Purpose

To review Engineering Services Department highlights and significant issues for the month ending April 2010.

Background and Discussion

Highlights and Significant Issues for period are as follows:

**ENGINEERING SERVICES MANAGEMENT**

*Coordination of project meetings, briefings and reports on the following projects:*

- Blue Water Quay Cafe - Architectus, prospective operator.
- Sod Turning - Paget Depot.
- Urban Congestion Study, Main Roads.
- Inspections at St. Helen's Beach, Seaforth, Grasstree Beach.
- Briefing of Senator Trude in conjunction with the Mayor.

*On-going involvement in the following areas:*

- Mackay Water Recycling Project (i.e: PCG and PAB), Mackay Development Advisory Board, Management Leadership Forum and Sustainable Futures Committee Meetings.
- LGEG, Transport Working Group and Paget Depot Project Steering Committee.
- Safe Plan, Design and Construct Review Meetings and SES matters.
- CBD Economic Development Advisory Committee.
- Local Disaster Management Group and Rural Advisory Committee.
CONSTRUCTION

Again works have been substantially delayed due to wet weather

Works have been completed on the following projects:
- Courtney Gap Road
- Pacific Drive
- 15th Lane

Works have been substantially completed on the following projects:
- Alfred Street between Wellington and Macalister
- Bridge Road – carpark at Hospital Bridge
- MECC car park
- Bedford Road
- Pinnacle Footpath
- Kennedy Street traffic islands
- Grasstree Road
- Flood damage package 3 – Mackay Rural
- Bus shelter/stops upgrade 55%

Grasstree Road - Sarina
The following projects are in progress:

- Flood damage package 4 – Sarina saturation
- Flood damage package 6 – Mackay outer urban
- Shoal Point Road – reconstruction
- Blue River Trail footpath
- Gregory Street – resurfacing
- Leisure Court – connection road
- Crightons Road – depot access
- Devereux Creek Road
- Railway Square upgrade
- Rifle Range Road
- Roberts Avenue – reconstruction
- Field Street – upgrade Bridge Road and Webberley Street
- Farrellys Road, Connors Road to Milton Street
- Eversleigh /Sarina Beach intersection
- Paget Depot Project
- Gorge Road
- Bluewater Trail Caneland Park
- Bluewater Trail Environment Park
- Lining of City Heart Drain
Devereux Creek - Mirani

The following projects have been awarded but not yet started:
- Brisbane Street reconstruction
- Iluka Park stage 2
- West Plane Creek
- Flood Damage Package 9
- Flood Damage Package 7
### Maintenance Grading in the following areas:

| Formation Grading                          | East Street, Anzac Street, Phillips Street, Nolan Street, Sarina Area, Shinfield Road, Bradford Road, Tara Creek Road, Bella Road, Upper Alligator Creek Road, McMahon Road, Landing Road, Hatfield Road, Jackson St, Rifle Range Road, Morrison Road, Heron Street, Denny Road, Murray Road, Sleeman Road, Saunders Road, Head Road, Sants Road, Moohins Road, Olletts Road, Absolon Road, Gerrys Lane, Moohins Access Road, Cobens Road, Griffith Road, Neilsen Creek Road, Edmonds Road, Zunkers Road, Gladys Road. |
| Shoulder Grading                           | Marwood Road, Slingardies Road, Nicholsons Road, Allandale Road, Jacksons Road, N Lambs Road, Jones Road. |

### Special Works:

- Cyclone clean up – McEwen's Beach area.
- Guidepost Maintenance – Eton, Oakenden, Chelona.
- Dig Out – Thomas Road, Anna Court, Port Newery Road, Olletts Road.

### Drainage Maintenance:

- Munbura Road, Boulder Road, Hendys Road, Mt Toby Road,
- Culvert repairs – Prospect Street, Eton.

### Pothole Patching:

- Langdon-Lumburra Road, Kowari Road, Devereux Creek Road, Kinchant Dam Road, Blacks Beach Road, Pacific Esplanade, Lambert court, Glenella Road, Hill End Road, Davey Street, Glenella-Richmond Road, Ocean Avenue, Knobels Road, Trevaskis Road, David Muir Street, Jansen Court, Harbour Road, Hamilton Street, Evans Avenue, Apollo Drive, Wandoon Court, Bedford Road, Grevillea Drive, Farleigh-Habana Road, Chidlow Street, Christoe Street, Wainai Road and Jensens Road.

### Slashing:

- Bentleys Road, Clausens Road, Barrie Lane, Connors Road, Archibald Street, Dunrock Road, McEwens Beach Road, Walz Road, Holmes Road, Kellys Road, Greenmount Road, Bergmanns Road.

### Tree and Vegetation Control:

- Marian, Gargett, Pinnacle and Eungella townships, Devereux Creek area.

### Bridge Maintenance:

<table>
<thead>
<tr>
<th>Bridge Name</th>
<th>Road Name / Location</th>
<th>Description of works</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bell Creek Bridge</td>
<td>Munbura Road, Munbura</td>
<td>Rehabilitation work, replacement of girders / headstocks and piles.</td>
<td>$250,000</td>
</tr>
<tr>
<td>Saltwater Creek Bridge</td>
<td>Munbura Road, Munbura</td>
<td>Upgrade girders and headstocks</td>
<td>$20,000</td>
</tr>
</tbody>
</table>
**Main Roads RMPC:**

<table>
<thead>
<tr>
<th>Other Bituminous Works / Pothole Patching / Pavement Repairs</th>
<th>Patching works are being undertaken under emergent works for Cyclone Ului.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Formation grading / gravel resheeting / other formation works</td>
<td>Eungella Dam Road, Gargett-Mia Mia Road, Mirani-Eton Road, Sarina-Homebush Road, Bruce Highway – North, Bruce Highway – South, Sarina Beach Road, Hay Point Road, Sarina-Marlborough Road, Koumala-Bolingbroke Road.</td>
</tr>
<tr>
<td>Heavy Shoulder Grading / Gravel Resheeting / Other Shoulder Works</td>
<td>Nil</td>
</tr>
<tr>
<td>Tractor Slashing Rural / Urban / Boom Mowing / Clearing Works / Herbicide Spraying / Declared Plant Spraying</td>
<td>Mackay Bypass Road, Maraju-Yakapari Road, Rockleigh-North Mackay Road, Mackay-Eungella Road, Gargett-Mia Mia Road, Eungella Dam Road, Marian-Eton Road, Mirani-Eton Road, Marian-Hampden Road.</td>
</tr>
<tr>
<td>Rest Area Servicing</td>
<td>Bruce Highway – North, Bruce Highway – South.</td>
</tr>
<tr>
<td>Road Sweeping/Roadside Litter Collection</td>
<td>Bruce Highway – South, Bruce Highway – North, Rockleigh-North Mackay Road, Mackay-Bucasia Road, Mackay-Slade Point Road.</td>
</tr>
<tr>
<td>Emergency Call Outs</td>
<td>Sarina-Homebush Road.</td>
</tr>
<tr>
<td>Signs / Guide Post Works</td>
<td>Eimeo Road.</td>
</tr>
</tbody>
</table>

**Quarry Operations:**

Gravel from the following quarries was extracted during April:

Comellis Pit, Hazelwoods-Mirani, Hoffman Pit, Howells Pit, Jensens Pit, Johnson Pit, Larsens Pit, Mitchell’s Pit, Mt Ossa-Seaforth Pit and Omands-Mirani Pit.
TECHNICAL SERVICES

- Development and design of projects for saturation damage projects throughout the Council area.
- Development and design of projects within Capital Works Programme.
- Development and ongoing modification of draft 20yr Capital Works Programme making provision for all current projects and proposed development projects for long term Financial Plan purposes.
- Discussions with GHD & utility providers regarding proposed road construction Connors Road (Archibald to Farrelly’s). Land acquisitions in progress and Ergon Telstra cost estimates received and orders placed. Construction sequencing plan and discussions proposed.
- Detail design ongoing for intersection upgrading on Malcomson Street at Charles Hodge and Greenfields intersections.
- Tender Specification and issue for Crediton Loop Road Reconstruction, West Plane Creek Reconstruction including the intersection with Middle Creek Road, and Hill/Leslie Streets, Sarina Rehabilitation.
- Detail design of culvert crossing Casey Avenue, concept development and detail design for stadium access, car park and Bluewater Trail extension ongoing. DA lodged and approved.
- Concept and detail design for future Milton/Bridge and Bridge/Paradise intersections commenced as part of Paget intersection and traffic study.
- Detail design of Caledonian Drive Stormwater Quality Improvement Device complete. Waiting final plan delivery.
- General design development of detail plans for Archibald/Paradise roundabout, Hague Street Culvert replacement, Middle Creek Road, CBD Pavement Improvements and Paget intersections.
- Ongoing discussions with DMR, Developer and Council staff with regard to detail design and division of costs for Bruce Hwy/Boundary Rd intersection and section of Boundary Road from Hwy to Rainlover Street.
- Submission of Whitsunday RRG Works and LRRS Safety program for adoption by Regional Roads Group.
- Attendance at Meetings PIP development, Paget Steering Committee, Local Laws Review, Leadership forum and Blacks Beach subdivision development.
- Provision of Reports to Council on Beaconsfield LATM Stage 2 and creation of easements and land exchange through the Emergency Services site Holts and Beaconsfield Roads.
The Parks & Environment report for the month of April contains information on activities undertaken throughout the month by the staff within the program.

- **Administration** – Staff assisted with paperwork associated with cyclone response operations, undertook customer request coordination and processed purchase orders required to support the cyclone response and customer requirements. Hire of Queens Park for weddings was cancelled due to cyclone damage during the month. Queens Park was opened for visitors on 23rd April following clean up of major damage.

- **Customer Requests** – All parks and environment staff were engaged in cyclone clean up for the majority of the month. Mowing operations recommenced on 5th April, once ground conditions dried sufficiently to allow machinery to work without causing further damage to surface. Wet weather continued to impact upon maintenance activities.

- **Technical Officers** – Subdivision assessment and meetings have been conducted during the month, with coordination of clean up of subdivisions which is normally the responsibility of the developer. 3 subdivisions were accepted off maintenance this month. The Technical Officer Assets coordinated the green waste cleanup for the region and undertook this role with dedication and commitment resulting in a swift response to the community requests for assistance.

- **Grass Maintenance Activities** – Wet conditions prevented access to parks, drains and easements in the month, with staff seconded to assist with cyclone clean up initially, and then tasked back to mowing operations as ground conditions improved sufficiently. Totals of 2,369,502m² Parks, 104,511m² Drains, 835,795m² of easements and 275079m² of road medians were serviced during the month.
- **Horticulture Activities** – Staff were engaged in supervision and coordination of cyclone clean up activities for the majority of the month. Minor maintenance activities were conducted to garden affected by cyclone damage. A total of 127941m² of garden beds were serviced during the month of April.

- **Arboriculture Activities** – Activities from this area were entirely relating to Cyclone Ului clean up, with the assistance of contractors and correctional service inmates. The main areas of damage were recorded in Midge Point, Eungella, North Mackay, Andergrove, Mackay City area and East Mackay. Other areas close to beaches also suffered damage, with many trees in parks falling due to a combination of wet ground and high winds. The species most vulnerable were Tabebuia, Fig, Eucalypt, Pines, Albizia and Syzygium species. These species generally suffered from splitting trunk and branch structures and shallow root structures. A study of the root mass of many of the fallen trees has shown that the root system reached to an underlying clay layer and then spread, reducing the development of strong tap root structure. The Botanic Gardens staff are undertaking a research study for ongoing reference. As a result of the cyclone, customer requests for this area have been building up as staff attend dangerous trees firstly, and then progress to ones which look fine, however on inspection of the canopy and top structures they show damage to trunk through twisting of the top canopy resulting in splitting of the trunk structure. There are lots of tree planting opportunities in the future as a result of this cyclone. Ongoing rectification works will take many months to complete.

- **Natural Environment Activities** – Inspection and assistance to Arbour crew from staff involved with this section of the program reduced the amount of activity in this area for half of April. Many reserves suffered damage to tree which is yet to be fully inspected and replacement of trees along reserves will be required to protect some habitat areas for the future. Conservation volunteers worked on three sites at Sandfly Creek, Shoal Point and Slade Point, no volunteers worked at the Natural Environment Centre due to cyclone clean up activities by supervisors and gangers elsewhere in parks areas.

- **Marine Beach Activities** – Beaches in Midge Point sustained extensive damage from the cyclone, with foreshore trees being undermined from wave action and sand loss. Haliday Bay enclosure was demolished to make the beach environment safe following extensive damage by wave action associated with the cyclone.

- **Parks Building Services Activities** – Staff undertook repairs to facilities affected by cyclone, and all playgrounds were inspected for damage and repaired as soon as parts were available. Shade sail reinstatement was conducted during the month, following removal prior to cyclone. This activity was undertaken by specialist contractors with ground support by staff. Minor repairs to shelters were undertaken. Replacement parts for shelter damaged at Midge Point have been ordered. The fence at Seaforth Wading Pool has been assessed and parts ordered for repair to top rail adjacent to pool pump shed.

- **Capital Projects** – The following capital projects were in progress during April:
  
  **In Progress**  
  Grass tree Beach Shelter replacement  
  St Helen’s Beach Camp Ground BBQ  
  St Helen’s Beach Esplanade BBQ
Throughout April:

Horticultural and Site Works

The majority of April has consisted of cyclone clean-up, with scheduled maintenance of mowing, lagoons water weed management and planting on hold until May. Over 300 trees and shrubs have been initially recorded as destroyed or potentially irreparably damaged by Cyclone Ului. The horticultural crew will continue with removal, expected to occur until the end of May. Further deaths and specimen removal will be necessary, as many plantings that survived the initial cyclone are dying or ‘tipping over’ in the saturated soils.

Data collection by the Curator and volunteer Friends has commenced and will record what has been damaged, why and plans for permanent removal or replacement. This report will be presented at the Horticultural Reference Group Meeting on June 22.

Masterplan Review and Planning

The Masterplan 2010 Review process has the draft Masterplan on the Botanic Gardens website www.mackayregionalbotanicgardens.com.au/what_can_i_learn/masterplan_2010 and at Council customer service centres for public comment in April and May. In June, Landscape Architect Lawrie Smith will again visit Mackay to correlate feedback and amendments with the Curator and the final document will be presented to Council in July for adoption.

Visitor Services Program

Cyclone damage notwithstanding, the Visitor Services program has continued with 6 weddings (being accommodated in areas quickly cleaned) and 6 events. The Gardens Friends undertook a mystery walk to view the plants housed in the Medicinal Plants garden and the Regional Rainforests garden beds. School visits include St Francis Xavier primary and Victoria Park State School, whilst events included Harmony Day celebrations, the launch of the 2010 Conservation Volunteer program and the commencement of weekly free guided walks for the public, held each Friday.

Consultation

There has been consultation with Engineering Services Program Managers.

Resource Implications

Nil.

Conclusion

Again it is evident that the major activity for the month of April was the recovery associated with Cyclone Ului. Most operational areas were back to normal activities by mid to late April.

Officer’s Recommendation

THAT this report be received.