Appendix D |
| The GIS shape file for the site development plan(s) must be submitted digitally. | | |

| | |
|--|--|
| | <p><u>area", and these would retain stormwater into the early summer, thus supporting Western Leopard Toad breeding cycles, without exposing them to predation from carp, as per the existing backwater system, that links to the Black River.</u></p> <ul style="list-style-type: none"> • The eastern boundary of the site as it banks onto the Black River is classified as an unchannelled valley-bottom wetland and CESA. This CESA is not linked to a vegetation type, and no specific conservation management objectives for this feature are provided. • Although the CoCT Biodiversity Network (Holmes et al 2008; updated June 2016) lists the Berkley Road Extension and the PRASA owned land to the north of the site as "Other Natural Vegetation", studies have concluded (e.g. Appendix G2 and Helme, 2016) that there is almost no natural vegetation remaining in the study area. • The Black River and both channels of the Liesbeek River are classified as Protected Areas in terms of a biodiversity agreement. <p><u>In terms of the City of Cape Town Biodiversity Network (2017 – see Figure 55):</u></p> <ul style="list-style-type: none"> • <u>"Conservation, low impact recreation & enviro education (could be supported in sensitive areas) as outlined in site management plan; hard infrastructure (should) only (be located) outside Critical Biodiversity Areas (CBAs) or adjacent or in existing highly degraded areas. Higher impact activities may be permitted on highly degraded areas."</u> • <u>The River Club property (Erf 151832) is degraded, and hosts no CBAs;</u> • <u>The western boundary of the site, or the eastern bank of the unlined, degraded course of the Liesbeek River is classified as an Ecological Support Area (ESA) – the potential impacts of infilling this feature are reported in Impact FE4 and FA2 (Appendix J) – in summary, a net ecological benefit in aquatic habitat quality is anticipated from the selection of either development alternative;</u> • <u>The eastern boundary of the site as it banks onto the Black River is classified as an ESA – the potential impacts on this ESA are reported in Impact FE2 (Appendix J) – a very low significance impact is anticipated following mitigation (i.e. reinstatement of the wetland following construction); and</u> • <u>The Raapenberg Wetland is listed as a CBA – the potential impacts on which are reported in Impact FE5 (Appendix J) and are found to be insignificant.</u> <p>Surrounding areas:</p> <ul style="list-style-type: none"> • A patch of Renosterveld Vegetation on the northern extent of the SAAO is listed as a CBA. • The Raapenberg Bird Sanctuary has been recognised as a nature reserve area within the CoCT and is an important breeding site for many bird species (CoCT 2011). |
|--|--|

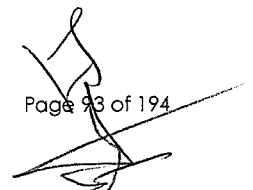
(b) Highlight and describe the habitat condition on site.

The site is a highly disturbed environment, with most of the aquatic ecosystems associated with this area under natural conditions (i.e. extensive floodplain wetlands set around and within the broad lowland river channels of the Black and Liesbeek Rivers) having been diverted, re-aligned, canalised, infilled or drained. Outside of the three channel systems described below (the Black, the western (natural) Liesbeek channel and the mainly canalised, eastern Liesbeek River canal, and the (artificial, isolated) golf course ponds, no wetland ecosystems remain on the site today.

| Habitat Condition | Percentage of habitat condition class (adding up to 100%) and area of each in square metre (m ²) | | Description and additional comments and observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing/harvesting regimes, etc.): |
|-------------------|--|-----------------|--|
| Natural | 0% | 0m ² | None. |

| Habitat Condition | Percentage of habitat condition class (adding up to 100%) and area of each in square metre (m ²) | Description and additional comments and observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing/harvesting regimes, etc.): |
|--|--|---|
| Near Natural (includes areas with low to moderate level of alien invasive plants) | N/A as beyond site boundary | <p>Raapenberg Wetland:</p> <p>Located to the east of the site, beyond the artificial eastern channel of the Liesbeek River.</p> <p>Of all the aquatic ecosystems in proximity to the site, the Raapenberg Wetland is the only one with significant ecological value, and is considered by far the most sensitive to changes in flow, hydroperiod, water quality or fragmentation. The wetland is considered part of the seasonal clay flats renosterveld wetland.</p> <p>Seasonal salt marshes of the Raapenberg Wetland appear to have been accidentally conserved by the construction of berms along the Black River and Liesbeek Canal, as well as by the infilled pathway leading to the pedestrian bridge over the Black River.</p> <p>The biodiversity importance of the Raapenberg Wetland as a whole owes itself to the spatial and temporal diversity of habitat types that support a wide range of indigenous and in many cases locally to regionally endemic fauna and flora.</p> <p>Waterbirds are attracted to all peripheral water bodies at the site, including two birds that are rated conservation species (Great White Pelican and Greater Flamingos, both rated as near-threatened).</p> |
| Degraded (includes areas heavily invaded by alien plants) | N/A as beyond site boundary | <p>The SAAO:</p> <p>Critically Threatened Peninsula Shale Renosterveld vegetation is present on this site, albeit in a greatly disturbed condition. Nine endemic or near-endemic wetland plant species occur within the SAAO site. Most of the natural vegetation is located in the central west, northern and central eastern part of the site, and is mainly in a poor condition.</p> <p>The proposed development is highly unlikely to impact negatively on the dryland renosterveld vegetation at the SAAO site and the security of the Critically Endangered <i>Moraea aristata</i> is thus likely assured, provided acceptable conservation measures are introduced on the SAAO site (see Appendix G2).</p> |
| | N/A as beyond site boundary | <p>The <u>unlined</u> channel of the Liesbeek River north of the site:</p> <p>The least developed sides of the river, and also the only sides along which there are real opportunities for channel / wetland rehabilitation. The channel here is steep, and shows signs of historic and ongoing disturbance. Dense stands of Common Reeds (<i>Phragmites australis</i>) in places form good cover for water fowl and likely to provide nesting habitat for other birds as well.</p> <p>Mature alien trees line the left hand bank in places, with the main species comprising Manotoka and Sesbania. Although both of these are listed alien species in terms of the National Environmental Management Biodiversity Act 10 of 2004 (NEMBA), they still provide useful shelter as well as roosting and perching areas for birds.</p> <p>In the lower reaches of the channel, the channel is separated from a mixed <i>Phragmites australis</i> and <i>Typha capensis</i> reedbed by the bermed left hand river bank. This reedbed is considered an important part of the river / wetland system in these reaches, and assumed to comprise a relic of the former more extensive riverine wetlands that would have occurred in this now highly altered part of the catchment.</p> <p>Waterbirds are attracted to all peripheral water bodies at the site, including two birds that are rated conservation species (Great White Pelican and Greater Flamingos, both rated as near-threatened).</p> |

| Habitat Condition | Percentage of habitat condition class (adding up to 100%) and area of each in square metre (m ²) | | Description and additional comments and observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing/harvesting regimes, etc.): |
|-------------------|--|------------------------|---|
| | 25% | ~59 500 m ² | <p>The <u>unlined</u> channel of the Liesbeek River west of (fronting) the site:</p> <p>This channel is steep, and shows signs of historic and ongoing disturbance. The channel itself currently provides a transformed and disturbed aquatic habitat, which would not be sensitive to slight changes in water quality but which could be affected by significant deterioration in habitat quality. This channel may support the indigenous Cape Galaxias Fish.</p> <p>The channel is at least partially suited as a western leopard toad breeding habitat, and for the purposes of this study it is assumed that they do indeed currently breed here.</p> <p>Birds use the banks of the natural channel of the Liesbeek River abutting the River Club for roosting and/or nesting.</p> <p>Waterbirds are attracted to all peripheral water bodies at the site, including two birds that are rated conservation species (Great White Pelican and Greater Flamingos, both rated as near-threatened).</p> <p><u>The Liesbeek is classified as a Fish Support Area (FEPA CODE 2) in the NFEPA database. This dataset also attributes Cape Kurper to the river. The biodiversity report will be amended to include the FEPA Status.</u></p> <p><u>Ecological services provided by the section of the "unlined course" of the Liesbeek River are in fact mainly stormwater conveyance, with some water quality amelioration through passage through vegetation. These functions would be provided in a more managed and efficient manner for runoff from the site – stormwater from the surrounding urban area would be passed into the downstream portion of the "unlined course" through the swale, and would experience slightly improved water quality amelioration - but the effects of this would be marginal, given that the system is backed up by the Black River, which is of really poor water quality.</u></p> <p><u>The loss of wetland habitat by the "unlined course" would be mitigated / offset by the proposed inclusion of standing water ponds along the "swale area", and these would retain stormwater into the early summer, thus supporting Western Leopard Toad breeding cycles, without exposing them to predation from carp, as per the existing backwater system, that links to the Black River.</u></p> <p><u>The canal rehabilitation project should at least improve habitat for fish species, compared to the canal, as if important fish species can survive in the Black River backwaters of the "unlined course" of the Liesbeek River (unlikely) then such conditions would persist downstream of the site. The proposed rehabilitation activities associated with the Riverine corridor alternative would support the status of the Liesbeek as a Fish Support Area.</u></p> |
| | N/A as beyond site boundary | | <p>Infilled former floodplain that lies north of the River Club boundary:</p> <p>An area that is now subject to litter, minor dumping and invasion by weedy and /or alien plants, including kikuyu grass (<i>Pennisetum clandestinum</i>).</p> <p>This floodplain is considered of extremely low sensitivity from an ecological perspective, with its only present functions being provision of a degree of buffering of the channel from adjacent noise and physical disturbance – such buffering derives only from the physical space provided by this area, and not from any quality of habitat it affords.</p> |



| Habitat Condition | Percentage of habitat condition class (adding up to 100%) and area of each in square metre (m ²) | | Description and additional comments and observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing/harvesting regimes, etc.): |
|--|--|------------------------|---|
| | 3% | ~7 140 m ² | <p>Unlined eastern channel of the Liesbeek River:</p> <p>Steep banks vegetated with Common Reed (<i>Phragmites australis</i>) (right hand bank), and mixed reeds and (mainly alien) trees along the left hand bank abutting the site.</p> <p>The left-hand bank (abutting the site) has been bermed along most of its length, presumably to reduce its flood potential.</p> <p>A small treed island has been established in the channel here and provides day roosting for birds (Darters and Cormorants) and is worthy of preservation. Waterbirds are attracted to all peripheral water bodies at the site, including two birds that are rated conservation species (Great White Pelican and Greater Flamingos, both rated as near-threatened).</p> |
| | 3% | ~ 7 140 m ² | <p>The Black River on the north-eastern site boundary:</p> <p>This banks are lined mainly with alien kikuyu grass and other invasive aliens such as cannas, and are bermed in places.</p> <p>The Black River is considered generally poor in indigenous biodiversity, largely as a result of habitat transformation, ongoing maintenance disturbance as a result of dredging of the channel; invasion by alien plants of both aquatic and marginal habitats; and poor water quality. Although no quantitative data had been sourced at the time that this document was produced, two alien fish species are understood from popular literature and comments by local resident to occur in the Black River, namely common carp (<i>Cyprinus carpio</i>) and African Catfish (<i>Clarias gariepinus</i>), as well as the pollution-tolerant amphibian, the Common platanna (<i>Xenopus laevis</i>).</p> <p>Waterbirds are attracted to all peripheral water bodies at the site, including two birds that are rated conservation species (Great White Pelican and Greater Flamingos, both rated as near-threatened). In ecological terms the Black River, which is broader and more stable offers the greatest potential for birds.</p> |
| Transformed (includes cultivation, dams, urban, plantation, roads, etc.) | 4% | ~9 520 m ² | <p>Canalised eastern channel of the Liesbeek River:</p> <p>Canalised on both sides in its reaches immediately downstream of Observatory Road fronting the site. Habitat diversity is low, and the canal provides a generally sterile aquatic ecosystem, unlikely to support a high diversity of flora and fauna, despite the relatively good water quality in this river.</p> <p>Willow trees along the canal provide day roosting for birds (Darters and Cormorants) and are worthy of preservation.</p> <p>Liesbeek River supports the Cape Galaxias (<i>Galaxias zebratus</i>) (a Western Cape endemic fish) as well as a more diverse suite of aquatic macroinvertebrates than those occurring in the Black River.</p> <p>Waterbirds are attracted to all peripheral water bodies at the site, including two birds that are rated conservation species (Great White Pelican and Greater Flamingos, both rated as near-threatened).</p> |
| | 64.9 % | 154 462 m ² | <p>Driving Range, Golf Course and other transformed areas (e.g. road reserves):</p> <p>The site and surrounding areas was found to support no terrestrial indigenous plant communities, being located on old fill material, and sensitivity to development was deemed negligible from a floral perspective.</p> <p>Apart from the open water habitats of the river channels, there are few habitat patches of value for birds within the site itself.</p> |

| Habitat Condition | Percentage of habitat condition class (adding up to 100%) and area of each in square metre (m ²) | | Description and additional comments and observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing/harvesting regimes, etc.): |
|-------------------|--|-----------------------|---|
| | | | Otter activity has been confirmed from the general region, however these are unlikely to have a resident population at the site, but rather a few individuals probably move in and out of this area throughout the year. |
| | 0.1% | ~2 380 m ² | Golf Course Ponds: A number of seasonally to perennially inundated ponds have been created in the golf course. These artificial water features have been noted as potentially suitable breeding sites for Western Leopard Toads (WLTs) and other amphibians. They are, however, easily replaceable habitats, and little effort has been made in their landscaping / design to replicate natural standing water habitats in this area. |

Birds:

Waterbird use of the area is heavily influenced by the availability of wetland habitats in the Raapenberg wetlands. The major drawback of the area for waterbirds, despite reasonable foraging areas and apparent food availability, is the lack of safe, undisturbed breeding habitat for the larger species. This situation applies along the greater part of the two rivers. The nearest significant breeding populations of larger waterbirds are at Intaka Island in Century City and at Rondevlei, near Grassy Park.

Despite the poor availability of habitat for birds on the site, its location at the confluence of the Liesbeek and Black Rivers means that the site has excellent wetland linkages across the centre-north of the Cape Town metropol.

Mammals:

Most of the larger mammal species that would have occurred naturally on the site have become locally extinct, leaving only a subset of small species that still manage to maintain meagre populations here. The conservation status of these mammals are almost all listed as being of Least Concern (LC), with only one species (African Clawless Otter) with a global and regional listing of Near Threatened (NT).

The Faunal Importance Assessment (FIA) score for Mammals on the River Club site is considered Moderate at regional and Low to Moderate at a national scale.

Reptiles:

The only reptile species of conservation concern that could occur at the site is the Cape Dwarf Chameleon which currently is listed as Vulnerable (VU).

The FIA score for reptiles in the context of the River Club site is Moderate at regional and Low to Moderate at a national scale.

Amphibians:

The only amphibian species of conservation concern that occurs at the site is the WLT which currently is listed as Endangered (EN).

The FIA score for amphibians in the context of the site is Moderate at regional and Low to Moderate at a national scale.

With regard to the presence of WLTs at the site, the following has relevance:

- The only known WLT breeding site in the region of the site is the wetlands at the Raapenberg Bird Sanctuary.
- WLTs refuge at terrestrial areas at the site during the non-breeding season.
- The WLT population of the area (that is, Observatory and surroundings), appears to be somewhat disjunct and seemingly completely separated from WLT breeding populations further south on the Cape Peninsula.

(c) Complete the table to indicate:

- the type of vegetation present on the site, including its ecosystem status; and
- whether an aquatic ecosystem is present on/or adjacent to the site.

| Terrestrial Ecosystems | | Description of Ecosystem, Vegetation Type, Original Extent, Threshold (ha, %), Ecosystem Status |
|---|-----------------------|--|
| Ecosystem threat status as per the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) | Critically Endangered | A small portion of the site falls within the original extent of the Peninsula Shale Renosterveld vegetation type. This vegetation type occurs at the SAAO, but no remnants are known to occur at the site (see Appendix G2). |

Vegetation Types:

The CoCT falls within the Cape Floral Region (CFR). The CFR is of international significance as one of the smallest but richest plant kingdoms in the world with approximately 70% of the plant species found only in this region. The fynbos biome includes two of South Africa's rarest vegetation types, namely Sand Fynbos and Renosterveld. Most of the CoCT is highly developed and transformed with very little natural vegetation remaining (CoCT, 2011).

The majority of the site falls within the original extent of the Cape Flats Dune Strandveld Vegetation type (see Figure 50). A small portion of the site falls within the original extent of the Peninsula Shale Renosterveld vegetation type (see Figure 50). This vegetation type occurs at the SAAO, but no remnants occur at the site.

The Cape Flats Dune Strandveld Vegetation Type is considered an Endangered vegetation type (Mucina and Rutherford, 2006). The Peninsula Shale Renosterveld vegetation type is endemic to the CoCT and is considered to be a Critically Endangered vegetation type (Mucina and Rutherford, 2006). However, no known remnants of these vegetation types occur at the site.

The site itself is mostly grassed (lawn) with scattered trees and is considered to be of extremely low sensitivity from a botanical perspective. There are a few trees in the areas surrounding the site. There are also dense tree copses surrounding the Observatory buildings on the ridgeline to the south-east of the site.

Aquatic Ecosystems:

Also refer to the table presented in Section 6(b).

Almost all the land that makes up the River Club is an artificial island that has been reclaimed from the estuary surrounded by artificial drainage channels on all sides (see Figure 48). As such the River Club is considered to be a highly disturbed environment and the floodplain at the site is considered to be of extremely low sensitivity from an ecological perspective, with its only present functions being as a WLT refuge and movement corridor and provision of a degree of buffering of the channel from adjacent noise and physical disturbance – such buffering derives only from the physical space provided by this area, and not from any quality of habitat it affords.



Figure 48: 1934 aerial photograph of the site and surrounds

A handwritten signature or set of initials in black ink, located in the bottom right corner of the page.

Ecological Status

Most of the naturally occurring aquatic ecosystems such as extensive floodplain wetlands have been transformed from their natural condition and no wetland ecosystems remain on site today.

The unlined course of the Liesbeek River

No natural flow from the Liesbeek River enters the unlined course west of the site and it is supplied by backwaters of the Black River. As a result, flow through this watercourse has been largely reduced. One result of the reduced rate is the shallowing of the water body which has facilitated the invasion of alien aquatic plants that prevent birds using the waterbody. Despite this, the unlined course has high rehabilitation and ecological potential.

An assessment of condition or Present Ecological State (PES) of the water course classified it as PES Category E, which indicates "a system that has undergone a Serious change from its natural conditions, with changes in natural river morphology being major contributors to this poor condition rating, along with water quality, changes in natural flow regime, extensive loss of indigenous vegetation and invasion of the river channel by alien plants" (FWC, 2015),

This aquatic ecosystem is considered to be of Moderate local sensitivity (see Appendix D).

The Liesbeek Canal

The Liesbeek Canal is not a natural water feature and is considered to have a PES Category of F which is indicative of "a system that has undergone Extreme changes from its natural condition" (FWC, 2015). The canalised portion of the canal has low habitat diversity with a sterile aquatic ecosystem. In contrast, the uncannalised portion (approximately 200m in length upstream of the confluence with the Black River) offers a better quality of riverine habitat and could be considered sensitive to disturbance.

This aquatic ecosystem is considered to be of Very low local sensitivity (see Appendix D).

The Black River

The Black River is not considered a sensitive environment. Given the high degree of habitat transformation, impacts of dredging and poor water quality, the Black River is considered to have low ecological importance. Its diminished importance is attributable to its stormwater and effluent conveyance function and habitat for some birds. The improved servicing and management of upstream developments would rapidly improve the water quality of the river which would make the rehabilitation of the river banks attainable, albeit not to natural conditions. The Black River was accorded a PES Category F.

Abutting wetlands such Raapenberg wetlands and other reedbed wetlands have high functional importance as wetlands large enough to provide wetland habitat in an environment that is largely transformed and urbanised. More specifically, they may play a role in polishing discharge from adjacent urbanised developments.

The Black River is considered to be of Low local sensitivity, and reedbed wetlands are considered to be of High local sensitivity (see Appendix D).

River / Land Interface

The unlined course of the Liesbeek River

Banks on either side of the unlined course of the Liesbeek River show signs of ongoing disturbance such as the raising of the right hand bank, presumably to reduce flooding of the River Club (FCG, 2015). The water course supports dense stands of reeds which form good cover for water fowl and likely provide nesting habitat for other birds as well.

In the lower reaches (towards the confluence of the Black River), the channel is separated from a reedbed by a berm. Although this reedbed lies outside of the River Club boundary, it is considered to have ecological value as a relic of a former, more extensive riverine wetland.

Reedbed wetlands are considered to be of High local sensitivity (see Appendix D).

The Liesbeek Canal

Similarly, a berm separates the right hand side of the Liesbeek Canal from Raapenberg Sanctuary in which the Raapenberg Wetlands occur. These wetlands support a wide diversity of habitat types such as reedbed, open water pools and pans and shallow wading areas and are recognised as an important breeding site for many duck species. These habitats would be sensitive to elevations in flood height which would inundate wading and nesting areas.

The Raapenberg Wetlands are considered to be of Very high local sensitivity (see Appendix D).

The Black River

The river banks of the Black River are lined mainly with alien invasive species, with berms in places. The right hand river bank, abutting the M5, is sterile with little vegetation. A small treed island exists on the site near the confluence with the Liesbeek Canal that serves as the focal area for a bird hide.

Reedbed wetlands are considered to be of High local sensitivity (see Appendix D).

Aquatic Flora

Riverine vegetation, although much of it exotic, is found along the banks of the rivers. Trees have been planted along Liesbeek Parkway, and around the sports fields to the west of the site provide protection from the wind.

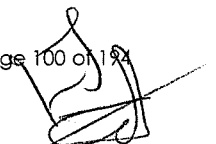
Dense reed beds are located on the eastern edge of the site along the Black River.

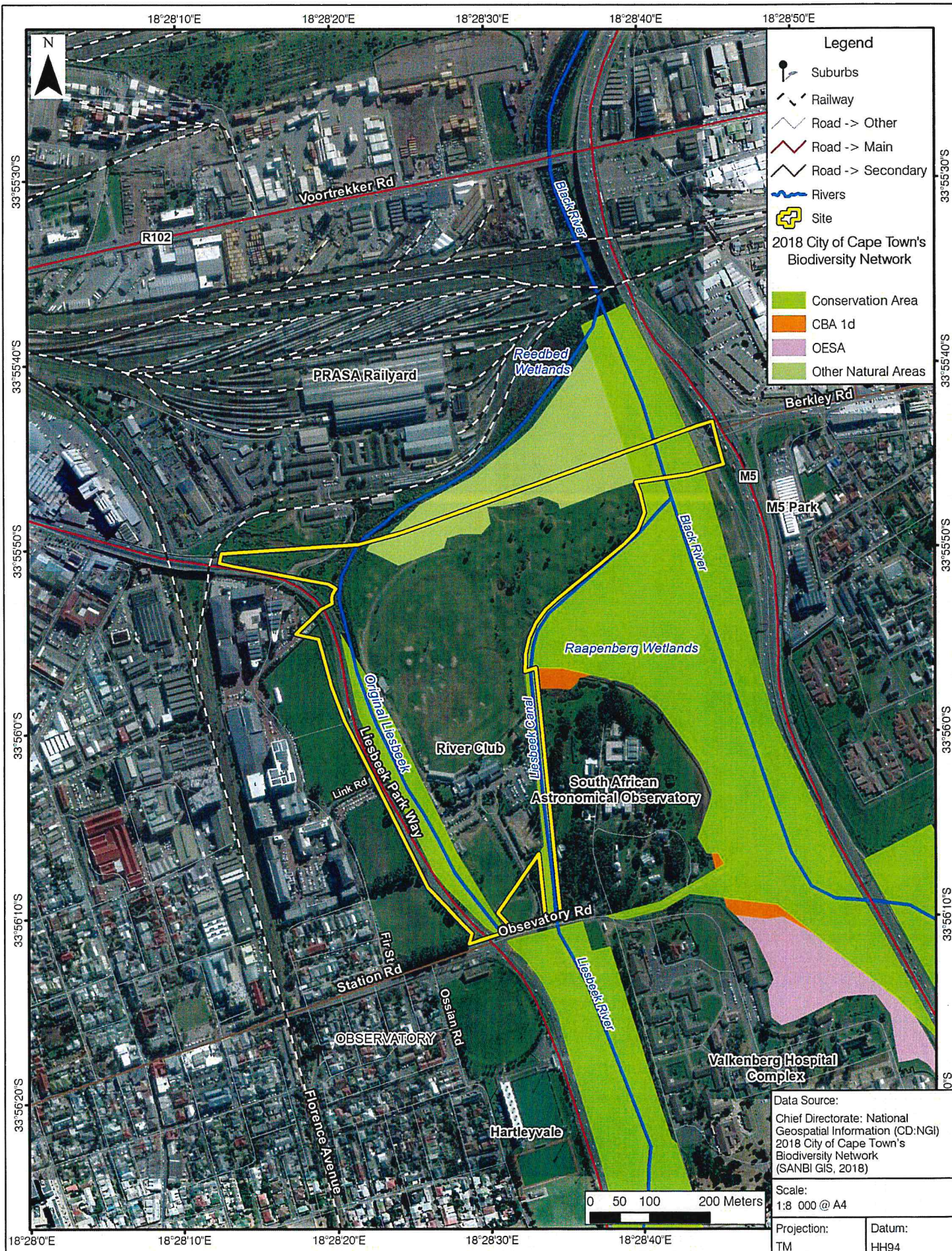
Various exotic aquatic plants occur in the Black River, including parrot's feather (*Myriophyllum aquaticum*) and water hyacinth (*Eichhornia crassipes*), along with patches of indigenous pondweed (*Potamogeton pectinatus*).

Abutting wetlands are dominated by stands of common reed, *Phragmites australis*, which provide good cover for water fowl and likely provide nesting habitat for other birds as well.

Similarly, the unlined course of the Liesbeek River open water habitat is densely invaded with mainly alien plants. One of the most prominent invaders is the Benghal dayflower, *Commelina benghalensis*. Others include kikuyu grass (*Pennisetum clandestinum*) and mature alien trees with the main species comprising Manotoka (*Myoporum tenuifolium* subsp. *Montanum*) and Sesbania (*Sesbania punicea*).

The Liesbeek Canal gives way to vegetated banks, which are lined with *Phragmites australis* reeds as well as mixed reeds and trees (mainly alien) along the left hand bank.





Legend

- Suburbs
- Railway
- Road -> Other
- Road -> Main
- Road -> Secondary
- Rivers
- Site

2018 City of Cape Town's Biodiversity Network

- Conservation Area
- CBA 1d
- OESA
- Other Natural Areas

Data Source:
 Chief Directorate: National Geospatial Information (CD:NGI)
 2018 City of Cape Town's Biodiversity Network (SANBI GIS, 2018)

Scale:
 1:8 000 @ A4

| | |
|-------------------|----------------|
| Projection: TM | Datum: HH94 |
|-------------------|----------------|

Central Meridian/Zone:
 Lo19

| | |
|-----------------------|----------------------|
| Date: 07/01/2020 | Compiled by: FUBM |
| Project No. 478320 | Fig No. 49 |



REDEVELOPMENT OF THE RIVER CLUB CONSERVATION AREAS NEAR THE SITE

- (b) Provide a description, including the distance and direction to the nearest residential area, industrial area, agri-industrial area.

The site is located less than 5 km from the Cape Town CBD (see Figure 1). There are a variety of land uses in the areas surrounding the site with residential, commercial, institutional and industrial activities interspersed with open spaces for passive and recreational activities.

The PRASA rail yard is located immediately north of the site with related industrial activities further north (see Figure 42).

Liesbeek Parkway (road) abuts the site's western boundary with sports fields (Malta Park) and the Black River Park commercial development, beyond that (see Figure 42). A railway line, light industry and the residential areas of Observatory and Salt River are located further west.

Raapenberg Bird Sanctuary Nature Reserve, situated on the banks of the Black River, is located to the immediate east of the Liesbeek River Canal. The M5 runs parallel to the site east of the Black River (see Figure 42). The Maitland and Ndabeni industrial areas, a commercial development (M5 Park), the Alexandra Hospital and the Maitland Garden Village are located east of the M5.

The SAAO, a Grade 1A Heritage Site, is situated on a low ridgeline immediately east of the southern portion of the site and the Liesbeek River Canal. The Valkenburg Hospital Complex is situated south-east of the site and south of the Observatory.

The site is located within the CoCT's Two River local area. This area extends from Hartleyvale and Malta sports fields to Alexandra Road, including Ndabeni Triangle and Pinelands Station. In terms of sections 12 to 14 of the MPBL, a LSDF has been compiled for the Two Rivers local area to align proposals for the area with the new 2018 MSDF and the principles outlined in the Spatial Planning and Land Use Management Act, 2013. The draft Two Rivers LSDF provides direction for short, medium and long term spatial and investment planning in the Two Rivers area, previously known as the Two Rivers Urban Park (TRUP).

Adjacent properties owned by public entities are indicated Below:

| Erf Numbers | Property Owner |
|--|---------------------------------------|
| Erf RE/15334; Erf 16677; Erf 166797; Erf RE/16676; Erf 26162 and Erf 24631 | South African Rail Commuter Corp Ltd. |
| Erf 24300; Erf 26437; Erf 26440; Erf 26454, Erf 26456; Erf 27661; Erf 24402; Erf 24403, Erf 24816, Erf 28095 and Erf 26166 | The CoCT |
| Erf 26423 and Erf 151833 | National Research Fund |
| Erf 165279 | Tamric Trust (M5 Park) |
| Erf 24396 | Hutchings Colin Stephen |
| Erf 118802 | Hope Fountain Inv 10 CC |
| Erf 118808 | Anchorcom Rental (Pty) Ltd |
| Erf 119084 | Isaacs Asia |
| Erf 24394; Erf 24395 | Da Luz Experience Family Trust |
| Erf 24398 | Van Rhyn Wine & Spirit Co Ltd |

9. SOCIO-ECONOMIC ASPECTS

- a) Describe the existing social and economic characteristics of the community in the vicinity of the proposed site, in order to provide baseline information (for example, population characteristics/demographics, level of education, the level of employment and unemployment in the area, available work force, seasonal migration patterns, major economic activities in the local municipality, gender aspects that might be of relevance to this project, etc.).

Refer to Section 4 of Appendix G4 – Socio-economic Baseline.

10. HISTORICAL AND CULTURAL ASPECTS

- (a) Please be advised that if section 38 of the NHRA is applicable to your proposed development, you are requested to furnish this Department with written comment from Heritage Western Cape as part of your public participation process. Heritage Western Cape must be given an opportunity, together with the rest of the I&APs, to comment on any Pre-application BAR, a Draft BAR, and Revised BAR.

Section 38 of the NHRA states the following:

"38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

- (a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50m in length;
- (c) any development or other activity which will change the character of a site-

- (i) exceeding 5 000m² in extent; or
- (ii) involving three or more existing erven or subdivisions thereof; or
- (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
- (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
- (d) the re-zoning of a site exceeding 10 000m² in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,

must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development".

- (b) The impact on any national estate referred to in section 3(2), excluding the national estate contemplated in section 3(2)(i)(vi) and (vii), of the NHRA, must also be investigated, assessed and evaluated. Section 3(2) states the following: "3(2) Without limiting the generality of subsection (1), the national estate may include—
- (a) places, buildings, structures and equipment of cultural significance;
 - (b) places to which oral traditions are attached or which are associated with living heritage;
 - (c) historical settlements and townscapes;
 - (d) landscapes and natural features of cultural significance;
 - (e) geological sites of scientific or cultural importance;
 - (f) archaeological and palaeontological sites;
 - (g) graves and burial grounds, including—
 - (i) ancestral graves;
 - (ii) royal graves and graves of traditional leaders;
 - (iii) graves of victims of conflict;
 - (iv) graves of individuals designated by the Minister by notice in the Gazette;
 - (v) historical graves and cemeteries; and
 - (vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
 - (h) sites of significance relating to the history of slavery in South Africa;
 - (i) movable objects, including—
 - (i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;
 - (ii) objects to which oral traditions are attached or which are associated with living heritage;
 - (iii) ethnographic art and objects;
 - (iv) military objects;
 - (v) objects of decorative or fine art;
 - (vi) objects of scientific or technological interest; and
 - (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996)".

| | | | |
|---|------------|-----------|------------------|
| Is Section 38 of the NHRA applicable to the proposed development? | YES | NO | UNCERTAIN |
|---|------------|-----------|------------------|

If YES or UNCERTAIN, explain:

As the development will change the character of the site (which exceeds 5 000 m²) in extent, the development does trigger Section 38 of the NHRA.

Please refer to Appendix G5 (Heritage Impact Assessment *and supplementary report*) for a far more detailed overview of the heritage baseline, and Appendix J (Impact Assessment) for an analysis of impacts considered and analysed in the BA process. A very brief summary follows:

Topographically, the current sense of place at and along the section of the Liesbeek River at the site is that of a wide flat floodplain, greatly transformed by the frequent changes in land-use. Wetlands have been transformed to farmland, then to various institutional uses and to modern suburbia. Nevertheless, the floodplain, Liesbeek and Black Rivers, their confluence and the remnants of the Salt River estuary still exist today.

Although the landscape in general is considered to be of heritage significance, and the broader area contains some highly significant heritage places and structures (the SAAO, Valkenburg Hospital and farm complex, Oudemolen and the Victorian period suburbs of Observatory and Maitland), the site itself includes no tangible traces of early historic events (see Appendix G5). The site therefore contains few tangible features. Nevertheless, People, including First Peoples groups, experience cultural value from the character, ecology, history, and awareness of the historical import of the floodplain and Liesbeek River.

The one heritage feature of high significance that has been identified is the Liesbeek River corridor itself (and the confluence) which is the common feature that runs through the project area and beyond. It is a powerful historic symbol and place-mark that refers to early landscape of pre-colonial transhumance use, colonial settlement and agriculture, and contestation. The development proposal seeks to enhance and celebrate this important heritage resource, which is viewed by the specialists to offset impacts on the historical character of the site (and change in sense of place) and on the SAAO.

Following submission of a heritage Notice in Intend to Develop (NID), Heritage Western Cape Requested a Heritage Impact Assessment (HIA) including an archaeological study and an urban design framework of the proposed development. These reports are attached as Appendix G5.

The draft HIA and revised draft HIA were released for public comment in January 2018 and in March 2019 respectively. The HIA was submitted to HWC. HWC considered the HIA at an Impact Assessment Committee Meeting (IACOM) on 22 August 2019 and provided interim comment on the report (attached as Appendix E1).

Subsequent to this comment, and on 15 October 2019, the Draft Two Rivers Local Spatial Development Framework (LSDF) was released for public comment. This report included a Phase 1 HIA and a "TRUP First Nations Report" (AFMAS Solutions, 2019). The main findings of this report are as follows:

- The Two Rivers local area (and beyond) is the historic landscape of the indigenous First Nations;
- That the indigenous narrative of the Two River local area, as articulated by the First Nations Collective, is congruent with the historic record; and
- Acknowledgement of the First Nations narrative is the primary aspiration of the First Nations.

Based on these findings, the following recommendations were made in this report:

- Acknowledge, embrace, protect and celebrate the indigenous narrative in design and planning at all scales of the Two River local area;
- Provide a gathering place for indigenous cultural performances;
- Incorporate indigenous plants - used as food, medicine and ritual purposes - into landscaping;
- Provide an Indigenous Peoples centre; and
- Rename the Two River local area as an integral part of the indigenizing of the Two Rivers local area landscape.

Following this report, AFMAS Solutions were appointed to build on the "TRUP First Nations Report" (AFMAS Solutions, 2019 - Appendix G5b) to:

- Understand the significance of the River Club site to the First Nations by identifying indigenous intangible cultural heritage specific to the River Club;
- Locate the River Club site within the indigenous narrative of the broader TRUP cultural landscape;
- Identify First Nation aspirations with regard to Indigenous cultural heritage and the River Club site; and
- Make recommendations for the implementation of the key recommendation of the TRUP First Nations report, specifically: "Acknowledge, embrace, protect and celebrate the indigenous narrative in design and planning".

This report, the "River Club First Nations Report" was informed by:

- Primary research, including key informant interviews with various First Nations representatives for the "TRUP First Nations Report" (AFMAS Solutions, 2019);
- Key informant interviews with First Nation knowledge keepers and traditional custodians of the Goringhaiqua, Gorachouqua, Cochoqua, Griqua Royal Council and the San House of N!In#e to

understand First Nation intangible heritage significance and indigenous "sense of place and meaning" of the River Club site; and

- Deconstruction of the Two Rivers local area cultural landscape through multi-layered and multi-dimensional contextualizing to locate the indigenous narrative of the River Club within this area.

Key findings of these studies, as they relate to the River Club, are as follows:

- Given that the entire TRUP project area was part of the historic indigenous landscape, each of the precincts that make up TRUP has a measure of indigenous cultural heritage;
- The River Club site is a small part of a much larger TRUP cultural landscape that extends to approximately 300 hectares;
- The extent to which the site bears testimony to its indigenous cultural heritage, is determined by the amount of indigenous cultural capital assigned to the site;
- First Nation informants concurred that the Two Rivers local area was the dominion of the Gorinhaiqua;
- No cross-cutting, narrative-defining event for any of the strands of the indigenous narrative; be it, the dominion of the Gorinhaiqua, Battle of Gorinhaiqua, Colonial-settler 'arilaqem', or resistance to 'arilaqem,' can be attributed specifically to the River Club site;
- No tangible or intangible reference has been made to the Gorinhaiqua having settled specifically on the River Club site;
- No specific act of resistance, battle or encounter, whether tangibly manifested or intangibly articulated, have been attributed specifically to the River Club site;
- Although mostly a wetland and therefore of low functional use value, the River Club site was most likely part of an early precolonial landscape from which the Indigene was displaced and/or precluded from having access to;
- The site is not a burial ground;
- The site was not used as a pre-colonial river crossing;
- The Liesbeek River is an important heritage resource in the broader landscape, and its rehabilitation / naturalisation is supported by the First Nations Collective / would be a cultural benefit; and
- The First Nations narrative should be acknowledged, embraced and celebrated in design and planning for the River Club.

The studies also found that the First Nations collective:

- Aspire towards the restoration of the Liesbeek River as an important connecting heritage element of the broader landscape;
- See the development of the site is an opportunity for the articulation and celebration of the significance of the place and of its historical associations to First Nations people; and
- Value this opportunity more deeply than the conservation of an open area (for golf or other recreational activities) with no tangible connection to their heritage.

In this context, the heritage practitioners maintain that the Two River local area is comprised of a variety of precincts of very different topographies, histories of use, of development-type, each with its own qualities and a variety of potential heritage significances; and that, apart from the Liesbeek River, the site itself has little obvious heritage significance, noting that:

- The site is either entirely or mostly an infill site;
- Much of the history that derives the cultural significance of the Two Rivers local area extends over a far broader spatial scale;
- The valley (or floodplain) in which the site is located, although an important component of the Liesbeek River as a landscape, has been transformed by urban development upstream and downstream of the site;
- No tangible heritage relics or resources occur on the site; and
- No historic events are attributed to have occurred at the site.

Therefore, while the HIA acknowledges the role that the 'openness' of the site plays in determining the current sense of place, as well as the importance of views from within and across the floodplain (which are comprehensively assessed in the VIA), the heritage specialists maintain that this openness and these views are of low heritage significance, and that by developing the site, its history will not be lost: "whether the site is developed or otherwise, it will always have a history which does not manifested on the ground and cannot be destroyed by physical changes", and that there is a heritage opportunity to restore the Liesbeek River canal fronting the site as a heritage and public amenity corridor and to celebrate the heritage of the area to the First Nations people. And in this regard, and in addition to the proposals for the naturalisation of the Liesbeek Canal fronting the site, the proponents commit to articulating and celebrating the significance of the place and of its historical associations to First Nations groups by:

- Establishing an Indigenous Garden for medicinal plants used by the First Nations at the site (Figure 52);
- Establishing a Cultural, Heritage and Media centre at the location of the Heritage information hub at the site (Figure 51);
- Establishing a Heritage-Eco trail that goes around the site (Figure 52);
- Establishing an Amphitheatre at the site for use and cultural performances by both the First Nations and the general public;

| | | | |
|---|--|-----------|------------------|
| | <ul style="list-style-type: none"> • <u>Commemorating the history of the First Nations in the area, by:</u> <ul style="list-style-type: none"> o <u>Establishing a Gateway Feature inspired by symbols central to the First Nations narrative at the road crossing the eco-corridor (Figure 53);</u> o <u>Incorporating symbols central to the First Nations narrative in detailed design of buildings (e.g. pillars / supports, facades, building names, etc. - Figure 54); and</u> o <u>Naming internal roads inspired by people or symbols central to the First Nations narrative.</u> <p><u>A supplementary report articulating these views of the heritage specialists, as well as a project team response to the HWC interim comment was submitted to HWC on 6 December 2019 and released for stakeholder information on the same day (attached as Appendix G5b). It is anticipated that HWC will consider this supplement at an IACom in January 2020 and provide final comment on the HIA.</u></p> | | |
| Will the development impact on any national estate referred to in Section 3(2) of the NHRA? | YES | NO | UNCERTAIN |
| If YES or UNCERTAIN, explain: | The development may detract from the historical setting of the SAAO, a building that is a Grade I heritage site (i.e. of national heritage significance) because of its cultural and scientific historical significance. | | |
| Will any building or structure older than 60 years be affected in any way? | YES | NO | UNCERTAIN |
| If YES or UNCERTAIN, explain: | <p>The main building "the River Club Building" was built in 1939.</p> <p>This building has been assessed as a Grade III C heritage resource – a significant heritage resource due to its contribution to the character of the local environment. According to the heritage specialist, the buildings are considered to be of very low significance, and that the loss of this structure would have very little or no impact on the significance of the site or environs.</p> | | |
| Are there any signs of culturally or historically significant elements, as defined in section 2 of the NHRA, including Archaeological or paleontological sites, on or close (within 20m) to the site? | YES | NO | UNCERTAIN |
| If YES or UNCERTAIN, explain: | <p>While the entire Liesbeek River valley has not been surveyed for archaeological material, many parts of the Observatory section have been examined: the River Cub itself was previously surveyed by the ACO, who have also observed excavations for new structures on the neighbouring SAAO site. Furthermore, comprehensive trial excavations have taken place at Valkenburg and at the Varsche River, and excavations for renovation of the Hospital were monitored.</p> <p>The archaeological material that has been found during these excavations relates entirely to the VOC period and thereafter.</p> <p>Despite the major works near the site (including canalisation of the river), no graves or human remains have been reported or are lodged according to the skeleton register at either Iziko Museum or the UCT medical school which have been the official repositories of such finds since both institutions were established. The nearest recorded remains of pre-colonial people and archaeological sites are from close to the Salt River estuary in Milnerton.</p> <p>Khoikhoi people burial methods are described and are archaeologically well documented. Therefore, if the site and surrounding area were once used as a burial ground it is extremely likely that remains would have already been discovered during previous excavations in the area.</p> <p>Furthermore, the site has undergone extensive surface disturbances (e.g. it is <u>an infill site</u>)</p> <p>It is therefore very unlikely that any significant archaeological or palaeontological resources will be uncovered during construction. It is however possible, although still unlikely, that during excavation of the western wall of the Liesbeek Canal (Riverine Concept Alternative only) and foundations of the Berkley Road bridge archaeological or palaeontological resources may be uncovered – but the discovery of human remains is extremely unlikely.</p> <p>This is the view of the Archaeology Contracts Office and is confirmed by ACO in the study attached as Appendix G5.</p> | | |

Note: If uncertain, the Department may request that specialist input be provided **and** Heritage Western Cape must provide comment on this aspect of the proposal. (Please note that a copy of the comments obtained from the Heritage Resources Authority must be appended to this report as Appendix E1).

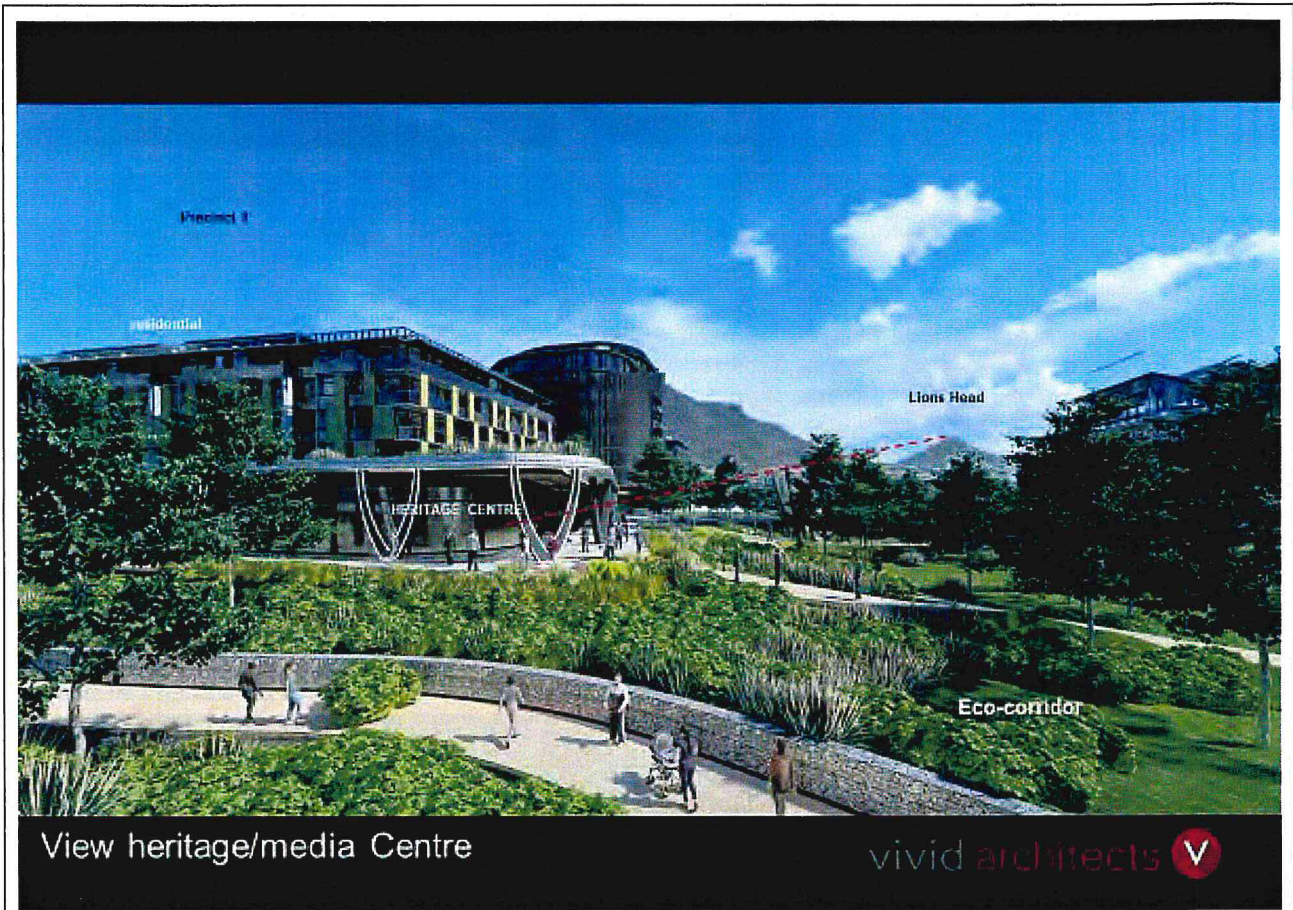


Figure 51: Cultural, Heritage and Media centre

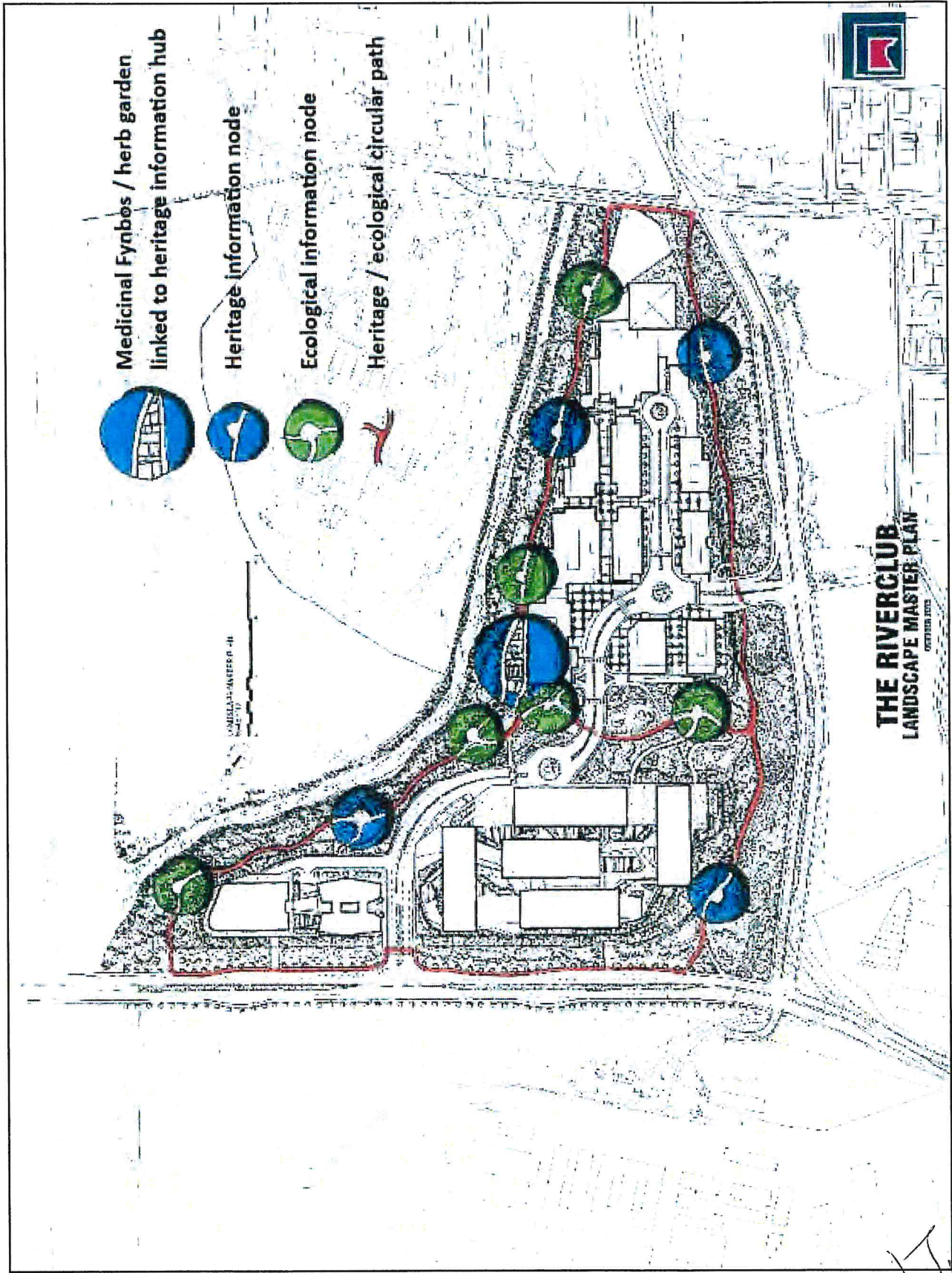


Figure 52: Eco-heritage trail

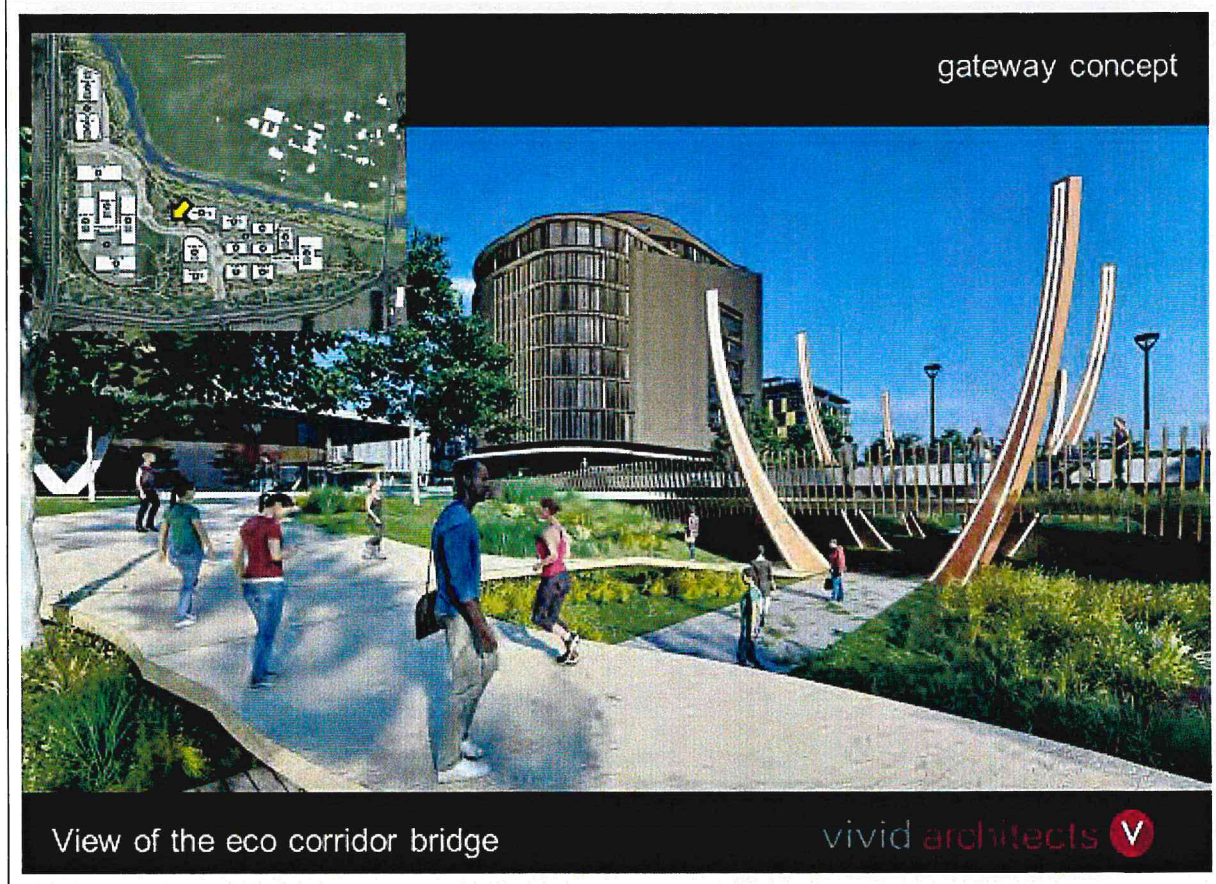
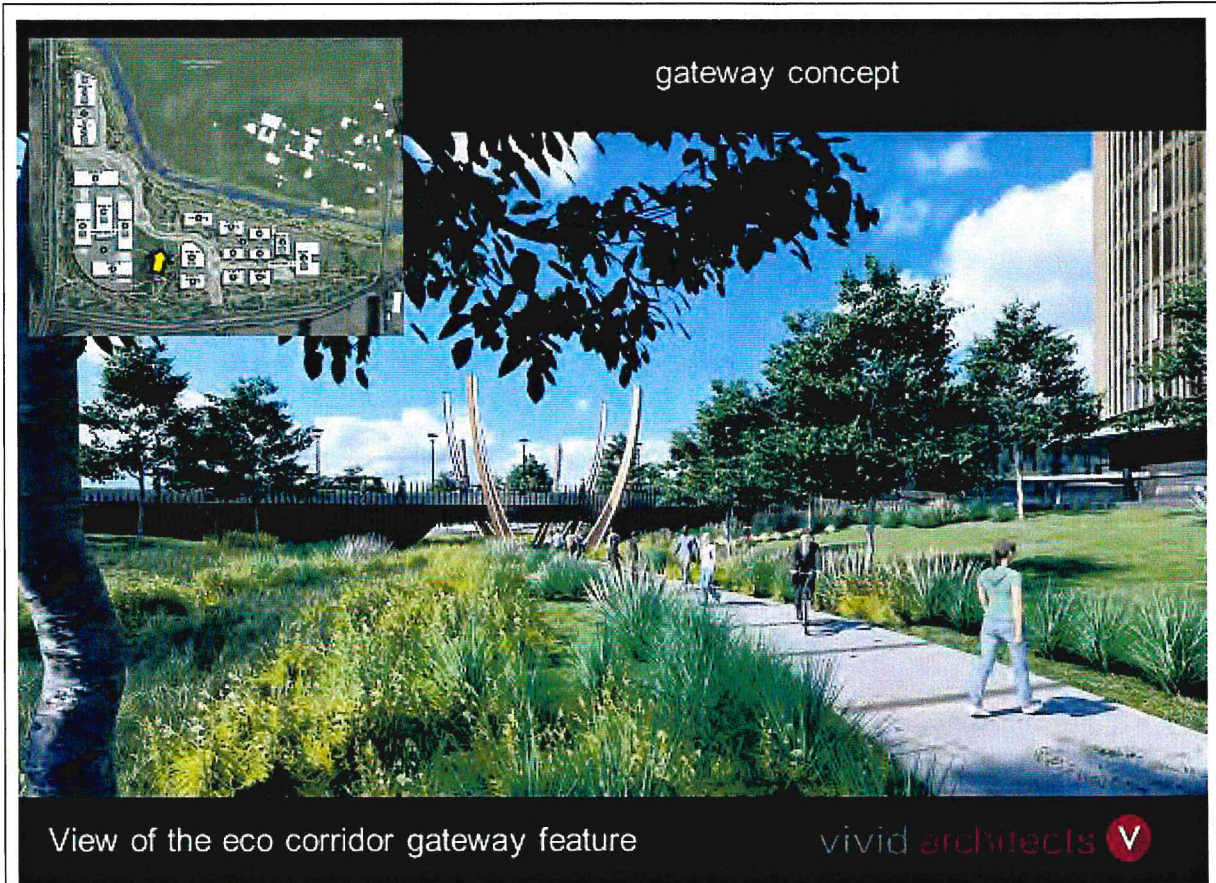


Figure 53: Gateway feature over ecological corridor inspired by symbol central to First Nations

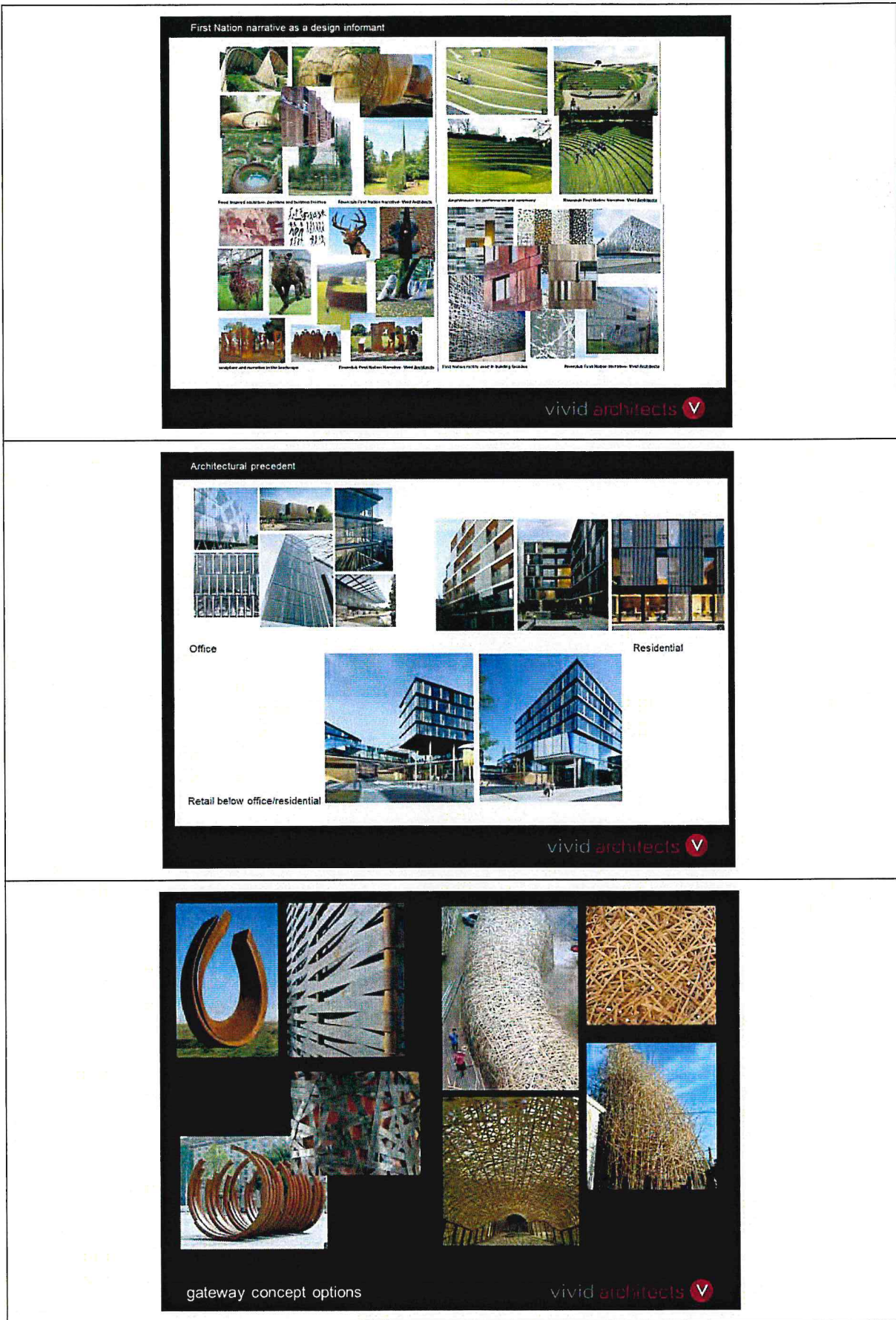


Figure 54: Examples of how symbols central to First Nations narrative would be incorporated into the design

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SECTION C: PUBLIC PARTICIPATION

The PPP must fulfil the requirements outlined in the NEMA, the EIA Regulations, 2014 (as amended) and if applicable, the NEM: WA and/or the NEM: AQA. This Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must also be taken into account.

1. Please highlight the appropriate box to indicate whether the specific requirement was undertaken or whether there was an exemption applied for.

| | | | |
|---|-----|-----------|-----|
| In terms of Regulation 41 of the EIA Regulations, 2014 (as amended) - | | | |
| (a) fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of - | | | |
| (i) the site where the activity to which the application relates, is or is to be undertaken; and | YES | EXEMPTION | |
| (ii) any alternative site | YES | EXEMPTION | N/A |
| (b) giving written notice, in any manner provided for in Section 47D of the NEMA, to - | | | |
| (i) the occupiers of the site and, if the applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken; | YES | EXEMPTION | N/A |
| (ii) owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken; | YES | EXEMPTION | |
| (iii) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area; | YES | EXEMPTION | |
| (iv) the municipality (Local and District Municipality) which has jurisdiction in the area; | YES | EXEMPTION | |
| (v) any organ of state having jurisdiction in respect of any aspect of the activity; and | YES | EXEMPTION | |
| (vi) any other party as required by the Department; | YES | EXEMPTION | N/A |
| (c) placing an advertisement in - | | | |
| (i) one local newspaper; or | YES | EXEMPTION | |
| (ii) any official Gazette that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations; | YES | EXEMPTION | N/A |
| (d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken | YES | EXEMPTION | N/A |
| (e) using reasonable alternative methods, as agreed to by the Department, in those instances where a person is desirous of but unable to participate in the process due to— (i) illiteracy; (ii) disability; or (iii) any other disadvantage. | YES | EXEMPTION | N/A |
| If you have indicated that "EXEMPTION" is applicable to any of the above, proof of the exemption decision must be appended to this report. | | | |
| Please note that for the NEM: WA and NEM: AQA, a notice must be placed in at least two newspapers circulating in the area where the activity applied for is proposed. | | | |
| If applicable, has/will an advertisement be placed in at least two newspapers? | YES | | NO |
| If "NO", then proof of the exemption decision must be appended to this report. | | | |

2. Provide a list of all the State Departments and Organs of State that were consulted:

| State Department / Organ of State | Date request was sent: | Date comment received: | Support / not in support |
|--|------------------------|------------------------|--------------------------|
| CapeNature | By 15 July 2019 | | |
| CoCT departments: | By 15 July 2019 | | |
| City Parks | By 15 July 2019 | | |
| Catchment, Stormwater and River Management | By 15 July 2019 | | |
| Disaster Risk Management | By 15 July 2019 | | |
| Electricity | By 15 July 2019 | | |
| Environmental Resource Management | By 15 July 2019 | | |
| Heritage Management | By 15 July 2019 | | |
| Planning and Building Development Management | By 15 July 2019 | | |
| Refuse | By 15 July 2019 | | |
| Spatial Planning and Urban Design | By 15 July 2019 | | |

| | | | |
|----------------------|-----------------|--|--|
| Sport and Recreation | By 15 July 2019 | | |
| Tourism | By 15 July 2019 | | |
| Transport | By 15 July 2019 | | |
| Water and Sanitation | By 15 July 2019 | | |
| DEA&DP | By 15 July 2019 | | |
| DWS | By 15 July 2019 | | |
| HWC | By 15 July 2019 | | |

3. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated, or the reasons for not including them.

(The detailed outcomes of this process, including copies of the supporting documents and inputs must be included in a Comments and Response Report to be attached to the BAR (see note below) as **Appendix F**).

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Previously pre-application stakeholder engagement was undertaken for the project on Draft Scoping, and Revised Draft Scoping Reports for the project in furtherance of a Scoping and Environmental Impact Reporting (S&EIR) Process as was required at the initiation of the pre-application phase.

However, the EIA Regulations, 2014 were amended by GN R324 – GN R327 on 7 April 2017. As part of these changes, Activity 27 of Listing Notice 2 (the only "listing Notice 2" activity previously applicable to the project) was amended to exclude its applicability in urban areas. The project, as currently contemplated, therefore only triggers Activities listed in Listing Notice 1 and Listing Notice 3, requiring a BA Process.

The activities undertaken and proposed during the Pre-application Phase of the assessment thus far are outlined below:

| Task | Objectives | Dates |
|--|---|---|
| <u>Notified identified stakeholders, including authorities, neighbouring property owners and residents</u> | <u>To notify IAPs of the commencement of the EIA process and to provide a description of the proposed project and the affected environment, as well as a description of potential environmental issues, and the proposed approach to the Impact Assessment Phase.</u> | <u>By 4 August 2016</u> |
| <u>Conducted an extended letter drop was conducted in the broader community inviting stakeholders to register on the project database</u> | | <u>3 August 2016</u> |
| <u>Placed posters with details of the project and EIA process and EAP contact details at the site boundary fence, at the club house at the River Club, the Peninsula Driving Range, Mowbray Library and the Starke Ayres Nursery</u> | | <u>4 August 2016</u> |
| <u>Advertised commencement of EIA process and released Draft Scoping Report for public and authority comment period (including registered heritage conservation bodies)</u> | | <u>4 August 2016</u> |
| <u>Public comment period</u> | <u>To provide stakeholders with the opportunity to review and comment on the results of the Scoping Phase.</u> | <u>5 August 2016 – 5 September 2016</u> |
| <u>Compiled Comments and Responses Summary and revised Draft Scoping Report</u> | <u>To record all issues and concerns raised and collate these comments in the revised report.</u> | <u>5 September – 11 November 2016</u> |
| <u>Released revised Draft Scoping Report and Issues and Responses Summary</u> | <u>To provide IAPs an opportunity to review the revised Draft Scoping Report and Issues and Responses Summary and to provide further comment.</u> | <u>11 January 2017 – 10 February 2017</u> |
| <u>Held Public Open Day</u> | <u>To present the findings of the revised Draft Scoping Report to stakeholders and provide an opportunity for questions and discussion.</u> | <u>25 January 2017</u> |
| <u>Presented Specialist baseline findings</u> | <u>To present specialist baseline findings for the site and for the proponent to demonstrate how site constraints have been addressed in the progression of the development proposal.</u> | <u>1 February 2017</u> |
| <u>Placed additional adverts</u> | <u>To advertise the EIA process, and comment opportunities on versions of the Heritage Impact Assessment for the project</u> | <u>25 January 2018 and 22 March 2019</u> |
| <u>Placed poster with details of the project and EIA process and EAP contact details at the site boundary fence</u> | <u>To notify IAPs of the date and venue of the Public Open Day, and of the availability of the Pre-Application BAR for public review and comment.</u> | <u>11 July 2019</u> |
| <u>Advertised the EIA process and comment opportunity on the pre-application BAR</u> | | <u>11 July 2019</u> |
| <u>Release BA Report to the public</u> | <u>To provide IAPs an opportunity to review the Pre-application BAR to provide further comment.</u> | <u>By 15 July 2019</u> |
| <u>Public Meeting</u> | <u>To present the findings of the Pre-Application BAR to stakeholders and provide an opportunity for questions and discussion.</u> | <u>15 August 2019</u> |
| <u>Public comment period</u> | <u>To provide stakeholders with the opportunity to review and comment on the results of Basic Assessment.</u> | <u>15 July 2019 – 16 September 2019</u> |
| <u>Compile Comments and Responses Summary and revise BAR</u> | <u>To record all issues and concerns raised and collate these comments in the revised report.</u> | <u>16 September 2019 – 20 December 2019</u> |

Note that the development proposal was amended significantly since initial engagement processes, partially in response to stakeholder comments, as well as input from specialists (most notably, a new approach to rehabilitation, a more significant setback at the SAAO boundary and the inclusion of a component of social housing at the development).

Issues raised during the stakeholder engagement processes during Scoping are summarised as follows (refer to Appendices F6, F7 and F8):

- The Need and Desirability and (in)appropriateness of the proposed land use for the site;
- The opportunity cost of not developing the site for alternative low intensity land uses;
- The need to consider reasonable alternatives;
- The need for integration with the Two Rivers local area planning process and the impact of the development on the Two Rivers local area;
- The efficiency / inefficiency of the urban form that will be created if the development is authorised;
- Flooding of adjacent properties;
- The impact on the WLT;
- The impact on adjacent freshwater and botanical resources;
- The loss of the site as part of an open space resource;
- A change to the sense of place of the area;
- A decline in the cultural and historic value of the site, and adjacent sites of cultural and historical significance (and in particular, the view from the SAAO to Signal Hill);
- The exclusivity of the development proposal / lack of affordable and / or social housing component; and
- Increased private vehicles on the local road network.

These issues are all comprehensively addressed in the issues and responses summaries for the pre-application BAR (Appendices F2 and F2c).

During engagement on the pre-application BAR, 494 comments were received from the public (many of which guided by a pro-forma comments / objections supplied to stakeholders), and 22 comments were received from authorities and institutional stakeholders (Appendix F5).

The frequency of public comments in each of the various issues categories is reflected in Figure 58. It is evident that the majority of public issues stem from potential heritage, biodiversity, socio-economic, alternatives / appropriateness of the development for the site and planning.

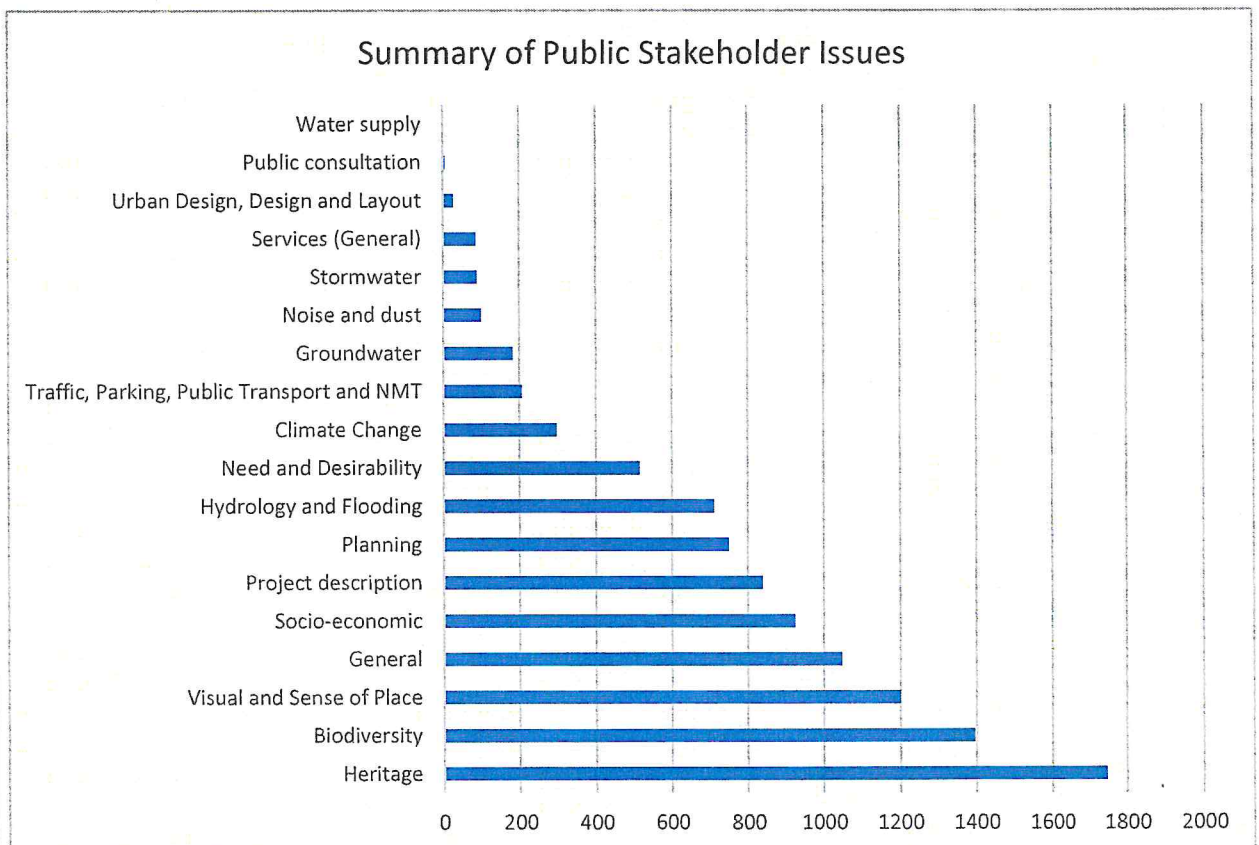
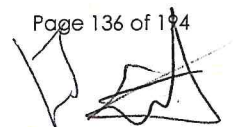


Figure 58: Summary of frequency of public stakeholder issues



Key issues raised by authorities, institutions and public stakeholders are summarised as follows and responded to comprehensively in Appendices F2 and F2c):

- The heritage impact of the built form of the development, and the identification of heritage resources at the site;
- The impact on the history of the site to First Nations groups / the intangible heritage value of the site;
- The impact on the historical landscape of the SAAO;
- The perception that the development will lead to a net ecological impact (as opposed to the benefit assessed by the specialists);
- The impact of the development on sensitive fauna and flora (particularly the Western Leopard Toad);
- A change to the sense of place of the area;
- The loss of the site as part of an open space (visual) resource;
- The interruption of views, of, from, and through the site;
- The need and desirability of the development / social justification to develop the site;
- The impact of the development on the City's resilience to climate change;
- The calculation of financial feasibility by the proponent;
- The independence of specialists on the project team;
- The perceived lack / inadequacy of the inclusionary housing component;
- The decline in public amenity by developing the site which is currently zoned as private open space;
- The (in)appropriateness of the proposed land use for the site / preference for other (mostly lower-density) alternatives not proposed by the LLPT;
- The planning implications of developing a site which is zoned for (often misconceived to be "public") open space;
- The conflict of the development proposal with spatial planning for the area;
- Flooding of adjacent properties; and
- Increased private vehicles on the local road network.

Most public stakeholders that submitted comments on the pre-application BAR objected to the development proposal, and approximately two thirds of public comments were submitted on templates distributed by local civic bodies.

The Constitution and numerous national laws and policies make it clear that South Africa is a developmental state. Furthermore, sustainable development requires both inter, and intra generational equality, and the South African economy is characterised by a very high level of intra-generational inequality. In other words, development that does not affect the ability of future generations (especially non-abstractive development) should be prioritised in the South African context.

People are opposed to development for all sorts of reasons, as is their prerogative in a democratic society where participation is encouraged. At the same time, developers are allowed to make development applications and these applications should be considered on merit in a balanced and fair manner.

The BAR (including Planning Policy overview – Appendix K1) outlines certain factors suggest that intense development may be reasonable, or appropriate, at this location (which are listed in Section B11 of this report). These factors are substantiated by specialist studies and have been formulated after much research and careful planning by highly qualified professionals. Potential impacts and benefits of the development are also described in detail (Appendix J to the BAR).

It is also pertinent that the City of Cape Town, which is the responsible statutory authority for planning at the municipal scale, has adopted a Municipal Spatial Development Framework (MSDF) and development of the River Club site is consistent with the MSDF. Furthermore, the City of Cape Town and the Provincial Department of Transport and Public Works have prepared a Draft Local Spatial Development Framework (dated October 2019) which makes provision for development of the River Club site. The development proposals respond to, and are broadly consistent with, these latest spatial planning instruments prepared by the authorities.

4. Provide a summary of any conditional aspects identified / highlighted by any Organs of State, which have jurisdiction in respect of any aspect of the relevant activity.

The DWS and CoCT are the only other authorities with jurisdiction with regard to the activity, and neither of these organs have identified any conditional aspects to the development to date (as these authorities are yet to decide on the relevant applications, and these decisions are only likely to be taken following the decision on EA).

Note:

Even if pre-application public participation is undertaken as allowed for by Regulation 40(3), it must be undertaken in accordance with the requirements set out in Regulations 3(3), 3(4), 3(8), 7(2), 7(5), 19, 40, 41, 42, 43 and 44.

If the "exemption" option is selected above and no proof of the exemption decision is attached to this BAR, the application will be refused.

A list of all the potential I&APs, including the Organs of State, notified and a list of all the registered I&APs must be submitted with the BAR. The list of registered I&APs must be opened, maintained and made available to any person requesting access to the register in writing.

The BAR must be submitted to the Department when being made available to I&APs, including the relevant Organs of State and State Departments which have jurisdiction with regard to any aspect of the activity, for a commenting period of at least

30 days. Unless agreement to the contrary has been reached between the Competent Authority and the EAP, the EAP will be responsible for the consultation with the relevant State Departments in terms of Section 24O and Regulation 7(2) – which consultation must happen simultaneously with the consultation with the I&APs and other Organs of State.

All the comments received from I&APs on the BAR must be recorded, responded to and included in the Comments and Responses Report included as **Appendix F** of the BAR. If necessary, any amendments made in response to comments received must be effected in the BAR itself. The Comments and Responses Report must also include a description of the PPP followed.

The minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded, must also be submitted as part of the public participation information to be attached to the final BAR as **Appendix F**.

Proof of all the notices given as indicated, as well as notice to I&APs of the availability of the Pre-Application BAR (if applicable), Draft BAR, and Revised BAR (if applicable) must be submitted as part of the public participation information to be attached to the BAR as **Appendix F**. In terms of the required "proof" the following must be submitted to the Department:

- a site map showing where the site notice was displayed, a dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;
- in terms of the written notices given, a copy of the written notice sent, as well as:
 - if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);
 - if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp indicating that the letter was sent);
 - if a facsimile was sent, a copy of the facsimile report;
 - if an electronic mail was sent, a copy of the electronic mail sent; and
 - if a "mail drop" was done, a signed register of "mail drops" received (showing the name of the person the notice was handed to, the address of the person, the date, and the signature of the person); and
- a copy of the newspaper advertisement ("newspaper clipping") that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

SECTION D: NEED AND DESIRABILITY

Note: Before completing this section, first consult this Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, 2014 (as amended), any subsequent Circulars, and guidelines available on the Department's website: <http://www.westerncape.gov.za/eadp>. In this regard, it must be noted that the *Guideline on Need and Desirability in terms of the Environmental Impact Assessment (EIA) Regulations, 2010* published by the national Department of Environmental Affairs on 20 October 2014 (GN No. 891 on Government Gazette No. 38108 refers) (available at: http://www.gov.za/sites/www.gov.za/files/38108_891.pdf) also applied to EIAs in terms of the EIA Regulations, 2014 (as amended).

| | | | |
|--|-----|----|----------------|
| 1. Is the development permitted in terms of the property's existing land use rights? | YES | NO | Please explain |
| The property is currently zoned Special Open Space: Open Space 3 in terms of the CoCT's Development Management Scheme, which does not convey the necessary development rights to accommodate the proposed development. It is therefore necessary to rezone the property in order to permit the proposed development. <u>The planning motivation report submitted in connection with the River Club provides detailed reasons as to why development on this site should be considered (refer to 9 below).</u> | | | |
| 2. Will the development be in line with the following? | | | |
| (a) Provincial Spatial Development Framework ("PSDF"). | YES | NO | Please explain |
| Also refer to Section B11 the Planning Policy Overview – Appendix K1. | | | |
| Although the PSDF is a broad-based document that does not provide specific guidance for development or land use proposals at a micro-scale (e.g. individual properties), it does contain overarching planning policy guidelines adopted by the Provincial Government, and major development applications need to be evaluated in terms of these policy guidelines. In terms of environmental integrity, the WCSDF contains policies and guidelines pertaining to the "sustainable use of the Western Cape's spatial assets", which include <i>inter alia</i> environmental assets such as biodiversity, freshwater resources, clean sources of energy, and cultural and scenic assets. | | | |
| <u>While the development is in line with a number of policies contained in the PSDF such as opening-up opportunities in the urban space-economy, improving accessibility, the promotion of a mixed use development, and the promotion of densification, it is in conflict with others that relate to the protection of cultural assets.</u> | | | |
| The development will aim to be consistent with the policies and guidelines contained in the PSDF. However, there is a certain minimum level of bulk leasable area required in order to make the development financially viable, and there will need to be a trade-off between e.g. ecological rehabilitation and protection, cultural and visual impacts and economic viability. | | | |
| (b) Urban edge / edge of built environment for the area. | YES | NO | Please explain |
| The property falls within the urban edge. | | | |

- (c) **Design or layout** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

Layout Progression

Feasible layout alternatives have been refined through a number of iterations in response to a number of aspects, including, *inter alia*, the ecological status of the site, potential inundation, cultural and heritage factors, traffic and access, urban plans, the Two Rivers local area, public comment, as well as commercial and technical considerations. These prior layout alternatives are described below as six main layout concepts. The reasons underpinning their evolution to the current conceptual layout are also described briefly below.

Initial Layout:

The initial concept assumed that the servitude for the Berkley Road extension could be acquired by LLPT the proponent and could be developed, and would therefore not be used for the road extension. This concept also assumed that the existing River Club building would need to be retained during the redevelopment of the site.

Revised Layout 1:

Both the initial and revised concepts included a "hard edge" and an engineered extension of the unlined course of the Liesbeek River in order to create a marina at the main retail component (Figure 60). It was also assumed that this water body would be required for floodwater abatement.

The CoCT advised LLPT that plans for the Berkley Road extension would not be withdrawn and this road forms part of the long term plans for the spatial development of the City (providing better access to Salt River, Woodstock and Observatory from the M5). The servitude and the Berkley Road extension were then included in the development concept.

This layout assumed that the Liesbeek River would be diverted to the unlined course to the west of the site, and that the River Club building would be retained.

The following also formed part of the revised layout:

- New access from new link from bridge from Black River Parkway development;
- Existing site entrance retained;
- Retail and mixed use positioned centrally with public spaces being north orientated and protected from the South East wind;
- Commercial office buildings located along the Berkley Road extension on the northern boundary of the development.
- High rise residential apartment buildings located on the southern edge of the development.
- Parking on surface minimised with most parking accommodated in basement and podium parking structures.
- Non-motorised transport to include running and cycling tracks throughout the development; and
- 140 000m² of floor area.

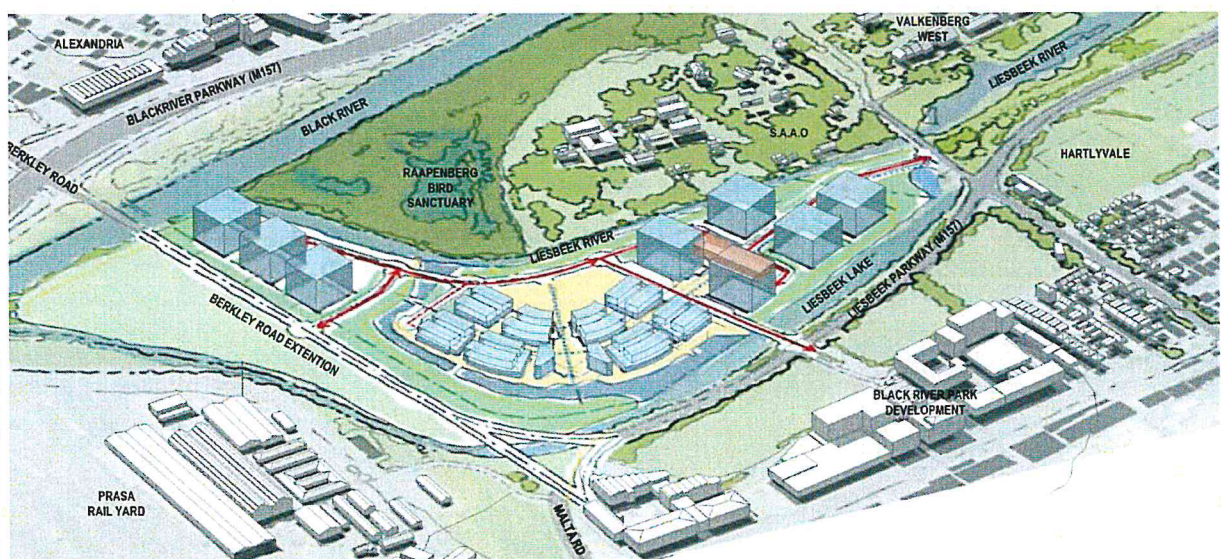


Figure 60: Revised Layout 1

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Revised Layout 2:

A heritage specialist has assessed the existing River Club building to be a Grade III C heritage site (a heritage site of low local significance), and that it will be possible to apply for the demolition of this building, and that such an application has a reasonable chance of success. Previous plans to retain the River Club building were therefore revised. Due to the low lying nature of the site, the possible demolition of this building had a significant impact on the development concept, allowing more extensive portions of the site to be raised above the 1:100 year flood line.

Following initial input from the freshwater ecologist ecological setbacks were instituted on the unlined course of the Liesbeek River and Liesbeek Canal (see Figure 61).

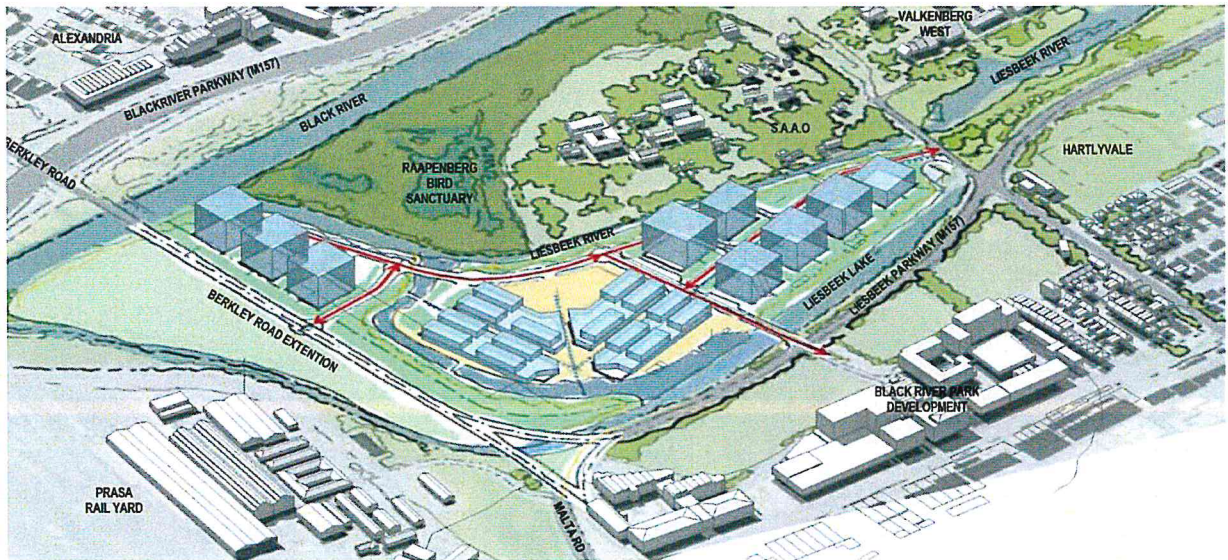


Figure 61: Revised Layout 2

Revised Layout 3:

Specialist hydrology indicated that a new water body connecting the Liesbeek Canal and the unlined course of the Liesbeek River is not required to abate floodwaters. The number of buildings on the northern edge of the site was reduced, and this water feature was removed (see Figure 62).

Following preliminary input from the freshwater ecologist, the marina edge at the main retail component of the proposed development was shelved in order to reduce the impact and enhance the benefit of the development on the freshwater environment.

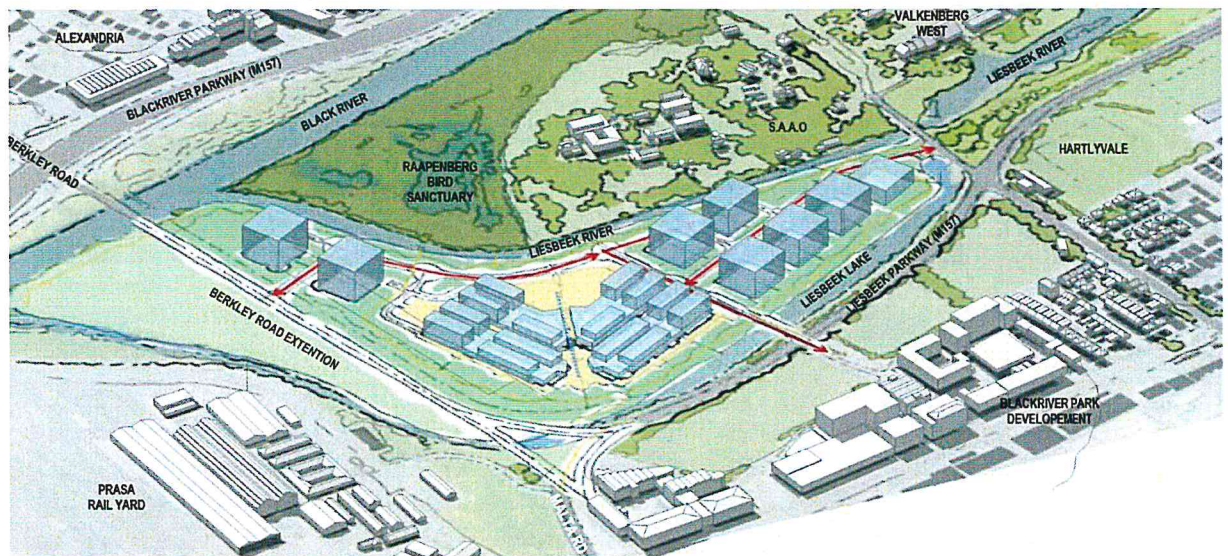


Figure 62: Revised Layout 3

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Revised Layout 4:

Following more detailed input from a heritage practitioner, a more substantial setback from the SAAO was implemented, the internal access road was moved away from this boundary, and a central (or open space) was included (see Figure 63). A visual and pedestrian east-west link was also included. Gross Building Area was reduced to 120 000 m².

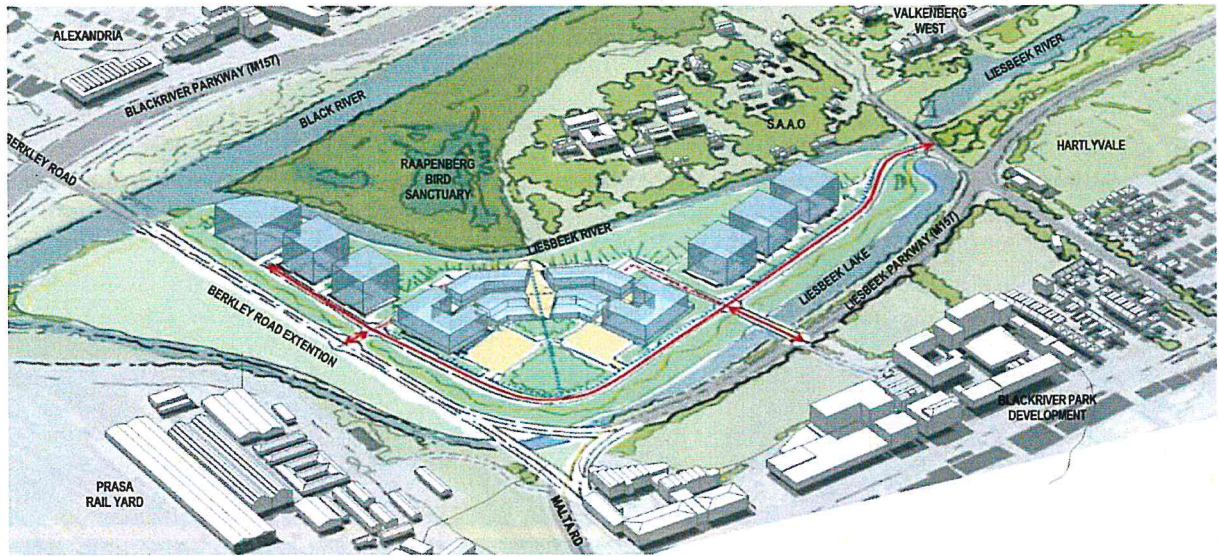


Figure 63: Revised Layout 4

Revised Layout 5:

Taking into account high infrastructure costs and feasibility analysis; as well as input from the urban designers, *the Two Rivers local area*, the heritage consultant, the ecologist, geotechnical specialists, and structural, civil and traffic engineers, the following changes to the development proposal were made (see Figure 64):

- The conversion of the central park into an east-west ecological corridor through the development;
- The inclusion of view lines to Devil's Peak, Lions Head and Table Mountain;
- The fragmentation of building form and lower heights in the southern precinct;
- An increase in building heights in the northern precinct;
- The possible remodelling of the Liesbeek Canal as a natural watercourse;
- The inclusion of a cultural, environmental and educational centre in a prime location in the development;
- A reduction in surface parking; and
- An increase in the floor area provision to 140 000 m².

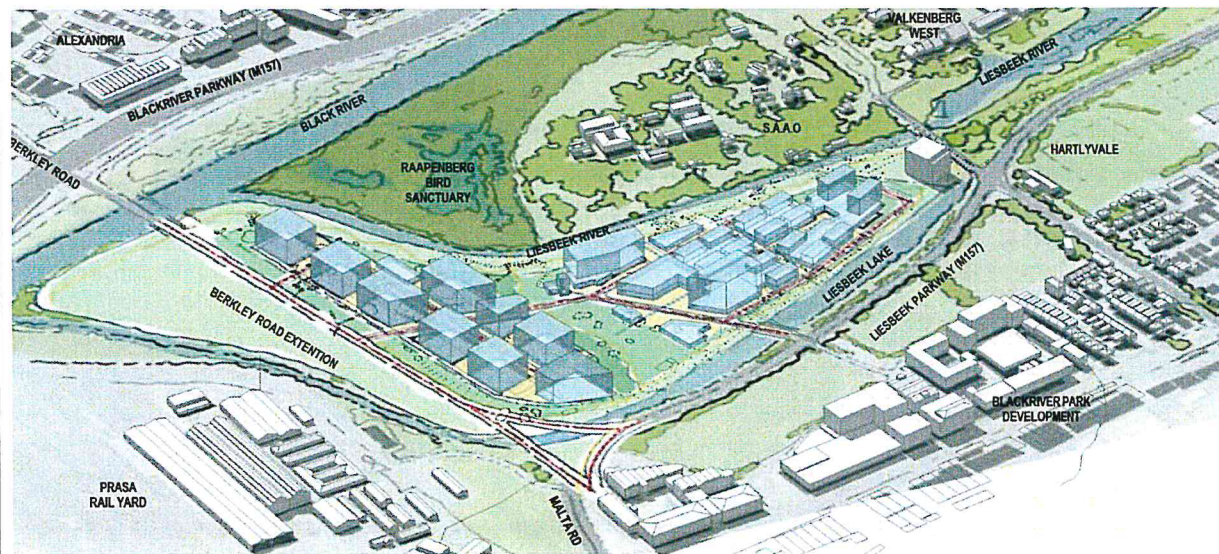


Figure 64: Revised Layout 5

Revised Layout 6:

Taking into account the competing imperatives of setting back from the SAAO, and for the ecological restoration of the Liesbeek River, a sixth preferred development layout was developed which included the following changes:

- The introduction of a wide riverine corridor along the route of the existing canal running adjacent to the eastern boundary of the site; and
- The infilling and landscaping of the old Liesbeek River channel on the western edge of the site to create a vegetated stormwater swale.



Figure 65: Revised Layout 6

Layout Alternatives Under Consideration

Also see Section A1 and Appendix K2: Alternatives Analysis

Preferred Development Alternative: The Riverine Corridor Alternative

In order to further mitigate heritage and visual (sense of place) impacts, and respond to inputs made during consultation on the planning application, the following changes were made to the sixth layout alternative to form the current preferred development alternative:

- A more substantial (50m) setback of the north-western most building from the confluence of the Liesbeek Canal and the Black River;
- A further reduction in the heights of buildings directly opposite the SAO (to four stories above current ground level - see Figure 67);
- The realignment of the internal road linking the development precincts to a more orthogonal layout; and
- Incorporating symbols central to the First Nations narrative in the design of the project

This alternative proposes approximately 150 000m² of floor space, which includes retail, office, residential (including inclusionary housing), hotel and community uses (see Figure 3 and Figure 66). Developed areas of the site (including roadways) will be raised above the 100-year flood elevation.

The proposal includes the wide riverine corridor along the route of the existing canal running adjacent to the eastern boundary of the site (see Figure 21 Figure 24 and Figure 26), and also includes the infilling and landscaping of the old Liesbeek River channel on the western edge of the site as a vegetated stormwater swale (see Figure 27 and Figure 28). The 'ecological corridor' and open space that extends across the site in an east-west direction, connecting the rehabilitated riverine corridor and the stormwater swale, is also retained.

Alongside the transformed riverine corridor there will be pedestrian and cycle paths, as well as viewing and seating areas where the public can enjoy the amenity of this rehabilitated water course. The SAO, with its heritage features, and the Raapenberg Wetland & Bird Sanctuary, with its associated flora and fauna, will become more accessible to the public as a result of the riverine corridor upgrade.

This alternative has been found to be financially feasible to the proponent (see Appendix K2).

(c) Provide a summary of the site selection matrix.

The proponent owns the majority of the site, and the characteristics and location of the site, are central to the development proposal and project motivation. While the suitability of the site for a development of this nature is assessed in this report, the consideration of alternative sites is not possible as no other site is available to the proponent for a development of this nature, and, therefore, falls outside the scope of this BA process. As such a site selection matrix has not been compiled.

Berkeley Road Extension is an approved scheme within a right of way proclaimed and set aside for this purpose. The land vests in the City of Cape Town. The location of this road is taken as given by the project team, and other possible locations of the road are not considered to be reasonable alternatives.

(d) Outcome of the site selection matrix.

N/A

3. SPECIALIST INPUTS/STUDIES, FINDINGS AND RECOMMENDATIONS

Note: Specialist inputs/studies must be attached to this report as **Appendix G** and must comply with the content requirements set out in Appendix 6 of the EIA Regulations, 2014 (as amended). Also take into account the Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, 2014, any subsequent Circulars, and guidelines available on the Department's website (<http://www.westerncape.gov.za/eadp>).

Provide a summary of the findings and impact management measures identified in any specialist report and an indication of how these findings and recommendations have been included in the BAR.

The following specialist studies were undertaken:

- Biodiversity impact assessment;
- Faunal comment (to inform biodiversity impact assessment);
- Botanical comment (to inform biodiversity impact assessment);
- Hydrogeological comment (to inform biodiversity impact assessment);
- Surface water hydrology impact assessment;
- Heritage impact assessment;
- Visual impact assessment;
- Socio-economic impact assessment; and
- Traffic impact assessment.

The completed specialist studies and their findings have been integrated into the BA Report, and have informed the final development proposal. The key findings of each specialist were evaluated in relation to each other to provide an overall and integrated assessment of the project impacts (see Appendix J).

SRK has considered the suite of potential impacts in a holistic manner and in certain instances, based on independent professional judgment and this integrated approach, may have altered impact significance ratings provided by the specialist (see specialist studies attached as Appendix G).

Specialists have made recommendations for the management of impacts, and the EIA team has assessed these recommendations and incorporated them into both impact assessment, and the EMPr.

4. ENVIRONMENTAL IMPACT STATEMENT

Provide an environmental impact statement of the following:

(i) A summary of the key findings of the EIA.

The project will entail so-called triple bottom line costs and benefits, i.e. social, environmental and economic costs and benefits. The triple bottom line concerns itself with environmental (taken to mean biophysical) sustainability, social equity and economic efficiency and is typically employed by companies seeking to report on their performance. The concept serves as a useful construct to frame the evaluation of environmental impacts of the project.

The challenge for DEA&DP is to take a decision which is sustainable in the long term and which will probably entail trade-offs between social, environmental and economic costs and benefits. The trade-offs are documented in the report, which assesses environmental impacts and benefits and compares these to the No-Go alternative. SRK believes it will be instructive to reduce the decision factors to the key points which the authorities should consider. These points constitute the principal findings of the BA:

- The LLPT operates the River Club in Observatory, Cape Town (the site) and owns the majority of the site.
- The LLPT is proposing to redevelop most of the site for commercial, retail and residential use.
- Infilling of the site to above the 1:100 year floodline, demolition of existing structures, construction of new buildings, roads, bridges, surface water control structures all form part of the development proposal.
- The site and surrounding area is prone to regular flooding.
- The site is transformed from a biophysical perspective and has limited ecological value. However, the adjacent freshwater ecosystems (i.e. the natural course of the Liesbeek and Black Rivers), as well as the interfaces of the site with these features - although degraded - have ecological value and also provide an opportunity for rehabilitation.
- The local road network is currently congested, and a number of intersections and the Liesbeek Parkway already operate beyond capacity during peak periods.
- The sense of place of the study area is strongly influenced by the rivers, and an "island" of green open space in a highly developed and evolving urban environment of mixed land use.
- Historically, culturally and ecologically, the riverine corridor and floodplain of the Liesbeek River is considered to be the most important component of the historic landscape, and is the key topographical determinant of the current urban townscape from a heritage perspective.
- The site has both historical agricultural and cultural significance as an extensive wide-open floodplain.
- The site is the one of the last open remnants of the floodplain.
- The site abuts the historic landscape of the SAAO.
- The site provides low-quality, but important terrestrial habitat and connectivity for faunal species, most importantly, the WLT.
- Various alternative layouts were considered, and the preferred layout alternative was selected through a process of extensive consultation with specialists, most notably heritage and freshwater specialists.
- The two layout alternatives presented for impact assessment, the Riverine Corridor Alternative and the Island Concept Alternative, are similar except for their treatment of the unlined course of the Liesbeek River and the Liesbeek Canal.
- The site can be infilled without significantly changing the flood hazard in surrounding communities.
- Delays to road users are anticipated both during construction of the development, and during operations, and numerous road upgrades are required from both the CoCT and the LLPT.
- The character of the site as a wide open floodplain will be transformed by the development.
- The development will be congruent with surrounding land uses to a certain extent, mainly the commercial and industrial activities towards the north of the site, and views from key vistas (such as the M5) will be changed, but not destroyed (see Appendix A to the VIA and Figure 59);
- Although a negative change in the historical character of the site is anticipated, the Riverine Corridor Alternative provides an opportunity to rehabilitate and enhance the Liesbeek River corridor, and enhance its public amenity value. The heritage specialists conclude that this alternative would lead to a net benefit to the heritage value of the site.
- The development of the Riverine Corridor Alternative is expected to detract from the historical setting of the SAAO.
- A key design informant of the Riverine Corridor Alternative is to set-back from the SAAO as far as possible, reduce the height of buildings directly opposite this site, and to allow for vistas between buildings from this site (see Section E, Figure 3, Figure 71 and Figure 72);
- The Island Concept Alternative will lead to a more significant degradation of the historical setting of the SAAO.
- The development will lead to the loss of well represented wetlands of limited ecological value in the unlined course of the Liesbeek River and on the banks of the Black River that are classified as ESAs.
- The Raapenberg Wetland is not expected to be negatively impacted by the development.
- The Riverine Corridor Alternative will improve the quality of aquatic habitats at and adjacent to the site.
- Although there will be a loss in the extent of terrestrial habitat, the quality of terrestrial habitat will improve by developing the site as proposed.
- Faunal mortalities, most importantly of WLT are anticipated both during construction and operation, and extensive mitigation has been carefully planned to avoid this impact as far as possible.
- A significant loss of sense of place and visual intrusion are anticipated.
- The development will provide housing close to the City, and will include an inclusionary housing component.
- The development will increase employment and wealth, improve skills, increase government revenue, provide densification and facilitate improved connectivity, transport systems and the Two Rivers local area implementation, improve the public amenity value of the site.
- The development may increase the pace of local gentrification to a limited extent.
- The design (layout) of the development has been informed by extensive input by specialists, and therefore a number of mitigation measures are inherent in design, or must be incorporated into detailed design. These components of the design of the development are recommended as conditions of authorisation.
- Although heritage and visual impacts cannot be fully mitigated by on-site mitigation (i.e. there will be significant residual visual impacts), strict implementation of the EMPr will ensure that ecological benefits are enhanced, and that potential impacts are mitigated to acceptable levels.
- A development alternative with less floor area would not mitigate visual and heritage impacts completely;
- The development provides an opportunity to restore the Liesbeek course at the canal fronting the site as a feature with cultural and ecological value, and to celebrate the First Nations history of the broader area at the site.
- Heritage and visual impacts have been assessed to be acceptable by specialists, and there will be a net benefit to ecological systems at, and adjacent to, the site if the preferred development alternative is selected. Furthermore, socio-economic benefits to local communities and to the CoCT will be significant. The proposal is therefore recommended for development.

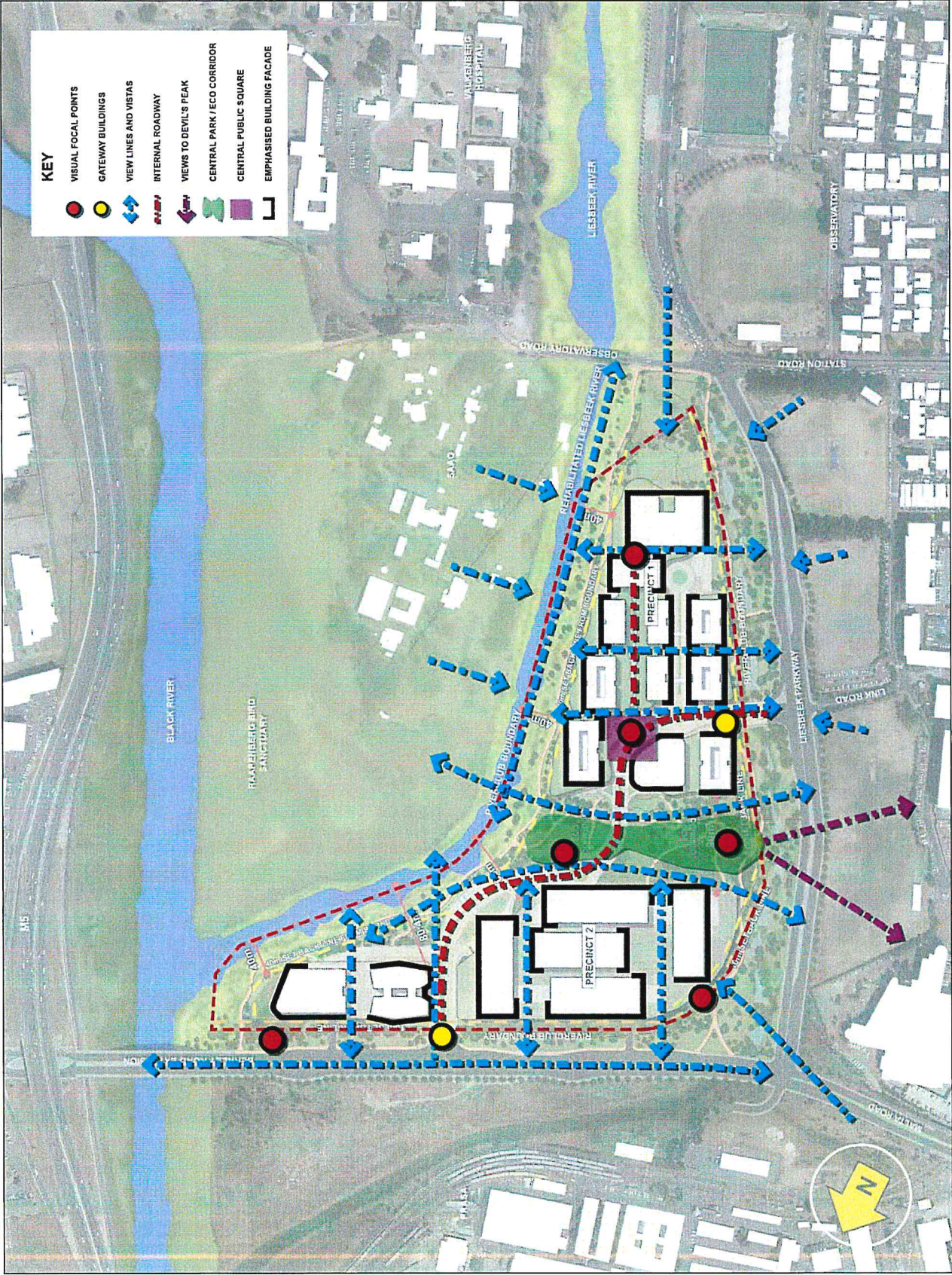
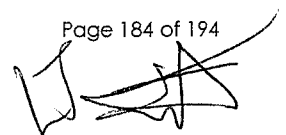


Figure 71: Primary focal points and views

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SECTION H: RECOMMENDATIONS OF THE EAP AND SPECIALISTS

| | | |
|---|-----|----|
| (a) In my view as the appointed EAP, the information contained in this BAR and the documentation attached hereto is sufficient to make a decision in respect of the listed activity(ies) applied for. | YES | NO |
| (b) If the documentation attached hereto is sufficient to make a decision, please indicate below whether, in your opinion, the listed activity(ies) should or should not be authorised: | | |
| Listed activity(ies) should be authorised: | YES | NO |
| Provide reasons for your opinion | | |
| <p>This BA Report has identified and assessed the potential biophysical and socio-economic impacts associated with the proposed redevelopment of the River Club, Observatory, Cape Town, taking into account the concerns of potentially affected stakeholders.</p> <p>In terms of section 31 (n) of NEMA, the EAP is required to provide an opinion as to whether the activity should or should not be authorised. In this section, a qualified opinion is ventured, and in this regard, the EAPs believe that sufficient information is available for DEA&DP to take a decision.</p> <p>The site is strategically located close to the CBD, and offers one of the last major development opportunities this close to the City. The site has been the subject of revitalisation initiatives for over a quarter of a century but none have been financially viable, leading to the persistent under-utilisation of the site.</p> <p><u>Despite the site's current zoning, and status in terms of the Table Bay District Plan, there are a number of factors which suggest that development could take place at this location from a planning perspective, and the latest spatial planning documents for the site identify it positively for development, and the project would achieve a number of the CoCT's key city making imperatives, including densification and mixed-use development. Nevertheless, the project is located in a sensitive cultural landscape, and is located in the floodplain of the Liesbeek and Black Rivers.</u></p> <p>In order to develop the site large portions must be infilled to above the 1:100 floodline, which will entail significant cost. The cost of the installation of services will also be high (see Appendix K2). The developer has investigated reasonable (mixed-use) development alternatives identified by stakeholders, and has assessed these to be not financially viable. The developer has further calculated that the <u>floor area</u> currently proposed is the minimum required to ensure financial feasibility (see Appendices K2 and K3), and as such, impacts associated with the change in character of the site cannot be avoided completely through layout or operational alternatives. In other words, residual impacts on the character of the site, the historical setting of the SAAO, and sense of place of the area are anticipated should the development proceed.</p> <p>The proponent has presented two financially feasible development alternatives: the Riverine Corridor Alternative and the Island Concept Alternative (as well as the No-Go Alternative) for assessment in this BA. An experienced specialist team comparatively assessed the impacts and benefits of the two development alternatives (see Appendix G). The HIA concluded that the impact of the "Island Concept Alternative" on the historical setting of the SAAO would be significant, but that the impacts of the Riverine Corridor Alternative (that steps back from the SAAO and restores the Liesbeek River Floodplain) on the historical setting of the SAAO are tolerable. The ecological benefits of the Riverine Corridor Alternative are also significantly higher than for the Island Concept Alternative.</p> <p>The specialist team and EAPs have not identified any fatal flaws associated with the Riverine Concept Alternative, and have assessed that (as well as residual impacts) there will be a number of socio-economic benefits to local communities and government, and that the immediately adjacent ecological environment will be improved.</p> <p>The LLPT is committed to ensuring that the development is operated to high standards, achieved through implementation of the recommended mitigation measures and ongoing monitoring of performance. The EAPs believe, and specialist studies and the BA Report demonstrates that, through effective implementation of detailed design and the stipulated mitigation measures, the adverse impacts can be reduced to tolerable levels, and that benefits are significant. The Riverine Corridor Alternative is therefore positively assessed for development.</p> <p>Ultimately, DEA&DP will need to consider whether to authorise the project, which brings significant economic, ecological <u>and cultural</u> benefits <u>and is in line with the latest draft Local Spatial Development Framework for the area</u>, but which will lead to irreversible (but acceptable) heritage and visual impacts and is currently not consistent with zoning (which is the subject of <u>a separate</u> application).</p> | | |
| (c) Provide a description of any aspects that were conditional to the findings of the assessment by the EAP and Specialists which are to be included as conditions of authorisation. | | |
| <p>The following development component have been or will be incorporated into the design of the development through discussions with specialists and the developer. These components are assumed to form part of the project description, and are key to the pre-mitigation assessment of impacts, nevertheless, they have been incorporated into the EMPr for reference. Additional mitigation measures to reduce the significance of impacts are also recommended, and are also included in the EMPr.</p> <p>Ecology:</p> | | |



- The current elevation of conservation areas, ecological corridors¹⁰, the Liesbeek Canal, unlined channel of the Liesbeek River (unless the Riverine Corridor Alternative is selected) open space swales and open space areas will be retained as far as possible;
- Sewerage pump stations will be installed in basements with a 2 hour overflow capacity;
- Gabions will be installed on the edges of roads on the outer perimeter of each development precinct;
- An ecological corridor of at least 10 m will be retained along the southern property boundary of the site;
- An ecological corridor of at least 10 m will be retained between the Berkley Road Extension and the northern building line of the site (with the exception of a single choke-point at the north-western corner of the development);
- A recreational buffer area of at least 65 m wide will be retained between Precinct 1 and Precinct 2;
- At least two culverts will be installed under the Berkley Road Extension to allow for faunal movement;
- For the Black River Bridge:
 - Two box culverts will be installed above the 1:50 year floodline on each bank of the river to facilitate faunal passage through the infilled road structure;
 - Gabion baskets will be installed on the road edge where the bridge ties into the existing Berkley Road; and
 - Unlined grassed channels will channel stormwater from Berkley Road into the Black River.
- For the recreational buffer area running through the development area between Precinct 1 and Precinct 2:
 - At least 40% of this corridor will be managed as an indigenous planted habitat without lawns or pathways and designed to provide continuous cover and protection for the movement of western leopard toads through the corridor;
 - The corridor will be shaped up steeply towards the surface of the road that crosses this area, and a gabion toad barrier will be provided along the edge of both sides of the road to prevent WLTs from climbing up onto the road; and
 - Three culverts will be installed under the road that crosses this area at a location to be agreed with by a wetland or faunal specialist.
- For the Riverine Corridor Alternative:
 - At the Liesbeek Canal:
 - The western wall of the canal and its base will be removed;
 - Stepped gabions will be installed on the remaining eastern canal wall to a depth slightly lower than the wet season base-flow level;
 - Gabions along the eastern canal wall will be vegetated with sedges and areas of higher spatial diversity will be provided (e.g. by adjusting installation marginally);
 - A riverine corridor of at least 25 m will be provided for channel flow up to the 1:1 year return interval flood, including a short low bank, shaped roughly to a slope of 1:4 to create a slightly elevated floodplain to accommodate within-year floods;
 - The river will be allowed to meander in this corridor naturally;
 - The short low bank will be vegetated with *Phragmites australis* reedbed and other indigenous plant species typical of lowland rivers in this area;
 - The within-year floodplain / channel margin will be vegetated with a range of indigenous plant species (it is likely that *Phragmites australis* reeds and possibly *Typha capensis* bulrush would dominate);
 - An ecological corridor of at least 15 m width at its narrowest pinch-point in the south-eastern corner of the development will be established and retained from upslope of the 1:1 year floodline, and this area will be vegetated with appropriate low-growing indigenous vegetation for at least the first 7.5 m and other indigenous riparian vegetation thereafter – where space permits the ecological corridor will extend westwards well beyond the 15m width (that is, in areas as shown in the layout plan excluding the above pinch point);
 - A 1 m high gabion wall will be installed at the western boundary of the ecological corridor to restrict the movement of Western Leopard Toad into the development area;
 - A recreational buffer area and pathways will be installed to east of the ecological corridor;
 - A 1 m high gabion wall will be installed at the western boundary of the recreational buffer area to further restrict the movement of Western Leopard Toad into the development area;
 - The western bank of the earth channel downstream of the existing canal will be shaped all the way to the Black River to mimic the rehabilitated profile upstream, and this area will be planted accordingly with locally indigenous vegetation;
 - Existing willow trees will be replaced along on the western bank of the earth channel downstream of the existing canal with indigenous riverine trees that will supply roosting and /or nesting areas to riverine birds; and
 - The western bank of the Black River where it fronts the site will be shaped to the approval of an aquatic ecologist.
 - At the unlined course of the Liesbeek River:
 - Infill the channel to create a wide vegetated open swale with ecological, amenity and stormwater polishing functions;
 - Provide terrestrial and breeding season habitat for WLTs in this area;
 - Allow stormwater to daylight as open channel vegetated bioretention swales;
 - Place low weirs at intervals in the swale behind which water can back up and create seasonally inundated areas;
 - Install eight culverts under the Link Road Crossing of the swale to allow for faunal movement;
 - Include three additional culverts at the Liesbeek swale crossing of the Berkley Road on the eastern terrestrial margins of the swale to allow faunal movements during flood events (i.e. seven culverts in total);

¹⁰ In this context, an ecological corridor is defined as a corridor that allows for the unrestricted movement of fauna.

- Pipe stormwater flows that currently enter the channel from urban areas to the west of Liesbeek Parkway under the swale;
- Step the eastern (development) side of the swale up steeply using gabions to discourage western leopard toad passage into the development;
- Use toad barriers edging the rehabilitated swale as the foundations for pathways; and
- Slope sections of the western bank of the swale gradually up to a walkway, but retain sections of steep bank for bird nesting habitat – walkways must include toad barriers to restrict toad passage from the swale onto Liesbeek Parkway.
- For the Island Concept Alternative:
 - At the Liesbeek Canal:
 - Recreational buffer area with a width of at least 20 m will be retained along the western bank of the canal where it fronts the site; and
 - Gum trees will be replaced with locally indigenous plants and trees.
 - At the unlined course of the Liesbeek River:
 - Allow the Link Road Bridge and the Berkley Road Bridge to span the rehabilitated watercourse on piers, including buffer areas.
 - The eastern channel bank will be graded to a slope of 1:5 (or flatter) over a distance of about 7.5 m,
 - An ecological corridor of about 7 m will be provided to the east of the graded bank and this area will be planted with locally indigenous vegetation (with the emphasis on habitat creation);
 - A 20 m wide recreational buffer area will be retained to the east of east of the ecological corridor; and
 - The low-lying area will be stepped up steeply up to the development platform with gabion baskets to discourage western leopard toad passage into the development.

Visual:

- A "green" setback will be retained along the banks of the Liesbeek River and the Black/Salt River.
- Visual (green) corridors connecting with the Black River will be retained.
- Westerly views towards Devils Peak will be utilised in movement routes.
- Easterly views across Raapenberg Bird Sanctuary will be utilised.
- The Raapenberg Bird Sanctuary will be linked visually with the portion of the site bordering the Sanctuary.

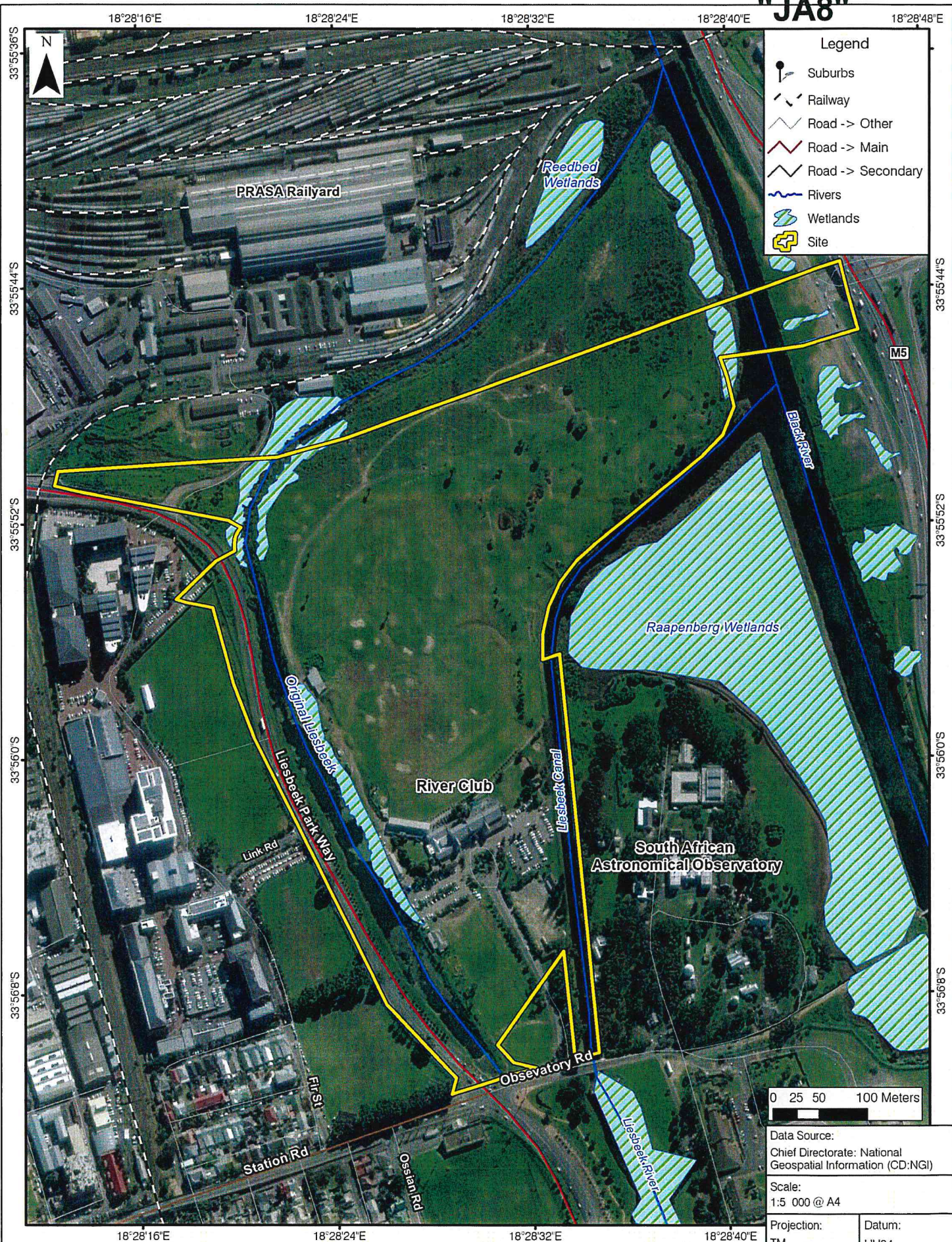
Socio-economic:

- 20% of the total floor space (~30 000 m²) will be allocated for residential use.
- 20% (6 000 m²) of residential floor space will be allocated for inclusionary housing.
- Inclusionary housing will be subsidised by the developer.
- The affordable housing units will be integrated into the project and blend in with the surrounding buildings;
- Inclusionary housing units will target households that earn a combined income of between R22 000 per month and R30 000 (in 2019 prices);
- Rental prices will be informed by the international standard that households should not spend more than 33% (1/3) of their income on housing; and
- Annual increases in rental prices will be aligned to increases in social housing rental prices or a set rate tied to changes in area median income or the consumer price index.

Heritage and Urban Design

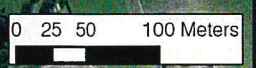
- The canalised portion of the Liesbeek River will be restored as an ecologically viable riverine corridor, and a meaningful sense of 'river-ness' will be established;
- The sense of place of the historically significant topography of the Liesbeek River will be restored (by implementing design recommendations of the freshwater ecologist at the Liesbeek Canal);
- The development will step back and be built to a height that responds to the shape established by the banks, trees and buildings of the SAAO;
- The following building design principles will be followed:
 - Buildings on the Berkley Road (northern) part of the development should have greater bulk and height than the southern part opposite the SAAO site;
 - Buildings at precinct entrances should be designed to reflect gateways and emphasise the hierarchy of spaces in the precinct;
 - Buildings on prominent corners and edges should contain architectural features that highlight the significance of these buildings;
 - Along internal streets, emphasis shall be placed on the interface between buildings and the public realm in order to promote an attractive and pedestrian friendly urban environment;
 - The design of buildings around public accessible spaces shall be appropriately scaled and contribute to the creation of safe spaces; and
 - Any parking structures that are above finished ground level shall be screened or shall incorporate an active interface so that hard edges and blank walls are avoided; and
- The significance of the place and its historical associations to First Nations groups must be celebrated by:
 - Establishing an Indigenous Garden for medicinal plants used by the First Nations;
 - Establishing a Cultural, Heritage and Media centre at the location of the Heritage information hub;
 - Establishing a Heritage-Eco trail that goes around the site;

| | |
|--|----------|
| <ul style="list-style-type: none"> o <u>Establishing an Amphitheatre for use and cultural performances by both the First Nations and the general public; and</u> o <u>Commemorating the history of the First Nations in the area, by:</u> <ul style="list-style-type: none"> ▪ <u>Establishing a Gateway Feature inspired by symbols central to the First Nations narrative at the road crossing the eco-corridor;</u> ▪ <u>Incorporating symbols central to the First Nations narrative in detailed design of buildings (e.g. pillars / supports, facades, building names, etc.); and</u> ▪ <u>Naming internal roads inspired by people or symbols central to the First Nations narrative.</u> | |
| <p>(d) If you are of the opinion that the activity should be authorised, please provide any conditions, including mitigation measures that should in your view be considered for inclusion in an environmental authorisation.</p> | |
| <p>Key recommendations, which are considered essential, are:</p> <ol style="list-style-type: none"> 1. Implement the EMPr to guide detailed design, construction, operation and maintenance activities and to provide a framework for the ongoing assessment of environmental performance; 2. Appoint an experienced Environmental Control Officer (ECO) with a qualification and experience in freshwater ecology to oversee the implementation of the EMPr and supervise any construction activities in particularly sensitive habitats; 3. Get sign-off from a freshwater ecologist for all changes to the project description that may affect freshwater resources (although none are anticipated); 4. Prevent uncontrolled access to the Raapenberg Wetland during construction and operations; 5. Obtain other permits and authorisations as may be required, including, but not limited to: <ol style="list-style-type: none"> a. WUL; b. Rezoning; and c. Amendment to the District Plan. | |
| <p>(e) Please indicate the recommended periods in terms of the following periods that should be specified in the environmental authorisation:</p> | |
| i. the period within which commencement must occur; | 5 years |
| ii. the period for which the environmental authorisation is granted and the date on which the development proposal will have been concluded, where the environmental authorisation does not include operational aspects; | 15 years |
| iii. the period for which the portion of the environmental authorisation that deals with non-operational aspects is granted; and | N/A |
| iv. the period for which the portion of the environmental authorisation that deals with operational aspects is granted. | N/A |



Legend

- Suburbs
- Railway
- Road -> Other
- Road -> Main
- Road -> Secondary
- Rivers
- Wetlands
- Site



Data Source:
 Chief Directorate: National Geospatial Information (CD:NGI)

Scale:
 1:5 000 @ A4

Projection: TM Datum: HH94

Central Meridian/Zone:
 Lo19

Date: 07/01/2020 Compiled by: FUBM

Project No. 478320 Fig No. 46



**REDEVELOPMENT OF THE RIVER CLUB
 THE RIVER CLUB FRESHWATER ENVIRONMENT**