

# Technical Services Reports

**Committee Consideration – 12 February 2013**  
**Council Resolution – 26 February 2013**

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<b>TS01.13</b> <b>Hampden Road – Permanent Change to Speed Limit from 50 kph to 40 kph</b>
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<b>Committee</b>	12 February 2013
<b>Council</b>	26 February 2013

<b>Applicant</b>	City of Nedlands
<b>Owner</b>	City of Nedlands
<b>Officer</b>	Maria Hulls
<b>Director</b>	Mark Goodlet – Director Technical Services
<b>Director Signature</b>	
<b>File ref.</b>	HA6
<b>Previous Item No's</b>	Nil
<b>Disclosure of Interest</b>	No officer involved in the preparation of this report had any interest which required it to be declared in accordance with the provisions of the <i>Local Government Act (1995)</i> .

**Purpose**

The purpose of this report is to obtain Council approval to implement a permanent change to the speed limit along Hampden Road from 50 kph to 40 kph.

**Recommendation to Committee**

**Council approves the change to the speed limit along Hampden Road from 50 kph to 40 kph as a permanent measure.**

**Strategic Plan**

KFA 1:    Infrastructure

- 1.1    Implement a Capital Works Program based on 5 and 20 year forward work schedules linked to the Strategic Financial Plan.
- 1.2    Design and construct infrastructure in accordance with Australian standards and guidelines.

**Background**

The City of Nedlands is bordered by Hampden Road and Broadway and shares the road with the City of Subiaco.

Following resident concerns about traffic speeds and pedestrian safety along Hampden Road and Broadway, Administration wrote to Main Roads WA (MRWA) requesting consideration of a 40 kph speed limit to be implemented.

Main Roads WA conducted an investigation along Broadway and Hampden Road and concluded that Hampden Road between Monash Avenue and Gordon Street fully complied with the criteria being:

- Continuous retail;
- Alfresco facilities;
- Commercial development; and
- High pedestrian activity.

All of these face both sides of the road over a distance of greater than 400 meters. Also taken into consideration was continuous frequent movement of pedestrians across the road as well as kerb side parking resulting in frequent parking maneuvers.

As Hampden Road is divided by the City of Nedlands and the City of Subiaco, Administration sought comment from the City of Subiaco on this proposal.

The City of Subiaco Administration supports the reduction in the speed limit on Hamden Road and will be submitting a report to Council in February 2013.

### **Proposal Detail**

To implement a 40 kph speed limit along both sides of Hampden Road between Gordon Street and Monash Avenue as a permanent measure.

### **Consultation**

Required by legislation: Yes  No

Required by City of Nedlands policy: Yes  No

Consultation type:

Following Council decision, Administration will inform all of the affected residents and stakeholders of the change if approved.

### **Legislation**

- *Disability Discrimination Act*;
- City of Nedlands Footpath Policy; and
- City of Nedlands Disability Access and Inclusion Plan.

### **Budget/financial implications**

Budget:

Within current approved budget: Yes  No

Requires further budget consideration: Yes  No

Financial:

A minimal cost is associated for the changeover of sign plates which we have available.

### **Risk Management**

Nil

### **Discussion**

Pedestrians form the largest single road user group and are the vulnerable group of road users.

In 2010 pedestrians formed 13% of fatalities in the Perth metropolitan region. Pedestrians have the least physical protection and pedestrian fatalities comprised disproportionately of the very young and the elderly.

40 km/h speed zones have been introduced since 1991 as part of the Local Area Traffic Management (LATM) schemes. These are installed in areas of the 40 km/h urban limit which is part of a nationwide strategy to reduce the incidence of injury and death in areas of high pedestrian activity such as busy CBD areas and small suburban shopping strips.

### **Conclusion**

There are a number of benefits to lowering speed limits in urban and metropolitan areas. Vulnerable road user groups such as pedestrians and cyclists are likely to benefit most from lowering speed limits which in turn encourages better interaction between different types of road users and leads to a more attractive and livable environment. It is therefore recommended to approve the reduction in the speed limit along Hampden Road between Park Road and Monash Avenue to 40 kph.

### **Attachments**

Nil

<b>TS02.13</b>	<b>Stage 2 – Shared Path Network Alexander Road &amp; Beatrice Road</b>
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<b>Committee</b>	12 February 2013
<b>Council</b>	26 February 2013

<b>Applicant</b>	City of Nedlands
<b>Owner</b>	City of Nedlands
<b>Officer</b>	Maria Hulls – Manager Engineering Services
<b>Director</b>	Mark Goodlet – Director Technical Services
<b>Director Signature</b>	
<b>File ref.</b>	AL2, BE1
<b>Previous Item No's</b>	Special Council Meeting 28 July 2009
<b>Disclosure of Interest</b>	No officer involved in the preparation of this report had any interest which required it to be declared in accordance with the provisions of the <i>Local Government Act (1995)</i> .

### Purpose

The purpose of this report is to present information resulting from consultation undertaken with the community on the proposed shared paths along Alexander Road & Beatrice Road.

### Recommendation to Committee

**Council approve the construction of a:**

- 1. 1.5 metre wide footpath along Alexander Road (eastern side) between Beatrice Road and Viking Road; and**
- 2. 2 metre wide shared footpath on Beatrice Road (southern side) between Wattle Avenue and Adelma Road.**

### Strategic Plan

KFA 1: Infrastructure

- 1.1 Implement a Capital Works Program based on 5 and 20 year forward work schedules linked to the Strategic Financial Plan.
- 1.2 Design and construct infrastructure in accordance with Australian standards and guidelines.

KFA 4: Community Wellbeing

- 4.1 Provide and facilitate access to services and facilities required by the broader community, clubs and community groups.

## Background

Following the construction of Stage 1 of a shared use path through David Cruikshank Reserve in 2010 / 2011, a proposal for stage 2 of the shared path was submitted to Council for consideration in the 2011 / 2012 budget and was adopted.

Two options for this path were considered:

Option 1:

Beatrice Road from Wattle Road to Adelma Road on the southern side.

Option 2:

Alexander Road from Beatrice Road to Viking Road on the eastern side.

Option 1 however was not progressed due to a Council decision during the 2009 / 2010 budget deliberations which removed the proposed funding from the budget.

A number of letters of requests and a petition (refer to attachment 5 for map of petition signatures) have been submitted to Council from the Dalkeith Primary School and the Member for Nedlands, Hon, Bill Marmion, requesting a footpath along Alexander Road between Viking Road and Beatrice Road to connect the school with the David Cruikshank Oval, the Kindergarten and other community facilities.

Key Relevant Previous Decisions:

At a special Council meeting 28 July 2009

**That the total amount of \$81,976 budgeted for Footpath improvements on Beatrice Road be removed.**

## Proposal Detail

To construct a 1.5 metre wide concrete path along the eastern side of Alexander Road between Viking Road and Beatrice Road. This path will provide links from and to the Dalkeith Primary School to the David Cruikshank Reserve and Dalkeith Kindergarten and Waratah Avenue shopping precinct. It is recommended that this not be a 2 metre shared path due to it being a non public transport route, however it will provide a vital link to Beatrice Road and Waratah Avenue shopping precinct. It is proposed to install the footpath along the boundary due to site conditions.

To construct a 2 metre wide concrete shared footpath for both pedestrians and cyclists along the southern side of Beatrice Road between Wattle Avenue and Adelma Road. This path will provide links along the major transport route and accessibility to and from bus stops. It is proposed to install the footpath along the boundary where possible, however will have to construct the footpath around any existing trees.

**Consultation**

Required by legislation: Yes  No

Required by City of Nedlands policy: Yes  No

Consultation type:

Two public meetings were held, one for Alexander Road and one for Beatrice Road. At the public meetings, the community members were invited to walk the length of where the proposed footpath would be to discuss any concerns regarding alignment, they were then able to interact with both each other and the City’s staff to convey their concerns.

Feedback forms were handed out which were required to be completed and returned to Administration within three weeks from the meeting date.

Public meeting Alexander Road Date: 27/10/12  
 Public meeting Beatrice Road Date: 1/ 12 /12

For a complete list of the feedback comments received and a map showing the location of community members for or against each proposal, please refer to confidential attachments 1-4.

A petition was also received by Council requesting the Alexander Road footpath to provide a pedestrian connection from the Dalkeith Primary School to DC Cruikshank Reserve and Dalkeith Kindergarten (refer to attachment 5).

**Legislation**

- *Disability Discrimination Act*
- City of Nedlands Footpath Policy
- City of Nedlands Disability Access and Inclusion Plan
- City of Nedlands Greenway Policy

**Budget/financial implications**

Budget:

Within current approved budget: Yes  No

Requires further budget consideration: Yes  No

Financial:

Currently in the budget there are funds allocated for Stage 2 which will be sufficient to construct one of the two proposed footpaths. Further

consideration is required for the additional footpath and will be requested during the 2013/14 budget process.

### **Risk Management**

Should the City not install the footpaths, the City may be liable if a complaint is lodged in accordance with the *Disability Discrimination Act*.

Currently 1 in 5 people in Australia have a disability with two in three people over the age of 75; this figure is predicted to increase by around 38% to around 632,200 people who identify themselves as having a disability by 2023.

### **Discussion**

Pedestrians form the largest single road user group and are the vulnerable group of road users. In 2010 pedestrians formed 13% of fatalities in the Perth metropolitan region. Pedestrians have the least physical protection and pedestrian fatalities comprised disproportionately of the very young and the elderly.

Beatrice Road is a public transport route with walking forming part of every public transport trip highlighting the importance of planning accessible transport links to and from bus stops.

Local Government is responsible for planning, constructing and maintaining pedestrian networks on local distributor, access roads and through parks and reserves. It also implements Travel Smart projects promoting walking opportunities and works with schools to improve safety and attractiveness of walk to school routes such as that along Alexander Road.

Planning and designing good pedestrian infrastructure with well connected and amenable facilities will benefit the whole community.

#### **Path Location within Nature Strip**

The feedback provided by the community has informed the decision process regarding the location of the paths within the nature strip. In some instances the path will be against the road while in others it will be closer to the boundary. The aim is to provide sensible informed site specific solutions.

#### **Path Width**

The recommended path width for Alexander Road is 1.5 metres. This width ensures that the minimum useful and safe width is utilised. A 1.5 metre wide path allows for minimum width safe disabled access. It is not wide enough to act as a cycle way, however, children under 12 are still allowed to cycle on footpaths, thereby meeting the needs of the Primary School. The 2 metre wide path in Beatrice Road is on a bus route. It also allows for cyclists as a minimum width cycle way.

## Greenways

Alexander Road forms one of the City's Greenways. Those are designed to protect, retain and promote flora and fauna within the City. Intuitively the more vegetation the better within a greenway, this does not preclude a footpath however, with many of the city's greenways already containing footpaths.

### Location of path – Property boundary

#### For

- Increased pedestrian safety due to buffer zone between pedestrians and the road
- No loss of trees or vegetation (maintaining greenway)

#### Against

- Relocation of obstacles
- Increased costs associated with reinstatement of reticulation

### Location of path – Kerb side

#### For

- Ease of construction
- reduced loss of amenity to residential green space and nature strip

#### Against

- Loss of trees and vegetation
- May be accessed by cars for parking
- Waste collection bins will render the path inaccessible on bin days
- No buffer zone between cars & pedestrians

## Conclusion

In conclusion, it is proposed to construct a 1.5 metre standard footpath connecting the missing link along Alexander Road and a 2 metre shared path along Beatrice Road between Wattle Avenue and Adelma Road. These two footpaths will enable accessibility along transport routes and provide safe links between a primary school, kindergarten, oval and reserve and shopping precinct.

## Attachments

1. Confidential - Alexander Road Consultation Feedback Responses (not to be published)
2. Confidential - Alexander Road Consultation Feedback Map (not to be published)

3. Confidential - Beatrice Road Consultation Feedback Responses (not to be published)
4. Confidential – Beatrice Road Consultation Feedback Map (not to be published)
5. Alexander Road Footpath Petition Map

<b>TS03.13</b> <b>Soundwave Festival, Monday 5 March 2012 – Claremont Showground, Claremont</b>
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<b>Committee</b>	12 February 2013
<b>Council</b>	26 February 2013

<b>Applicant</b>	Keiran McNamara – Director General, Department of Environment and Conservation
<b>Owner</b>	Town of Claremont
<b>Officer</b>	Katy Trevaskis – Environmental Health Officer
<b>Director</b>	Mark Goodlet – Director Technical Services
<b>Director Signature</b>	
<b>File ref.</b>	ENV/017-04
<b>Previous Item No's</b>	Nil
<b>Disclosure of Interest</b>	No officer involved in the preparation of this report had any interest which required it to be declared in accordance with the provisions of the <i>Local Government Act (1995)</i> .

**Purpose**

This report is before Council because the Director General of the Department of Environment and Conservation (DEC) has received an application from Altered State (WA) Pty Ltd to hold the Soundwave Festival at the Claremont Showgrounds on Monday 4 March 2013. This approval is pursuant to Regulation 18 of the *Environmental Protection (Noise) Regulations 1997* which allows an event to proceed which would otherwise lose its character or usefulness if it were required to comply with the prescribed neighbourhood noise levels.

Council's role is to determine whether it agrees with the conditions applicable to the approval pursuant to Regulation 18 (12) of the Regulations which state:

*(12) An approval must not be granted unless the local government of each district in which the noise emissions received from the event are likely to fail to comply with the standard prescribed under regulation 7 agrees to the proposed conditions applicable to the approval.*

Council agreement to these conditions as per Regulation 18 relates only to the control of noise from the event.

## **Recommendation to Committee**

**Council, pursuant to Regulation 18 (12) of the *Environmental Protection (Noise) Regulations 1997*, agree to the Department of Environment and Conservation's proposed conditions, (refer to attachment 1) for the Soundwave Festival to be held at the Claremont Showgrounds on March 4 2013 subject to the Department of Environment and Conservation or Altered State (WA) Pty Ltd notifying the City of Nedlands Health Section of any noise complaints received from City of Nedlands residents, within 7 days after the event.**

## **Strategic Plan**

KFA 4: Community Wellbeing

- 4.4 Continue to develop a sense of community through the promotion of cultural events and programs.

KFA 5: Governance

- 5.6 Ensure compliance with statutory requirements and guidelines.
- 5.8 Establish and actively manage a range of partnerships with government, private and not-for-profit sectors.

## **Background**

The Claremont Showground venue has long been associated with the annual Royal Show. However, since the inception of the Big Day Out event many years ago, its use has diversified to host a variety of regular music events and festivals like the Big Day Out, City Muster, Stereosonic and V Festival.

Historically, the Soundwave Festival has been held at the Claremont Showgrounds after approval being granted by the Town of Claremont under Regulation 18 of the *Environmental Protection (Noise) Regulations 1997*. However, in this instance, the Town of Claremont Council decided not to approve this year's application in line with the Towns "*Framework for Noise Approvals for Non – Conforming Events at the Claremont Showgrounds*".

Where the governing Local Government Council rejects an application for approval, the promoter may make application to the Department of Environment and Conservation for approval. The Department of Environment and Conservation is bound by the same requirement to seek approval of the conditions from those Local Governments whose residents will receive noise emissions from the event.

The Soundwave Festival originated in Perth and is now a national touring music event which hosts a number of rock, metal and punk acts. It is a licensed, all ages event with those under 15 requiring parental or guardian supervision. The event is sold out in all states including

Western Australia, with an expected attendance of 30,000 to 40,000 persons. The City received one complaint pertaining to noise from last year's Soundwave music festival.

### Proposal Detail

The Soundwave Festival 2013 is scheduled to be held at the Claremont Showgrounds on Monday 4 March 2013 from 11:00am to 10:30pm. Sound system checks will not exceed one hour on the day preceding the event (3 March 2013) and one hour on the day of the event (4 March 2013), these will be undertaken between 2.00pm and 4.00pm on the day preceding the event and not before 9.00am on the day of the event.

The Department of Environment and Conservation seeks Council's agreement to the conditions it proposes for Soundwave 2013, in relation to noise. The Department seeks agreement to the conditions because it is required to do so for this type of event under regulation 18(12) the *Environmental Protection (Noise) Regulations 1997* which states:

*“an approval must not be granted unless the local government of each district in which noise emissions received from the event are likely to fail to comply with the standard prescribed under Regulation 7, agrees to the proposed conditions applicable to approval.”*

Council needs to consider the Department of Environment and Conservation's conditions applicable to approval and decide whether it agrees to them. Refer to Attachment 1 for the conditions applicable to approval.

Notably in the conditions imposed by the Department of Environment and Conservation is the requirement for a Noise Management Plan for the event to be submitted. This was recommended to the Town of Claremont by the City in previous years where the Town was the approving body and has been adopted by the Department of Environment and Conservation as standard practice.

### Consultation

Required by legislation: Yes  No

Required by City of Nedlands policy: Yes  No

### Legislation

- *Environmental Protection (Noise) Regulations 1997*;
- City of Nedlands is the determining authority for conditions applicable to approval pertaining to noise; and

- The Department of Environment and Conservation is the determining authority for the approval.

### **Budget/financial implications**

Budget:

Within current approved budget: Yes  No

Requires further budget consideration: Yes  No

Financial:

There are no financial impacts.

### **Risk Management**

Conditions applicable to approval are considered by Council and agreed to as required in accordance with the *Environmental Protection (Noise) Regulations 1997*. The conditions applicable to approval are adequate in minimising the possibility of the City receiving noise complaints from its residents.

### **Discussion**

The Soundwave Festival is similar to other music events hosted at the Claremont Showgrounds, where due to the likelihood of noise levels being exceeded, requires an exemption from the relevant provisions of the *Environmental Protection (Noise) Regulations 1997* (the Regulations) prior to the event going ahead. Under the relevant provisions in the Regulations, Regulation 18 (12) states:

*“an approval must not be granted unless the local government of each district in which the noise emissions received from the event are likely to fail to comply with the standard prescribed under Regulation 7 agrees to the proposed conditions applicable to the approval.”*

The purpose of a Regulation 18 approval is to cater for an event, which would otherwise lose its character or usefulness if it were required to comply with prescribed noise levels. Regulation 7 stipulates prescribed noise levels normally applied to assess the impact of noise within neighbourhoods.

Noise from the event will be of a punk, metal, rock music genre incorporating amplifiers and public address systems. There is likelihood that noise levels will exceed the requirements of the Regulations in some areas of the City of Nedlands, most particularly those located in parts of Mount Claremont. The Department of Environment and Conservation has imposed conditions on the event to facilitate noise control (refer to Attachment 1, Schedule – Conditions of Approval). The

Department of Environment and Conservation is applying both 'A' weighted and 'C' weighted sound level limits to control noise impact.

Details of the event and a complaint response service are proposed to be publicised in the 'The Post' and 'Western Suburbs Weekly' not later than Friday 1 March 2013

Issue: Noise likely to be heard at some residences in the City of Nedlands

Requirement:	That Council agrees to conditions applicable to approval for the Soundwave Festival at Claremont Showground, Monday 4 March 2013
Applicants Proposal:	To seek agreement from Council of the conditions applicable to approval.
Applicant justification summary: Note: a full copy of all relevant consultation feedback received by the City has been given to the City's Councillors prior to the meeting.	The Department of Environment and Conservation is required to have agreement from the City of Nedlands Council for the conditions relevant to the approval.
Officer technical comment:	<p>The Department of Environment and Conservations application to seek agreement from the City of Nedlands Council over conditions applicable to approval is in accordance with the requirement to do so under the <i>Environmental Protection (Noise) Regulations 1997</i>.</p> <p>The noise control measures which form the conditions applicable to approval should include;</p> <p>1. The Department of Environment and Conservation or Altered State (WA) Pty Ltd notifying the City of any noise complaints received from residents in the City of Nedlands, within five (5) days after the event.</p>

### Conclusion

It is important to note that Council's role in the Department of Environment and Conservation's approval process for the Soundwave Festival 2013 is to agree, or not to agree, as to whether the noise control conditions imposed by the Department of Environment and Conservation are reasonable. Council's role does not extend to deciding whether it approves of the event or anything outside the scope

of noise. The *Environmental Protection (Noise) Regulations 1997* recognise the likelihood and necessity that noise levels from such an event will be above the normal neighbourhood levels. It is anticipated that the impact on City of Nedlands residents will be tolerable given the proposed conditions of approval.

In view of the above and the fact that the Department of Environment and Conservation has fulfilled its statutory obligation to notify the City of the upcoming event, there seems little justification for Council not to agree to the conditions proposed for the Soundwave Festival 2013.

### **Attachments**

1. Soundwave Festival Schedule - Conditions of Approval
2. Distribution area for 'Advice to Residents' leaflet

<b>TS04.13</b> River Walls
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<b>Committee</b>	12 February 2013
<b>Council</b>	26 February 2013

<b>Applicant</b>	City of Nedlands
<b>Owner</b>	City of Nedlands
<b>Director</b>	Mark Goodlet – Director Technical Services
<b>Director Signature</b>	
<b>File ref.</b>	PRS/100-16
<b>Previous Item No's</b>	Nil.
<b>Disclosure of Interest</b>	No officer involved in the preparation of this report had any interest which required it to be declared in accordance with the provisions of the <i>Local Government Act (1995)</i> .

**Purpose**

This report seeks Council direction on expenditure of budgeted River Wall funding of \$250,000 (+GST).

**Recommendation to Committee**

**Council approves expenditure on the river wall as follows:**

1. **Review and redesign of a standard cross section for the River Wall, which allows for a 1 in 50 year event in terms of strength, durability and overtopping height, to a value of \$20,000 + GST;**
2. **Detailed design and preparation of plans and a specification for continuation of the wall renewal to a value of \$20,000 + GST;**
3. **Concept design and estimate for the installation of pocket beaches at Paul Hasluck Reserve to a value of \$30,000 + GST; and either**
4. **Construction of the river wall with the balance of funds from the \$250,000 budget allocation after execution of items 1 to 3; or**
5. **Installation of a 1.2m high chain wire fence on damaged sections of the river wall and letters to the Swan River Trust and the State Government explaining that;**

- a. **The river wall is a shared financial responsibility between the Swan River Trust and the City of Nedlands;**
- b. **The City of Nedlands is disappointed in the level of funding provided to the ongoing repair and maintenance of the wall;**
- c. **Despite not receiving grant funding the City of Nedlands is proactively undertaking design and preparatory work in anticipation of further grant funding; and**
- d. **The City of Nedlands will apply for further grant funding for river wall reconstruction and will undertake the works if it is successful in receiving the grant funding.**

### **Strategic Plan**

KFA 1: Infrastructure

- 1.3 Provide and maintain quality passive and active recreational and leisure facilities and open space to meet community needs.

KFA 5: Governance

- 5.1 Manage the City's resources in a sustainable and responsible manner.

### **Background**

Property Address: Birdwood Pde, Dalkeith  
Zoning MRS: Reserve  
Zoning TPS No. 2: Reserve  
Lot Area: 208660m<sup>2</sup>

The construction of a river wall in the City of Nedlands Swan River frontage by the Public Works Department was carried out in 1936-38 when over 2 million m<sup>3</sup> of material was dredged and disposed of on the Nedlands Foreshore.



Figure 1. River Wall - Report Subject Area

There are five types of wall now existing from Broadway to Iris Avenue, which are in various stages of repair.

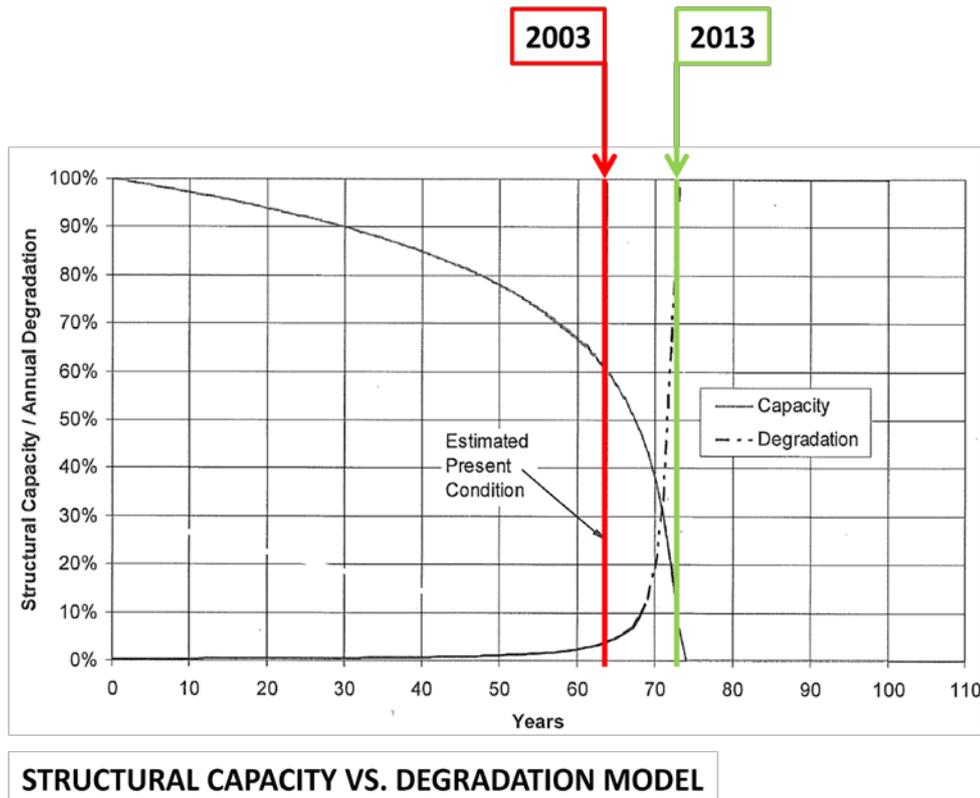
The City of Nedlands now has 5020m of Swan River water frontage. 307m of this is direct private frontage. The remaining 4713m is Crown land, although 585m of this length has no ownership details in the City's GIS database. This is likely to be where historical vestings to the City haven't been completed in the past through Landgate.

In July 2003 a Foreshore Condition Assessment was carried out through the Swan River Trust for the river frontage from Broadway to Iris Avenue, to examine the shore protection structures. This section of river frontage is where the predominant river front retaining wall structures are, which are the joint responsibility of the City of Nedlands and the Swan River Trust. The river walls are largely fronting recreational areas.

Please note that while this report focuses on the river walls between Broadway and Iris Avenue there are a number of other river walls within the City of Nedlands on the Swan River. A visual photographic record and desktop assessment of the foreshore along the entire Swan River foreshore within the City of Nedlands boundaries, was recently conducted. There are a number of short wall lengths in public reserves protecting private residences. These walls will need to be assessed in future and responsibility for maintenance determined.

The Swan River Trust commissioned a study of the river wall in 2003 to determine its condition and remaining life expectancy. The figure below shows the condition of the Broadway to Iris Avenue river walls in 2003 along with the modeling to show deterioration of the wall and its

structural capacity. The sections of wall that have not been replaced are now effectively near the end of their useful life. This is evidenced by a range of problems including panel cracking, footing integrity issues, sand washouts behind the wall, rusted reinforcing and concrete deterioration.



“Nedlands Foreshore Stability Assessment”  
July 2003, by Damara WA P/L for SRT, p.31

Figure 2. Predictive Modelling for Retaining Wall Condition from Broadway to Iris Avenue

The condition assessment notes also that the wall is overtopped by a less than one in one year storm event and it therefore needs to be raised.

The State Government Swan River Trust and the City of Nedlands are “jointly responsible” for the Riverpark areas within the City of Nedlands boundaries under the Swan and Canning Rivers Management Act 2006 (Pt 2 S12. (3))

The City of Nedlands applied for a \$250,000 grant from the Swan River to be matched with equivalent funding by the City in the 2012/13 budget. This application was not successful, leaving a total budget of \$250,000 funded only by the City.

Discussions with the Swan River Trust indicated that the unsuccessful bid was due to a number of factors including:

- the demand for the grant funding from other local government authorities and government agencies
- the lower priority given to the City's wall because it is not protecting critical infrastructure such as private property, road infrastructure or utilities; and
- the high cost of the most recent river wall works undertaken by the City under contract (the City will be liaising more closely with the SRT in the design and procurement phase as a result of this).

### Proposal Detail

It is proposed that the City's 2012/13 funding of \$250,000 be used as follows:

1. Review and redesign of a standard cross section for the River Wall, which allows for a 1 in 50 year event in terms of strength, durability and overtopping height, to a value of \$20,000 + GST;
2. Detailed design and preparation of plans and a specification for continuation of the wall renewal to a value of \$20,000 + GST;
3. Concept design and estimate for the installation of pocket beaches at Paul Hasluck Reserve to a value of \$30,000 + GST.
4. Construction of the river wall with the balance of funds from the \$250,000 budget allocation after execution of items 1 to 3 or installation of a chain wire fence along the damaged sections or river wall.

### Consultation

Required by legislation: Yes  No

Required by City of Nedlands policy: Yes  No

Consultation type: Involve Dates: To be Determined

Consultation with the following stakeholders will be undertaken.

- Community
- Swan River Trust
- Yacht Clubs

### Legislation

Swan and Canning Rivers Management Act 2006 Part 2 Section 12. (3) provides for joint responsibility of the river wall as follows -

*Despite any written or other law to the contrary, a person who has the care, control and management of Crown land in the*

*Riverpark shoreline is jointly responsible with the Trust for the care, control and management of that part of the Riverpark shoreline and for the maintenance of any wall or other structure on that part of the Riverpark shoreline.*

Planning and Development Act 2005, Section 26 (State Planning Policy 2.10 Swan-Canning River System). This policy is supportive of connectivity to the river as follows:

*Planning decisions in this area should:*

...

- improve opportunities for public access and use of the river, particularly between Chidley Point and Keanes Point, parts of Freshwater Bay and Point Resolution on the northern side, taking account of the terrain, public risk and recreational opportunities;*

City of Nedlands policies that affect the proposal:

Greenways Policy. - The aim of this policy is to “provide greater biodiversity and enhanced amenity around the City’s neighbourhoods. The replacement of river wall with pocket beaches will be sympathetic to these aims. The renewal and raising of the river wall, where it is to be kept will protect foreshore greenways.

Infrastructure - The provision of quality passive and active recreational facilities and compliance with Australian Standards.

Swan River Trust Policies that affect the proposal:

Policy SRT/DE7 River Retaining Walls. The Swan River Trust (the Trust) considers the construction of retaining walls as a last resort for river bank protection. Renourishment of beaches and re-vegetation are the preferred strategies.

### **Budget/financial implications**

Budget:

Within current approved budget: Yes  No

Requires further budget consideration: Yes  No

Financial:

In 2003 the value of the river walls from Broadway to Iris Avenue was estimated at \$2.5 million. Allowing for construction cost rises the 2013 value of the wall is \$4.9 million.

With a life expectancy of 50 years about \$98,000 per year (2013 \$) should be invested in renewal of the wall, assuming the wall is already

in a satisfactory condition and there is no intention to improve its overall condition.

The Swan River Trust manages the Riverbank Grants Scheme. It has provided \$7.2million in funding for 151 projects since 2002 on projects all along the Swan and Canning Rivers. Grants are provided on a competitive basis with a 50/50 cost sharing arrangement between the responsible authority and the Swan River Trust.

Previous joint funding between the City of Nedlands and the Swan River Trust (SRT) is as shown below (figures provided by SRT)..

Point Resolution Reserve Foreshore Restoration 2003 – 2011. Note that this is not expenditure on the river wall.

City Contribution	\$364,821
SRT Contribution	\$283,559
Total Project Cost	\$648,380

Nedlands Yacht Club to Iris Avenue  
River wall Restoration

City Contribution	\$250,000
SRT Contribution	\$250,000
Total Project Cost	\$500,000

Foreshore enhancement and storm water management. Note that this is not expenditure on the river wall.

WESROC

WESROC Contribution	\$101,900
SRT Contribution	\$101,900
Total Project Cost	\$203,800

With just \$500,000 spent on the river wall over the past ten years the condition of this wall continues to deteriorate.

The Swan and Canning Rivers Management Act 2006 Part 2 Section 12. (3) provides for joint responsibility of the river wall. This refers to the financial responsibilities for the river wall. In determining grant allocations the Swan River Trust priorities those projects which protect infrastructure. Without adequate funding for their portion of the works however the Swan River Trust must allocate its resources fundamentally on a priority needs basis.

### **Risk Management**

A risk assessment on the wall has identified the loss of the wall itself as the most adverse outcome, with subsequent loss of park land.

Leaving the wall un-restored from the perspective of the Swan River Trust is a relatively low risk, at least in the short term, because there is no expensive infrastructure in proximity to the rear of the wall, such as roads, utilities or buildings, that need to be protected.

## **Discussion**

### River Wall Design

An updated river wall design is urgently needed to take into account the most recent Department of Transport predictions about long term water level rise and to mitigate the current regular overtopping events.

A new design cross-section will also provide uniformity for future wall while keeping style elements of the current wall.

### Plans and Documentation for next stage works

Preparation for the next stage of the works will provide for better estimation of the cost of construction and certainty regarding the extents of works. It will place the City in a position of greater preparedness for any future works.

### All Abilities Play Area – Beaton Park

The construction of the All Abilities Play Area in Beaton Park will soon be underway. This will provide an impetus for the upgrade of the river wall as a means of protecting this infrastructure into the future. Having the wall in place will allow final design levels of the land area to be resolved.

### City of South Perth Action

The City of South Perth is currently protesting the lack of funding for works on their river walls by erecting a permanent fence to protect the public from the deteriorated areas.

A similar approach is an option for the City of Nedlands. Currently regular inspections are carried out by City of Nedlands staff and temporary safety fence is installed on dangerous sections. The temporary fencing is not particularly durable and is often damaged by the wind and vandals. A more permanent fence could be installed at a cost of \$140 plus GST per linear metre for 1.2 high chain wire mesh fence.



Figure 3. Damaged Wall and Temporary Fencing

#### Riverwall Potential for Foreshore Modification

A study was carried out in 2003 to examine the potential to modify the foreshore river wall by creating pocket beaches accompanied by small groynes where appropriate. This study assessment concluded the following:

Location	Suitable	Unsuitable	Comments
Charles Court Reserve		✓	
Paul Hasluck Reserve	✓		More detailed foreshore design required; Subject to adjacent uses; and Some management would need to be clearly identified and a special budget reserve be put in place.
Beaton Park		✓	
Foreshore 3		✓	

Table 1. Parks suitable for pocket beaches

The SRT were open to the concept of pocket beaches, however they cautioned that if this was being done as a cost saving measure, the

installation of pocket beaches and associated protective measures to keep the sand as well as ongoing sand nourishment requirements would be unlikely to provide a cost saving.

The City of Nedlands "Foreshore Enhancement & Management Plan" Volume 2, February 2010, makes the statement that the hard edge sea wall that extends most the length of the foreshore makes interaction with the river difficult. Recommendation 31 is to undertake a detailed engineering study to determine feasibility and implications of removing the river wall from Paul Hasluck Reserve and prepare plans for wall removal. This was predicated on the conversion of Paul Hasluck Reserve from active to passive recreation in accordance with the Concept Plan (Recommendation 35) and the preparation of a detailed landscape plan for this reserve (Recommendation 37).

Recommendation 33 seeks to commence planning to progressively replace the river wall adjacent to Beaton Park and Charles Court Reserve.

### **Conclusion**

The River wall is a protection mechanism for the Swan River foreshore and is the joint responsibility of the City of Nedlands and the State Government. It is now nearing the end of its useful life and needs ongoing replacement.

The City was not successful in attracting grant funding from the Swan River Trust for the wall re-built this financial year.

It is recommended that the City undertake preparatory works for a new river wall cross-section, plans for the next section of work and development of a concept for pocket beaches in Paul Hasluck Reserve.

Council may elect to then allocate the balance of the funds to the ongoing wall repair without the financial assistance of the Swan River Trust. Alternatively it may elect to fence off the damaged areas and write to the Swan River Trust and the State Government with an explanation of this action and seeking the State Government's adequate funding of this infrastructure.

### **Attachments**

Nil