INVERELL SHIRE COUNCIL

NOTICE OF MEETING

CIVIL & ENVIRONMENTAL SERVICES COMMITTEE

6 July 2018

A Civil & Environmental Services Committee Meeting will be held in the Committee Room, Administrative Centre, 144 Otho Street, Inverell on Wednesday, 11 July, 2018, commencing at 9.00 am.

Your attendance at this Civil & Environmental Services Committee Meeting would be appreciated.

P J HENRY PSM

GENERAL MANAGER

A G E N D A

SECTION A	**APOLOGIES** **CONFIRMATION OF MINUTES** **DISCLOSURE OF CONFLICT OF INTERESTS/PECUNIARY AND NON-PECUNIARY INTERESTS** **PUBLIC FORUM** **BUSINESS ARISING FROM PREVIOUS MINUTES**
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Quick Reference Guide

Below is a legend that is common between the:

- Inverell Shire Council Strategic Plan;
- Inverell Shire Council Delivery Plan; and
- Inverell Shire Council Operational Plan.

CIVIL & ENVIRONMENTAL SERVICES COMMITTEE MEETING

Wednesday, 11 July, 2018

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MINUTES OF THE CIVIL & ENVIRONMENTAL SERVICES COMMITTEE MEETING HELD IN THE COMMITTEE ROOM, 144 OTHO STREET, INVERELL ON WEDNESDAY, 13 JUNE, 2018 COMMENCING AT 9.00 AM.

PRESENT: Cr D F Baker (Chairperson), Crs P J Harmon, M J Peters, S J Berryman and J N McCosker.

Also in attendance: Crs J A Watts, C M Dight, P A King and A A Michael.

Paul Henry (General Manager), Brett McInnes (Director Civil and Environmental Services), Scott Norman (Director Corporate and Economic Services), Anthony Alliston (Manager Development Services) and David Strugnell (Asset Management Co-coordinator)

SECTION A

APOLOGIES:

There were no apologies received.

1. CONFIRMATION OF MINUTES

RESOLVED (Berryman/Harmon) that the Minutes of the Civil and Environmental Services Committee Meeting held on 9 May, 2018 as circulated to members, be confirmed as a true and correct record of that meeting.

2. DISCLOSURE OF CONFLICT OF INTERESTS/PECUNIARY AND NON-PECUNIARY INTERESTS

Nil

SECTION B
ADVOCACY REPORTS

Cr Harmon — Reported that he and Cr King attended the Myall Creek Remembrance Service on Sunday 10 June 2018. It was well attended and was a moving occasion that recognised a unique event in Australian history.

SECTION D
DESTINATION REPORTS

AC-A
MCE-A 1. CONSIDERATION OF THE LOCAL TRAFFIC COMMITTEE RECOMMENDATIONS S30.8.1

RESOLVED (Harmon/Berryman) that the Committee recommend to Council that the following Local Traffic Committee recommendations be adopted:

i) ADDITIONAL DESIGNATED DISABILTY PARKING SPACE - ROSS HILL PUBLIC SCHOOL S28.27.2

An additional designated disability parking space be provided in Andrew Street adjacent to Ross Hill Public School.

ii) NEW DESIGNATED DISABILITY PARKING SPACE - ASHFORD MEDICAL CENTRE S28.27.2 + S5.9.17

The new designated disability parking space be provided in Jubilee Street, at the front of the Ashford Medical Centre as per the design drawings.

iii) ADDITIONAL DESIGNATED DISABILITY PARKING SPACE - INVERELL PUBLIC SCHOOL S28.27.2

An additional designated disability parking space be provided in Ross Street adjacent to Inverell Public School.

iv) INTERSECTION SAFETY UPGRADES - INVERELL TOWNSHIP S15.8.21/05

The intersection safety upgrade works be implemented in accordance with the plans.

2. REVIEW OF MANAGEMENT POLICY – ROAD HIERARCHY S16.7.19/05

DECLARATION: Mr Brett McInnes, Director Civil & Environmental Services, declared a non-pecuniary interest in this issue. The nature of Mr McInnes' interest arises from his wife being an employee of Dr Hall.

MOTION (Harmon/Berryman) that the Committee recommend to Council that:

i) Council maintains its position in respect to the maintenance of Carl Tomes Lane.

ii) The residents of Carl Tomes Lane be advised of the decision and the justification for it, and informed of the process through which they could approach Crown Lands to transfer the road to Council, at which point Council would consider the transfer under its Management Policy: Crown Roads – Transfer to Council.

iii) Management Policy – Road Hierarchy be endorsed as presented including the updated classification of Loves Lane to Rural Minor for its entire length.

AMENDMENT (McCosker/Peters) that the Committee recommend to Council that Council initiates the process to transfer Carl Tomes Lane from a Crown Road to a Road Reserve controlled by Council.

The Amendment on being put to the meeting was LOST. The Motion on being put to the meeting was CARRIED.

Cr McCosker and Cr Peters requested that their vote against the motion be recorded.

3. PUBLIC FORUM S13.5.6/11

At this juncture, the time being 9.25 am, the Chair welcomed the members of the public and opened the Public Forum Session by inviting members of the public to speak:

Members of Community Gardens delivered an update and requested financial support for the proposed relocation of the gardens. The gardens were established in 2012 to show case gardening techniques, provide education opportunities and demonstration sites. The goal being to provide a nurturing space to build community connections. It is entirely run by volunteers and works with other community organisations and programs such as IDFS, MacIntyre High School, Job Link Plus and Brighter Access. Nick Barton presented the site plan proposed under Master Plan developed by the Committee. He highlighted the garden will be well positioned in relation to many of its' community partners. The Master Plan is staged with stage 1 being to develop an access off Ross St to the proposed processing area. Storage and processing building is included along with a toilet block. Helen McCosker then presented the Group's community engagement strategy and budget for Stage 1. Total budget being

$198,000 with possible identified funding sources of $241,000 including a pending grant application to the Building Better Regions program for $100,000 and a request for Council assistance of $100,000.

At this juncture, the time being 9.45 am, the Public Forum Session closed and the Committee resumed the balance of the Agenda.

SECTION D - DESTINATION REPORTS (Continued)

3. UPDATE ON FIRE SAFETY REPORTS S7.11.2/11

RESOLVED (Harmon/Peters) that the Committee recommend to Council that;

i) The information be received and noted.

ii) A further report on the matter be provided at the conclusion of the deadline for property owners to formally respond to Council.

4. REQUEST FOR SURPLUS PAVERS– INVERELL LAPIDARY CLUB S26.4.19

RESOLVED (Berryman/Harmon) that the Committee recommend to Council that Council make a donation to the Inverell Lapidary Club of sufficient obsolete pavers to pave the breezeway between the two structures on the Club House site and immediate surrounds (an area of approximately 60 square meters).

5. SELF HELP POLICY REVIEW S4.14.3/02 + S4.14.1/01

RESOLVED (Harmon/Berryman) that the Committee recommend to Council that:

i) The existing management policy - Contributions, Works Carried Out Ahead of Priority be amended noting risk management issues and matters raised by the committee.

ii) The amended policy be returned to a future committee meeting for endorsement.

6. PETITION - CAMPBELL STREET PEDESTRIAN CROSSING S30.9.4

RESOLVED (Peters/McCosker) that the Committee recommend to Council that the project to construct a pedestrian refuge on Campbell Street be added to Council's design priority list so that the project can have a comprehensive engineering design completed.

SECTION E
INFORMATION REPORTS

1. WORKS UPDATE S28.21.1

2. BYRON LANE ACCESS BETWEEN HONG YUEN PLAZA AND THE OLIVER STREET CARPARK S28.10.SR223

RESOLVED (McCosker/Berryman) that the items contained in the Information Reports to the Civil & Environmental Services Committee Meeting held on Wednesday, 13 June, 2018, be received and noted.

SECTION F
GENERAL BUSINESS

Cr Dight The Gunnee Feedlot

The Gunnee Feedlot has requested if options for dust suppression in their immediate vicinity could be considered by Council.

Cr McCosker Recognition of Community Service

Cr McCosker requested that the matter be referred to Closed Committee for consideration.

RESOLVED (Harmon/McCosker) that the matter be referred to Closed Committee for consideration as:

i) the matters and information are 'personnel matters concerning particular individuals (other than Councillors)', (Section 10A(2)(a) of the Local Government Act, 1993);

ii) on balance the public interest in preserving the confidentiality of the information outweighs the public interest in openness and transparency in Council decision-making by discussing the matter in open meeting; and

SECTION H
CONFIDENTIAL REPORTS IN CLOSED COMMITTEE
(SECTION 10A(2) OF THE *LOCAL GOVERNMENT ACT 1993*)

At 10.01am, the Chairperson offered the opportunity to members of the public to make representations as to whether any part of the Committee Meeting should not be considered in Closed Committee. There was no response from the public.

CLOSED COMMITTEE REPORTS

RESOLVED (Harmon/McCosker) that the Committee proceed into Closed Committee to discuss the matters referred to it, for the reasons stated in the motions of referral.

At this juncture, the time being 10.35am, Cr Watts left the meeting and returned at 10.42am.

RESOLVED (Harmon/Berryman) that the Committee proceed out of Closed Committee into Open Committee.

Upon resuming Open Committee, at 10.44am, the Chair verbally reported that the Committee, with the Press and Public excluded, having considered the matters referred to it, recommends as follows:

1. RECOGNITION OF COMMUNITY SERVICE S3.15.16

That the Committee recommend to Council that a confidential report be prepared for Council highlighting the adopted policy on Recognition of Community Service and consideration be given to recognition for the contribution made to the community by the individual discussed in Closed Committee.

ADOPTION OF RECOMMENDATIONS

RESOLVED (Harmon/McCosker) that the recommendations of Closed Committee be adopted.

There being no further business, the meeting closed at 10.46am.

CR D F BAKER

CHAIRPERSON

TO CIVIL & ENVIRONMENTAL SERVICES COMMITTEE MEETING 11/07/2018

ITEM NO:	1.	**FILE NO**: S28.23.1/11
DESTINATION 5:	The communities are served by sustainable services and infrastructure	**S**
SUBJECT:	**ROAD CLOSURE - EAT DRINK NEW ENGLAND**	
PREPARED BY:	Michael Frost, Technical Support Officer	

SUMMARY:

Council is in receipt of a request from the Chairperson of Eat Drink New England committee for the closure of the Evans Street precinct from midday Friday, 9 November 2018 to coincide with their annual event to be held Saturday, 10 November, 2018.

COMMENTARY:

Council is in receipt of a request from the Eat Drink New England committee for the closure of Evans Street between Otho Street and Campbell Street from 12 Noon on Friday, 9 November, 2018. Closure is requested to coincide with their annual event to be held Saturday, 10 November 2018 to allow for sufficient time for the set up of stalls and amenities. It is proposed that normal traffic flow in Evans Street be reinstated at 5pm on the Saturday, at the conclusion of the event. A copy of the correspondence is attached in Appendix 1 (D3 – D4) for the information of the Committee.

Eat Drink New England is the major fundraiser for The Inverell Club. Profits from this event are applied to the maintenance, and ongoing operations of the club's buildings and facilities. The event is in its fourth year and has grown exponentially in that time. Initially the event was held in The Inverell Club, incorporating the immediate footpath. This year there will be up to 65 stallholders spread over the entire block, promoting various forms of local produce from throughout the Tablelands. Live bands and celebrity cooking demonstrations are also a feature of the event which adds to its popularity drawing residents from throughout the Shire and beyond.

Last year's event was the first time security fencing was used and proved successful in directing pedestrian traffic throughout the display areas and away from quarantined areas. The downside being, after a 5.00am start, the area was still being set up when the first wave of the public arrived and this has prompted the request to allow set up to commence at midday the day prior to the event. With limited volunteers, set up includes but is not limited to:

- Delivery, unloading and installing of approximately 175 metres of mesh fencing;
- Directing and supervising 65 stallholders;
- Set up eight (8) marquees/shade shelters;
- Provide power to sites and conceal electrical cables;
- Set up speakers for band and PA system for committee and conceal cables;
- Deliver and set up two (2) stages (band & cooking demonstrations).; and
- Position Pantech in easterly parking bays of Turnham Car Park.

As in past years, Eat Drink New England pay for road closure costs and marquee hire. Council has legislated authority under the *Roads Act 1993 - Section 122* to grant a permit for an event with

associated road closure. Should Council agree to the requested road closure, the appropriate approvals will also need to be obtained from NSW Police.

Access to the Art Gallery and the residence at 83–85 Otho Street would be impacted by any road closure approval. The Chairperson of the Eat Drink New England has approached representatives of both sites and has been provided with verbal consent to the proposal. The committee will also need to accommodate any vehicles that may be within the confines of this area when the proposed road closures commence. Those vehicles will need to be monitored and owners provided a prompt, clear and unobstructed exit from the area.

The Committee is requested to make a determination regarding Eat Drink New England's request for closure of Evans Street between Otho and Campbell Streets between the hours of 12 Noon on Friday, 9 November 2018 and 5pm Saturday, 10 November 2018.

RELATIONSHIP TO STRATEGIC PLAN, DELIVERY PLAN AND OPERATIONAL PLAN:

Strategy: S.07 Provide accessible and usable recreation facilities and services meet the needs of the community.

Term Achievement: S.07.01 Recreational and leisure facilities and services that meet community needs and are maintained to promote optimal utilisation.

Operational Objective: S.07.01.01 Facilitate joint use of the Shire's recreation and leisure facilities, sporting and open space facilities including co-location of programs.

POLICY IMPLICATIONS:

Nil

CHIEF FINANCIAL OFFICERS COMMENT:

Nil

LEGAL IMPLICATIONS:

Nil

RECOMMENDATION:

A matter for the Committee.

APPENDIX 1

THE INVERELL CLUB
ESTABLISHED 1902

EAT · DRINK
NEW ENGLAND

INVERELL SHIRE COUNCIL
14 JUN 2018

14 June 2018

Mr Paul Henry
General Manager
Inverell Shire Council
PO Box 138
INVERELL NSW 2360

Dear Paul,

Re: Eat Drink New England 2018

We are in the early stages of organizing this year's event. It will be held on Saturday 10th November 2018. We are looking to highlight local & regional produce and products. This will involve around 65 Stall holders.

I am writing to seek permission for the following;

1. Closure of Evans St as per the attached map from Friday 9th November 12 Noon (to allow for erection of security fencing) until Saturday 10th November 5.00pm.
2. Use of Council power boxes in Evans Street.
3. Use of Council zulo bins from the Town Hall.

Site Terms and Conditions would include a clause prohibiting Stallholders using tent pegs or anything that may damage the road surface.

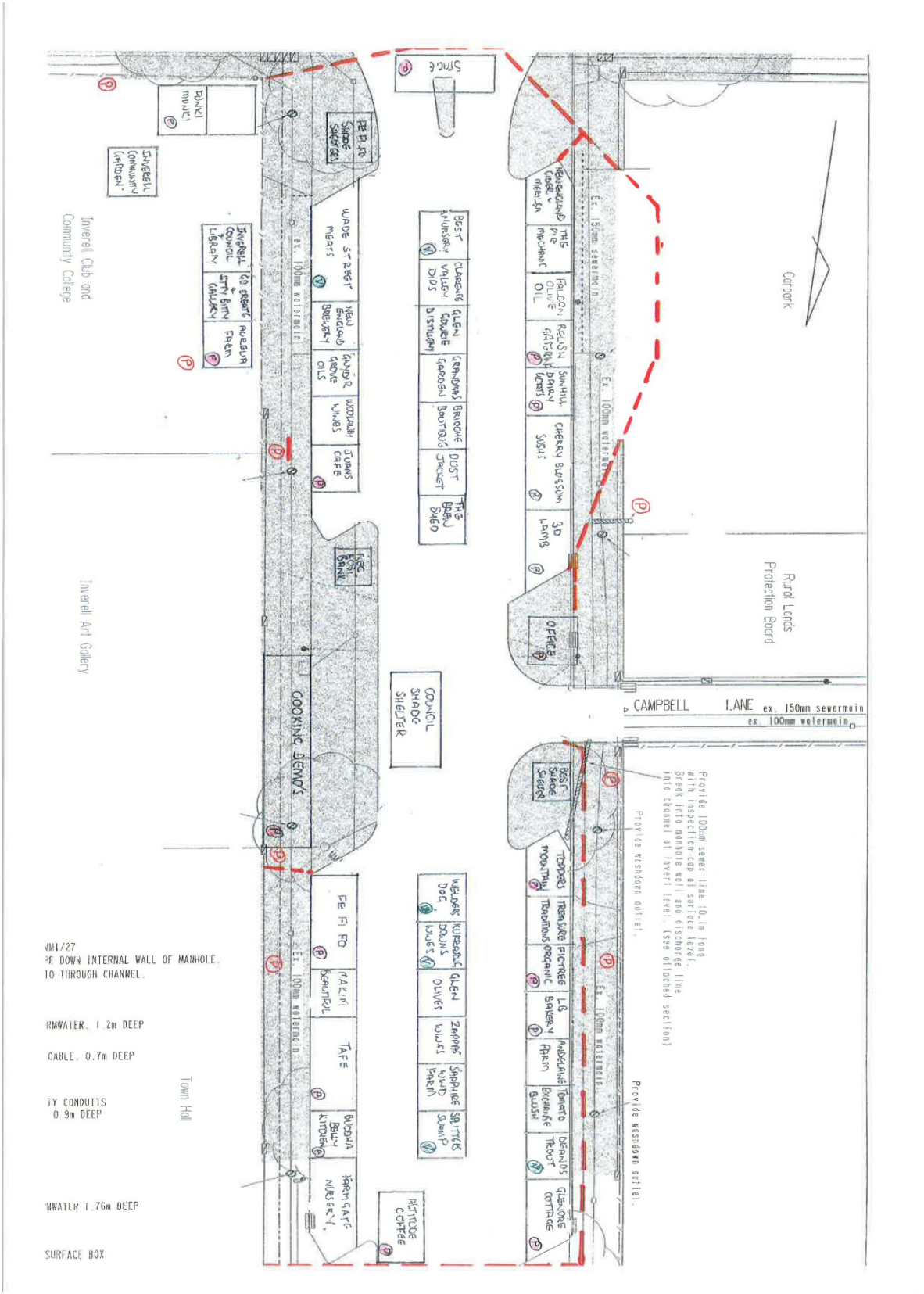
I would be happy to meet a Council representative on site to discuss this further.

Please let me know if you have any questions or require further information.

Yours Faithfully,

Sean Taylor (0409 666 854)
Chairperson
Eat Drink New England 2018

P: (02) 6722 3043
E: INVERELLCLUB@GMAIL.COM
THE INVERELL CLUB LTD
CNR EVANS & CAMPBELL STS
PO BOX 330
INVERELL NSW 2360


Carpark
Rural Lands Protection Board
CAMPBELL LANE
ex. 150mm sewermain
ex. 100mm watermain
Inverell Club and Community College
Inverell Art Gallery
Town Hall
COOKING DEMO'S
COUNCIL SHADE SHELTER
OFFICE
Provide washdown outlet.
Provide 100mm sewer line 10.1m long with inspection cap at surface level. Break into manhole wall and discharge line into channel at invert level. (see attached section)
4M1/27
PE DOWN INTERNAL WALL OF MANHOLE. TO THROUGH CHANNEL.
RMWATER. 1.2m DEEP
CABLE. 0.7m DEEP
TY CONDUITS 0.9m DEEP
WATER 1.76m DEEP
SURFACE BOX

ITEM NO:	2.	**FILE NO**: S28.16.7	
DESTINATION 5:	The communities are served by sustainable services and infrastructure		**S**
SUBJECT:	**SPECIAL PROJECTS ROADS INFRASTRUCTURE FUNDING ALLOCATION**		
PREPARED BY:	Justin Pay, Manager Civil Engineering		

SUMMARY:

Since September 2017, the Valuer General has issued separate land valuations for the wind turbine sites installed on farming land within the Inverell Shire. This has resulted in additional income which Council has resolved to allocate to its road asset renewal and maintenance programs.

The committee is requested to make a determination on the allocation of these funds for the 2018/2019 financial year.

COMMENTARY:

Since September 2017, the Valuer General has issued separate land valuations for the wind turbine sites installed on farming land within the Inverell Shire. This has resulted in additional income which Council has resolved to allocate to its road asset renewal and maintenance programs.

The funds available for expenditure in the 2018/2019 financial year total $611,460. These funds are made up of $293,460 from the 2017/2018 financial year and $318,000 from the 2018/2019 financial year.

It is recommended that these funds be allocated to gravel resheeting and drainage maintenance on the 20km unsealed section of Kings Plains Road. Council has a high maintenance burden on this section of road due to the lack of suitable gravel surface. Council receives a high number of complaints regarding this section of road, relating to areas with limited or no gravel as well as sections with course gravel that leads to tyre punctures. Whilst some gravel patching and resheeting has taken place over the past 10 years, significant works on the road have been delayed due to the lack of a suitable gravel source in the area. This delay in works has lead to frustration to residents in the Kings Plains area.

Council staff have undertaken extensive investigations over the past decade, but until now have been unable to find an appropriate source of gravel in the area. Recent investigations have found a potentially suitable gravel source on the property “Carinya”, which is adjacent to the unsealed section of Kings Plains Road. It is estimated that there is sufficient gravel at this location to resheet up to 10km of road. Staff are currently working on the required approvals to open up a gravel pit at this site. Once approval is granted, it is proposed to complete a 1km trial section of resheeting to ensure that the gravel provides a suitable road surface. If the trial is successful this gravel will be utilised to complete as much resheeting as possible, the actual amount will not be known until gravel extraction is underway. The remaining required gravel will be sourced from “Mathers Pit” on Poolbrook Road, Nullamanna. This is a long distance to haul gravel and as such the cost per kilometre to complete these works will be higher than Council’s standard resheeting rate.

It is anticipated that with the full funding allocation of $611,460, the entire unsealed length on Kings Plains Road will be resheeted and areas with poor drainage improved. It is essential with such significant expenditure on the gravel surface that drainage maintenance occurs to protect the road from washouts and water ingress, which if not treated would reduce the useful life of the road.

In reviewing Council's asset management system and in considering the above issues, it has been determined that utilising the Special Roads Project funding for gravel resheeting and drainage maintenance on the unsealed section of Kings Plains Road would deliver optimum benefit to the community.

RELATIONSHIP TO STRATEGIC PLAN, DELIVERY PLAN AND OPERATIONAL PLAN:

Strategy: S.08 Civil infrastructure is secured, maintained and used to optimum benefit.

Term Achievement: S.08.01 An asset management strategy is in operation for civil infrastructure that optimises its use and maintains it to agreed standards fit for its contemporary purpose.

Operational Objective: S.08.01.01 An Asset Management Strategy for Civil assets is developed, maintained and implemented.

POLICY IMPLICATIONS:

Nil

CHIEF FINANCIAL OFFICERS COMMENT:

Nil

LEGAL IMPLICATIONS:

Nil

RECOMMENDATION:

That the Committee recommend to Council that the Special Projects Roads Infrastructure funding of $611,460 be allocated to Gravel Resheeting and drainage maintenance on Kings Plains Road.

ITEM NO:	3.	**FILE NO**: S28.15.3/08
DESTINATION 5:	The communities are served by sustainable services and infrastructure	**S**
SUBJECT:	**ROAD TRAIN ACCESS REQUEST – BINGARA ROAD**	
PREPARED BY:	Justin Pay, Manager Civil Engineering	

SUMMARY:

Council is in receipt of a Restricted Access Vehicle (RAV) Permit application for an A - Double Road Train (Type 1) on the Bingara Road, Delungra. Council is requested to decline approval for the permit.

COMMENTARY:

Council is in receipt of a Restricted Access Vehicle (RAV) Permit application for an A - Double Road Train (Type 1) on the Bingara Road, Delungra. Below in Appendix 2 (D9) is a visual representation of a road train including length and mass limits. The route under application is from the western boundary of the Shire at Myall Creek to Gwydir Highway intersection at Delungra.

The application was received in May 2018 and an assessment of the route was conducted by Councils Engineering Department in June 2018. The assessment was completed in accordance with Council's Restricted Access Vehicle policy. A report showing the outcome of the assessment is in Appendix 3 (sent under separate cover).

The assessment shows that in various locations along Bingara Road the sealed surface width is less than the requirements for A Double Road Trains to operate. The required sealed surface width for A Double Road Trains is 6 metres. Bingara road only has 5.6 metres in various locations. The safety hazards associated with the narrow width of the road are further exacerbated by several locations with poor sight distance and road surface defects.

The bridge at Myall Creek does not have the required width to approve use for A Double Road Trains. The required carriage way width for A Double Road Trains at structures is 7.2 metres, the existing carriage way width at Myall Creek Bridge is only 6 metres.

These factors lead to considerable safety risk to the public as well as risk to Council's road network if road train access was to be approved. It is not considered that any low cost options exist that would overcome these safety issues. In order to mitigate these risks, significant upgrade works would be required, in excess of 12kms of bitumen road would need to be widened and the bridge at Myall Creek would need to be upgraded. These works would cost up to $5 million, Council does not currently have a budget allocation for these works.

RELATIONSHIP TO STRATEGIC PLAN, DELIVERY PLAN AND OPERATIONAL PLAN:

Strategy: S.10 Maintain and enhance a safe, efficient and effective local road network.

Term Achievement: S.10.01 Road network capacity, safety and efficiency are improved and traffic congestion is reduced.

Operational Objective: S.10.01.01 A program is being implemented to address deficiencies and areas of congestion in the local road network.

POLICY IMPLICATIONS:

Nil.

CHIEF FINANCIAL OFFICERS COMMENT:

Nil.

LEGAL IMPLICATIONS:

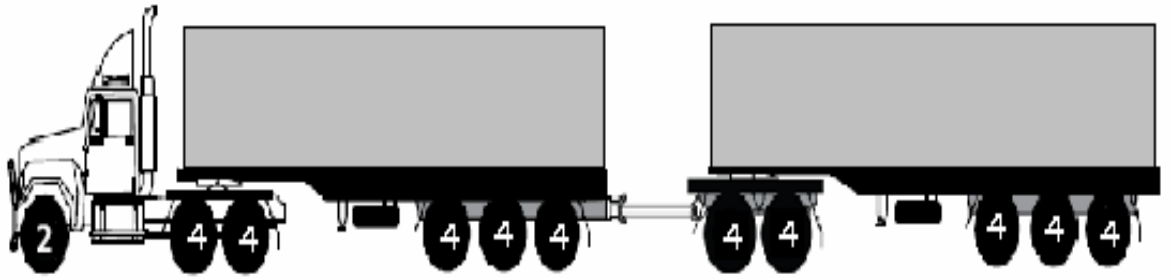
Nil.

RECOMMENDATION:

That the Committee recommend to Council that the current RAV application for a permit for a Modern A – Double Road Train ≤36.5m on Bingara Road be declined.

APPENDIX 2

Road Train Configuration



Length – less than or qual to 35.6m

Mass – General Mass Limits – 79t
Concessional Mass Limits – 81t
Higher Mass Limits – 85t

Note: a modern road train must have a tri axel dolly (above shown dual axel dolly)

ITEM NO:	4.	**FILE NO**: S28.15.3/08
DESTINATION 5:	The communities are served by sustainable services and infrastructure	**S**
SUBJECT:	**B – DOUBLE ACCESS REQUEST – STANNIFER AND OLD MILL ROADS**	
PREPARED BY:	Justin Pay, Manager Civil Engineering	

SUMMARY:

Council is in receipt of a Restricted Access Vehicle (RAV) Permit application for a B-Double access on the Stannifer Road and Old Mill Road, Stannifer. Council is requested to decline approval for the permit.

COMMENTARY:

Council is in receipt of a Restricted Access Vehicle (RAV) Permit application for a access on the Stannifer Road and Old Mill Road, Stannifer. The route under application is from the intersection at Elsmore Road and Stannifer Road to 450 Old Mill Road.

The application was received in May, 2018 and an assessment of the route was conducted by Councils Engineering Department in June, 2018. The assessment was completed in accordance with Council's Restricted Access Vehicle policy. The outcome of the assessment is presented in Appendix 4 (sent under separate cover).

A summary of the assessment is provided below:

- Stannifer Road is not suitable for B - Double access as the road does not have the required carriageway width for B - Double access. There would not be sufficient width for cars to get off the road safely when passing the combination. Please note that this road already has a high maintenance burden for Council, approving this route would only increase this maintenance burden and the road would require more routine maintenance.

- Old Mill Road is not suitable for B - Double access, the road does not have the required sealed surface width for B - Double access. To operate safely B-Doubles Require 6.0m of sealed surface width. Old Mill Road currently only has 5.5 metres.

These factors lead to considerable safety risk to the public as well as risk to Council's road network if B - Double access was to be approved. It is not considered that any low cost options exist that would overcome these safety issues. In order to mitigate these risks, significant upgrade works would be required; in excess of 9kms of bitumen road would need to be widened and 4kms of unsealed road would need widening. These works would cost up to $3 million. Council does not currently have a budget allocation for these works.

RELATIONSHIP TO STRATEGIC PLAN, DELIVERY PLAN AND OPERATIONAL PLAN:

Strategy: S.10 Maintain and enhance a safe, efficient and effective local road network.

Term Achievement: S.10.01 Road network capacity, safety and efficiency are improved and traffic congestion is reduced.

Operational Objective: S.10.01.01 A program is being implemented to address deficiencies and areas of congestion in the local road network.

POLICY IMPLICATIONS:

Nil.

CHIEF FINANCIAL OFFICERS COMMENT:

LEGAL IMPLICATIONS:

Nil.

RECOMMENDATION:

That Council decline the current RAV application for a permit for B-double access.

ITEM NO:	5.	**FILE NO**: S28.15.3/08	
DESTINATION 5:	The communities are served by sustainable services and infrastructure		**S**
SUBJECT:	**ROAD TRAIN ACCESS REQUEST – RING STREET AND BYRON STREET**		
PREPARED BY:	Justin Pay, Manager Civil Engineering		

SUMMARY:

Council is in receipt of a Restricted Access Vehicle (RAV) Permit application for an A - Double Road Train (Type 1) on Ring Street, Inverell. Council is requested to grant approval for a trial permit.

COMMENTARY:

Council is in receipt of a Restricted Access Vehicle (RAV) Permit application for a Modern A - Double Road Train (Type 1) on Ring Street and Byron Street, Inverell. A modern road train is a vehicle with a tri axle dolly and road-friendly suspension. This vehicle configuration provides less stress onto the pavement and underlying assets. Appendix 2 (D9) is a visual representation of a road train including length and mass limits. The route under application is from Bannockburn Road to BP Service Station, 307 Byron Street, Inverell.

The application was received in June, 2018 and Council's Engineering Department conducted an assessment of the route in June, 2018. The assessment was completed in accordance with Councils Restricted Access Vehicle Policy. The outcome of the assessment is presented in the assessment (Appendix 5, sent under separate cover). The report shows that the route is suitable for Road Train access until the intersection of Ring Street and Byron Street. At this point in the assessment, a desktop analysis was conducted on the intersection with turning templates. It was unable to definitively determine if the combination could safely negotiate the intersection. The bridge over the Macintyre River on Ring Street has previously been assessed for Road Trains at Higher Mass Limits.

It is therefore recommended, that Council decline the current application and approve a one-day permit for a modern road train for a trial of the route, all cost associated with the trial are to be born by the applicant. A report of the outcome of the trial be reported back to a future committee meeting. This permit would only be applicable to the permit holder and it is proposed to provide a permit for a trial of the route under supervision of Council's engineering staff, to see how the combination will perform on the route. The permit would also be subject to standard conditions for road trains operating east of the Newell Highway, being:

> *The operator of a modern A-double road train on this route must hold National Heavy Vehicle Accreditation Scheme (NHVAS) maintenance management accreditation for the vehicle. The vehicle must have a tri-axle dolly and the tri-axle dolly must be fitted with certified Road Friendly Suspension (RFS). The minimum extreme axle spacing must be at least 26.5m.*

RELATIONSHIP TO STRATEGIC PLAN, DELIVERY PLAN AND OPERATIONAL PLAN:

Strategy: S.10 Maintain and enhance a safe, efficient and effective local road network.

Term Achievement: S.10.01 Road network capacity, safety and efficiency are improved and traffic congestion is reduced.

Operational Objective: S.10.01.01 A program is being implemented to address deficiencies and areas of congestion in the local road network.

POLICY IMPLICATIONS:

Nil.

CHIEF FINANCIAL OFFICERS COMMENT:

Nil.

LEGAL IMPLICATIONS:

Nil.

RECOMMENDATION:

That the committee recommend to Council that;

i) The applicant be refused at this time, pending the outcome of a trial;

ii) That a one day permit be approved for a trial of the route to be conducted;

iii) That all cost associated with the trial be borne by the applicant; and

iv) A report on the outcome of the trial be reported back to a future committee meeting.

ITEM NO:	6.	**FILE NO**: S4.14.1/01 + S4.14.3/02	
DESTINATION 5:	The communities are served by sustainable services and infrastructure		**S**
SUBJECT:	**SELF HELP POLICY REVIEW**		
PREPARED BY:	Brett McInnes, Director Civil & Environmental Services		

SUMMARY:

After recent consideration of relevant matters Council has sought to amend its existing 'Self-Help' Policy. An amended policy has been developed and the Committee are being asked to recommend to Council that the policy be adopted.

COMMENTARY:

The Committee at its June, 2018 meeting considered a review of the existing 'Self Help' Policy. Whilst the limited application of the existing policy was noted, it was considered important that Council had a policy that recognised the opportunity for community contributions benefiting Council road assets and provided a framework for such.

Council at its meeting on the 27 June, 2018, subsequently resolved:

i) That the existing management policy - Contributions, Works Carried Out Ahead of Priority be amended noting risk management issues and matters raised by the committee; and

ii) That the amended policy be returned to a future committee meeting for endorsement.

Consistent with the matters discussed when reviewing the policy and issues identified by staff, an amended policy has been developed. A copy of the amended policy is included in Appendix 6 (D16-D17).

It is considered the amended policy as presented both facilitates and provides appropriate safe guards for 'self-help' work proposals.

RELATIONSHIP TO STRATEGIC PLAN, DELIVERY PLAN AND OPERATIONAL PLAN:

Strategy: S.08 Civil infrastructure is secured, maintained and used to optimum benefit.

Term Achievement: S.08.01 An asset management strategy is in operation for civil infrastructure that optimises its use and maintains it to agreed standards fit for its contemporary purpose.

Operational Objective: S.08.01.01 An Asset Management Strategy for Civil assets is developed, maintained and implemented.

POLICY IMPLICATIONS:

The proposal will amend Council's existing policy position regarding self-help on Council road assets.

CHIEF FINANCIAL OFFICERS COMMENT:

It is proposed that any Council contribution to self-help works be funded from existing budget allocations.

LEGAL IMPLICATIONS:

NIL

RECOMMENDATION:

That the Committee recommend to Council that the amended Self-Help (Contributions) – Works Carried Out Ahead of Priority Policy be adopted as presented.

APPENDIX 6

MANAGEMENT POLICY:	SELF-HELP (CONTRIBUTIONS) – WORKS CARRIED OUT AHEAD OF PRIORITY
Ref:	Resolution

Contact Officer	Director Civil and Environmental Services
Approval Date	30 September 1991
Approval Authority	Council
Reviewed	April 1994, Nov 1998, Jan 2001, Mar 2007, Sept 2009, July 2018
Date of Next Review	July 2020

1 Preamble

This policy has been developed to facilitate and provide a mechanism for community members wishing to make a contribution toward the upgrade of a Council road asset.

2 Objectives

The objectives of this policy are as follow:

i. To recognise and support the contribution the community can make by providing funds or in-kind donations to augment Council expenditure for road asset upgrade or renewals.

ii. To provide guidelines for decision making when a community contribution toward the upgrade or renewal of road asset is proposed.

3 Scope

i. This policy applies to all Council controlled road and road related assets within Inverell Shire Council.

ii. This policy excludes any works which are the subject of a Development Application.

4 Policy Statement

i. Council will consider at any stage proposals from community members to make contributions toward the upgrade or renewal of a road asset.

ii. Contributions may be either monetary or in-kind. In-kind contributions may consist of the supply of material such as gravel or the use of plant and equipment.

iii. If an in-kind contribution is proposed Council shall be responsible for determining the monetary value of such a contribution.

iv. In assessing a proposal for a self-help contribution Council will take the following matters into consideration:

a) Merit of the proposed works and alignment with Council's Roads Asset Management Plan.

b) Road safety and public liability issues.
c) Future maintenance implications.
d) Broader community benefit of the proposed works.
e) Compliance with other Council policies and road construction standards.
f) Available funding to meet Council's contribution.

v. Council's maximum contribution to any works proposed under this policy will be capped at 50% of the final cost.

vi. All works undertaken shall comply with Councils workplace health & safety, risk management and environmental compliance standards at the time. This would include all items of plant or equipment operating on the site meeting Council's minimum plant hire standards. All operators must also be appropriately inducted to ensure compliance with Council's Safety Management System.

vii. Where Council agrees to accept a 'self-help' proposal it is acknowledged the subject works will be completed ahead of priority otherwise nominated by Council's Asset Management System. On this basis, Council will attempt to complete such works as soon as practicable within the constraints of the existing works program.

viii. A formal agreement shall be entered into prior to the undertaking of any works under this policy. The agreement as a minimum will specify:

a) The nature of the proposed works
b) The responsibilities of the contributing party
c) The responsibilities of Council
d) Proposed timeframe for the work

ix. Any monetary contribution that forms part of a proposal under this policy must be paid to Council prior to the commencement of any works.

x. On completion of works ongoing maintenance will be the responsibility of Council and undertaken in accordance with Council's Road Asset Management Plan.

xi. Council retains the right to accept or reject any proposal under this policy.

xii. In instances where it is proposed not to enter into a 'self-help' agreement and the community contribution nominated is considered to be in excess of $10,000 the matter will be referred to Council's Civil and Environmental Services Committee for recommendation to Council prior to final determination.

5 Delegation

Consistent with *Section 377 of the Local Government Act 1993* the General Manager is delegated with such powers as considered necessary for the implementation of this policy.

ITEM NO:	7.	**FILE NO**: DA-64/2018
DESTINATION 3:	An environment that is protected and sustained	**E**
SUBJECT:	**DA-64/2018 – SINGLE DWELLING USE – 700 OLD BUNDARRA ROAD, INVERELL – VARIATION TO MINIMUM LOT SIZE DEVELOPMENT STANDARD**	
PREPARED BY:	Chris Faley, Development Planner	

SUMMARY

This report has been prepared for the Committee to consider and determine Development Application DA-64/2018 for a "single dwelling use" on Lot 186 DP 753638, 700 Old Bundarra Road, Inverell. The Development Application seeks to vary the 40 hectare minimum lot size, which is required for a dwelling.

A "single dwelling use" is a type of approval used to establish a dwelling entitlement. Development Application DA-64/2018 is seeking development consent for a dwelling entitlement on Lot 186 DP 753638. Should consent be granted for the single dwelling use (dwelling entitlement), a subsequent application would need to be lodged for the construction of a dwelling.

Lot 186 DP 753638 is zoned RU1 Primary Production under the *Inverell Local Environmental Plan 2012 (LEP)*. To construct a dwelling on land zoned RU1 Primary Production compliance with Clause 4.2A of the LEP is required, with the land having to meet one of the following:

- Be created via an approved subdivision; or
- Have at least the minimum area – in this case 40 hectares.

Lot 186 DP 753638 was not created via an approved subdivision process and its area is only 20.23 hectares. Therefore, Council cannot approve the construction of a dwelling pursuant to Clause 4.2A of the LEP.

As Lot 186 DP 753638 does not comply with 4.2A of the LEP, the applicant has made a written request pursuant to Clause 4.6 of the LEP, to vary the minimum lot size. The variation sought is 49.4%.

An assessment of the variation has been undertaken, and it is recommended that the Committee support the proposal. In accordance with Planning Circular PS 18-003, Council staff cannot approve variations greater than 10% for rural dwellings under delegated authority.

Due to the size of the variation, DA-64/2018 requires:

- Determination by Councillors (i.e. DA-64/2018 cannot be determined under delegated authority); and
- Concurrence from the Department of Planning and Environment – Concurrence has been requested and is still pending; however, discussion between Council and Department staff indicates that concurrence is likely to be obtained. On that basis, it is considered Council could determine DA-64/2018 subject to concurrence.

DA-64/2018 was notified to adjoining neighbours and was advertised in the Inverell Times from 1 June 2018 to 15 June 2018. No submissions were received.

The application has been assessed having regard to the matters for consideration detailed in Section 4.15 of the *Environmental Planning and Assessment Act 1979* and other statutory requirements. It is considered that the site is suitable for the development and the proposed single dwelling use:

- Complies with the Inverell Local Environmental Plan 2012;
- Complies with the relevant State Environmental Planning Policies;
- Complies with the Development Control Plan 2013;
- Will have minimal impacts on the natural and built environment;
- Will have minimal social or economic impact; and
- Is not prejudicial to the public interest.

This report focuses primarily on the variation to the minimum lot size. A full assessment against Section 4.15 of the Environmental Planning and Assessment Act 1979 has been included as **Appendix 7** (D31 – D34) to this report.

APPLICATION DETAILS

Applicant:	Kay Lavina Wotherspoon
Owner:	Kay Lavina Wotherspoon
Application No:	DA-64/2018
Address:	700 Old Bundarra Road, Inverell
Title Particulars:	Lot 186 DP 753638
Proposed Development:	Single Dwelling Use
Site Area:	20.23 hectares
Zoning:	RU1 Primary Production
Existing Use:	Vacant Land

SUBJECT SITE AND LOCALITY

The site is known as Lot 186 DP 753638, 700 Old Bundarra Road, Inverell. It has an area of 20.23 hectares is located approximately 5 kilometres south of Inverell (Figure 1)

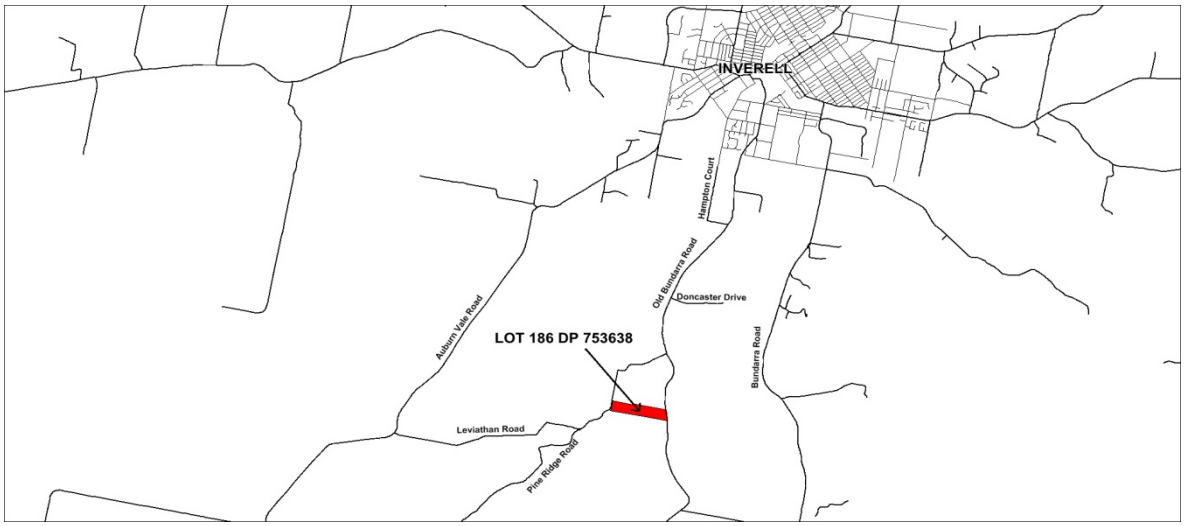


Figure 1 – Locality Map

Lot 186 DP 753638 is vacant land, containing large areas of vegetation at the front and rear of the site. A large clearing is located within the centre of the property (Figure 2). Remnants of an historic dwelling are located on the property; however, it is considered that continuing use rights do not apply. The property is mapped as bush fire prone land however, it is considered that there is sufficient area within the central clearing to locate a dwelling (Figure 3).

Figure 2 – Aerial Image

Figure 3 – Photo of Clearing within Lot 186 DP 753638

The site has frontage to the bitumen sealed section of Old Bundarra Road and also has frontage to Leviathan Road, which is a gravel road. An access crossing has been constructed off Old Bundarra Road (Figure 4).

Figure 4 – Photo of Access Crossing to Lot 186 DP 753638 off Old Bundarra Road

The surrounding area is comprised of a mixture of small rural residential lots, small rural holdings and some larger agricultural properties. The lot/holding pattern is discussed further in the report.

INVERELL LEP 2012 – CLAUSE 4.2A – ERECTION OF DWELLING HOUSES ON LAND IN CERTAIN RURAL AND ENVIRONMENT PROTECTION ZONES.

To construct a dwelling (or obtain a dwelling entitlement) on a property zoned RU1 Primary Production, it is necessary for the subject property to satisfy the provisions of Clause 4.2A of the Inverell Local Environmental Plan 2012. An assessment of Lot 186 DP 753638 against Clause 4.2A has been undertaken below.

(1) The objectives of this clause are as follows:
- *(a) to minimise unplanned rural residential development,*
- *(b) to enable the replacement of lawfully erected dwelling houses in rural and environment protection zones.*

(2) This clause applies to land in the following zones:
- *(a) Zone RU1 Primary Production,*
- *(b) Zone E3 Environmental Management,*
- *(c) Zone E4 Environmental Living.*

(3) Development consent must not be granted for the erection of a dwelling house on land to which this clause applies, and on which no dwelling house has been erected, unless the land:

- *(a) is a lot that is at least the minimum lot size shown on the Lot Size Map in relation to that land, or*

Planner Comment: The minimum lot size shown on the lot size map in relation to the development site is 40 hectares. The site area is 20.23 hectares.

(b) is a lot created before this Plan commenced and on which the erection of a dwelling house was permissible immediately before that commencement, or

Planner Comment: Lot 186 DP 753638 was not created under the necessary subdivision provisions to enable a dwelling under this sub-clause.

(c) is a lot resulting from a subdivision for which development consent (or equivalent) was granted before this Plan commenced and on which the erection of a dwelling house would have been permissible if the plan of subdivision had been registered before that commencement, or

Planner Comment: Lot 186 DP 753638 was not created under the necessary subdivision provisions to enable a dwelling under this sub-clause.

(d) is an existing holding, or

Planner Comment: An existing holding is a property which is comprised of the same land as the holding that existed on 1 July 1979. Whilst Lot 186 DP 753638 is an existing holding, pursuant to clause 4.2A (4), the 'existing holding' provisions above ceased on 7 December 2015 and dwellings can no longer be constructed under this clause.

An assessment of Lot 186 DP 753638 concludes that it does not satisfy the provisions of Clause 4.2A. As such, the construction of a dwelling on Lot 186 DP 753638 cannot be approved by Council pursuant to Clause 4.2A of the LEP.

Accordingly, the applicant has lodged a written request to vary the minimum lot size development standard provision (4.2A (3) (a)) as discussed below.

INVERELL LEP 2012 – CLAUSE 4.6 – EXCEPTION TO DEVELOPMENT STANDARDS

Clause 4.6 of the LEP allows Council to consider and grant consent to this proposed development, subject to written request, even though the development would contravene a development standard. In this case, granting consent for a single dwelling use despite the property not meeting the minimum lot size standard (4.2A (3) (a) of the LEP).

An assessment of Lot 186 DP 753638 against Clause 4.6 has been undertaken below.

(1) The objectives of this clause are as follows:

(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,
(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

(2) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.

Planner Comment: The applicant has requested to vary the principal development standard specified in Clause 4.2A (3) (a) of the LEP, requiring land to have at least the minimum area as specified on the applicable LEP Lot Size Map. The variation is summarized in Table 1.

Table 1 – Variation Summary	
Development Standard – Required Property Size	40 hectares
Actual Property Size	20.23 hectares
Percentage Variation	49.4%

(3) Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:

(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and
(b) that there are sufficient environmental planning grounds to justify contravening the development standard.

Planner Comment: A written request has been submitted by the applicant. The written request seeks to justify the contravention of the development in accordance with the requirements of this clause. The request is included as Appendix 8 (D35 -37) to this report.

The request has been assessed under sub clause (4) below.

(4) Development consent must not be granted for development that contravenes a development standard unless:

(a) the consent authority is satisfied that:

(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and

Planner Comment: The applicant seeks to justify that compliance with the minimum lot size development standard is unreasonable and there are sufficient environmental planning grounds for the variation based on following reasons:

- Prior to expiration of the *"existing holding"* provisions on 7 December, 2015, a dwelling could have been constructed on Lot 186 DP 753638;
- Lot 186 DP 753638 is similar in area and consistent with the lot holding pattern in the area;
- Lot 186 DP 753638 is in close proximity to rural residential subdivisions;
- Lot 186 DP 753638 has limited agricultural value; and
- Strict compliance with the standard would not encourage sustainable development of the land nor promote economic use and development of the lot.

An analysis of the properties and development within the surrounding area has been undertaken, which has identified:

- Nine (9) dwellings have been identified in the area surrounding Lot 186 DP 753638 (refer Figure 5). The lot sizes for these dwellings vary from 0.7 hectares to 26.81 hectares, being an average of 17.184 hectares (Table 2);
- The average *"holding"* size for the nine (9) dwellings is 43.532 hectares (Table 2) – Holding refers one or more lots held in the same ownership as the dwelling; and
- Immediately to the south of Lot 186 DP 753638 is a subdivision (9 lots) approved under DA-139/2010. The lot sizes in this subdivision range from 20 hectares to 200 hectares (Figure 6). Six (6) of the nine (9) lots approved under DA-139/2010 are less than 40 hectares.

It is also noted that the R5 Large Lot Residential zone is located approximately 2 kilometres north of Lot 186 DP 753638 along the Old Bundarra Road. Between Lot 186 DP 753638 and the R5 zone there are a number of historic rural residential subdivisions; being lots with dwellings zoned RU1 Primary Production.

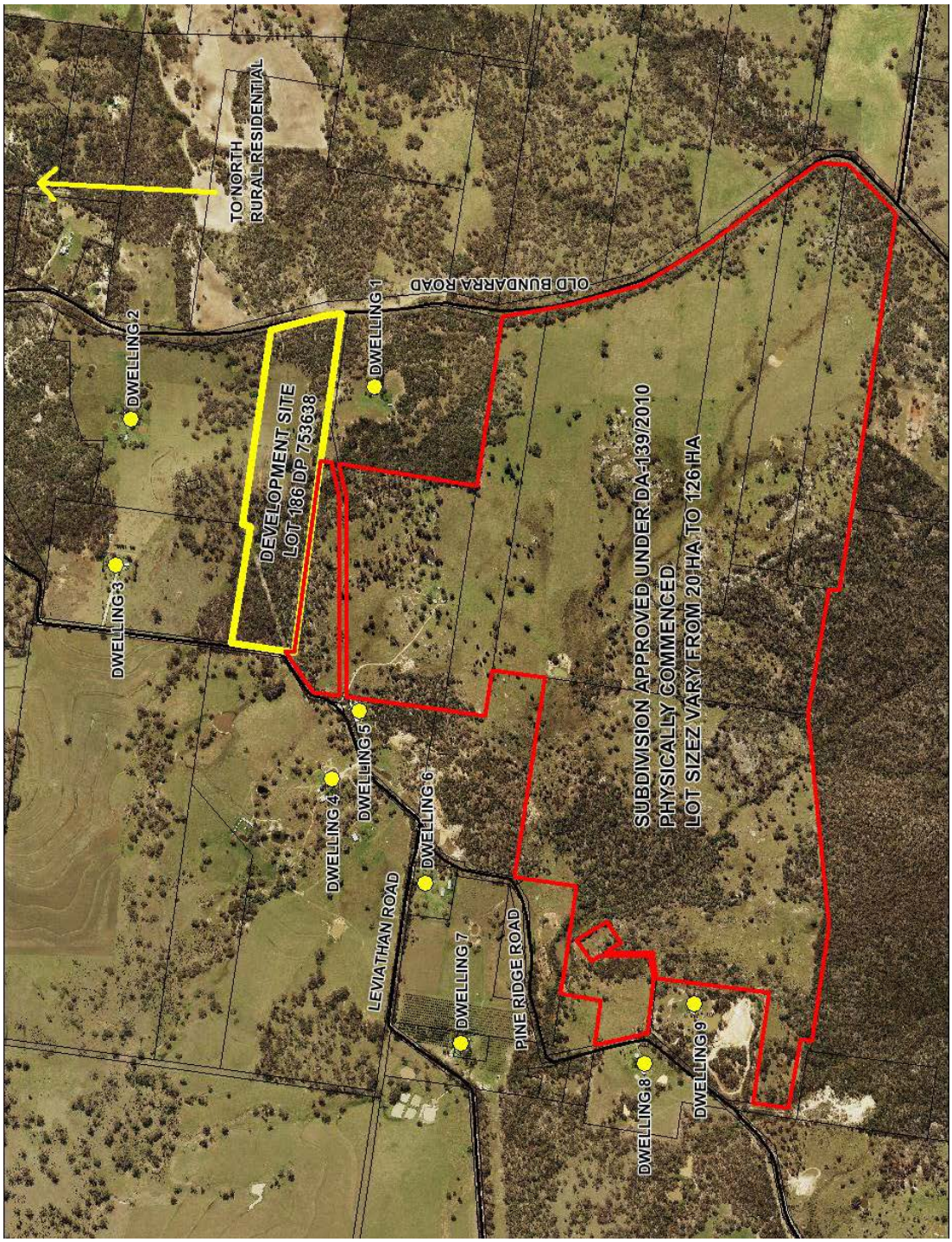


Figure 5 – Lot Map

Table 2 - Summary of Lots with Dwellings Immediately Surrounding Lot 186 DP 753638

Map No.	Lot Area (ha)	Property Area (ha)	Address
1	23.37	23.37	720 Old Bundarra Road
2	26.81	26.81	650 Old Bundarra Road
3	20.23	20.23	117 Leviathan Road.
4	60	267.8	214 Leviathan Road
5	5.463	5.463	201 Leviathan Road
6	2.023	8.732	247 Leviathan Road
7	0.7	23.32	317 Leviathan Road
8	7.967	7.967	120 Pine Ridge Road
9	8.094	8.094	123 Pine Ridge Road
Average	**17.184**	**43.532** (10.715 excl. 4)	

As can be seen, the area of Lot 186 DP 753638 is consistent with the surrounding lot pattern in the immediate area, being slightly larger than the average lot size for existing dwellings in the area. Whilst the average holding size is larger (43.532 hectares), this is due to a single large holding comprising 267.8 hectares, which is an anomaly in this location. Eight (8) out of the nine (9) identified dwellings in the area are on a holding of less than 30 hectares.

There is also an approved subdivision (DA-139/2010) immediately to the south of Lot 186 DP 753638 containing 20 hectare lots. This supports a lot/holding area in the locality consistent with the subject development site.

Figure 6 – DA-139/2010 Approved Subdivision layout

Given Lot 186 DP 753638 only has an area of 20.23 hectares, the applicants statement of limited agricultural viability is considered to be justified.

It is also noted that prior to 7 December, 2015, a dwelling would have been permissible under former *'existing holding'* provisions. Whilst this is insufficient justification on its own, when considered in conjunction with the above lot size pattern and approved subdivision, the variation request has further merit.

It is considered that the applicant's written request to vary the minimum lot size for the construction of a dwelling has adequately addressed the matters contained in Clause 4.6 sub-clause (3).

> *(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*

The relevant aims and objectives to be considered for this development within the zone are shown in Table 3.

Table 3 – Relevant Aims and Objectives

ILEP 2012 – Cl. 1.2 (2) Aims of Plan	*The particular aims of this Plan are as follows:* *(a) to encourage sustainable economic growth and development,* *(b) to protect and retain productive agricultural land,* *(c) to protect, conserve and enhance natural assets,* *(d) to protect built and cultural heritage assets,* *(e) to provide opportunities for growth.*
ILEP 2012 - RU1 Primary Production Zone Objectives	• *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.* • *To encourage diversity in primary industry enterprises and systems appropriate for the area.* • *To minimise the fragmentation and alienation of resource lands.* • *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
Clause 4.2A (1) - Erection of dwelling houses on land in certain rural and environment protection zones	*The objectives of this clause are as follows:* *(a) to minimise unplanned rural residential development,* *(b) to enable the replacement of lawfully erected dwelling houses in rural and environment protection zones.*
State Environmental Planning Policy (Rural Lands) 2008	*The aims of this Policy are as follows:* *(a) to facilitate the orderly and economic use and development of rural lands for rural and related purposes,* *(b) to identify the Rural Planning Principles and the Rural Subdivision Principles so as to assist in the proper management, development and protection of rural lands for the purpose of promoting the social, economic and environmental welfare of the State,* *(c) to implement measures designed to reduce land use conflicts,* *(d) to identify State significant agricultural land for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations,* *(e) to amend provisions of other environmental planning instruments relating to concessional lots in rural subdivisions.*

Planner comment: From the above aims and objectives, it is evident that the underlying intent for development within rural areas is to protect rural land, prevent land use conflict and minimise fragmentation. Orderly and economic use of land can occur, where this intent is achieved.

This intent of these objectives is generally achieved through the use of minimum lot size provisions.

In respect to Lot 186 DP 753638, it is considered that strict compliance with the minimum lot size provisions is not required to achieve the intent of the aims and objectives for development within the RU1 zone as:

- Due to the limited size and characteristics of the site, Lot 186 DP 753638 has limited agricultural potential. Likewise, the adjoining properties also have limited agricultural potential. A single dwelling use on Lot 186 DP 753638 will not have a significant impact on the availability or viability of agricultural land in the area;
- A dwelling on Lot 186 DP 753638 is consistent with the land use on surrounding lots. There are no significant agricultural or other rural productions in the area. A single dwelling use will not result in land use conflict; and
- Lot 186 DP 753638 is a single lot, historically held in the same ownership (i.e. existing holding). A single dwelling use will not result in any fragmentation of rural land.

(b) the concurrence of the Secretary has been obtained.

Planner comment: Concurrence has been requested. It is considered that DA-64/2018 can be approved subject to this concurrence being received.

CONCLUSION

This application (DA-64/2018) is for a single dwelling use (dwelling entitlement) on Lot 186 DP 753638. Lot 186 DP 753638 is zoned RU1 Primary Production and the Minimum Lot Size for a dwelling is 40 hectares. Lot 186 DP 753638 has an area of 20.23 hectares.

The applicant has lodged a written request to vary the minimum lot size to facilitate the single dwelling use pursuant to Clause 4.6 of the Inverell Local Environmental Plan 2012. An assessment of this variation has concluded that:

- The written request has been made in accordance with and addressed the requirements of Clause 4.6;
- The variation is justified in terms of:
    - Consistency with the surrounding lot pattern;
    - Consistency with the approved subdivision to the south; and
    - Limited agricultural viability of the site; and
- Strict compliance with the Minimum Lot Size is unnecessary.

It is recommended that the Committee support the variation made under Clause 4.6 and recommend that Council grant consent for the single dwelling use on Lot 186 DP 753638.

Given the size of the variation, any consent granted by Council must have concurrence from the NSW Department of Planning and Environment. DA-64/2018 has been referred to the Department with concurrence pending. Discussion between Council and Department staff indicates that concurrence is likely to be obtained. On that basis, it is recommended that the Committee recommend to Council that DA-64/2018 be approved subject to concurrence being received from the NSW Department of Planning and Environment.

RECOMMENDATION:

That the Committee recommend to Council, subject to concurrence being received from the NSW Department of Planning and Environment, DA-64/2018 be approved subject to the following conditions:

Preliminary

1. Inverell Shire Council issues its consent, subject to conditions stated hereunder, in accordance with Section 80A of the *Environmental Planning and Assessment Act 1979.*

   Consent is granted for a single dwelling use only on Lot 186 DP 753638.

Advice Only

2. The following matters are not conditions of consent, but will require consideration in the design of any proposed dwelling:

   - A separate application is to be approved for the actual construction of a dwelling.
   - Any new dwelling is to comply with the provisions of *Planning for Bush Fire Protection 2006*.
   - Approval is required under Sec. 68 of the *Local Government Act 1993* for the installation and operation of an onsite sewage management system.
   - No native vegetation should be removed as a result of the construction of a dwelling without the approval of Council.
   - The external colours of the dwelling should be sympathetic with the surrounding rural landscape.

APPENDIX 7

DA-64/2018 – SINGLE DWELLING USE
LOT 186 DP 753638 – 700 OLD BUNDARRA ROAD, INVERELL
ASSESSMENT UNDER THE *ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979*

4.14 Consultation and development consent—certain bush fire prone land (previous s 79BA)

The subject site is bush fire prone land. Whilst a dwelling is not actually being constructed under this DA, consideration should still be given to dwelling envelope, asset protection and access for a future dwelling. In this regard:

- A large clearing is centrally located within the site to suitably locate a dwelling and associated asset protection zones;
- The clearing is within 100 metres off Old Bundarra Road, for ease of evacuation in case of an emergency. A secondary access to Leviathan Road is also a possibility.

Overall, it is considered that a future dwelling on the subject property could readily achieve compliance with Planning for Bush Fire Protection 2006.

4.15 Evaluation (previous s 79C)

(1) Matters for consideration—general In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

(a) the provisions of:

(i) any environmental planning instrument, and

The following environmental planning instruments are relevant to DA-64/2014:

- State Environmental Planning Policy No. 44 – Koala Habitat;
- State Environmental Planning Policy No. 55 – Remediation of Land;
- State Environmental Planning Policy (Rural Lands) 2008; and
- Inverell Local Environmental Plan 2012.

State Environmental Planning Policy No. 44 – Koala Habitat

Whilst the site contains significant native vegetation at the front and rear of the site, there is a large clearing centrally located for any future dwelling. As DA-64/2018 is for a use only (no works proposed) and a future dwelling is unlikely to require clearing, the development is not considered to impact potential Koala habitat.

State Environmental Planning Policy No. 55 – Remediation of Land

There is no evidence that the site is contaminated or unsuitable for a dwelling.

State Environmental Planning Policy (Rural Lands) 2008

Pursuant to Clause 10 of this state policy, the following matters are to be taken into consideration in determining a development application for a rural dwelling:

(a) the existing uses and approved uses of land in the vicinity of the development,

The existing and approved uses in the area are predominantly small rural holdings, containing dwellings with limited agricultural use. The proposed development is consistent with this land use.

(b) whether or not the development is likely to have a significant impact on land uses that, in the opinion of the consent authority, are likely to be preferred and the predominant land uses in the vicinity of the development,

It is considered that the preferred and predominant land uses in the area will continue to be small rural holdings, particularly with an approved subdivision to the south. The development is not considered to have a significant impact on these land uses.

(c) whether or not the development is likely to be incompatible with a use referred to in paragraph (a) or (b),

The development is not incompatible with the land uses identified above.

(d) if the land is not situated within a rural residential zone, whether or not the development is likely to be incompatible with a use on land within an adjoining rural residential zone,

The R5 Large Lot Residential zone is located approximately 2 kilometres to the north. The development is not incompatible with this nearby zone.

(e) any measures proposed by the applicant to avoid or minimise any incompatibility referred to in paragraph (c) or (d).

No such measures are considered necessary.

The proposed development is considered to comply with this Clause and State Environmental Planning Policy (Rural Lands) 2008.

Inverell Local Environmental Plan 2012

Lot 186 DP 753638 is zoned RU1 Primary Production and a 'dwelling house' is permitted with consent.

Consideration of Clause 4.2A and 4.6 of the ILEP 2012 has been undertaken in the Main Report for DA-64/2018.

The following other clauses of the ILEP 2012 apply:

- 5.10 Heritage Conservation – The site is not listed as heritage and there is no evidence to suggest the present of European or Aboriginal artefacts.

- 6.1 Earthworks – No earthworks are required for a single dwelling use, as actual construction is subject to a separate DA. It is considered that any future earthworks on the site for a dwelling are not unreasonable and will comply with this clause.

- 6.6 Essential Services – Access exists to the site off Old Bundarra Road and powerlines are already extended into the site. The site is considered suitable for on-site effluent disposal, with the type of system to be approved at the time of dwelling construction. Any future dwelling application would demonstrate water supply (e.g. tanks); however, Council's general policy is Lots greater than 12.5 hectares in size do not require dedicated supply (e.g. Council supply).

(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent

authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and

No relevant proposed instruments require consideration for DA-64/2018.

(iii) any development control plan, and

The following chapters of the Inverell Development Control Plan 2013 are relevant to DA-64/2018:

- Chapter 1 Introduction – DA-64/2018 was notified and advertised in accordance with the provisions of this Chapter. No submissions were received.

- Chapter 3 Residential Accommodation – Whilst a detailed assessment against the provisions of this Chapter will apply once an separate application for the actual construction of a dwelling is lodged, given the cleared area on the site and separation to surrounding properties, compliance with this chapter is readily achievable.

(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and

No Planning Agreements are relevant to this proposal.

(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),

No prescribed matters contained within Clause 92 of the Environmental Planning and Assessment Regulation 2000 apply to the assessment of DA-64/2018.

(v) (Repealed)

that apply to the land to which the development application relates,

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,

A single dwelling use will eventually result in the construction of a single dwelling on Lot 186 DP 753638. Given the rural small holding area, property size (20.23 hectares) and distance between neighbours, it is considered that a dwelling will have minimal impact on the natural and built environment.

A dwelling (use and construction) will not have a significant social or economic impact.

(c) the suitability of the site for the development,

Although vegetated and bush fire prone, the site has a suitable clearing for a dwelling without impacting these factors. Council's records do not identify any other constraints affecting the property.

An access crossing exists of Old Bundarra Road, which is bitumen sealed. Powerlines extend through the site.

Overall, the site is considered suitable for the construction of a dwelling.

(d) any submissions made in accordance with this Act or the regulations,

No submission were received in response to notification and advertisement of DA-64/2018.

(e) the public interest.

An assessment of the variation has been undertaken in the main report, including consideration of public interest and the objectives for the development. On balance, the single dwelling use is not considered to be prejudicial to the public interest.

Biodiversity Conservation Act 2016

No clearing is required under DA-64/2018 and it is considered that a future dwelling will be located within the existing clearing without the need to remove any native vegetation. An assessment under the Biodiversity Conservation act 2016 is not required for DA-64/2018.

APPENDIX 8

RE: 700 Old Bundarra Road, Inverell
LOT 186 DP 753638
20.23 hectares / 50acres

Submission for variation of development standards.

I would like to make a request for Inverell council to relax the rules relating to planning changes in the LEP 2012, which no longer give building entitlement for the above property, to enable single dwelling use for that property.

My request is based on:-

1. I bought the property in 2002 when the property had a building entitlement under the 1988 LEP. Apparently these clauses have expired. I was unaware of these changes as I don't live locally and so did not see any advertised changes and the Inverell Council Rate Notices state "Land Category - Residential" and "Rates and Charges - Residential Rural". When I bought the property, I intended to build on it around year 2010 when I retired, as my sister and brother-in-law own/live on the property next door, to the south. However, since then I have had l to take on the role of carer for my father who lives next door to me at Wyong, (he is now 99 and still living in his own home) and so have not been able to do so, with those plans to build put on the back burner.

2. When I purchased the property there was an existing dwelling although it was in a fair state of neglect. Part of it had been lived in up until just before I bought it.

3. Based on the holding pattern within the immediate local area I ask that my submission be favourably considered. The adjacent blocks are also 50 acres. Approximately 500 metres to the south of the property there is a new subdivision with 20ha lots that have building entitlements. Approximately 1km to the north of the property there are smaller subdivision blocks of about 2.5ha.

4. I do not believe this is a viable primary production property as the south-west section of the property is mostly rocky hillside, this rock also predominates in the south-east corner. Soil types are predominately granite. YIYO carrying capacity at 10 cows has been assessed for the area.

Kay Wotherspoon
35a Panonia Road
Wyong NSW 2259

April 2018

Appendix 3: Application Form to vary a development standard

Written application providing grounds for variation to development standards

To be submitted together with the development application (refer to EP&A Regulation 2000 Schedule 1 Forms).

1. **What is the name of the environmental planning instrument that applies to the land?**

Inverell Local Environmental Plan 2012

2. **What is the zoning of the land?**

RU1 Primary Production

3. **What are the objectives of the zone?**

To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
To encourage diversity in primary industry enterprises and systems appropriate for the area.
To minimise the fragmentation and alienation of resource lands.
To minimise conflict between land uses within this zone and land uses within adjoining zones.

4. **What is the development standard being varied? e.g. FSR, height, lot size**

4.2A (3) (a) Minimum lot size for the erection of a dwelling if no dwelling erected

5. **Under what clause is the development standard listed in the environmental planning instrument?**

Clause 4.2A

6. **What are the objectives of the development standard?**

(a) to minimise unplanned rural residential developement
(b) to enable the replacement of lawfully erected dwelling houses in rural and environment protection zones.

7. **What is the numeric value of the development standard in the environmental planning instrument?**

40 hectares

8. **What is proposed numeric value of the development standard in your development application?**

20.23 hectares (existing lot size, since at least1903)

9. **What is the percentage variation (between your proposal and the environmental planning instrument)?**

50%

GUIDELINES

10. How is strict compliance with the development standard unreasonable or unnecessary in this particular case?

Strict compliance could prevent building a new house on the property which greatly reduces the value of the block which has little use for primary production due to poor soils and rocky ground.
(a) Although the size of the lot is only 50% of the standard, the block was surveyed as a separate block in 1880 and sold as such in 1903. The block had a building entitlement prior to the 2012 LEP. The adjacent blocks to the north are all 50 acres and have houses on them and one adjacent block to the south is 22.83 ha with a dwelling.
(b) There is an old dwelling on the block.

11. How would strict compliance hinder the attainment of the objects specified in Section 5(a)(i) and (ii) of the Act.

Strict compliance would not encourage sustainable development of the land nor promote economic use and development of the lot. With the expansion of residential development in close proximity, the block of land would now be called a lifestyle block as it is not suitable for modern agriculture.

Note: If more than one development standard is varied, an application will be needed for each variation (eg FSR and height).

12. Is the development standard a performance based control? Give details.

Additional matters to address

As outlined in "Varying Development Standards: A Guide" there are other additional matters that applicants should address when applying to vary a development standard.

13. Would strict compliance with the standard, in your particular case, would be unreasonable or unnecessary? Why?

Strict compliance with the standard would be unreasonable as within the immediate vicinity there are lots less than 40 ha which have dwellings on them and approval of my application would be in line with the holding pattern of the area

14. Are there sufficient environmental planning grounds to justify contravening the development standard? Give details.

Erection of a dwelling on the land would not effect the existing use of land and current environmental character of the land which I believe would be more appropriately zoned as R5 as are blocks less than 2km away.
The adjacent blocks are also 50 acres. Approximately 500 metres to the south of the property there is a new subdivision with 20ha lots that have building entitlements. Approximately 1km to the north of the property there are smaller subdivision blocks of about 2.5ha.

ITEM NO:	8.	**FILE NO**: S30.11.3
DESTINATION 5:	The communities are served by sustainable services and infrastructure	**S**
SUBJECT:	**INVERELL HIGH SCHOOL TRAFFIC MANAGEMENT**	
PREPARED BY:	Brett McInnes, Director Civil & Environmental Services	

SUMMARY:

Council on many instances has considered traffic management around Inverell High School. In April 2018, Council resolved to implement two (2) measures to improve traffic management and safety in proximity of the School. Principal of Inverell High School Ms Penelope Colley spoke at the public forum at the June 2018 Council meeting raising concerns regarding the potential impacts of one of those measures. The Committee is being asked what action if any it proposes to take in response to the concerns raised by Ms Colley.

COMMENTARY:

In April 2018, Council considered a comprehensive report regarding traffic management around Inverell High School. A copy of that report (excluding appendices) has been included in Appendix 9 (D41 – D43) for the information of the Committee. At the meeting of Council on 26 April, 2018 it was subsequently resolved:

That Council implement the following short term measures:

i) The No Stopping signs adjacent to each intersection around the school be erected at a distance of no less than 15m from the intersection kerb line at intersections about the school perimeter; and

ii) Some of the long term angle parking in Brae Street in front of the school be converted to short term parallel parking for student drop-off and pick-up. This should at least be implemented in the section of Brae Street across the school frontage to the north-east of the pedestrian crossing.

The Principal of Inverell High School, Ms Penelope Colley, was formally advised of Council's resolution in May 2018. Discussions between Ms Colley and Council's Manager Civil Engineering, Mr Justin Pay ensued, with Ms Colley electing to address Council during the public forum at the June Council meeting.

The key components of Ms Colley's address to Council were as follows:

- There has been regular and ongoing dialogue between herself and Council's Manager Civil Engineering regarding traffic management around the high school;
- The school supported the proposal to move the No Stopping signs out to a distance of no less than 15 metres from the intersection kerb line at intersections around the school perimeter;
- The school does not support the conversion of existing angle parks in Brae Street to short-term parallel parking for student drop-off and pick-up. This is on the basis of the number of existing parking spaces that would be lost and the thought that it would only push parking conflict further afield in Brae Street;

- Whilst the School has an existing drop off and pick up point in Howard Street, it was acknowledged that such an area in Brae Street would be beneficial. In lieu of the parallel parking arrangement it was suggested that two x 1 hour restricted angle parks and one x 15 minute restricted angle park be created over existing spaces in Brae Street for such purposes;
- In peak periods during term three, it is expected the School would have approximately 120 students and 80 staff members driving to school;
- The School is not willing to utlilise any of the vacant Department of Education land bounded by Brae, Howard and George Streets for onsite parking. This is on the basis of the School having limited open space, utilisation of the area for various activities and safety concerns given conflict due to proximity of demountable classrooms; and
- The existing rear to kerb angle parking spaces in Brae Street are considered very wide and reducing their width could create additional parking spaces.

The position articulated by Ms Colley is consistent with the information previously provided to Council's Manager Civil Engineering when he met with Ms Colley and a representative from the Asset Management Unit of the Department of Education. This information was included in the report to the Committee prior to Council reaching their April 2018 resolution.

An investigation has subsequently been undertaken regarding the widths of the parking bays in Brae Street and the opportunity to create additional car parks. The average width of the existing parking bays is approximately 3.0 metres and whilst generous are not excessive. It would be possible to reasonably reduce the width of the bays to 2.6 metres in this location creating an additional 5 to 6 parking spaces. If these actions were taken in conjunction with implementing the minimum arrangement for a parallel drop-off bay (14 angle spaces required) there would be a net reduction of 8 or 9 parking spaces, subject to final design. From a road safety and traffic management perspective a parallel configured drop-off pick-up point is far superior to a reverse angle arrangement.

CONCLUSION

The need to have a long-term Local Area Traffic Management Plan (LATMP) surrounding Inverell High School has been accepted for a number of years. Council has undertaken considerable planning work and investigation in this regard. Without significant contribution from the Department of Education it is unlikely such works could proceed in the short to medium term. Advice from the Department to date would indicate they are not willing to fund such measures.

Given the traffic management issues currently existing around the High School, Council sought specialist advice from a Traffic Engineer. This resulted in two (2) short-term measures being proposed to improve traffic management and safety in the area. After considering feedback from Inverell High School and the Department of Education, Council in April 2018 resolved to implement both of these measures.

The School via its Principal Ms Penny Colley has recently taken the opportunity to reiterate its objection to the conversion of existing angle parking in Brae Street to short-term parallel parking.

Prior to undertaking any further steps to implement Council's April 2018 resolution, the Committee is being asked what, if any, alternate action it wishes to take.

RELATIONSHIP TO STRATEGIC PLAN, DELIVERY PLAN AND OPERATIONAL PLAN:

Strategy: S.08 Civil infrastructure is secured, maintained and used to optimum benefit.

Term Achievement: S.08.01 An asset management strategy is in operation for civil infrastructure that optimises its use and maintains it to agreed standards fit for its contemporary purpose.

Operational Objective: S.08.01.01 An Asset Management Strategy for Civil assets is developed, maintained and implemented.

POLICY IMPLICATIONS:

CHIEF FINANCIAL OFFICERS COMMENT:

LEGAL IMPLICATIONS:

RECOMMENDATION:

A matter for the Committee.

APPENDIX 9

MINUTES OF THE ORDINARY MEETING OF INVERELL SHIRE COUNCIL HELD IN THE COUNCIL CHAMBERS, ADMINISTRATIVE CENTRE, 144 OTHO STREET, INVERELL ON THURSDAY, 26 APRIL 2018, COMMENCING AT 3 PM.

SECTION C
COMMITTEE REPORTS

1. CIVIL & ENVIRONMENTAL SERVICES COMMITTEE MEETING MINUTES – 11 APRIL 2018

32/18 RESOLVED (Baker/King) that:

i) the Minutes of the Civil & Environmental Services Committee Meeting held on Wednesday, 11 April, 2018, be received and noted; and

ii) the following recommendations of the Civil & Environmental Services Committee be adopted by Council with the exception of Item #4 'Rural Road Classifications S16.7.19/05, ii) Loves Lane.'

2. Inverell high school traffic management S30.11.3

That Council implement the following short term measures:

1. The No Stopping signs adjacent to each intersection around the school be erected at a distance of no less than 15m from the intersection kerb line at intersections about the school perimeter.

2. Some of the long term angle parking in Brae Street in front of the school be converted to short term parallel parking for student drop-off and pick-up. This should at least be implemented in the section of Brae Street across the school frontage to the north-east of the pedestrian crossing.

MINUTES OF THE CIVIL & ENVIRONMENTAL SERVICES COMMITTEE MEETING HELD IN THE COMMITTEE ROOM, 144 OTHO STREET, INVERELL ON WEDNESDAY, 11 APRIL 2018, COMMENCING AT 9.00 AM.

SECTION D
DESTINATION REPORTS

MCE-A 1. Inverell high school traffic management S30.11.3

RESOLVED (Berryman/Michael) that the Committee recommend to Council that Council implement the following short term measures:

3. The No Stopping signs adjacent to each intersection around the school be erected at a distance of no less than 15m from the intersection kerb line at intersections about the school perimeter.

4. Some of the long term angle parking in Brae Street in front of the school be converted to short term parallel parking for student drop-off and pick-up. This should at least be implemented in the section of Brae Street across the school frontage to the north-east of the pedestrian crossing.

ITEM NO:	2.	**FILE NO**: S30.11.3

DESTINATION 5:	The communities are served by sustainable services and infrastructure	**S**
SUBJECT:	**INVERELL HIGH SCHOOL TRAFFIC MANAGEMENT**	
PREPARED BY:	Justin Pay, Manager Civil Engineering	

SUMMARY:

In October 2017, Council resolved to give in principal support to two (2) short term traffic management measures relating to the area adjacent to Inverell High School. It was also resolved that consultation with the school be undertaken and the outcome reported back to the Committee. Consultation has been completed and this report outlines the response from the school and Department of Education regarding these short term measures. The Committee is requested to determine an appropriate course of action.

COMMENTARY:

In October 2017, a report was presented to the Civil and Environmental Services Committee (a copy of the report is attached in Appendix 1, (D5) outlining two (2) short term measures aimed at improving road safety adjacent to Inverell High School. These measures were developed with input from Mr Glen Holdsworth, an experienced Specialist Transport, Traffic and Parking Engineer. It was intended that these measures would improve traffic safety around the school until long term plans for a Local Area Traffic Management Plan (LATMP) can be finalised. Given Council's extensive works program over the previous two years and the complex nature of the investigation and design required for this project, design works for this LATMP are ongoing.

The short term measures recommended by Mr Holdsworth are:

5. The No Stopping signs adjacent to each intersection around the school be erected at a distance of no less than 15m from the intersection kerb line at intersections about the school perimeter.

6. Some of the long term angle parking in Brae Street in front of the school be converted to short term parallel parking for student drop-off and pick-up. This should at least be implemented in the section of Brae Street across the school frontage to the north-east of the pedestrian crossing.

The recommendation from the Committee and subsequent resolution from the October 2017 meeting of Council (RES105/17) is reproduced below:

That:

i) The two proposed short term measures be endorsed in principle;

ii) Inverell High School be consulted regarding the two proposed options;

iii) Discussions with the School and the Department of Education include the prospect of establishing a staff carpark across the road from the school with the entry point to the carpark being located in George Street; and

iv) The outcome of the consultations be reported back to the Committee.

In accordance with item *ii)* and *iii)* of the resolution, a meeting was held between the Principal of the School, Scott Strijalnd from the Asset Management Unit of the Department of Education and Council's Manager Civil Engineering. The school and department provided full

support for the first short team measure. In fact they recommended that the no stopping signs be moved 20-25m back from each intersecting street.

The School and Department did not support the second measure, noting that it would reduce a significant number of parking spaces at a location that is important to them. However, they did acknowledge that there was a need to improve availability of car parking for school drop off and pick up. This is a matter that had recently been discussed by the School P&C, where it was recommended that two of the existing long term parking spaces in this area have time restrictions placed on them. The principal and department representative supported this idea and recommended a 15-30 minute time restriction.

The prospect of establishing a staff car park across the road from the School, with the entry point to the car park being located in George Street was raised at the meeting. The School and Department made it very clear that their position on the matter had not changed and that this was not a possibility that they were willing to consider. They again sighted safety concerns and lack of space as the reason behind their position.

Now that consultation has been undertaken the Committee needs to determine what action, if any, is required. If Council resolves to implement any of the recommended measures, the matter would need to be referred to the Local Traffic Committee so that Council could exercise its delegated authority relating to traffic management devices.

Options

There are a number of options that the Committee may wish to consider, including:

1. Implement both recommended short term measures, disregarding the position of the School and Department. This would improve vehicular and pedestrian safety, however would potentially negatively impact Council's relationship with the Department and make any further negotiations difficult.

2. Implement the first item regarding No Stopping signage and not implement item two, instead consider the recommendation from the school that two car parking spaces in Brae Street have time restrictions enforced. This would provide improved intersection safety and some increase to safety for pedestrians entering and exiting the School.

3. Take no action and wait for design work to be completed for a long term solution to the traffic management issues in the area.

RELATIONSHIP TO STRATEGIC PLAN, DELIVERY PLAN AND OPERATIONAL PLAN:

Strategy: S.08 Civil infrastructure is secured, maintained and used to optimum benefit.

Term Achievement: S.08.01 An asset management strategy is in operation for civil infrastructure that optimises its use and maintains it to agreed standards fit for its contemporary purpose.

Operational Objective: S.08.01.01 An Asset Management Strategy for civil assets is developed, maintained and implemented.

POLICY IMPLICATIONS:

Nil.

CHIEF FINANCIAL OFFICERS COMMENT:

LEGAL IMPLICATIONS:

Nil.

ITEM NO:	9.	**FILE NO**: S28.15.3/08
DESTINATION 5:	The communities are served by sustainable services and infrastructure	**S**
SUBJECT:	**MODERN ROAD TRAIN ACCESS – BRUXNER WAY**	
PREPARED BY:	Justin Pay, Manager Civil Engineering	

SUMMARY:

In February 2018, Council approved access for a Modern Road Train on part of the Bruxner Way under a permit. In assessing this application Council assessed the entire length of Bruxner Way, noting the significant benefit to the wider community. The committee is now requested to make a determination on Road Train access on the entire length of Bruxner Way within Inverell Shire.

COMMENTARY:

In February 2018, Council received a request and approved access for a Modern Road Train on part of the Bruxner Way under a permit. In assessing this application Council assessed the entire length of Bruxner Way, noting the significant benefit to the wider community. An external Engineering Consultant company was engaged to undertake an assessment of the route in January 2018. This assessment noted that there are two (2) structures along the route that have insufficient carriage width to carry road trains, a copy of the assessment is provided in Appendix 10 (D46-D61). A risk assessment has been undertaken on these structures and determined that installation of hazard signage will be sufficient to mitigate the risk and allow road train access on the entire length of Bruxner Way.

The two structures that required risk assessment are located at 78.64km and 78.95km east of the Inverell Shire - Gwydir Shire boundary respectively. The risk assessment was completed by Council engineering staff, who applied the comprehensive process as outlined in Council's policy. The route assessment process, as conducted by contractors, follows a strict methodology with prescribed requirements to assess against. In order to provide for a consistent risk assessment approach across the road network and compared to previous assessments, it was determined appropriate for Council staff to complete the risk assessment rather than contractors.

The required structure width prescribed for this location is 7.2m, the subject structures are 6.5m and 7m wide respectively. The risk assessment on both structures noted the traffic volumes are relatively low (less than 150 vpd) and sight distance is good, signage is deemed suitable to mitigate the risk. It is proposed to erect Narrow Bridge and Beware Heavy Vehicle signage on the approaches to each structure. The cost of these signs is estimated at $6,400. Council currently has available signage allocation in the BLOCK Grant traffic facilities fund. Given the significant benefit to the wider community it is recommended that Council fund these risk mitigation measures.

Once these signs are in place, the route will be suitable for Modern Road Train Access. Whilst there have been no further applications for road train access on the Bruxner during the assessment process, approval of the route will provide a positive future outcome.

RELATIONSHIP TO STRATEGIC PLAN, DELIVERY PLAN AND OPERATIONAL PLAN:

Strategy: S.08 Civil infrastructure is secured, maintained and used to optimum benefit.

Term Achievement: S.08.01 An asset management strategy is in operation for civil infrastructure that optimises its use and maintains it to agreed standards fit for its contemporary purpose.

Operational Objective: S.08.01.01 An Asset Management Strategy for Civil assets is developed, maintained and implemented.

POLICY IMPLICATIONS:

CHIEF FINANCIAL OFFICERS COMMENT:

LEGAL IMPLICATIONS:

RECOMMENDATION:

That the Committee recommend to Council that;

i) Council fund the installation of risk mitigation signage at two locations on Bruxner Way; and
ii) Once the above risk mitigation measures are completed the entire length of the Bruxner Way in Inverell Shire be approved for Modern Road Train Access.

APPENDIX 10

PROTERRA GROUP

ROUTE ASSESSMENT REPORT

BRUXNER HIGHWAY INVERELL SHIRE COUNCIL

FEBRUARY 2018

ROUTE ASSESSMENT REPORT

BRUXNER HIGHWAY

INVERELL SHIRE COUNCIL

16 February 2018

Document Control					
Revision	Author	Reviewer	Approved for Issue		
			Name	Signature	Date
B – Final Issue	Adam Rogers	Michael Shellshear	Michael Shellshear		16 Feb 2018

TABLE OF CONTENTS

1 Project Information

Location of Site	Bruxner Highway, INVERELL, NSW
Length of Road	105.1 km
Asset Manager	Inverell Shire Council
Approval being sought	Approval for A-Double and B-Triple Use
Level of assessment	Visual Route Assessment and Desktop analysis
Client contact	Tim Williams PO Box 138 INVERELL NSW 2360 phone: 02 6728 8243 email: Timothy.williams@inverell.nsw.gov.au

2 Route Assessment Summary

2.1 Project Details

Proterra Group was commissioned by Inverell Shire Council to undertake the assessment of the Bruxner Highway for A-double (Type 1) and B-Triple road train access (Maximum length of 36.5m).

The Bruxner Highway is 105.1km in length through the Inverell Shire Council and passes through the townships of Yetman and Bonshaw.

An inspection of the existing road was conducted on the 18th January 2018. This inspection included video recording of the route in both directions which has been provided with this report.

It was noted that the Bruxner Highway is currently approved to have A-double (Type 1) and B-Triple road train access through the Gwydir Shire Council. The Gwydir Shire section is considered to be in poorer condition to the assessed Inverell Shire section.

2.2 Road Access into and from Terminals

Entry and Exit through the shire is via the continuation of the Bruxner Highway and therefore there are no further requirements.

2.3 Road and Intersection Alignment

The assessment was of the Bruxner Highway alone and no intersections have been assessed for their suitability for the applicable vehicles to exit to or enter from.

The super elevation and grades along the route are acceptable. There are no geometrical hazards along the route.

2.4 Overtaking opportunities

The site distances that are maintained along the route allow for multiple overtaking opportunities.

2.5 Road Cross-section

The sealed width is maintained to a minimum of 6 metres (two lanes, 3 metres each) and is widened appropriately at tighter radiused corners.

2.6 Structure width

Refer to Road Survey for structure widths. Two major culvert crossings at CH 78.64 and 78.95 that require risk assessments.

2.7 Rail Crossings

There are no rail crossings along the route.

2.8 Traffic facilities

The existing nominated speed limits are satisfactory and do not pose an increased risk for road users.

The existing signage is deemed adequate for the application and does not require upgrading.

Line marking needs to be re-applied in the first kilometre of road as it has worn down.

2.9 Noise and emissions

The new vehicles will have a minimal increase on the noise or emissions along the route.

2.10 Infrastructure Loading

The bridges along this route were previously assessed and received approval for High Mass Limits (HML). These structures were not re-assessed as part of this project.

The existing seal of the road is in good condition. The first kilometre of the road however requires attention as the seal may need upgrading once it is exposed to the new vehicles.

2.11 Property Damage

There are no issues with Vertical clearance as the route is already utilised by large vehicles.

The traffic islands at chainage 86.9km may need to be altered if this becomes a pinch point for passing trucks after the bridge. The approx. width between the islands is 6m.

CONCLUSIONS AND RECOMENDATIONS

The 105km section of the Bruxner Highway through Inverell Shire Council has been assessed using the Roads & Maritime Services - NSW Route Assessment guide for Restricted Access Vehicles (30 October 2012).

This assessment has found that the section of road should be Approved with Conditions for the use of A-Triple and B-Double road trains.

The condition on which this section of road relies on for full approval is the risk assessment of two culverts. These are highlighted in the road survey (Appendix A with RAR).

Once the risk assessments are carried out and sufficient treatment is provided to all of these structures this route will be receive full approval.

The road should be monitored after the introduction of these vehicles to ensure that there are no adverse effects.

Feedback from the operators may also be sought to gain an understanding of improvements that may increase the safety of the route.

It should be noted that this assessment is based only on the traffic travelling through the entire route. No assessment of any connecting roads has been completed.

APPENDICES

Appendix A - Bruxner Highway Road Survey

Chainage	Description	Seal Width/Structure Width	Speed (km/hr)	Continuous Item
0	Start of Section Ottleys Creek Bridge	7.5	100	
0.04	Start of Seal 2 x 3m Lanes unsealed shoulders	6	100	
0.04	Seal needs attention no linemarking	6	100	SC1
1	Rough Surface Sign	6	100	
1.98	Seereys Creek Bridge	7.5	100	
2.354	Start of Linemarking and better condition seal	6	100	EC1
2.372	Yetman West Road Intersection (Right)	6	100	
2.428	Tucka Tucka Road Intersection (Left)	6	100	
2.46	Seal width change 2 x 3m Lanes sealed 0.5m shoulders	7	100	SC2
5.566	Truck stopping area on left side	7	100	SC3
5.72	Truck stopping area on left side	7	100	EC3
8.7	Seal width change 2 x 3m Lanes unsealed shoulders	6	100	SC4
9.12	Major Culvert crossing	7.2	100	
13.13	Major Culvert crossing	8	100	
14.03	Major Culvert crossing	8	100	
16.77	Widened seal for Intersection	7	100	EC4 SC5
16.922	Warialda Road Intersection (Right)	7	100	
17.08	Seal returns to 2 x 3m Lanes unsealed shoulder	6	100	EC5
17.446	60 km/hr ahead sign	6	100	
17.564	Bedwell Downs Road Intersection (Right)	6	100	
17.66	Yetman Town start	6	100	SC6
17.775	Start of 60 km/hr zone	6	60	SC7
17.86	Bridge	8	60	
18.4	MacIntyre River Richard Coventry Bridge	7.5	60	SC8
18.611	MacIntyre River Richard Coventry Bridge	7.5	60	EC8
18.68	Start of 100 km/hr zone	6	100	EC6 EC7 SC9
18.78	MacIntyre River Overflow Bridge	7.5	100	
18.9	Holdfast Road Intersection (Left)	6	100	
23.1	Major Culvert crossing	8	100	
24.75	Truck stopping area on left side	6	100	
30.78	Pothole repair required	6	100	
32.14	Major Culvert crossing	7.2	100	
35.5	Damaged seal monitor and upgrade	6	100	
37.75	Damaged seal monitor and upgrade	6	100	
38.5	Major Culvert crossing	8.4	100	
38.64	Major Culvert crossing	7.4	100	
40	Damaged seal monitor and upgrade	6	100	

40.55	Damaged seal monitor and upgrade	6	100	
40.7	Rough Surface Sign	6	100	
40.87	Damaged seal monitor and upgrade	6	100	
40.94	Damaged seal monitor and upgrade	6	100	
41.21	Damaged seal monitor and upgrade	6	100	
42.97	Damaged seal monitor and upgrade	6	100	
43.74	Damaged seal monitor and upgrade	6	100	
44.63	Tarwoona Road Intersection (Left)	6	100	
44.88	Camp Creek Road Intersection (Right)	6	100	
45.21	Camp Creek Road Bridge	7.5	100	
46.6	Damaged seal monitor and upgrade	6	100	
46.78	Damaged seal monitor and upgrade	6	100	
46.97	Damaged seal monitor and upgrade	6	100	
48.2	Major Culvert crossing	8	100	
48.35	Damaged seal monitor and upgrade	6	100	
53.42	Major Culvert crossing	7.2	100	
53.84	Truck stopping area on left side	6	100	
54.08	Old Texas Road Intersection (Left)	6	100	
57.28	Goat Rock Road Intersection (Right)	6	100	
57.36	Texas Road Intersection (Left)	6	100	
57.69	Major Culvert crossing	7.4	100	
60.12	Damaged seal monitor and upgrade	6	100	
60.72	Damaged seal monitor and upgrade	6	100	
62.42	Major Culvert crossing	7.4	100	
63.4	Damaged seal monitor and upgrade	6	100	
64.8	Damaged seal monitor and upgrade	6	100	
65.58	Major Culvert crossing	8	100	
66.4	Major Culvert crossing	7.4	100	
70.19	Seal width change 2 x 3m Lanes sealed 0.5m shoulders	7	100	SC10
70.35	Seal returns to 2 x 3m Lanes unsealed shoulder	6	100	EC10
70.4	Seal width change 2 x 3m Lanes sealed 0.5m shoulders	7	100	SC11
70.49	Seal returns to 2 x 3m Lanes unsealed shoulder	6	100	EC11
71.02	Seal width change 2 x 3m Lanes sealed 0.5m shoulders	7	100	SC12
71.27	Seal returns to 2 x 3m Lanes unsealed shoulder	6	100	EC12
72.54	Seal width change 2 x 3m Lanes sealed 0.5m shoulders	7	100	SC13
72.66	Seal returns to 2 x 3m Lanes unsealed shoulder	6	100	EC13
73.1	Damaged seal monitor and upgrade	6	100	
73.56	Bonshaw Weir Road Intersection (Left)	6	100	
78.1	Damaged seal monitor and upgrade	6	100	
78.64	Major Culvert crossing	6.5	100	RAR
78.7	Damaged seal monitor and upgrade	6	100	
78.92	Atholwood Road Intersection (Right)	6	100	
78.95	Major Culvert crossing	7	100	RAR

80	Damaged seal monitor and upgrade	6	100	
80.48	60 km/hr ahead sign	6	100	
80.84	Start of 60 km/hr zone	6	60	EC9 SC14
81.54	Truck stopping area on left side	12	60	
81.54	Bonshaw Township	12	60	
81.91	Start of 100 km/hr zone	6	100	EC14 SC15
83.48	Little Sandy Creek Crossing	8	100	
85.76	Bonshaw Road Intersection (Right)	6	100	
86	Spring Creek Bridge	7.5	100	
87.29	Damaged seal monitor and upgrade	6	100	
87.67	Damaged seal monitor and upgrade	6	100	
89.19	Towel Creek Crossing	8	100	
89.34	Damaged seal monitor and upgrade	6	100	
90.13	Seal width change 2 x 3m Lanes sealed 0.5m shoulders	7	100	
91.43	Bentley Springs Creek bridge	8	100	
96.3	Major Culvert crossing	8	100	
96.5	Seal width change 4 x 3m Lanes sealed 0.5m shoulders	12	100	
96.62	Rocky Creek Road Intersection (Right)	12	100	
96.8	Seal returns to 2 x 3m Lanes unsealed shoulder	6	100	
97.7	Limestone Creek Floodway	6	100	
98.8	Major Culvert crossing	8	100	
105.1	Beardy River Bridge	8	100	EC15

Appendix B - Bruxner Highway Road Survey

Road Name and Section:	Bruxner Highway – Inverell Shire Council Section

Ref	Assessment characteristic	Data	Comment / information
2.2	**Route overview**		
2.2.1	**Route data**		
	Length of route (km)	105km	
	Road Class Hierarchy (State Roads)	N/A	
	Traffic Volumes (AADT)	144	
	% Volume of commercial vehicles	18%	
	Volume by types of freight vehicles:		
	• Semi-trailers	Not Available	
	• B–doubles	Not Available	
	• Road Trains	Not Available	
	• AB and B–triple combinations	Not Available	
	• Other	Not Available	
2.2.2	**Road safety reports**		
	Road Crash Investigation Report Review of desk-top analysis of the road crash history over the previous 5 years.	Refer Appendix C	
	Where required, road safety audit report	Not required	
	Speed zones (signposted speeds)	100 km/h and 60 km/h	
	Number of school speed zones	0	

Ref	Assessment characteristic	Pass	Investigate	Comment / information
2.3	**Legal/regulatory**			
2.3.1	**Vehicle**			
	Check the proposed vehicle against the regulations:	✓		
	Actual legal class and configuration	✓		

Ref	Assessment characteristic	Pass	Investigate	Comment / information
2.4	**Road safety issues**			
2.4.1	**Road access into or from terminals**			
	Entry and exit complies	✓		Entry and Exit to the section are a from the Bruxner Highway directly.
	Evidence provided to confirm suitability within terminals.			
2.4.2	**Road and intersection alignment**			
	Is there a comparable vehicle using this route?	✓		B-Doubles are currently using the route without issue
	Curve geometry at road speed	✓		
	Low speed turns at intersections, roundabouts, traffic management devices	✓		No intersections have issue and there are no roundabouts on the route.
2.4.3	**Overtaking opportunities**			
	Overtaking opportunities meet the requirements of the route.	✓		The geometric layout of the road provides multiple overtaking opportunities.
2.4.4	**Approach visibility (stopping distance)**			
	Stopping Sight Distance (SSD)	✓		Topography along the route provides adequate SSD
2.4.5	**Road cross-section**			
	For unsealed sections: • Carriageway width	N/A		
	For sealed sections: • Sealed width • Carriageway width	✓		6 metre width minimum along route 7 metre minimum width along route
2.4.6	**Structure width (including bridge width)**			
	Widths meet the requirements		✓	Refer to Road Survey for structure widths. Two major culvert crossings at CH 78.64 and 78.95 that require risk assessments.
	Ratio of approach width to structure width			
2.4.7	**Rail crossings at-grade**			
2.4.7(a)	Queuing	N/A		
2.4.7(b)	Stacking distance	N/A		
2.4.7(c)	Sight distance	N/A		
	Stopping Sight Distance (SSD)	N/A		
	Approach Sight Distance (ASD)	N/A		

2.4.7(d)	Clearance times at active protection	N/A		

Ref	Assessment characteristic	Pass	Investigate	Comment / information
2.4.7(e)	Sight envelope at passive control	N/A		
	S_1 (where relevant)	N/A		
	S_2 (where relevant)	N/A		
	S_3 (where relevant)	N/A		
2.4.8	**Intersections and turn bays**			
	Safe intersections sight distance (SISD)	✓		The intersections to the Bruxner Highway have sufficient SISD to allow for the new vehicles.
	Adequate road length for storage	N/A		The turning of the new vehicles from the Bruxner Highway is not permitted as these roads do not form part of this assessment.
2.4.9	**Traffic facilities**			
2.4.9(a)	Signs, lines and markings	✓		Linemarking and signage is adequate for this route. Linemarking should be reapplied between CH 0.00 – 1.00
	Signposting	✓		
2.4.9(b)	Crash barriers and clear zones	✓		
2.4.9(c)	Traffic signals	N/A		
	Minimum green time (Note locations where adjustment is required)	N/A		
2.4.10	**Traffic interaction with other users**			
	School bus route has bus stop areas off the road where the bus can safely stop.	✓		There are signed areas for school bus drop zones
	Pedestrians and Pedal Cyclists	✓		There are no areas that appear to be at risk of causing problems with Pedestrians or Cyclist
	Other drivers familiar with RAV	✓		Other drivers in the area are aware that B-doubles frequent the route and the new vehicles will not come as a surprise.
2.4.11	**Local conditions**			
	Other local conditions (describe)			
2.5	**Work, health and safety**			
2.5.1	Decoupling operation	✓		Multiple stopping areas along the route provide adequate areas for set down and breaks. The towns also provide facilities required.
2.5.2	Driver breaks	✓		

Ref	Assessment characteristic	Pass	Investigate	Comment / information
2.6	**Amenity and environment issues**			
2.6.1	**Community amenity**			
	Assessed as satisfactory and no further consultation	✓		
	If required, consultation carried out			
2.6.2	**Noise and emissions**			
	Noise - Prime mover ADR 83/00 and AVSR 153	✓		The new vehicles will have a minimal increase on the noise or emissions along the route.
	Emission - Prime mover ADR80	✓		
	Grade >5% (potential for engine brake noise)	✓		No grades >5% through built up areas no need for exhaust breaks
2.6.3	**Vulnerable or endangered flora or fauna**			
	Comments			Use by restricted access vehicles usually reduces the number of truck movements and consequently reduce exposure of fauna to road-kill.
2.7	**Infrastructure loading**			
2.7.2	**Bridge structure**			
	All bridges & culverts structurally capable	N/A		Council provided information that the structures along this route have already been assessed and approved for HML.
2.7.3	**Pavement structure**			
	Wear relative to 6 axle semi- trailer Pavement condition	N/A		Restricted access vehicles are designed to carry greater payload and usually have more axle groups to better distribute the vertical load on the pavement. Therefore, restricted access vehicles usually cause less pavement wear from vertical loading for the same freight task even though the individual vehicle may have a higher ESA.
2.7.4	**Floodways and causeways**	N/A		Council provided information that the structures along this route have already been assessed and approved for HML.
2.8	**Property damage (public infrastructure or property)**			
2.8.1	**Vertical clearance**			
	Min Vertical clearance	✓		As B-doubles already utilize this route there are no issues with vertical clearance to any structures.
2.8.2	Roadside structures: • Pedestrian islands/refuges • Chicanes • Drainage structures	✓		Traffic islands at bridge entering Yetman are 6m apart. These should not pose a problem as they are on a long straight and trailer swing should not occur as the speed is also 60 km/h
2.9	**Other significant issues**	N/A		

Risk Management Approach:	Yes	No
Risk management analysis required to resolve issues Attach the risk management analysis at the end of this summary		✓

Access Conditions:

Other issues:	Yes	No
Is a review of the route scheduled?		✓

Appendix C - Road Crash History

Bruxner Highway Inverell Shire - Crash History						
Year	Crash Id	Degree of crash	Description	Light	No Kill	No Injuries
2012	806226	Non-Casualty	Off left/right bend – object	Day		
	810713	Moderate Injury	Off right/right bend – object	Day		4
	821267	Non-Casualty	Right rear-end	Day		
2013	836427	Serious Injury	Off road left	Day		1
	840828	Moderate Injury	Struck animal	Day		1
	854592	Non-Casualty	Off right/right bend – object	Night		
2014	1046827	Minor/Other Injuries	Off right/right bend – object	Day		1
	1060228	Minor/Other Injuries	Overtake turning	Day		1
2015	1065919	Moderate Injury	Out of control on bend	Day		2
	1074278	Non-Casualty	Off road left	Day		
	1080166	Serious Injury	Rear end	Day		1
	1089973	Minor/Other Injuries	Struck animal	Night		1
2016	1095079	Non-Casualty	Struck animal	Night		
	1109382	Fatal	Off road right	Night	1	

Data Breakdown

Traffic over 5 years – 262800 Vehicles
Crashes over 5 years – 13 Crashes

This section of the Bruxner Highway has a good safety record over the past 5 years with only one fatal accident which from available data was a single vehicle incident.

ITEM NO:	11.	**FILE NO**: S6.8.5/11 + S28.16.3
DESTINATION 3:	An environment that is protected and sustained	**E**
SUBJECT:	**EROSION ON PRIVATE PROPERTY IN INVERELL TOWNSHIP AND ELSMORE COMMON**	
PREPARED BY:	Justin Pay, Manager Civil Engineering	

SUMMARY:

Council has received requests from a number of concerned residents regarding serious erosion issues on three (3) predominantly residential sites. The committee is requested to determine an appropriate course of action.

COMMENTARY:

Council has received requests from concerned residents for Council to address serious erosion issues on three (3) properties.

The three sites are:

- 76 Froude Street – dam on private property (on a natural water course) where discharge from Council's underground pipe drainage system flows;
- 77 Auburn Vale Road – further down stream from 76 Froude Street (on the same natural water course), discharge from above site crosses Auburn Vale Road and has caused significant erosion of the natural watercourse traversing the property; and
- 95 Elsmore Common Road – discharge through culvert under Council Road from paddock on Elsmore Common causing significant erosion and sedimentation directly into Macintyre River.

Generally speaking, where storm water drains cross private land and no formal easement exists, Council has no legal rights or obligations to undertake maintenance activities on such drains or water courses. This does not prevent an individual seeking to take action under the tort of nuisance and negligence to remedy the action of any party/s they believe to have unreasonably contributed to erosion on private land.

The fact that Council has historically completed work at some of these sites can create an expectation of some form of ongoing responsibility. The sedimentation of adjacent waterways that result from each of these issues is also a matter of potentially significant environmental harm.

Each matter has been ongoing for a lengthy period, as there is no simple solution in any of the locations. Council staff commenced discussions with Soil Conservation Service (SCS) mid 2017 seeking their expertise to determine a best solution for each site and also quote to undertake the subsequent work. This involved initial analysis by local SCS staff and a more senior officer based in Tamworth. Their report dated September 2017 recommended rock flume structures to be the preferred fix for all sites. Refer to Appendix 11 (D67 –D76) for copy of that report.

Council's next step was to have SCS provide quotes to repair each site. At this point a more senior officer, who is based in Newcastle, became involved. The latter recommendations vary slightly from the initial report and the following commentary from one (1) to three (3) below is based on his recommendations. Refer to Appendix 12 (D77 – D82) for copy of the latter report.

A combined quotation of $176k has been received from SCS to stabilise and rehabilitate the sites.

An outline of each individual site is presented below:

1. 76 Froude Street

   A considerable stormwater catchment leads into a dam on the property, with the flows then directed northeast to a culvert crossing the Auburn Vale Road. It is this channel between the dam and Auburn Vale Road that has been severely eroded due to rain events and minor breaching of the dam wall. Stormwater run off from Kurrajong Place, part Lauder Street, part Lewin Street, part Gordon Street, Kuna Avenue and part Froude Street all feed into this site. This arrangement has been in place for decades.

   With the water catchment feeding into kerb and guttering from roads, houses, garages and driveways, even a minor rain event leads to substantial volumes of water filling the dam site. Refer to Appendix 13 (D83) for a diagram of stormwater collection for this site.

   Council has previously completed minor work at this site, which has not been effective long term. The owners of the land contest that this problem has become far more severe since additional land development has taken place in the Froude Street area over the preceding 15 years.

   Soil Conservation Service recommendation is to establish a rock flume from the dam structure for a distance of 40 metres. Then from a stable point, continue a rock lined drain through to a stable outlet point. There will be significant excavated soil which should be placed on the dam wall to increase its stability and free board. The estimated cost for SCS to complete these works is $43k. Refer to Appendix 14 (D84) for map of dam and erosion site.

2. 77 Auburn Vale Road

   Water that traverses 76 Froude Street feeds via a 1.2 metre box culvert across Auburn Vale Road and down an open channel on the northern side of the property and into Spring Creek.

   The eroded channel is in close proximity to neighbouring property 20 Harland Street. This owner has been the main driver in bringing the site to Council's attention. Approximately 15 years ago, Council completed minor earthwork on the property in an attempt to divert the run off and utilised the removed soil to fill the channel. Refer to Appendix 14 (D84) for map of channel erosion site.

   The property owners are now presented with severe erosion to the depth of five (5) metres over the last 45 metres of the channel, causing soils and plants to wash into Spring Creek which is a native fish habitat. The site also presents a hazard, as local children enjoy playing and exploring the site and a risk of a cave- in exists.

   Soil Conservation Service's recommendation at a cost of $59k is again for a rock flume from natural ground level to a stable point near water level. The existing gully would then need to be backfilled with suitable soil. Excavated material may be considered too sandy and not suitable for backfill.

3. 95 Elsmore Common Road

   Water from a large mainly rural catchment on the northern side of the road concentrates as it feeds through a 450mm pipe culvert creating a five (5) metre deep erosion on the eastern

side of the road as it feeds into the Macintyre River. Refer Appendix 15 (D85) for diagram of the site.

At this site, Council has not previously completed any physical works in a direct attempt to mitigate this erosion issue. To date, the only assistance that Council has provided has been engineering assessment, consultation with relevant authorities and technical advisers and the collaborative work on developing a design for mitigation works.

Again, there would be soil and debris being washed into a native fish habitat. The property owner has done some minor work in an effort to arrest the erosion, however, he does not possess the resources and equipment to address the issue.

Soil Conservation Services recommendation at a cost of $75k is to construct a 45 metre rock flume. Excavated material from this site could be spread throughout the owners paddock on the northern side of the road.

As the proposed remediation works would be carried out on private property, should Council wish to proceed, land owner consent would be required. In all cases the property owner has provided verbal consent for the works to take place. In each instance there has been a significant number of approaches from the land owner for Council to take action on these matters.

The owners of all properties consider Council is responsible for these matters. At sites one and two, an increase in property developments and associated infrastructure are allegedly directing additional and significant water flows to the erosion sites, which forms the basis for the property owners' argument. At site three the property owner's argument is based on the fact that water is directed from Council road reserve, onto the erosion site.

As previously discussed, Council does not have a direct responsibility to undertake such works on private property. Thought would also need to be given to what precedent is created by any intervention. Council's actions in attempting to assist and implementing physical measures in the past is also what is driving current land owner expectations.

In the event that Council undertook rehabilitation works on these sites, there is the distinct possibility that land owners would expect Council be accountable for any ongoing maintenance. Any potential work completed by Council would require all land owners accepting responsibility for future maintenance and entering into an appropriate release with Council.

The land owners in each case have an expectation that Council will take action to rehabilitate these issues. Staff have made no commitments to the land owners that Council will complete the physical works. Staff have previously applied unsuccessfully under a number of programs for grant funding to fix these problems.

No funding is allocated for such works in the current budget. If Council resolved to complete these works, potential funding sources are the Urban Drainage Reconstruction and Rural Drainage votes in future years.

Options

1) Take no action, as Council is not directly responsible to remediate these issues. This would be considered an unsatisfactory outcome by each land owner. This would also be ignoring the potentially significant environmental harm from each site.

2) Resolve to enter into an agreement with each land owner and provide some assistance, provided that each land owner makes some contribution to the works. If such an agreement were to be reached, it would be prudent for the agreement to release Council from any further claims relating to these matters. All previous attempts from staff to discuss such an option

have not had a positive response. It would be likely that none of the land owners would be willing to contribute to the works and as such the problems would persist.

3) Continue to apply for grant funding from all available funding programs and take no action unless these applications are successful.

4) Continue to apply for grant funding for the duration of the 2018/2019 financial year and defer a decision regarding funding allocation to the 2019/2020 budget process, in the case that these funding applications are unsuccessful.

5) Commit to Council funding remediation projects for sites one and two commencing in the 2018/2019 financial year. Acknowledging that property developments and associated infrastructure are allegedly directing additional and significant water flows to the erosion sites. Decide not to fund works at site three, given the water that is discharged from Council's under-road pipe culvert to this site originates from the catchment up stream and no action Council has taken has contributed to the problem at the site.

Given the significant cost associated it may be necessary to implement a staged plan with works carried out over a number of years.

It is recommended that Council resolve to take action to rehabilitate sites one and two, given that these sites practically form part of Council's storm water drainage system. A reasonable argument can be made that development upstream of these sites has created larger water flows to the site, which has contributed to the further erosion. However, it is not recommended that Council fund works at site three. This site has long standing erosion issues and no recent recognisable change to infrastructure, Council or privately owned, is identified as being a contributing factor. The water that is discharged from Council's under-road pipe culvert to this site originates up stream and no action Council has taken has contributed to the problem at the site. There remains a significant environmental issue at this site and it would be reasonable for Council to continue to apply for grant funding opportunities to complete remediation works at this site on behalf of the owner.

It is recommended to utilise the identified funding sources over a number of years and complete the works in the order of priority. This would allow staff to re-apply for grant funding in an attempt to leverage Council funds with an external funding source.

RELATIONSHIP TO STRATEGIC PLAN, DELIVERY PLAN AND OPERATIONAL PLAN:

Strategy: E.03 Protect, rehabilitate and manage all impacts on the built and natural environment.

Term Achievement: E.03.01 Industrial and residential estate areas designed constructed and maintained to deliver ecologically sustainable outcomes.

Operational Objective: E.03.01.01 to establish measures and processes to protect the built environment and safety of the residents of the Shire through both direct control and education.

POLICY IMPLICATIONS:

Nil

CHIEF FINANCIAL OFFICERS COMMENT: Given these projects are on private and urban land and there is clear private benefit, there is a VERY slim likelihood of grant funding for any current environmental or riparian funding streams.

LEGAL IMPLICATIONS:

Nil

RECOMMENDATION:

That the Committee recommend to Council that:

i) Council apply for any available grant funding opportunities for works to mitigate each erosion issue;

ii) If grant funding is not forthcoming during 2018/2019, Council commit to funding the stabilisation and rehabilitation of erosion at the 76 Froude Street and 77 Auburn Vale Road sites, at a cost of $102,000;

iii) The works be completed over a 2 year program;

iv) The funding sources be the Urban Drainage Rehabilitation and Rural Drainage votes respectively, and;

The order for completion of works be as follows:
1) Site 1 at 76 Froude St
2) Site 2 at 77 Auburn Vale Rd

v) Prior to undertaking any works on site 1 or 2, Council obtain a formal release from the property owners, absolving them from any further maintenance responsibilities; and

vi) Council not fund works at 95 Elsmore Common Road, but continue to apply for grant funding for remediation works at the site on behalf of the owner.

APPENDIX 11

NSW GOVERNMENT | Soil Conservation Service

DESIGN OPTION REPORT
For Inverell Shire Council

Prepared by
Soil Conservation Service
September 2017

Prepared By

Brett Hanly

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TABLE OF CONTENTS

1.0 Introduction

Inverell Shire Council (ISC) commissioned the Soil Conservation Service (SCS) to undertake a Design Option Report for rehabilitation works on eroded gullies and drains located in Inverell. The location is shown in **Figure 1** below

Figure 1a: Site 1,2 and 3 Location

Figure 1b: Site 4

This report outlines design options for rehabilitation works and provides an estimation of the cost for each option.

2.0 Objectives

The objective of this project is to provide design options to restore the integrity of the site and prevent future erosion. Works to stabilise the areas ideally should satisfy the following objectives:

- Be robust enough to address the problem long term
- Require minimal ongoing maintenance
- Design to withstand anticipated flow events
- Be consistent with stream / wetland conditions and behaviour
- Be practical to construct given site constraints
- Have minimal environmental impact
- Provide a cost effective solution

3.0 Site Characteristics

Figure 2: Site 1

Figure 2: Site 1

Figure 3: Site 2

Figure 4: Site 2

Figure 5: Site 3

Figure 6: Site 3

Figure 7: Site 4

Figure 8: Site 4

4.0 Investigation and Inspection

An inspection was undertaken by SCS personnel (Brett Hanly/ Wally Duff) on the 13th of September 2017. The preparation of this report "Design Option Report" was requested by the ISC to provide assistance in deciding upon the appropriate course of action.

5.0 Options

The following options have been considered in arriving at recommendations for conservation earthworks.

5.1 Do Nothing

This option is not considered effective treatment of the sites and not fulfilling the objectives outlined in section 2.0. If left untreated sediment will continue to move into the aquatic systems downstream. These sites will continue to worsen impacting infrastructure and property.

5.2 Gabions

Gabions are rectangular wire cages used to effectively retain rock fill to serve as retaining structures or surface protection against erosion and scouring.

Gabions have the following advantages:

- Can accommodate significant deformation without failure, allowing use on soft ground
- Permeable nature eliminates hydrostatic build-up behind structure
- Can be designed to withstand bank flow events

The potential disadvantages of the use of gabion baskets in a riparian environment include:

- Requires substantial access for trucks and machinery
- Potential to rip open during high flows which carry woody debris
- Wire mesh will decay over time
- Repair of gabions (if the above should occur) requires removal, unpacking, replacement and repacking which is likely to be expensive and time consuming
- Requires significant manual labour to construct to ensure rock is well packed
- Requires reshaping of existing bank

5.3 Loose Rock Flume

Rock Revetment is a direct protection treatment which can be directly placed onto the existing eroded surface with minimal reshaping (providing the batter is not greater than the natural angle of repose of the rock)

Rock revetment has the following advantages:

- Rock size, grading, angular and hardness can be specified to provide long lasting protection
- Constructed properly, rock revetment requires minimal maintenance
- Rock characteristics can be specified to withstand bankfull flow events
- Rock is clean, non-polluting natural material

The potential disadvantages of using rock revetment include:

- Requires suitable access for trucks and machinery

5.4 Dams

Eroding head cuts on actively eroding gullies can be flooded out utilising dams or weirs to trap water effectively removing the drop (cut) by having water falling on water. These structures have the following advantages:

- Cost effective to construct
- Provide water storage
- Can be constructed in series covering long eroding areas.

The potential disadvantages include:

- Require larger disturbance footprint
- Difficulties establishing stable spillways
- Cannot be constructed in flood prone or riparian zones.

5.6 Discounted Options

There were a number of additional methods that were not considered as design options, as they do not adequately meet the objectives of the project. These include:

- Concrete Flume. The high cost of concrete and the unnatural nature of concreter ruled it out.
- Geotextile products alone. Theses products are unlikely to handle the velocity of flow during flood events leading to structure failure and erosion.
- Grass flume. Simple reshape and revegetation would not handle the velocity of flow during flood events leading to erosion.

6.0 Cost Estimates

Wally Duff can provide detailed costings for each site. Approximate cost of installed gabions are $400 to $500 per m3 with estimated loose rock flume construction being $250 to $350 per m3

7.0 Specific Recommendations

Based on the advantages and disadvantages outlined for each of the design options and also factoring in the estimated cost of each option, it is the recommendation of the Soil Conservation Service to stabilise the all eroding gully heads with Rock Flumes as described in **Section 5.3** above. Rock Revetment is the preferred option as it best fits the objectives outlined below:

- Robust enough to address the problem long term;
- Will require minimal ongoing maintenance;
- Can be designed to withstand anticipated flow events;
- Is consistent with stream conditions and behaviour;
- Will have minimal environmental impact; and
- Is the most cost effective solution.

Appendix 1 shows typical plan view of proposed structures.

8.0 Regulations

8.1 WHS Regulations

The methods of construction for the options outlined are able to be constructed under existing WHS Regulations and codes of practice. Due to the location and nature of the sites it is essential that a site specific safety management plan be completed prior to work commencing.

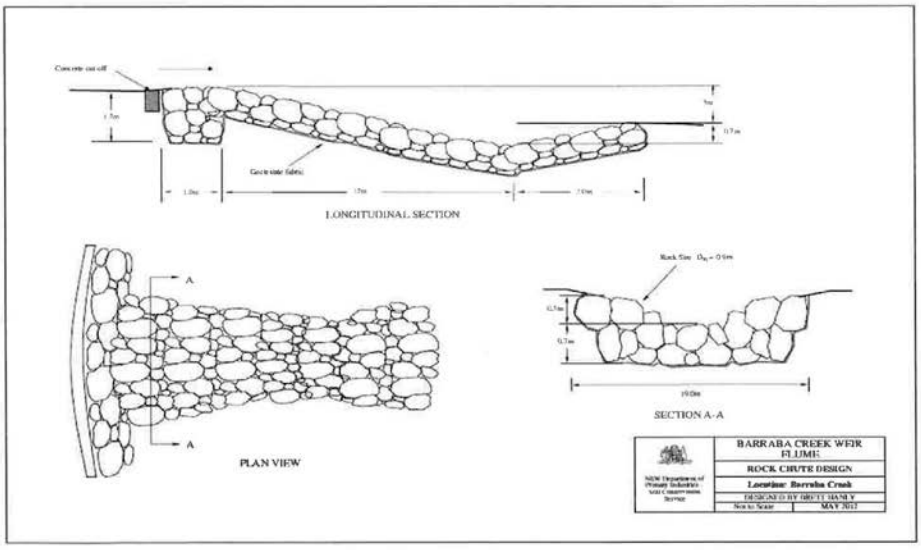
8.2 Environmental Protection Regulations

The Assessment of all options has been undertaken with consideration of the environmental sensitivity of the areas and the potential impact work could have on surrounding ecosystems. Prior to works commencing documents and permits including but not limited to, the following are required:

- Review of Environmental Factors
- Site Specific Environmental Management Plan
- Controlled Activity Approval under Water Management Act
- Approval under Fisheries Management Act

Additional approvals may be required from the Department of Primary Industries - Lands.

Appendix 1


LONGITUDINAL SECTION
A
A
PLAN VIEW
SECTION A-A
BARRABA CREEK WEIR
FLUME
ROCK CHUTE DESIGN
Location: Barraba Creek
Not to Scale
MAY 2017

APPENDIX 12

NSW GOVERNMENT | Soil Conservation Service

EROSION CONTROL STRUCTURES

Inverell Council

Elsmore Headcut……(Site 1)

Auburn Vale Rd ……..(Site 2)

Spillway Froud St Dam..(Site 3)

Prepared by
David Johnson
Soil Conservation Service Maitland
Contact 0427165027
7/12/2017

Contents

Author:	Signature:	Date:
Reviewer: David Johnson	Signature:	Date: 8th Dec 2017

1 INTRODUCTION

Inverell Shire Council approached Soil Conservation Service to inspect a number of erosion sites within it shire to determine best methodology to stabilise and rehabilitate the areas.

Soil Conservation Service has extensive experience in land rehabilitation and erosion repair and rehabilitation, the methods recommended within this scope have been designed to SCS standards and revolve around natural materials where possible such as use of rock and revegetation where appropriate.

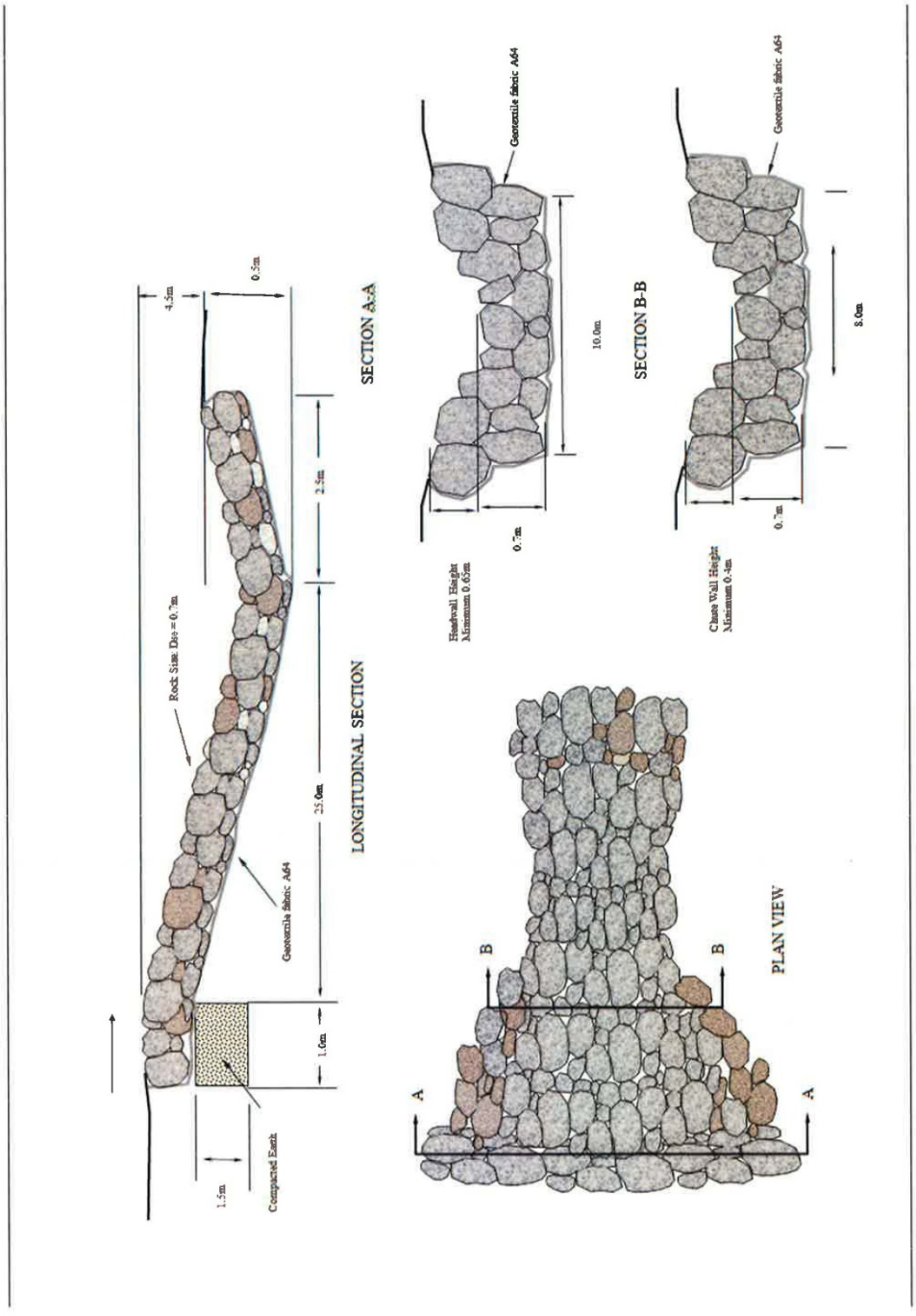
2 Design

Inverell Shire Council provided SCS with peak discharges for two sites, AuburnVale Rd & Froud St, discharges provided are 1:10 & 1:20 yr ARI'S, our design is based on the 1:20yr events.
Design specification of structures are calculated from the Soil Conservation Service design program, pipes and chutes.

Table 1:

Structure Name	Peak Discharge	Flume chute width (m)	Flume grade sides	Wall height inlet (m)	Rock Size (mm)	Rock Volume (t)	Geofabric (A64) m/2	Estimated Cost (incl. GST)
Site (1) Flume Elsmore Road	8m3 / 1:50yr	45m	3:1	0	600	280	300	**$74,784.00**
Gully erosion entering river has a total depth of 5m, this height is measured from the gully head to a stable level protruding the river / boundary fence. It is difficult to determine the exact path of the runoff although it is evident the lower flows enter via a small pipe road culvert and the larger flows an even spread across the flat. The concentrated flow comes from the road and its catchment. Proposed stabilisation for this site is to shape the eroded sides for a distance of approximately 20 metres from the gully head to remove all loose material. Determine the level of the stable point and ensure rock stabilisation of the bed is achieved. Rock will be imported to form an apron at ground level, line the gully head and side batters to provide for the overland flow events as well as total inundation during flood events. Design is via "Chute Program". It is important to note the gully is significant and if not constructed correctly will fail. All excavated material which is estimated at 600m3 can be spread throughout the paddock to the northern side or stockpiled seeded to stabilise.								
Site (2) 76 Froud St Drop from dam to drain (flume)	2.57m3 / 1:20yr	4.5	3:1 (chute)	Vertical .7	600	72	78	
Site (2) 76 Froud St Drain construction from flume outlet	2.57m3 / 1:20yr	Lined Drain 1.5m base width	1:20 (chute)	Vertical 1m	500	200	412	**$42,930.00**
On inspection it is evident flow events overtop the wall, this was confirmed by the owner. Prior to the drain being cut to concentrate the flow the volume of runoff was able to spread out over a wide area, now with the flow restricted erosion will potentially continue and may eventually breach the dam spillway. Options were looked at to minimise cost for a repair however are limited due to the active erosion created. To fill the gully on this slope would only scour our and produce more sediment. The proposal is to rock line the structure from the dam to the stable point below (approx. 40m). With this approach there are two structures. (1) A rock flume set on a 3:1 grade to convey runoff from the existing top water level down to the new gully base stable point. (2) Continue a rock lined drain through to the stable outlet point. With tis there will be significant soil excavated to prepare for the rock lining, consultation with the owner will be needed however the practical placement is on the dam wall to increase its stability and free board which is currently insufficient by SCS standards. (1m minimum freeboard above spillway level.								

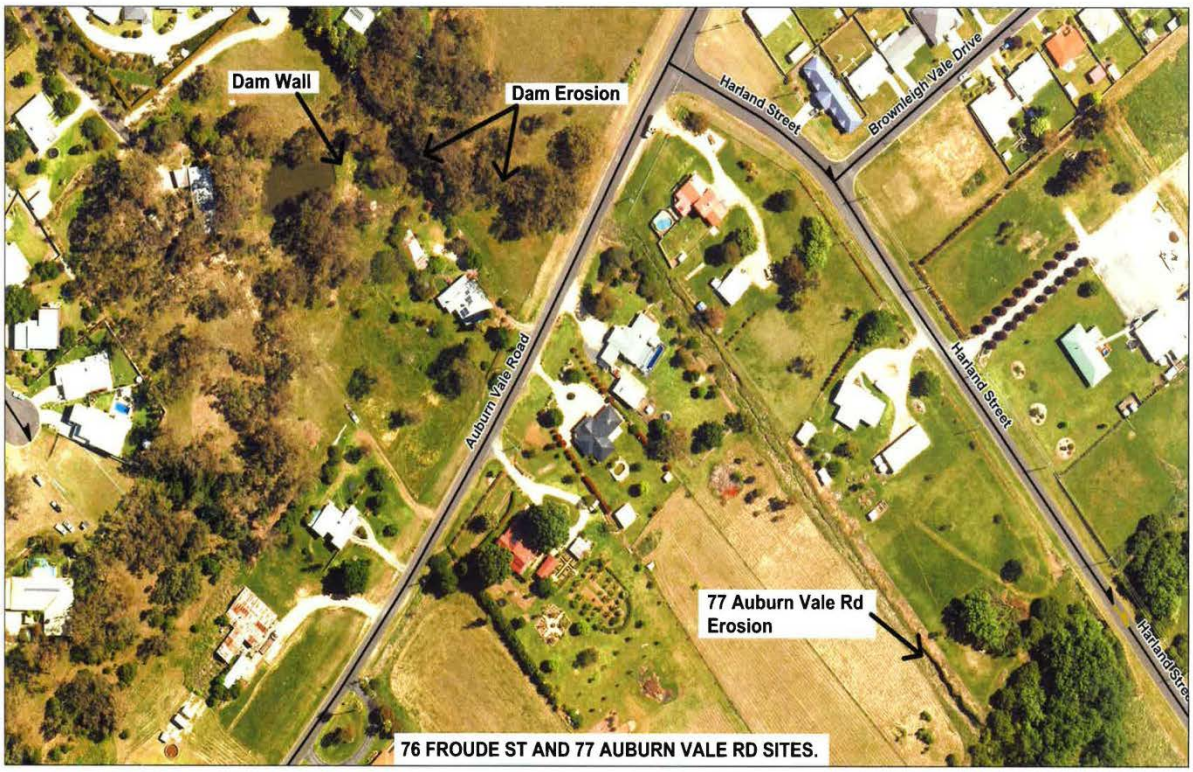
Site (3) Opt 1 77 AuburnVale Rd Entry into River via Flume from Ground level	2.82m3 / 1:20yr	3.5	3:1	1	600	260	321	**$58,810.00**
Option (1) provides for a rock flume to be constructed from natural ground level to a stable point near current water level (approx 5 metre drop) to construct this would mean the existing gully be backfilled with suitable soil (possibly sourced from Boss engineering) as they have a significant stockpile for disposal of suitable excavated material, estimated volume loose 720m3. Any excavated material from this site may not be suitable for back fill of the gully if considered too sandy. Flume structure would be built to with stand inundation during flood events, however, SCS could not guarantee erosion issues in a flood event due to nature of these flows.								
		Pipe size mm	Pipe length m		Rock size	Rock stabilis	Geo (A64)	
Site (3) Opt 2 77 AuburnVale Rd Piped from gully head to creek	2.82m/3 1:20	1m minimum = 2.65m3/s	40		600	140	215	**$82,440.00**
Option (2) is to install a drop inlet at the current gully head to convey flow from natural ground level down to the gully bed level, connect to a suitable sized pipe (1 metre min dia) to take the flow through to the river at a lower level than natural ground level. This option reduces outlet height at the river however will still require stabilisation at the pipe up to ground level. The down side to this option is the success of a drop inlet sited in private property where blockage such as long grass and debris' can cause problems as well as safety for stock and walkers. Should this option be considered discussions as to what level of on ground works council could offer.								
Notes: All costs are estimates at this point should council accept SCS proposal a site survey of each would be undertaken to determine exact quantities and volumes required however this estimate is considered reasonably accurate/								
Any landholders affected by this would need to be approached by council once a final approach is decided on to ensure they are satisfied with any impact:								
Soil backfill for AuburnVale is suggested to approach Boss engineering as SCS has been using this material for another rehabilitation this material has been tested and would be suitable for this purpose, sourcing & transport costs have not been included in this estimate.								
See example a plan view of a typical rock flume SCS constructs in similar circumstances								


SECTION A-A
LONGITUDINAL SECTION
SECTION B-B
PLAN VIEW
Geotextile fabric A64
Rock Size Dia = 0.7m
Compacted Earth
Headwall Height
Minimum 0.65m
Chase Wall Height
Minimum 0.4m
10.0m
8.0m
25.0m
2.5m
1.0m
1.5m
4.5m
0.5m
0.7m
A
B

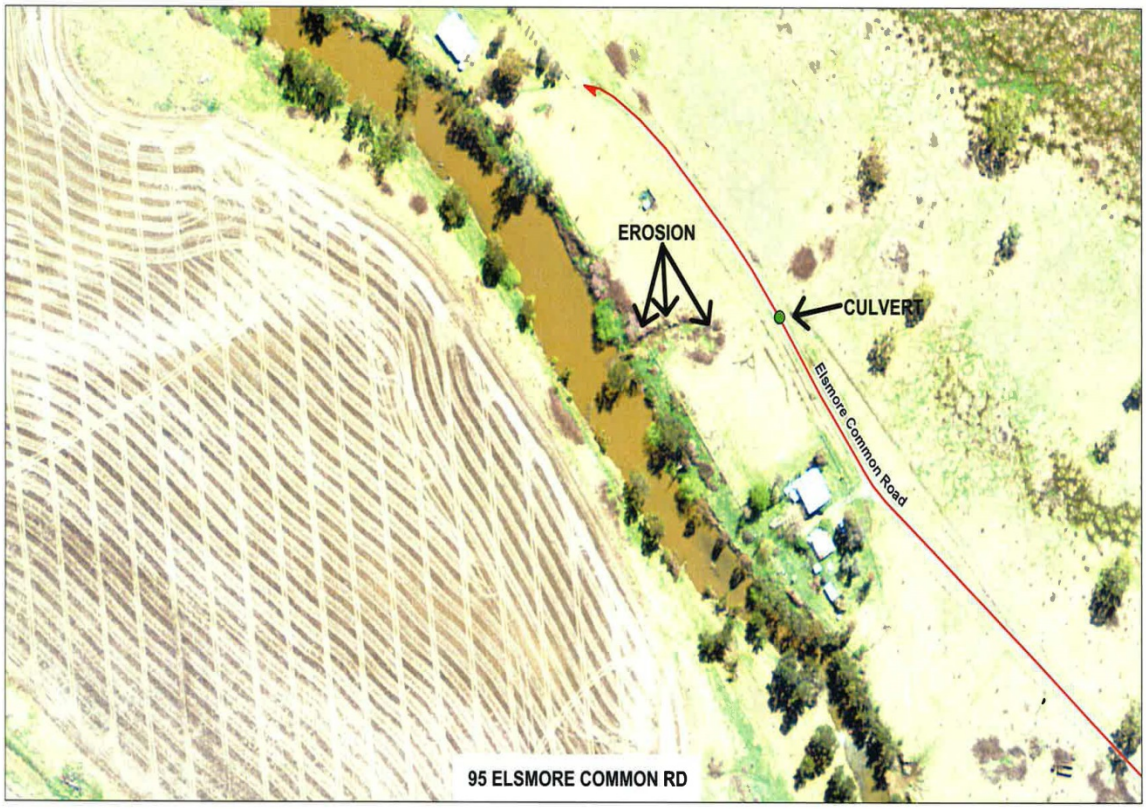
APPENDIX 13


Lauder Street
Lewin Street
Lewin Street
Gordon Street
Harland Street
Froude Street
Harland Street
Stormwater pipes collecting run off from Lauder st, Kurrajong Pl and part Lewin St via Gordon St & Froude St feeding into dam site.
Froude Street
Kuna Avenue
Gordon Street
Froude Street
Murgal Place

APPENDIX 14


Dam Wall
Dam Erosion
Harland Street
Brownleigh Vale Drive
Auburn Vale Road
Harland Street
77 Auburn Vale Rd
Erosion
76 FROUDE ST AND 77 AUBURN VALE RD SITES.

APPENDIX 15



TO CIVIL & ENVIRONMENTAL SERVICES COMMITTEE MEETING 11/07/2018

ITEM NO:	1.	**FILE NO**: S32.8.2
DESTINATION 5:	The communities are served by sustainable services and infrastructure	**S**
SUBJECT:	**WATERNSW 20 YEAR INFRASTRUCTURE OPTIONS STUDY**	
PREPARED BY:	Michael Bryant, Manager Environmental Engineering	

SUMMARY:

The purpose of this report is to inform Council of the recently released WaterNSW 20 Year Infrastructure Options Study for Rural Valleys in NSW.

COMMENTARY:

WaterNSW is responsible for the construction, operation and maintenance of NSW Government owned dams and other infrastructure associated with the storage and delivery of bulk water on regulated streams in rural NSW. The 20 year Infrastructure Options Study aims to address long term strategic planning, identifying customer needs in rural areas and across town water supply, agriculture and environmental sectors. The study details rural bulk water supply systems and provides a strategic level assessment of infrastructure solutions to mitigate or improve long term level of service issues in the regulated valleys. WaterNSW propose the options study will continue to evolve over the next two (2) years involving customer consultation in developing future infrastructure planning and pricing submissions.

A copy of the relevant sections of the options report relating to the Border Rivers and Gwydir valleys are attached as Appendix 1 (E3 – E8).

A full copy of the options report including frequently asked questions can be found on the WaterNSW website: **https://www.waternsw.com.au/projects/20-year-infrastructure-options-study#stay**

The report outcomes for each valley address:

- water resource and catchment;
- water use / customers;
- water supply infrastructure opportunities;
- water availability improvement;
- asset availability (capacity) improvement; and
- improvement to delivery efficiency and timeliness of water delivery

The cost estimates in the options studies are pre-feasibility level estimates and used for options comparison only. More in-depth engineering analysis and hydrological modelling will be needed to confirm the optimum asset locations, capacities, lifecycle costs and potential positive and negative impacts. WaterNSW propose that the next edition of the options study will identify the customer supported preferred options to mitigate long-term water supply issues in the valleys.

It should be noted that while many options have been flagged for each valley in the options study, not all options are likely to be implemented for various reasons including cost / benefit, proposed

new dam catchment yields, environmental and other aspects associated with catchment water diversions, new water storages, and associated infrastructure.

Border Rivers

Long term infrastructure options considered for further investigation in the Border Rivers to improve water availability include the raising of Pindari Dam full supply level by 5m to increase the storage capacity from 312 GL to 450 GL. Other options include a new dam on the Severn River, a new dam at Mingoola near the confluence of the Mole and Dumaresq Rivers, plus Glenyon Dam rising with flow diversion from the Severn River to Pike Creek. An inland water diversion from the east has also been included in the options.

Ashford town water supply draws raw water from the Severn River downstream of Pindari Dam, providing a high level of water security for Ashford.

Gwydir Valley

Potential options to improve reliability of supply and water efficiency in the Gwydir valley include new dam options at Bingara, Gravesend and the Horton River. Other options include off stream storage, underground dams and inland diversion from the Aberfoyle River.

The Copeton Town Water Supply Scheme draws raw water from Copeton Dam, providing a high level of security to Inverell, Delungra, Gilgai and Tingha.

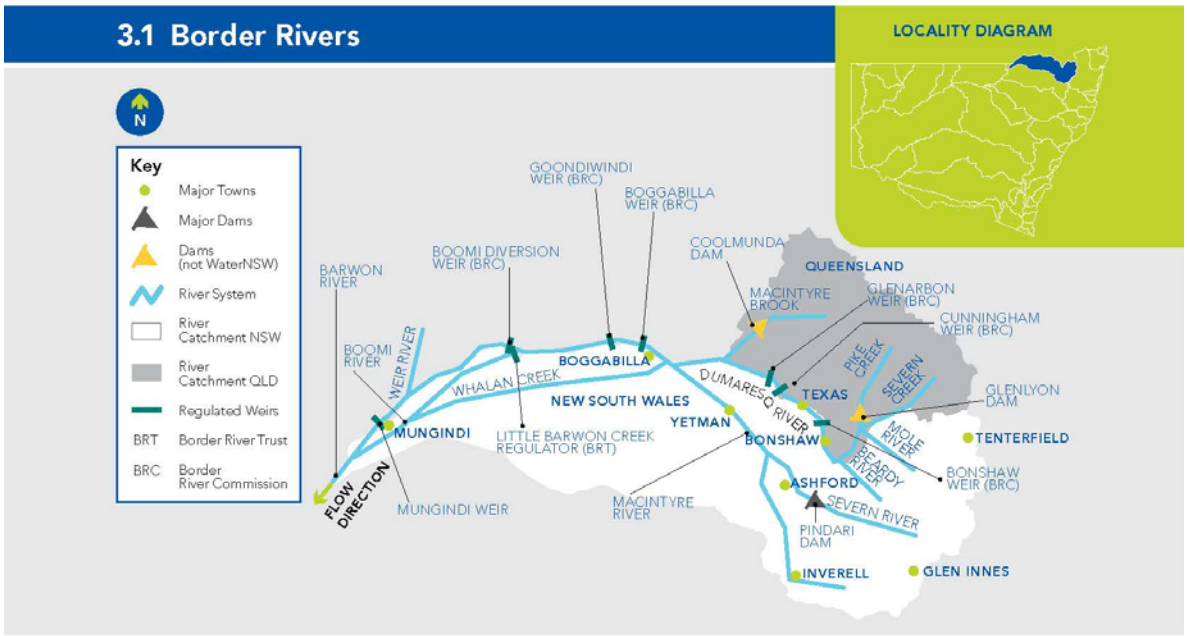
Way Forward

Council will be kept informed on the progress of the WaterNSW 20 Year Infrastructure Study for rural valleys going forward including any input required by Council as part of the stakeholder engagement process.

APPENDIX 1

03 Outcome

3.1 Border Rivers



Water Resource and Catchment

The Border Rivers comprises the Macintyre River, Dumaresq River and part of the Barwon River, which constitute the border between NSW and Queensland (QLD) for approximately 470 km. The Border Rivers catchment covers approximately 49,500 km^2 in southern QLD and northern NSW. Glen Innes, Inverell, Tenterfield and Mungindi are the main town centres in NSW's section of the Border Rivers Catchment.

The Border Rivers are regulated by three dams – Glenlyon Dam on Pike Creek (254 GL*), Coolmunda Dam on Macintyre Brook (69 GL) and Pindari Dam on the Severn River (312 GL). NSW is supplied by Pindari Dam, a share of Glenlyon Dam, and tributary inflows.

The combined volume of on-farm storages in the Border Rivers is relatively high and estimated to be 155 GL and 300 GL in NSW and QLD, respectively.

The Border Rivers contributes about 5 per cent of the Murray-Darling Basin water.

Water Use/Customers

The Border Rivers system supplies water for irrigation, stock and domestic, town water supply and industrial purposes. Land use is predominately for cattle and sheep grazing. Dryland cropping mostly occurs on the slopes. Small-scale crops such as grapes, stone fruit, vegetables and apples are grown in the upland areas. On the western plains, 75 per cent of irrigated crops are cotton.

Water Supply Infrastructure Opportunities

This Options Study has identified a range of options that address the potential LOS gaps in the Border Rivers.

The following table is a summary of the preferred options under consideration.

* Gigaliter

LOS Gap/Issue	Preferred Option	Preliminary Capital Cost ($ Million)
Water Availability	New 100 GL dam on the Mole River	331
Asset Availability (capacity)	Glenlyon and Pindari Dams outlets upgrade – valves replacement	3.9
Delivery Efficiency	Augment end-of-system storage by raising Mungindi Weir (approx. by 5 m)	50

Water availability improvement

The Border Rivers is a large catchment. Its water supply is serviced by three relatively small dams and large on-farm storages that rely on access to unregulated flows (supplementary water access). A significant proportion of water taken by customers evaporates from these on-farm storages.

Long-term water availability is therefore a key issue facing the valley. Unreliable water supply could undermine agricultural productivity, and serve as a barrier to future investments that support the local economy and community.

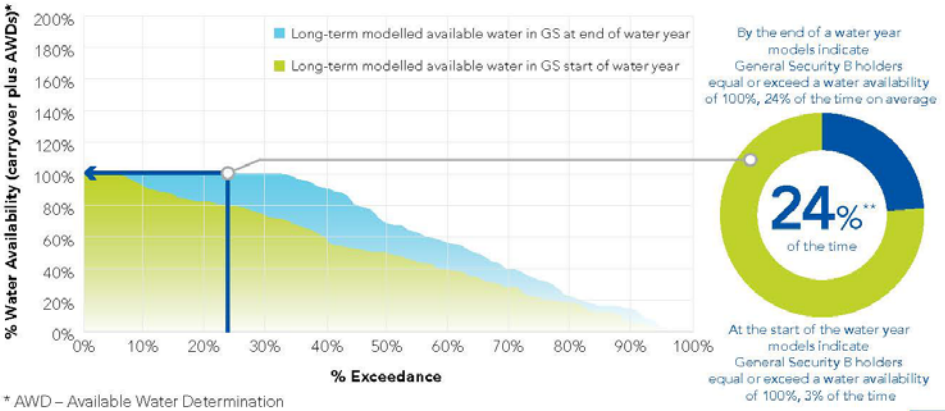
Hydrological data received from DoI Water for the Border Rivers indicates that under the current arrangements, General Security licence holders receive low reliability of supply as shown in Figure 2.

Long-term infrastructure options considered for further investigation to improve security and reliability of supply in the Border Rivers include:

Potential Options to Improve Water Availability	Preliminary Capital Cost ($ Million)
New 100 GL dam on the Mole River	331
Raise Pindari Dam FSL* by 5 m which could increase storage capacity to 450 GL	339
New 500 GL dam on the Severn River	1,342
New dam at Mingoola near the confluence of Mole River and Dumaresq River	183
Glenlyon Dam raising with flow diversion from Severn River to Pike Creek	300
Inland diversions from the east	975

* Full Supply Level

Figure 2: Border Rivers Reliability of General Security B Releases



* AWD – Available Water Determination
** Note: 33% of the time on average, 98% reliability.

03 Outcome

Asset availability (capacity) improvement

In 2013, the MDBA prepared a report outlining the preliminary overview of constraints to environmental water delivery in the Murray-Darling Basin. It identified the release capacities of Pindari and Glenlyon Dams as "second order" constraints to the efficient delivery of environmental flows to the lower Border Rivers during specific flow and climatic conditions. The study indicated that the ability of the dams to satisfy both environmental and irrigation requirements may impede environmental water delivery when the volume of water in storage is relatively low.

Options identified to improve release capacity at Glenlyon and Pindari Dams include:

Potential Options to Mitigate Asset Capacity Constraint	Preliminary Capital Cost ($ Million)
Glenlyon Dam outlet upgrade – valve replacement	2.0
Glenlyon Dam outlet upgrade – installation of additional valve	8.2
Pindari Dam outlet upgrade – valve replacement	1.9
Pindari Dam outlet upgrade – installation of additional valve	8.2
Glenlyon and Pindari Dams outlets upgrade – valves replacement	3.9
Glenlyon and Pindari Dams outlets upgrade – installation of additional valves	15.6

Note: Glenlyon Dam is owned by the Border Rivers Commission

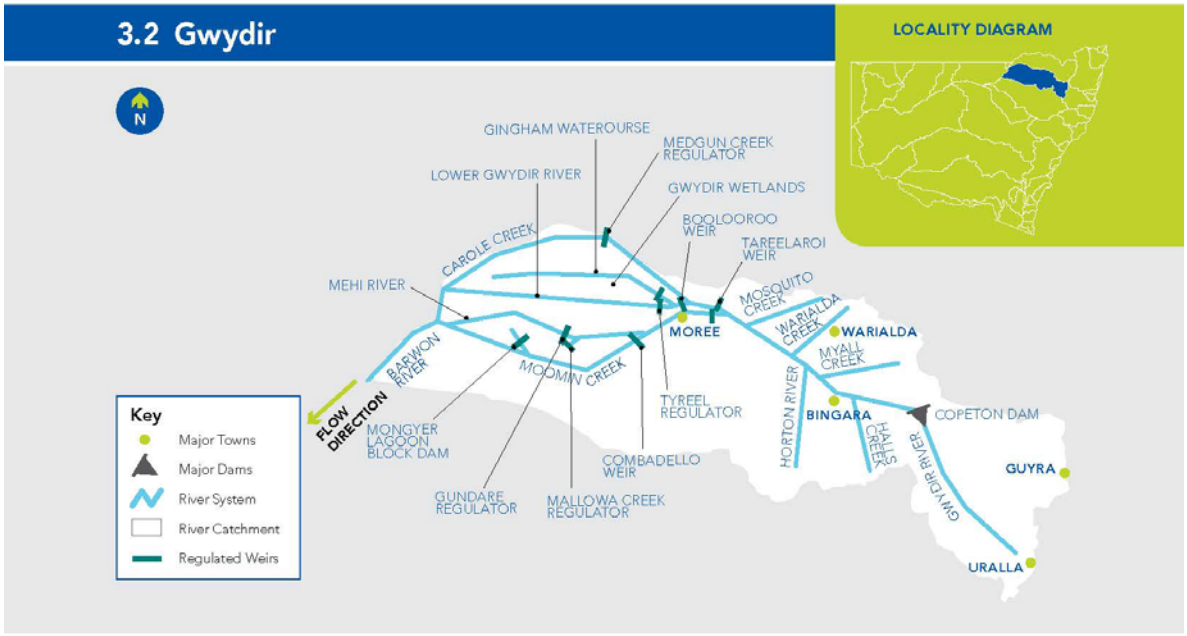
Improvement to delivery efficiency and timeliness of water delivery

There is a potential storage shortage in the middle and bottom sections of the regulated system, impacting overall efficiency and timeliness of delivery. Currently, on average it takes approximately five days to deliver water from Glenlyon Dam to Boggabilla and a further 11 to 13 days to reach Mungindi. Consequently, large volumes of water are released from the dams to account for conveyance losses that occur along the way.

Cross boundary flows through existing breakout structures were also identified as key contributors to in-system losses.

Options considered for further investigation to improve delivery efficiency include:

Potential Options to Improve Delivery Efficiency	Preliminary Capital Cost ($ Million)
New off-stream storage at Boomi	296
New off-stream storage at Mungindi	313
Piped supply to the unregulated Boomi River	591
Raise Mungindi Weir (approx. by 5m)	50
New off-stream storage at Boomi and Mungindi	609



Water Resource and Catchment

The Gwydir River System is located in northern NSW and is part of the Murray-Darling Basin which covers an area of 26,600 km^2.

The Gwydir River System is regulated by Copeton Dam (1,364 GL). Horton River is the main tributary downstream of Copeton Dam.

The Gwydir River System contributes about 2 per cent of the Murray-Darling Basin water.

Bingara, Gravesend and Moree are the main town centres in this valley.

Water Use/Customers

The Gwydir River System supplies water for irrigation, stock and domestic, town water supply and industrial purposes. The dam also provides environmental flows to the Gwydir Wetlands near Moree and irrigation and environmental flows for hydroelectric power generation (21 MW).

Water Supply Infrastructure Opportunities

This Options Study has identified a range of options that address the LOS gaps for the Gwydir Valley.

The following table is a summary of the preferred options under consideration.

03 Outcome

LOS Gap/Issue	Preferred Option	Preliminary Capital Cost ($ Million)
Water Availability and Delivery Efficiency	A new 350 GL Horton Dam on the Horton River	937
Asset Availability (capacity)	Increase bottom width of Lower Gwydir River from north bank and increase the size of the Tyreel regulator	171

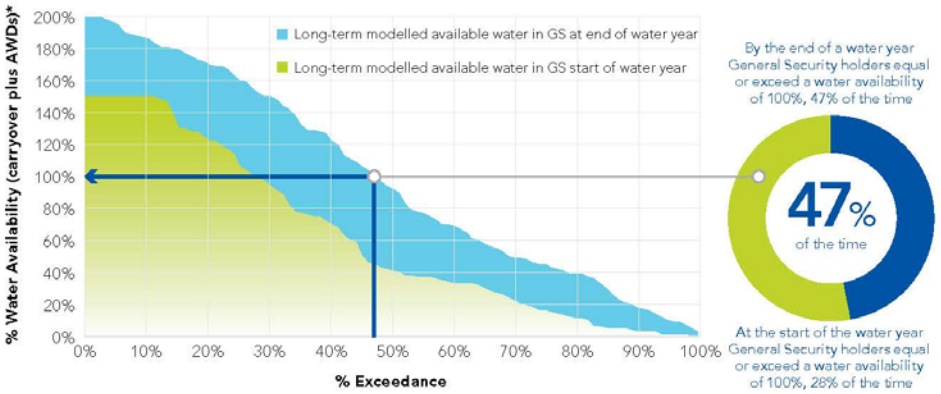
Reliability of supply and delivery efficiency improvement

Irrigation customers downstream of Copeton Dam experience low reliability for general security, due to the limited regulating capacity of the valley. Customers have continued to demand higher water utilisation, which with the current infrastructure, can only be delivered with low reliability.

On-farm storages developed over the last 20 years in the Gwydir Valley produce high evaporative water losses.

Hydrological data received from DoI Water for the Gwydir Valley, confirms that under the current arrangements, Gwydir General Security licence holders receive low reliability of supply (refer Figure 3).

Figure 3: Gwydir Valley Reliability of General Security Releases



* AWD – Available Water Determination

Long-term infrastructure options considered for further investigation to improve reliability of supply and delivery efficiency in Gwydir Valley include:

Potential Options to Improve Reliability of Supply and Delivery Efficiency	Preliminary Capital Cost ($ Million)
A new 500 GL Lower Gravesend Dam on the Gwydir River downstream of Warialda Creek	1,073
A new 500 GL Upper Gravesend Dam on the Gwydir River upstream of Warialda Creek	1,066
A new 350 GL Horton Dam on the Horton River	937
A new 700 GL Bingara Dam on the Gwydir River	1,002
Inland diversion (from Aberfoyle River to Happy Valley Creek in the Gwydir Basin)	1,794
Re-regulating structure at Biniguy with transmission channel to Tareelaroi Weir	388
Biniguy underground dam	79
Biniguy underground dam and transmission conduit to Tareelaroi Weir	1,290
Biniguy underground dam and weir and transmission channel to Tareelaroi Weir	429
A new 250 GL off-stream storage including weir and transmission channel	1,282

Asset availability (capacity) improvement

The limitation to supply for the Lower Gwydir irrigation area is a major issue for the Gwydir Valley system. Supply comes from the Lower Gwydir River and effluent streams, but over the years considerable agricultural land development has occurred at the lower end of the valley. This has led to constraints between Tyreel regulator and Brageen station.

To avoid this asset availability constraint the following infrastructure option has been considered:

Potential Options to Mitigate Asset Capacity Constraint	Preliminary Capital Cost ($ Million)
Increasing bottom width of Lower Gwydir River from north bank and increase the size of the Tyreel regulator	171

DID YOU KNOW?

The construction of Copeton Dam began in 1968 and finished in 1973 with a storage capacity of 863 GL. Construction work on nine radial gates in the spillway was completed in 1976, increasing storage to its current capacity of 1,364 GL.

ITEM NO:	2.	**FILE NO**: S28.21.1/11	
DESTINATION 5 :	The communities are served by sustainable services and infrastructure		**S**
SUBJECT:	**2016-2017 & 2017-2018 GRAVEL RESHEETING PROGRAMS**		
PREPARED BY:	Justin Pay, Manager Civil Engineering		

SUMMARY:

This report is intended to keep the Committee updated on the recently completed 2016-2017 and 2017-2018 Gravel Resheeting Programs.

COMMENTARY:

Council's works staff and contractors completed the 2016-2017 & 2017-2018 gravel resheeting program in the period between October 2017 and May 2018. Given the significant quantum of work in the programs due to additional funding, a significant amount of the 2016-2017 program was completed in the 2017-2018 financial year. As such this report will present the outcomes for both years as a combined program. Costings of the program having been reconciled and a detailed analysis has been undertaken.

The table below shows the average cost per kilometre for Council's previous six (6) years gravel resheeting programs.

Year	Actual Expenditure	Length of Completed Resheeting (m)	Average Unit Rate Cost per Kilometre
16/17 &17/18	$ 3,193,777	206,550	$15,462
15/16	$ 1,563,956	112,774	$13,868
14/15	$ 1,073,927	67,227	$15,975
13/14	$ 946,874	61,335	$15,438
12/13	$ 1,267,550	78,060	$16,239
11/12	$ 1,101,393	70,966	$14,287
10/11	$ 650,682	42,473	$15,320

In the combined 2016/2017 and 2017/2018 program 206.55km of unsealed road was gravel resheeted.

The original combined budget adopted by Council allocated $2,820,734 to complete 190km of resheeting on specified roads with $140,447 assigned to reactionary resheeting, with the location for this expenditure to be determined throughout the year. The total combined budget for gravel resheeting in the combined 2016/2017and 2017/2018 program is $2,961,181.

The total expenditure for the program was $3,193,777 with $232,596 of expenditure higher than the original budgets. This additional expenditure was due to extra completed resheeting works that were not included in the original program and the actual unit rate being slightly higher than estimated. The additional works in the program were on sections of road that were adjacent to planned resheeting and required attention for safety reasons. It was more cost effective for Council's works crew to address these sections whilst in the area, reducing establishment costs and providing for economies of scale. This additional expenditure was funded from cost savings on projects within the Roads to Recovery Program.

The actual unit rate was slightly higher than estimated due to the extremely dry weather experienced during 2018. This resulted in the requirement for additional water carts and the need to haul water significantly longer distances than estimated for. For example, the resheeting works on the Woodstock and Waterloo Roads required an extra water cart and roller, and water for these roads had to be hauled in excess of 40km.

Another issue that has previously been reported to Council that impacts on the efficiency of the resheet program is the declining availability of suitable gravel reserves.

The last reported 2014/2015 RMS Regional Road Network Gravel Resheet figure was $26,700 per kilometre. Some Group 11 Council Gravel Resheeting Rates are up to $34,380 per km. Whilst these figures are slightly dated, they do show that Councils current average rate of under $15,500 per kilometre is very competitive when compared to industry standards.

Considering the quantum of works undertaken, Council's resheeting team have achieved a very cost competitive unit rate whilst providing a quality outcome.

ITEM NO:	3.	**FILE NO:** S28.21.1/11
DESTINATION 5:	The communities are served by sustainable services and infrastructure.	**S**
SUBJECT:	**WORKS UPDATE**	
PREPARED BY:	Justin Pay, Manager Civil Engineering	

SUMMARY:

This report is intended to keep Council updated on the capital works and maintenance programs.

COMMENTARY:

MR 187 "Cucumber Creek" Pavement Widening and Rehabilitation

This project involves the widening and rehabilitation of the section of Yetman Road north of Cucumber Creek, including upgrades to a number of significant drainage structures. Currently $2.1M is allocated to the project from multiple sources. The project will be completed in stages with the exact length to be rehabilitated dependant on the final design and cost. It is anticipated the total extent of works will be between 4 and 5kms. Stage one (1) of the project incorporates a section of Yetman Road from 62.6km to 64.0km north of Inverell, whilst stage two (2) incorporates a section from 64.0km to 66.7km north of Inverell.

Ozwide Bridge Rail and Civil have completed the widening of the box culvert in stage two (2) with the concrete overlay due to commence early July 2018. It is anticipated that the contractor has two (2) weeks to complete the box culvert overlay and a further two (2) weeks extending another two (2) minor piped culvert extensions. Once the contractor has completed the drainage extensions, Council's crew will return to complete the remaining 1.5km section. The completion of the current project will bring the total road rehabilitation on MR187 to 4.5km for the project. A further 700m of rehabilitation adjacent to the recently completed works is planned with the remaining budget allocation.

Wood Street, Gilgai – Hall Street to Stannifer Street Drainage

This project is stage three (3) of the Gilgai Drainage Upgrade Program and involves the reconstruction of Wood Street between Hall Street and Stannifer Street, Gilgai. The project includes

the construction of underground drainage, sub-soil drainage and kerb and gutter along a 180 metre section of Wood Street in the village of Gilgai. The project is funded from the Urban Drainage Reconstruction Program with $480K allocated to this stage.

Works are now complete on this project with a primer seal being applied on 19 June, 2018. Residents have been notified of their option to upgrade their access with a select few taking up Council's offer. Council's crew are due to carry out this work commencing 2 July, 2018.

Wood Street, Gilgai

SR 168 Michell Lane Bitumen Renewal

This project involves the pavement rehabilitation and bitumen renewal of a 4.1km section of Michell Lane from the intersection of Bingara Road. Council have allocated $520K to renew this section of Michell lane.

Pavement works are now complete for the entire length of the project with a primer seal being completed on 28 June, 2018. Contractors have commenced culvert upgrade works and are anticipated to complete this work early July, 2018. This culvert maintenance works on Michell Lane were delayed due to additional culvert upgrade works undertaken on the Gwydir Highway.

MR 137 "Airlie Brake" Pavement Widening and Rehabilitation

This project involves the widening and rehabilitation of an 1,100 metre section of pavement and the replacement of drainage structures, on Ashford Road at Airlie Brake Lane (chainage 20.7 to 21.8km north of Inverell). The budget allocation for this project is $510,000, funded from the Regional Roads REPAIR program. The works are scheduled to take ten (10) weeks to complete.

The project was split into two (2) distinct sections for construction and traffic management purposes. Earthworks for the first 650 metre section of the project were commenced on 7 May 2018, the subgrade of this section was stabilised with hydrated lime to give the pavement extra strength to carry the traffic loading. The sub-base and base layers of pavement have been hauled and placed for this section.

Earthworks commenced on the remaining 450 metre section on the 11 June, 2018, the sub grade of this section was also stabilised with hydrated lime to give the pavement extra strength to carry traffic loading. The sub base has been hauled in and compacted to required levels. Weather permitting, hauling of the final base layer will commence Thursday, 5 July, 2018. Stabilisation works of the base will commence on Tuesday, 10 July, 2018 and will continue for 5 days, an estimated seal date will be scheduled for Wednesday, 18 July, 2018.

Intersection Safety Upgrades – Safer Roads Program

Council were recently successful in securing $152,100 of funding under the Roads and Maritime (RMS) Safer Roads Program. Having submitted a number of unsuccessful applications over the past few years, our most recent submission for traffic calming devices targeting cross street accidents was successful. The three (3) intersections identified were Mansfield and Ross Streets, Mansfield and Oliver Streets and Wood and Oliver Streets. All of these intersections have a high number of cross traffic accidents at each location.

Council engaged the services of TPS Traffic and Parking Systems Pty Ltd to design mountable traffic islands and improved delineation and signage on approach to each intersection. The designs specifically had to target cross traffic accidents.

This work is now complete with the pavement markings and signage installed the week ending 29 June, 2018.

Corner Oliver and Mansfield Streets facing north

Gwydir Highway Drainage Works

Roads and Maritime Services (RMS) have provided approximately $350,000 for drainage structure maintenance on the Gwydir Highway. The works are to be completed under the Roads Maintenance Council Contract (RMCC), under which Council completes maintenance works on the highway on behalf of RMS.

These funds have been allocated on the basis that they are expended by the end of the current financial year. A contractor will complete the required work under the project management control of Council engineering staff. The RMS often seeks to partner with Council to enable the expenditure of any surplus funds towards the end of the financial year. Council's demonstrated capacity to deliver works on behalf of the RMS and our positive working relationship creates such opportunities.

Council engaged the services of Interflow Pty Ltd under the Local Government Procurement (LGP) contract to reline and grout five (5) existing culvert structures along the Gwydir Highway. This work was commenced on 15 June, 2018 and was completed on 29 June, 2018.

Heavy Patching – MR187 Yetman Road

In July 2018 Council will commence a significant heavy patching program on Yetman Road. It has been identified that significant bitumen resealing is required on Yetman Road and it is proposed that these works will be completed in November 2018, subject to Councils approval. In order for the 28km of proposed bitumen resealing to proceed there are significant areas of road pavement defects that need to be addressed. The heavy patching program comprises approximately 6,350 square metres at an estimated cost of $875,525. The majority of this work is located between Inverell and Graman. These funds are sourced from the Fit For the Future Heavy Patching, BLOCK Grant and ACRD Heavy Patching budgets.

Maintenance Grading

The current period of extreme dry weather continues to negatively impact maintenance grading and gravel resheeting works. In many locations in the Shire there are no viable options to source water, in most cases if Council were to draw water it would have a major impact on local graziers.

Maintenance grading works were undertaken on the following roads during June 2018.

Road Number	Road Name	Length Graded (KM)
SR 266	Duftys Lane	2.3 km
SR 167	Sheep Station Creek	1.0 km
SR 166	Reserve Creek Road	8.40 km
	TOTAL	11.7 km

Reactive /Spot Grading

Reactive/spot grading works were undertaken on the following roads during June 2018.

Road Number	Road Name	Length Graded (KM)
SR 173	Delungra Bypass Road	8.3 km
SR 12	Blue Nobby Road	4.7 km
	TOTAL	13.0 km

2017/2018 Gravel Resheeting Program

Gravel re-sheeting works were undertaken on the following roads during June 2018.

Road Number	Road Name	Length Re-Sheeted (KM)
SR12	Blue Nobby Road	5.0 km
	TOTAL	5.0 km

Heavy Patching

No Heavy Patching Works were undertaken during June 2018.

Other Maintenance Activities

Council's State, Regional and Local Roads, Urban and Village Street maintenance activities, such as bitumen patching, drainage and shoulder repairs as well as vegetation control, are continuing as required. Town maintenance will continue as programmed.

RECOMMENDATION:

That the items contained in the Information Reports to the Civil & Environmental Services Committee Meeting held on Wednesday, 11 July, 2018, be received and noted.

TO CIVIL & ENVIRONMENTAL SERVICES COMMITTEE MEETING 11/07/2018

ITEM NO:	1.	**FILE NO**: S1.2.3/12
DESTINATION 5:	The communities are served by sustainable services and infrastructure	**S**
SUBJECT:	**GOVERNANCE - PERFORMANCE REPORTING ON ROAD MAINTENANCE COUNCIL CONTRACTS**	
PREPARED BY:	Nicole Riley, Administration Coordinator	

SUMMARY:

Council is in receipt of an audit report from the Roads & Maritime Services (RMS), on Council's performance on road maintenance as a contractor.

COMMENTARY:

The RMS conducts regular Contract Performance Reporting on the Road and Maintenance Council Contracts. Reports are submitted to Council 4 times a year with the most recent one being completed for quarter one (1), January to March, 2018.

A copy of the report is attached as Appendix 1 (G2 – G 6).

RELATIONSHIP TO STRATEGIC PLAN, DELIVERY PLAN AND OPERATIONAL PLAN:

Strategy: S.10 Maintain and enhance a safe, efficient and effective local road network.

Term Achievement: S.10.01 Road network capacity, safety and efficiency are improved and traffic congestion is reduced.

Operational Objective: S.10.01.01 A program is being implemented to address deficiencies and areas of congestion in the local road network.

POLICY IMPLICATIONS:

Nil

CHIEF FINANCIAL OFFICERS COMMENT:

Nil

LEGAL IMPLICATIONS:

Nil

RECOMMENDATION:

That the information be received and noted.

APPENDIX 1

Transport Roads & Maritime Services

ROADS AND MARITIME SERVICES

RMS Form No 517 (amended)
Catalogue No. 45062482
(April 2018)

Contractor Performance Report

Single Invitation Maintenance Contract

General Information

Contractor's Name

Inverell Shire Council

Trading as

ABN 72 695 204 530

Contract No. 08.2547.1956 **Equip Contract No.**

Contract Description

Inverell Shire Council

At Acceptance of Tender

Original Due date for

Contract Period (weeks) 188 **Completion** 30/06/2012

Date of Acceptance of Tender 03/11/2008 **Original Contract Sum** $ 4,359,375.00

Reason for Report

Progress

Quarter 1	Quarter 2	Quarter 3	Quarter 4
☑	☐	☐	☐

Key Milestones

Defect Correction Period	After construction or call back	Continuing unsatisfactory Performance	Termination of Contract
☐	☐	☐	☐

Contract Sum as Varied at Report Date $ 1,131,169.06

Transport Roads & Maritime Services

Contractor's Performance

	Unsatisfactory	Marginal	Acceptable	Good	Superior
Collaboration - RMCC	☐	☐	☐	☑	☐
The entire RMCC team work collaboratively with RMS staff and no issues of conflict have been recorded.					
Community and Stakeholder Engagement - RMCC	☐	☐	☐	☑	☐
Inverell Shire have good customer and stakeholder engagement processes for RMCC works.					
Contract Management - RMCC	☐	☐	☐	☑	☐
The contract is well managed by competent staff who are responsive to all RMS requests.					
Environmental Management - RMCC	☐	☐	☐	☑	☐
Toolbox talks include environmental management and are being conducted regularly on works. No incidents have been reported.					
People Management - RMCC	☐	☐	☐	☑	☐
No known issues.					
Quality Management Systems - RMCC	☐	☐	☑	☐	☐
There have been few projects in 2017/18 to effectively assess quality control but routine works including reseals have been well managed with respect to quality.					
Standard of Work - RMCC - Maintenance	☐	☐	☐	☑	☐
Maintenance budgets and field work are well managed and achieve good standard of work.					
Standard of Work 2 - RMCC - Minor Works	☐	☐	☐	☑	☐
Minor works are well managed with good co-operation with RMS staff.					

Standard of Work 3 - RMCC - Drainage	☐	☐	☐	☑	☐
Drainage works are well managed.					
Subcontractor Management - RMCC	☐	☐	☐	☑	☐
The reseal program was completed prior to December showing good contract management. All line marking completed early in 2018.					
Time Management -RMCC	☐	☐	☐	☑	☐
All planned works have been completed in a timely manner.					
Traffic Management - RMCC	☐	☐	☐	☑	☐
No know issues and all works have been found compliant when inspected by the surveillance officer.					
Workplace Health and Safety Management - RMCC	☐	☐	☐	☑	☐
Toolbox talks are being done regularly and there is a good commitment to WH&S.					
Workplace Relations Management - RMCC	☐	☐	☑	☐	☐
No known issues.					
Performance Score	☐	☐	☐	☑	☐

Transport Roads & Maritime Services

Overall Comments *(Use separate report if necessary)*

Reporting Officer

In my opinion:

Inverell Shire Council deliver a very good standard of work and are always supportive of RMS requests.

Name: Paul Radnidge Report Date: 24/05/2018

Phone: 6640 1018

Reviewing Officer:

In my opinion:

The report has been forwarded to the Contractor **Yes** *(All reports are to be forwarded)*

The unsatisfactory performance aspects have been discussed with

Name: Discussion Date:

Phone:

Response from Contractor Received and report finalised: No

Name: Review Date:

Phone:

Transport Roads & Maritime Services

Approving Officer

In my opinion:

Inverell continue to set the standard in delivery of the RMCC. All works are completed as planned to a high standard.

Name: David Pattison Report Date: 25/05/2018

Phone: 6640 1078

Attachments:

Distribution:

1. Contractor's Representative
2. RMS's Representative