



CITY of PERTH

Lord Mayor and Councillors,

**NOTICE IS HEREBY GIVEN** that the next meeting of the **Works and Urban Development Committee** will be held in Committee Room 1, Ninth Floor, Council House, 27 St Georges Terrace, Perth on **Tuesday, 27 September 2016 at 5.30pm.**

Yours faithfully

MARTIN MILEHAM  
CHIEF EXECUTIVE OFFICER

22 September 2016

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**Committee Members:**

**Members:**

Cr Limnios (Presiding Member)  
The Lord Mayor  
Cr McEvoy

**1<sup>st</sup> Deputy:**

Cr Harley

**2<sup>nd</sup> Deputy:**

Cr Chen

Please convey apologies to Governance on 9461 3250  
or email [governance@cityofperth.wa.gov.au](mailto:governance@cityofperth.wa.gov.au)

# EMERGENCY GUIDE

Council House, 27 St Georges Terrace, Perth



CITY of PERTH

The City of Perth values the health and safety of its employees, tenants, contractors and visitors. The guide is designed for all occupants to be aware of the emergency procedures in place to help make an evacuation of the building safe and easy.

## BUILDING ALARMS

Alert Alarm and Evacuation Alarm.

### ALERT ALARM

#### beep beep beep

All Wardens to respond.

Other staff and visitors should remain where they are.

## EVACUATION ALARM/PROCEDURES

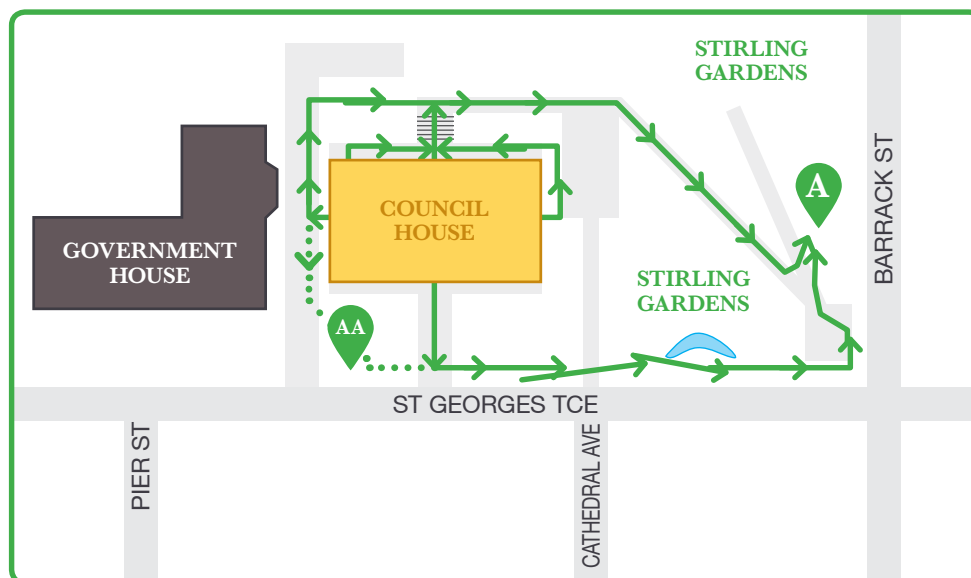
### whoop whoop whoop

On hearing the Evacuation Alarm or on being instructed to evacuate:

1. Move to the floor assembly area as directed by your Warden.
2. People with impaired mobility (those who cannot use the stairs unaided) should report to the Floor Warden who will arrange for their safe evacuation.
3. When instructed to evacuate leave by the emergency exits. **Do not use the lifts.**
4. Remain calm. Move quietly and calmly to the assembly area in **Stirling Gardens** as shown on the map below. Visitors must remain in the company of City of Perth staff members at all times.
5. After hours, evacuate by the nearest emergency exit. **Do not use the lifts.**



### EVACUATION ASSEMBLY AREA



Assembly Area

Alternate Assembly Area

# WORKS AND URBAN DEVELOPMENT COMMITTEE

**Established:** 17 May 2005 (Members appointed 22 October 2015)

<b>Members:</b>	<b>1<sup>st</sup> Deputy:</b>	<b>2<sup>nd</sup> Deputy:</b>
Cr Limnios (Presiding Member) The Lord Mayor Cr McEvoy	Cr Harley	Cr Chen

**Quorum:** Two

**Expiry:** October 2017

**TERMS OF REFERENCE:** OCM 24/11/15

To oversee and make recommendations to the Council on matters related to:

1. works required to construct, upgrade and maintain streets, footpaths, thoroughfares and other public places, including streetscape upgrades, landscaping initiatives and directional signage and graffiti;
2. design, construction and upgrading of parks, reserves, recreational and civic amenities and facilities and Council owned buildings, excluding Council House, the Perth Town Hall, City of Perth Public Lending Library and the Perth Concert Hall;
3. oversight of the implementation of the Lighting Strategy;
4. waste management.

**This meeting is not open to members of the public**

**WORKS AND URBAN DEVELOPMENT  
COMMITTEE  
27 SEPTEMBER 2016**

**ORDER OF BUSINESS**

- 1. Declaration of Opening**
- 2. Apologies and Members on Leave of Absence**
- 3. Confirmation of Minutes – 6 September 2016**
- 4. Correspondence**
- 5. Disclosure of Members' Interests**
- 6. Reports**
- 7. Motions of which Previous Notice has been Given**
- 8. General Business**
  - 8.1. Responses to General Business from a Previous Meeting**
    - 1. Graffiti Removal**

The Lord Mayor raised concerns regarding the increase in graffiti and requested an update on graffiti removal.

A report titled Graffiti Management Update is included in this agenda.
    - 2. Cable Cars**

The Lord Mayor requested information as to the validity of the media statement from the Metropolitan Redevelopment Authority regarding wind being a potential barrier to the cable cars between Elizabeth Quay and Kings Park.

Officers have contacted the Metropolitan Redevelopment Authority and requested more details including any documentation (such as studies) which highlight that wind is a barrier to the cable car proposal.
  - 8.2. New General Business**

## **9. Items for Consideration at a Future Meeting**

### **Outstanding Reports:**

- **“PTA Proposed construction of Fitzgerald Street Bus Lanes (City of Perth Section)” (Deferred 12/04/16, Updated 24/05/16, Updated 26/07/16).**

## **10. Closure**

# INDEX OF REPORTS

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3	TENDER 005-16/17 INSPECTION AND MAINTENANCE OF STORMWATER SYSTEMS	10

# ITEM NO: 1

## GRAFFITI MANAGEMENT UPDATE

### **RECOMMENDATION:**

### **INFORMATION**

***That the Works and Urban Development Committee receives the Graffiti Management Update.***

### **BACKGROUND:**

FILE REFERENCE: P1009039-31  
REPORTING UNIT: Street Presentation and Maintenance  
RESPONSIBLE DIRECTORATE: Construction and Maintenance  
DATE: 20 September 2016  
MAP / SCHEDULE: Schedule 1 – Example of Daily Graffiti Report

### **LEGISLATION / STRATEGIC PLAN / POLICY:**

#### **Legislation**

*Graffiti Vandalism Act 2016*

#### **Integrated Planning and Reporting Framework Implications**

#### **Corporate Business Plan**

Council Four Year Priorities: Perth At Night  
S14 Further improve safety and security  
14.1 Review and implement Community Safety and Crime Prevention Plan

#### **Strategic Community Plan**

Council Four Year Priorities: Community Outcome  
Living in Perth  
Safety and Security

#### **Policy**

Policy No and Name: 2.3 – Graffiti Treatment

### **DETAILS:**

The Lord Mayor raised concerns about the increase in graffiti in the city and requested an update on the City's initiatives to remove graffiti at the Works and Urban Development Committee meeting held on 6 September 2016. This report provides an update on graffiti management, measures that are being undertaken and the costs associated with graffiti removal.

The City of Perth is actively working to manage graffiti removal as a participating council in the State Graffiti Taskforce initiative 'Goodbye Graffiti'. Executive Leadership Group approved the Graffiti Management Plan 2016-2020, an informing strategy to the Corporate Business Plan, in May this year. The plan focuses on:

- **Prevention**
  - Increased effectiveness in designing and managing public and semi-public areas to deter graffiti vandalism;
  - Support opportunities for approved urban art or legal murals; and
  - Reduce the number of people engaging in graffiti (criminal) offences.
- **Reporting**
  - Increase public awareness on how to report graffiti; and
  - Increase community reporting of graffiti via the Goodbye Graffiti Hotline and website.
- **Recording & Analysis**
  - Capture accurate data on graffiti locations and tags;
  - Improve analysis of graffiti activity within the city; and
  - Generate graffiti maps and target responses on highest risk areas.
- **Treatment & Rapid Removal**
  - Deliver an effective graffiti treatment service, within designated response times;
  - Reduce the number of stickers and posters in public and semi-public locations; and
  - Ensure graffiti treatment policy and procedures meet best practice.
- **Response & Enforcement**
  - Improve graffiti management and response by the City of Perth;
  - Improve links between the Surveillance Centre, WA Police Graffiti Unit and Police; and
  - Increase liaison between the City of Perth and stakeholders to coordinate prevention and responses to graffiti.

The measures of the Graffiti Management Plan to the Street Presentation and Maintenance Unit are:

- Reduced number of graffiti incidents recorded by City Graffiti Removal operators;
- Reduced total monthly paint/chemical volumes used to keep public space free of graffiti vandalism and reduced areas of graffiti cleaned;
- Graffiti removal operators photograph all graffiti and upload on regular basis (instant, daily, and monthly); and
- Graffiti maps generated to identify hot spot locations and analysed weekly.

The Street Presentation and Maintenance Unit has three Graffiti Removal Operators who actively monitor the high risk graffiti locations and investigate information



reported through the City's Graffiti Hotline (1800 109 010), Goodbye Graffiti Hotline (1800 44 22 55) and online reporting, reports from state agencies such as Main Roads, and information received from the public. The preference has been to use the City's hotline owing to delays with the State's Goodbye Graffiti Hotline. However, those issues have been resolved and the state service is available via phone or email 24 hours per day. Alignment with the state's service will create higher public awareness and traceability of incidents reported and closed.

90% of all graffiti treated by the City of Perth is removed proactively through regular inspections undertaken by each of the Graffiti Removal Operators.

The aspiration is to collect and collate accurate data on graffiti locations and tags that will be mapped and analysed weekly to determine trends and identify top offenders and locations. The Data and Information Unit will be responsible for generating the maps.

This information will be shared by the Street Presentation & Maintenance Unit with the City's Surveillance Centre, WA Police Graffiti Team and Western Australian Police to facilitate offender prosecutions and prevention. Internally, the information will be provided to the Graffiti Reference Group to facilitate management and prevention strategies aligned to the Graffiti Management Plan, such as more public art in high risk areas.

The City's three graffiti removalists in the Street Presentation and Maintenance Unit utilise a program on their phones to photograph the graffiti and insert key information that is collated as a weekly report and sent to the WAPOL. The program used by the staff was developed internally using a \$20,000 grant from WAPOL. An example of a daily report demonstrating the works carried out on a single day is attached as Schedule 1.

The Street Presentation and Maintenance Unit currently measures its effectiveness in managing graffiti based on the number of incidents reported and/or found by staff; the time from reporting to removal, and the budget expenditure.

- Years 2009/2010 to 2015/2016 have seen a 29% decrease in the number of graffiti incidents reported or identified by City staff or a reduction from 6,834 to 4,839 reported cases;
- The damaged area (m2) has reduced by 55%;
- A corresponding reduction in chemical and paint use (m2) by 70 and 75% respectively;
- Graffiti is removed within 48 hours of reports being received; and
- The budget for graffiti removal that now includes three staff, contractors, materials and fleet has increased 11% between 2012/2013 to 2016/2017 while the number of graffiti instances removed has increased in the same time period by 39%. Contractors carry out specialised works such as removal on limestone walls.

The Street Presentation and Maintenance Unit budget expenditure for the last five years is as per the table on the next page.

Table 1: Street Presentation and Maintenance Unit Five Year Graffiti Expenditure

Graffiti Expenditure	2012/13 Actual	2013/14 Actual	2014/15 Actual	2015/16 Actual	2016/17 Budget
3 Graffiti Crew Costs	238,878.73	265,127.17	269,152.66	308,676.76	313,000.00
Stores and Materials	26,552.00	36,214.90	31,253.61	33470.43	32,200.00
Contractors	67,760.00	65,935.90	-	-	12,500.00
Fleet	-	-	-	17,745.00	17,500.00

The City's Graffiti Management Plan sets new operational targets that include:

- Increased number of offenders identified and prosecuted (>6 per month);
- Reduced paint/material spend (<8,000m2 per annum); and
- >95% of graffiti removed within specified times defined by a revised City Graffiti procedure. It is recognised that treatment operations may need to be undertaken outside of normal hours or with the assistance of road traffic management in order to fulfil these requirements.

Future initiatives should be assisted with the *Graffiti Vandalism Act 2016* which received Royal Assent on 11 July 2016. The Act makes graffiti vandalism a stand-alone offence with penalties up to \$24,000 fine and two years in jail. The law will enable the forfeiture of anything used in the commission of the offence including tools used to record, store or transmit photos to boast.

The Street Presentation Unit will collaborate with the other units involved in the Graffiti Management Plan – Community Amenity & Safety, Co-ordination & Design, Arts, Culture and Heritage, Data and Information, and Information Technology – to ensure that reporting data is provided for the future mapping and subsequent analysis. The current data will provide a baseline to track against future improvements that will contribute to a safer city.

The Unit will lead the review of Council Policy 2.3 Graffiti Removal and Graffiti Treatment Procedure to ensure that both support the new performance measures. The reviews will be completed by the end of the calendar year.

**FINANCIAL IMPLICATIONS:**

ACCOUNT NO: N/A  
BUDGET ITEM: N/A  
BUDGET PAGE NUMBER: N/A  
BUDGETED AMOUNT: \$0  
AMOUNT SPENT TO DATE: \$0  
PROPOSED COST: \$0  
BALANCE: \$0  
  
ANNUAL MAINTENANCE: N/A  
ESTIMATED WHOLE OF LIFE COST: N/A

All figures quoted in this report are exclusive of GST.

**COMMENTS:**

This report is for information only and responds to a matter raised by the Lord Mayor under New General Business at the Works and Urban Development Committee meeting of 6 September 2016.

SCHEDULE 1  
City of Perth Graffiti Incidents

15/09/2016

Run on: 16/09/2016 07:06 AM

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**Reference Number:** 24524      **Premise Number:** 50      **Road Name:** Murray      **Road Type:** ST      **Suburb:** PERTH  
**State:** WA      **Postcode:** 6000      **Nearest Corner Street:** N/A      **Item Used:** Marker/Pen  
**Damaged Item Value:** 75      **Damage Description:** Walls      **Tag:** Kerry Rude      **Is Graffiti Racist or Obscene?** N  
**Damaged Item:** Private Property (residential/business)      **Operator:** Gary Brownlie  
**Date Identified:** 15/09/2016 6:44:59AM      **Time to Repair:** 45 mins



16668.jpg



16667.jpg



16666.jpg

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**Reference Number:** 24525      **Premise Number:**      **Road Name:** De Vlamingh      **Road Type:** AV      **Suburb:** EAST PERTH  
**State:** WA      **Postcode:** 6004      **Nearest Corner Street:** Plain Street      **Item Used:** Paint  
**Damaged Item Value:** 75      **Damage Description:** Fence      **Tag:** Figr Jqsee      **Is Graffiti Racist or Obscene?** N  
**Damaged Item:** Fence (Private residence/business)      **Operator:** Gary Brownlie  
**Date Identified:** 15/09/2016 7:05:06AM      **Time to Repair:** 45 mins



16669.jpg

**Reference Number:** 24526      **Premise Number:** 417      **Road Name:** Hay      **Road Type:** ST      **Suburb:** EAST PERTH  
**State:** WA      **Postcode:** 6004      **Nearest Corner Street:** N/A      **Item Used:** Paint  
**Damaged Item Value:** 50      **Damage Description:** Wall      **Tag:** Moars      **Is Graffiti Racist or Obscene?** N  
**Damaged Item:** Private Property (residential/business)      **Operator:** Gary Brownlie  
**Date Identified:** 15/09/2016 7:36:05AM      **Time to Repair:** 30 mins



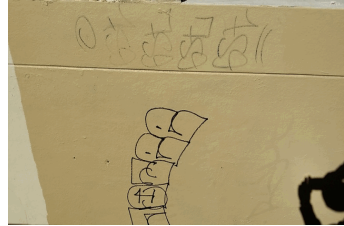
16671.jpg



16670.jpg

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**Reference Number:** 24527      **Premise Number:** 69      **Road Name:** Murray      **Road Type:** ST      **Suburb:** PERTH  
**State:** WA      **Postcode:** 6000      **Nearest Corner Street:** N/A      **Item Used:** Marker/Pen  
**Damaged Item Value:** 50      **Damage Description:** Walls      **Tag:** Jqzee      **Is Graffiti Racist or Obscene?** N  
**Damaged Item:** Private Property (residential/business)      **Operator:** Gary Brownlie  
**Date Identified:** 15/09/2016 8:02:19AM      **Time to Repair:** 30 mins



16672.jpg

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**Reference Number:** 24528      **Premise Number:**      **Road Name:** Murray      **Road Type:** ST      **Suburb:** PERTH  
**State:** WA      **Postcode:** 6000      **Nearest Corner Street:** N/A      **Item Used:** Marker/Pen  
**Damaged Item Value:** 50      **Damage Description:** Fire Box      **Tag:** Jqsie      **Is Graffiti Racist or Obscene?** N  
**Damaged Item:** Private Property (residential/business)      **Operator:** Gary Brownlie  
**Date Identified:** 15/09/2016 8:10:34AM      **Time to Repair:** 30 mins



16673.jpg

**Reference Number:** 24529      **Premise Number:** 156      **Road Name:** Wittenoom      **Road Type:** ST      **Suburb:** EAST PERTH  
**State:** WA      **Postcode:** 6004      **Nearest Corner Street:** N/A      **Item Used:** Marker/Pen  
**Damaged Item Value:** 50      **Damage Description:** Pillar Signs      **Tag:** Sike      **Is Graffiti Racist or Obscene?** N  
**Damaged Item:** Private Property (residential/business)      **Operator:** Gary Brownlie  
**Date Identified:** 15/09/2016 8:32:30AM      **Time to Repair:** 30 mins



16676.jpg



16675.jpg



16674.jpg

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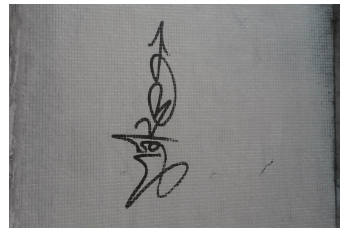
**Reference Number:** 24530      **Premise Number:**      **Road Name:** Malcolm      **Road Type:** ST      **Suburb:** WEST PERTH  
**State:** WA      **Postcode:** 6005      **Nearest Corner Street:** Freeway      **Item Used:** Paint  
**Damaged Item Value:** 150      **Damage Description:** Walls      **Tag:** Make Zeps      **Is Graffiti Racist or Obscene?** N  
**Damaged Item:** Bridge, bridge abutment, overpass      **Operator:** Wayne Bertram  
**Date Identified:** 15/09/2016 10:26:55AM      **Time to Repair:** 1 hour 30 mins



16678.jpg



16677.jpg



16680.jpg



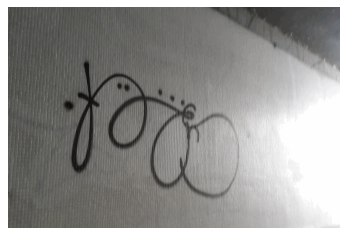
16679.jpg

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**Reference Number:** 24531      **Premise Number:**      **Road Name:** Malcolm      **Road Type:** ST      **Suburb:** WEST PERTH  
**State:** WA      **Postcode:** 6005      **Nearest Corner Street:** Freeway      **Item Used:** Paint  
**Damaged Item Value:** 150      **Damage Description:** Walls      **Tag:** Sike      **Is Graffiti Racist or Obscene?** N  
**Damaged Item:** Bridge, bridge abutment, overpass      **Operator:** Wayne Bertram  
**Date Identified:** 15/09/2016 10:29:39AM      **Time to Repair:** 1 hour 30 mins



16683.jpg



16682.jpg



16681.jpg

**Reference Number:** 24532      **Premise Number:**      **Road Name:** Aberdeen      **Road Type:** ST      **Suburb:** NORTHBRIDGE  
**State:** WA      **Postcode:** 6003      **Nearest Corner Street:** Lake Street      **Item Used:** Marker/Pen  
**Damaged Item Value:** 25      **Damage Description:** Post      **Tag:** Cge      **Is Graffiti Racist or Obscene?** N  
**Damaged Item:** Private Property (residential/business)      **Operator:** Gary Brownlie  
**Date Identified:** 15/09/2016 10:50:24AM      **Time to Repair:** 15 mins



16684.jpg

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**Reference Number:** 24533      **Premise Number:** 47      **Road Name:** Malcolm      **Road Type:** ST      **Suburb:** WEST PERTH  
**State:** WA      **Postcode:** 6005      **Nearest Corner Street:** N/A      **Item Used:** Marker/Pen  
**Damaged Item Value:** 75      **Damage Description:** Caninet      **Tag:** Chalks      **Is Graffiti Racist or Obscene?** N  
**Damaged Item:** Private Property (residential/business)      **Operator:** Wayne Bertram  
**Date Identified:** 15/09/2016 10:52:05AM      **Time to Repair:** 45 mins



16685.jpg

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**Reference Number:** 24534      **Premise Number:** 59      **Road Name:** Malcolm      **Road Type:** ST      **Suburb:** WEST PERTH  
**State:** WA      **Postcode:** 6005      **Nearest Corner Street:** N/A      **Item Used:** Marker/Pen  
**Damaged Item Value:** 50      **Damage Description:** Light Pole      **Tag:** Chalks      **Is Graffiti Racist or Obscene?** N  
**Damaged Item:** Western Power Metal Light Poles      **Operator:** Wayne Bertram  
**Date Identified:** 15/09/2016 10:56:12AM      **Time to Repair:** 30 mins



16686.jpg

**Reference Number:** 24535      **Premise Number:** 70      **Road Name:** Mount      **Road Type:** ST      **Suburb:** WEST PERTH  
**State:** WA      **Postcode:** 6005      **Nearest Corner Street:** N/A      **Item Used:** Marker/Pen  
**Damaged Item Value:** 50      **Damage Description:** Post Box      **Tag:** Chalks      **Is Graffiti Racist or Obscene?** N  
**Damaged Item:** Australia Post Letter Box      **Operator:** Wayne Bertram  
**Date Identified:** 15/09/2016 11:33:43AM      **Time to Repair:** 30 mins



16687.jpg

**Reference Number:** 24536      **Premise Number:**      **Road Name:** Malcolm      **Road Type:** ST      **Suburb:** WEST PERTH  
**State:** WA      **Postcode:** 6005      **Nearest Corner Street:** Cliff Street      **Item Used:** Marker/Pen  
**Damaged Item Value:** 50      **Damage Description:** Sign      **Tag:** Chalks Whos Koda      **Is Graffiti Racist or Obscene?** N  
**Damaged Item:** Road signage      **Operator:** Wayne Bertram  
**Date Identified:** 15/09/2016 11:37:07AM      **Time to Repair:** 30 mins



16689.jpg



16688.jpg

**Reference Number:** 24537      **Premise Number:** 337      **Road Name:** Wellington      **Road Type:** ST      **Suburb:** WEST PERTH  
**State:** WA      **Postcode:** 6005      **Nearest Corner Street:** N/A      **Item Used:** Marker/Pen  
**Damaged Item Value:** 75      **Damage Description:** Wall      **Tag:**      **Is Graffiti Racist or Obscene?** N  
**Damaged Item:** Private Property (residential/business)      **Operator:** Wayne Bertram  
**Date Identified:** 15/09/2016 12:45:50PM      **Time to Repair:** 45 mins



16690.jpg



**Reference Number:** 24538

**Premise Number:** 339

**Road Name:** Wellington

**Road Type:** ST

**Suburb:** PERTH

**State:** WA

**Postcode:** 6000

**Nearest Corner Street:** N/A

**Item Used:** Marker/Pen

**Damaged Item Value:** 100

**Damage Description:** Roller Door

**Tag:** Zoui

**Is Graffiti Racist or Obscene?** N

**Damaged Item:** Private Property (residential/business)

**Operator:** Wayne Bertram

**Date Identified:** 15/09/2016 12:51:20PM

**Time to Repair:** 1 hour



16691.jpg

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**Reference Number:** 24539

**Premise Number:** 337

**Road Name:** Wellington

**Road Type:** ST

**Suburb:** PERTH

**State:** WA

**Postcode:** 6000

**Nearest Corner Street:** N/A

**Item Used:** Paint

**Damaged Item Value:** 150

**Damage Description:** Walls

**Tag:** Mor Xokr

**Is Graffiti Racist or Obscene?** N

**Damaged Item:** Private Property (residential/business)

**Operator:** Wayne Bertram

**Date Identified:** 15/09/2016 1:02:51PM

**Time to Repair:** 1 hour 30 mins



16692.jpg

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**27 Incidents**

## ITEM NO: 2

### FEASIBILITY REPORT ON THE INSTALLATION OF AN OPERATIONAL BEEHIVE IN THE CITY OF PERTH LOCAL GOVERNMENT AREA

#### **RECOMMENDATION:**

#### **INFORMATION**

*That the Works and Urban Development Committee consider this report.*

#### **BACKGROUND:**

FILE REFERENCE: P1002608-2  
REPORTING UNIT: Parks  
RESPONSIBLE DIRECTORATE: Construction & Maintenance  
DATE: 21 September 2016  
MAP / SCHEDULE: Schedule 2 – Feasibility Appendix

The Works and Urban Development Committee has not previously considered this issue.

Parks was recently asked to consider the feasibility of setting up an operational beehive, either at Council House or within the surrounding gardens; and whether this could be achieved operationally.

#### **LEGISLATION / STRATEGIC PLAN / POLICY:**

**Legislation** Environmental Protection and Biodiversity Conservation Act 1999 (Cth)  
Western Australian Wildlife Conservation Act 1950 (WA)  
Beekeepers Act 1963 (WA)  
General Conditions for using Apiary Authorities on Crown land in Western Australia (DPaW 2013)  
City of Perth Health Local Law, Division 6

**Integrated Planning and Reporting Framework Implications** **Corporate Business Plan**  
Council Four Year Priorities: Meaningful and contemporary community engagement and communications  
20.1 – Develop Community Engagement Capability

**Strategic Community Plan**  
Council Four Year Priorities: Community Outcome  
Living in Perth

S11 – Increase community awareness of environmentally sustainable ways of living  
Capable and Responsive Organisation  
S20 – Meaningful and contemporary community engagement and communications

## **Policy**

Policy No and Name: 8.0 – Environment Policy

## **DETAILS:**

The information included in this report has been sourced from the Centre for Bee Research (CIBER) and University of Western Australia (UWA), Department of Parks and Wildlife (DPaW), Department of Agriculture and Food and local apiarists.

The aim of installing an operational bee hive with public visibility is to raise awareness and educate the public around the issues threatening bee populations. Global bee populations are in decline as a result of disease, parasites and increased exposure to pesticides. The conservation of bee populations is a global issue as bees are responsible through pollination for over a third of the world's food supply.

Urban beekeeping is popular in major cities worldwide including Paris, London, Toronto, San Francisco and Hong Kong. Operational hives are also established in Sydney, Melbourne, Brisbane and Adelaide. There are four managed operational hives located in the Perth CBD. The locations include Parliament House gardens, the roof tops of two commercial buildings and the 'visible hive' at Scitech. These are discussed in detail as attached in Schedule 2.

The operational hive set up in the outer garden of Parliament House, West Perth was implemented through a partnership between the (CIBER) at UWA, Parliament House and apiarist Joseph Kwintowski. The driver of the project was to raise awareness and educate about the issues faced by global bee populations. The Acting Deputy Parliament Services advised that the project has been very successful with the creation of educational information for staff and the general public. The project was launched with a media event including the Minister for Agriculture, CIBER, UWA, WA Beekeepers Association and Wesfarmers.

The factors influencing site suitability for an operational beehive include:

- Compliance with City of Perth Health Local Law, Division 6, S109;
- Site conditions including warmth and/or level of sunshine;
- Proximity to source of pollen and nectar;
- Proximity to source of water;
- Site accessibility for hive maintenance;
- Site security - risk of vandalism etc.; and
- Public perception and risk to public.

The Department of Agriculture and Food WA advises that for bees kept on Crown land, the following requirements must also be met:

The beekeeper shall:

- Conduct operations entirely at the beekeeper's own risk and the beekeeper shall inform his/her employees, agents and contractors in either a written or oral form regarding the risks and dangers arising from the operations that are likely to be encountered on or near the site;
- Only employ or engage competent and suitably qualified employees, agents and contractors in relation to his/her operations;
- Fully inform all employees, agents and contractors employed or engaged in relation to the operations of the terms of the authority and these conditions relevant to the operations and any other conditions or restrictions applied to the authority;
- Ensure that all employees, agents and contractors employed or engaged in relation to the operations conducted under the authority comply with the terms of the authority, these conditions and any other conditions or restrictions relevant to the operations;
- Carry appropriate safety and first aid equipment at all times;
- Ensure that appropriate risk management systems, strategies and procedures are in place to minimise foreseeable risks to the environment, the values of the parks and reserves, the beekeeper and his/her employees, agents or contractors or other members of the public, and shall produce evidence of such systems, strategies and procedures if requested by the Director General or his representative;
- Take all appropriate safety precautions including the possession of appropriate communications equipment and sufficient food and water supplies; and
- Maintain a policy of public liability insurance of not less than \$10 million.

### **FINANCIAL IMPLICATIONS:**

ACCOUNT NO:	Will vary according to chosen location
BUDGET ITEM:	Parks, Gardens and Reserves
BUDGET PAGE NUMBER:	43
BUDGETED AMOUNT:	No funds allocated
AMOUNT SPENT TO DATE:	N/A
PROPOSED COST:	<ul style="list-style-type: none"><li>• The costs associated with this report are limited to the staff time required to investigate the opportunity.</li><li>• Should Council approve the installation of an operational hive in the future the potential set up costs range from \$1,000 to \$34,000 depending on the type and the location of the hive.</li></ul>
BALANCE:	N/A

ANNUAL MAINTENANCE:

- No ongoing costs if the City acts as a hive 'host' as the hive is owned and managed by an external operation.
- The annual cost to own and internally manage an operational hive is not known at this point in time.
- Additional costs relate to staff training and insurances.

ESTIMATED WHOLE OF LIFE COST: Not known.

All figures quoted in this report are exclusive of GST.

**COMMENTS:**

The City of Perth Health Local Law Division 6 states that the keeping of bees is not permitted within 10 metres of a public place. To comply with the conditions of Division 6 of the Health Local Law a hive could only be installed on private property 10 metres away from the public realm. Applications to install bee hives on private property are considered on a case by case basis by the City's Environment and Public Health Unit. It may be possible to install a hive off the ground clear of public access.

At any one time there are a number of wild beehives existing in public trees. The City's current response to beehives is to remove them if their location presents a risk to the public and where the hive is less than 3 metres above the ground. In the last five years, five bee swarms have been removed, eight hives euthanised and four hives have been relocated.

If the Works and Urban Development Committee resolve to progress this issue, the recommended next step would be to make contact with the Director of CIBER at UWA, Professor Boris Baer, and arrange a meeting to discuss the possibility of a joint venture along the lines of the Parliament House project.

## SCHEDULE 2

The information included in this schedule has been sourced from the Centre for Bee Research (CIBER) and University of Western Australia (UWA), Department of Parks and Wildlife, Department of Agriculture and Food and local apiarists.

### **BACKGROUND:**

Over the last 20 years global bee populations have been in decline as a result of disease, parasites and exposure to pesticides. The conservation of bee populations is a significant global issue as bees are responsible through pollination, for over a third of the world's food supply<sup>1</sup>. Australia is the only continent that remains relatively pest-free with no bee colony collapse recorded. Promoting genetic diversity of honey bees is important in order to build resilience in existing bee populations<sup>2</sup>.

Despite this, the European honey bee is also considered an invasive species in Australia, as it competes with native fauna for floral resources, disrupts natural pollination processes and may displace endemic wildlife from tree hollows<sup>3</sup>.

The City of Perth Health Local Law Division 6 states that the keeping of bees is not permitted within 10 m from any public place. In accordance with the conditions in Division 6 of the Health Local Law, an application may be made under local law to keep beehives on private property. Applications to install a beehive on private property are considered on a case by case basis by the Environment and Public Health unit.

At present the City's response to beehives in public open spaces is if the hive is above 3.0 m, then it will be left in situ as the risk of injury from bee-sting is low. If the hive is lower than 3.0 m, the hive is relocated where possible, or euthanised. During the warmer months of the year the City receives a number of calls about bee swarms. From October 2012 to present there have been 5 swarms removed, 4 hives relocated and 8 hives euthanised.

### **LEGISLATIVE REQUIREMENTS:**

By law anyone who owns, or has charge, care or possession of beehives is required to register the hive with the Department of Agriculture and Food Western Australia (DAFWA) as a beekeeper under the Beekeepers Act 1963 within 14 days of becoming a beekeeper. A licence and brand identification will then be issued. The brand must be printed on all your beekeeping equipment.

If the City did establish a beehive and wanted to harvest the honey for production, it would be necessary to comply with the Food Standards Australia New Zealand (FSANZ) Food Safety Standard, which requires food businesses to develop a Hazard Analysis and Critical Control Point (HACCP) based food safety plan. In addition to this, there are two main quality assurance schemes that have been developed specifically for beekeepers and honey producers. Information on these schemes are available from the Department of Agriculture and Food.

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<sup>1</sup> Baer 2010, <http://www.ciber.science.uwa.edu.au/>

<sup>2</sup> Department of Agriculture and Food 2016, <http://www.agriculture.gov.au/pests-diseases-weeds/bees>

<sup>3</sup> Department of the Environment 2016, <https://www.environment.gov.au/biodiversity/invasive-species/insects-and-other-invertebrates/invasive-bees>

The Department of Agriculture and Food WA specifies conditions for bees kept on Crown land; which address risk management, competencies, and insurance requirements. Additional legislative requirements are contained within the General Conditions for using Apiary Authorities on Crown land in Western Australia<sup>4</sup>.

## **PERTH EXAMPLES:**

There are three different types of urban hives already operating within the Perth CBD.

### Garden hive

An operational bee hive has been set up in the outer gardens of Parliament House, West Perth. The project was implemented through a partnership between the Centre for Integrative Bee Research (CIBER) at the University of Western Australia (UWA), Parliament House and hobby apiarist Joseph Kwintowski. The driver for the project was to raise awareness and educate the public about the issues faced by the global honey bee population.

Kathryn Galvin Acting Deputy Parliament Services (formerly Head of Community Engagement) advised that the project has been very successful. Parliament House created educational information for staff and members of the public, and use honey from the hives in the Parliament House kitchen. A launch event was held with key stakeholders including the Minister for Agriculture, CIBER, UWA, the WA Beekeepers Association and Wesfarmers. There has also been a significant amount of media attention.

Risk mitigation included locating the hive in a fenced-off section of the outer gardens, ensuring sufficient water near-by, using a specific 'calm' bee breed developed by CIBER and having CIBER check the temperament and health of the hive once established. Other important considerations included developing policies and procedures around the management of the beehive, including only allowing access to view the hive in the appropriate PPE and developing a procedure to outline the response to bee stings. The hive has been in place since December 2015 and there have been no bee-stings to date.

Kathryn Galvin advised there were no costs involved in setting up the hive except for the launch event. All promotional material was done in-house. The hive and harvested honey belong to the apiarist and Parliament House is the host location only. The apiarist is responsible for all ongoing maintenance costs.

### Roof-top hive

Two roof-top hives have been installed in the Perth CBD to date by apiarists Blaine and Tristan Campell from local business 'Honey I'm Home'. One is located at the Treasury Building opposite Council House and one at the Adina Hotel.

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<sup>4</sup> Department of Parks and Wildlife 2016 ([https://www.dpaw.wa.gov.au/images/documents/plants-animals/animals/General\\_Conditions\\_for\\_using\\_Apiary\\_Authorities\\_on\\_Crown\\_land\\_in\\_Western\\_Australia.pdf](https://www.dpaw.wa.gov.au/images/documents/plants-animals/animals/General_Conditions_for_using_Apiary_Authorities_on_Crown_land_in_Western_Australia.pdf))

The purpose of these hives is for honey production, which is then supplied to the surrounding restaurants. For example, the Wildflower restaurant located at the Treasury Building features the locally sourced honey in its menu items.

In these cases, any harvested honey and the hives themselves remain the property of the apiarist.

#### Visible hive

The 'Visible Hive' at Scitech is a clear Perspex hive with a specialised valve systems and a long tunnel allowing the bees to enter and exit the hive away from the public, thus reducing the risk of injury from bee-sting. Developed with CIBER, this system allows members of the public to view the bees within the hive, learn about the processes involved in making honey and the issues faced by global bee populations.

Craig Bloxsome General Manager of City West advised that 'off the shelf' observation systems are available however for bee security Scitech preferred to construct their own to ensure bee security. The complex hive set up at Scitech is virtually impossible to break. The hive itself is licenced to an apiarist from UWA who maintains the hive on Scitech's behalf, with yearly services. They do not harvest honey from this hive as most of the produce is used by the bees themselves.

The Scitech hive enables students to get up close and observe the bee hive and behaviour. It has been in place for approximately two (2) years and has been a very successful display. Posters have been included to provide information on the ecology of bees and the issues facing global bee populations. Scitech has received a significant amount of positive feedback on this specific display. There have been two (2) bee-stings during this period, both while servicing the hives.

#### **OTHER CAPITAL CITIES:**

Urban beekeeping is now popular in major cities worldwide including Paris, London, Toronto, San Francisco and Hong Kong. Examples can also be found in other capital city locations around Australia including Sydney, Melbourne, Brisbane and Adelaide.

#### City of Sydney

City of Sydney provided an environmental grant to the Asylum Seekers Centre in 2012 to establish native bee hives in their community garden. The native honey bee is stingless, which removes the risk to public from bee-sting. The stingless native honey bee is a tropical species and not suited to the Mediterranean climate of Perth.

Doug Purdie from the Urban Beehive in Sydney currently manages over 100 hives in a mix of rooftop and ground level areas. The Urban Beehive has 8 hives in the botanic gardens in Sydney at ground level unfenced. There is an additional 10 hives in Centennial Park which are fenced, mainly for security reasons.

Doug Purdie advised that the risk to the public is very low from bee stings despite the public perception. A community education campaign could be implemented to help the public understand the ecology of bees and the low risk they pose when left undisturbed.



Doug Purdie advised that it is usually possible to put bees anywhere, provided passive bees are kept. Once bees reach their cruising height (about 2.5 m) they stay there and do not interact with passers-by. Bees can be assisted in reaching that 2.5 m cruising height by using screening plants, physical screens or elevating the hives.

### City of Melbourne

City of Melbourne sponsors two hives on the roof of Federation Square as part of their *Food City* programme, which aims to promote sustainable food production within the CBD. City of Melbourne receives several harvests of honey from each beehive per year. To date, ten kilos of fresh, unpasteurised honey have been donated straight from the hive to community organisations such as the Salvation Army, the Lazarus Centre and other community causes.

The Health and Wellbeing unit at City of Melbourne advised that these hives support colonies of European honey bees therefore have not been set up in public open space due to the potential for risk of injury from bee-sting. They have advised the project has been considered a success, and have supported other rooftop urban hives around the CBD through environmental grants.

### **OPTIONS:**

There are no local stingless honeybees native to the Perth region, therefore any hive in the Perth region would need to be colonised with European honey bees. When purchasing hives, evidence of the testing history needs to be provided plus a vendor declaration to guarantee that the equipment is free from pests, diseases and chemical residues.

Apiarist Joseph Kwintowski advised that the ideal criteria for locating a beehive include:

- All day sunshine or source of warmth
- Easy access with a trolley (harvested honey can weigh up to 40 kg)
- Nearby source of nectar and water
- Access for apiarist every 3-4 weeks from August through to April each year
- Safe from vandalism and damage
- Location which minimises the risk of bee-sting to public

The skills and equipment required to install an operational beehive do not exist in-house. In all of the given examples, the owner of the premises has engaged a qualified apiarist to provide the hive and bee colony, and to maintain and harvest the hives on a regular basis. To manage beehives in-house the requirements detailed under Legislative Requirements (p. 3) must be met.

To place a hive on Council property or public open space, the restrictions on keeping bees detailed in the City of Perth Health Local Law, Division 6 6 will apply.

The hive must be kept:

- outside, and at least 10 metres from any building other than a fence;
- at least 10 metres from any footpath, street, private street or public place;
- at least 5 metres from the boundary of the lot; and
- the hive is enclosed on all sides by a fence, wall or other enclosure.

### Parliament House outer-gardens beehive



### Rooftop hive in Melbourne CBD



### Scitech Visible hive

*Text: Our bees can't escape inside the building, but have access to the outside world via a long tube, which they had to be specially trained to walk through. They have a landing platform outside with a yellow surround to make it easy for them to find. During times of low food availability we need to supplement the bees' diet with honey. An apiarist looks after our bees regularly, replacing frames and ensuring they have everything they need.*



## ITEM NO: 3

### TENDER 005-16/17 INSPECTION AND MAINTENANCE OF STORMWATER SYSTEMS

**RECOMMENDATION:**

**APPROVAL**

***That Council:***

- 1. approves the most suitable tender, being that submitted by Drainflow Services Pty Ltd, for the inspection and maintenance of stormwater systems for a period of three years commencing on 20 October 2016 with the option to extend for a further two years at the rates supplied in Schedule 3 'Rates – Normal Hours,' Schedule 4 'Rates – Out of Hours' and Schedule 5 ' Rates – Additional Costs' for the first year with each subsequent year increase based upon the Consumer Price Index for the preceding year;***
- 2. authorises the Chief Executive Officer to enter into a contract/s, for the provision of the services.***

**BACKGROUND:**

FILE REFERENCE:	P1033031
REPORTING UNIT:	Street Presentation and Maintenance
RESPONSIBLE DIRECTORATE:	Construction and Maintenance
DATE:	24 August 2016
MAP / SCHEDULE:	Schedule 3 – Rates – Normal Hours Schedule 4 – Rates- Out of Hours Schedule 5– Rates – Additional Costs Confidential Schedule 6 - Qualitative Selection Criteria Evaluation Matrix

Tender 005-16/17 Inspection and Maintenance of Stormwater Systems was advertised in the West Australian on Wednesday, 20 July 2016. Tenders closed at 2.00pm on Tuesday, 9 August 2016 with the following submissions received:

- MMM (WA) Pty Ltd; and
- Drainflow Services Pty Ltd.

## LEGISLATION / STRATEGIC PLAN / POLICY:

**Legislation** Part 4 of the Local Government (Functions and General) Regulations 1996

**Integrated Planning and Reporting Framework Implications** **Strategic Community Plan**  
Council Four Year Priorities: Living in Perth  
S9 Promote and facilitate CBD living

### Policy

Policy No and Name: 9.7 – Purchasing Policy

### DETAILS:

Tenderers were required to address all selection criteria in detail to demonstrate both their experience and ability to undertake inspections of and repairs to stormwater systems and to submit a Form of Tender that included a Schedule of Rates. The criteria were:

- Experience with Similar Works;
- Support Resources;
- Financial Capacity/Ongoing Viability;
- Safety Management Procedures;
- Disposal of Waste Water /Debris;
- Reporting Methodology; and
- Price.

The two submissions were assessed individually and ranked in order of merit according to the criteria with particular emphasis on relevant experience, safety management procedures and support resources.

Based on the selection criteria, the submissions were ranked as follows:

#### 1. **Drainflow Services Pty Ltd**

The submission from this company was considered fair with some minor deficiencies, particularly in respect to reporting methodology. The company does substantial work of a similar nature for numerous local governments and is the City's current service provider. Drainflow Services Pty Ltd supplied the most competitive pricing for the majority of line items particularly those that are utilised by the City regularly.

#### 2. **MMM (WA) Pty Ltd**

This company provided a fair offer with some deficiencies across all criteria. MMM have completed numerous stormwater drainage construction contracts with other local governments but did not provide evidence of undertaking services similar to those required under this tender. As evidenced in the

Schedules, submitted prices were generally the most expensive offered particularly those that are regularly utilised by the City of Perth.

**FINANCIAL IMPLICATIONS:**

ACCOUNT NO:	Various Operating Accounts
BUDGET ITEM:	Transport – Streets, Roads, Bridges, Depots – Drainage - Roads
BUDGET PAGE NUMBER:	N/A
BUDGETED AMOUNT:	\$1,628,423
AMOUNT SPENT TO DATE:	\$ 100,424
PROPOSED COST:	\$ 200,000
BALANCE:	\$1,327,999
ANNUAL MAINTENANCE:	N/A
ESTIMATED WHOLE OF LIFE COST:	N/A

All figures quoted in this report are exclusive of GST.

Based upon current pricing for the four most commonly utilised line items, prices offered by the recommended service provider range from a decrease of 32% (Item 3.1 of Schedule 3) to an increase of 1% (Item 1.1 of Schedule 3).

Financial and Occupational Health and Safety assessments of the recommended tenderer were undertaken with positive outcomes.

**COMMENTS:**

Drainflow Services Pty Ltd has the necessary resources and experience to fulfil the requirements of the City of Perth as specified in the tender documents. The company is the City's current service provider and has undertaken these works satisfactorily over the previous five years. It is therefore recommended that the tender from Drainflow Services Pty Ltd be accepted for a period of three years effective from Thursday, 20 October 2016 with the option to extend for a further two years.

SCHEDULE 3

**TENDER 005-16/17**  
**Rates - Normal Hours**

ITEM	DESCRIPTION	QUANTITY	UNIT	MMM	DRAINFLOW
	<b>INSPECTION</b>				
1	Inspection - Item 1.	<i>Per Complete Inspection (Section 10)</i>		2,503.00	6,500.00
2	Inspection -Item 2.	<i>Per Inspection of Approx. 6,000</i>		168,000.00	102,000.00

	DESCRIPTION	QUANTITY	UNIT	MMM	DRAINFLOW
<b>3</b>	<b>MAINTENANCE</b>				
3.1	Manual cleaning (per pit) Pits up to 2m deep	1	Item	1032.40	20.00
3.2	Mechanical cleaning (per pit)	1	Item	888.40	20.00
3.3	Replace insitu concrete surrounds	1	Item	904.00	1575.00
3.4	Replace trafficable Gatic surrounds	1	item	750.00	1375.00
3.5	Replace standard pre-cast conversion slabs (City to supply)	1	item	1990.00	2350.00
3.6	Replace Gatic cover - trafficable (City to supply)	1	Item	1990.00	1750.00
3.7	Replace Gully grates - 900x450mm (City to supply)	1	Item	1990.00	200.00
3.8	Replace Gully grates - 600x450mm (City to supply)	1	Item	1990.00	200.00
3.9	Replace side-entry pit surrounds (City to supply)	1	Item	1990.00	1550.00
3.10	Replace side-entry pit covers (City to supply)	1	Item	1990.00	200.00
3.11	Replace Letterbox kerbing (City to supply)	1	Item	670.00	400.00
3.12	Reinstating footpaths	1	/m <sup>2</sup>	540.00	150.00
3.13	Replace brickwork in drainage structure	1	/m <sup>2</sup>	442.50	200.00
3.14	Re-pointing brickwork in drainage structure	1	/m <sup>2</sup>	317.50	100.00
3.15	Breakout/replace pipework mortar joints - up to 300mm Ø	1	Item	680.00	250.00
3.16	Breakout/replace pipework mortar joints 301mm to 600mm Ø	1	Item	940.00	300.00
3.17	Breakout/replace pipework mortar joints over 600mm Ø	1	Item	1200.00	350.00
3.18	Re-fix step irons	1	Item	770.00	150.00
3.19	Replace step irons	1	Item	1058.00	250.00
3.20	Replace aggregate in drain hole	1	Item	615.00	110.00
3.21	Replace 305's and 308's pit covers – (City to Supply)	1	Item	910.00	150.00

	<b>DESCRIPTION</b>	<b>QUANTITY</b>	<b>UNIT</b>	<b>MMM</b>	<b>DRAINFLOW</b>
3.22	Cleaning of Pipes and Culverts (not including root removal)	1	Lm	3.46	8.00
3.23	Cleaning of Pipes and Culverts (including root removal)	1	Lm	4.46	10.00
3.24	Road Traffic Management* (2 personnel, signage, 1 x VMS	1	/Hour	128.40	95.59
3.25	50mm Pump - 20mm max head, 15 litres per second	1	/Day	130.80	150.00
3.26	100mm Pump – 64mm max head, 80 litres per second	1	/Day	234.00	450.00
3.27	225mm Outfall Plug	1	/Day	659.00	100.00
3.28	300mm Outfall Plug	1	/Day	659.00	125.00
3.29	375mm Outfall Plug	1	/Day	659.00	130.00
3.30	450mm Outfall Plug	1	/Day	979.67	200.00
3.31	525mm Outfall Plug	1	/Day	979.67	350.00
3.32	600mm Outfall Plug	1	/Day	979.67	350.00
3.33	750mm Outfall Plug	1	/Day	2097.33	350.00
3.34	900mm Outfall Plug	1	/Day	2097.33	350.00
3.35	1200mm Outfall Plug	1	/Day	2097.33	400.00
3.36	1500mm Outfall Plug	1	/Day	2097.33	400.00
3.37	High pressure jetting, CCTV inspection and vac sucking.		/Hour	454.25 (Min Hours 3)	240.00 (Min Hours 4)

	<b>DESCRIPTION</b>	<b>QUANTITY</b>	<b>UNIT</b>	<b>MMM</b>	<b>DRAINFLOW</b>
<b>4</b>	<b>DATA COLLECTION - ITEM 4</b>				
4.1	Data Collection – Surveyor*	1	/ Hour	144.00	145.00

\* Any additional charges or requirements should be included in Schedule C – Additional Costs

All prices GST exempt

SCHEDULE 4

**TENDER 005-16/17**  
**Rates- Out of Hours**

ITEM	DESCRIPTION	QUANTITY	UNIT	MMM	DRAINFLOW
	<b>INSPECTION</b>				
1	Inspection - Item 1.	<i>Per Complete Inspection (Section 10)</i>		3,128.75	8,450.00
2	Inspection -Item 2.	<i>Per Inspection of Approx. 6,000</i>		210,000.00	132,600.00

	DESCRIPTION	QUANTITY	UNIT	MMM	DRAINFLOW
<b>3</b>	<b>MAINTENANCE</b>				
3.1	Manual cleaning (per pit) Pits up to 2m deep	1	Item	1,290.50	26.00
3.2	Mechanical cleaning (per pit)	1	Item	1,110.50	26.00
3.3	Replace insitu concrete surrounds	1	/m <sup>2</sup>	1,130.00	1,575.00
3.4	Replace trafficable Gatic surrounds	1	item	937.50	1,375.00
3.5	Replace standard pre-cast conversion slabs (City to supply)	1	item	2,487.50	2,350.00
3.6	Replace Gatic cover - trafficable (City to supply)	1	Item	2,487.50	1,750.00
3.7	Replace Gully grates - 900x450mm (City to supply)	1	Item	2,487.50	220.00
3.8	Replace Gully grates - 600x450mm (City to supply)	1	Item	2,487.50	220.00
3.9	Replace side-entry pit surrounds (City to supply)	1	Item	2,487.50	1,600.00
3.10	Replace side-entry pit covers (City to supply)	1	Item	2,487.50	200.00
3.11	Replace Letterbox kerbing (City to supply)	1	Item	837.50	400.00
3.12	Reinstating footpaths	1	/m <sup>2</sup>	675.00	150.00
3.13	Replace brickwork in drainage structure	1	/m <sup>2</sup>	553.13	200.00
3.14	Re-pointing brickwork in drainage structure	1	/m <sup>2</sup>	396.88	100.00
3.15	Breakout/replace pipework mortar joints - up to 300mm Ø	1	Item	850.00	250.00
3.16	Breakout/replace pipework mortar joints 301mm to 600mm Ø	1	Item	1,175.00	300.00
3.17	Breakout/replace pipework mortar joints over 600mm Ø	1	Item	1,500.00	350.00
3.18	Re-fix step irons	1	Item	962.50	150.00
3.19	Replace step irons	1	Item	1,322.50	250.00
3.20	Replace aggregate in drain hole	1	Item	768.75	110.00
3.21	Replace 305's and 308's pit covers – (City to Supply)	1	Item	1,137.50	150.00



	<b>DESCRIPTION</b>	<b>QUANTITY</b>	<b>UNIT</b>	<b>MMM</b>	<b>DRAINFLOW</b>
3.22	Cleaning of Pipes and Culverts (not including root removal)	1	Lm	4.37	10.00
3.23	Cleaning of Pipes and Culverts (including root removal)	1	Lm	5.57	12.00
3.24	Road Traffic Management* (2 personnel, signage, 1 x VMS	1	/Hour	160.50	95.59
3.25	50mm Pump - 20mm max head, 15 litres per second	1	/Day	163.50	150.00
3.26	100mm Pump – 64mm max head, 80 litres per second	1	/Day	292.50	450.00
3.27	mm Outfall Plug	1	/Day	823.75	100.00
3.27	225mm Outfall Plug	1	/Day	823.75	100.00
3.28	300mm Outfall Plug	1	/Day	823.75	125.00
3.29	375mm Outfall Plug	1	/Day	823.75	130.00
3.30	450mm Outfall Plug	1	/Day	1,224.59	200.00
3.31	525mm Outfall Plug	1	/Day	1,224.59	400.00
3.32	600mm Outfall Plug	1	/Day	1,224.59	400.00
3.33	750mm Outfall Plug	1	/Day	2,621.66	400.00
3.34	900mm Outfall Plug	1	/Day	2,621.66	450.00
3.35	1200mm Outfall Plug	1	/Day	2,621.66	450.00
3.36	1500mm Outfall Plug	1	/Day	2,621.66	450.00
3.37	High pressure jetting, CCTV inspection and vac sucking.		/Hour	567.81 (Min Hours 3)	340.00 (Min Hours 4)

	<b>DESCRIPTION</b>	<b>QUANTITY</b>	<b>UNIT</b>	<b>MMM</b>	<b>DRAINFLOW</b>
<b>4</b>	<b>DATA COLLECTION - ITEM 4</b>				
4.1	Data Collection – Surveyor*	1	/ Hour	180.00	155.00

\* Any additional charges or requirements should be included in Schedule C – Additional Costs

All prices GST exempt

SCHEDULE 5

**TENDER 005-16/17  
RATES - ADDITIONAL COSTS**

	DESCRIPTION	QUANTITY	UNIT	MMM	DRAINFLOW
	Traffic Management Plan	1	Each	650.00	
	Labour and Vehicle to manage pumps if required	1	/hour	75.00	
3.22	Minimum Charge (std hours)		100Lm	346.20	
3.23	Minimum Charge (std hours)		100Lm	446.12	
	Waste Disposal	Min 3 tonne	tonne	222.00	
	P/Jet Unit – Std Hours (OOH +25%)		/hour	190.80	
	Gully Eductor – Std Hours (OOH +25%)		/hour	178.80	
	King Vac – Std Hours (OOH +25%)		/hour	226.80	
	CCTV – Std Hours (OOH +25%)		/hour	202.80	
	Eductor Truck – 1 Man Crew		/hour		100.00
	Eductor Truck – 2 Man Crew		/hour		145.00
	Eductor Truck – 1 Man Crew	After Hours	/hour		185.00
	Jetter Truck – 2 Man Crew		/hour		145.00
	Jetter Truck – 2 Man Crew	After Hours	/hour		185.00

All prices GST exempt

CONFIDENTIAL SCHEDULE 6  
ITEM 3 – TENDER 005-16/17 INSPECTION AND  
MAINTENANCE OF STORMWATER SYSTEMS

FOR THE WORKS & UBRAN DEVELOPMENT COMMITTEE  
MEETING

27 SEPTEMBER 2016

DISTRIBUTED TO ELECTED MEMBERS UNDER  
SEPARATE COVER