



WORKS AND TRAFFIC COMMITTEE

A G E N D A

9 May 2017

**Commencing immediately after the Commercial Services
Committee Meeting**

**Held at the Mt Larcom Hall,
47 Raglan Street, Mt Larcom**

Please note: These minutes are to be read in conjunction with the preceding General Meeting Minutes.

Terms of Reference

Committee is primarily responsible for overseeing policy and performance in the following areas of Council operation:-

- Road Construction and Maintenance
- Drainage Operations
- Public Car Parks
- Street Sweeping
- Footpath Management
- Design Services
- Traffic Management (via Traffic Environment Advisory Committee).

Committee members are all Councillors.

By virtue of section 12(3)(g) of the *Local Government Act 2009*, the Mayor is a (ex-officio) member of the committee.

Cr Masters is the Chair of the committee.

A quorum be a simply majority of members.

The Committee meet in the first instance of the second Tuesday of each month commencing immediately after the Commercial Services Committee Meeting in the Council Chambers and the committee be authorised to determine its future meeting times and frequency.

Committee Administrator is the Director Engineering Services.

Appointment of Committees

Section 264 of the *Local Government Regulation 2012* as follows:-

(1)A local government may -

- (a) appoint, from its councillors, standing committees or special committees;
- and
- (b) appoint advisory committees.

(2)Two or more local governments may appoint, from their councillors, a joint standing committee.

Closed Meetings

Section 275 of the *Local Government Regulation 2012* as follows:-

(1)A local government or committee may resolve that a meeting be closed to the public if its councillors or members consider it necessary to close the meeting to discuss -

- (a) the appointment, dismissal or discipline of employees; or

- (b) industrial matters affecting employees; or
- (c) the local government's budget; or
- (d) rating concessions; or
- (e) contracts proposed to be made by it; or
- (f) starting or defending legal proceedings involving the local government; or
- (g) any action to be taken by the local government under the Planning Act, including deciding applications made to it under that Act; or
- (h) other business for which a public discussion would be likely to prejudice the interests of the local government or someone else, or enable a person to gain a financial advantage.

Committee Members

Cr Masters - Chair

Mayor Burnett

Cr Bush

Cr Churchill

Cr Goodluck

Cr Hansen

Cr O'Grady

Cr Sobhanian

Cr Trevor

Table of Contents

| ITEM | PAGE |
|--|-----------|
| WTC/1. OPENING AND APOLOGIES..... | 5 |
| WTC/2. DISCLOSURE OF INTEREST | 5 |
| WTC/3. CONFIRMATION OF MINUTES | 6 |
| WTC/3.1. CONFIRMATION OF MINUTES FOR 11 APRIL 2017..... | 6 |
| WTC/4. DEPUTATIONS | 6 |
| WTC/5. OFFICERS' REPORTS | 7 |
| WTC/5.1. ROAD SERVICES CAPITAL REPORT - APRIL 2017 | 7 |
| WTC/5.2. ASSET MANAGEMENT PLANS - URBAN AND RURAL ROADS..... | 18 |
| WTC/5.3. CBD CAR PARKING AND WI-FI APPLICATION PROPOSAL FOR SMART CITIES AND SUBURBS PROGRAM..... | 24 |
| WTC/5.4. SIDE STREET, GLADSTONE - STREET LIGHTING IMPROVEMENTS | 35 |
| WTC/6. URGENT BUSINESS..... | 39 |
| WTC/7. NOTICE OF MOTION | 39 |
| WTC/8. CONFIDENTIAL ITEMS | 39 |
| WTC/9. MEETING CLOSE | 39 |

WTC/1. OPENING AND APOLOGIES

WTC/2. DISCLOSURE OF INTEREST

Nil.

WTC/3. CONFIRMATION OF MINUTES

WTC/3.1. CONFIRMATION OF MINUTES FOR 11 APRIL 2017

Responsible Officer: Director Engineering Services

Committee Meeting Date: 9 May 2017

File Ref: CM7.2

Purpose:

Confirmation of the minutes of the Works and Traffic Committee held on 11 April 2017.

Officer's Recommendation:

That the minutes of the Works and Traffic Committee of Council held on 11 April 2017 be confirmed.

Attachments:

1. Minutes of the Works and Traffic Committee of Council held on 11 April 2017.

Tabled Items:

Nil.

Report Prepared by: Senior Administration Officer

WTC/4. DEPUTATIONS

Nil.

WTC/5. OFFICERS' REPORTS

WTC/5.1. ROAD SERVICES CAPITAL REPORT - APRIL 2017

Responsible Officer: Director Engineering Services

Committee Meeting Date: 9 May 2017

File Ref: RD1.8

Purpose:

The purpose of this report is to update Councillors on the status of the 2016-2017 Road Services Capital and Operational budgets and works program, in particular covering the noteworthy issues from the previous month and the plans for the coming month. The report provides a basis to discuss the performance of the Department (including staff, consultants, contractors and customer feedback).

This is an information only report, and is not provided for the purpose of Council exercising its powers as a Local Government.

Officer's Recommendation:

That the Road Services Monthly Briefing Report – April 2017 be received for information.

Background:

This is a regular monthly information report. The material in each report builds on previous reports and thus each month is only intended to present new information. Should a detailed analysis of an issue or project be required this will be the subject of a specific report, and more than likely a specific resolution of the Council.

Capital Business Units are examined at the end of each month and reported at the first Committee Meeting in the following month.

Operational Business Units are examined at the end of each financial year quarter, i.e.

| | | |
|-----------------------|----------------------|---|
| First Quarter | Jul, Aug, Sep | Reported at the first Works & Traffic Committee Meeting in October |
| Second Quarter | Oct, Nov, Dec | Reported at the first Works & Traffic Committee Meeting in January |
| Third Quarter | Jan, Feb, March | Reported at the first Works & Traffic Committee Meeting in April |
| Fourth Quarter | Apr, May, Jun | Reported at the first Works & Traffic Committee Meeting in July |

At the time of preparing this report the financial year was 83.56% completed. The following financial data has been extracted from Council's official financial database (Technology One):

| Directors' Financial Overview - Roads Operational | | | | | |
|--|-----------------------------|-------------------------------|---|-------------------------------|---|
| As at end of period 10 | | | % Of Year passed - 83.56% | | |
| Description | Year to Date Expenditure | Adopted Expenditure Budget | % of Adopted Budgeted Expenditure | Revised Expenditure Budget | % of Revised Budgeted Expenditure |
| Bridges, Jetty's & Boatramps | 120,070 | 365,441 | 32.9% | 365,441 | 32.9% |
| Footpath Management | 263,211 | 357,865 | 73.6% | 357,865 | 73.6% |
| Rural & Urban Road Maintenance (excl Flood) | 6,884,589 | 10,267,370 | 67.1% | 10,349,843 | 66.5% |
| LG Public Car Parks | 21,108 | 83,000 | 25.4% | 50,300 | 42.0% |
| Street Lighting | 1,045,443 | 1,500,000 | 69.7% | 1,495,000 | 69.9% |
| Traffic Lights Maintenance | 157,153 | 127,000 | 123.7% | 160,000 | 98.2% |
| Stormwater | 1,929,007 | 2,280,379 | 84.6% | 2,382,827 | 81.0% |
| Street Sweeping | 438,015 | 665,000 | 65.9% | 612,769 | 71.5% |
| Sub Total | \$ 10,858,596 | \$ 15,646,055 | 69.4% | \$ 15,774,045 | 68.8% |
| - Flood Repairs (Emergent) | 380,146 | 0 | | | |
| Grand Total | \$ 11,238,742 | \$ 15,646,055 | | \$ 15,774,045 | |

| Directors' Financial Overview - Roads Capital | | | | | |
|--|-----------------------------|-------------------------------|---|-------------------------------|---|
| Description | Year to Date Expenditure | Adopted Expenditure Budget | % of Adopted Budgeted Expenditure | Revised Expenditure Budget | % of Revised Budgeted Expenditure |
| Bridges, Jetty's & Boatramps | 1,375,681 | 2,555,000 | 53.8% | 2,155,125 | 63.8% |
| Footpath Management | 1,319,397 | 1,611,380 | 81.9% | 2,178,901 | 60.6% |
| Roads Program - Capital (excl Flood) | 12,961,581 | 17,192,600 | 75.4% | 16,871,153 | 76.8% |
| - Flood Repairs | 4,688,994 | 11,039,382 | 42.5% | 11,213,808 | 41.8% |
| LG Public Car Parks | 0 | 0 | 0.0% | 25,000 | 0.0% |
| Street Lighting | 214 | 35,000 | 0.6% | 35,000 | 0.6% |
| Traffic Lights Maintenance | 66,499 | 100,000 | 66.5% | 66,499 | 100.0% |
| Stormwater | 679,612 | 2,108,000 | 32.2% | 1,879,493 | 36.2% |
| Sub Total | \$ 21,091,977 | \$ 34,641,362 | 60.9% | \$ 34,424,979 | 61.3% |

| Directors' Financial Overview - Roads Recoverable | | | | | |
|--|-----------------------------|-------------------------------|---|-------------------------------|---|
| Description | Year to Date Expenditure | Adopted Expenditure Budget | % of Adopted Budgeted Expenditure | Revised Expenditure Budget | % of Revised Budgeted Expenditure |
| Recoverable Works - Roads | 1,740,677 | 1,400,000 | 124.3% | 3,731,226 | 46.7% |

Consideration:

Operational Business Unit Summary

Operational Business Units are tracking close to or within pro rata with the exception to Traffic Lights Maintenance, as expenditure is intermittent and unpredictable in nature.

| Business Unit | Comment |
|---|---|
| Bridges, Jetty's & Boat Ramps | Expenditure is tracking below pro-rata at 32.9% and is forecast to remain within allocation. |
| Footpath Management | Expenditure is tracking below pro-rata at 73.6% and is forecast to remain within allocation. |
| Rural & Urban Roads Maintenance (excluding flood damage) | Expenditure is tracking below pro-rata at 66.5% and is forecast to remain within allocation. |
| LG Public Car Parks | Expenditure is tracking below pro-rata at |

| | |
|-----------------------------------|---|
| | 42.0% and is forecast to remain within allocation. |
| Street Lighting | Expenditure is tracking below pro-rata at 69.9% and is forecast to remain within allocation. |
| Traffic Lights Maintenance | Expenditure is tracking above pro-rata at 98.2% and will be closely monitored for the remainder of the financial year, however a portion of traffic light maintenance can be reactive due to unforeseen circumstances. |
| Stormwater | Expenditure is tracking close to pro-rata at 81.0% and is forecast to remain within allocation. |
| Street Sweeping | Expenditure is tracking below pro-rata at 71.5% and is forecast to remain within allocation. |

Capital Business Units

For Councillors' convenience a copy of the adopted Capital Projects are provided in "Attachment 1". The current financial timing status of the Capital Projects is provided in "Attachment 2".

Technology One provides information on invoices received from contractors and suppliers as well as committed costs (i.e. value of contracts or purchase orders issued to contractors and suppliers which have not yet been invoiced to Council). The above Financial Overview table provides details on amounts invoiced to Council. Attachment 2 provides details on actual expenditure plus committed costs.

Based on invoices received to date, 70.7% of the allocated budget (excluding flood damage) has been spent. Based on invoiced amounts and including committed costs 85% of the allocated budget (excluding flood damage) has been either spent or committed. This places Road Services actual capital position ahead of pro rata.

Capital Business Unit Summary

At the time of producing this report the Roads Capital Budget had completed 70 projects out of 118 (excluding flood damage). This sees 48 projects currently under construction or in the preconstruction planning phase. It is worth recognising though, that a number of projects have reached physical completion however, are awaiting final invoicing before the projects can be reported as complete.

Bridges Jetty's and Boat Ramps – The final bridge tender has now been awarded. This is a design and construct project with design to take approximately 10 weeks. This will see construction commence early in the 2017-2018 financial year. This leaves one (1) investigate and design project, that is also progressing.

Footpaths – Non-completed projects are in various stages of pre-construction and/or construction, and sees all nominated projects forecast for completion within the financial year. There are no forecast concerns in delivering this program at this time.

Roads Capital – Non-completed projects have now recommenced following delays to the program as a result of crews being deployed to Emergent Works associated with Cyclone Debbie. Apart from the projects reported and nominated as partially deferred to Council, the remaining projects remain forecast for completion in the current financial year.

Street Lighting – One (1) capital project resides within this Business Unit, that being the installation of a street light at the pedestrian crossing on Captain Cook Drive, adjacent to the Service Station in Agnes Water. The foundations for the light pole were identified as conflicting with a previously non-recorded stormwater asset, which has resulted in the need to marginally relocate the pedestrian crossing position. From a design compliance perspective, this has now been resolved enabling the project to proceed. The project can now be programmed and it is hoped that Ergon can complete the works this financial year.

The vast majority of the street lighting budget allocation is for electricity supply invoicing for the region's street lights.

Traffic Lights – Capital program completed.

Stormwater – Non-completed projects have now recommenced following delays to the program as a result of crews being deployed to Emergent Works associated with Cyclone Debbie. Apart from the projects reported and nominated as partially deferred to Council, the remaining projects remain forecast for completion in the current financial year.

LG Public Car Parks – Nil capital projects are associated with this Business Unit.

| Status | Description |
|--|--|
| Projects nominated as <u>Completed April</u> | |
| RFC0089 – Archer Street Footpath | Project completed under budget by approximately \$16,600. Underspend can be utilised to reconcile overspends on other Capital Projects and will be reported accordingly. |
| RDC0578 – Dawson Road DDA Compliant Bus Stop | Project completed under budget by approximately \$500. Underspend can be utilised to reconcile overspends on other Capital Projects and will be reported accordingly. |
| RDC0591 – Katandra Street DDA Compliant Bus Stop | Project completed under budget by approximately \$22,000. Underspend can be utilised to reconcile overspends on other Capital Projects and will be reported accordingly. |
| RDC0618 – Waratah Crescent DDA Compliant Bus Stop | Project completed over budget by \$9,800. Over expenditure will be reconciled by project savings from completed capital projects and will be reported accordingly. |
| RDC0564 – Bentley Street Pavement/Surface Renewal | Project completed under budget by approximately \$67,700. Underspend can be |

| | |
|---|---|
| | utilised to reconcile overspends on other Capital Projects and will be reported accordingly. |
| RDC0586 – Gladstone – Benaraby Road Service Road (South of Dalrymple Drive) | Project completed over budget by \$20,400. Over expenditure will be reconciled by project savings from completed capital projects and will be reported accordingly. |
| Projects nominated as <u>Defer April</u> (ie unable to substantially start this financial year) | |
| Nil. | |
| Projects nominated as <u>Carry Over or "Partial Defer" April</u> (ie started but unable to finish this financial year, Carry over to 2017-2018) | |
| Nil. | |
| Projects nominated as <u>Overspend April</u> (not yet complete but forecast to be overspent by 10% or more) | |
| Nil. | |

Operational Plan Update

| Operational Plan Measure | Current Status of "Target" | Comments |
|--|-----------------------------------|---|
| Local Roads of Regional Significance "LRRS" network level safety assessment Target – 30 June 2017 | On Track | At the Regional Roads and Transport Group (RRTG) meeting held 16 November 2016, Officers were made aware of a State initiative that will see the assessment of our Local Roads of Regional Significance completed via an AusRap "Australian Road Assessment Program" Safety Assessment Project, which will likely see the phase one project 100% funded by the State Government. The phase one project will include road condition survey and video data collection of our LRRS network. This work is proposed to be completed by 30 June 2017. Phase two of the project will likely be 50% funded by the State Government and include assessment and translation of this data into a priority program to target safety |

| | | |
|---|-----------|---|
| | | improvements to the nominated sites. The stage two project will not proceed until the 2017-2018 financial year. In anticipation of receiving this funding the project is currently on hold until further advice from the Regional Roads and Transport Group and will also include the partial carryover of funding into the 2017-2018 financial year to facilitate Stage 2 of the program. |
| Investigate and adopt fit for purpose floodway renewal options considering constructability, environmental requirements and suitability for Road Hierarchy Target – 30 June 2017 | Completed | Officers have investigated suitable and cost effective outcomes in relation to upgrading/renewing of existing floodways. Consideration was given to Council's Road Hierarchy, environmental obligations and stream classifications. These factors significantly influence the type of structure required to be built and the associated costs. A standard has now been developed for each road hierarchy and stream type, and is being included within the Capricorn Municipal Development Guidelines "CMDG". Future floodway upgrade/renewals will be considered in accordance with this standard. |
| Investigate and adopt a fit for purpose Low Cost Seal strategy considering DTMR Sealing of Unsealed Roads with Low Traffic (Technical Note 118) Target – 30 June 2017 | Completed | A list of roads and road segments were finalised, considered and adopted by Council at its 11 April Works and Traffic Committee Meeting for "Low Trafficked Road Seal Solutions" and subsequently included in the Accelerated Gravel Road Seal program. Assessment of each road or segment was considered for suitability in accordance with the Department of Transport and Main Roads "Technical |

| | | |
|---|----------------|---|
| | | Note 118 Sealing of Unsealed Roads with Low Traffic". Road and road segments deemed viable for an Accelerated Gravel Road Seal program have now been included into Council's Long Term Financial Plan for future budget deliberations. |
| Percentage per quarter of Customer Service Requests initially received by Road Services responded to within 10 business days of lodgement. Target - 100% | Target not met | Due to the Cyclone Debbie event, one request was not actioned within the allocated timeframe. The physical works were complete however, the CSR was not appropriately actioned to reflect this works. Roads Services remain committed to Council's Customer Service Charter and continually monitor progress. |

Communication and Consultation (Internal/External):

Nil.

Legal Environmental and Policy Implications:

Nil.

Financial and Resource Implications:

"Attachment 2" summarises budget savings and over expenditures for completed projects.

At the end of April, the balance of completed capital projects is as follows and equates to an underspend of \$285,707.

| | | |
|-------------------------------------|-----------|-----------------|
| Capital Projects | \$ | +285,707 |
| Flood Projects | \$ | - |
| Total Capital Under / (Over) | \$ | +285,707 |

Budget Revisions

Nil.

Commentary:

RDC0311 Butler Street Yarwun Provide Drainage Easement

Officers have been trying for over 18 months to reach an agreement with the owners of 54 Butler Street, Yarwun to establish this drainage easement. The project originated at the request of the owners however, the couples circumstances have since changed and they are not responsive to Council's requests to facilitate the project. The terms were to be by mutual agreement between Council and the owners in establishing the easement for which Council will then maintain the stormwater flow path. Council allocated \$20,000 in its 2016-2017 budget to facilitate survey and legal expenses.

Officers will now progress the project with a forced establishment of the drainage easement to complete the project. Partial deferral of funding is now required to realise project completion through the 2017-2018 financial year.

Wood Street / Young Street Flood Gates

Application for environmental approval to install the flood gates has been lodged with

- The Department of Agriculture and Fisheries (DAF)
- Department of Infrastructure, Local Government and Planning (DILGP)
- Environment Heritage and protection (EHP)

Officers were advised that the departments would not support the project if mangroves were lost due to the flood gates permanently stopping tidal flows, and if approval was granted it would likely result in an estimated \$120,000 mangrove offset fee. For this reason Officers have reassessed the flood gates and will implement a strategy and process that will see the gates marginally cracked open to enable tidal movements during calm weather. However will see the gates closed when inclement weather is pending, this will be a manual operation. It is hoped approval is imminent to enable the gates to be fitted within the current financial year.

2017 Cyclone Debbie

Crews continue to undertake minor works under the NDRRA Emergent Works activity, this enables teams to undertake necessary temporary repairs to make the road safe for commuters. This Emergent Work period is finalised on 5 June 2017, at which time all additional works are to be considered Restoration. Council's trigger point to become eligible for Cyclone Debbie funding is to have expended \$502,000. The Federal Government have advised Councils that once the trigger point has been reached all reasonable costs incurred by Council will be reimbursed, subject to QRA approval and well documented and justified evidence that expenditure was related to the event.

Officers believe at this point the total repair cost could exceed \$25 million however this will become more clear as all damage is collated in the coming weeks. Cyclone Oswald's restoration value was approximately \$74 million. Cyclone Marcia's event totalled approximately \$9.5 million.

Road Services have appointed Cardno to finalise and collate damage data in preparation for submission to QRA, it is envisaged that this work will be completed early July. Cardno will also assist with the preparation and submission of the Emergent Works Form 4 required for this reimbursement.

Road Services are preparing tender documents in order to seek external Procurement/Construction/Management (PCM) assistance from suitably experienced consultants. This is essential so that Council gathers data and coordinates repair efforts in a manner that will facilitate funding reimbursement from QRA. This approach has worked successfully for past cyclone events, and is required from an overall resourcing perspective. The PCM costs are reimbursable.

Given the Federal Governments commitment to reimbursing Councils for restoration works, officers will now assess how best to deliver the Restoration Program. The scale of the restoration is too large for Council to undertake all works, considering our resource pool and our ongoing commitment to operational and capital works. Officers believe opportunities exist to combine the restoration effort by a mix of Council day labour and contractors and the coordination of this restoration program be managed by Council staff.

2015 Flood Restoration Status

Cardno were appointed as Council's Procurement and Construction Manager for the Cyclone Marcia event (2015 Betterment). Golding Contractors were awarded the restoration contract and these works have now been completed. Note: Some minor REPA works that Golding Contractors were unable to commence and complete due to flooded causeways, has been completed within the Miriam Vale Plant Hire (MVPH) scope (so that the acquittal process from previous contracts can proceed).

The Betterment contract was awarded to Miriam Vale Plant Hire and due to recent wet weather and the effects of Cyclone Debbie the works are now forecast for completion during early to mid May.

Final Reporting to QRA

Batch 1 (50.15) - Golding Contract

Form 9 (Progress Report), Form 10 (Final Reporting Checklist), Form 11 (Signed Value for Money Report) were finalised and sent to QRA 22 February 2017.

Batch 2 (51.15) - Golding Contract

Assurance Audit yet to be completed with QRA (unlikely to change the result below)

Cost Recovery 99.74% in \$3.250M

10% payment authorised by QRA 14 March 2017 and paid to Council – amount being \$311,436.16

Batch 3 (52.15) - Golding Contract.

Cost Recovery 99.48% in \$3.148M

10% payment now due to Council – being \$314,816.00

Both remaining payments above were forecast to be made to Council during March 2017.

The current Betterment works are almost complete as follows:-

Practical Completion for 8 of the 12 sites has been applied for by the Contractor (MVPH)

Practical Completion for 7 of the 12 sites has been awarded by the Superintendent

The contract Value for MVPH is currently at \$3,371,917

Physical work is forecast to be complete (including minor defects) by Friday 12 May 2017.

Tender Progress

Current status of tenders to be released for the remaining 2016/17 financial year include:-

| Tender | Status |
|---|---|
| Procurement and Construction Management "Harvey Road" | Tender # 175-17 closed and currently being assessed. |
| Procurement and Construction Management "Cyclone Debbie" | Tender currently being collated with the view to release in May 2017. This will see the appointment of a contractor to manage the Restoration component of the Cyclone Debbie recovery. |
| Harvey Road, Clinton – Upgrade "Stage 1" NB: The work done Dec16 / Jan 17 is described as "Early Works" | Stage 1 designs have been finalised. Project documentation for Tender release is currently being collated with the intention to release the Stage 1 Tender in late May 2017. |

Summary:

Capital Works programmed to commence or continue in the month of May include:-

| | |
|----------------|---|
| RDC0490 | Harvey Road Reconstruction |
| RDC0580 | East End Road gravel resheet |
| RDC0579 | Deep Creek Road gravel resheet |
| RDC0574 | Darts Creek Road gravel resheet |
| RDC0605 | Norton Road gravel resheet |
| RFC0089 | Archer Street Footpath |
| RDC0534 | Shaw Street & Butler Street Intersection Improvements (blackspot project) |
| RDC0505 | O'Connell Street pavement and kerb renewal |
| RDC0548 | Round Hill Scenic Lookout Upgrade |
| RDC0571 | Dale Drive gravel resheet |
| RDC0582 | Fingerfield Road (Rules Beach) gravel resheet |
| RDC0581 | Fingerfield Road (Baffle Creek) gravel resheet |
| RDC0608 | Pacific Avenue gravel resheet |
| RDC0606 | Oceania Court gravel resheet |
| RDC0583 | Freshwater Court gravel resheet |
| RDC0599 | Matchbox Road gravel resheet |
| RDC0569 | Claytons Road gravel resheet |
| RDC0598 | Mackellor Road gravel resheet |
| RDC0588 | Gorge Road gravel resheet |
| RFC0104 | Dawson Hwy Footpath renewal Stocklands to Farr Street |
| DRC0088 | Ubobo drainage design to alleviate flooding |
| Various | Cyclone Marcia Flood Event (Betterment) |
| Various | Cyclone Debbie Flood Event (Emergent Works) |
| DRC0089 | Urban Drainage (Renew / Repair / Replace) |
| DRC0087 | South Gladstone Stormwater Renewal |
| DRC0076 | Wood Street - Flood Mitigation flood gate installation to Young Street culverts |
| DRC0082 | Gully Pit Renewal / Replacement Program |
| DRC0069 | Marten Street - Establish drainage easement and concept designs |

| | |
|----------------|---|
| RDC0500 | Lucke Road/Aplin Road - Establish road reserves |
| DRC0080 | Cross Road Drainage (install new) Various Locations |
| RDC0370 | Red Rover Road Bridge Remedial Works |
| RDC0454 | Matthew Flinders Bridge gantry construction |
| RDC0551 | Gentle Annie Road (Four Mile Creek Bridge) Remedial Works |
| RDC0485 | Flinders Street - Bus Stop |
| RDC0311 | Butler Street - Establish drainage easement (#54) |
| RDC0554 | Raglan Station Road (Fire Creek Bridge) Remedial Works |
| DRC0064 | Beach Houses Estate Modify Intake Structure |
| RDC0558 | Asphalt Overlays Program |
| RFC0098 | Discovery Coast Christen College Footpath Round Hill Road |
| RDC0547 | Auckland Point Scenic Lookout Upgrade |
| RDC0548 | Round Hill Scenic Lookout Upgrade |
| DRC0078 | Arthurs Park Drainage Easement and Associated Infrastructure |
| RFC0075 | Springs Road Footpath |
| RDC0617 | Various TEAC Resolutions |
| RFC0105 | Glenlyon Road Cycleway (Derby Street to Philip Street) eastern side |
| RFC0101 | Boowan Court to Red Rover Road Footpath renewal "asphalt" |

Attachments:

1. Road Services 2016-2017 Budget allocation paper
2. Roads Capital Works Financial Review April 2017

Tabled Items:

Nil.

Report Prepared by: Manager Road Services

WTC/5.2. ASSET MANAGEMENT PLANS - URBAN AND RURAL ROADS

Responsible Officer: Director Engineering Services

Committee Meeting Date: 9 May 2017

File Ref: RM1.8; FM18.1

Purpose:

This report seeks Council to endorse the proposed Urban and Rural Roads Asset Management Plans, and the Stormwater "urban" Asset Management Plan.

Officer's Recommendation:

That Council:-

Resolves to adopt and replace the existing Transport Asset Management Plan (with the exception of bridges) and Drainage and Stormwater Infrastructure Asset Management Plans with:-

1. Gladstone Regional Council – Urban Roads Asset Management Plan;
2. Gladstone Regional Council – Rural Roads Asset Management Plan; and
3. Gladstone Regional Council – Stormwater Asset Management Plan.

That Council:-

Notes the Plans identifying the following increase in its renewal allocations to be considered in the 2018/19 budget process:-

1. Urban Roads on average per annum by \$1,750,000 as detailed within the Urban Roads Asset Management Plan.
2. Rural Roads on average per annum by \$1,694,000 as detailed within the Rural Roads Asset Management Plan.
3. Urban Stormwater on average per annum by \$310,000 as detailed within the Stormwater Asset Management Plan.

Background:

Previously, Council finalised Core Asset Management Plans (AMPs) for major asset classes in 2010, which included the adoption of Gladstone Regional Council's - Transport Asset Management Plan (Road Infrastructure) (refer Attachment 1) and Drainage and Stormwater Infrastructure Asset Management Plan (refer Attachment 2).

Roads

Roads are Council's largest asset type, and high expenditure is required to ensure maintenance and capital programs are met. Council engaged consultants, Infrastructure Management Group (IMG) to perform structural and visual pavement testing on the sealed and unsealed road network within the Gladstone region in the 2015/2016 financial year. This data was shared with Asset Management Software and Consulting Services (Assetic) to implement a new asset management package and update the Asset Management Plans for both Urban and Rural transport/road infrastructure, which are critical components of the asset management process. This data collection also ensured Council met financial audit obligations and requirements for the same year.

Stormwater

Council currently engage contractors on an annual basis to inspect stormwater infrastructure using CCTV equipment to evaluate the current condition of these mains. The results of these inspections are entered into Councils Assets systems to produce condition reports and establish programs that may include, but are not limited to, maintenance works and future relining of infrastructure. Current budget allocation for CCTV inspection results in approximately 22Km of mains being cleaned and inspected per annum, and with a total of approximately 344km of mains, this equates to a 15 year rotation program. As Council collects more data relevant to the condition and asset consumption levels the asset useful lives will be refined as required.

Bridges

Bridges are key elements of the road network and represent a major investment of community resources within the Gladstone region. Bridge assets will remain as an existing component of the current Transport Asset Management Plan (Road Infrastructure) until Gladstone Regional Council endorse a separate Bridge Asset Management Plan. This Plan is currently in its final development stage and is forecast to be presented to Council in June 2017.

Consideration:

Officers determined that it would be more appropriate to separate Urban roads from Rural roads when undertaking a review of the current Transport Asset Management Plan (Road Infrastructure). This has resulted in the development of an Urban Roads Asset Management Plan (Attachment 3) and a Rural Roads Asset Management Plan (Attachment 4). In addition the existing Stormwater Asset Management Plan has been reviewed. (Attachment 5).

All Asset Management Plans have been reviewed with the inclusion and consultation from Assetic, (Councils newly adopted Asset Management consultants and system).

Key components of the Urban Roads Asset Management Plan include:

Assets covered under this plan:

Table 2.1.

| Asset category | Units | Quantity | Current Replacement Cost (\$) |
|-----------------------------------|----------------|--------------|-------------------------------|
| Sealed Road Surface | m ² | 4,031,000 | 122,642,000 |
| Sealed Road Pavement | m ² | 4,496,000 | 252,983,000 |
| Sealed Road Formation | m ² | 5,146,000 | 19,692,000 |
| Unsealed Roads Pavement | m ² | 79,700 | 2,370,000 |
| Unsealed Roads Formation | m ² | 95,519 | 367,000 |
| Kerb & Channel, including Medians | m | 806,400 | 101,318,000 |
| Footpaths | m ² | 359,000 | 39,428,000 |
| | | TOTAL | 538,800,000 |

Replacement cost is at June 2016 totalling \$538,800,000, and when considering new assets will be added over the 10 year forecast period, replacement costs are expected to reach \$672,637,000.

The condition profile of the Council's Urban Roads assets is shown below with a rating 1 being excellent, 2 good, 3 fair, 4 poor and 5 being unserviceable.

Table 5.4b. Condition Distribution of Council's Assets

| Asset Class | Design Life (yrs) | Condition Rating | | | | | Average Condition |
|---|--------------------|------------------|-------|-------|------|------|-------------------|
| | | 1 | 2 | 3 | 4 | 5 | |
| Sealed Road Surface (Spray Seal and AC) | 15 (SS) 25 (AC) | 12.7% | 16.7% | 63.2% | 6.5% | 1.0% | 2.66 |
| Sealed Road Pavement | 50 | 84.7% | 10.4% | 3.7% | 1.0% | 0.2% | 1.22 |
| Unsealed Road (in Urban streets) | 15 | 0% | 32.5% | 67.5% | 0% | 0% | 2.59 |
| Concrete Channels (i.e. K&C & Medians) | 80 | 21% | 22.2% | 55.1% | 0.9% | 0.8% | 2.38 |
| Concrete Footpaths | 50 | 21.0% | 34.5% | 41.8% | 2.0% | 0.7% | 2.27 |
| Asphalt\Bitumen Footpaths | 50 | 1.8% | 20.2% | 62.7% | 9.0% | 6.3% | 2.98 |

The Asset Management Plan financial summary concludes that Council currently underfunds its Urban Road renewals on average each year to the value of \$1,694,000. It is therefore proposed that consideration be given to increasing renewal funding.

Key components of the Rural Road Asset Management Plan include:

Assets covered under this plan:

Table 2.1.

| Asset Category | Units | Quantity | Current Replacement Cost* (\$) |
|-------------------------|----------------|--------------|--------------------------------|
| Sealed Road Surface | m ² | 4,617,000 | 79,786,000 |
| Sealed Road Pavement | m ² | 5,146,000 | 240,285,000 |
| Sealed Road Formation | m ² | 5,146,000 | 17,124,000 |
| Unsealed Road Pavement | m ² | 7,340,700 | 162,382,000 |
| Unsealed Road Formation | m ² | 9,514,000 | 36,452,000 |
| | | TOTAL | 536,029,000 |

Replacement cost is at June 2016 totalling \$536,029,000, with no forecast increases in the rural road network over the 10 year period.

The condition profile of the Council's Rural Roads assets is shown below with a rating 1 being excellent, 2 good, 3 fair, 4 poor and 5 being unserviceable.

Table 5.4b. Condition Distribution of Council's Assets

| | Design Life (yrs.) | 1 | 2 | 3 | 4 | 5 | Average Condition |
|----------------------|--------------------------|-------|-------|-------|------|------|-------------------|
| Sealed Road Surface) | 15 (SS) or 25(AC) | 77.0% | 17.4% | 4.1% | 0.6% | 0.9% | 1.31 |
| Pavement | 50 (base)- 100 (subbase) | 66.5% | 27.1% | 4.6% | 1.3% | 0.4% | 1.42 |
| Gravel Roads | 15 | 0.0% | 72.2% | 27.8% | 0.0% | 0.0% | 2.4 |

Note: only a small portion of Council's Gravel Road network has been assessed for a condition rating, and this data has been used to distribute a rating value across the entire gravel road network.

The Asset Management Plan financial summary concludes that Council currently underfunds its Rural Road renewals on average each year to the value of \$1,750,000. It is therefore proposed that consideration be given to increasing renewal funding.

Key components of the Stormwater Asset Management Plan include:

Assets covered under this plan:

Table 2.1.

| Asset category | Units | Quantity | Current Replacement Cost (\$) |
|----------------------------------|-------|--------------|-------------------------------|
| Drainage pipes | km | 344 | 323,054,200 |
| Stormwater pits (inlets/outlets) | Each | 12,990 | 46,568,300 |
| Culverts | km | 35.6 | 96,752,400 |
| Open Drains | km | 47.7 | 7,935,500 |
| Drainage/ Retention Basins | Each | 80 | 20,309,000 |
| | | TOTAL | 494,619,400 |

Replacement cost is at June 2016 totalling \$494,619,400, and when considering new assets will be added over the 10 year forecast period, replacement costs are expected to reach \$564,112,500.

The condition profile of the Council's Urban Stormwater assets is shown below with a rating 1 being excellent, 2 good, 3 fair, 4 poor and 5 being unserviceable.

Table 5.4b. Condition Distribution of Council's Assets

| Asset Class | Design Life (yrs) | 1 | 2 | 3 | 4 | 5 | Average Condition |
|----------------------------------|-------------------|-------|-------|------|------|------|-------------------|
| Drainage pipes | 80 - 100 | 73.2% | 21.6% | 0.5% | 4.6% | 0.1% | 1.43 |
| Stormwater pits (inlets/outlets) | 70 - 80 | 73.2% | 21.1% | 3.6% | 1.5% | 0.7% | 1.35 |
| Culverts | 70 - 100 | 74.4% | 16.4% | 3.8% | 2.5% | 2.8% | 1.43 |
| Headwall | 70 - 100 | 75.3% | 19.5% | 0% | 5.2% | 0% | 1.40 |
| Other | 100 | 80.1% | 19.9 | 0% | 0% | 0% | 1.2 |

Note: Council is yet to capture all of its rural stormwater assets. This work is currently underway and will see a full inventory of these assets included in the Asset Register over the coming 12 months.

The Asset Management Plan financial summary concludes that Council currently underfunds its Urban Stormwater renewals on average each year to the value of \$310,000. It is therefore proposed that consideration be given to increasing renewal funding.

Communication and Consultation (Internal/External):

Ongoing discussions relating to asset audits and asset management plans have been frequent with various officers within Engineering Services and also with external consultants, IMG and Assetic, to endeavour to meet all requirements and obligations.

Legal Environmental and Policy Implications:

S104 (5)(ii) of the Local Government Act 2009 requires long term asset management plans.

Financial and Resource Implications:

There is an ongoing cost associated with Council productively managing its stormwater, road and transport network infrastructure; therefore the long term cost of not managing infrastructure would be significantly higher.

All three (3) asset management plans identified that Council currently underfunds renewals as follows:

1. Urban Roads on average per annum by \$1,750,000.
2. Rural Roads on average per annum by \$1,694,000.
3. Urban Stormwater on average per annum by \$310,000.

These figures will form part of future budget considerations and will be considered on their merits at the time.

Commentary:

The following Operational Plan strategies apply:-

- 1.2.1 - Develop a road hierarchy that suits the evolving needs of the community.
- 1.2.2 - Implement an asset renewal strategy that keeps pace with technology and the changing way the community uses public facilities.
- 4.3.3 - Ensure Council's financial sustainability through responsible management and planning of finances and assets.
- 4.3.4 - Ensure Council resource allocation is responsible, efficient and sustainable.

Summary:

Nil.

Attachments:

1. Gladstone Regional Council - Transport Asset Management Plan (Road Infrastructure) adopted in 2010.

2. Gladstone Regional Council - Drainage and Stormwater Infrastructure Asset Management Plan.
3. Gladstone Regional Council – Urban Roads Asset Management Plan.
4. Gladstone Regional Council – Rural Roads Asset Management Plan.
5. Gladstone Regional Council – Stormwater Asset Management Plan.

Tabled Items:

Nil.

Report Prepared by: Manager Road Services

WTC/5.3. CBD CAR PARKING AND WI-FI APPLICATION PROPOSAL FOR SMART CITIES AND SUBURBS PROGRAM

Responsible Officer: Director Engineering Services

Committee Meeting Date: 9 May 2017

File Ref: GS3.2

Purpose:

The purpose of this report is to allow Council to consider a `proposal to submit a funding application to the 'Smart Cities and Suburbs' Program to install and operate Smart Parking Infrastructure within the Gladstone Central Business District.

Officer's Recommendation:

That Council;

1. Make a funding application to the Smart Cities and Suburbs Program (Department of Industry, Innovation and Science) for the Smart Parking Infrastructure Project (Stage 1) at an estimated total cost of \$473,680 (exc. GST) which includes the following:
 - a. Installing Wi-Fi access within the Gladstone CBD as per Drawing No. 17-042-003.
 - b. Installing Smart Parking Technology (including sensors and gateways) in On-Street Parking Bays within the Gladstone CBD as per Drawing No. 17-042-000.
 - c. Installing Smart Parking Technology (including sensors and gateways) in Off-Street Council Owned parking lots as per Drawing No.17-042-000.
2. Seeks funding of 45% for the Smart Parking Infrastructure Project (Stage 1) costs, equivalent to \$213,156 (exc. GST) , in its application to the Smart Cities and Suburbs Program and allocates the remaining 55% of the costs in the 2017/18 budget allocations.
3. Allocates funds estimated at approximately \$29,172 - \$46,272 (exc. GST) per annum for ongoing maintenance of the Smart Parking Technology and associated Wifi from its operational maintenance budget.
4. Authorise the Chief Executive Officer (or delegate) to prepare and implement a strategy (including review of Stage 1, refinement of costs and proposed implementation year) to progress with Stage 2 & 3 in future Council budgets.

Background:

The parking within the Gladstone Central Business District (CBD) has been the subject of several complaints to Council over many years.

Complaints include:

- Difficulty locating available parking bays on Goondoon Street during peak periods
- Lack of clarity with current parking restrictions
- Difficulty in navigating streets to seek 'hidden' parking facilities due to lack of signage and awareness
- Vehicles overstaying the time allotted in parking bays (primarily for all day use in 2 hour restricted parking)

- Assumed reduction in retail visitors to the CBD due to the general belief that there is a lack of parking.

In response to these concerns, Gladstone Regional Council has adopted the following resolutions.

- At the General Meeting on the 17 February 2015 (*Vide Resolution No. G/15/2321*).
 1. *Council support the development of a CBD Activation Program that will incorporate the existing CBD Parking and Traffic Flow studies as well as the proposed Library Square "Place Making" project.*
 2. *This program will go beyond town planning and street scape to include a whole of council approach ensuring the Economic, Social and Environmental sustainability of the CBD Activation program.*
 3. *This program be funded within existing budgets.*
 4. *That the reports be received.*
- At the General Meeting on the 2 June 2015 (*Vide Resolution No G/15/2439*):
 1. *That Council adopt a Centralised Car Parking Philosophy as its preferred way to provide car parking in the Gladstone CBD and achieve Council's objective of "Activating the Gladstone CBD" and undertake the following key actions required to develop a centralised car parking outcome:-*
 - *Identify potential "central" sites for car parking provision that will promote pedestrian movement. These sites can be Council owned or privately owned.*
 - *Determine the number of car parks that would be required for a long term planning horizon.*
 - *Develop a CBD road hierarchy that efficiently delivers vehicle traffic to and from the car parks.*
 - *Develop conceptual plans to define the car park costs and consider options to develop income generating assets at ground level to activate the street frontage or on top of car parks (i.e commercial floor space).*
 - *Consult with CBD stakeholders and refine conceptual planning.*
 - *Adopt conceptual planning, and consolidate all the work into a Car Parking Subplan (i.e a Subplan of CBD Master Plan).*
 2. *After Council adopts a Centralised Car Parking Subplan, Council developing a CBD Activation Program by conducting comprehensive review of the fundamental components, key assumptions and achievements of the current CBD Master Plan.*
 3. *That the Chief Executive Officer develop a costed action plan to;*
 - a. *Develop a Centralised Car Parking Subplan and;*
 - b. *Complete a comprehensive review of the fundamental components, key assumptions and achievements of the current CBD Master Plan.*

The Action Plan being adopted by Council before the Action Plan is implemented.

- At the General Meeting on the 15 September 2015 (*Vide Resolution No. G/15/2571*):

1. *Council endorse the preparation of an Urban Renewal Strategy and Implementation Plan to be undertaken in house, and led by Council's Development Services section; and*
2. *Council endorse the creation of an Urban Design Task Force, led by Council's Development Services section, consisting of members from Council and Officer's from various departments, including (but not limited to):*
 1. *Planning and Economic Development;*
 2. *Parks and Environment;*
 3. *Community Wellbeing;*
 4. *Communication and Marketing;*
 5. *Engineering; and*
 6. *Arts and Culture*

As a result of the above Resolution, the "Jumpstart our City Heart: Urban Renewal Strategy" is currently being developed within Council and aims to revitalise the CBD through new social, economic and environmental opportunities. The Strategy acknowledges the *"perceived parking issues within the CBD"* (pg 10) and aims to address these concerns through *"investigating alternative transport options for ease of access into and throughout the CBD"* (Key Objective 5). The Urban Renewal Strategy recognises the need for motorists to be directed to parking bays not directly on Goondoon Street and has proposed the installation of appropriate signage to direct traffic.

To implement the Resolutions stated above, Council authorised the CBD Parking Survey in June 2015 to determine parking bay usage within the CBD. The data showed significant occupancy rates for selected street parking bays during peak hours. Occupancy rates that exceeded 60% during 8am – 6pm occurred within Goondoon Street, Yarroon Street, Roseberry Street and the streets surrounding the Gladstone Square Shopping Complex (Herbert Street, Tank Street and Oaka Lane). In comparison, other Street and Off Street parking bays (still located within walking distance to these higher demand locations) typically showed low occupancy rates between 20 – 50% during peak hours. This data demonstrates that the parking capacity of the CBD is currently underutilized as motorists either are not aware of the location of existing parking bays or that it is considered too far to walk.

Councils throughout Australia have attempted to address parking concerns in a variety of methods, including increased patrols, altering time restrictions, installing directional signage, constructing more parking bays or implementing advanced technologies, including sensor infrastructure.

Case Study

A high traffic region in Cottesloe, Perth had significant complaints of insufficient parking. A study performed by their Council determined that vehicles were commonly disobeying the time restrictions, resulting in fewer available parking bays. The Town of Cottesloe attempted to address the problem by first using traditional methods, including increased patrolling to issue infringement notices. The action significantly increased the time and resources spent to manage the problem, while it was found to be ineffective at identifying all infringing vehicles.

Due to the high density development throughout that region, the option of constructing more parking bays was deemed not feasible.

Smart Sensor Technology was then implemented, installing sensors into 554 parking bays in the affected area. These sensors directed motorists to available parking through a smart phone app, which reduced complaints about inadequate parking and encouraged some motorists to walk a little further to reach their final destination as it was easy to see the distance on the map. Council was also able to use the technology to more efficiently enforce

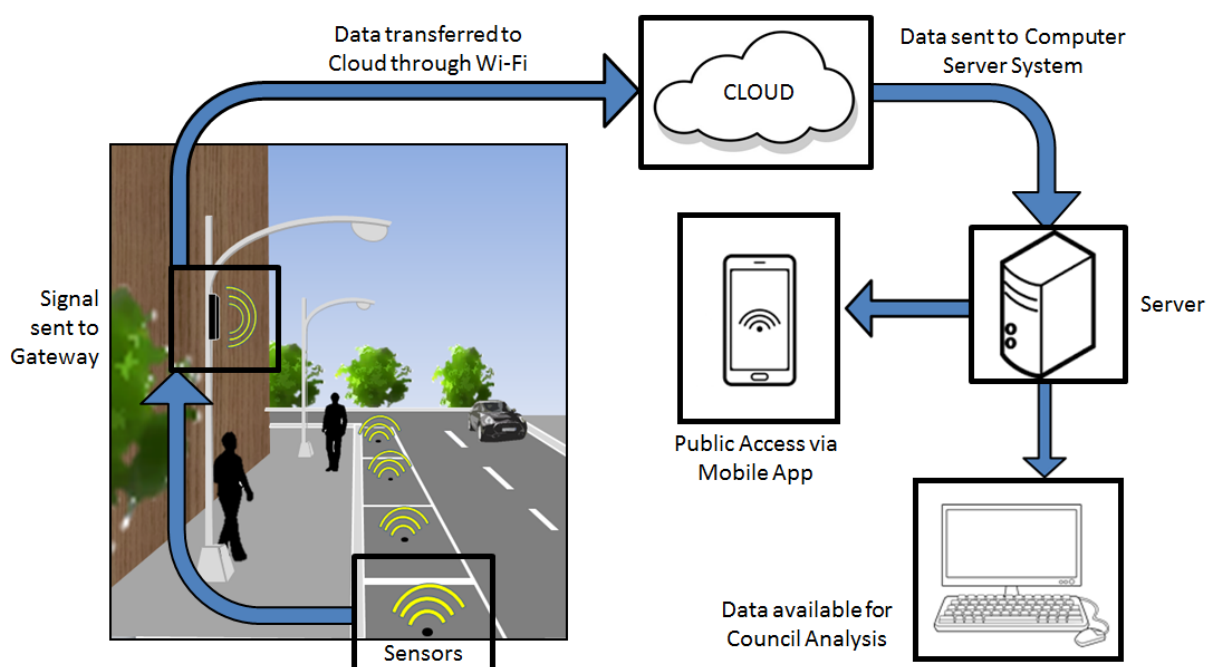
parking restrictions. The sensors monitored the duration of each vehicle, and notified parking officers of vehicles which had violated the parking restriction for that bay. Over the course of four (4) years, parking fine revenue increased from \$230,400 to \$983,200. Due to the peak tourism demands throughout summer, the fine revenue generated from the Smart Parking installation paid for the project and provided the Town of Cottesloe with an increased capital reserve.

Smart Parking Technology

Other than guiding motorists to available parking and increasing efficiency of parking restriction enforcement, Smart Parking Technology can also provide:

- Increased traffic flow within a heavily congested region (which reduces driver frustration and car exhaust pollution);
- Increased awareness of parking bay locations that may have been previously underused
- Increased pedestrian traffic in previously low traffic areas (potentially increasing trade for surrounding businesses);
- real-time parking occupancy data to assist with future parking management strategies and;
- parking usage reports to assist with resident complaints or concerns for parking issues.

Smart Technology is a growing industry that aims to address parking, lighting, security or water issues within a city using advanced technology. Smart Technology has been implemented throughout the world at various scales, having the ability to be adapted to the region's specific needs. Smart Parking Technology is one component of the Smart Technology industry and is becoming an increasingly common solution for parking issues.



Smart Parking Technology uses magnetic sensors which are installed in each parking bay by cutting out a small, circular section in the road surface. As a vehicle passes over it, the change in magnetic field transmits an electronic pulse to a gateway. Gateways can be installed on existing street infrastructure (such as street lights) and depending on parking layout and distance, can accommodate up to 100 sensors at once.

The signal from the gateway is then transferred to a server through Wi-Fi. This data is then transferred to a smart phone app in real time to inform motorists which parking spaces are available. The driver can then be directed to the available parking area through hands free GPS, or controlled by a passenger within the vehicle. If the parking bay becomes unavailable during the time taken to travel to the area, the driver will be redirected to the next nearby available parking bay.

Smart Parking Technology may be a suitable solution to address Gladstone's current parking issues, as it will direct motorists to 'hidden' carparks, while providing Council with real time data to allow for future parking management strategies. It will adhere to previous Council resolutions to use a Centralised Car Parking Philosophy that will encourage an increase in pedestrian traffic and suitable solution that supports the objectives of the Jumpstart our City Heart Urban Renewal Strategy. Installing Wi-Fi as a supportive network for the Smart Parking Technology system will provide the capacity for Council to implement future technology based projects without the additional expenditure. Areas that provide access to free Wi-Fi report increased time spent by visitors (which could increase trade within the CBD) while creating a link between the CBD and East Shores.

Funding

The Smart Cities and Suburbs Program provided by the Department of Industry, Innovation and Science, can provide up to 50% of project costs if Council proceeds and is successful with the application to install smart technology. Due to experience with past grant application processes, it is recommended that Council applies for 40 – 45% of project costs for the grant funding.

To be successful in the application, the project must:

- apply innovative technology-based approaches to improve the liveability of cities and their suburbs;
- develop, apply or implement a solution that is new to the local government area, new to a city or defined region, or new to Australia or;
- deploy existing smart technologies in an innovative way.

To be eligible the project must involve at least one private organisation during the life of the project. Incorporating more than one would be considered more favourably during the application process.

The project will be weighed against four (4) Merit Criterion:

1. The extent to which the project is innovative and uses smart technology and open data (30 points)
2. The scope of social, environmental and economic benefits the project will deliver (30 points)
3. The extent of the project's community focus and impact on the liveability of the cities, suburbs and towns (20 points)
4. The capacity, capability and resources to carry out the project (20 points)

The minimum grant amount is \$100,000.

The maximum grant amount is \$5 million.

If successful in the application, the project must commence within two (2) months of receiving the grant.

Applications for the first round of grant funding closes 30th June 2017.

Consideration:

Option 1:

Do nothing.

Advantages

- No cost involved.
- No disruption to existing parking layouts.

Disadvantages

- Does not improve access to parking facilities within the CBD for motorists.

Option 2:

Install street signage to direct motorists to 'hidden' parking bays adjacent to high traffic regions within the Gladstone CBD at an estimated cost of \$20,000.

Works to Include:

- *Commission the design and installation of appropriate directional signs in locations within Gladstone CBD as per Drawing 17-042-004.*

Advantages

- Provides direction for motorists seeking alternative parking areas
- Minimal costs involved to install signs.

Disadvantages

- Motorists may be redirected to parking bays that are at maximum capacity and therefore cannot park their vehicle, leading to driver frustration.
- Installing signage may not be sufficient enough to encourage motorists to walk the extra distance to access services in the CBD.
- Potential disruption to traffic and pedestrian access during installation.
- Council would have to conduct parking audits in the future to further monitor parking issues within the CBD.
- A proliferation of signs within the CBD could lead to a reduced effectiveness of these signs as per the Manual of Uniform Traffic Control Devices.

This would achieve the outcome as it directs drivers to parking bays, however, it fails to provide motorists information on parking availability, which may result in increased driver frustration. For this reason, this is not the preferred option.

Option 3:

To install Smart Parking Technology and Wi-Fi within the Gladstone CBD and privately owned car parks at a total cost of \$754,299 and ongoing estimated maintenance costs of \$42,438 - \$81,168.

Option 3 is split into the following 3 stages:-

- Stage 1 – Install Smart Parking Technology in On-Street Parking Bays and Off-Street Council Owned Parking Lots (including the Gladstone Entertainment Centre) within the Gladstone CBD and install Wi-Fi for the Gladstone CBD.

Estimated Total Project Cost is \$473,680 with ongoing estimated maintenance costs of \$29,172 - \$46,272 per annum.

Works include:

- *Install Smart Parking Technology on Street Parking Bays with greater than 50% occupancy (Goondoon Street, Yarroon Street, Roseberry Street, Herbert Street, Oaka Lane and Tank Street). As per Drawing 17-042-000.*
 - *Install indoor sensors on parking Bays at the Gladstone Entertainment Convention Centre as per Drawing 17-042-000.*
 - *Install Wi-Fi access within the Gladstone CBD as per Drawing 17-042-003*
 - *Installation of software, including staff training*
 - *Assess Stage 1 suitability, then prepare and implement a strategy for Stages 2 & 3*
- **Stage 2** – Expand the installation of Smart Parking Technology in On-Street Parking Bays and Off-Street Privately Owned Parking Lots within the Gladstone CBD.

Estimated Total Project Cost is \$153,519 with ongoing estimated maintenance costs of \$36,678 - \$65,808 per annum. This estimated value may fluctuate depending on the total number of privately owned parking lot agree to participate in the project.

Works include:

- *Install Smart Parking Technology on Street Parking Bays with greater than 30% occupancy rate located on Yarroon Street, William Street, Herbert Street, Auckland Street, Tank Street and Off Street as per Drawing 17-042-001 or as assessed as a suitable strategy in Stage 1.*
 - *Prepare and implement a strategy to determine the location of privately owned parking lots appropriate for Smart Parking Technology.*
- **Stage 3** – Expand the installation Smart Parking Technology in On-Street Parking Bays and Off-Street Privately Owned Parking Lots within the Gladstone CBD.

Estimated Total Project Cost is \$127,100 with ongoing estimated maintenance costs of \$42,438 - \$81,168 per annum. This estimated value may fluctuate depending on the total number of privately owned parking lot agree to participate in the project.

Works include:

- *Install Smart Parking Technology on Street Parking Bays located on Yarroon Street, Roseberry Street, William Street, Bramston Street, Herbert Street and Auckland Street as per Drawing 17-042-002 or as re-assessed as a suitable strategy in Stage 1.*
- *Prepare and implement a strategy to determine the location of privately owned parking lots appropriate for Smart Parking Technology.*

Advantages

- Provides motorists with accurate, real-time parking information to direct motorists to available parking and therefore reduce driver frustration.
- Provides Council with accurate parking occupancy data which can be used to determine future parking strategies.
- Notifies parking officer/s of parking infringements, reducing the time required patrolling the streets.
- Potential increased parking fine revenue for Council
- Increases foot traffic in previously under-utilized areas of the CBD, potentially increasing trade for businesses.

- Access to Wi-Fi can increase the overall business trade in the CBD, due to the potential increase in visitors and the length of time spent there.
- Access to Wi-Fi can assist in attracting P&O Cruise passengers into the CBD and promoting a linked space between East Shores and the CBD for all users.
- Can be used by motorists with the Smart Parking App to ensure own user's mobile data doesn't cut out or exceeds usage.
- Wi-Fi can more easily enable future innovative projects which Council may wish to pursue, including smart lighting, smart water and other initiatives.
- The app could be further developed to include tourism initiatives, including tourist site information, business promotion, history tours, scavenger hunts etc.

Disadvantages

- Financial outlay for installation, including potential on-going costs for licensing and maintenance (depending on agreement with server provider)
- Possible disruption to traffic during installation
- The number of parking bays used is limited to higher peak areas, which could decrease the effectiveness of the technology.

This is the preferred option as it provides motorists with real-time data on available parking, promotes Council's objective of encouraging more pedestrians within the CBD and provides parking occupancy data to Council for future parking management considerations.

It is recommended that Council proceed with lodging a funding application for Stage 1 only at this stage and if Council determines that the project is effective in managing the CBD parking issues once completed, then Stages 2 & 3 could be commenced and funded for at a later date.

Should Council resolve to submit a funding application for Stage 1, Council will need to ensure funding is allocated within the 2017/18 budget for at least 50% of the costs. Refer Financial Consideration section below.

Communication and Consultation (Internal/External):

In meeting with the eligibility requirements set by the Smart Cities and Suburb Program guidelines, the project must involve at least one local government and one private sector organization that will supply and/or contribute technical expertise on smart technology. If Council decides to accept the proposal to install and operate Smart Parking Infrastructure and provide free Council Wi-Fi within the Gladstone Central Business District, it is recommended that Council select a suitable partner/s from the private sector via tenders. During the investigation process a number of Smart parking providers and telecommunication providers were consulted to obtain information and cost estimates on their respective services and the options they have available.

Jumpstart Our City Heart Urban Renewal Strategy should be consulted as the proposed Smart Parking project aligns with the objectives of the Renewal Strategy and addresses one of the key challenges identified in the Renewal Strategy, Accessibility within the CBD.

Marketing is crucial to the success of the project and great emphasis must be placed on media releases and community consultation. Local business, private car park owners such as the Woolworths Complex and other possible stakeholder organizations should be informed of the proposal and consulted for their input. Involving them has the added benefit of giving the project a wider launching platform. An effort was made in the investigative stage to consult possible stakeholder organizations such as the

- Port Authority/East Shores
- Gladstone Area Promotion and Development Limited (GAPDL)

An excellent way to promote the free Council Wi-Fi and possible extend the service is to encourage local business such as cafes, restaurants and retailers to offer free Wi-Fi. Offering free Wi-Fi is very profitable for businesses since most businesses that have broadband connections tend to underuse their data. Capitalising on the unused data by offering it up to customers will encourage foot traffic, enticing customers to stay longer and spend more and promoting customer loyalty.

Legal Environmental and Policy Implications:

To be considered for installation, the parking bays must be formal; line marked and adhered to present Standards. These include:

- Australian Standards 2890.1-1993 Parking facilities – Off-street parking
- Australian Standards 2890.5-1993 Parking facilities – On-street parking

Financial and Resource Implications:

Option 1 – Nil.

Option 2 – The following proposal is new and there is currently no budget allocation present for it in the Council's Long Term Financial Plan. If chosen, the total project cost of \$20,000 would need to be funded by Gladstone Regional Council.

Option 3 – The following proposal is new and there is currently no budget allocation present for it in the Council's Long Term Financial Plan.

- Stage 1 - If successful in the Smart Cities and Suburbs Program grant application, 55% – 60% of the total project costs would be funded by Gladstone Regional Council at an estimated cost of \$284,208. Council would also be responsible for the annual ongoing costs, estimated between \$29,172 and \$46,272. There is currently no budget allocation present for this proposal therefore additional funding will need to be made available.
- Stage 2 – Will require 100% funding by Council at a cost of \$153,519 plus an increase of the annual ongoing costs to \$36,678 - \$65,808.
- Stage 3 – Will require 100% funding by Council at a cost of \$127,000 plus an increase of the annual ongoing costs to \$42,438 - \$81,168.

See Attachment 6 for a breakdown of costs. Please note all costings are rough estimates and exact figures cannot be determined until the project scope is well defined.

Commentary:

Nil.

Summary:

Option 1

Do nothing.

Option 2

That Council:-

- a. Does not pursue funding application to the Smart Cities and Suburbs program.
- b. Install street signage to direct motorists to 'hidden' parking bays adjacent to high traffic regions within the Gladstone CBD at an estimated cost of \$20,000 to be funded from Council's 2017/18 Long Term Financial Plan as per Drawing 17-042-004.

Option 3

That Council:-

1. Endorse the submission of a funding application to the Smart Cities and Suburbs Program by the Department of Industry, Innovation and Science for Stage 1 of the Smart Parking Infrastructure project at an estimated total cost of \$473,680 for the following works:
 - i. Install Smart Parking Technology (including sensors and gateways) in On-Street Parking Bays within the Gladstone CBD as per Drawing No. 17-042-000.
 - ii. Install Smart Parking Technology (including sensors and gateways) in Off-Street Council Owned parking lots as per Drawing No. 17-042-000.
 - iii. To install Wi-Fi access within the Gladstone CBD as per Drawing No. 17-042-003
2. Seek funding of 45% of the Stage 1 project costs, equivalent to \$213,156 , in its application to the Smart Cities and Suburbs Program.
3. Allocate the remaining 55% of the costs in the 2017/18 future budget allocations.
4. Allocate funds estimated at approximately \$29,172 - \$46,272 per annum for ongoing maintenance costs of the Smart Parking Technology and associated Wi-Fi from its operational Roads Services maintenance budget.
5. Authorise the Chief Executive Officer (or delegate) to prepare and implement a strategy (including review of Stage 1, refinement of costs and proposed implementation year) to progress with Stage 2 & 3 in future Council budgets.

Option 4

That Council:-

1. Endorse the submission of a funding application to the Smart Cities and Suburbs Program by the Department of Industry, Innovation and Science for all Stages of the Smart Parking Infrastructure project at an estimated total cost of \$754,299 for the following works:
 - i. Install Smart Parking Technology (including sensors and gateways) in On-Street Parking Bays within the Gladstone CBD as per Drawings No. 17-042-000, 17-042-001 and 17-042-002.
 - ii. Install Smart Parking Technology (including sensors and gateways) in Off-Street Council Owned parking lots as per Drawing No. 17-042-000, 17-042-001 and 17-042-002.
 - iii. To install Wi-Fi access within the Gladstone CBD as per Drawing No. 17-042-003.

2. Seek funding of 45% of the Stage 1 project costs, equivalent to \$339,435, in its application to the Smart Cities and Suburbs Program.
3. Allocate the remaining 55% of the costs in the 2017/18 future budget allocations.
4. Allocates funds estimated at approximately \$42,438 - \$81,168 per annum for ongoing maintenance of the Smart Parking Technology and associated Wi-Fi from its operational Roads Services maintenance budget.
5. Authorise the Chief Executive Officer (or delegate) to prepare and implement a strategy to locate suitable private parking bays to install Smart Parking Technology.

Attachments:

1. Smart Cities and Suburbs Proposal: Stage 1 Completed Works Site Plan (Drawing No. 17-042-000)
2. Smart Cities and Suburbs Proposal: Stage 1 Wi-Fi Coverage Plan (Drawing No. 17-042-003)
3. Smart Cities and Suburbs Proposal: Stage 2 Completed Works Site Plan (Drawing No. 17-042-001)
4. Smart Cities and Suburbs Proposal: Stage 3 Completed Works Site Plan (Drawing No. 17-042-002)
5. Gladstone CBD Sign Parking Locations Site Plan (Drawing No. 17-04-004)
6. Smart Cities and Suburbs Proposal Cost Breakdown

Tabled Items:

Nil.

Report Prepared by: Graduate Engineer - Technical Services

WTC/5.4. SIDE STREET, GLADSTONE - STREET LIGHTING IMPROVEMENTS

Responsible Officer: Director Engineering Services

Committee Meeting Date: 9 May 2017

File Ref: RD1.9

Purpose:

The purpose of this report is to allow Council to consider street lighting improvements on Side Street, between Railway Street and Yarroon Street, Gladstone to address public security and safety.

Officer's Recommendation:

To address the current security and safety concerns on Side Street, between Railway Street and Yarroon Street, and upgrade to current AS1158 standards, that Council:-

1. Engage consultants to undertake a detailed lighting and electrical design to upgrade the existing lighting to meet current Australian Standards (AS1158 Lighting Standards).
2. Allocate \$15,000 for this design project in Council's 2017/18 long term financial plan.

Background:

On 18 April 2016 a request was received by Council to install more street lights along Side Street between Railway Street and Yarroon Street, Gladstone. The customers' concern was particularly in regards to the security and safety of pedestrians adjacent to Memorial Park after night time sports activities have concluded and sporting lights have been switched off.

Memorial Park is predominantly used by Gladstone Netball Association and Gladstone Amateur Basketball Association. Both of these organizations were consulted on the 26 April 2016 to ensure night street light audit were carried out outside of sporting activities time so that accurate lux readings could be obtained from the existing street lights without interference from the sporting facilities lights.

At the time of the investigation, a member of Gladstone Amateur Basketball Association also contacted Council with their concerns relating to the lack of lighting within the carpark adjoining the PCYC and basketball areas. This additional request (CSR 364516) was forwarded to Council's Sport and Recreation Department for action, as it relates to the property's internal carpark facility.

A lighting audit was carried out including a daylight site visit on 16 May 2016 to review the current lighting types and pole locations. This was followed by a night site visit on the 16th and 18th May 2016 to evaluate the current luminaire lux levels on the existing street lights along Side Street. (See Attachment 1 - Dwg. 16-020-600 Rev1.1). The audit and investigation identified the following:

- Absence of street lighting on Side Street along the netball court frontage.
- Existing street lighting arrangement on Side Street does not meet the minimum requirements under current Australian Standards (AS1158 - Lighting for Roads and Public Places).

To ensure the street lighting complies with current Australian Standards, a P2 or P4 lighting category must be adopted.

- P2 lighting category have an additional requirement for lighting in the vertical plain to allow for clear recognition of facial features and is required in areas where crime is a problem.
- P4 is the minimum standard and will provide sufficient lighting for activities in Side Street.

The following factors were also identified as part of the investigation:-

- This section of Side Street (Between Yarroon Street & Railway Street) is approximately 470m in length.
- Road geometry is of a relatively flat vertical alignment which includes two (2) 90° horizontal bends (Approx. Radius 25m) near Yarroon Street intersection.
- The horizontal curve located approx. 120m from Yarroon Street intersection has a 1.5m wide concrete median in the centre of the road carriageway.
- Road carriageway (2 lanes) width typically 9.6m, length of 90° parking spaces 5.5m (both sides of roadway, majority of this section of Side Street).
- Memorial Parklands (DNRM Reserve Land) is located on the northern side of the roadway with facilities includes-PCYC building, Gladstone Amateur Basketball Association courts and building, Gladstone Softball fields and Gladstone Netball Association courts.
- Memorial Parklands carpark access road is located approx. 30m from Yarroon Street intersection.
- Side Street is a highly used road most nights of the week with various sporting events held at Memorial Parklands and is relatively close to Gladstone CBD precinct.
- Street lighting infrastructure along Side Street between Railway Street and Ormonde Street (Approx. 160m) include three (3) of existing 80Watt mercury vapour lights and three (3) power poles/stays without luminaires.
- Street lighting infrastructure along Side Street between Ormonde Street and Yarroon Street (Approx. 310m) includes two (2) of existing 80Watt mercury vapour lights, one (1) of existing 400Watt high pressure sodium (HPS) light and one stay.
- The 80Watt luminaire on Pole No. 4029854 (At the second bend) has a blown lamp which was reported to Ergon Energy on 15 June 2016.
- This section of Side Street is classified as "Urban Residential/Commercial Collector" in Gladstone Regional Council Road Hierarchy 2009.
- Council's Road Hierarchy Policy P-2014/31 requires "Urban Residential/Commercial Collector" to have a minimum lighting standard of "P4" category.

Consideration:

Option 1:

Do Nothing.

Advantages:

- No cost involved.

Disadvantages:

- Existing lighting does not comply with current AS1158 lighting standards.
- As this request involved a security issue, further concerns of safety could be questioned by residents/sporting facilities.

This is not the preferred option as the current street lighting on Side Street (Railway - Yarroon Street) does not comply with current AS1158 standards. It also does not address the safety and security concerns of the applicant and the greater public that use the area at night.

Option 2:

Design and upgrade the existing lighting arrangement to meet current Australian Standards for street lighting category P4. This will require engaging a Consultant to produce a certified lighting design for construction by Ergon.

Estimated cost of this option is;

- \$15,000 for survey and design - 2017/18; and
- \$60,000 for construction - 2018/19.

Note: Estimated costs do not consider the relocation of other services which may be required.

Advantages:

- Addresses the safety concerns of the applicant.
- Ensures that this section of road meets current AS1158 standards.
- Improves pedestrian lighting within the area.

Disadvantages:

- Design and construction costs borne by Council.
- Increase of light from street lights into residential properties.
- Increase of lighting pole infrastructure within road reserve.

This is the preferred option to address the safety and security concern.

Communication and Consultation (Internal/External):

Council Officers have consulted with Gladstone Netball Association and Gladstone Amateur Basketball Association as part of the investigation process. Further consultation may be required with adjacent residents.

Council to engage qualified consultants to carryout certified design for street lighting improvements.

Council to request Ergon to carryout the works.

Legal Environmental and Policy Implications:

By doing nothing Council does not conform to its adopted Road Hierarchy Policy 2009 and is not compliant to current Australian Standards.

Financial and Resource Implications:

Funding allocation is required for Option 2. Due to the security and safety nature of the issue, it is recommended that the design project be included in the 2017/18 budget and construction by Ergon in the following financial year.

Commentary:

There is at least one reported alleged stalking incident in the area.

Summary:

Nil.

Attachments:

1. Drawing 16-020-600 (Rev1.1) - Existing lighting (Isolines) layout plan.

Tabled Items:

Nil.

Report Prepared by: Engineering Officer - Technical Services

WTC/6. URGENT BUSINESS

Nil.

WTC/7. NOTICE OF MOTION

Nil.

WTC/8. CONFIDENTIAL ITEMS

Nil.

WTC/9. MEETING CLOSE

ATTACHMENTS