

**ASSISTANT GENERAL MANAGER ENGINEERING SERVICES REPORT****ITEM 11.6 SF2459 280219 LANES BRIDGE BOWRAVILLE - PROGRESS REPORT NO5**

**AUTHOR/ENQUIRIES:** Paul Gallagher, Assistant General Manager - Engineering Services; Matthew Leibrandt, Manager Infrastructure Services; Clint Fitzsummons, Manager Assets

**SUMMARY:**

This report provides Council with the fifth progress report on the replacement of Lane's bridge. It is anticipated that the bridge and associated road works will be functional by the end of April 2019 (weather permitting). Works ceased on site for the Christmas period on 21 December and recommenced in mid-January.

**RECOMMENDATION:**

**That Council receive and note the fifth progress report on the replacement of Lanes Bridge as at 20 February 2019.**

**OPTIONS:**

Receive the report.

**DISCUSSION:*****Current expenditure:***

The budget allocation for the bridge project is \$2.7million. At the time of preparing this report the current expenditure at 20 February 2019 inclusive of both financial years is \$1,544,841.49 which now encompasses the expenditure of the tenders and direct costs as follows:

Project Budget	Expenditure 2017/18 Financial Year	Expenditure 2018/19 Financial Year	Project Expenditure To Date	Remaining Budget
\$2,700,000.00	\$161,582,00	\$914,063.00 expenditure for crane hire (approx. \$173,350), piling (approx. \$257,922.5) and supply of precast concrete elements (\$362,100.85).  \$630,778.49 - direct costs (includes wages, on-costs and external consultants, bridge design and contribution and compensation of \$45k towards the raising of 8 High Street) Installation of culverts and road works.	\$1,544,841.49	\$993,576.51

- Notable costs which have already been accounted for include the tenders for the bridge works, precast culverts, bridge guardrails, steel tie down brackets and consulting fees.
- Notable costs which have not yet been accounted for include approach guardrails, bridge lighting, and pedestrian fencing.
- Notable costs which are in progress include the installation of the culverts, road works and materials to the approaches.

---

**ITEM 11.6 LANES BRIDGE BOWRAVILLE - PROGRESS REPORT NO5**

---

***Progress report on the Construction of Lanes Bridge:***

Construction is on schedule and it is anticipated to have traffic over the new bridge by the end of April 2019. Various street furniture, line marking and site rehabilitation and beautification works will be completed by the 30 June prior to the end of the financial year.

At the time of preparing this report:

- The bridge structure itself has been constructed (with the exception of the concrete deck).
- The first span of reinforcement for the bridge deck has been completed, and is ready for concreting. The remaining steel for the deck is concurrently being placed with the steel for the pile set blade walls. The formwork for the first blade wall is currently under construction, and will allow for the wall to be poured at the same time as the first deck span, which is expected to be completed towards the end of February. As was previously reported, the cost of the addition of the blade walls between the piles will be covered by the steel reinforcing supplier, and will not affect the budget of the bridge.
- The culvert base slab has been poured, and precast elements are soon to be placed. Following this the wing walls and curtain walls for the culvert will be formed and poured.
- The roadworks for the approaches to the bridge have commenced, with Council's roads crews working on constructing the embankments to the height of the bridge. The first stage of filling works began on the 18 February 2019, which involves laying a raw feed material (wrapped in a thick geofabric).

***Communication and Media Release:***

The following media releases have been issued:

- 24 May 2018 - Nambucca Shire Council has resolved to replace Lanes Bridge at Bowraville with an all concrete structure at an estimated cost of \$2.7million.
- 24 September 2018 - Construction of Lanes Bridge, Bowraville is about to commence.
- 19 November 2018 – Planned significant traffic delays
- 7 December 2018 – Amended timetable for traffic delays
- Progress reports;
- 27 September 2018 – Progress Report No1 placed on Council's website.
- 31 October 2018 – Progress Report No2 placed on Council's website
- 18 December 2018 – Progress Report No3 placed on Council's website
- 31 January 2019 – Progress Report No4 placed on Council's website

All road closures alerts have been publicised on MyRoadinfo and the existing road closure notice to emergency and transport services. The above information can also be found on Council's website and MyRoadInfo.

**CONSULTATION:**

General Manager  
Engineer Designer  
Surveyor  
Manager Infrastructure Services  
Structure's Coordinator  
Roads Coordinator

---

**ITEM 11.6 LANES BRIDGE BOWRAVILLE - PROGRESS REPORT NO5**

---

**SUSTAINABILITY ASSESSMENT:****Environment**

There are significant environmental implications associated with the construction of the new bridge. These have been investigated and mitigation measures included within the project plan.

**Social**

There are significant social implications associated with the construction of a new bridge, should the road be closed, and residents and industry be required to be diverted for a period of up to 7 months through construction. Tallowood Steiner School have advised of the implications to their staff and students as follows:

*Tallowood Steiner School*

*Staff members total: 10*

*Students total: 40*

- 1 *6 staff members (both permanent and casuals) affected by this:  
Extra 32 minutes travel (without any traffic) one way = Extra 1h and 4 minutes per day  
Extra 29.1 kilometres one way = Extra 58.2 kilometres per day*
- 2 *26 students out of 40 affected:*
  - a *Students that travel to school mostly by private car: 7 students between the ages of 5 and 7 will have between 40 minutes to 1h 4 minutes extra travel per day.*
  - b *Bus from North Arm Road: 12 students between the ages of 5 and 12 extra 1h 4 minutes travel per day.*
  - c *Busses from Missabotti: currently students travel from Missabotti to Bowraville, then take bus to Tallowood Steiner School. At the end of day, they take the bus to Bowraville, then change bus to Missabotti busses: 7 students between the age of 6 and 12 will have an extra 2h 8 minutes extra travel per day.*

**Economic**

There are significant economic implications associated with construction of the new bridge should the road be closed and residents and industry be required to be diverted for a period of up to 7 months through construction. The proposed option mitigates full closure and traffic diversion.

The closing of the whole road pavement has already been met with significant community angst following the story that was prematurely aired on NBN News without seeking any formal advice from the Council and the Engineering Department

Post construction, the bridge will increase economic outlook with less closures and increased productivity.

**Risk**

There are significant risk implications associated with construction of the new bridge. These have been investigated and mitigation measures included within the project plan. During the course of construction there is the potential of significant flooding of the area during large storm events. The option being recommended reduces the risk in that there is no side track, the bridge deck will be higher than the existing deck level and a single lane of traffic under traffic lights is maintained.

**FINANCIAL IMPLICATIONS:****Direct and indirect impact on current and future budgets**

The cost of the bridge is generally covered from grants. Council will now use \$1m from unexpended loans funds in lieu of taking T-Corp loan to match the federal grant.

---

**ITEM 11.6 LANES BRIDGE BOWRAVILLE - PROGRESS REPORT NO5**

---

**Source of fund and any variance to working funds**

Council has signed a funding agreement for \$1M for the Federal funding (matched by Council through loan funds) and most recently signed the funding agreement for \$500,000 provided from the State Government under the 'Bridge Timber Replacement' program.

The road is classified as a Regional Road and funding can be provided from within the Block Grant.

**Service level changes and resourcing/staff implications**

There is a proposed improved service level associated with the raising of the bridge deck by 1.75m, which increases the flood immunity for the community. At present all work has been undertaken in house and tenders let for works outside the scope of Council's bridge team.

**ATTACHMENTS:**

There are no attachments for this report.