

Infrastructure

Asset Management

3.12 Roadside Memorial Policy

File Ref:	6130 – 11/107583
Responsible Officer:	Director Infrastructure
Disclosure of Interest:	Nil
Attachments:	1

Issue

To consider a policy to determine and advise how the City will deal with requests for Roadside Memorials and existing roadside memorials.

Background

The number and types of memorials commemorating accident victims is increasing throughout the State. Family and friends may wish to commemorate the death of a loved one with the installation of a memorial at the site of the accident. This not only assists with the grieving process, it also delivers a powerful road safety message to road users.

The policy recognises the demand for memorials, while seeking to ensure that road safety is not compromised. This includes visual distractions to motorists, physical objects that could harm road users and potential for movement of personal items onto the road. The safety of pedestrians visiting the memorial in close proximity to vehicles is also considered.

Detail

The policy details the types of memorials that can be installed within the road reserve to commemorate the life of a family member or friend who has lost their life on the road.

The policy identifies that the City will:

- Be considerate and respectful of the needs of persons wishing to install memorials;
- Approve the placement of memorials;
- Supply memorials;
- Install or assist in the installation of memorials at suitable locations as detailed in the guidelines attached to this policy;
- Not accept responsibility for the security or maintenance of memorials;
- Remove any memorials not conforming to this policy;
- Not approve or provide memorials for animals; and
- Will only approve or provide memorials for accident sites where fatalities have occurred.

Furthermore, the City will approve, supply and assist with the installation of a cross, paver or decal as per the Management Guidelines in support of the Policy, depending on the family and/or friends preference. Alternatively, the applicant may choose a plant tree from the City's list of recommended street tree species, which the City will donate and assist with the installation.

Refer **Attachment 1** for the proposed Roadside Memorial Guidelines.

Advice from Main Roads WA (MRWA) has indicated minimal enquiries from the public requesting crosses, pavers, decals or plants.

Consultation

A presentation on the draft Policy was given to Council Forum on 12 July 2011 and a report presented to the City of Wanneroo Roadwise Working Group on 16 August 2011. It was resolved by the Working Group as follows:

“That the Roadwise Working Group ADVISES Council that it endorses the draft Roadside Memorial Policy and draft Roadside memorial management guidelines and REQUESTS that Council advertise them for public comment.”

Comment

The Policy is based on the MRWA Roadside Memorials Policy and Guidelines. It may be updated in line with any modifications that MRWA make. Similarly, any recommended modifications the City considers to be necessary will be conveyed to MRWA.

Statutory Compliance

Nil

Strategic Implications

The proposal accords with the following Outcome Objective of the City's Strategic Plan 2006 – 2021:

- “2 Social
- 2.4 Improve community safety”

Policy Implications

Nil

Financial Implications

The annual cost to the City will be minimal and can be accommodated within its annual operating budget.

Voting Requirements

Simple Majority

Recommendation

That Council ENDORSES the Draft Roadside Memorials Policy as follows for public comment:

Roadside Memorials Policy

Policy Owner:	Director Infrastructure
Contact Person:	Manager Assets Management
Date of Approval:	Date the policy was approved by Council and Resolution Number

POLICY OBJECTIVE

The purpose of this policy is to determine and advise how the City shall deal with requests for Roadside Memorials (Memorials) and existing or recently installed Memorials.

POLICY STATEMENT

To clearly detail the types of Memorial that can be installed within the road reserve to commemorate the life of a family member or friend who has lost their life on the road.

The City of Wanneroo has an obligation to provide a safe and efficient road network.

The City will:

- Be considerate and respectful of the needs of persons wishing to install Memorials;
- Approve the placement of Memorials;
- Supply Memorials (as defined in section 4.3);
- Install or assist in the installation of Memorials at suitable locations as detailed in the guidelines attached to this policy;
- Not accept responsibility for the security or maintenance of Memorials;
- Remove any Memorials not conforming to this policy;
- Not approve or provide Memorials for animals; and
- Will only approve or provide Memorials for accident sites where fatalities have occurred.

SCOPE

A Memorial can be described as an object or image constructed, erected, planted, painted or placed within the road reserve in honour of family or friends whose lives have been lost on the road or road reserve.

This policy applies to all requests for Memorials that are received for roads administered by the City of Wanneroo.

Requests for Memorials on Wanneroo Road shall be referred to Main Roads Western Australia (MRWA) to deal with in accordance with their document "Roadside Memorials Policy and Guidelines".

Requests for Memorials on roads within the Yanchep National Park shall be referred to the Department of Environment and Conservation.

BACKGROUND

The number and types of Memorials, commemorating accident victims is increasing throughout the State. Family and friends may wish to commemorate the death of a loved one with the installation of a memorial at the site of the accident. This can not only assist with the grieving process, but also delivers a powerful road safety message to road users.

The Policy recognises the demand for memorials, but seeks to ensure that road safety is also considered. This includes visual distractions to motorists, physical objects that could harm road users and potential for movement of personal items into the road. The safety of pedestrians visiting the memorial in close proximity to vehicles is also considered.

CONSULTATION WITH STAKEHOLDERS

This policy is based on the MRWA Roadside Memorials Policy and Guidelines.

IMPLICATIONS (Financial, Human Resources)

Administration of the memorial register and monitoring of any erected memorials can be carried out with existing resources.

IMPLEMENTATION

Requests for Memorials as well as the management of existing Memorials on all roads that are the responsibility of the City of Wanneroo will be dealt with in accordance with the City of Wanneroo Document "Roadside Memorials Management Guidelines".

ROLES AND RESPONSIBILITIES

Memorials on all roads that are the responsibility of the City of Wanneroo will be dealt with in accordance with the City of Wanneroo Document "Roadside Memorials Management Guidelines".

DISPUTE RESOLUTION

All disputes in regard to this policy will be referred to the Director Infrastructure in the first instance. In the event that an agreement cannot be reached, the matter will be submitted to Council for decision.

WHO NEEDS TO KNOW ABOUT THIS POLICY?

Manager Infrastructure Maintenance
 Manager Infrastructure Projects
 Manager Community Programmes and Services
 Manager Waste Operations
 Road Maintenance Supervisors
 Waste Operations Supervisors
 Rangers

EVALUATION AND REVIEW PROVISIONS

This policy is based on the MRWA Roadside Memorials Policy and Guidelines. It will be updated in line with any modifications that they may make. Similarly any recommended modifications that the City considers to be necessary will be conveyed to MRWA.

DEFINITIONS

DEFINITIONS: Any definitions listed in the following table apply to this document only.

Bitumen/road seal	The surface of the road.
Carriageway	The portion of a road or bridge devoted particularly to the use of vehicles, inclusive of shoulders and auxiliary lanes.
Contractors	A contract with a third party to deliver a set of given services for a defined period to maintain sections of the road network.

Control of Access Road	Roads that do not permit pedestrian access or parking, eg Mitchell Freeway, Tonkin and Roe Highways
Freeway	Highway - a divided highway for through-traffic with no access for traffic between interchanges and with grade separation at all intersections.
Guideposts	A wooden or plastic white post with a reflector approximately 1.5m from the edge of the road.
Highway	Highways provide connections between capital cities. They are also principal routes between a city and the major producing regions of the State. Highways also service major transport terminals or significant commercial and industrial centres.
Landscaped verges	Landscaped frontages/mown verges adjacent to the road, eg, estates such as Secret Harbour and Carramar.
Main Road	A principal road in the road system.
Median	Divides two carriageways.
Road Reserve	The area either side of the road that belongs to Main Roads.
Roadside Structure	eg, bridges, overpasses, tunnels.
Shared Path	Paths which are adjacent to freeways, major highways and rail corridors. These paths cater for pedestrians, including those in wheelchairs, and cyclists.
Traffic Control Item	Traffic signals or signs.
Traffic Islands	Small refuge typically located at intersections.

RELEVANT POLICIES/MANAGEMENT PROCEDURES/DOCUMENTS OR DELEGATIONS

City of Wanneroo Roadside Memorials Management Guidelines
City of Wanneroo Verge Treatment Policy

REFERENCES

Main Roads Roadside Memorials Policy and Guidelines

RESPONSIBILITY FOR IMPLEMENTATION

Manager Assets Management
Manager Community Programs and Services

Version	Next Review	Record No:

Attachments:

1. Memorial Guidelines 12/4401



Management Guideline

Guidelines for Administration of Roadside Memorials Policy

Policy Owner:	Director Infrastructure
Contact Person:	Manager Infrastructure Maintenance
Date of Approval:	Date the policy was approved by Council and Resolution Number

4.1. Requests for Roadside Memorials

When touched by tragedy, family and friends find a Roadside Memorial (Memorial) can help comfort and heal, as it provides a tangible record of a life lived and serves as a reminder to the community to drive carefully. Where requests are received, the City of Wanneroo can provide support to family and friends by assisting them to understand the requirements of this policy and install or assist in the installation of a suitable Memorial at the safest location. It should be noted that this policy is intended to provide guidance to City of Wanneroo Officers and each case should be dealt with on an individual basis.

The City of Wanneroo's foremost concern is that all road users are provided with a safe road environment and that family and friends and the road user are safe whilst a Memorial is being erected, visited, or is being maintained. It is important that family and friends park their vehicles safely and clear of the road while attending the Memorial.

4.2. Recording Requests for Memorials

The City of Wanneroo will maintain a record of requests for Memorials. The details will be documented so the person/s responsible for the Memorial can be contacted if necessary.

4.3. Memorial Requirements to Maximise Road Safety

The City of Wanneroo will approve, supply and assist with the installation of a cross, paver, or decal as per the specifications in section 4.3.1, depending on the family and/or friends preference. Alternatively, the applicant may choose a plant compliant with the City of Wanneroo's list of recommended Street Tree species and the City will donate the plant and assist with the installation.

4.3.1 Memorials – Types and Structure

In consideration of safety to all, the following specifications are recommended. If unsure, please contact the City of Wanneroo.

Note: These specifications should be used as a guide only. Common sense should prevail when assessing specific locations for placement of Memorials.

4.3.1.1 Cross

Crosses are constructed from timber and are:

- 850mm long (600mm out of the ground) and 400mm wide;
- Built from pieces 40mm x 18mm; and
- Painted white and are non-reflective.



Management Guideline

Crosses shall be located:

- No closer than 3 metres from the edge of any bitumen/road seal;
- No closer than 1 metre from behind the line of guideposts; and
- No closer than 1 metre from the edge of any shared path.

Crosses shall not be located:

- Where they may interfere with the role of any traffic control item;
- In close proximity to residential dwellings where they may cause concern to the occupants;
- On landscaped verges;
- On traffic islands, medians or roundabouts;
- Within 30m of traffic signals; and
- On any roadside structure.

4.3.1.2 Paver

Pavers are of grey concrete and are 600mm long and 300mm wide.

Pavers should be flush with the existing surface and shall be located:

- No closer than 1 metre from behind the line of guideposts;
- No closer than 3 metres from the edge of any bitumen/road seal;
- No closer than 1 metre from the edge of any shared path;
- On control of access highways and freeways; and
- On traffic islands and medians where the landscaping permits.

Pavers shall not be located:

- Within the area which is regularly graded during shoulder grading or drain maintenance;
- In close proximity to residential dwellings where they may cause concern to the occupants;
- On landscaped verges; and
- On roundabouts.

4.3.1.3 Decal

Decals are adhesive labels, 160mm long and 130mm wide, which display a white cross on a black background.

Decals shall be located:

- At the base of traffic signal poles; and
- At the base of street light columns.

Decals shall not be located:

- On any traffic signs; and
- On street name signs.

4.3.1.4 Plants

Plants must comply with the City of Wanneroo Street Tree Master Plan and vegetation placement guidelines in regards to trunk size and setback distance. The requested plant type must be stated as part of the application/approval process and the City will verify the appropriateness of the plant type for the location.

Plants shall be located:

- Outside of the maintenance clearing zone;
- No closer than 1 metre from the edge of any shared path;
- On traffic islands and medians where the landscaping permits.



Management Guideline

Plants shall not be located:

- Where they may interfere with the role of any traffic control item;
- In close proximity to residential dwellings where they may cause concern to the occupants; and
- On landscaped verges.

4.3.1.5 Memorial Options

If a cross is not suitable, please contact the City of Wanneroo to discuss alternative options.

4.3.1.6 Memorabilia and Personalisation

The City of Wanneroo understands that personalising a memorial may provide comfort to families and friends of people who have lost their lives on the road. In the interest of preserving safety for all, items such as flowers, toys and other personal effects must be firmly secured to the memorial. Where possible, memorabilia should not exceed the dimensions outlined in the memorial requirements, the reason being that such items may be a visual distraction to road users. Physical objects could harm road users and the possible movement of personal items onto the road could be a potential road safety hazard. Only one Memorial shall be allowed per life lost.

Some items that are a safety hazard and should not be used include:

- Reflective material such as foil and cellophane
- Solar lights
- Rocks, bricks or other non frangible items

Personalisation of crosses should be limited to non-reflective material.

4.3.2 Installation of Memorials

A City of Wanneroo representative will assist in the installation of approved Memorials as detailed in section 4.3.1. The City Officer will ensure its placement is in accordance with the City of Wanneroo's standards and requirements and most importantly take into consideration the safety of road users. The City Officers will consider safety issues such as where the road geometry is less than optimum i.e. road crests, bends and high-speed locations.

4.3.3 Maintenance of Memorials

The road reserve is maintained by the City of Wanneroo. The City does not accept responsibility for the loss or damage of Memorials that may occur due to vandalism. The City, will as part of its regular maintenance program, report on memorials on its network which have been subject to vandalism or are in a significant state of disrepair. Should the condition of a memorial deteriorate, or after a period of five years, the City will endeavour to contact the owners of a memorial to discuss its condition and to confirm their wish for the memorial to remain in place.

4.3.4 Visiting a Memorial

The City of Wanneroo is concerned for the safety of people who visit Memorials. They may expose themselves and other road users to safety risks. If people visit Memorials they must understand that roadsides can be hazardous locations and take appropriate precautions. The City can provide advice as to what precautionary steps may be taken to maintain a safe environment.



Management Guideline

4.4 Roadworks/Maintenance Near Approved Memorials

The City of Wanneroo will continue to perform all construction and maintenance works required within road reserves that contain Memorials. Where works are required to the ground on which an approved Memorial is located, the memorial will be carefully shifted away from the work area for the duration of works and then re-installed as close as practical to the original location at the conclusion of works unless otherwise advised by the memorial owner. Care will be taken to minimise damage to the Memorial.

For unregistered memorials, the City will make every effort to locate the owners of the memorial before the removal, which may include placing a notice on the memorial prior to removal for roadworks to take place. The City will store these removed memorials for 4 (four) months or the period of the roadworks (whichever is the greater).

4.5 Memorial Removal Procedure

One of the City of Wanneroo's key objectives is to maximise road safety on its roads. Any Memorial presenting a safety hazard will be removed without notice. Every effort will be made to contact the responsible person/s regarding the removal of the Memorial.

Person/s responsible for Memorials that comply with section 4.3 but require removal because of their poor state of repair or concerns raised by the local community, shall be contacted by the City. If the City is unsuccessful in contacting the appropriate person, a notice will be attached to the memorial asking the person who has placed, or requested the placement of the memorial, to contact the City within 60 days. (The standard notification advising of the need to remove a Memorial is at **Attachment 1**)

If the City is not contacted within the given timeframe, the Memorial will be removed. The City will store the removed Memorial for a period of 4 months.

4.6 Non Compliant Memorials

Memorials which are not considered to be an immediate safety hazard, but do not comply with the policy, either through size or extent of personalisation will be addressed in the following manner:

- The person/s responsible for the Memorial shall be contacted by the City;
- If the City is unsuccessful in contacting the appropriate person, a notice will be attached to the memorial asking the person who has placed, or requested the placement of the memorial, to contact the City within 7 days (The standard notification advising of the need to immediately modify a Memorial is at **Attachment 2**);
- Where possible, the material is to be removed with the responsible person or their representative present, with the extent of the works required to meet the policy pre-agreed;
- If the responsible person cannot be contacted, the City will determine the extent of works required, and an inventory of removed items is to be maintained. The City will store the removed materials for 4 months.
- Photos to be taken pre- and post clean up



Management Guideline

4.7 Existing Memorials

The City of Wanneroo will treat all existing Memorials in a sensitive manner and will address each one on an individual basis with the aim of making all Memorials compliant with this policy.

5. CONTACTS

The City of Wanneroo on 9405 5000 during business hours or the after hours number **1300 138 393** (24 hours a day 7 days a week, 365 days a year)

Alternatively through "contact us page on the City's Website at "wanneroo.wa.gov.au"

DEFINITIONS

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Main Road	A principal road in the road system.
Median	Divides two carriageways.
Road Reserve	The area either side of the road that belongs to the City.
Roadside Structure	For example, bridges, overpasses, tunnels.
Shared Path	Paths which are adjacent to freeways, major highways and rail corridors. These paths cater for pedestrians, including those in wheelchairs, and cyclists.
Traffic Control Item	Traffic signals or signs.
Traffic Islands	Small refuge typically located at intersections.

Version	Next Review	Record No:



Management Guideline

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ATTACHMENT 1

THE CITY OF WANNEROO

ROADSIDE MEMORIAL NOTICE

We regret to advise that it has become necessary for this Roadside Memorial to be removed/relocated. The basis of the removal/relocation will be explained in full upon contacting our office.

Can the person responsible for this roadside memorial please contact: -

at the City of Wanneroo, Western Australia on telephone

within 60 days of the date of this notice to discuss arrangements for its removal/relocation.

If the above-nominated City Officer is not contacted by the ____/____/____, the Roadside Memorial will be removed. The City of Wanneroo will store the removed Roadside Memorial for a period of four months.

_____/____/____
(Signature) (Date)



Management Guideline

ATTACHMENT 2

THE CITY OF WANNEROO

**ROADSIDE MEMORIAL NOTICE
IMMEDIATE ACTION REQUIRED**

We regret to advise that this Roadside Memorial requires immediate attention or it will be removed or modified by the City of Wanneroo. The basis of the action required will be explained in full upon contacting our office.

Can the person responsible for this Roadside Memorial please contact: -

at the City of Wanneroo Western Australia on telephone

within 7 days of the date of this notice to discuss the necessary modifications required for it to comply with the City's Roadside Memorials Policy.

If the above-nominated City Officer is not contacted by the ____/____/____, the Roadside Memorial will be removed or modified. The City of Wanneroo will store the removed Roadside Memorial or material for a period of four months.

(Signature) (Date)

Infrastructure Maintenance

3.13 Review of "Two Rocks Coastal Management - May 2006" Study Report on the Coastal Erosion North of Two Rocks Marina

File Ref: 1702 – 11/131925
Responsible Officer: Director Infrastructure
Disclosure of Interest: Nil
Attachments: 1

Issue

To consider allocation of funds for a joint study with the Department for Transport (DoT) for undertaking a review of "Two Rocks Coastal Management – May 2006" study report on coastal erosion of the Two Rocks coastline north of Two Rocks Marina.

Background

Council considered reports in 2003 and 2004 (Items TS15-12/03 and TS18-06/04 refer) and approved the commissioning of coastal engineering consultants to undertake a study of the coastal erosion at Two Rocks north of the Two Rocks Marina. The study was completed in May 2006 and Council considered a report (IN04-06/06 refers) at its meeting on 27 June 2006 and resolved as follows:

"That Council:-

- 1. RECEIVES the 'Two Rocks Coastal Erosion and Management' Study Report (May 2006) prepared by M P Rogers and Associates, which outlines the various options and recommendations for coastal management at the Two Rocks coastline north of the marina northern breakwater.*
- 2. ENDORSES the construction of partial length groynes and associated works as the preferred coastal protection option for Two Rocks coastline.*
- 3. WRITES to the Hon Minister for Planning and Infrastructure urgently seeking State Government commitment to funding the necessary groynes and associated works in accordance with the Two Rocks Coastal Erosion and Management Study report in recognition that the Two Rocks Marina has largely contributed to the erosion problem."*

This report outlines the actions taken since 2006 and the current status of this matter.

Detail

In accordance with Council decisions made on 27 June 2006, a formal request was made to the then Minister for Planning and Infrastructure for early funding in the State Government capital works program to undertake the recommended coastal protection works required to ensure the protection of the coastline and associated infrastructure. The City received a confirmation from the Minister's office acknowledging receipt of the City's request but no funding commitment or provision of funds in the State Government's budgets was received.

The "Two Rocks Coastal Management – May 2006" study report noted that there was no immediate requirement to implement the recommended coastal management option of the "construction of two partial length groynes". It was anticipated that the groynes may be required in five years from the year (2006) of the report.

Due to no State Government funding commitment and the finding of the study report, the City had continued to monitor the erosion at this site.

The City again approached the State Government in August 2011 by writing to the Minister for Transport seeking his consideration of the matter with a view to make suitable funds available to the City for implementing the recommended coastal management option to ensure the protection of the infrastructure along the Two Rocks Coastline.

The Minister advised the City in October 2011, (refer **Attachment 1**), that in order to assist in any decision making regarding this issue, the DoT has been asked to schedule a beach and hydrographic survey in late 2011 and update the existing shoreline movement plots. The Minister has also suggested that the City applies for grant funding under the 2012/13 Coastal Protection Grants Program to update the options recommended in the "Two Rocks Coastal Management – May 2006" study report.

In view of the advice received from the Minister, it is proposed to undertake the review and include the coastal management options suggested by the Minister in his response.

Subsequent discussions with the Coastal Infrastructure section of DoT has resulted in support in principle to the City's proposed review of the 2006 study and advice that funding is likely in the coastal management grant allocations for 2012/2013. Under the provision of the guidelines for this grant, the funding will be allocated up to 50% of the cost of the review study and the City would be required to fund the remaining 50% of the cost.

Subject to the finalisation of the consultant's brief and invitation of quote, the cost of the review study is estimated to be in the order of \$50,000 and the City's funding requirement would be \$25,000. The City has not made any provisions in the 2011/2012 budget for undertaking this study. Confirmation of the allocation of grant funding from DoT will be known towards the end of the financial year. It is proposed to prepare the consultant's brief and commence the quotation process around April 2012 in the anticipation of the allocation of grant funding for the review study. Depending on the timing of the confirmation of grant funding, the project can then be listed for consideration in the 2012/13 budget or a further report presented to Council to consider a budget variation and accept the grant funding.

The City is continuing to monitor the location for coastal erosion and maintenance works are being undertaken as and when necessary.

Consultation

The Coastal Infrastructure section of the DoT has been consulted on this matter and further input and technical advice will be obtained during all phases of the study from the preparation of the consultants brief through to the finalisation of the study report.

Comment

The "Two Rocks Coastal Management – May 2006" study established that the coastal erosion occurring at Two Rocks is due to the State owned marina construction interrupting the natural sand movement from south to north. On this basis it is considered that any coastal management works to control the erosion needs to be funded by the State Government. In order for this to occur, the City as a local coastal manager of the Two Rocks coastline needs to progress this matter further in line with the advice received from the Minister for Transport.

Initial consultation with the Coastal Infrastructure section of the DoT has indicated that there may be further coastal management options that may be suitable at this location which have not been evaluated in the earlier study.

It has been just over five years since the previous study was undertaken and it is considered appropriate to review the previous study findings and evaluate further options suggested by the Minister.

It is considered that the results of this review study will guide the City and the State Government to make an early decision on possible future coastal protection option.

Statutory Compliance

Nil

Strategic Implications

The proposal accords with the following Outcome Objective of the City's Strategic Plan 2006 – 2021:

"1 Environment

1.3 Minimise impact of development on the environment"

Policy Implications

The allocation of grant funding will be subject to the provision of the Department of Transport's Operational Policy "Coastal Protection Policy for Western Australia".

Financial Implications

The cost of the Two Rocks Coastal Management review study is expected to be in the order of \$50,000 which will be jointly funded by the City and the DoT. It would be necessary to make appropriate funding provisions in the City's budget after a confirmation is received regarding the allocation of the grant funding.

Voting Requirements

Simple Majority

Recommendation

That Council:-

- 1. NOTES** the advice from the Minister for Transport regarding the Two Rocks Coastal Protection Works as included in Attachment 1;
- 2. AGREES** to a joint study with the Department of Transport for undertaking a review of the "Two Rocks Coastal Management – May 2006" study report on the coastal erosion of the Two Rocks coastline north of Two Rocks Marina;
- 3. AUTHORISES** the Director Infrastructure to proceed with the preparation of a consultancy brief and initiate the process for inviting quotations from coastal engineering consultants to undertake a review of the "Two Rocks Coastal Management – May 2006" study report on the coastal erosion of the Two Rocks coastline north of Two Rocks Marina;
- 4. SEEKS** a further report, subject to the confirmation of grant funding from the Department for Transport and after the receipt of the quotations as defined in 3 above; and

5. **REQUESTS** the Mayor to write to the Minister for Transport expressing concern that the State Government has not committed any funds for the previously identified coastal protection works and has given no commitment in this regard, but has asked the City to jointly fund another study.

Attachments:

1. TWO ROCKS COASTAL PROTECTION WORKS 11/111925 *Minuted*

Draft

COW
WED 5/10/11

Minister for Transport; Housing

Our ref: 30-21075
Your ref: 1702, 11/95184

Mayor Jon Kelly
City of Wanneroo
Locked Bag 1
WANNEROO WA 6946

Dear Mayor

Two Rocks Coastal Protection Works

Thank you for your letter dated 22 August 2011 regarding protection of the Two Rocks coastline.

I note that although the Two Rocks Marina is the property of the State Government, it was a private development built initially to enhance the value of the adjoining subdivided land and is currently leased and managed by a private company. It is understood that the beach erosion to the north of the marina is due to the marina construction interrupting the natural sand transport from south to north.

The Department of Transport's (DoT) navigation aid and the landward infrastructure, including the road, are not likely to be threatened in the near future and I have been informed that there is now some evidence of a beach rock platform in the area which may decrease the rate of future erosion.

It is understood that the City of Wanneroo's preferred remedial option is to construct a number of groynes immediately north of the harbour. I am concerned that this solution may only serve to move the erosion area further north and therefore may not provide a long term solution. I note that the option of sand bypassing from south to north (across the marina) was considered in the previous 2006 options report, but not supported by the City. It is also considered that the cost of these works is likely to be significantly more than the value of any assets at risk in the near future. Therefore I am of the view that it is premature to commit to any works at this time.

To assist in any decision making, I have asked DoT to schedule a beach and hydrographic survey in late 2011 and update the existing shoreline movement plots. I also invite the City to apply for grant funding under the 2012-13 Coastal Protection Grants Program to update the 2006 options report by Mick Rogers and Associates. It is suggested that this update considers the emergent beach rock platform, the impact of any protection works on areas to the north, the current costs and the management option of sand bypassing.

Level 12, Dumas House, 2 Havelock Street, West Perth, Western Australia 6005
Telephone: +61 8 9213 6900 Facsimile: +61 8 9213 6901 Email: minister.buswell@dpc.wa.gov.au

City of Wanneroo IM 5/10/2011

Should you have any follow up questions or require any immediate technical advice, please contact Mr Charlie Bicknell, Manager of DoT's Coastal Management section on 9216 8923 or email charlie.bicknell@transport.wa.gov.au.

Thank you for your correspondence.

Yours sincerely



**TROY BUSWELL MLA
MINISTER FOR TRANSPORT**

4 OCT 2011

City of Wanneroo IM 5/10/2011

3.14 Parks and Reserves Maintenance Service Levels

File Ref: 6342 – 11/131671
Responsible Officer: Director Infrastructure
Disclosure of Interest: Nil
Attachments: 2

Issue

To consider maintenance service levels for various categories of parks and reserves.

Background

The City maintains 336 parks and reserves, with a total area of 2,175 hectares. These parks and reserves are categorised according to size, infrastructure and use. The Infrastructure Maintenance Service Unit maintains all parks and reserves within the City of Wanneroo to a consistent standard for each category of park. The maintenance works are undertaken by a combination of in-house day-labour and external contract resources.

A number of parks and reserves are developed within the City by land developers as part of subdivisional development. The City from time-to-time upgrades dry parks to irrigated parks as part of its Passive Park Development Program.

The Local Planning Policy 4.3: Public Open Space articulates the City's position on the planning, location, design, development and maintenance of the public open space.

It is noted that Council considered a report on "Parks and Reserves Development and Maintenance Service Levels" (Item TS09-11/03 refers) at its meeting on 25 November 2003 and endorsed maintenance performance standard for each park and reserve category as defined in **Attachment 1**.

It is confirmed that parks maintenance operations are being undertaken to meet these standards. For example, in accordance with these standards, dry parks (categorised as Passive Unirrigated) such as Cheltondale Park, Madeley are serviced up to four times per annum and the service includes mowing, removal of rubbish and removal of dead trees.

However, some adjustments or variations have been made to these service standards to accommodate seasonal impacts, operational demands, resources, horticultural practices and availability of ground water for irrigation purposes.

During the last few years, with the evolution of the development industry, the nature of the parks developed has changed. In addition, due to change in the seasonal patterns and the restrictions placed on the extraction of ground water for irrigation purposes, parks maintenance practices have required alterations to suit. In view of this, it was decided to undertake a thorough review of the parks categories and related service standards to align with the Local Planning Policy 4.3: Public Open Space.

Detail

The parks and reserves categories and maintenance service levels adopted by Council in November 2003 are detailed in **Attachment 1**. All parks and reserves were categorised into 13 categories and maintenance service levels were set for each category.

"The Local Planning Policy 4.3: Public Open Space" adopted by Council on 19 October 2010 (Item PS02-10/10 refers) categorises the Public Open Spaces into following main categories:

- Active
- Passive
- Conservation

From a maintenance point of view, it is considered that grouping all parks and reserves into only three categories would create difficulties in setting appropriate maintenance services levels to suit. It is therefore proposed to categorise all parks and reserves into the following categories under the overall umbrella of three main categories defined in the "The Local Planning Policy 4.3: Public Open Space". These are:

Active POS

- Active Public Open Space
- Sports Facilities (Hard Courts)

Passive POS

- Passive Public Open Space Irrigated
- Passive Public Open Space Unirrigated

Conservation POS

- Bushland
- Foreshore
- Wetlands and Buffers

Further categories are required that include the maintenance for the streetscapes throughout the City and also for the community facilities. These are:

- Streetscapes - Wanneroo Town Centre and Streetscapes/Entry Statements
- Regional Facilities – Kingsway Sporting Complex and Inclusive and Innovative Playspace
- Building Facilities

The maintenance service levels proposed for the 12 categories are as shown at **Attachment 2** and include the following key changes to those adopted previously:

- The new maintenance levels are now based on the number of maintenance services to be provided for the surface maintenance instead the turf height.
- Maintenance levels included for the non-seasonal periods for Sports Facilities.
- Increase the maintenance service for Passive Open Spaces Unirrigated to 17 maintenance visits per year instead of four maintenance visits per year as per the current service levels. It is important to increase the service level for this category to acknowledge the fact that parks infrastructure, such as playgrounds installed in such parks, attract visitors. Many such parks are located within residential areas and the City receives many requests for improved maintenance standards.
- Maintenance service levels defined for the new category of "Streetscapes", "Regional Facilities" and "Building Facilities".

It is also noted that the maintenance service levels for the City's Marangaroo and Carramar Golf Courses have not been included in these maintenance service levels as they are included in the scope and specification of a separate maintenance contract.

It is further noted that detailed scope of works and specifications are currently being developed for the following specific maintenance items:

- Arterial roads verge and median maintenance
- Kingsway Sporting Complex landscaping maintenance
- Environmental offset sites maintenance
- Rural road verge maintenance (fire mitigation)
- Urban streets unkempt verge maintenance

A detailed proposal outlining the resource requirements for these works will be presented to Council as part of the 2012/2013 budget development process.

Consultation

The City's Community Development Directorate has been consulted in relation to the revision of these service levels and has indicated a general agreement to the proposed service levels. A presentation was also made to Council Forum on 22 November 2011.

Comment

The current parks and reserves maintenance service levels were adopted in November 2003 and it is appropriate that the revised maintenance service levels are adopted to suit the current industry practices and the parks categories are in alignment with the City's Local Planning Policy 4.3: Public Open Space. The service levels outlined in **Attachment 2** will define work practices for effective works programming and consistency in maintenance levels across all parks, streetscapes and facilities.

Statutory Compliance

Nil

Strategic Implications

The proposal accords with the following Outcome Objective of the City's Strategic Plan 2006 – 2021:

“4 Governance

4.3 Deliver excellence in business performance and service provision”

Policy Implications

Nil

Financial Implications

The maintenance of the parks and reserves form part of the annual operating budgets. The increase in the service level for the unirrigated Passive Open Spaces will result in additional expense of \$150,000. It is therefore proposed that new maintenance service level of 17 maintenance visits for the unirrigated Passive Open Spaces be implemented from 2012/2013 after making suitable budget provisions in the 2012/2013 Budget.

Voting Requirements

Simple Majority

Recommendation

That Council:-

1. **NOTES** the categories applied to the parks, reserves, streetscapes and conservation reserves within the City as per Attachment 2;
2. **ENDORSES** the maintenance service levels for parks, reserves, streetscapes and conservation reserves categories as defined in Attachment 2;

3. **NOTES that a detailed proposal outlining the resources requirements due to the change in the maintenance service levels and for specific maintenance items explained in this report will be presented to Council as part of the 2012/2013 budget development process; and**
4. **NOTES that the community will be consulted on parks maintenance service level standards as part of the development of the City's Integrated Planning Framework.**

Attachments:

1. *Parks Service Levels adopted in 2003 11/113515*
2. *Proposed Parks Service Levels 2011 11/111905 Minuted*

PARKS SERVICE LEVELS ADOPTED IN NOVEMBER 2003

SERVICE LEVELS PARKS RESERVES

Class	Description	Example	Detail						
ACTIVE			Playing Surface	Surrounds	Parking Areas	Floodlighting	Security Lighting	Reticulation	Playground Equipment
Active - Major	Sports Venue with grassed area capable of supporting various codes of sport for both summer and winter periods.	Kingsway Football, John Maloney Reserve, Paloma Reserve	Winter - Grass to be maintained between 20mm and 50mm eg. Australian Rules Football, rugby, soccer Summer - Grass to be maintained between 15mm and 30mm eg cricket and hockey Summer - maintained in an operable condition in order to meet turf and recreational requirement	Grass to be maintained between 30mm and 100mm. Surrounds to be kept 90% weed free with even texture and colour, free of rubbish and in a tidy condition.	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with 9999 installation standards at all times.	Summer - maintained in an operable condition in order to meet turf and recreational requirements. Inspection requirement once every five working days. Winter - Test run to keep valves operational once a month. Bore to be flow tested	To be inspected and maintained in accordance with current Australia Standards. Defects to be rectified within five working days
Active - Minor	Sports Venue with grassed area supporting one seasonal sport	St Andrews Reserve, Lake Joondalup	Note: Off season grass can be 10mm longer than active season Winter - Grass to be maintained between 20mm and 50mm eg. Australian Rules Football, rugby, soccer Summer - Grass to be maintained between 15mm and 30mm eg cricket and hockey Summer - turf areas to be maintained between 15mm - 18mm. Winter - turf areas to be maintained between 15mm - 20mm Grass growth is to be maintained in	Grass to be maintained between 30mm and 100mm. Surrounds to be kept 90% weed free with even texture and colour, free of rubbish and in a tidy condition.	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	Summer - maintained in an operable condition in order to meet turf and recreational requirements. Inspection requirement once every five working days. Winter - Test run to keep valves operational once a month. Bore to be flow tested	To be inspected and maintained in accordance with current Australia Standards. Defects to be rectified within five working days
Sports Facility	Sports Venue with specialist synthetic playing surface	Kingsway Netball; Montrose Tennis	Artificial surfaces to be maintained in accordance with manufacturers specifications or in accordance with the surface type . To be kept free of weeds, litter and other materials. Line markings to be maintained in accordance with requirements of the sport	Area to be maintained in accordance with the appropriate class classification.	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	To be maintained in an operable condition in order to meet playing surface and seasonal requirements. Inspection requirement once every five working days	To be inspected and maintained in accordance with current Australia Standards. Defects to be rectified within five working days
PASSIVE									
Developers Standard	Parkland developed with irrigation and facilities, which may include	Alston Park, Comberton Park	Summer - turf areas to be maintained between 15mm - 18mm. Winter - turf areas to be	All plants shall be pruned, fertilised, mulched and an effective disease control regime implemented to ensure healthy vigorous growth as required.	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	Summer - maintained in an operable condition in order to meet turf and recreational requirements. Inspection requirement once every five working days.	To be inspected and maintained in accordance with current Australia Standards. Defects to be rectified

SERVICE LEVELS PARKS RESERVES

Class	Description	Example	Detail						
ACTIVE			Playing Surface	Surrounds	Parking Areas	Floodlighting	Security Lighting	Reticulation	Playground Equipment
	lakes, brick paving, gazebos, playgrounds and lakes		maintained between 15mm - 20mm Grass growth is to be maintained in a vigorous healthy state, 90% weed free with even texture and colour across the turf surface. Edging	Dead, vandalised, diseased and missing plants to be replaced within one month with same or similar species	times.			Winter - Test run to keep valves operational once a month. Bore to be flow tested	within five working days
Passive – Premium	Parkland developed with irrigation and facilities, which may include brick paving, gazebos, playgrounds and lakes	Alexander Heights Park (Nth); Studmaster Park; Ocean Keys Park	Summer - turf areas to be maintained between 18mm - 25mm. Winter - turf areas to be maintained between 30mm - 50mm Grass growth is to be maintained in a vigorous healthy state, 90% weed free with even texture and colour across the turf surface. Edging	All plants shall be pruned, fertilised, mulched and an effective disease control regime implemented to ensure healthy vigorous growth as required. Dead, vandalised, diseased and missing plants to be replaced as soon as practical with same or similar species	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	Summer - maintained in an operable condition in order to meet turf and recreational requirements. Inspection requirement once every five working days. Winter - Test run to keep valves operational once a month. Bore to be flow tested	To be inspected and maintained in accordance with current Australia Standards. Defects to be rectified within five working days
Passive – Minor	Parkland with irrigation and little or no infrastructure	Boyagin Park; Dunmore Park	Summer / Winter - turf areas to be maintained between 50mm - 100mm. Mowing will be rotary type	All plants shall be pruned, fertilised, mulched and an effective disease control regime implemented to ensure healthy vigorous growth as required. Dead, vandalised, diseased and missing plants to be replaced as soon as practical with same or similar species	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	Summer - maintained in an operable condition in order to meet turf and recreational requirements. Inspection requirement once every five working days. Winter - Test run to keep valves operational once a month. Bore to be flow tested	To be inspected and maintained in accordance with current Australia Standards. Defects to be rectified within five working days
Passive – Economy	Parkland with irrigation and little or no infrastructure with lower service level from time to time due to constraints on annual budget	Boyagin Park; Dunmore Park	Summer / Winter - turf areas to be maintained between 50mm - 200mm. Mowing will be rotary type	All plants shall be pruned as required. Dead, vandalised, diseased and missing plants not to be replaced	To be kept free of potholes and ponding. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	Summer - maintained in an operable condition in order to meet turf and recreational requirements. Inspection requirement once every five working days. Winter - Test run to keep valves operational once a month. Bore to be flow tested	To be inspected and maintained in accordance with current Australia Standards. Defects to be rectified within five working days
Passive – Unirrigated	Parkland with large cleared areas that are non irrigated with limited infrastructure	Whitfield Park; Sandow Park	To maintain mowing regime at minimal frequency of four times a year to provide a neat tidy appearance. Remove rubbish and install firebreaks where required.	Any plants present will be maintained in accordance with established horticultural practice	N/A	N/A	To be operable in accordance with installation standards at all times.	N/A	To be inspected and maintained in accordance with current Australia Standards. Defects to be rectified within five working days
Passive – Undeveloped	Parkland which is zoned for Public Recreation and is undeveloped	Avila Park; Welwyn Park	To maintain mowing regime at minimal frequency of once a year to provide a neat tidy appearance. Remove rubbish and install firebreaks where required.	Maintain plants and trees and remnant vegetation in accordance with established horticultural practice.	N/A	N/A	N/A	N/A	N/A

CONSERVATION & ENVIRONMENTAL									
Conservation	Parkland with conservation and or environmental management needs with management plans	Koondoola Regional Bushland; Lake Gnarangara Park	Area to be maintained in accordance with recognised "best practice" regimes. Some areas may be under specific Management Plans.	Area to be maintained in accordance with the appropriate class classification whilst respecting conservation area requirements	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	N/A	To be operable in accordance with installation standards at all times.	N/A	N/A
Bushland	Parkland with significant areas of remnant bushland without management plans	Alexander Park; Bradman Park	Area to be maintained in accordance with recognised "best practice" regimes.	Area to be maintained in accordance with the appropriate class classification whilst respecting conservation area requirements	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	N/A	To be operable in accordance with installation standards at all times.	N/A	To be inspected and maintained in accordance with current Australia Standards. Defects to be rectified within five working days
Foreshore	Parkland with foreshores without management plans	North Mardie Foreshore; Tamala Foreshore	Area to be maintained in accordance with recognised "best practice" regimes.	Area to be maintained in accordance with the appropriate class classification whilst respecting conservation area requirements	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	N/A	To be inspected and maintained in accordance with current Australia Standards. Defects to be rectified within five working days
BUILT FACILITIES									
Community Facility	Community buildings which have landscaping and grassed areas for aesthetic purposes	Aquamotion; Cockman House	Area to be maintained in accordance with the appropriate class classification.	Area to be maintained in accordance with the appropriate class classification.	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	N/A	To be operable in accordance with installation standards at all times.	To be maintained in an operable condition in order to meet seasonal requirements.	To be inspected and maintained in accordance with current Australia Standards. Defects to be rectified within five working days

PROPOSED SERVICE LEVELS (PARKS, RESERVES, STREETSCAPES AND CONSERVATION)

SERVICE LEVELS PARKS, STREETSCAPES AND CONSERVATION									
Class	Description	Example	Playing Surface	Surrounds	Parking Areas	Floodlighting	Security Lighting	Reticulation	Playground Equipment
ACTIVE									
Active	Sports Venue with grassed area capable of supporting various codes of sport for both summer and winter periods.	Kingsway, John Maloney Reserve, Paloma Reserve, Peridot Park	<p>Winter- Grass to be maintained/mown weekly to the following standard:</p> <p>Australian Rules Football - 15mm to 20mm</p> <p>Soccer - 15mm to 20mm Rugby - 20 to 30mm</p> <p>Summer - Grass to be maintained/mown weekly to the following standard:</p> <p>Cricket and hockey - 15mm to 20mm</p> <p>Rugby - 20 to 30mm.</p> <p>Fields where sport is played only for one season to be maintained in an operable condition in order to meet turf and recreational requirements.</p>	Grass to be maintained/mown 17 times per annum between 30mm and 50mm. Surrounds to be kept 90% weed free with even texture and colour, free of rubbish and in a tidy condition.	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	<p>Summer - maintained in an operable condition in order to meet turf and recreational requirements. Inspection requirement once every five working days.</p> <p>Winter - Test run to keep valves operational once a month. Maximum station run-time of 2 minutes. Bore flow to be tested.</p>	To be inspected twice per annum by the City's own staff and once per annum by independent consultant and maintained in accordance with current Australia Standards.
Sports Facility	Sports Venue with specialist playing surface including synthetic surfaces	Kingsway Netball; Montrose Tennis	<p>Playing season inspection at weekly maintenance visits.</p> <p>Non-playing season inspection at monthly maintenance visits.</p> <p>To be kept free of weeds, litter and other materials.</p> <p>Artificial surfaces to be maintained 17 times per annum.</p> <p>All maintenance in accordance with manufacturers' specifications or in accordance with the surface type.</p> <p>Line markings to be maintained in accordance with requirements of the sport</p>	Area to be maintained in accordance with the appropriate class classification. Maintenance visit at 17 visits per annum.	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	N/A	To be inspected twice per annum by the City's own staff and once per annum by independent consultant and maintained in accordance with current Australia Standards.

SERVICE LEVELS PARKS, STREETSCAPES AND CONSERVATION									
Class	Description	Example	Playing Surface	Surrounds	Parking Areas	Floodlighting	Security Lighting	Reticulation	Playground Equipment
PASSIVE									
Passive – Irrigated	Parkland developed with irrigation and facilities, which may include brick paving, gazebos, playgrounds and lakes	Alexander Heights Park; Studmaster Park; Ocean Keys Park	Turf areas to be maintained /mown 17 times per annum between 20mm to 50mm. Grass growth is to be maintained in a vigorous healthy state, 90% weed free with even texture and colour across the turf surface.	All plants shall be pruned, fertilised, mulched and an effective disease control regime implemented to ensure healthy vigorous growth as required. Dead, vandalised, diseased and missing plants to be replaced as soon as practical with same or similar species. Weed control when and where applicable.	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	Summer - maintained in an operable condition in order to meet turf and recreational requirements. Inspection requirement once every five working days. Winter - Test run to keep valves operational once a month. Maximum station run-time of 2 minutes. Bore flow to be tested.	To be inspected twice per annum by the City's own staff and once per annum by independent consultant and maintained in accordance with current Australia Standards
Passive – Unirrigated	Parkland with large cleared areas that are non irrigated with limited or no infrastructure	Whitfield Park; Sandow Park	To maintain at 17 visits per annum. Mowing height between 30mm and 50mm. Free of rubbish and in a tidy condition. Remove rubbish and install firebreaks where required.	Any plants present will be maintained in accordance with established horticultural practice. Weed control when and where applicable.	N/A	N/A	To be operable in accordance with installation standards at all times.	N/A	To be inspected twice per annum by the City's own staff and once per annum by independent consultant and maintained in accordance with current Australia Standards
STREETSCAPES									
Class	Description	Example	Grassed Areas	Landscaped Areas	Parking Areas	lighting	Security Lighting	Reticulation	
Wanneroo Town Centre	City Centre incorporating high profile areas	Dundobar Road, War Memorial, Entry Statements in Wanneroo Road	Turf areas to be maintained /mown 30 times per annum between 20mm to 50mm. Grass growth is to be maintained in a vigorous healthy state, 90% weed free with even texture and colour across the turf surface.	All plants shall be pruned, fertilised, mulched and an effective disease control regime implemented to ensure healthy vigorous growth as required. Dead, vandalised, diseased and missing plants to be replaced as soon as practical with same or similar species	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	Summer - maintained in an operable condition in order to meet turf and recreational requirements. Inspection requirement once every five working days. Winter - Test run to keep valves operational once a month. Maximum station run-time of 2 minutes. Bore to be flow tested	
Streetscapes and Entry Statements	Median and verge landscaping, roundabouts	Various	Turf areas to be maintained /mown 17 times per annum between 20mm to 50mm. Grass growth is to be maintained in a vigorous healthy state, 90% weed free with even texture and colour across the turf surface.	All plants shall be pruned, fertilised, mulched and an effective disease control regime implemented to ensure healthy vigorous growth as required. Dead, vandalised, diseased and missing plants to be replaced as soon as practical with same or similar species	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	Summer - maintained in an operable condition in order to meet turf and recreational requirements. Inspection requirement once every five working days. Winter - Test run to keep valves operational once a month. Maximum station run-time of 2 minutes. Bore to be flow tested	

SERVICE LEVELS PARKS, STREETSCAPES AND CONSERVATION									
Class	Description	Example	Grassed Areas	Landscaped Areas	Parking Areas	Floodlighting	Security Lighting	Reticulation	Playground Equipment
REGIONAL FACILITIES									
Kingsway Sporting Complex other than Playing Fields	Significant facilities which have landscaping and multi-purpose infrastructure and facilities	Kingsway Sporting Complex Internal roads, recreational areas, entry statements, etc	Turf areas to be maintained /mown 17 times per annum between 20mm-50mm Grass growth is to be maintained in a vigorous healthy state, 90% weed free with even texture and colour across the turf surface. Edging. Daily maintenance visits for general up keep to be undertaken during high use periods, i.e., school holidays. Twice weekly site visit at other times.	All plants shall be pruned, fertilised, mulched and an effective disease control regime implemented to ensure healthy vigorous growth as required. Dead, vandalised, diseased and missing plants to be replaced as soon as practical with same or similar species	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	Summer - maintained in an operable condition in order to meet turf and recreational requirements. Inspection requirement once every five working days. Winter - Test run to keep valves operational once a month. Maximum station run-time of 2 minutes. Bore to be flow tested	To be inspected twice per annum by the City's own staff and once per annum by independent consultant and maintained in accordance with current Australia Standards Sofffall maintained daily where required. Sand Sofffall mechanically sieved on a monthly basis.
INCLUSIVE & INTERACTIVE PLAYSPACE	Community facilities which have landscaping and multi-purpose playground facilities	Rotary Park	Turf areas to be maintained /mown 30 times per annum between 20mm-50mm Grass growth is to be maintained in a vigorous healthy state, 90% weed free with even texture and colour across the turf surface. Edging. Daily maintenance visits for general up keep to be undertaken during high use periods, i.e., school holidays. Twice weekly site visit at other times.	All plants shall be pruned, fertilised, mulched and an effective disease control regime implemented to ensure healthy vigorous growth as required. Dead, vandalised, diseased and missing plants to be replaced as soon as practical with same or similar species	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	Summer - maintained in an operable condition in order to meet turf and recreational requirements. Inspection requirement once every five working days. Winter - Test run to keep valves operational once a month. Maximum station run-time of 2 minutes. Bore to be flow tested	To be inspected twice per annum by the City's own staff and once per annum by independent consultant and maintained in accordance with current Australia Standards Sofffall maintained daily where required. Sand Sofffall mechanically sieved on a monthly basis.
BUILDING FACILITIES									
Community Facility/ Civic Landscaping	Community facilities which have landscaping and grassed areas for aesthetic purposes	Aquamation, Cockman House. Buckingham House, Butler Comm Centre, Ocean Keys Blvd, Civic Centre.	Turf areas to be maintained /mown 17 times per annum between 20mm to 50mm. Grass growth is to be maintained in a vigorous healthy state, 90% weed free with even texture and colour across the turf surface.	All plants shall be pruned, fertilised, mulched and an effective disease control regime implemented to ensure healthy vigorous growth as required. Dead, vandalised, diseased and missing plants to be replaced as soon as practical with same or similar species	To be kept free of potholes, ponding and litter. The line markings to be clearly visible at all times.	To be operable in accordance with installation standards at all times.	To be operable in accordance with installation standards at all times.	Summer - maintained in an operable condition in order to meet turf and recreational requirements. Inspection requirement once every five working days. Winter - Test run to keep valves operational once a month. Maximum station run-time of 2 minutes. Bore to be flow tested	N/A

CONSERVATION								
Class	Description	Example	Boundaries	Fire Mitigation	Weed Control	Signage	Tracks	General
Bushland	Conservation areas with bushland as sole component and bushland components of Passive Parks	Koondoola Regional Bushland, Waldburg Park	Boundaries are to be kept clear of weeds and rubbish at all times. Maintain gates, locks and fences in good repair and working order	Carry out seasonally programmed fire mitigation in conjunction with FESA and the relevant State Fire regulations	Carry out Annual woody, annual and perennial weed control programs as per seasonal requirements. Utilise current industry best practice with control methods	Ensure signs are visible and well maintained. Report graffiti/ vandalism within 24 hours	Maintain in good order, repair erosion to limestone surfaces, maintain hard stands adjacent to entry points	The Work Practice Manual identifies the full task range, staff responsibilities and reporting. All staff are to familiarise themselves with this.
Foreshore	Coastal frontal sand dunes and rocky outcrops	North Mindarie Foreshore, Yanchepp lagoon	Boundaries are to be kept clear of weeds and rubbish at all times. Maintain gates, locks and fences in good repair and working order	Carry out seasonally programmed fire mitigation in conjunction with FESA and the relevant State Fire regulations	Carry out Annual woody, annual and perennial weed control programs as per seasonal requirements. Utilise current industry best practice with control methods	Ensure signs are visible and well maintained. Report graffiti/ vandalism within 24 hours	Maintain in good order, repair erosion to limestone surfaces, maintain hard stands adjacent to entry points	The Work Practice Manual identifies the full task range, staff responsibilities and reporting. All staff are to familiarise themselves with this.
Wetlands and Buffers	Conservation category wetlands	Lake Joondalup	Boundaries are to be kept clear of weeds and rubbish at all times. Maintain gates, locks and fences in good repair and working order	Carry out seasonally programmed fire mitigation in conjunction with FESA and the relevant State Fire regulations	Carry out Annual woody, annual and perennial weed control programs as per seasonal requirements. Utilise current industry best practice with control methods	Ensure signs are visible and well maintained. Report graffiti/ vandalism within 24 hours	Maintain in good order, repair erosion to limestone surfaces, maintain hard stands adjacent to entry points	The Work Practice Manual identifies the full task range, staff responsibilities and reporting. All staff are to familiarise themselves with this.

- Note 1: These standards acknowledge the availability of resources to maintain these facilities.
- Note 2: All defects and repeated maintenance issues (cost of cycle), to be investigated and rectified in appropriate timescale.
- Note 3: The number and schedules of the maintenance visits may change subject to seasonal requirements and specific needs for each location

3.15 Water Conservation Plan

File Ref:	3374 – 11/131676
Responsible Officer:	Director Infrastructure
Disclosure of Interest:	Nil
Attachments:	1

Issue

To consider endorsement of the draft *Water Conservation Plan* as included in **Attachment 1**.

Background

A draft *Water Conservation Plan* (WCP) for the use of groundwater for irrigation purposes was prepared about three years ago and a number of strategies/actions were developed for implementation. Even though a number of actions were implemented as part of the normal operations and some capital upgrades, this Plan has remained a working draft.

The City for some time has also been in the process of preparing the “City Water Management Strategy”. The community consultation for this strategy has been concluded with the final document to be presented to Council for endorsement during next few months.

In view of the above, it was decided to prepare a new Water Conservation Plan in alignment with the proposed “City Water Management Strategy”.

Detail

The new WCP is aligned to the “Draft City Water Management Strategy” which has identified issues relating to the decline in the availability of the groundwater for irrigation purposes and the need for strategies for efficiency and conservation.

WCP has been prepared to address the following:

- Issues facing the City in the use of groundwater for irrigation purposes
- groundwater allocations
- Objectives to address the issues
- Strategies and actions to meet the objectives
- Department of Water’s (DoW) guidelines for the use of groundwater for irrigation

It is noted that the DoW has been consulted and comments provided by the DoW’s contact officer have been incorporated in the Draft Plan.

Consultation

Internal consultation with the City’s Planning and Sustainability Directorate has been undertaken to align the Water Conservation Plan with the “Draft City Water Management Strategy”.

A presentation was also made to Council Forum on 22 November 2011.

Comment

The finalisation of the WCP is now very important to acknowledge the groundwater issues faced by the City. In view of the City’s initiative to prepare the “Water Management Strategy”, the preparation of a new WCP is considered appropriate. The WCP will assist the City greatly in implementing a number of actions for the efficient use of groundwater and remain within the allocations made by the DoW.

The implementation of strategies and actions identified in the WCP will fulfil the need to meet the legal requirements of licences and reporting on groundwater usage. It is considered that the implementation of WCP strategies and actions will assist the City to construct, maintain and renew its irrigation systems in accordance with the industry best practices.

A number of actions as included in the new WCP are currently being implemented by the City. Data collection and monitoring, preventive irrigation maintenance involving irrigation infrastructure servicing, mainline flushing, regular inspections and corrective action is being undertaken as part of the parks maintenance operations.

The Irrigation Infrastructure Renewal Program is addressing the needs for the renewal of existing irrigation systems to align with the current industry practices. This Program is scheduled to be undertaken over several years and has been included in the City's 10 Year Financial Plan.

Statutory Compliance

Nil

Strategic Implications

The proposal accords with the following Outcome Objective of the City's Strategic Plan 2006 – 2021:

- “1 Environment*
- 1.2 Protect, conserve and recycle water”*

Policy Implications

Nil

Financial Implications

The WCP strategies and actions are interlinked and the implementation will be part of the irrigation systems construction, maintenance and renewals. This will require funding allocations over a number of years which will be addressed on an annual basis. The funding allocations will be required in both Parks Operating/Maintenance budgets and Asset Renewal Programs (Irrigation Infrastructure Replacement Program).

The annual Parks Maintenance Operating Budgets would need to be adjusted on an annual basis to meet the requirements of preventive maintenance. A provision of \$1.5M has been made in the 2011/2012 Capital Works Budget for Irrigation Infrastructure Renewal Program. This Program is listed in the 10 Year Financial Plan and is proposed to increase by \$250,000 annually until it reaches \$2.25M in 2014/15 and then remains at that level for the future years.

Voting Requirements

Simple Majority

Recommendation

That Council ENDORSES the “Water Conservation Plan” as included in Attachment 1.

Attachments:

- 1. Draft Water Conservation Plan V2 11/131906 Minuted*

City of Wanneroo

**Water
Conservation
Plan
(IRRIGATION)**



NOVEMBER 2011

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Overview

City of Wanneroo is in the process of finalising its "City Water Management Strategy". This document has been prepared to provide guidance to the City for the improved management of water resources within the City and highlight the significant issue of water availability for irrigation purposes. The development of a Water Conservation Plan has been identified in this document as a Water Resource Management Tool.

Water conservation/efficiency plans enable licensees to obtain a thorough knowledge of their water use and provide details of a water efficiency implementation program to achieve improved water use efficiency.

As identified in the City Water Management Strategy, in the Perth region, local governments are required to prepare Water Conservation Plans addressing the following issues:

- Develop and implement climate change adaptation strategies;
- Ensure that water use remains within licensed allocations;
- Demonstrate efficient groundwater use;
- Demonstrate that water use remains within licensed groundwater allocations;
- Accommodate decreasing groundwater availability while maintaining amenities, sport facilities, recreation and biodiversity outcomes; and
- Promote a culture of continuous improvement
- Develop links with the ICLEI (International Council for Local Environmental Initiatives) water campaign to promote a culture of continuous improvement.
- Gather information and legal perimeters generated by establishing a close working relationships with industry groups such as Department of Water (DoW), Water Corporation, Irrigation Association of Australia and other local councils

The Department of Water guidelines for local governments for the preparation of a Water Conservation Plan include issues similar to those identified in the City Water Management Strategy. Statewide Policy No 16 – Policy on water conservation/efficiency plans: Achieving water use efficiency through water licensing (Department of Water 2008a) further discusses the plans.

City of Wanneroo's Water Conservation Plan Irrigation (WCP) has adopted the following philosophy:

- To develop and implement processes and practices that enable the City's irrigation staff to achieve effective groundwater conservation of irrigated areas in the short term and to set longer term reduction targets as future goals.
- To reduce groundwater usage across the City to a maximum of 7500 kilolitres per hectare.
- To demonstrate to the community that the City is leading by example in groundwater conservation management.
- To work collaboratively with key stakeholders to maximize opportunities for groundwater extraction minimization
- To ensure that the City has the correct allocation of resources to achieve its goals in water conservation planning
- To ensure the community is aware and supportive of the groundwater reduction targets being sought.
- To address the discrepancy between actual total irrigated areas and licensed total areas.

The City of Wanneroo's Water Conservation Plan is aligned with the "Draft City Water Management Strategy" and has been prepared to meet with the Department of Water (DoW) initiatives & guidelines.

The City has implemented measures to undertake an analysis of its ground water use so as to establish levels of groundwater extraction. This analysis will allow the City to determine how much water is being applied to each irrigated park on a per hectare basis. This will also ensure the use of ground water within the City of Wanneroo in accordance with the City Water Management Strategy and DoW's guidelines.

1. Ground Water Data and demand

Number of Bores	205
No of flow meters	131
Total licensed area (Ha)	482
Total irrigated area (ha)	544
Number of licences	11
Total licensed allocation (KL)	3,583,772
Projected usage (11/12)	4,080,000
Area usage (KL/ha)	7500

*The City of Wanneroo has 11-groundwater licence's consisting of sub licences and 2 Golf Course licences.

The demand for groundwater within the City of Wanneroo over the next 10 years is expected to increase to service from 600 hectares to around 1,000 hectares. The development of existing dry parks within the City and the extended dry seasons will also place demands on the available water resources.

2. Ground water usage issues

Issues that will need to be addressed by the City due to the dependency on the use of groundwater over the next 5 years are:

1. The ongoing drop of the static water level throughout all ground water catchment areas.
2. Deteriorating quality of ground water aquifers with the increase of iron bacteria, sulphide reducing bacteria and heavy metals.
3. Increased wear and tear on existing pumping assets and increased maintenance of contaminated reticulation assets.
4. Ensuring the accuracy of flow data from all bores.
5. Managing old non-conforming irrigation systems with poor distribution of uniformity (DU).
6. Matching community expectations for green well maintained parks whilst trying to conserve water.
7. Most water extraction licences are fully allocated yet new developments will have watering requirements.

3. Draft "City Water Management Strategy"

The Draft "City Water Management Strategy" had identified the following issues/strategies relating to the use of groundwater for irrigation purposes:

Key issues described in the CWMS include:

- Declining groundwater levels and availability for irrigation of open space;

- Water sensitive management of stormwater;
- Water conservation and efficiency;
- Protection of public drinking water source areas; and
- Maintenance of sensitive environments.

Key strategies include:

- Implementing programs to increase efficiency in irrigation of new and existing public open space;
- Establishing working groups with relevant stakeholders to address key water issues and identify opportunities for alternative water sources in new development areas, such as use of recycled water from the Alkimos Wastewater Treatment Plant; and
- District and local water management planning for new development areas.

The Water Conservation Plan outlined in this document addresses the issues and strategies identified in the "City Water Management Strategy"

4. Water conservation objectives

The main groundwater conservation objectives for City of Wanneroo to achieve over the next 5 years are listed below:

1. To implement water monitoring infrastructure/devices, analyse the data and implement measures for efficient use of ground water with a view to reduce the water usage per hectare of the irrigated turf areas and thereby addressing the actual and licences discrepancies
2. Implement a program to accurately measure and account for water abstraction. Programs such as flow sensors used on the majority of the City's bores and connect to the Centralised Irrigation Management System.
3. To implement innovative ways to reduce the use of ground water by ensuring that only enough water is applied to match the plant requirements.
4. To continually review the adequacy of the water measurement devices such as calibration of flow meters, weather stations, soil moisture sensors
5. To implement auditing systems to ensure the continuation of a renewal program for those irrigation systems that fail to meet Distribution Uniformity (DU) of 75% as a minimum including the replacement of assets that have deteriorated causing loss of water.
6. To implement measure in compliance with all statutory requirements set by the DOW and WCWA and the City's own policies
7. To promote the use of drought tolerant designs and subsurface irrigation for garden bed areas
8. To implement a planned irrigation infrastructure maintenance program to ensure that the systems operate efficiently during the peak demand seasons
9. To implement on-job and external training programs to ensure the staff is up to date with the best practice irrigation practices
10. To implement community education programs which will provide information on the issues relating to water conservation principles and practices.

5. Water conservation strategies/actions

Strategy	Action	Time line
1. Monitor water extraction and usage	<p>1.1. Create a site map showing the location of each point of connection, meter, backflow prevention device, controller, station/zone valves, and area served by each valve.</p> <p>1.2. Implement Central Irrigation Management System (CIMS)</p> <p>1.3. Install flow sensors / meters at all bores</p> <p>1.4. Install a water meter to measure both water flow rate and cumulative volume. A meter with a flow rate output signal that can link to the controller will help detect leaks and manage water use.</p> <p>1.5. Design the maximum flow rate through the meter to be not be more than 75% of the maximum safe flow rate.</p> <p>1.6. Connect all bores to CIMS</p> <p>1.7. Identify the highest using sites</p>	2014
2. Implement hydro-zoning and eco-zoning principles	<p>2.1. Investigate the use of hydro-zoning on a park by park basis.</p> <p>2.2. Implement turf management practices including use of soil/moisture improvers and management practices</p> <p>2.3. Reduce the turf coverage and replace by mulched areas/garden beds</p> <p>2.4. Educate community by running programs such as demonstration gardens, workshops, seminars and newspaper articles, community planting days and creates a sense of ownership for the residents which improves uptake.</p>	Ongoing
3. Increase use of the field Technology	<p>3.1. Investigate the implementation of Weather Stations, soil moisture probes, evaporative transpiration data to assist decision making</p> <p>3.2. Use technology and install infrastructure to facilitate decision-making. Review information from these devices and implement tasks such as "rain off" and "water budgeting" for efficient use of ground water</p>	2012

Strategy	Action	Time line
4. Introduce proactive water management	<p>4.1. Review the requirements of irrigated turf and reduce wherever possible. Species selection might come into this.</p> <p>4.2. Set a water budget for each irrigated area based on Create a monthly water budget based on:</p> <ul style="list-style-type: none"> • Plant type and microclimate factors for each hydrozone. • Water holding capacity of the soil from sample cores • The effective root zone depth of the crop. <p>4.3. Compare actual water use to the budgeted amount for the month and modify the schedule to stay within the monthly budget if necessary. Implement program for the application of soil moisture retention additives</p> <p>4.4. Develop flow meters/sensors calibration program</p> <p>4.5. Create a monthly base irrigation schedules where the frequency of irrigation is informed by soil moisture content, water infiltration rate and historical evapotranspiration data.</p> <p>4.6. Trim or remove vegetation as trees mature to preserve system performance.</p>	2012
5. Ensure DU of irrigation systems exceed 75% minimum	<p>5.1. Undertake condition audit of all irrigation systems and develop a priority order for the renewal of the systems and pumping infrastructure.</p> <p>5.2. Use data for proactive water management.</p>	Ongoing

Strategy	Action	Time line
6. Review Parks Service Standards, Designs and Specifications	<p>6.1. Review and adjust parks service standards based on the use and the need for irrigated turf</p> <p>6.2. Ensure that the Irrigation Design Criteria and Specification is met by ensuring all irrigation is CIDS designed and DU, site-specific plant and turf species is addressed.</p> <p>6.3. Ensure that the irrigation systems in the new developments are in accordance with the City's Water Strategy and Public Open Space Policy</p> <ul style="list-style-type: none"> • Differing plant water requirements and root zone depths and use separate drip/micro-irrigation zones where practical. • Pressure-compensated emitters to improve overall application uniformity. • Design the layout of emitters to eliminate overspray. • Design for wind conditions for the times that the system is normally run. • Keep the emitter precipitation rate less than the infiltration rate of the soil. <p>6.4. Conduct system audit prior to handover to ensure the system performs as designed.</p>	Ongoing
7. Ensure regular irrigation infrastructure maintenance	<p>7.1. Review annual irrigation infrastructure maintenance requirements and secure appropriate budget allocations</p> <p>7.2. Develop annual program to undertake seasonal irrigation infrastructure maintenance (bore/pumps servicing, flushing of mainlines, sprinklers testing, etc.) on time</p> <p>7.3. Standardised hardware across all systems e.g. emitters.</p> <p>7.4. Use information from CIMS for fault finding and routine maintenance works</p>	Ongoing
8. Implement staff training programs	8.1. Review the need for staff training in the use of technology and irrigation practices and provide training as identified	Ongoing
9. Explore the use of alternate sources of water	9.1. Continue to liaise with the City's own staff and external agencies to explore new ideas and innovation	Ongoing

Strategy	Action	Time line
10. Implement a community education/ communication program	10.1. Conduct community education workshops/seminars 10.2. Run "Great Gardens" workshops 10.3. Publish articles and advertisements in local newspapers 10.4. Provide guidance to the community for the establishment of the gardens in the residential areas 10.5. Review and include the Verge Treatment Guidelines to reflect "Water Wise" initiatives 10.6. Make all information listed above on the City's Website	Ongoing
11. Reporting	11.1. Identify reporting requirement e.g. monthly 11.2. Implement reporting hierarchy e.g. monthly update to council. 11.3. Ensure the software used in central control can generate the appropriate water consumption reports	Ongoing

Tenders

3.16 Tender No. 01141 - Provision of Illuminated Street Signs for a Period of Five Years

File Ref: 6675 – 11/129246
Responsible Officer: Director Infrastructure
Disclosure of Interest: Nil
Attachments: Nil

Issue

To consider Tender No. 01141 for the Provision of Illuminated Street Signs for a Period of Five Years.

Background

To provide another avenue of advertising for local businesses and to diversify the City's income base, it is proposed to engage a contractor to install illuminated street signs at prominent locations. The proposed signs will include the business' advertisements, a community message, the City's logo and street names. All locations will be pre-approved by the City and the signs will be installed, maintained and owned by the contractor. The contractor will receive advertising income from local businesses and the City will receive income per sign for allowing these signs to be installed and will also receive a certain number of signs free of cost for the purpose of promoting its own facilities or locations of significance.

Tender No. 09006 - The Provision of Illuminated Street Signs for a Period of Five Years was advertised on 14 March 2009 and closed on 7 April 2009. Two conforming tenders were received.

Council considered a report regarding Tender No. 09006 (Item No IN01-06/09 refers) at its Ordinary Council Meeting on 2 June 2009 and resolved:

"That Council:-

- 1. ACCEPTS Tender No 09006 from Sarah Buehrig T/A Pulse Design for the Provision of Illuminated Street Signs for a Period of Five Years as per the schedule of rates and general conditions of tendering from 1 July 2009 to 30 June 2014 with an option to extend for a further five-year period or part thereof; and*
- 2. AUTHORISES the Chief Executive Officer to consider extending the contract with the successful tenderer for a further period of five years or part thereof subject to a satisfactory performance of the successful contractor during the first two years of the initial contract period."*

Following the commencement of the contract on 1 July 2009, Pulse Design undertook a number of steps to deliver the services under the contract but no substantial progress was made. During January and February 2011, Pulse Design indicated that due to a number of issues faced, it was considering seeking a variation to the contract. Formal advice seeking to vary the terms of the contract was then received from Pulse Design, but was not supported by the City. Pulse Design then requested termination of Contract No 09006.

Council considered a report regarding termination of Contract No. 09006 (Item No IN03-05/11 refers) at its Ordinary Council Meeting on 3 May 2011 and resolved as follows:

"That Council:-

1. *AGREES with the request for termination by Pulse Design in accordance with "General Conditions of the Contract; Clause 13 – Termination" of the contract agreement; and*
2. *AUTHORISES the calling of a new tender in July 2011 following a thorough review of the scope of works and specification."*

Detail

The scope of works and specification has been reviewed and similarly to the previous tender the specification is based on the following main items:

1. The contractor is to supply, install and maintain the signs;
2. The signs are to remain in the ownership of the contractor;
3. The contractor is to derive advertising income from the signs;
4. The City is to receive income per sign for the duration each sign is installed; and
5. The City is to receive similar free signs for its use. Two free signs are to be supplied upfront, another two to be supplied when contractor installs 30 signs and then one free sign for every 10 subsequent signs installed by the Contractor. The initial two free signs are to be located for the City's use at:
 - a. Wanneroo Road/Dundebar Road Intersection – indicating the locations of the City Offices, Wanneroo Library and Museum, Wanneroo Aquamotion and Wanneroo Police Station.
 - b. Marmion Avenue/Ocean Keys Boulevard Intersection – indicating the locations of the Clarkson Library, Clarkson Youth Centre and Clarkson Police Station.

The following items were modified from the previous tender and contract to encourage tenderers to submit achievable offers and to minimise the possibility that the successful contractor will not be able to deliver signs within the tendered timeframe.

Previous Condition	New Condition	Reason for Change
Tender Price Evaluation Criteria – 50%	Tender Price Evaluation Criteria – 40%	More emphasis on understanding of the construction process.
Five year contract extension available after 24 months, subject to satisfactory progress.	Five year contract extension available after 12 months, subject to satisfactory progress.	To enable a longer payback period and more certainty to the contractor to recover substantial sign installation and power connection costs.
No liquidated damages	Liquidated damages.	To provide a mechanism for the City to recover lost income if the contractor fails to perform and to discourage tenderers from overstating predicted income to the City.

Tender No. 01141 for Provision of Illuminated Street Signs for a Period of Five Years was advertised on Saturday 29 October 2011 and closed on Tuesday 15 November 2011.

Essential details of the contract are outlined below:

Contract Type	Fee per sign installed to be paid to the City
Contract Duration	Five years
Commencement Date	1 March 2012
Expiry Date	28 February 2017
Extension Permitted	Five years, available after 28 February 2013 subject to satisfactory performance
Sign Income Rise and Fall Included	Yes, Perth Consumer Price Index annually

Tender submissions were received from:

- Directional Systems Australia Pty Ltd;
- Rainbow Signs Rental Pty Ltd trading as Rainbow Outdoor Media;
- Claude Outdoor Pty Ltd;
- Muscara Holdings Pty Ltd trading as Streetside Advertising; and
- Kingman Visual.

Rainbow Outdoor Media, Claude Outdoor and Streetside Advertising's Alternative Tender did not agree to the liquidated damages and other clauses in the contract and were therefore considered to be non-compliant and were not considered further. Streetside Advertising also submitted a Compliant Tender which was considered further.

The Tender Evaluation Team, consisting of the Acting Manager Infrastructure Maintenance, Technical Officer – Contracts Administration and Contracts Officer, has evaluated the remaining three compliant tender submissions in accordance with the following selection criteria:

Item No	Description	Score
1	Total income to the City for the initial five year contract period.	40%
2	Tenderer's relevant similar experience with achievement of client expectations.	20%
3	Tenderer's demonstrated understanding of the construction process, including maintenance and upgrade programmes, the design and appearance of signs including sustainable design principles.	20%
4	Tenderer's safety management.	20%

Total Income to the City Offered (40%)

An assessment was made to determine the ranking based on the Price Schedule and Tenderer's Proposed Sign Installation Programme provided with the tender documentation, resulting in the following ranking:

Tenderer	Rank
Kingman Visual	1
Directional Systems Australia	2
Streetside Advertising	3

Tenderer's Demonstrated Similar Experience (20%)

Directional Systems Australia has experience in contracting advertisers and providing illuminated street signage to local government. Streetside Advertising has significant experience in providing seat benches and bus stops with advertising; however, does not have demonstrated experience in illuminated street signs. Kingman Visual has experience in sign manufacture and installation, but not in contracting advertisers on illuminated street signs on an ongoing basis.

The Evaluation Team's assessment resulted in the following ranking:

Tenderer	Rank
Directional Systems Australia	1
Streetside Advertising	2
Kingman Visual	3

Tenderer's Demonstrated Understanding of the Construction Process (20%)

The tenderer's proposed resources and methodology were examined in order to evaluate their ability to meet the requirements of the contract resulting in equal ranking for Directional Systems Australia and Streetside Advertising:

Tenderer	Rank
Directional Systems Australia	1
Streetside Advertising	1
Kingman Visual	2

Safety Management (20%)

Evidence of safety management policies and practices was assessed from the tender documents. The assessment for safety management was based on the tenderers' responses to an Occupational Health and Safety Management System Questionnaire included within the tender documentation and resulted in the following ranking:

Tenderer	Rank
Streetside Advertising	1
Kingman Visual	2
Directional Systems Australia	3

Overall Weighted Score

The tenderer's submissions were reviewed in accordance with the weighted score analysis process with the key aspect of the tender evaluation being income to the City.

The overall weighted score has resulted in the following tender ranking:

Tenderer	Rank
Directional Systems Australia	1
Kingman Visual	2
Streetside Advertising	3

Consultation

Nil

Comment

The tender submission from Directional Systems Australia achieved the highest score in accordance with the assessment criteria and weighting as detailed in the tender document and is therefore recommended as the successful tenderer. Reference checks have indicated that this contractor has previously provided a satisfactory service delivery to its customers.

Statutory Compliance

Tenders were invited in accordance with the requirements of Section 3.57 of the Local Government Act 1995. The tendering procedures and evaluation complied with the requirements of Part 4 of the Local Government (Functions and General) Regulations 1996.

Strategic Implications

The proposal accords with the following Outcome Objective of the City's Strategic Plan 2006 – 2021:

- “3 *Economic*
3.2 *Support business and initiatives*”
- and
- “4 *Governance*
4.4 *Maintain long-term financial stability*”

Policy Implications

Nil

Financial Implications

Based on the tenderer's payment rate per sign and proposed number of signs to be installed, the City can expect to receive an income of \$144,650 excluding CPI increases over the initial five year term.

Voting Requirements

Simple Majority

Recommendation

That Council ACCEPTS the tender submitted by Directional Systems Australia Pty Ltd for Tender No. 01141 for the Provision of Illuminated Street Signs for a Period of Five Years commencing 1 March 2012 as per the Price Schedule, Tenderer's Proposed Sign Installation Programme and General Conditions of Tendering, with annual Perth Consumer Price Index income increases and an option to extend the contract for a further five year period.

Attachments: Nil

3.17 Tender No. 01145 - Cleaning of Stormwater Pollutant Traps and Other Drainage Infrastructure for a Period of One Year

File Ref: 6826 – 11/142973
 Responsible Officer: Director Infrastructure
 Disclosure of Interest: Nil
 Attachments: Nil

Issue

To consider Tender No. 01145 for the Cleaning of Stormwater Pollutant Traps and Other Drainage Infrastructure for a Period of One Year.

Background

Cleaning of drainage infrastructure is currently undertaken by the City on a reactive basis as blockages and other drainage problems occur.

At the Ordinary Council Meeting on 11 October 2011 (Item IN02-10/11 refers), Council resolved:

“That Council:-

1. *ENDORSES the Stormwater Drainage Asset Management Plan as tabled in the Elected Members Reading Room.*
2. *LISTS for consideration in the 10-Year Capital Works Program - Stormwater Drainage an annual amount of \$45,000 for sump fencing renewal starting in 2012/2013 subject to a condition audit of the City’s network of sump fencing in 2011/2012.”*

Key functional objectives of the Stormwater Drainage Asset Management Plan include:

- A free flowing drainage system; and
- Effective flood protection to residents.

In addition, one of the actions required from the Asset Management Plan is improved asset performance monitoring.

To improve the maintenance of its stormwater drainage assets, Administration requires a contractor to provide condition reporting and programmed maintenance of the City’s stormwater pollutant traps and occasional cleaning of other drainage assets as required.

Detail

Tender No. 01145 for the Cleaning of Stormwater Pollutant Traps and Other Drainage Infrastructure for a Period of One (1) Year was advertised on Saturday 3 December 2011 and closed on Tuesday 20 December 2011. A copy of the tender document has been placed in the Elected Members’ Reading Room.

Essential details of the contract are outlined below:

Contract Type	Schedule of rates
Contract Duration	One year
Commencement Date	1 March 2012
Expiry Date	28 February 2013

Extension Permitted	Two 12 month extensions, with Perth CPI increases at commencement of extension periods.
Rise and Fall Included	No

Tender submissions were received from:

- KIS Environmental Services Pty Ltd;
- John Douglas Parker;
- Riverjet Pty Ltd trading as Riverjet Pipeline Solutions;
- Drainflow Services Pty Ltd;
- Redbrook Holdings Pty Ltd as trustee for the Lyons & Pierce Unit Trust trading as Lyons & Pierce;
- EnviroStream Catchment Management Pty Ltd; and
- Western Maze Pty Ltd trading as Western Educting Service.

An alternative proposal was received from Western Maze Pty Ltd trading as Western Educting Service. This alternative proposal was not considered as it changed the unit rate for several items and was not comparable to the other submissions. A compliant submission from Western Educting Service was considered in the evaluation process.

The Tender Evaluation Team, comprising the Acting Manager Infrastructure Maintenance, Acting Coordinator Engineering Maintenance and Contracts Officer evaluated the tender submissions in accordance with the following selection criteria:

Item No	Description	Score
1	Price for the services offered	50%
2	Tenderer's resources and capacity to undertake the services	20%
3	Tenderer's relevant similar experience with achievement of client expectations	10%
4	Safety management	20%

Price for the Services Offered (50%)

An assessment was made to determine the ranking based on the schedule of rates provided with the tender documentation. Assessment of this criterion was considered against the items within the schedule of rates most expected to be utilised by the City and resulted in the following ranking:

Tenderer	Rank
Drainflow Services	1
KIS Environmental Services	2
Riverjet Pipeline Solutions	3
Lyons & Pierce	4
Western Educting Service	5
EnviroStream Catchment Management	6
John Douglas Parker	7

Tenderer's Resources and Capacity to Undertake the Services (20%)

The tenderers' resources contained in the tender documentation were examined in order to evaluate their ability to meet the requirements of the contract. Assessment of this criterion considered the tenderers' staff resources, vehicles, plant/equipment and workshop support to manage the contract and resulted in the following ranking:

Tenderer	Rank
EnviroStream Catchment Management	1
Riverjet Pipeline Solutions	2
Drainflow Services	2
Lyons & Pierce	2
KIS Environmental Services	3
John Douglas Parker	4
Western Educting Service	5

Tenderers' Relevant Similar Experience with Achievement of Client Expectations (10%)

The tenderers' relevant experience as contained in the tender documentation was examined in order to evaluate their ability to meet the requirements of the contract. Assessment of this criterion considered the tenderer's previous experience with similar type of works previously performed and resulted in the following ranking:

Tenderer	Rank
EnviroStream Catchment Management	1
Riverjet Pipeline Solutions	2
Drainflow Services	2
Lyons & Pierce	2
KIS Environmental Services	3
John Douglas Parker	4
Western Educting Service	4

Safety Management (20%)

Evidence of safety management policies and practices was assessed from the tender documents. The assessment for safety management was based on the tenderers' responses to an Occupational Health and Safety Management System Questionnaire included within the tender documentation.

All the tenderers provided details of their safety management systems with the following ranking:

Tenderer	Rank
KIS Environmental Services	1
Drainflow Services	1
Riverjet Pipeline Solutions	2
John Douglas Parker	3
EnviroStream Catchment Management	3
Lyons & Pierce	4
Western Educting Service	5

Overall Weighted Score

The tenderer's submissions were reviewed in accordance with the weighted score analysis process with the following observations being of significance:

- the key aspect of the tender evaluation is price.
- the companies' bids were evaluated in accordance with the selection criteria and were assessed as having the necessary resources, previous experience, ability and safety management systems to undertake the tender.

The overall weighted score has resulted in the following tender ranking:

Tenderer	Score
Drainflow Services	1
KIS Environmental Services	2
Riverjet Pipeline Solutions	3
EnviroStream Catchment Management	4
Lyons & Pierce	5
John Douglas Parker	6
Western Educating Service	7

Consultation

Nil

Comment

The tender submission from Drainflow Services achieved the highest score in accordance with the assessment criteria and weighting as detailed in the tender document and is therefore recommended as the successful tenderer. Reference checks have indicated that this contractor has previously provided a satisfactory service delivery to its customers.

Statutory Compliance

Tenders were invited in accordance with the requirements of Section 3.57 of the Local Government Act 1995. The tendering procedures and evaluation complied with the requirements of Part 4 of the Local Government (Functions and General) Regulations 1996.

Strategic Implications

The proposal accords with the following Outcome Objective of the City's Strategic Plan 2006 – 2021:

“4 Governance

4.4 *Maintain long-term financial stability”*

4.4.1 *Develop, implement and continuously improve asset management practices and systems to ensure infrastructure is fit for purpose to provide sustainable and economic service.”*

Policy Implications

Nil

Financial Implications

Based on the tenderer's schedule of rates and the service intervals specified in the tender document, the total annual estimated value of works is \$40,000 per annum and this amount is accommodated in the existing Infrastructure Maintenance operational budget.

Voting Requirements

Simple Majority

Recommendation

That Council **ACCEPTS** the tender submitted by Drainflow Services Pty Ltd for Tender No. 01145 for Cleaning of Stormwater Pollutant Traps and Other Drainage Infrastructure for a period of One Year commencing from 1 March 2012 as per the Schedule of Rates and General Condition of Tendering with an option to extend the contract for a further two 12 month terms, or part thereof, with Perth Consumer Price Index increases at the commencement any extended term.

Attachments: Nil

Draft

Traffic Management

3.18 PT02-09/11 - Cheltondale Drive, Madeley - Request for Road Closure

File Ref: 3120 – 11/119095
Responsible Officer: Director Infrastructure
Disclosure of Interest: Nil
Attachments: 3

Issue

To consider a petition requesting an amendment to the road and transport network supporting Agreed Structure Plan No.8 - East Wanneroo Cell 6 – Darch/Madeley.

Background

Council received Petition PT02-09/11 at its meeting of 20 September 2011. The petition reads:

"We, the undersigned, all being Residents of the City of Wanneroo do formally request Council's consideration and support for: Cheltondale Drive, Madeley, to be returned to its status prior to Russell Road being opened up to Hartman Drive, this being no ready access for through traffic between Cooper Street and Hartman Drive. Regency Avenue, which is 7.3m wide and runs parallel to Cheltondale Drive, was designed specifically for this purpose not Cheltondale Drive which is only 6m wide.

There have been many instances of excessive speed in addition to the increased traffic on Cheltondale Drive due to it being a long straight stretch between Russell Road and Cooper Street. We suggest that Cheltondale Drive be made into a cul-de-sac near the public open space at the northern end or at the very least 3 speed bumps about 3.0m wide kerbed and brick paved evenly spaced along the road.

The Wanneroo East Structure Plan shows Cheltondale Drive being extended for twice its length dead straight and picking up another 6 roads in addition to the 5 that we have already and all this on a narrow 6.0m wide road. This would make it a very busy and dangerous road and must never happen, thus a cul-de-sac would be the best option to break this continuity and make for a safer neighbourhood, especially when the public open space is developed into a park for children to play on. Low traffic flow and lower speeds would be the result on 3 sides of this park instead of 1 at present."

The petition has been signed by 18 residents representing 11 of the 12 residential properties fronting Cheltondale Drive and two residents representing one residential property on Fairland Loop.

Refer to **Attachment 1** for a location plan of the subject area.

Detail

In accord with Agreed Structure Plan No.8 for East Wanneroo Cell 6 – Darch/Madeley (**Attachment 2** refers), Cheltondale Drive has been constructed as a Local Access Street Type 'D' with a 6m wide pavement in an 18m wide road reserve. In listing the function and characteristics of this type of roads, Liveable Neighbourhoods gives the indicative traffic volume for an Access Street with a 5.5-6.0m wide pavement as 1,000 vehicles per day.

The following traffic data was collected for Cheltondale Drive for the week commencing 5 May 2011:

Traffic data:

Definitions

AWT - average Weekday Traffic

vpd - vehicles per day

85%ile speed – the speed at or below which 85% of vehicles are travelling.

20km/h Pace – the 20km/h speed range in which the majority of vehicles are travelling

% in Pace – percentage of total vehicles travelling within the 20km/h Pace range

Cheltondale Drive – South of Atholl Way

AWT – 490 vpd

85%ile speed – 60 km/h

Max speed – 113 km/h

20km/h Pace – 41 – 61 km/h

% in Pace – 53.8%

Crash data provided by Main Roads WA from the WA Police record that there has been one reported accident on Cheltondale Drive during the five years 2006 to 2010. The accident was recorded as a single vehicle accident where the vehicle left the road and hit a fence. This accident type is typically the result of 'hoon' activity.

Consultation

The Planning and Sustainability and City Businesses Directorates were consulted in the preparation of this report. The closure of Cheltondale Drive was not supported because of the likely impacts on Emergency and Fire Services.

Comment

In the introduction to Element 2 – Movement Network of Liveable Neighbourhoods the section on 'Key Differences from Conventional Practice' states:

"Liveable Neighbourhoods promotes several major differences from conventional suburban street systems, including the following characteristics:

- *The street system is highly interconnected and is aimed at reducing local travel distances and related emissions and energy use;*
- *Traffic is distributed more evenly through a flatter hierarchy of streets, reducing pressure at major intersections;*
- *Cul-de-sac become less frequent...;"*

Additionally, Liveable Neighbourhoods identifies that in a residential street for a target operating speed of 30kph, the street should have a desirable leg length of 70–80m between slow points, with a slow point being defined as "...a traffic management device that generally reduces speeds to 20kph to 30kph". Additionally, under 'Control of Vehicle Speed in Local Streets', *"Liveable Neighbourhoods sets out several design components to contribute to limiting vehicle speeds on local streets, including:*

- *Pavement width appropriate to traffic volume and parking demand, so traffic is impeded and slowed by parked and opposing vehicles, but capacity is not unduly constrained;*
- *Short lengths between street junctions and/or slow points (tight corners, or traffic-calming devices) to encourage speeds of 30 to 40 km/h or less."*

Administration believes that Cheltondale Drive presents such a low speed environment, with short road lengths between intersections and low vehicle volumes.

The road network in the area is yet to be completed and there are currently three large properties north of Cooper Street and one east of Cheltondale Drive that are still undeveloped. While development of these properties will extend Cheltondale Drive, they will also create linkages that will provide alternate routes of travel. Importantly, Klaraborg Drive when constructed, will provide an alternative to Russell Road for motorists wishing to travel north, east or west; while Susan Road will be disconnected from Gngangara Road and Gngangara Road will be realigned with Whitfords Avenue (**Attachment 3** refers). These changes to the road network will all change the traffic flows in the area.

It is estimated that the cost to construct speed plateaux, as requested in the petition, would be in the order of \$20,000 each, subject to possible additional costs due to road drainage considerations.

To determine any justification and the priority of any traffic management works on Cheltondale Drive, the road was assessed in accordance with the City's Traffic Management Investigation and Intervention Policy (TM Policy), which assesses roads against a range of criteria such as:

- Speed
- Traffic volumes
- Crash history
- Road design and topography
- Vulnerable road users - Pedestrians/Cyclists

However, it should be noted that the TM Policy requires an area under assessment to be 90% developed and occupied. This is to prevent the wasteful and costly installation of traffic treatments that may ultimately be inappropriate or that compromise the function of the road when the area is fully developed. As identified in this report, this precinct of Madeley is still subject to considerable change.

Currently, neighbourhood connectors, Cooper Street and Regency Avenue intersect at a 'T' junction with Regency Avenue as the terminating leg. Administration agrees that for traffic travelling east on Cooper Street there are currently no visual cues at the intersection to attract road users to stay on the neighbourhood connector network, which results in road users staying on Cooper Street to the end, and then turning right onto Cheltondale Drive. However, while the current intersection of Cooper Street and Cheltondale Drive is a right angle bend, when Cheltondale Drive is extended north, this intersection with Cooper Street will become a 'T' junction, with Cooper Street being the terminating leg and drivers being required to 'Give Way' to traffic on Cheltondale Drive.

Assessing the current road layout, the TM Policy requires a score of > 60 to qualify for traffic management treatments, while scores between 30 and 60 points warrant increased attention to law enforcement and driver education. The assessment for Cheltondale Drive achieved a score of 42 based primarily on the measured speed of vehicles. This acknowledges that there are traffic issues on the street, but that at present Police enforcement and community education are the most appropriate measure of dealing with them.

The City's 10-Year Capital Works Program (CWP) allocates approximately \$600,000 of municipal funds to traffic treatments each year. While speeding does occur on Cheltondale Drive, as it does throughout the City, Administration considers the TM Policy and the resulting score indicate that an early construction of traffic management treatments, as requested in the petition, at this location cannot be justified ahead of other projects already listed in the CWP.

However, it is recognised that some other measures can be implemented as part of the future road network construction that would reduce the likelihood of ongoing traffic issues with Cheltondale Drive. To provide the visual clues to reinforce the road hierarchy, Administration considers that when the remaining properties to the north of Cooper Street are redeveloped that:

- Cooper Street east of Regency Avenue should be narrowed to a 6.0m wide local access street and treated to ensure a low speed environment;
- The Cooper Street/Regency Avenue intersection should be reconstructed to encourage users to remain on the neighbourhood connector network; and
- The Cooper Street/Cheltondale Drive intersection should be treated to meet Liveable neighbourhood's definition of a slow point.

As the junction of Cooper Street and Regency Avenue has been upgraded as a result of development of land on the south side of the road, it is considered that it may not be possible to achieve the modifications of the junction wholly through developer contributions. It is therefore suggested that this project should be included in the City's 10-Year CWP. It is estimated that the reconstruction of the Cooper Street/Regency Avenue intersection would cost in the order of \$100,000.

Statutory Compliance

Nil

Strategic Implications

The proposal accords with the following Outcome Objective of the City's Strategic Plan 2006 – 2021:

- “2 *Social*
2.4 *Improve community safety*”

Policy Implications

The City's Traffic Management Investigation and Implementation Policy is applicable to this petition.

Financial Implications

Nil in the 2011/2012 annual budget. However, allocation of funds in the order of \$100,000 would need consideration in the City's 10-Year CWP.

Voting Requirements

Simple Majority

Recommendation

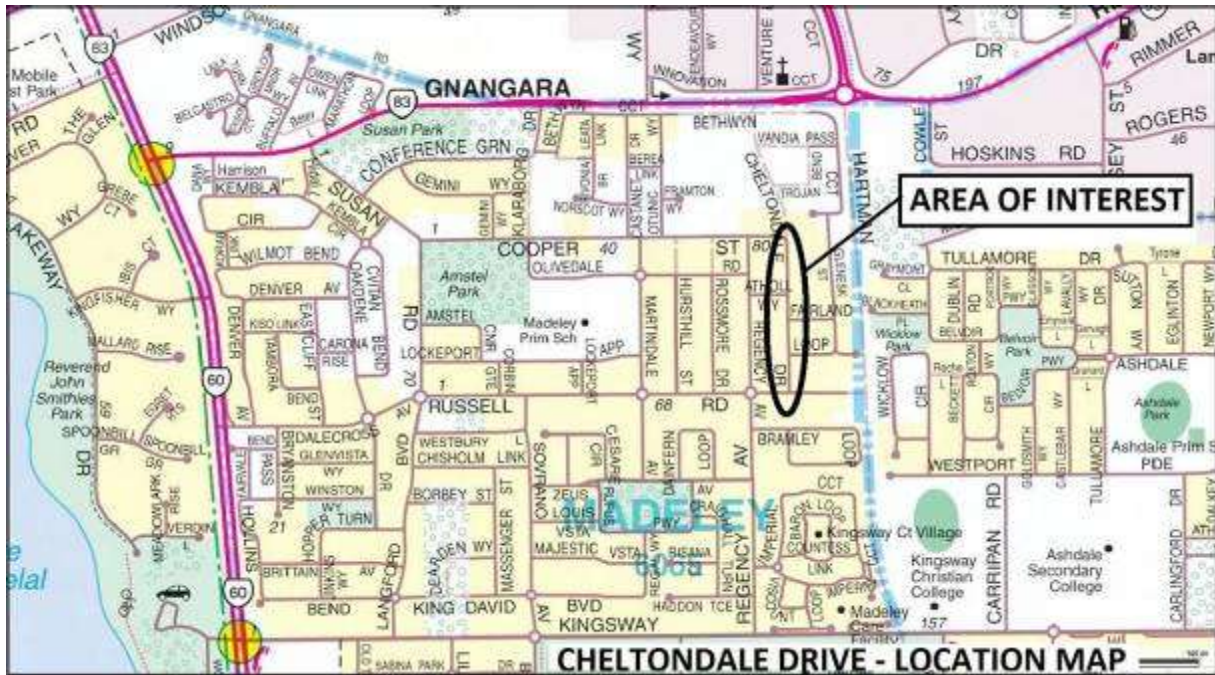
That Council:-

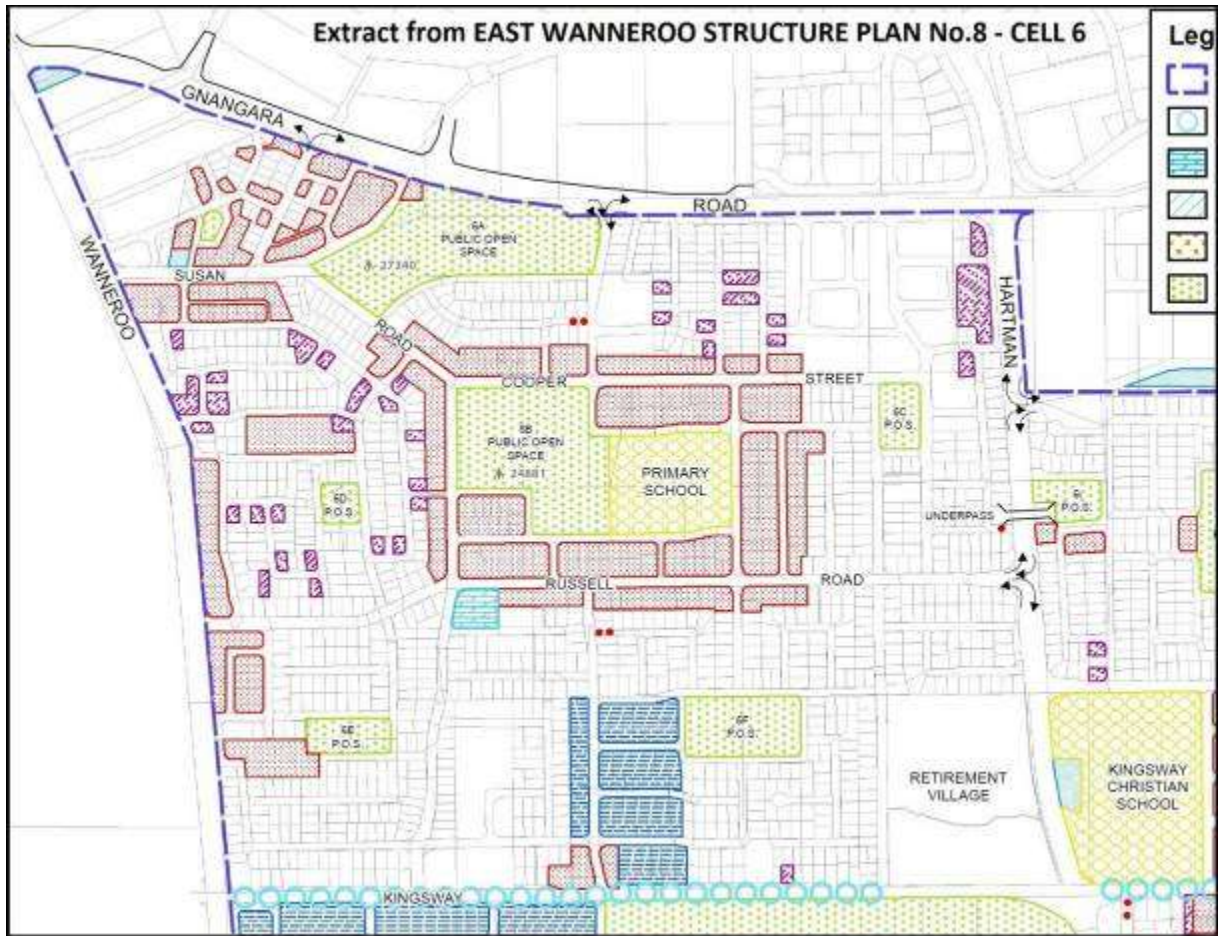
1. **DOES NOT SUPPORT** the construction of traffic treatments along Cheltondale Drive, Madeley but **NOTES** that Administration will continue to monitor the street as the area develops;

2. **LISTS** for consideration \$100,000 in the City's 10-Year Capital Works Program to reconstruct the Cooper Street/Regency Avenue intersection to encourage road users to remain on the neighbourhood connector road network;
3. **NOTES** that Administration will give consideration to conditioning future developments along Cooper Road and Cheltondale Drive:
 - a) To develop Cooper Street, between Regency Avenue and Cheltondale Drive, as a low speed 6m wide access street; and
 - b) To develop the Cooper Street/Cheltondale Drive intersection as a slow point in accord with Liveable Neighbourhoods;
4. **REQUESTS** the WA Police to undertake additional speed enforcement of vehicles using Cheltondale Drive; and
5. **ADVISES** the petition organiser of Council's decision.

Attachments:

1. *Cheltondale Drive, Madeley - Location Map* 11/119472
2. *ASP8_Cell6 -Extract* 11/120503
3. *Cheltondale Drive, Madeley - Aerial View* 11/127990







3.19 PT03-09/11 - Request for Sound Barrier Wall - Lukin Drive/RAAFA Estate, Merriwa

File Ref: 3000 – 11/120660
 Responsible Officer: Director Infrastructure
 Disclosure of Interest: Nil
 Attachments: 2

Issue

To consider a petition requesting the installation of a sound barrier wall along the boundary of the RAAFA Estate and Lukin Drive Merriwa.

Background

Council received petition PT03-09/11 at its meeting of 20 September 2011. The petition reads:

“We, the undersigned, all being Residents of the City of Wanneroo do formally request Council’s consideration: Sound barrier wall – Lukin Drive. End of RAAFA Estate.”

However, the cover letter to the petition reads *“We RAAFA Merriwa Estate Residents the undersigned call on the City of Wanneroo to add to next financial Budget the costs of erecting a Sound Barrier Wall bordering our property on Lukin Drive”*.

The petition was signed by 105 residents of the RAAFA Estate, 19 Hughie Edwards Drive, Merriwa.

Detail

Lukin Drive is a District Distributor road in the City’s Functional Road Hierarchy and runs east/west. Currently, Lukin Drive is constructed as a single carriageway between Marmion Avenue and Connolly Drive with 3.7m wide traffic lanes and 1.2m wide bicycle lanes and will ultimately link Mitchell Freeway and Marmion Avenue. Should traffic volumes justify the construction, it will become a dual carriageway, with the second carriageway constructed to the south of the already constructed carriageway.

The RAAFA Estate is bounded by Hughie Edwards Drive to the south, Baltimore Parade to the east, Lukin Drive to the north and Marmion Avenue to the west.

Due to grade differences, Lukin Drive overlooks the Estate and is elevated above the rear fence of the Estate.

To assist Administration with its investigation of this request, traffic surveys were conducted at two locations along Lukin Drive, commencing Monday, 7 November 2011.

Traffic Data

Definitions:

AWT	Average Weekday Traffic
vpd	vehicles per day
85%ile speed	the speed at or below which 85% of vehicles are travelling.
20km/h Pace	the 20km/h speed range in which the majority of vehicles are travelling
% in Pace	percentage of total vehicles travelling within the 20km/h Pace range

East of Marmion Avenue

AWT	4813vpd
85%ile speed	67km/h
Max Speed	125km/h
20km/h Pace	49--69km/h
% in Pace	76.4%

West of Baltimore Parade

AWT	3631vpd
85%ile speed	76km/h
Max Speed	158km/h
20km/h Pace	57--77km/h
% in Pace	64.1%

Whilst the long term projected traffic volumes on Lukin Drive are such that a second carriageway may not be warranted based on traffic volumes alone, the construction of a second carriageway would be located between the existing and the RAAFA Estate boundary.

A location map showing the subject site is shown in **Attachment 1** and an aerial view of the site is shown in **Attachment 2**.

Consultation

No consultation has been undertaken in the preparation of this report.

Comment

The Western Australian Planning Commission (WAPC) has developed a policy document in relation to noise from transportation corridors entitled *State Planning Policy 5.4 Road and Rail Transport Noise and Freight Consideration in Land Use Planning* (hereafter referred to as the Policy). The objectives of the Policy are to:

- “• *Protect people from unreasonable levels of transport noise by establishing a standardised set of criteria to be used in the assessment of proposals;*
- *Protect major transport corridors and freight operations from incompatible urban encroachment;*
- *Encourage best practice design and construction standards for new development proposals and new or redevelopment transport infrastructure proposals;*
- *Facilitate the development and operation of an efficient freight network; and*
- *Facilitate the strategic co-location of freight handling facilities.”*

With regard to road traffic noise, the Policy applies only to major roads, which are defined as one of the following:

- “• *State roads and national highways;*
- *Urban primary distributors, as described on the metropolitan functional road hierarchy network;*
- *Other urban roads carrying more than 20,000 vehicles per day;*
- *Other rural primary distributors carrying more than 5,000 vehicles per day; and*
- *Primary freight roads in the Perth metropolitan region, southwest region or statewide.”*

The requirements of the Policy do not apply to Lukin Drive. It is a District Distributor road and the traffic volumes are less than those required by the Policy and are not predicted to reach these levels. At this stage Administration is not proposing to conduct a Transport Noise Assessment unless a major upgrade occurs. Accordingly Administration does not support the construction of a sound barrier wall along Lukin Drive.

Should any future Transport Noise Assessment determine that noise mitigation measures are deemed to be warranted along Lukin Drive, a landscaped earth bund would then be a more appropriate solution instead of a noise barrier wall. The "walling off" of an arterial road such as Lukin Drive is no longer supported as it prevents passive surveillance leading to anti social problems.

Whilst a noise bund would be individually designed to suit the local conditions, subject to a detailed assessment and design, the cost of a typical earth bund and landscape planting along the Lukin Drive property boundary of the RAAFA Estate is estimated to be in the order of \$100,000.

Statutory Compliance

Nil

Strategic Implications

The proposal accords with the following Outcome Objective of the City's Strategic Plan 2006 – 2021:

"1 Environment

1.4 Improve the quality of the built environment"

Policy Implications

Nil

Financial Implications

Since no further assessment or works have been supported, there are no financial implications.

Voting Requirements

Simple Majority

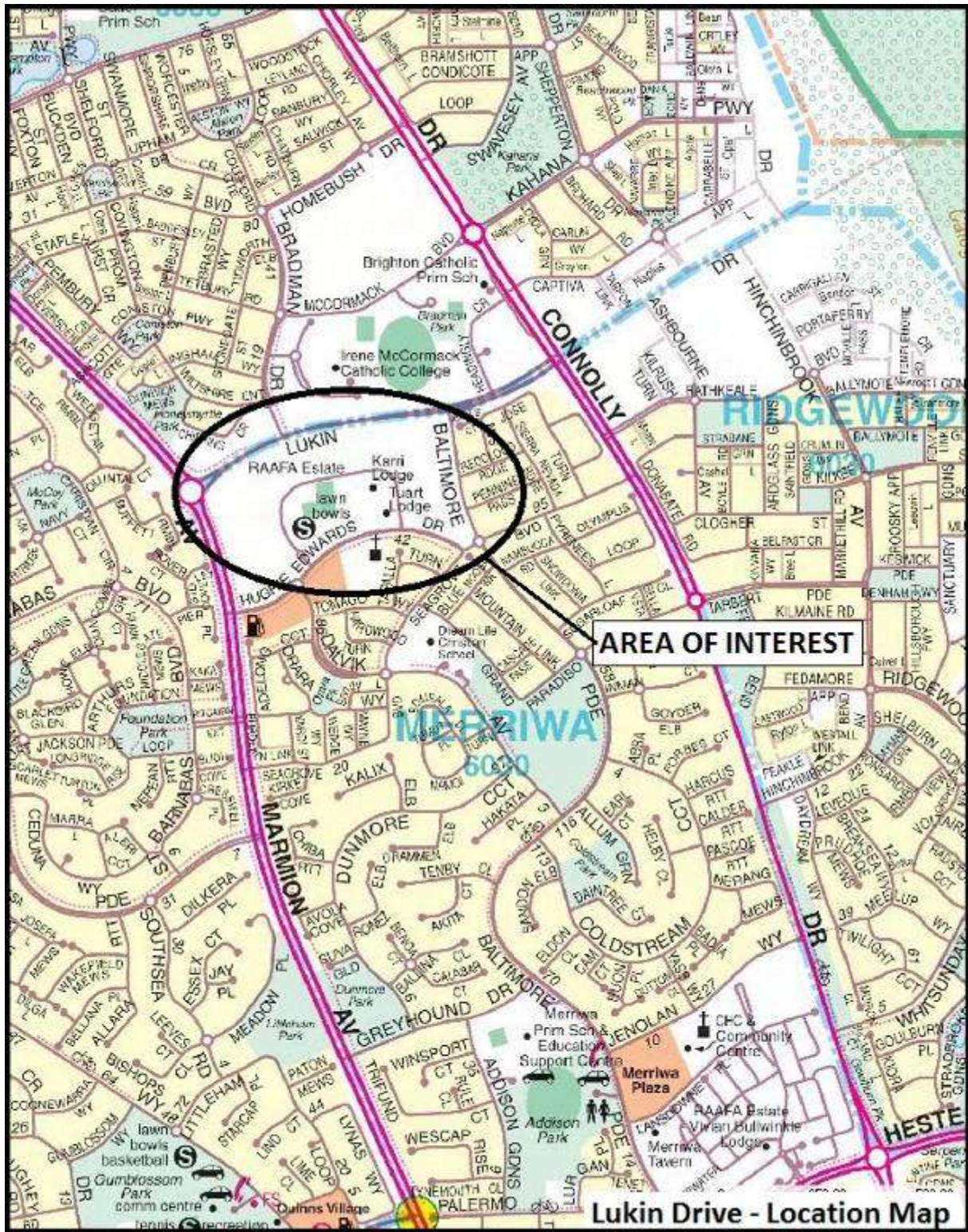
Recommendation

That Council:-

- 1. DOES NOT AGREE to the request for the construction of a sound barrier wall between Lukin Drive and the RAAFA Estate, Merriwa; and**
- 2. ADVISES the petition organiser of Council's decision.**

Attachments:

- 1. Lukin Drive, Merriwa - Location Map 11/128397*
- 2. Lukin Drive, Merriwa - Aerial View 11/128421*



3.20 PT04-09/11 - Wanneroo Road - Request for Dualling of Carriageway Between Joondalup Drive and Menchetti Road

File Ref: 3000 – 11/121764
Responsible Officer: Director Infrastructure
Disclosure of Interest: Nil
Attachments: 1

Issue

To consider a petition requesting the City to lobby State Government Ministers requesting the dualling of Wanneroo Road, between Joondalup Drive and Menchetti Road, Neerabup.

Background

Council received Petition PT04-09/11 at its meeting of 20 September 2011. The petition reads:

“We, the undersigned, all being Residents of the City of Wanneroo do formally request Council’s consideration: write to the Premier Colin Barnett and Troy Buswell Minister for Transport and request the dualling of Wanneroo Road between Joondalup Drive Carramar and Menchetti Road Neerabup be included in the 2012-2013 State Budget due to the high and ongoing fatalities.”

The petition is signed by 466 signatories, although many are from outside the City’s boundaries.

Detail

As part of the City’s ongoing advocacy for the upgrade of Wanneroo Road, the Mayor wrote to the Minister for Transport regarding this issue most recently on 16 June 2011. A response (**Refer Attachment 1**) has been received from the Minister’s office acknowledging the need for the construction of a dual carriageway in Wanneroo Road from Joondalup Drive to Hall Road. The response also advises that whilst funding was not allocated for the roadworks in the 2011/12 State Budget, Main Roads WA have commenced with project development work, a ground survey and a preliminary design, to enable an early start to the project when funding is confirmed and Main Roads WA will continue to reassess the project’s priority in the future budgetary processes.

Consultation

Nil

Comment

Administration supports the dualling of Wanneroo Road, between Joondalup Drive and Hall Road, to support the ongoing development of the north west metropolitan corridor.

Dualling and upgrading works on Wanneroo Road would be to the current road design standards and it would be expected that this would improve road safety along this road section. The additional capacity created by the upgrade would accommodate the additional traffic generated by land development until the traffic volume increase further to warrant the extension of the Mitchell Freeway.

As part of the review of the Wanneroo Road/Flynn Drive intersection improvement works, further advice was sought from the Minister for Transport on the program for the dualling of Wanneroo Road. The following advice was received from the Minister's office on 9 December 2011:

"Further to Minister Buswell's letter, I can confirm that there is no funding available in the current budget and Four Year Forward Estimates period for the upgrading of Wanneroo Road to a dual carriageway standard."

Statutory Compliance

Nil

Strategic Implications

The proposal accords with the following Outcome Objective of the City's Strategic Plan 2006 – 2021:

2 *Social*

2.4 *Improve community safety*

3 *Economic*

3.3 *Provision of timely and coordinated regional infrastructure*

Policy Implications

Nil

Financial Implications

The dualling of Wanneroo Road from Joondalup Drive to Hall Road is the responsibility of the State Government and does not require the City to make any funding provisions.

Voting Requirements

Simple Majority

Recommendation

That Council:-

- 1. NOTES that the Mayor has already written to the Minister for Transport on this issue and received a response indicating that no funding is available in the current budget and Four Year Forward Estimates period for the upgrading of Wanneroo Road to a dual carriageway standard;**
- 2. REQUESTS the Mayor write to the Premier seeking funding for the dual carriageway of Wanneroo Road between Joondalup Drive and Menchetti Road as a high priority in the State Government's Roadworks Capital Budget; and**
- 3. ADVISES the petition organiser of Council's decision and the Minister for Transport's responses.**

Attachments:

1. *REQUEST FUNDING - DUAL CARRIAGEWAY WANNEROO ROAD FROM JOONDALUP DRIVE TO HALL ROAD*

11/84040



COW
Thurs 21/07/11

Minister for Transport; Housing

Our Ref : 30-19337

Mayor J Kelly
City of Wanneroo
Locked Bag 1, Wanneroo Road
WANNEROO WA 6946

Dear Cr Kelly

Thank you for your letter of 16 June 2011 to the Minister for Transport, Hon Troy Buswell MLA, regarding funding for the construction of the duplication of Wanneroo Road from Joondalup Drive to Hall Road. The Minister has asked that I respond.

The need for the construction of a dual carriageway along this section of Wanneroo Road is acknowledged. However, due to other priority infrastructure needs, it was not possible to accommodate this project as part of the 2011/12 budgetary process. As you would appreciate, funding for roads is limited and it is essential that the monies that are available be directed to those areas providing greatest community benefit.

Notwithstanding the above, based on concept plans that were prepared in 2000, the latest preliminary estimate of cost for the further 5.4 km extension of the dual carriageway on Wanneroo Road from Joondalup Drive to Hall Road is \$45 million (2010 dollars). Further investigation and development work needs to be carried out to enable a more accurate estimate of cost to be prepared.

To enable an early start to construction when funds are confirmed, Main Roads is proceeding with project development work for the dual carriageway. A ground survey was commissioned last year and Main Roads has recently completed a preliminary design. Any further works beyond preliminary design is subject to the availability of funds.

You are assured that Main Roads will continue to reassess the project's priority in future budgetary processes.

I trust the information provided has clarified the situation.

Yours sincerely

Michael Buba
PRINCIPAL POLICY ADVISER

18 JUL 2011

Level 12, Dumas House, 2 Havelock Street, West Perth Western Australia 6005
Telephone: +61 8 9213 6900 Facsimile: +61 8 9213 6901 Email: Minister.Buswell@dpc.wa.gov.au

City of Wanneroo IM 21/7/2011

3.21 2011/2012 Pathways Program Budget Variation

File Ref: 6444 – 12/4860
 Responsible Officer: Director Infrastructure
 Disclosure of Interest: Nil
 Attachments: Nil

Issue

To consider an amendment to the approved 2011/2012 Capital Works Budget Pathways Program, including reallocation of funds to meet a funding shortfall for three approved projects.

Background

Following detailed design and cost estimates for the installation of pathways on Marmion Avenue, Quinns Rocks; Wanneroo Road, Madeley, and Rangeview Road, Landsdale, issues have arisen that were not identified/costed within the original scope of works.

The City's 2011/2012 Capital Works Program includes these three pathway projects, one of which is supported by grant funding through the Perth Bike Network Program, with existing funding as identified below:

Project	Description	Approved Budget	Grant Funds	Municipal Funds
PR-2222	Marmion Avenue, Quinns Rocks – Construct shared path Paton Mews to Meadow Place	\$76,500	\$42,500	\$34,000
PR-2224	Wanneroo Road, Madeley – Construct 1.5m path east side, Whitfords Avenue to Gnangara Road	\$45,000		\$45,000
PR-2232	Rangeview Road, Landsdale – Construct shared path Kingsway to 280m south of Kingsway	\$60,000		\$60,000
Totals		\$181,500	\$42,500	\$139,000

A review of the necessary funding to complete the revised scope of works has been undertaken.

This report considers the shortfall in funding to complete the revised scope of works associated with the proposed implementation of the three pathway projects identified in the table above, and seeks reallocation of funds within the 2011/2012 Capital Works Budget to accommodate the additional funding requirements.

Detail

The works identified in addition to the original scope of works for each project is as follows:

PR-2222 Marmion Avenue, Quinns Rocks:

- Sealing off an unused underpass entrance at one end
- Filling of entrance to underpass to verge level
- Services – working in proximity to High Pressure Gas Main

PR-2224 Wanneroo Road, Madeley:

- Relocation of obstructions – bus shelter and signs
- Additional traffic management due to proximity to two sets of traffic signals
- Services – working in proximity to High Pressure Gas Main

PR-2232 Rangeview Road, Landsdale:

- Tree removal, in part due to tree species and invasive nature of roots
- Services relocation and lowering of Telstra pillar, manhole and Sewer lid
- Recently installed Public Transport Authority bus hard stand area to be replaced
- Additional earthworks and drainage due to requirement for new kerbing

The additional scope of work as identified above has resulted in an overall budget shortfall estimated at \$44,500. It is proposed that this funding shortfall be accommodated through reallocating unexpended funds from the following projects:

- PR-2057 Anchorage Drive, Mindarie – Rearrange lane width to provide 1.2m wide bike lanes;
- PR-2229 Marcon Street, Two Rocks – Shared path, Two Rocks Road to Jordan Street; and,
- PR-2221 Various Locations – Install bike lane and shared path signage, and end of trip facilities.

It is noted that works associated with PR-2057 and PR-2259 have been completed, with budget transfers being accommodated through surplus funds. PR-2221 has not progressed as the City's grant funding application for this particular project was not successful.

Consultation

No consultation was undertaken in the preparation of this report.

Comment

The increased scope of work identified in relation to the construction of the three pathway projects is considered essential to achieve satisfactory levels of service for both pedestrian functionality and safety in the area.

Additional funding required to complete these projects is recommended to be sourced from two projects (PR-2057 and PR-2229) that have been completed and have surplus funds available, and PR-2221 for which a total of \$30,000 in municipal funding was approved by Council as part of the 2011/2012 Capital Works Budget but has not progressed given the City's grant funding application for this particular project was not successful.

Statutory Compliance

Budget variation is in compliance with Part 6 – Financial Management of Local Government Act and Part 2 – General Financial Management of the Local Government (Financial Management) Regulations 1996.

Strategic Implications

The proposal accords with the following Outcome Objective of the City's Strategic Plan 2006 – 2021:

“4 Governance

4.4 Maintain long-term financial stability”

Policy Implications

Nil

Financial Implications

The estimated additional proposed cost to construct each of the three pathway projects as well as identified savings from other projects approved by Council in the 2011/2012 Capital Works Budget are summarised below:

Project	Description	Municipal Funding Available	Municipal Funding Required
PR-2057	Anchorage Drive, Mindarie – Rearrange lane width to provide 1.2m bike lane	\$16,950	
PR-2221	Various locations – Install a bike lane and shared path signage, and end of trip facilities.	\$22,625	
PR-2229	Marcon Street, Two Rocks – Shared path Two Rocks Road to Jordan Street	\$4,925	
PR-2222	Marmion Avenue, Quinns Rocks – Construct shared path Paton Mews to Meadow Place		\$8,500
PR-2224	Wanneroo Road, Madeley – Construct 1.5m path east side, Whitfords Avenue to Gnangara Road		\$19,000
PR-2232	Rangeview Road, Landsdale – Construct shared path Kingsway to 280m south of Kingsway		\$17,000
Totals		\$44,500	\$44,500

The 2011/2012 Budget will need to be amended to reflect the reallocation of funds to accommodate the shortfall in funding in order to carry out these three pathways projects.

The balance of funding remaining in PR-2221 (ie: \$7,375) will be expended on works such as bicycle parking facilities at the Hainsworth Community Centre.

Voting Requirements

Simple Majority

Recommendation

That Council:-

1. **AGREES to continue with the construction of the Marmion Avenue, Quinns Rocks, Wanneroo Road, Madeley, and Rangeview Road, Landsdale, pathway projects, noting budget increases in order to complete works for each project is required; and**

2. **NOTES** the following budget variations to accommodate the shortfall in funding for the construction of the Marmion Avenue, Quinns Rocks, Wanneroo Road, Madeley, and Rangeview Road, Landsdale, pathway projects as follows:

Project No	From	To	Description
PR-2057	\$16,950		Anchorage Drive, Mindarie – Rearrange lane width to provide 1.2m bike lane
PR-2221	\$22,625		Various locations – Install a bike lane and shared path signage, and end of trip facilities.
PR-2229	\$4,925		Marcon Street, Two Rocks – Shared path Two Rocks Road to Jordan Street
PR-2222		\$8,500	Marmion Avenue, Quinns Rocks – Construct shared path Paton Mews to Meadow Place
PR-2224		\$19,000	Wanneroo Road, Madeley – Construct 1.5m path east side, Whitfords Avenue to Gnangara Road
PR-2232		\$17,000	Rangeview Road, Landsdale – Construct shared path Kingsway to 280m south of Kingsway
	\$44,500	\$44,500	

Attachments: Nil

3.22 Landsdale - Review of Traffic Flow Post Mirrabooka Avenue Extension

File Ref: 3000 – 11/139550
Responsible Officer: Director Infrastructure
Disclosure of Interest: Nil
Attachments: 3

Issue

To consider the impact of the Mirrabooka Avenue extension, from Hepburn Avenue to Gnangara Road, on vehicle traffic movements within the locality of Landsdale.

Background

The extension to Mirrabooka Avenue was opened to the public in March 2011. Since then Administration has undertaken a review of traffic flows to determine the impact of the extension on the existing Landsdale local distributor roads.

This report should be read in conjunction with Report **IN08-08/11**, which examines the impact of the Mirrabooka Avenue extension on traffic flows through Darch, and Report **IN05-10/10** which examines the impact of the Hartman Drive extension on traffic flows through Madeley.

Detail

The Perth metropolitan road network is based on a Functional Road Hierarchy (FRH) which defines the functions required of the road network at each level. It also provides criteria to describe each road functional type. The Perth FRH classification (**Attachment 1** refers) was developed by Main Roads WA (MRWA) in consultation with Local Government in 1999. The later Liveable Neighbourhoods planning guide proposes an alternative set of criteria (**Attachment 2** refers).

The FRH classifies Mirrabooka Avenue as a “District Distributor A” while the majority of the remaining roads listed in the table below constitute the internal Local Distributor Road (Neighbourhood Connector) network for Landsdale.

Mirrabooka Avenue has a posted speed limit of 70km/h, Kingsway and Landsdale Road have a posted speed limit of 60km/h, while the other local distributor roads operate under the default “built-up area” speed limit of 50km/h.

Commencing eight weeks after the opening of the Mirrabooka Avenue extension to the public, a series of traffic surveys were undertaken on the distributor road network for Landsdale. Using the data collected, each location was assessed using the City’s Traffic Management Investigation and Intervention Policy (TMIIIP) to determine if traffic management remedial works are required.

The TMIIIP assessment considers a range of criteria including:

- Speed
- Traffic volume
- Crash history
- Road design and topography
- Vulnerable road users – pedestrian/cyclists

and requires an area to be 90% developed and occupied, with a score of >60 to qualify for traffic management treatments, while scores between 30 and 60 points indicate a need for increased attention to law enforcement and driver education.

A list of survey sites and results are listed below:

AWT – Average weekday traffic volume in vehicles per day.

85%ile Speed - The speed in kilometres/hour at or below which 85% of vehicles are travelling.

No.	Location	AWT		85%ile Speed		TMIP Score
		Pre	Post	Pre	Post	
1	Mirrabooka Av – N of Hepburn Av		5945		70	
2	Mirrabooka Av – S of Kingsway		7925		80	
3	Mirrabooka Av – N of Kingsway		6444		75	
4	Mirrabooka Av – N of Furniss Rd		4238		75	
5	Coverdale Prom – S of Gnangara Rd	742	616	49	55	11
6	Priest Rd – N of Warradale Dr	597	366	40	54	86
7	Warradale Dr – N of The Broadview	632	676	54	54	13
8	Southmead Tce – E of Mirrabooka Av	1276	2091	53	51	7
9	Southmead Tce – N of The Broadview	2062	1441	54	58	15
10	Queensway Rd – E of The Broadview	2676	1718	71	57	73
11	The Broadview – W of Abbotswood Dr	2661	2090	43	56	29
12	The Broadview – S of Queensway Rd	3596	2766	52	56	29
13	Heathfield Dr – E of Mirrabooka Av	2029	2969	49	59	28
14	Abbotswood Dr – S of The Broadview	5028	3193	48	61	119
15	Abbotswood Dr – N of Kingsway	6102	3161	44	58	107
16	Rayner Dr – N of Abbotswood Dr	692	423	49	52	13
17	Kingsway – E of Mirrabooka Av	4748	4108	67	60	21
18	Kingsway – E of Abbotswood Dr	3042	2445	62	56	56
19	Rangeview Rd – N of Landsdale Rd	5781	3776	47	68	52
20	Rangeview Rd – S of Landsdale Rd	6961	3988	52	60	38
21	Landsdale Rd – E of Mirrabooka Av		1428	67	67	37
22	Landsdale Rd – E of Rangeview Rd	1288	1406	73	70	45

Refer to **Attachment 3** for a map of counter locations.

Consultation

No consultation was undertaken in the preparation of this report.

Comment

Overall, an analysis of the traffic survey results listed above shows that there has been a significant reduction in traffic volumes on north-south distributor roads such as Abbotswood Drive and Rangeview Road and a corresponding increase on the east-west local distributors of Southmead Terrace and Heathfield Drive. This was expected, as this traffic can now use Mirrabooka Avenue to access the district distributor network.

The roads which have been assessed with a TMIP score > 60 are Priest Road, Queensway Road and Abbotswood Drive.

Since these traffic counts were taken the Ocean Reef Road extension to Gnangara Road has been opened to the public and Priest Road is no longer the primary northern access route into the subdivision. Administration will continue to monitor Priest Road and Coverdale Promenade to ensure they are operating as intended but does not recommend any additional action at this time.

With regard to Queensway Road, ongoing subdivisional work associated with the development of East Landsdale will change the character of this road over the coming years and Administration does not recommend any additional action at this time.

Council has previously considered the issue of traffic treatments on Abbotswood Drive (**IN09-04/06** refers) and resolved in part as follows:

1. *“AGREES that Abbotswood Drive, Landsdale is not suitable for the immediate installation of physical traffic management treatments due to existing physical constraints and the adverse effect such treatments would have on the legitimate vehicular traffic accessing Landsdale.*
2. *REQUESTS Main Roads WA to install a painted white centreline along Abbotswood Drive, Landsdale as shown on City of Wanneroo Drawing T2114-2-0, Attachment 3.”*

This provision of a separation line along the length of Abbotswood Drive has been ineffective in reducing speed. Also, the reduction in traffic volumes since the extension of Mirrabooka Avenue has allowed the operating speed of the remaining traffic to increase. The narrow road reserve, frequent crossovers, topology, the function of the road, and a need to accommodate a bus route, made the development of a traffic management plan based on traditional traffic calming treatments difficult in the past. Administration now considers that the use of speed cushions may be a viable option to reduce the speeding problems.

While the northern end of Rangeview Road has yet to be developed, Administration considers that Rangeview Road, between Kingsway and Landsdale Road, be treated with speed cushions similar to Abbotswood Drive as an option to reduce the high speeds.

When considering Item No **IN08-08/11** into the impact of the Mirrabooka Avenue extension on the Darch road networks Council resolved as follows:

- “3 *REQUIRES Administration to consult with the community to determine the level of support for a reduction in the speed limit on, Driver Road, Furniss Road Kingsway and Landsdale Road from 60km/h to 50km/h, and present the results to Council within the next 12 months;”*

When this consultation process has been completed Council will be better informed as to what work if any will be required along Kingsway and Landsdale Road to achieve the desired outcome.

Statutory Compliance

Nil

Strategic Implications

The proposal accords with the following Outcome Objective of the City's Strategic Plan 2006 – 2021:

- “2 *Social*
2.5 *Improve transport options and connections”*

Policy Implications

The City's Traffic Management Investigation and Intervention Policy is applicable to this report.

Financial Implications

Nil

Voting Requirements

Simple Majority

Recommendation

That Council:-

- 1. NOTES that Administration will develop a traffic management plan for Abbotswood Drive and report the results of community consultation based on that plan to Council within the next 12 months; and**
- 2. NOTES that Administration will develop a traffic management plan for Rangeview Road Drive and report the results of community consultation based on that plan to Council within the next 12 months.**

Attachments:

- | | |
|---|----------|
| 1. <i>Functional Road Hierarchy Criteria</i> | 11/86761 |
| 2. <i>Liveable Neighbourhoods - Road Hierarchy Criteria</i> | 11/86764 |
| 3. <i>Landsdale Traffic Count Locations</i> | 12/1970 |

	CRITERIA AND ACTIVITY	ROAD TYPES				
		PRIMARY DISTRIBUTOR	DISTRICT DISTRIBUTOR CATEGORY "A"	DISTRICT DISTRIBUTOR CATEGORY "B"	LOCAL DISTRIBUTOR	ACCESS ROAD
1	Predominant Activity	Major networks eg freeways	Important network	Less important network	Minor network	Limited access to traffic. Forms part of local distribution network
2	Intersections	Controlled with appropriate measures eg grade separation, high speed traffic management measures	Controlled with appropriate measures Eg traffic signals	Controlled with appropriate Local Area Traffic Management	Controlled with minor Local Area Traffic Management	Self controlling with minor measures
3	Indicative Traffic Volume (except semi-rural areas)	Above 15 000 vehicles per day	Above 8000 vehicles per day	Above 6000 vehicles per day	Maximum desirable volume 6000 vehicles per day	Maximum desirable volume 3000 vehicles per day
4	Frontage Access Allowed	None on Controlled Access Hwys Limited on other routes	Prefer not to have residential access and limited commercial Generally via service roads	Residential and commercial access due to its historic status Prefer to limit when and where possible	Yes, except at intersections where side entry is preferred and traffic signals are involved	Yes
5	Pedestrians Allowed	Preferably none at grade Crossing should be controlled	With positive measures for control and safety Eg pedestrian signals	With appropriate measures for control and safety Eg median/islands refuges	With minor safety measures	Yes
6	Recommended Operating Speed	60 – 110 km/h (depending on design characteristics)	60 – 70 km/h	60 km/h	60 km/h	40 – 60 km/h (desired speed)
7	Buses Allowed	Yes	Yes	Yes	Yes	If required
8	Parking Allowed	No	Generally no Clearways where necessary	Not preferred Clearways where necessary	Yes	Yes
9	Truck Routes	Yes	Yes	Yes	Only to service properties	Only to service properties
10	Responsibility	MRWA	Local Government	Local Government	Local Government	Local Government

Functional Road Hierarchy Criteria

Liveable Neighbourhoods a Western Australian Government sustainable cities initiative

Element 2 - Movement network
Table 3: Function and characteristics of arterial routes

Route type and function	Route characteristics	Route name	Max speed limit (km/hr)	Indicative volume range* (vehicles per day)	Indicative street reserve width (metres)**	Indicative road pavement width (metres)
Primary distributors Form the regional grid of MRWA traffic routes, including highways, and catering for inter- and intra-regional traffic. Major truck routes.	Should be designed to be fronted by development and connected with service roads wherever possible. Usually median divided.	Six lane Primary distributor	80	50 000	Determined by Main Roads WA	
	Intersections limited and often signal-controlled.	Four lane Primary distributor	80	35 000		
Integrator arterials Form a finer grain of routes than the primary distributors, with frequent connections to local streets. Low percentage of trucks. Usually bus routes. On-street bike lanes and separate dual-use paths are usually required.	Four lane and two lane arterial road types. Integrators outside centres typically have service roads and development frontage to support a mix of uses.	Integrator A (Four lanes, outside centres)	70 or 60	15 000-35 000	50.6 - 52.6	2 x 8.2 including bike lane and 2 x 5.5 service roads with parking.
	Direct vehicle access from adjoining property should be limited where no service roads are provided. On-street parking desirable.	Integrator A - centres (Four lanes, in centres)	80	<25 000	35.6	2 x 10.7 in centres including combined on-street parking and bike lane.
	Integrators through centres typically will have at least one clear travel lane in each direction, and a parking and/or manoeuvring lane. Volumes above 15 000 vehicles per day need detailed design to manage traffic at intersections, facilitate bus movement and deal with parking and access.	Integrator B (Two lanes, outside centres)	60	7000-15 000 15 000-20 000	29.2	2 x 7.5 including on-street parking and bike lane. 2 x 7.5 including bike lane. Parking requires special consideration, or service roads may be needed.
		Integrator B - centres (Two lanes)	40-50	15 000	25.2	2 x 7.5 including on-street parking.

Notes: Wider central medians are to be provided where a route is planned to be used for a future bus transit way or light rail route, or possibly for drainage swales to provide stormwater infiltration.

Where an arterial is constructed in an interim situation at a higher posted speed than that intended as the ultimate speed limit, the horizontal and vertical alignment should suit the higher speed, but the lane widths, planned intersection spacings and deceleration lanes etc should be designed to the ultimate speed standard (tables 5, 5A and 5B).

* All functions of streets need to be considered as well as traffic volume and through traffic needs.

** Refer to figures 12 to 16 for indicative cross-sections. Adequate reserves need to be provided to accommodate space for trees, varied service requirements, or wider shared path requirements, particularly where densities are at 15 dwellings per hectare or greater, and/or mixed-use development is anticipated. Widening for intersections may also be required.

Liveable Neighbourhoods a Western Australian Government sustainable cities initiative

Element 2 - Movement network

Table 4: Function and characteristics of local streets

Street type and function	Street characteristics	Street name	Max design speed/ target operating speed (km/hr)	Indicative volume range* (vehicles per day)	Indicative street reserve width (metres)+	Indicative road pavement width (metres)
Neighbourhood connectors Streets with mostly residential frontage that typically provide the lower order sub-arterial network. These streets service and link neighbourhoods and towns.	A two-lane divided street used for higher neighbourhood connector volumes, or for character, stormwater infiltration swales or safety. These are often special streets and their design needs to have particular regard to context, function and adjacent land uses.	Neighbourhood connector A (Median)	50/50	7000	24.4 **	2 x 7.1 including parking, on-street bike lane, median plus shared path on one verge.
	A two-lane undivided street for lower volume neighbourhood connectors. Typically can accommodate buses, will have at least one shared path and above 3000 vehicles per day separate on-street bike lane.	Neighbourhood connector B (Minor)	50/50	3000	19.4	11.2 including parking, plus shared path on one verge.
Access streets Access streets are to accommodate shared pedestrian, bike and vehicular movements. The requirements of adjacent land uses should be supported through street design.	Varied formats to suit a range of typical conditions in predominantly residential areas at different densities, and with different traffic volumes. An avenue access street (Access street A) with median is particularly suited to incorporation of a drainage swale. Access street B is a wider undivided street for situations with increased parking and/or traffic demand. The most typical and most common residential street will be Access street C – Yield street. Access street D is for short, low volume and low parking demand streets. In addition, a comprehensively designed variant with 3.5 m travel lane with indented parking, is also specified for very low volume short streets.	Access street A – avenue	50/40	3000	20-24	2 x 3.5 (or 2 x 3.6 under some conditions) plus indented parking.
		Access street B – wider street	50/40	3000	16.5-18	9.7
		Access street C – yield or give way street	50/40	3000	15.4-16	7.2 (7-7.5)
		Access street D – narrow yield or give way street	50/30	1000	14.2	5.5-6
			50/20	150	14.2	3.5 (plus parking indents)
Laneways Provide access to the side or rear of lots principally for access to garages.	Laneways may incorporate some services and can provide rubbish collection access. Laneways usually contain some studio units over garages for surveillance. Lane may be widened in parts to create mews courts.	Laneway/rear lane	15	300	6** - 6.4	6** typical 3-6.4 (range)

Liveable Neighbourhoods a Western Australian Government sustainable cities initiative

Element 2 - Movement network

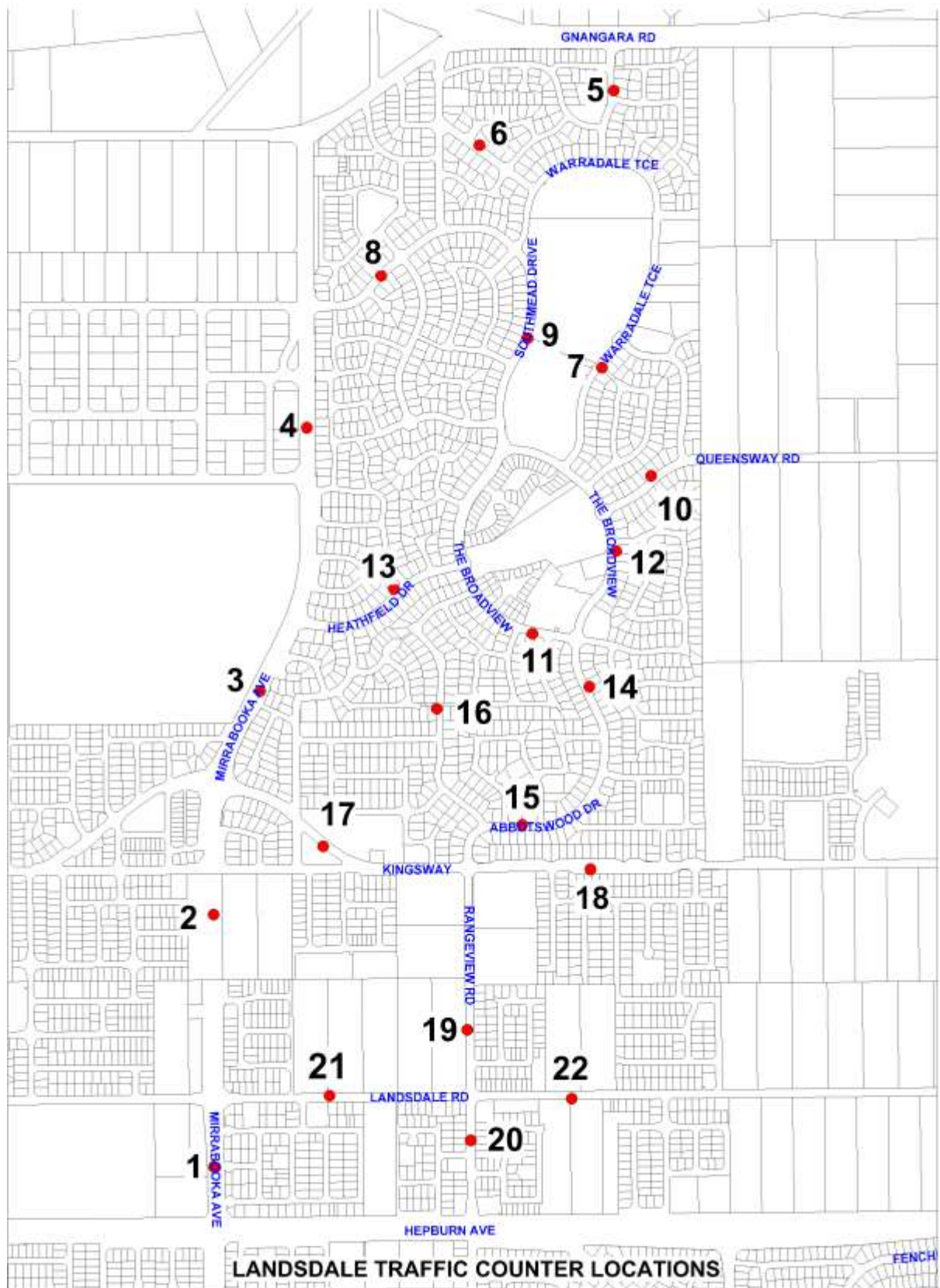
Table 4: Function and characteristics of local streets (continued)

Street type and function	Street characteristics	Street name	Max design speed/ target operating speed (km/hr)	Indicative volume range* (vehicles per day)	Indicative street reserve width (metres)+	Indicative road pavement width (metres)
Small town centre street Suited to small secondary streets in centres.	For use in predominantly pedestrian areas in centres, where the street is short and is specifically designed for pedestrian emphasis, and visual containment is required.	Small town centre street	50/20	300	10-12	5.5 m

Notes: * Refer to figures 17 to 23 for cross-sections. In approving applications for subdivision under Liveable Neighbourhoods, the WAPC will specify both reserve and matching road pavement widths and require the construction of footpaths and the planting of shade trees in accordance with the provisions of the policy. Verge widths will often need to be increased if wider shared paths or trunk services are required. Verge widths on access streets abutting parks may usually be reduced from 4.1 m to 1 m on the park side.

* Function of streets needs to be considered as well as traffic volume and parking.

** Lesser reserves and road pavement widths may be applied over limited lengths where performance can be justified, such as at laneway entrances.



3.23 Perth Bicycle Network Grants 2012/13

File Ref:	3000 – 11/140239
Responsible Officer:	Director Infrastructure
Disclosure of Interest:	Nil
Attachments:	3

Issue

To consider projects submitted for part funding from the Perth Bicycle Network (PBN) Local Government Grant Program 2012/2013.

Background

The Department of Transport has sought applications from local governments for funding of cycling related projects through the PBN Local Government Grant Program 2012/2013. The closing date for applications was 9 December 2011.

Detail

The PBN Local Government Grants Program is a State Government funding program that offers financial assistance through grants to metropolitan local government authorities to develop bicycle network infrastructure.

- \$1M is available in 2012/2013.
- 31 metropolitan local government authorities are the eligible applicants including the City of Mandurah.

Bicycle network infrastructure requires both planning and implementation.

- Network Planning is undertaken through the development and continued updating of the City's Local Bike Plan.
- Network Implementation relates to specific projects identified in the network plan and can be further separated into the project's feasibility, design and construction.

Each of the above components can attract grant funding through this program.

There are four categories that applicants can submit for grant funding in:

1. Network Planning
2. On Road Infrastructure
3. Path Infrastructure
4. Other Infrastructure

Categories 2-4 relate to network implementation and therefore include project development and project delivery.

Important priorities for the grants program are projects that:

- Improve the integration between cycling and public transport
- Encourage students to cycle to school
- Design sections of Principal Shared Path (PSP) network

Consultation

Community consultation was undertaken as part of the development of the Wanneroo Bike Plan 2008.

Comment

The three projects submitted by the City were chosen based on delivering improved integration between cycling and public transport:

- Beach Road connecting to the Mirrabooka Bus Station;
- Joondalup Drive linking to the Currambine Train Station; and
- Wanneroo Road linking to the Whitford Train Station.

The following bicycle network project proposals have been submitted for funding from the Perth Bicycle Network (PBN) Local Government Grant Scheme 2012/2013:

Category 3 – Path Infrastructure

1. *Beach Road, Koondoola* – Upgrade 635m x 1.8m wide footpath to a 2.5m wide cast in-situ concrete shared path on the northern side of Beach Road between Alexander Drive and Mirrabooka Avenue. (Refer **Attachment 1**)

Project Cost \$72,000

Provides a contiguous shared path along the southern boundary of the City between Alexander Drive and Mirrabooka Avenue with links to the Mirrabooka Bus Station.

2. *Joondalup Drive, Tapping* – Construct a 605 x 2.5m wide cast in-situ concrete shared path on the southern side of Joondalup Drive between Wanneroo Road and the Palmerston Crescent underpass. (Refer **Attachment 2**)

Project Cost \$104,000

Provides a contiguous shared path along the southern side of Joondalup Drive from Old Yanchep Road to the boundary with the City of Joondalup and through to the Currambine Train Station and Mitchell Freeway Principle Shared Path.

3. *Wanneroo Road, Madeley* – Construct 270m x 2.5m wide cast in-situ concrete shared path on the eastern side of Wanneroo Road from Wilmot Bend to Gngangara Road. (Refer **Attachment 3**)

Project Cost \$149,000

There are currently no cycling or pedestrian facilities along this section of Wanneroo Road. This project will extend the existing shared path north to Gngangara Road.

Statutory Compliance

Nil

Strategic Implications

The proposal accords with the following Outcome Objective of the City's Strategic Plan 2006 – 2021:

“2 Social

2.5 Improve transport options and connections”

Policy Implications

Nil

Financial Implications

Projects approved for funding as part of the PBN Local Government Grant Program 2012/2013 will require a minimum of 50% contribution from the City towards the overall cost of each project. The most likely contribution figure is 60%, based on past approvals.

The estimated total cost of the submitted projects is \$325,000, with \$195,800 being funded by Council. The City's current 10 Year Capital Works Program 2011/12 - 2020/21 includes PBN Government Grant Projects, for 2012/13, for \$239,000 with \$159,000 being funded by Council.

The Program timetable anticipates that formal grant offers will be made by 11 June 2010 to enable 2012/2013 budgets to incorporate funding for successful project applications. The proposed bicycle network projects will be listed in the Pathways Capital Works Program to be submitted to Council for consideration as part of the 2012/2013 budget deliberation.

Voting Requirements

Simple Majority

Recommendation

That Council:-

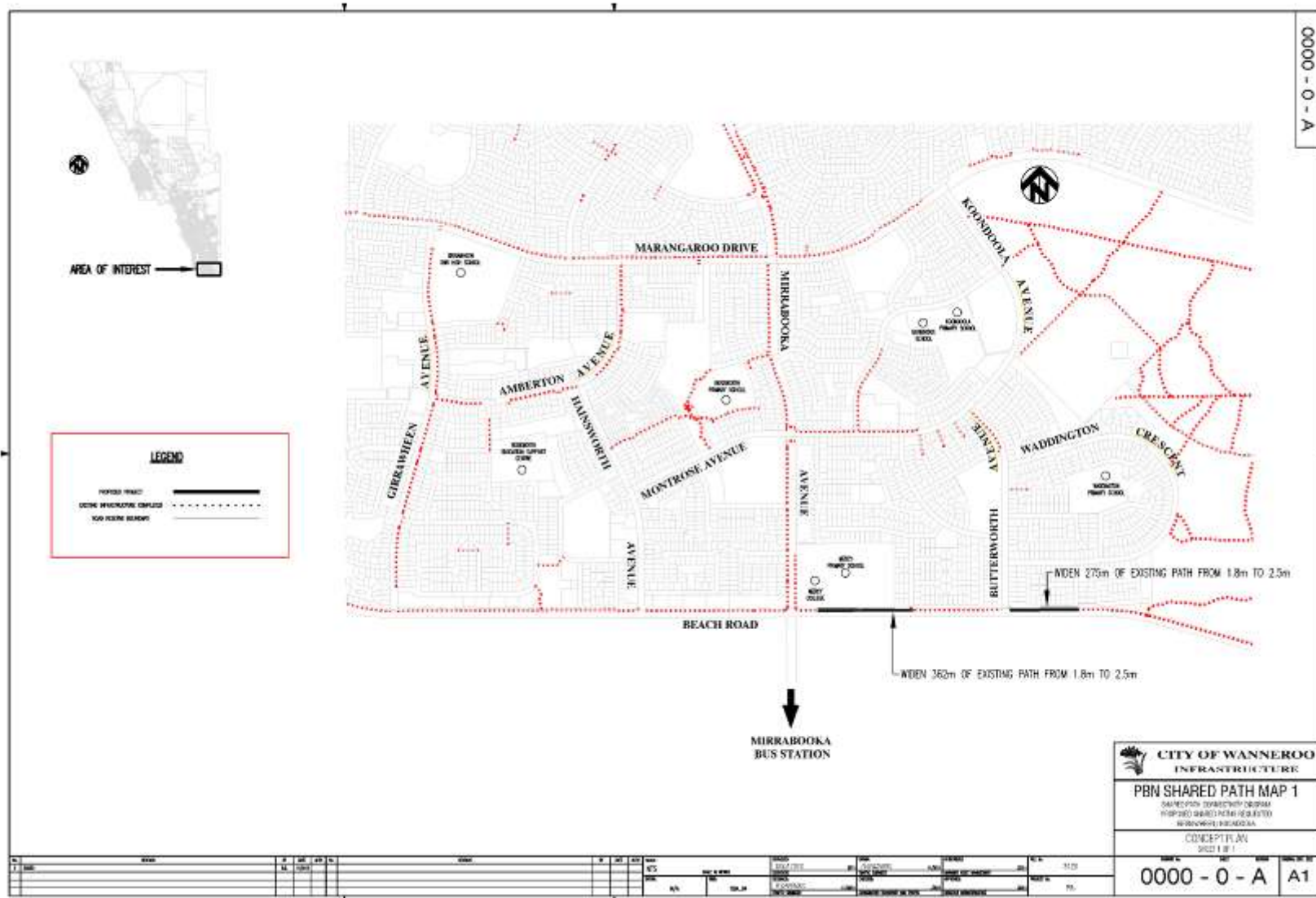
1. **ENDORSES** the following City of Wanneroo bicycle network projects submitted for funding consideration in the Perth Bicycle Network Local Government Grants Program 2012/2013; and

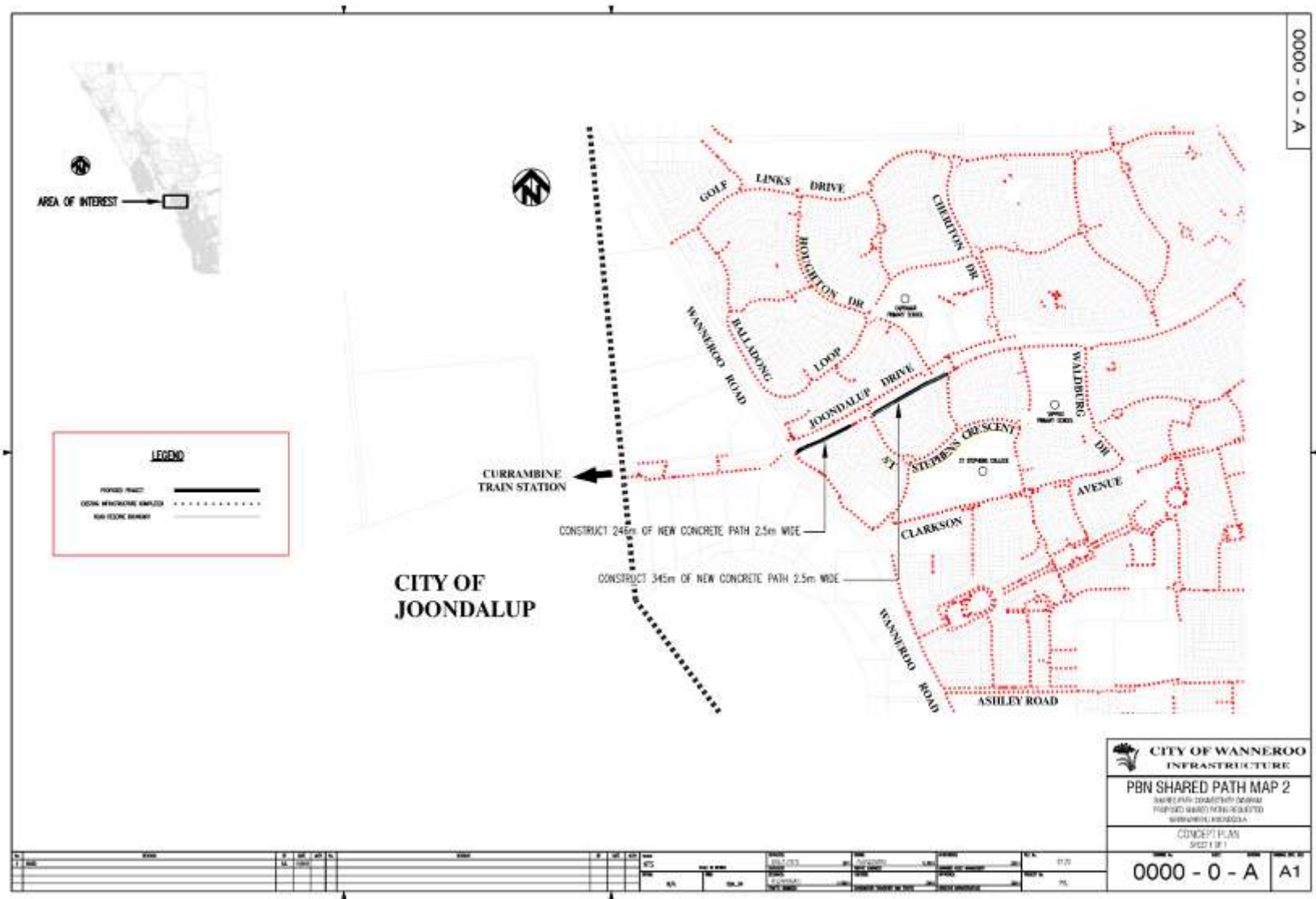
Project	Project Cost	Proposed Council Contribution (Min)
<i>Beach Road, Koondoola</i> – Upgrade 635m x 1.8m wide footpath to a 2.5m wide cast in-situ concrete shared path on the northern side of Beach Road between Alexander Drive and Mirrabooka Avenue	\$72,000	\$44,000
<i>Joondalup Drive, Tapping</i> – Construct a 605 x 2.5m wide cast in-situ concrete shared path on the southern side of Joondalup Drive between Wanneroo Road and the Palmerston Crescent underpass	\$104,000	\$62,400
<i>Wanneroo Road, Madeley</i> – Construct 270m x 2.5m wide cast in-situ concrete shared path on the eastern side of Wanneroo Road from Wilmot Bend to Gngara Road.	\$149,000	\$89,400

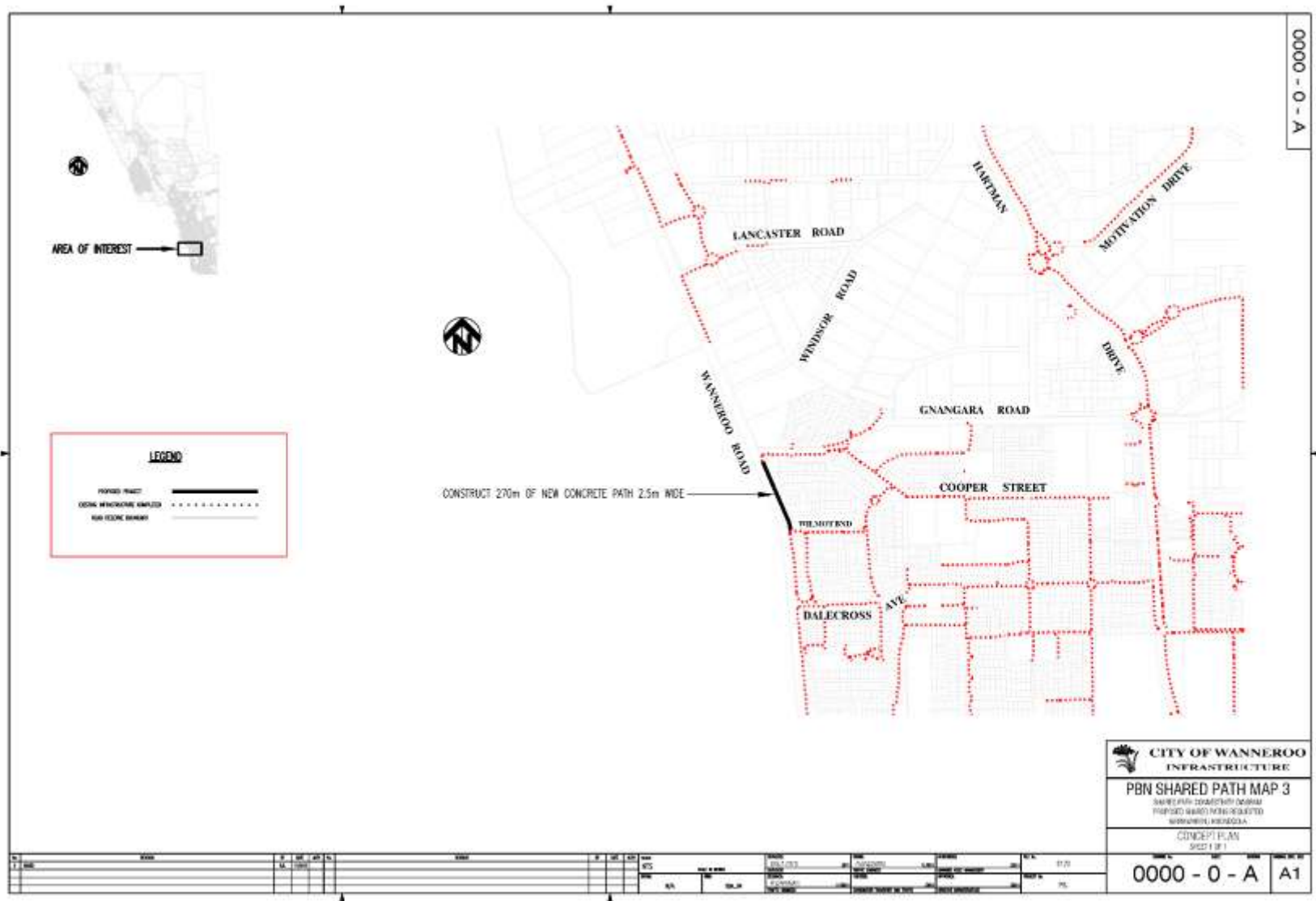
2. **NOTES** that provision will be made in the draft 2012/2013 Pathways (Road Reserve) Capital Works Program to accommodate the proposed Perth Bicycle Network Local Government Grant Program 2012/2013 funding and associated contribution from the City.

Attachments:

1. PBN Grant 2012/13- Beach Road Map 12/971
2. PBN Grant 2012/13 - Joondalup Drive Map 12/976
3. PBN Grant 2012/13 - Wanneroo Road Map 12/983







3.24 Russell Road and Dalecross Avenue, Madeley - Traffic Management Scheme

File Ref: 3000 – 11/140411
Responsible Officer: Director Infrastructure
Disclosure of Interest: Nil
Attachments: 4

Issue

To consider a traffic management scheme for Russell Road and Dalecross Avenue, Madeley.

Background

Council at its meeting of 4 May 2010 considered a Report **IN06-05/10** into Petition PT03-03/10 in which the petitioners requested:

“We, the undersigned, all being Residents of the City of Wanneroo do formally request Council’s consideration of the investigation of vehicle speeds in and around Dalecross Avenue and Russell Road in Madeley”.

In response Council resolved as follows:

- “1. DOES NOT implement any traffic management treatments in Dalecross Avenue and Russell Road, Madeley;*
- 2. NOTES that Administration will undertake a traffic assessment of Dalecross Avenue and Russell Road within 12 months of the opening of the Hartman Road extension and report the results to Council;*
- 3. REQUESTS the WA Police to undertake additional speed enforcement of vehicles using Dalecross Avenue and Russell Road.”*

The follow-up Report IN05-10/10, which reviewed the traffic after the opening of Hartman Drive to the public, was considered by Council at its meeting on 19 October 2010 at which time Council resolved as follows:

- “1. LISTS for consideration in the 2011/2012 Traffic Treatment Capital Works Program funding to undertake traffic management treatments in Dalecross Avenue and Russell Road, Madeley;*
- 2. REQUESTS Administration to develop a traffic management scheme for Kingsway, Madeley for presentation to Council within the next 12 months; and*
- 3. REQUESTS Administration to present the speed results to the WA Police to assist them with speed enforcement throughout Madeley.*
- 4. REQUESTS Administration to conduct further traffic surveys between April and June 2011”*

Refer to **Attachment 1** for a location map of the area of interest.

Detail

In response to resolution IN05-10/10 Item 4 above, the following table compares traffic data taken before the Hartman Drive extension was opened to the public, with data obtained in August 2010 and April 2011, after the opening of the extension. The Average Weekday Traffic in vehicles per day is provided, plus the 85%ile speed (in brackets).

Each location has been assessed using the Traffic Management Investigation and Intervention Policy (TMIIIP) using the data from the April 2011 traffic counts. The assessment considers a range of criteria including:

- Speed
- Traffic volume
- Crash history
- Road design and topography
- Vulnerable road users – pedestrian/cyclists

The TMIIIP requires an area to be 90% developed and occupied with a score of >60 to qualify for traffic management treatments, while scores between 30 and 60 points indicate a need for increased attention to law enforcement and driver education.

Additionally, the TMIIIP discounts raw scores by 25 points when a bus route is located along the road. In this case the score provided shows scores with and without the 25 point discount.

Hartman Drive has a posted speed limit of 70km/h. Kingsway has a posted speed limit of 60km/h and all other roads operate under the default “built-up area” speed limit of 50km/h.

Traffic Data

Definitions:

AWT	Average Weekday Traffic
vpd	vehicles per day
85%ile speed	the speed at or below which 85% of vehicles are travelling.

No.	Location	Pre AWT	August 2010	April 2011	TMIIIP Score
1	Hartman Drive – South of Gnangara Road		9,729 (70)	13,184 (74)	N/A
2	Hartman Drive – North of Kingsway		10,566(71)	14,000 (73)	N/A
3	Skeit Road – North of Hepburn Avenue	7,824	13,921 (66)	16,016 (71)	N/A
4	Kingsway – West of Sovrano Avenue	8,625	7,141 (66)	7,320 (66)	31/56
5	Kingsway – West of Hartman Drive	6,996	6,580 (66)	7,135 (65)	66/91
6	Russell Road – West of Hartman Drive	135	2,020 (59)	2,188 (59)	25
7	Russell Road – East of Susan Road	2,076	2,038 (62)	2,169 (64)	46
8	Dalecross Avenue – East of Wanneroo Road	2,148	2,664 (62)	2,803 (60)	35
9	Dalecross Avenue – West of Susan Road	1,878	2,317 (46)	2,380 (44)	5
10	Susan Road – South of Gnangara Road	2,924	2,108 (59)	2,523 (58)	17/42
11	Susan Road – North of Russell Road		1,535 (61)	1,649 (60)	4/29
12	Langford Boulevard – South of Russell Road	1,019	891 (49)	953 (48)	36
13	Langford Boulevard – North of Kingsway	1,513	1,015 (56)	1,368 (39)	32

14	Cooper Street – East of Susan Road	1,428	1,488 (56)	1,476 (56)	25
15	Cooper Street – West of Regency Avenue		773 (62)	812 (62)	57
16	Regency Avenue – South of Cooper Street	895	698 (56)	630 (56)	15
17	Regency Avenue – North of Kingsway	2,434	1,544 (59)	1,650 (59)	28/53
18	Sovrano Avenue – North of Kingsway	1,085	726 (36)	1,084 (49)	17
19	Sovrano Avenue – South of Russell Road		1,113 (50)	712 (45)	19

Refer to **Attachment 2** for a map of counter locations.

Consultation

No consultation has been undertaken in the development of this report.

Comment

Overall, an analysis of the traffic survey results listed above and TMIP scores justify the implementation of traffic management treatments for Kingsway. A traffic management plan for Kingsway is currently being prepared.

Russell Road and Dalecross Avenue are local distributor roads in the City's Functional Road Hierarchy. The width of the road reserve for both roads is 20 metres. Russell Road has been constructed as an undivided seven metres wide single carriageway with a seven metre wide verge on the north side and a six metre wide verge on the south side. Dalecross Avenue is similarly constructed, except for the road section between Wanneroo Road and Bryanston Pass where the road is constructed as a two lane dual carriageway. A bus service operates on Russell Road between Regency Avenue and Susan Road.

As the majority of the property frontages along both roads are less than 20 metres and given that the standard crossover width is six metres the number of locations where standard traffic management treatments can be installed without conflicting with crossovers is limited. Given the function of the road and the requirement to reduce speed without displacing traffic onto local roads, the frequency of crossovers, and the need to accommodate a bus service, Administration recommends the use of 1.6 metre wide speed cushions as shown in **Attachments 3 and 4** as a cost effective option for treating both roads.

Statutory Compliance

Nil

Strategic Implications

The proposal accords with the following Outcome Objective of the City's Strategic Plan 2006 – 2021:

“2 Social

2.4 Improve community safety”

Policy Implications

The City's Traffic management Investigation and Implementation Policy is applicable to this report.

Financial Implications

The estimated cost for the supply and installation of speed cushions and additional street lighting as shown in City drawings 2733-1-0 (**Attachment 3** refers) and 2740-1-0 (**Attachment 4** refers) is \$40,000 for Russell Road and \$12,000 for Dalecross Avenue, which can be funded from the following two projects listed in the 2011/12 Capital Works Program:

- PR-2276 – Russell Road: Construct traffic management treatments \$50,000
- PR-2277 – Dalecross Avenue: Construct traffic management treatments \$16,000

Voting Requirements

Simple Majority

Recommendation

That Council:-

1. **NOTES** the results of the traffic counts for Madeley taken during April 2011;
2. **ENDORSES** the proposed traffic management plans shown in City Drawing 2733-1-0 (**Attachment 3**) for Russell Road and 2740-1-0 (**Attachment 4**) for Dalecross Avenue as the basis for consultation with the community; and
3. **NOTES** that a report will be presented to Council on the outcomes of the community consultation.

Attachments:

- | | | |
|---|---------|---------|
| 1. Madeley - Location Map | 12/2119 | |
| 2. Madeley Traffic Counter Locations | 12/2539 | |
| 3. Russell Road, Madeley - Traffic Management Scheme - 2733-1-0 | 12/2087 | Minuted |
| 4. Dalecross Avenue, Madeley - Traffic Management Scheme - 2740-1-0 | 12/2091 | Minuted |

