

# NOTICE OF MEETING



## COMMUNITY INFRASTRUCTURE ADVISORY COMMITTEE MEETING

A Community Infrastructure Advisory Committee Meeting of Byron Shire Council will be held as follows:

Venue	<b>Council Chambers, Station Street, Mullumbimby</b>
Date	<b>Thursday, 10 September 2015</b>
Time	<b>2.00pm</b>

A handwritten signature in black ink, appearing to read "Ken Gainger".

Ken Gainger  
General Manager

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## CONFLICT OF INTERESTS

**What is a “Conflict of Interests”** - A conflict of interests can be of two types:

**Pecuniary** - an interest that a person has in a matter because of a reasonable likelihood or expectation of appreciable financial gain or loss to the person or another person with whom the person is associated.

**Non-pecuniary** – a private or personal interest that a Council official has that does not amount to a pecuniary interest as defined in the Local Government Act (eg. A friendship, membership of an association, society or trade union or involvement or interest in an activity and may include an interest of a financial nature).

**Remoteness** – a person does not have a pecuniary interest in a matter if the interest is so remote or insignificant that it could not reasonably be regarded as likely to influence any decision the person might make in relation to a matter or if the interest is of a kind specified in Section 448 of the Local Government Act.

**Who has a Pecuniary Interest?** - a person has a pecuniary interest in a matter if the pecuniary interest is the interest of the person, or another person with whom the person is associated (see below).

**Relatives, Partners** - a person is taken to have a pecuniary interest in a matter if:

- The person’s spouse or de facto partner or a relative of the person has a pecuniary interest in the matter, or
- The person, or a nominee, partners or employer of the person, is a member of a company or other body that has a pecuniary interest in the matter.

N.B. “Relative”, in relation to a person means any of the following:

(a) the parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descends or adopted child of the person or of the person’s spouse;

(b) the spouse or de facto partners of the person or of a person referred to in paragraph (a)

**No Interest in the Matter** - however, a person is not taken to have a pecuniary interest in a matter:

- If the person is unaware of the relevant pecuniary interest of the spouse, de facto partner, relative or company or other body, or
- Just because the person is a member of, or is employed by, the Council.
- Just because the person is a member of, or a delegate of the Council to, a company or other body that has a pecuniary interest in the matter provided that the person has no beneficial interest in any shares of the company or body.

### Disclosure and participation in meetings

- A Councillor or a member of a Council Committee who has a pecuniary interest in any matter with which the Council is concerned and who is present at a meeting of the Council or Committee at which the matter is being considered must disclose the nature of the interest to the meeting as soon as practicable.
- The Councillor or member must not be present at, or in sight of, the meeting of the Council or Committee:
  - (a) at any time during which the matter is being considered or discussed by the Council or Committee, or
  - (b) at any time during which the Council or Committee is voting on any question in relation to the matter.

**No Knowledge** - a person does not breach this Clause if the person did not know and could not reasonably be expected to have known that the matter under consideration at the meeting was a matter in which he or she had a pecuniary interest.

### Participation in Meetings Despite Pecuniary Interest (S 452 Act)

A Councillor is not prevented from taking part in the consideration or discussion of, or from voting on, any of the matters/questions detailed in Section 452 of the Local Government Act.

**Non-pecuniary Interests** - Must be disclosed in meetings.

There are a broad range of options available for managing conflicts & the option chosen will depend on an assessment of the circumstances of the matter, the nature of the interest and the significance of the issue being dealt with. Non-pecuniary conflicts of interests must be dealt with in at least one of the following ways:

- It may be appropriate that no action be taken where the potential for conflict is minimal. However, Councillors should consider providing an explanation of why they consider a conflict does not exist.
- Limit involvement if practical (eg. Participate in discussion but not in decision making or vice-versa). Care needs to be taken when exercising this option.
- Remove the source of the conflict (eg. Relinquishing or divesting the personal interest that creates the conflict)
- Have no involvement by absenting yourself from and not taking part in any debate or voting on the issue as if the provisions in S451 of the Local Government Act apply (particularly if you have a significant non-pecuniary interest)

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## RECORDING OF VOTING ON PLANNING MATTERS

### Clause 375A of the Local Government Act 1993 – Recording of voting on planning matters

- (1) In this section, **planning decision** means a decision made in the exercise of a function of a council under the Environmental Planning and Assessment Act 1979:
  - (a) including a decision relating to a development application, an environmental planning instrument, a development control plan or a development contribution plan under that Act, but
  - (b) not including the making of an order under Division 2A of Part 6 of that Act.
- (2) The general manager is required to keep a register containing, for each planning decision made at a meeting of the council or a council committee, the names of the councillors who supported the decision and the names of any councillors who opposed (or are taken to have opposed) the decision.
- (3) For the purpose of maintaining the register, a division is required to be called whenever a motion for a planning decision is put at a meeting of the council or a council committee.
- (4) Each decision recorded in the register is to be described in the register or identified in a manner that enables the description to be obtained from another publicly available document, and is to include the information required by the regulations.
- (5) This section extends to a meeting that is closed to the public.

**BYRON SHIRE COUNCIL**  
COMMUNITY INFRASTRUCTURE ADVISORY COMMITTEE MEETING

**BUSINESS OF MEETING**

**1. APOLOGIES**

**2. DECLARATIONS OF INTEREST – PECUNIARY AND NON-PECUNIARY**

**3. ADOPTION OF MINUTES FROM PREVIOUS MEETINGS**

3.1 Community Infrastructure Advisory Committee Meeting held on 7 May 2015

**4. BUSINESS ARISING FROM PREVIOUS MINUTES**

**5. STAFF REPORTS**

**Infrastructure Services**

5.1	Bridge Renewal Program Funding Applications for Blindmouth Creek, Scarrabelottis Bridge and O'Mearas Bridge .....	4
5.2	Update Report on 2012 & 2013 Landslip Restorations .....	7
5.3	Update Report - Infrastructure Services Risk Management Procedures Part 1 - Roads, Footpaths & Drainage .....	12
5.4	Status of Delivery of 2015/16 Local Roads Capital Works Program .....	22

STAFF REPORTS - INFRASTRUCTURE SERVICES

**Report No. 5.1      Bridge Renewal Program Funding Applications for Blindmouth Creek, Scarrabelottis Bridge and O'Mearas Bridge**

5    **Directorate:**            Infrastructure Services  
**Report Author:**        Shane Pearce, Engineer - Bridges  
**File No:**                I2015/813  
10    **Theme:**                 Community Infrastructure  
                                  Local Roads and Drainage

**Summary:**

15    Applications for matching funding have been submitted for the upgrade of the Blindmouth Creek Crossing and replacement of both Scarrabelottis and O'Meara's Bridges.

20    The Federal Government, Department of Infrastructure, Round 2 Bridge Replacement Program August 2015 has \$100M of available funding to the nation. Applicants must be willing to fund 50% of the bridge replacement costs and works must progress to a predetermined program to be eligible.

25    Each application includes an assessment of Concepts / Options / Costs / Benefits / Risk / Social / Economic factors and the like. Supporting documentation included condition reports; costs breakdown for pre-construction phase and construction phase and a project timeline for each preferred option are included.

30    The Load Limit on O'Meara's Bridge was reduced from 18 tonne to 5 tonne on 24 August 2015. The Load Limit on Scarrabelottis Bridge is currently being assessed and it is anticipated a reduction will be required and also some modest asset protection works will need to be completed. These risk management measures have been implemented with communications plans.

35    The condition of a number of bridges in the Shire indicates Council will need to prepare a replacement program that reflects Fit for Future outcomes, the Council Improvement Plan and opportunities for grant funding. In the absence of sufficient funds to replace bridges or conduct major repairs it will be necessary to deploy risk management measures, which could include speed limits, vehicle limits, load limits or even closure.

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**RECOMMENDATION:**

**That the Community Infrastructure Advisory Committee note the report and that applications for funding as part of the Federal Round 2 Bridge Replacement Program have been submitted.**

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**Report**

Council bridges include 11 timber bridges, one steel and the remainder are concrete.

5 The bridges are inspected by certified bridge inspectors on a bi annual regular basis. In accordance with the bridge inspection manual, the bridges are assigned a Condition Rating from 1 to 4. Condition 4 is the most serious, requiring significant replacement or repairs within a short timeframe to protect the structural integrity of the asset.

10 The following four (4) bridges currently have a Condition 4 rating and need either replacement or major repairs:

- 15 Scarrabelottis Bridge – a steel bridge
- O’Meara’s Bridge – timber
- Parkers Bridge - timber
- Booyong Bridge –timber

20 Most of the timber bridges in the Shire warrant repair and maintenance in the medium term, and a forward replacement program. With the passage of time and limited investment, Condition 3 bridges degrade to Condition 4 rating.

25 The 2015/16 bridges program has approximately \$1.6M in funding and this could increase subject to grant funding outcomes or further allocation of council funds. Council has engaged on a contract basis an engineer to the role ‘Engineer – Bridges’ to focus on delivery of the program.

30 The crossing upgrade at Blindmouth Creek, Main Arm Road is a section 94 funded project that is funded in the 2015/16 financial year (although the available funds may be insufficient for the scope of work).

Corrosion is affecting the foundations at Belongil Creek Bridge and repairs are currently being programmed and implemented.

35 The capital program also includes a shared pedestrian/bicycle path to be included at Kolora Way Bridge (a concrete bridge at South Golden Beach). Funding for this project will be subject to the sale of the Roundhouse subdivision.

**Financial Implications**

40 Estimates of the cost to replace/upgrade the existing crossings as per the applications based upon the cost estimates by consultants for the investigations, design, renewal of bridges/crossings including roadwork’s, approvals, project management – all inclusive are as follows:

- 45 Scarrabelottis Bridge Replacement \$2.81M (Opus International Consultants)\*\*
- O’Meara’s Bridge Replacement \$1.686M (Local Government Engineering Services)
- Blindmouth Causeway Replacement \$1.375M (Local Government Engineering Services)

50 \*\* for Super T girder option – long lead time on delivery

55 It is important to note that approved project funding will not be increased ie the Australian Government will contribute a maximum of 50% of the total project cost approved by the Minister. If costs rise after this point, the Council must meet 100% of any increase.

Council is unlikely to be successful with all three applications, however hopefully one application is successful. So in the case of, say O'Meara's Bridge, being part funded by the Federal Government, Council's contribution could be \$843,000.

5 The submitted applications for funding include a project schedule (timeline) and this has an affect on cash flow. For example, Blindmouth Creek crossing upgrade could be fast tracked for completion in Financial Year 2015/16 and Scarrabelottis Bridge replacement has most of the capital spend in Financial Year 2016/17.

10 Managing the pace of the project can play a role in managing cash flow over the financial forecasting years, thus enabling Council to review budget priorities or raise funds etc.

Going forward, Council will need to prioritize funding for four key areas in the overall Bridges Program.

- 15
- Replacement / renewal (cap) eg Scarrabelottis (in other words, renewal/ refurbishment works are not viable)
  - Refurbishment / renewal (cap) eg key elements of bridges such as O'Meara's
  - Maintenance work (ops) eg bolt tightening, cleaning, inspections etc
  - Risk management work (ops) eg where we cannot complete works in time to ameliorate risk we need supplementary action such as signage, speed limits, load limits etc.
- 20
- 25

**Statutory and Policy Compliance Implications**

30 As detailed in the report

**Report No. 5.2**                    **Update Report on 2012 & 2013 Landslip Restorations**  
**Directorate:**                    Infrastructure Services  
**Report Author:**                Tony Nash, Manager Works  
**File No:**                         I2015/833  
5 **Theme:**                         Community Infrastructure  
    Local Roads and Drainage

**Summary:**

10 This report provides a summary of the status of the restoration of the landslips across the Council area from the 2012 and 2013 Natural Disasters.

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**RECOMMENDATION:**

15 **That the Community Infrastructure Advisory Committee note the information provided in the update report on landslips.**

**Report**

This report provides a brief outline of the status of the restoration of the landslips from the 2012 and 2013 Natural Disasters.

- 5 A summary of all the landslips from the 2012 and 2013 Natural Disasters is contained in Table 1.

**Table 1**

<b>Location</b>	<b>Status</b>
<b>2012 Natural Disaster</b>	
Wilsons Creek Road at primary school	Completed
<b>2013 Natural Disaster</b>	
Upper Coopers Creek	Completed
Federal Drive	Completed
Possum Shoot Rd (lower)	Completed
Possum Shoot Rd (upper)	Completed
Wilsons Creek Rd at Laverty's Gap	Completed
Wanganui Road south	Construction contract in progress
Wanganui Road main	Construction contract in progress
Huonbrook Road	Construction contract in progress
Upper Wilsons Creek Road	Design and Construction contract in progress

10 Additional resources have been obtained with funding through the disaster assistance program to assist Council in the design and tender stages and contract management stages. Generally Ardill Payne has managed the projects for the completion of the designs, environmental and project approval and through to award of tender by Council, with GHD managing the construction contracts of the permanent restoration works.

15 The only exception was Laverty's Gap landslip, where Ardill Payne managed the construction contract of the permanent restoration work.

20 The detailed information per landslip is provided in Table 2, generally taken from Council's website, which was last updated on 27 March 2015, however, there are some further updates to ensure the correct information is provided to the Committee.

**Table 2**

25

<b>Slip Site</b>	<b>Managed by</b>	<b>Timeframe</b>	<b>Status</b>
Wilsons Creek at the School	GHD	Completed	<p>ARK Constructions was awarded Practical Completion on 24 October and have now demobilised from site. The final contract sum will be approximately \$2.415 million exc GST.</p> <p><u>Repair Methods</u> Micropile anchored wall, soil nail anchors to stabilise the road in preparation for the repair of the road pavement and refurbishment of the stormwater drainage system.</p> <p><u>Where Next</u> The project has reached practical completion and has now entered a 12 month defects liability period. All minor defects works have been completed.</p>
Upper Coopers	GHD	Completed	The construction contract was awarded to Mainland Civil for approximately \$2.6 million exc GST.



# BYRON SHIRE COUNCIL

## STAFF REPORTS - INFRASTRUCTURE SERVICES

5.2

Slip Site	Managed by	Timeframe	Status
Creek			<p>Construction works commenced on 24 February 2015. The project reached practical completion on 26 March 2015.</p> <p>All soil nail and shotcrete activities, the reinstatement of the road and installation of the guardrail have been completed, together with minor works associated with the re-establishment of vegetation.</p> <p><u>Repair Methods</u> Combination of soil nails and shotcrete stabilisation in preparation for the repair of the road pavement and refurbishment of the stormwater drainage system.</p> <p><u>Where next</u> Minor defects to be addressed, final site tidy up, demobilisation and handover of QA documents.</p>
Federal Drive	GHD	Completed	<p>Pancivil was awarded Practical Completion on 17 April. The final contract sum will be approximately \$322,000 exc GST.</p> <p><u>Repair Methods</u> Soil nailing and shotcrete stabilisation in preparation for the repair of the road pavement and refurbishment of the stormwater drainage system.</p> <p><u>Where next</u> The project has reached practical completion and has now entered a 12 month defects liability period. All minor defects works have been completed.</p>
Possum Shoot (lower)	GHD	Completed	<p>Doval Constructions (QLD Pty Ltd) was awarded Practical Completion on 6 March 2015. The final contract sum will be approximately \$1.22 million (exc GST).</p> <p>All gabion wall repair works, the installation of stormwater provisions and the final pavement reinstatement works have been completed.</p> <p><u>Repair Methods</u> Gravity retaining wall with gabion facing.</p> <p><u>Where next</u> The project has reached practical completion and has now entered a 12 month defects liability period. All minor defects works have been completed.</p>
Possum Shoot Upper	GHD	Completed	<p>The works were completed on 7 November 2014 and Specialised Geo have now demobilised from site. The final contract sum is approximately \$360,000 exc GST.</p> <p><u>Repair Methods</u> Soil nailing and shotcrete.</p>

# BYRON SHIRE COUNCIL

## STAFF REPORTS - INFRASTRUCTURE SERVICES

5.2

Slip Site	Managed by	Timeframe	Status
			<p><u>Where next</u> The project has reached practical completion and has now entered a 12 month defects liability period. All minor defects works have been completed.</p>
Wanganui Road South and Middle	GHD	Early July 2015	<p>The construction contract has been awarded to Geotech Pty Ltd for approximately \$1.8 million exc GST.</p> <p>It is anticipated that the Contractor will commence the establishment of the works site (Wanganui Road South, Main and Huonbrook Landslip Projects), undertake tree clearance activities and install a number of test soil nails at each site in early April. The works are currently scheduled for completion in early July 2015.</p> <p><u>Repair Methods</u> Soil nailing and shotcrete for both landslips.</p> <p><u>Where next</u> Establishment of sites, clearance of vegetation and installation of test soil nails.</p>
Wanganui Road - North	Ardill Payne	Ongoing	<p>Detailed investigation and ecological assessment has been completed. Options Report completed. Bore holes completed. A consultant has been engaged to continue monitoring as recommended.</p> <p><u>Repair Methods</u> Drainage works and monitor.</p> <p><u>Where next</u> Site currently being monitored in accordance with Geotechnical Consultant's recommendation. Current monitoring will further inform the detailed design. Report from consultant.</p>
Wilson's Creek Road - Laverty's Gap	Ardill Payne	Complete	<p>These works have reached Practical Completion and are currently in a 12 month defects liability period.</p> <p><u>Repair Methods</u> Soil nailing and shotcrete.</p> <p><u>Where next</u> Monitoring of works scope during the defects liability period.</p>
Upper Wilsons Creek Road – end of road	GHD	Detailed design in progress.	<p>The construction contract has been awarded to the Warner Company for approximately \$1.2 million exc GST.</p> <p>Some additional geotechnical testing was undertaken on 20 March to assist with the progressing the detailed design. It is not anticipated that the Contractor will commence works on site until late April / early May</p>

# BYRON SHIRE COUNCIL

## STAFF REPORTS - INFRASTRUCTURE SERVICES

5.2

Slip Site	Managed by	Timeframe	Status
			<p>once the detailed design has been completed. Some preliminary testing may be undertaken.</p> <p><u>Repair Methods</u> Down slope anchored pile wall.</p> <p><u>Where next</u> Detailed design period and preparation of management plans</p>
Huonbrook Road	GHD	Early July 2015	<p>The construction contract has been awarded to Geotech Pty Ltd in conjunction with the two sites at Wanganui Rd South and main. It is anticipated that the Contractor will commence the establishment of the works site (Wanganui Road South, Main and Huonbrook Landslip Projects), undertake tree clearance activities and install a number of test soil nails at each site in early April. The works are currently scheduled for completion in early July 2015.</p> <p><u>Repair Methods</u> Soil nailing and shotcrete for both landslips.</p> <p><u>Where next</u> Establishment of sites, clearance of vegetation and installation of test soil nails.</p>

### Financial Implications

- 5 All projects are fully funded by Natural Disaster funds.

### Statutory and Policy Compliance Implications

- 10 Local Government (General) Regulation 2005 – Part 7 Tendering will apply to the process of undertaking the restoration work of the landslips by contract.

**Report No. 5.3**                    **Update Report - Infrastructure Services Risk Management Procedures Part 1 - Roads, Footpaths & Drainage**

**Directorate:**                    Infrastructure Services

**Report Author:**                Tony Nash, Manager Works

5   **File No:**                        I2015/834

**Theme:**                         Community Infrastructure  
Local Roads and Drainage

10   **Summary:**

To provide an update report to the Community Infrastructure Advisory Committee (CIAC) on the use of the Infrastructure Services Risk Management Procedures Part 1- Roads, Footpaths and Drainage and the implementation and use of the Reflect software for accurately recording defects and accomplishments of work on these assets.

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**RECOMMENDATION:**

**That the Community Infrastructure Advisory Committee note the information contained in this report and the presentations about the Infrastructure Services Risk Management Procedures Part 1- Roads, Footpaths and Drainage and the implementation of the Reflect software.**

20   **Attachments:**

1      Report to CIAC on 4 December 2014, E2014/74153 , page 18

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**Report**

At the CIAC meeting on 4 December 2014 a report was presented regarding the Infrastructure Services Risk Management Procedures Part 1- Roads, Footpaths and Drainage (ISRMP-RFD). A copy of that report is attached.

The recommendation of the CIAC was:

Committee Recommendation CIAC 4.2

*That Council endorse the Infrastructure Services Risk Management Procedures Part 1 Roads, Footpath and Drainage, including:*

1. *The ability for Council to meet future service level obligations as identified within the Infrastructure Services Risk Management Procedure will be constrained by future budgets, which may result in the need for a further report to Council to address:*
  - a) *reducing the level of service of programmed maintenance in order to undertake high and urgent risk priorities or;*
  - b) *adjusting the risk rating formula so less defects are included in the high and urgent priority, and response times are increased or;*
  - c) *increasing the future Local Roads and Drainage budget to permit Council to continue with the current Service Level program and address defects in the recommended time frame*
2. *That the Infrastructure Services Risk Management Procedure is being undertaken in a staged approach, with each implementation stage to be reported to the Community Infrastructure Advisory Committee for endorsement.*
3. *That Council is supportive of a trial taking place for six months, with a report coming back to the Community Infrastructure Advisory Committee providing the result of the trial.*

The resolution of Council from the meeting of 5 February 2015 was:

**15-013 Resolved** That Council adopt the following Committee Recommendation:

Report No. 5.3 Infrastructure Services Risk Management Procedures Part 1 – Roads  
Footpaths and Drainage  
File No: I2014/171

Committee Recommendation 5.3.1

That Council endorse the Infrastructure Services Risk Management Procedures Part 1 Roads, Footpath and Drainage, including:

1. The ability for Council to meet future service level obligations as identified within the Infrastructure Services Risk Management Procedure will be constrained by future budgets, which may result in the need for a further report to Council to address:
  - a) reducing the level of service of programmed maintenance in order to

# BYRON SHIRE COUNCIL

## STAFF REPORTS - INFRASTRUCTURE SERVICES

5.3

- undertake high and urgent risk priorities or;
- b) adjusting the risk rating formula so less defects are included in the high and urgent priority, and response times are increased or;
  - c) increasing the future Local Roads and Drainage budget to permit Council to continue with the current Service Level program and address defects in the recommended time frame
2. That the Infrastructure Services Risk Management Procedure is being undertaken in a staged approach, with each implementation stage to be reported to the Community Infrastructure Advisory Committee for endorsement.
  3. That Council is supportive of a trial taking place for six months, with a report coming back to the Community Infrastructure Advisory Committee providing the result of the trial.

Following the Council resolution, the ISRMP-RFD and the Reflect software has been implemented as follows for roads, footpath and drainage:

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Event	Description	Date
Staff training	Asset Edge provided two day training to all personnel using Reflect including Administration, Systems and Outdoor Crews.	21/01/2015-22/01/2015
Defect Model	Defect model, based on the Risk Management Procedure (ISRMP-RFD) was developed and implemented.	26/01/2015-20/02/2015
Council Patching Crew Trial	Initial set up and trial with Council patching crew to determine optimum implementation details and begin recording basic accomplishments.	3/02/2015 – 5/3/2015
Inspector	Begin use of Reflect for inspections in line with inspection schedule.	23/02/2015
Overseer	Staged use of Reflect for inspections, programming, closing defects and recording accomplishments over 6 months.	5/03/2015 – 5/9/2015
Contract Patching Crew	Begin use of Reflect for closing defects and recording accomplishments.	5/03/2015
Council Patching Crew	Begin use of Reflect for closing defects as well as recording accomplishments.	9/04/2015
Council and Contract Patching Crew Program developed	Data collected from inspections was programmed to ensure completion of High and Urgent Priorities were within response time. Only implemented for Council Crew due to restrictions on maintenance works for 2014/15.	27/04/2015
Grader Crew	Training held, but not used due to restrictions on maintenance works in 2014/15.	27/04/2015
Drainage Crew	Training held, but not used due to restrictions on maintenance works in 2014/15.	27/04/2015
Signs Crew	Begin use of Reflect for closing defects and recording accomplishments	1/06/2015

# BYRON SHIRE COUNCIL

## STAFF REPORTS - INFRASTRUCTURE SERVICES

5.3

Council and Contract Pothole Patching Program	2015/16 Pothole Patching Program implemented	1/07/2015
Reseal Maintenance inspections	Defect model was set up for reseal works. All data was collected and collated within Reflect.	6/07/2015
Reseal Maintenance works	Defects closed and accomplishments recorded by supervisors and overseers.	18/08/2015
Shoulder Grading Crew	Begin use of Reflect for closing defects and recording accomplishments	24/08/2015

The staff and crews within the Works Team of the Infrastructure Services Directorate that are using the Reflect software are as follows:

- 5       • Inspections Officer
- Road Maintenance Overseer
- Council pothole filling crew
- Contract pothole filling crew
- Sign maintenance crew
- 10       • Shoulder grading crew
- Unsealed roads shoulder grading crew
- Drainage maintenance crew
- Reseal supervisor

15       Reflect is being used to program the following maintenance activities:

- Pothole patching,
- Shoulder grading
- Vegetation control
- Drainage
- 20       - Roadside safety and delineation i.e. guideposts, guardrails and signs.

The Reflect software is operated on computers in the office and hand-held devices in the field. These devices are equivalent to modified tablets and smart phones. Examples of the hand-held devices will be available at the meeting for the information of committee members.

25       A demonstration of the Reflect software on the Windows platform will also be undertaken at the meeting. This will show how the road hierarchy, location of the defect within the road and the hazards severity are all used to determine a priority and a response time and target date for rectifying the defect. This same philosophy applies to defects for sealed and unsealed road pavements, signs, drainage and vegetation.

30       From consideration of the defect types and the response times, programmes of planned work to rectify the defects can be formulated for each defect type. An example of the planned works to fill potholes both in the rural and urban areas will be presented at the meeting. This program has been formulated considering the number of outstanding defects, Council's maintenance budgets for filling potholes and learning from the experience of 2014/15 regarding expenditure too early throughout the financial year.

35       The statistics from February 2015 to the end of August 2015, for the implementation of the Reflect software and the defects arising from the inspections will be presented at the meeting.

40       It needs to be noted that the status of the year to date (YTD) road maintenance budgets in March 2015 were greater than the YTD budgets and the management decision was to defer or postpone maintenance works for the balance of the 2014/15 financial year to ensure that the expenditure on road maintenance was not greater than the budget at the end of the financial year at 30 June 2015. This decision for financial sustainability reasons resulted in a number of defects identified using the

Reflect system being deferred and hence the response times and accomplishment dates being greater than the targets.

5 Since 1 July 2015, the programming of maintenance works to rectify the defects has been aimed to accomplish the work within the response time and before the target date, after due consideration of the status of the YTD budgets and expenditures.

10 Revisions and improvements to the draft ISRMP-RFD has been considered for the identification of defects on our road network. The ISRMP-RFD is largely based around one defect at each location, whereas for potholes on our road network, we have numerous locations where there are a number of potholes and defects that are clustered. However in Reflect they generally only show as one defect with a comment regarding the clusters of potholes.

15 The other improvement to the process is to formulate and document what the typical actions and maintenance work outcomes will be to repair or remove the defect. Some examples are:

- Fill the pothole to make the road pavement safe
- Undertake heavy patching at locations with clusters of potholes to repair the damaged road pavement and prevent the potholes re-occurring at this location in clusters.
- Undertake grading of unsealed roads where defects of potholes, rutting and corrugations exist.

The other factors to be considered when deciding upon the action and maintenance works are:

- the status of Council's road maintenance budgets at that time of the year and throughout the year
- prevailing weather conditions
- safety issues associated with the defects
- time required to organise the more substantial preventative works versus the short-term make safe works

30 The ability for Council to meet future service level obligations identified within the ISRMP-RFD will be constrained by the future budgets, which may need further reports to Council to address:

- a. reducing the level of service program maintenance in order to undertake high and urgent risk priorities or
- b. adjusting risk rating formula Celeste defects are included in the high and urgent priority, in response times are increased or
- c. increasing the future local roads and drainage budget for maintenance activities to allow Council to continue within the current service level program and addressed defects within the targeted response times.

40 It should also be noted that Council in the adopted Council Improvement Plan (CIP), submitted to the Office for Local Government (OLG) under the State Government Fit for the Future Program, included a number of strategies to generate additional revenues for both maintenance and renewal works. The allocation of increased budgets for both maintenance and renewal works will be dependent on the success of implementing these strategies.

45 The further use of the Reflect software will be investigated for Council's other assets such as:

- 1. Drainage
- 2. Footpaths
- 3. Water
- 50 4. Sewer

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The increased use of the hand-held devices by supervisory and operational field staff will be investigated for activities such as:

1. Electronic timesheets
2. Daily work costing
- 5 3. Recording of Daily Pre-starts and online Risk Assessments
4. WHS reference documentation
5. WHS Forms
6. Transmittal of information to and from work sites

10 The further use of the Reflect software and the hand held devices will be dependant upon resources being available to assist with the development, implementation and staff training and mentoring to ensure the successful implementation and ongoing use of this technology.

**Financial Implications**

15 There are no negative implications proposed in this report.

**Statutory and Policy Compliance Implications**

20 There are no negative implications proposed in this report.

**Report No. 1. Infrastructure Services Risk Management Procedures Part 1 – Roads Footpaths and Drainage**

**Director:** Infrastructure Services  
**Report Author:** Kristian Penrose, Works Engineer  
**File No:** #E2014/74153

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**Theme:** Community Infrastructure, Local Roads and Drainage

**Summary:** This report is to provide Part 1 of the Infrastructure Services Risk Management Procedures to the CIAC for their consideration.

This document is intended to form an interim Risk Management Procedure (RMP) for Roads, Drainage and Footpaths which will supersede these sections in Council’s current and Risk Management Procedure (DM329546).

This is Part 1 of a staged approach to updating the Risk Management Procedures.

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**RECOMMENDATION:**

10 **That the Community Infrastructure Advisory Committee recommend to Council that Council note the Infrastructure Services Risk Management Procedures Part 1 Roads, Footpath and Drainage, including:**

15 a) **The ability for Council to meet future service level obligations as identified within the Infrastructure Services Risk Management Procedure will be constrained by future budgets, which may result in the need for a further report to Council to address:**

20 i) **reducing the level of service of programmed maintenance in order to undertake high and urgent risk priorities or;**

ii) **adjusting the risk rating formula so less defects are included in the high and urgent priority, and response times are increased or;**

25 iii) **increasing the future Local Roads and Drainage budget to permit Council to continue with the current Service Level program and address defects in the recommended time frame**

30 b) **That the Infrastructure Services Risk Management Procedure is being undertaken in a staged approach, with each implementation stage to be reported to the Community Infrastructure Advisory Committee for endorsement.**

**Attachments:**

- 35 • Draft Infrastructure Services Risk Management Procedures Part 1 Roads, Footpaths and Drainage E2014/62240 [42 pages] ..... **Annexure 1(a)**
- Asset Management Risk Management Procedures DM329546 [50 pages] ..... **Annexure 1(b)**
- Statewide Mutual Best Practice Manual Roads V5 Aug 2012 E2014/74488 [28 pages] ..... **Annexure 1(c)**
- 40 • Statewide Best Practice Manual Footpaths V4 2010 E2013/73846 [18 pages] ..... **Annexure 1(d)**

**Report**

An internal audit was undertaken in October 2013 by Grant Thornton on Byron Shire Councils' Asset Management and in particular, the treatment of key infrastructure of Roads, Drainage and Building.

- 5 From the internal audit, it was found that Council's Roads and Drainage Maintenance Plans are reactive in nature and based on a variety of different sources, including the Customer Request Management (CRM) system, inspection sheets in Excel and various other programs. There is no formal prioritisation matrix used to determine the order of addressing defects.
- 10 The internal audit highlighted that the Asset Risk Management Procedures at that time had been in a draft format since September 2011 and had not been applied in practice for the majority of asset classes, with the exception of footpaths.

15 It was recommended that Asset Risk Management procedures should be adopted by Council and implemented across all asset classes to ensure consistency of inspection, evaluation and maintenance classes.

20 Council staff have begun the implementation phase of a software system to accurately record defects and support existing maintenance service levels and risk management through the 'Reflect' software, provided by Asset Edge.

25 The Reflect software can be used for the recording, planning and analysis of maintenance activities for any class of asset. This software is currently being trialled by the Better Byron Crew for the Byron Bay town centre for accomplishment only, before a full roll out to the Roads and Parks Maintenance crews in a two staged implementation process.

30 The Draft Infrastructure Services Risk Management Procedure Part 1 (RMP) is intended to form an interim Risk Management Procedure for Roads, Drainage and Footpaths, which will supersede these sections in Council's current Risk Management Procedure (DM329546).

This document is Part 1 of a staged approach to updating the Risk Management Procedures.

35 The remainder of the Risk Management Procedures will be rolled out once the restructure of Infrastructure Services is complete and relevant tasks are allocated to positions.

Once the restructure is formalised, the staged approach will encompass the following:

- Road signs and guideposts
- Street lighting
- 40 • Beach accesses
- Roadside slashing
- Bridges
- Boat ramps
- Parks and gardens
- 45 • Skate parks
- Bush fire risk areas

Roads and Carparks

Resources to Effect Repair or Make Safe Potholes on Sealed Roads

5 The proposed RMP provides a response time to repair defects based on a risk rating. The risk rating will coincide with a priority. Works will be programmed in accordance with their priority.

If response times are not being met, or it becomes apparent budget will be exceeded, a report to management and / or Council will be required to resolve the following options:

- 10
1. increase the duration for response times in Table 1.6 in the RMP
  2. increase the budget for pothole patching
  3. reduce the Hazard Severity Category or the values in the description of Hazard Category in Table 1.5 in the RMP
  - 15 4. adjust road risk rating formula so fewer defects are included in the high and urgent priority (Section 1.4 in the RMP)
  5. increase the value of the risk rating associated with high and urgent priorities as specified within in Table 1.6 of the RMP

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Resources to Effect Repair or Make Safe Shoving or Rutting on Sealed Roads

In most instances, a heavy patch is required to effect a repair to a pavement that has shoved (deformation of the pavement surface), or has rutted (depressions or grooves worn into the road).

25



40 The proposed RMP provides a response time to repair defects based on a risk rating. The risk rating will coincide with a priority. Works will be programmed in accordance with their priority.

If response times are not being met, or it becomes apparent budget will be exceeded, a report to management and / or Council will be required to resolve the following options:

- 45
1. increase the duration for response times in Table 1.6 in the RMP
  2. increase budget for heavy patching
  3. reduce the Hazard Severity Category or the values in the description of Hazard Category in Table 1.5 in the RMP
  - 50 4. adjust road risk rating formula so fewer defects are included in the high and urgent priority. (Section 1.4 in the RMP)
  5. increase the value of the risk rating associated with high and urgent priorities as specified within in Table 1.6 of the RMP

Drainage

Resources to Effect Repair and Conduct Programmed Maintenance

- 5 Works will be conducted as per the required response times in order of risk rating. If response times are not being met, or it becomes apparent budget will be exceeded, a report to management and / or Council will be required to resolve the following options:
1. increase the duration for response times in Table 2.4 in the RMP
  - 10 2. increase budget for drainage maintenance
  3. reduce the Hazard Severity Category or the values in the description of Hazard Category in Table 2.2 in the RMP.
  4. adjust road risk rating formula so less defects are included in the high and urgent priority
  - 15 5. increase the value of the risk rating associated with high and urgent priorities in Table 2.4 in the RMP

Footpaths and Cycleways

- 20 Works will be conducted as per the required response times in order of risk rating. If response times are not being met, or it becomes apparent budget will be exceeded, a report to management and / or Council will be required to resolve the following options:
- 25 1. increase the duration for response times in Table 3.3 in the RMP
  2. increase budget for footpath maintenance
  3. reduce the Integer Ranking or the values in the Verbal Rating in Table 3.2 in the RMP
  - 30 4. adjust road risk rating formula so less defects are included in the high and urgent priority
  5. increase the value of the risk rating associated with high and urgent priorities in Table 3.3 in the RMP

35 **Financial Implications**

The financial implications are detailed in the body of this report.

40 **Statutory and Policy Compliance Implications**

There are no negative implications proposed in this report.

**Report No. 5.4**                    **Status of Delivery of 2015/16 Local Roads Capital Works Program**  
**Directorate:**                    Infrastructure Services  
**Report Author:**                Tony Nash, Manager Works  
**File No:**                         I2015/835  
5 **Theme:**                         Community Infrastructure  
    Local Roads and Drainage

**Summary:**

10 This report provides a summary of the status of the implementation of the overall 2015/16 Local Roads Capital Works Program and its individual projects.

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**RECOMMENDATION:**

1. **That the Community Infrastructure Advisory Committee note the actions taken to implement the 2015/16 Local Roads Capital Works Program.**

20 **Attachments:**

- 2015/16 Capital Works Construction Program pdf (E2015/55772)[2 pages] ..... **Annexure ???**

**Report**

**1. Budget Overview for 2015/16**

5 The changes to the 2015/16 budget for the Capital Works Program for Local Roads since December 2014 are detailed in the following table:

Original Draft Budget as at December 2014	\$11,719,600
Less Byron Bay Bypass	\$5,000,000
Original Draft Budget as at December 2014 less Byron Bay Bypass	\$6,719,600
Additions	
Wilsons Creek Road Blackspot Project	\$150,000
Brunswick Valley Way/Tweed Valley Way Blackspot Project	\$300,000
Safer Roads project for Coolamon Scenic Drive	\$475,000
Additional \$2M roadworks	\$2,017,700
Additional Roads to Recovery (R2R) funding	\$463,854
Total without Byron Bay Bypass	\$10,126,154
Total with Byron Bay Bypass	\$15,126,154

10 The total budget without the Byron Bay bypass has increased by 1.5 times the original draft budget as at December 2014.

The remainder of this report details the works to be delivered on local roads in 2015/16 excluding the Byron Bay Bypass.

15 The budget for 2016/17 will also be increased by an additional \$1M from R2R as announced recently by the Australian Government.

**2. Delivery Methods**

20 The delivery of the construction phase of all projects for local roads in 2015/16 will be undertaken by either one of the following two delivery methods:

1. internal operational staff and subcontractors
2. formal contracts

25 The delivery of the preconstruction phases of all projects will be a combination of both internal and external resources that are managed by internal staff, either permanent, contract or labour hire.

30 Due to the number and size of the projects and the timing of their delivery, it is proposed that any formal contracts will be construct only and the option for design and construction contracts will not be used as this stage. However this will be reviewed as the knowledge about the individual projects increases as we move through the different phases of the life of a project, as detailed in section 3 of this report, from concept to draft to final and ultimately construction.

35 There have been recent discussions with the Roads & Maritime Services (RMS) about their ability to assist Council with delivery of projects in the future, both in planning and preconstruction activities, which are explained in more detail later in this report, through to actual works on the ground. These initial discussions will be further explored with RMS staff to identify any opportunities for Council for 2015/16. This is for the Byron Bay Bypass at one extreme down to road pavement renewal projects.

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**3. Phases of work for projects**

The general phases of work for individual projects vary from an idea, to a concept, to investigation, to detailed design development, approval for construction, construction works and finalisation.

5

Specifically at Council, our phases are:

- 3.1 an idea at budget development stage
- 3.2 desktop assessment for budget finalisation stage
- 3.3 concept design
- 3.4 preconstruction
- 3.5 construction
- 3.6 finalisation

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A concept design is normally based on ballpark unit rates for similar work undertaken in the past.

15

The preconstruction phase is the preparation phase where details need to be determined investigated and finalised as follows:

- What needs to be done?
- What resources and equipment is needed?
- Who will do what?
- What are the priorities?
- What is the contingency plan for any unforeseen problems or changes?

20

Activities undertaken during the preconstruction phase include:

25

- set up of work order, project file and Reflect planned works number
- electronic collection of data for GIS layers
- site survey
- location of services
- geotechnical testing
- road pavement design
- geometric design from concept to draft final to final IFC (issued four construction) plans
- Referral to local traffic committee, if required.
- Ecological assessment
- environmental planning and assessment
- construction methodology
- cost estimate
- project approval
- preparation of job package for internal staff delivery
- preparation of tender documents for delivery by formal contract

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**4. Status of Projects**

The status of the projects varies across the total program.

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Generally the projects included in the original draft budget as at December 2014 have progressed through phases 3.1 idea, 3.2 desktop assessments and 3.3 concepts with some projects at various steps within phase 3.4 preconstruction.

50

The projects that have been added after December 2014 and late in the 2014/15 financial year are generally at a lower phase of 3.2 desktop and 3.3 concept. Virtually none of these projects have had any activities undertaken for phase 3.4 preconstruction.

55

There is a planning and pre-construction activities spreadsheet that lists the 2015/16 Local Roads Capital Works Program by individual project and provides details of the status of the various preconstruction activities for each individual project. This spreadsheet will be updated throughout



the financial year as the status of the preconstruction activities of each project change. As a minimum it will be updated each calendar month.

**5. Resourcing**

5 During the 2015/16 financial year there will be the normal periods of staff leave for planned leave such as annual and long service and unplanned leave such as sick leave.

10 At this time, the biggest gap in resourcing for the delivery of the total 2015/16 Capital Works Program for Local Roads is in the positions of Project Engineer/s to undertake work associated with the individual projects for phase 3.2 desktop assessment, phase 3.3 concept design and 3.4 preconstruction activities.

15 As the phases of the projects develop, there will be more need to engage Contract Management Engineer/s to manage the formal contracts where the delivery is undertaken by external private companies. This will develop naturally as these projects move along in their phases of the project life and the Project Engineers involved in the earlier phases could easily morph to be the Contract Management Engineers for delivery by external private companies.

20 The delivery of projects by internal staff is much greater than in normal years and the work required to be undertaken by Works Engineer for the delivery of capital projects and the proper management and supervision of road maintenance activities will need to be supplemented by the continued engagement of a Project Engineer for all of 2015/16, who will assist with maintenance programming , maintenance programs of work and construction management including scheduling,  
25 forecasting, cost monitoring and procurement.

The delivery methods and resourcing for the 2015/16 Local Roads Capital Works Program was reported to Management on 8 July 2015 and the management endorsement was as follows:

- 30 1. *That ET notes the flexible and multifaceted delivery of projects in 2015/16 for the Local Roads Capital Works Program utilising a combination of internal staff and formal contracts.*
- 35 2. *That to facilitate this delivery, additional staff be engaged as follows :*
- a. *That approval be given for the engagement of 2 additional fixed-term Engineers for the Works Team to assist with the work required for desktop assessment, concept designs and preconstruction activities for the projects to be delivered in 2015/16.*
  - 40 b. *That the engagement of the existing two Temporary Engineers be extended by 12 months up to 30 June 2016.*
  - c. *That a temporary staff position be engaged to assist the Transportation and Traffic Planner with the implementation of paid parking in Byron Bay.*
  - d. *Recruit the vacant full-time administration position.*
- 45 3. *That ET receives status reports of the delivery of the 2015/16 Local Roads Capital Works Program monthly in conjunction with Performance Reporting throughout 2015/16 with forward programming of works to assist communications.*
- 50 4. *That the status of the delivery of the 2015/16 Local Roads Capital Works Program be reported to each meeting of the Community Infrastructure Advisory Committee.*
- 55 5. *That the progress of the delivery of the 2015/16 Local Roads Capital Works Program be included in the monthly production reports of the Works Team.*
6. *Weekly Critical projects reporting on Capital Works status to be reported by exception on issues arising from Capital Works Project.*

5 The additional short term technical positions are needed to ensure suitably qualified and experienced resources are available to properly and efficiently deliver the large capital works program in 2015/16. These additional positions are resourcing the peak requirements of Council this FY whilst the permanent positions are provided for the normal, longer term Capital Works Programs undertaken by Council.

**6. 2015/16 Construction Program**

10 The attached Gantt chart (E2015/55772) details the 2015/16 Local Roads Capital Works Program sorted by work type and then supervisor as at 27 August 2015.

At this stage, the works proposed to be undertaken by contract and not Council staff include:

- bitumen reseal works
- footpath at Marine Parade, Wategos
- concrete roundabout at Lawson/Massinger Street, Byron Bay
- 15 • intersection upgrade at Broken Head Road/Clifford Street, Suffolk Park

20 Other projects may be added to this list depending upon the scope, extent of and type of work of the individual projects and the progress of Council staff and subcontractors in delivering their nominated projects.

It should be noted that Council holds formal periodic contracts for:

- 1. bitumen resealing
- 2. asphalt works, including wearing surface and deep lift AC pavement layers
- 3. supply of quarry products
- 25 4. supply of ready mix concrete
- 5. plant and equipment hire
- 6. truck hire
- 7. traffic control services

30 These periodic contracts will be used on individual projects in conjunction with Council staff in the overall delivery of the 2015/16 local roads capital works program.

Works recently completed by Council staff and our subcontractors include:

- 35 1. Carpark at Station Street, Mullumbimby.
- 2. Roadworks at Booyong Road, Booyong
- 3. Bus bay outside Wilsons Creek Primary School
- 4. footpath works outside Mullumbimby High School
- 5. roadworks at Left Bank Road and Azalea Street, Mullumbimby
- 6. reseal preparation works at Bangalow Road, Myocum Rd, Left Bank Road & Lighthouse Rd
- 40 7. drainage works on Myocum Road, Myocum, in advance of roadworks
- 8. drainage works on Middleton Street, Byron Bay, in advance of roadworks

At the time of writing this report, works currently in progress by Council staff in our subcontractors include:

- 45 1. reseal preparation works at Main Arm Road
- 2. roadworks on Myocum Road, Myocum
- 3. Bus bay outside Wilsons Creek Primary School – path for DoE

Works to be commenced in September / October 2015 include:

- 50 1. reseal preparation works at Wilsons Creek Rd, Skinners Shoot Rd, Broken Head Rd, Federal Dr & Coolamon Scenic Dr
- 2. South Golden Beach Drainage Easements Upgrade
- 3. Reseals – visit 1
- 4. 2 lanes in bound Lawson St (Shirley St) project
- 55 5. Wilsons Creek Rd Blackspot Project

6. Middleton St roadworks

**Consultation:**

- 5 There has been consultation within the Works Team for the preparation of this report; implementation of the 2015/16 Local Roads Capital Works Program and the individual projects at our weekly construction meetings; periodic preconstruction meetings; and one off site and office meetings on individual projects. This will continue throughout 2015/16.
- 10 Status reports of the delivery of the 2015/16 Local Roads Capital Works Program will be provided to each meeting of the Community Infrastructure Advisory Committee during this FY.

**Financial Implications**

- 15 All projects are fully funded by Council for delivery in 2015/16.

**Statutory and Policy Compliance Implications**

- 20 There are no negative impacts proposed in this report.