From:

To: Flood Inquiry

Subject: NSW Independent Flood Inquiry - SUBMISSION - P.Bennett

 Date:
 Friday, 20 May 2022 2:51:04 PM

 Attachments:
 20220520 Submission - P.Bennett.docx

Dear Secretariat

NSW Independent Flood Inquiry

Attention; Professor Mary O'Kane and Mr Michael Fuller APM

Thank you for this opportunity to make a submission to this Inquiry.

Please find attached a Word Docx copy of the submission.

"NSW Independent Flood Inquiry - SUBMISSION - P.Bennett"

The submission is in accordance with the broad reading of the Terms of Reference.

The subjects covered

- 1. road and bridge damage, and
- 2. the exacerbating effect of the floods on the parlous state of Tweed Shire's housing.

Should you have an questions re the submissions please feel free to contact me by phone or email.

Yours faithfully

Peter Bennett

### New South Wales Independent Flood Inquiry –

## Applicable to Tweed Shire Council.

#### **Cover Page**

Thank you for the opportunity to make this submission to the New South Wales Independent Flood Inquiry. The submission may be published with my name and email address only displayed.

#### **Mr Peter Bennett**

#### **Submission Details**

I am making this submission as an active community member

- a. Seeking to clarify the Terms of Reference.
- b. Effects of road/bridge damage on rural communities.
- c. Poor Council community consultation on prioritisation and methods of flood repairs.
- d. Restricted housing exacerbates weather events in rural areas.
- e. Generally, the flood harm to the rural social fabric, its economy, health and wellbeing.

This submission broadly addresses the Inquiry's Terms of Reference.

The Inquiry's Terms of Reference (ToR) focusing on flooding are hopefully being "read up" to include the scope of the catastrophic weather event. Many roads and bridges and other property were not necessarily affected by <u>floods</u>. That damage was caused by landslips, rain/storm damage and flash flooding. Nonetheless, these matters must be addressed by the Inquiry.

Should that not occur and the Inquiry only addresses 'Flood" issues, please inform the writer forthwith.

The Submission covers many ToR specifications by generally addressing "location.. mitigation strategies... protecting life... procedures for recovery..... immediate housing....community engagement measures.... longer-term community rebuilding support....future developments.... collaboration by governments....etc".

The social, health and economic impact of rural housing shortages and road usage/closures in remote or rural areas is highlighted. The Tor clause 1f. provides scope to cover those subjects (i.e. "any other matters that the Inquiry deems appropriate in relation to floods").

The Inquiry's reconstruction and repair objectives will expose the critical housing shortage and homelessness in this Shire. The Tweed Council's housing policies, specifically in rural areas, have created an appalling shortage of housing and high levels of homelessness in the Shire. The impact of the weather event has greatly exacerbated and exposed the council's irrational and poor house planning policies. Recovery from the weather event demands a review of housing needs generally and in the rural areas especially. Planning and building adequate housing in the Shire must be examined by the Flood Inquiry so that the Northern Rivers Reconstruction Corporation can act accordingly on the Inquiry's findings.

This submission is prepared in concert with 'The Tyalgum District Community Association.' Please refer to that submission for further context.

# New South Wales Independent Flood Inquiry -Applicable to Tweed Shire Council.

#### Recommendations to the Inquiry

#### **Re Roads and Bridges**

- 1. Reprioritisation of road and bridge repairs after disaster events by;
  - a. Setting the highest value on community road and bridge <u>usage</u> above administrative convenience and economic costs.
  - Ensuring every possible means of maintaining community road <u>usage</u> has been exhausted before reducing or cutting road usage and commencing any permanent repairs.
  - c. Timely consulting with adversely affected Communities as to their needs and expectations and to Council's prioritising and planning intentions.
- 2. Recommend a thorough investigation of using temporary bridges to maintain rural community road <u>usage</u> following a weather disaster.
- 3. Recommend Governments establish Bailey Bridge type manufacturing in Australia as a strategic asset, for general disaster relief and private user consumption.

#### **Re Rural Housing**

- 1. Oblige the Tweed Council to change the Local Environmental Plans for rural second dwellings as an immediate relief to the critical housing shortage in the Shire.
- 2. Set the rural second dwelling standard so that not more than 1% of the property is used to build a second dwelling. Furthermore, the size of any second dwelling should be limited to no less than 60 m<sup>2</sup> and not more than 140 m<sup>2</sup>.

#### Subject; - Roads and Bridges:

This Submission part is focused particularly on the shire's <u>more rural communities</u> and the prioritisation and process of repairs by Tweed Shire Council to weather-damaged roads and bridges in those areas. Rural communities are usually reliant on one or two sole roads or bridges to provide access between their homes/businesses and all medical/police/fire services, emergency services, social/family connections, business stock, customers/patrons, schools, food supplies, fuel, repairs and servicing, maintenance and equipment services, communications, finances, entertainment and much more. Limited road usage is worrying for all — the loss or potential loss of road usage is frightening for some and terrifying for many.

In respect of the repair of road and bridge damage, there is a detrimental dichotomy between the objectives of the Council and the objectives of adversely affected communities.

- A. The Council sees road/bridge damage as an administrative/functional problem.
- B. The community knows that road and bridge damage can/will cause severe interruption to road usage which will adversely affect its social fabric, well-being and stability.

#### The Status Quo.

When there is road or bridge damage, the council determines;

- o the work to be done
- the priority of each job
- the resources required
- the timeframe for commencement and the completion of repairs.

<u>What is lacking</u> is a failure by Council to appreciate the significant stress, uncertainty and anxiety caused by these flood events in rural communities. The loss, prospective loss, or irregular restrictions of community road usage is disconcerting and causes havoc in rural communities.

The damage caused by the denial or reduction in road usage to a community's psychological, economic and social disruption far outweighs any inconvenience or cost to Council.

<u>What is lacking</u> is a failure of Council to consult with an affected community; a) as to the impact that road/bridge damage is/will have on that community and b) advice to the community on Council's plan (including timing) to resolve the damage and c) advice to the affected community as to the priority basis on which their damage is assessed and the repairs are to be implemented and d) why any advice, suggestions, or recommendations of the community were rejected.

<u>What is lacking</u> is a Council policy and practice to prioritise concerted action to provide effective (if temporary) broad community road usage. <u>All resources</u> must be directed at establishing community road usage at least for personal use – then graduating to heavier workload capacities as soon as possible.

<u>What is lacking</u> is a Council policy and practice that empathetically and objectively analyses and prioritises the scope and adverse effect that particular road/bridge damage is causing to a community.

<u>What is lacking</u> is a change in policy to stop the repeated implementation of road and/or bridge repairs which consistently fail. Major waterways and landslips have been repaired in such a way that too many repeatedly fail in subsequent events, sometimes as often as 4 times. The accumulative cost of these failed repairs would be much more than one repair that was done properly in the first instance.

<u>What is lacking</u> is a willingness of Council to consider and pursue ALTERNATE means (including temporary measures) to alleviate the harm being caused by road or bridge damage. Council seems disinclined to investigate means other than those traditionally used by Council to repair damaged roads or bridges (See addendum below on repair options including temporary Bailey Bridges or similar).

#### The Community's Stand Point:

- It is assumed that the role of Council is to best serve the social wellbeing/welfare of the community before expediting the explicit practical/material functions of Council.
- If serving the social interests of the community has primacy, then Council must take the prioritisation lead from the community (and offer advice).
- If expediting the explicit material functions of Council takes or is given primacy, then Council takes the lead and addresses the road and bridge repairs as they determine with only passing regard to the adverse social and other impacts on the affected communities. That situation seems contrary to provisions of the Local Government Act.

#### The Issues for the Flood Inquiry.

- Who determines how repairs are prioritised?
  - o Who should prioritise repairs?
  - o How are community views incorporated in repair planning?
  - What balancing method should be used to prioritise repairs that incorporate both the councils' and community needs?
- What are the criteria used to determine the priority of repairs?
  - What Council and community interest should determine the priority of repairs
- How and at what stage should the Council's planning priorities be conveyed to the community.

 What mechanisms need to be established to ensure the community is timely and fully aware of the repair matters.

Explaining the current dichotomy when road (including bridge) damage stops/harms community usage;

- 1. <u>The council</u> ultimately determines how it chooses to repair the road damage with an apparent preference to do so economically, passably and with minimal scrutiny.
- 2. But <u>the community's priority</u> is the restoration of reasonable road usage, preferably on a fully and properly restored road but if not, then <u>by any means</u> even if it is only temporary and <u>especially if the restoration will take more than a week</u>. Using a road in any condition including by long-term temporary means is better than being denied road usage.

The Council uses 3 primary methods to repair road damages;

- a. if the road is obstructed by land slips, debris, or road surface damage –
   <u>Council Solution</u>: the obstruction is graded from the road and where necessary the road resurfaced.
- b. if the road itself is partially washed away or partly collapses through a landslip the affected part is closed.

Council Solution: the remaining part is left open for traffic if it is safe to do so.

c. if the road itself is completely washed away or collapses through a landslip, or is unsafe, the road is closed.

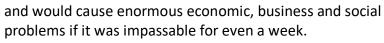
Council Solution: the road remains closed until;

- i. the washed away or collapsed part is refilled and resurfaced or
- ii. full remedial action is taken and the road is repaired/resurfaced.
  - a. This could include installing a bridge or rerouting the road.
- d. Under normal work situations outside of flooding or related events where road or bridge damage is identified, Council usually does satisfactory repair work.

#### Landslip & Wash away Repair Practice

The Council's usual <u>landslip or wash away repair practice</u> is to fill the landslip void as soon as possible. The problem with this approach is that <u>the cause of the landslip or wash away</u> is not resolved.

The Black Drain crossing (Tweed Valley Way) is a classic example. The road is a significant thoroughfare



The road was washed away in 1954. It washed away again in March 2017. And it washed away in February 2022.

The cause in each instance has been the same. The problems created in each case were the same. The failure of the repairs in each case was the same.

There is a considerable expense in filling the wash away and resurfacing the area each time there was a damaging weather event.

In each instance, the cause of the problem was not resolved. Subsequently, resolving the problem would

have meant digging up and removing the infill.



However, this would be very difficult because the infill would be unstable and require the closure of the road and the creation of a complicated road bypass system.

However, the road on either side of the wash away is stable. It would have been possible to temporarily bridge the wash away in the first instance (see Bailey Bridge notes below). This would have enabled repairs to be carried out without having to do any infill in the first instance. Traffic could have flowed even if restricted to a single lane bridge crossing but it would have allowed sufficient room for effective long-term remedial engineering to occur before the wash away area was refilled.



Two other instances of the same landslip repair practices have occurred on Zara and Limpinwood Road near Tyalgum NSW. There have been 2 previous occasions where the landslips have occurred in the same place. On both occasions, the landslips have been infilled. No remedial action was taken to prevent a recurrence of the same cause.

If either of these landslips causes the closure of this road then the Tyalgum District valley in which about 1500 or more people live will have no vehicular access to the outside world.

And even if a pedestrian crossing was possible, there is no means to get beyond the landslip to any other community servicing location.

Zara St – Tyalgum Note the previous underlying layer of asphalt road surface,



This situation is repeated multiple times in every serious weather event across the shire. Repairs that persistently fail are used again despite the evidence that the same loss of service will likely occur during the next serious weather event. Repeatedly using a process that fails while each time expecting a more favourable outcome is poor administration at best.

It is acknowledged that on occasions a short-term infill repair may be necessary given the location, the size of the problem and the availability or suitability of using temporary bridging. And it is also acknowledged that not every road landslip or wash away damage can be remedied or repaired by use of temporary bridging measures. But if an affected community is consulted before a council decision is made on how best to maintain community road usage over an anticipated period, there will be considerably less stress and angst in the community as to the plan moving forward.

Limpinwood Road – Limpinwood near Tyalgum.

#### The temporary bridging problem

- The Tweed Council has decided that temporary bridging is either unnecessary or undesirable. Suggestions for Council to consider using Bailey Bridges or a similar equivalent have been rejected by Council.
  - Council has not explained its reason for that decision.
- 3. There appears to be no stockpile of temporary bridging readily available in Australia. It appears that no government or local instrumentalities such as State Emergency Services (SES) have made any effort or have any plan to secure a reserve of temporary bridging.
- 4. Research indicates there are many Bailey Bridge sources in China and a few others in the UK and the USA. Another form of the temporary bridge is made in France and is available in Australia. This bridge seems more complex and appears to require more resources to build.
- 5. In every weather emergency, be it a flood or fire, bridges are destroyed or become unserviceable. But because there are no readily available temporary bridging options, councils are repeatedly obliged to resort to temporary road infills or road closures with the inevitable adverse effect on the economy, businesses and the community social fabric.

#### **Subject; Rural Housing**

#### Background

The Tweed Shire has an appalling shortage of rural dwellings. This was an intentional policy of the Council. Consequently, many families are divided with some family members living on rural properties while others are living in town/urban areas. Building a second dwelling for care support for ageing landholders will not be permitted by Council. Council permissions to build rural workers' accommodation is virtually impossible to get past Council. Building a 60 m² cabin as a second dwelling for income purposes is not practical and could only be used for one person and only on 10 ha properties. This situation is unnecessary, impractical and illogical and the consequential adverse effect was seriously exacerbated by the 2022 weather event. The 5 Shire's surrounding the Tweed Shire all permit second dwellings on rural properties. Second dwellings (in Local Environment Plans) are defined as "a second dwelling which is not connected to the primary dwelling".

Tweed Shire has banned all second dwellings on rural properties for many years despite years of pleading from rural landholders to allow them to be built at the landholder's expense. In 2020 Council permitted 10 ha properties to have a second dwelling of no more than 60 m<sup>2</sup> to be built. This size dwelling is regarded as a 'granny flat'. It is totally unsuitable for a multiple occupancy dwelling.

Council's reason for the ban is an NSW ministerial edict requiring landholders to preserve as much agricultural land as possible. The rural hinterland is North, West and South of Murwillumbah. There are cane growing areas (flood-prone) and some beef cattle areas but the rest of the hinterland is generally unsuited for anything other than hobby farming. Virtually nobody on hobby farms can make a living from agricultural production.

Construction of rural second dwellings would be at the landholder's expense. There would be no cost to the Shire. It is estimated that more than 600 landholders want second dwellings on their properties as soon as possible.

It is estimated that there are over 1000 substandard illegal rural second dwellings in the Shire. The Council created this situation because it has refused permission for the second dwellings to be built

Consequently, landholders with a desperate need for second dwellings – for growing children, extended families or income have been forced to build illegally. If second dwellings were permitted those substandard dwellings would have to comply with all building codes.

#### Solution

Rural landholders want to use no more than 1% of their property to build a second dwelling. And they propose to limit any second dwelling to no less than 60 m<sup>2</sup> and not more than 140 m<sup>2</sup>. Most rural landholders would use less than 1% for a second dwelling.

#### For example;

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1 ha (10,000 \text{ m}^2) property could have a 100 \text{ m}^2 cabin leaving 9900 \text{ m}^2 for agriculture 3 ha (30,000 \text{ m}^2) " " 140 \text{ m}^2 " " 29,860 \text{ m}^2 " " 140 \text{ m}^2 " " 99,860 \text{ m}^2 " " 99,860 \text{ m}^2 " "
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Most rural properties in the Shire are more than 1 ha.

There is no legitimate reason to prevent landholders from using 1% or less of their property for a second dwelling. That would not objectively harm any agricultural production. Over 3000 people signed a petition asking for second dwellings to be permitted in the Tweed Shire. The council rejected that outright save for the provision of 60 m<sup>2</sup> granny flats on 10 ha+ properties.

Construction of rural second dwellings would be at the landholder's expense. There would be no cost to the Shire. It is estimated that more than 600 landholders want second dwellings on their properties as soon as possible. It is estimated that there are over 1000 substandard illegal rural second dwellings in the Shire. Council has refused permission for the second dwellings to be built causing desperate landholders to build illegal substandard second dwellings for growing children, extended families, farmworkers or income.

However, to best resolve the Shire's housing shortage, second dwellings should be built for use as permanent occupancy – not for AirB&B. This could be achieved by creating separate Local Environment Plan categories respectively for permanent residency (long-term rental) and AirB&B.

Building approvals for the separate categories could facilitate long-term rental/permanent residency applications compared to building approvals sought for AirB&B facilities. The registered purposes of the respective dwellings would be binding and must be difficult to change (at least for 5 years). As of November 2021, all NSW AirB&B must be registered and strong controls have been put on their usage. This would help ensure that building approvals would have to comply with the intended purpose of the dwelling.

It is strongly urged that the Independent Flood Inquiry note the above information concerning housing shortages and homelessness in the Tweed Shire. There is no logical reason for this situation to continue. Though the housing problem and the homelessness existed in the Shire before the floods, it is a fact that the situation caused by the floods has now seriously exacerbated that problem. There is now a very serious need for housing and homelessness relief.

The fastest most economical and easy way to resolve this situation is to allow rural landholders at their own expense to build a second dwelling for permanent accommodation on their property. No new estates need to be established, no new roads cut or facilities or services provided.

The Inquiry is urged to draw the attention of the Northern Rivers Reconstruction Corporation to this current deplorable and unnecessary housing situation. The Reconstruction of the Tweed Shire with adequate and suitable rural housing would be a creditable and worthy outcome.

# **Bailey Bridges**



Bailey Bridges were invented during the Second World War. Churchill claimed that without Bailey Bridges the war may have been forced to a stalemate. In any disaster where there are serious disruptions to communities by road and bridge failures the application of Bailey Bridges must be objectively considered in the interests of affected communities.

Bailey Bridges are not suitable for all situations. The primary criteria for their use are that the land

on either side of that which needs to be bridged is solid and firm enough to take the weight of the bridge and traffic.

The Scenic Drive at Bilimbil has been closed even though a portion of the road remains intact. However, that portion is unstable and would most likely collapse under constant traffic.

Nonetheless, the area has stable land on both sides of the landslip. A Bailey Bridge could be constructed 1) sitting on the existing roadway and supported by the stable land on either side or 2) a Bailey Bridge could have been constructed above the roadway on the stable land but using concrete blocks to lift the bridge above the existing roadway.

Whichever way a Bailey Bridge was best installed, it would have meant that the Scenic Drive roadway would be open for use. Similarly, if either of the landslips in the Tyalgum area had effectively cut the road beyond immediate repair, Bailey Bridges could have been a temporary fix. They would have been sufficiently robust to give the community confidence as to their safety and well-being. As matters stand both landslips have had stopgap landfills. The cause of the problem in each case has not been addressed. When the second round of rain events was approaching in mid-May the apprehension in the community was palpable. It was clear the

council had no plan other than to keep infilling any further slips in the hope that the situation would not deteriorate further.

The Tyalgum community lived on a knife-edge for a week and a half before the rain event wondering whether it would be sufficient to cut them off. Then after the rain, there was apprehension as to whether there had been enough rain to cut them off. Fortunately, neither situation eventuated.

However, council has now commenced some sort of remedial action in the gully adjacent to the Zara Street road slip. It is not an infill. But it does not look as though it has any capacity to release water under the road. It looks as though it will partially dam the gully which would only put more pressure on the likelihood of another landslip. The community has no idea what the remedial action is - whether it is temporary or permanent. Whether it is intended to resolve the problem of the landslip or simply provide some preventive measure to minimise any immediate risk.

The Tyalgum District and Village are primarily serviced by Tyalgum Road. It is now been closed for more than 2 months because of an extensive landslip. The landslip covers more than 60 m of road length and has an underlying problem that the land causing the slip may cover acres. It requires an enormous amount of work to resolve. As matters stand the district residents on average used to take 25 minutes (for some 40 minutes) from Tyalgum to the main shopping and business centre of Murwillumbah. Now it is a 40 minute (for some 60 minutes) trip over a narrow, winding third-rate road, riddled with potholes and punctuated by 2 significant landslips and one potential but critical landslip in-waiting.

There has been one circular from Council 2 months ago, advising that repairs "may take 6 to 12 months". There's been no consultation with the local community at all. Information found on circulars relating to other landslips indicates that there have only been preliminary Geotech work on Tyalgum Road. More intensive Geotech work may be due in a month or so and the results may be available in August. That takes care of '6' of the "6 to 12" months expected for repairs. And no actual work will have commenced.

It was suggested to Council that they consider using temporary measures such as a Bailey Bridge. The suggestion was rejected out of hand. There has been no explanation why it has been rejected. It is unlikely that Tyalgum Road would be suitable for temporary measures like Bailey Bridges. However, it would have been courteous if nothing else to explain to the frustrated and upset residents of the Tyalgum District why their suggestion to use Bailey Bridges was rejected.

An objective analysis of the number of bridges, roads, causeways, landslips, culverts and other transport ways that have been rendered unusable in this shire and other Northern Rivers areas would have identified hundreds of locations where Bailey Bridges could have been effectively erected. All those places still waiting for road or bridge repairs and/or replacements (some of which will be stopgap - liable to fail -patch-ups) could have been resolved temporarily more than 2 months ago. (See 11 MAY 2022 –My Road closures and under caution below)

What is beyond comprehension is that authorities, particularly the Tweed Shire Council have abandoned the adversely affected communities by applying priorities that best suits Council procedural functions and least suits communities under stress.

All agencies, the local council, emergency services, State and Federal governments have all failed in their responsibilities to maintain community services, protect a community's economic viability and to care for a community's social fabric.

There is a lack of imagination and will to best serve the public interest. Priorities of authorities and particularly Tweed Council are askew. The Inquiry should consider this predicament.

This submission is offered for the consideration and relevant action by the Inquiry.

Peter Bennett

# Bailey Bridge for Temporary Bridge— Easy to Repair and Easy to Transport





Under fair conditions, only 20 people are needed to assemble a short single-layer temporary Bailey bridge in 6 to 8 hours.

According to the increase in the load and the number of layers, the duration will increase accordingly, but the average construction time of the Bailey bridge is generally 24 hours. In practice, a Bailey bridge of 100m in length could be assembled within 36 hours. The Bailey bridge is composed of many individual prefabricated modular Bailey panels.





The bridge body components can be loaded into small trucks. A convoy of several trucks can move everything needed for a complete bridge. No special tools, skills or heavy equipment are required.

Model: HZCB100

• Bridge truss height: 1.448m

- Net width of bridge deck: Standard single lane 3.277m, extra width single lane 4.2m
- Design span: the maximum span of a single span is 60.96 meters (200 feet)
  - Double/triple or stacking side panels will greatly extend the span of a bridge.
- Sidewalk: can be configured according to needs
- Deck material: Wood or steel
- Bailey Panel Dimension: 3.048(10ft)\*1.448m
- Design load: American Bridge Load Standard HS-15, HS-20, HS-25

HS refers to Tonnage.

# 11 May 2022 - My Road - Road Closures and Road under caution.

Bartletts Road, Eviron Tweed Shire  Cadell Road - Mebbin Forest National Park  Tweed Shire	Council C	1 20.0		
Forest National Park				30-03-2022 10:43:06 AM
Boundary	Council <mark>C</mark> l			30-03-2022 10:42:54 AM
Chowan Creek Tweed Shire	Council Cl			31-03-2022 7:31:30 AM
Commissioners Creek Tweed Shire Road	Council Cl			30-03-2022 10:42:55 AM
Mebbin Forest Road - Tweed Shire Mebbin Forest National Park Boundary	Council C			30-03-2022 10:42:54 AM
Reserve Creek Road Tweed Shire	Council C			30-03-2022 10:43:03 AM
Scenic Drive north of Simpson Drive, Bilambil Heights  Tweed Shire	Council <mark>C</mark> l			30-03-2022 10:42:52 AM
South Chowan Road (Mt Tweed Shire Jerusalem National Park)	Council C			30-03-2022 10:42:54 AM
Tyalgum Road, about 950Tweed Shire m east of Van Den Broek Road	Council Cl			30-03-2022 10:43:03 AM
Adcocks Road, Stokers Tweed Shire	Council Ca			30-03-2022 10:42:52 AM
Siding				
Aults Road, Uki Tweed Shire	Council Ca			30-03-2022 10:43:01 AM
		10:43 ution 30-03	3:01 AM 3-2022	
Aults Road, Uki Tweed Shire  Balfours Road, Tweed Shire	· Council Ca	10:43 ution 30-03 10:42 ution 30-03	3-2022 2:50 AM	10:43:01 AM 30-03-2022
Aults Road, Uki  Balfours Road, Bungalora  Tweed Shire	: Council Ca	10:43 ution 30-03 10:42 ution 30-03 10:42 ution 06-04	3:01 AM 3-2022 2:50 AM 3-2022 2:53 AM	10:43:01 AM 30-03-2022 10:42:50 AM 30-03-2022

D11 C1- D 1	T 101' C '1	C 1.	20.02.2022	20.02.2022
Byrrill Creek Road - Byrrill Creek Bridge	Tweed Shire Council	Caution	30-03-2022 10:42:49 AM	30-03-2022 10:42:49 AM
Carool Road, Bilambil	Tweed Shire Council	Caution	30-03-2022 10:43:01 AM	30-03-2022 10:43:01 AM
Cedar Creek Road, Byrrill Creek	Tweed Shire Council	Caution	30-03-2022 10:42:53 AM	30-03-2022 10:42:53 AM
Chauviers Road, Upper Crystal Creek	Tweed Shire Council	Caution	30-03-2022 10:43:01 AM	30-03-2022 10:43:01 AM
Clothiers Creek Road - Condong End	Tweed Shire Council	Caution	30-03-2022 10:43:03 AM	30-03-2022 10:43:03 AM
Clothiers Creek Road, Nunderi	Tweed Shire Council	Caution	04-04-2022 9:32:26 AM	04-04-2022 9:32:26 AM
Coalmine Road	Tweed Shire Council	Caution	30-03-2022 10:42:54 AM	30-03-2022 10:42:54 AM
Cobaki Rd near Robinsons Rd Intersection	Tweed Shire Council	Caution	01-04-2022 2:31:32 PM	05-03-2022 4:05:22 PM
Commercial Road, Murwillumbah	Tweed Shire Council	Caution	30-03-2022 10:43:00 AM	30-03-2022 10:43:00 AM
Costellos Road, Doon Doon	Tweed Shire Council	Caution	30-03-2022 10:42:54 AM	30-03-2022 10:42:54 AM
Couchy Creek Road, Numinbah	Tweed Shire Council	Caution	30-03-2022 10:42:54 AM	30-03-2022 10:42:54 AM
Cranneys Road North Tumbulgum	Tweed Shire Council	Caution	30-03-2022 10:43:00 AM	30-03-2022 10:43:00 AM
Cudgen Rd - Tweed Valley Hospital Project	Tweed Shire Council	Caution	30-03-2022 10:43:07 AM	30-03-2022 10:43:07 AM
Cudgera Creek Road, Cudgera Creek	Tweed Shire Council	Caution	07-04-2022 2:07:52 PM	07-04-2022 2:07:52 PM
Dixons Road, Burringbar	Tweed Shire Council	Caution	30-03-2022 10:43:00 AM	30-03-2022 10:43:00 AM
Doon Doon Road, Doon Doon	Tweed Shire Council	Caution	30-03-2022 10:42:49 AM	30-03-2022 10:42:49 AM
Dulguigan Road - Hogans Road to Urliup Road	Tweed Shire Council	Caution	31-03-2022 9:24:37 AM	31-03-2022 9:24:37 AM
Dungay Creek Road / Tomewin Road intersection	Tweed Shire Council	Caution	30-03-2022 10:42:51 AM	30-03-2022 10:42:51 AM
Edwards Lane	Tweed Shire Council	Caution	30-03-2022 10:42:55 AM	30-03-2022 10:42:55 AM
Garden of Eden Road, Tomewin	Tweed Shire Council	Caution	30-03-2022 10:43:00 AM	30-03-2022 10:43:00 AM
Geles Road	Tweed Shire Council	Caution	30-03-2022 10:42:56 AM	30-03-2022 10:42:56 AM
Hazelbrook Road, Smiths Creek	Tweed Shire Council	Caution	30-03-2022 10:43:00 AM	30-03-2022 10:43:00 AM

Tweed Shire Council	Caution	30-03-2022 10:42:56 AM	30-03-2022 10:42:56 AM
Tweed Shire Council	Caution	01-04-2022 2:30:12 PM	10-03-2022 10:09:53 AM
Tweed Shire Council	Caution	30-03-2022 10:43:01 AM	30-03-2022 10:43:01 AM
Tweed Shire Council	Caution	30-03-2022 10:42:55 AM	30-03-2022 10:42:55 AM
Tweed Shire Council	Caution	30-03-2022 10:42:59 AM	30-03-2022 10:42:59 AM
Tweed Shire Council	Caution	30-03-2022 10:42:55 AM	30-03-2022 10:42:55 AM
Tweed Shire Council	Caution	30-03-2022 10:42:59 AM	30-03-2022 10:42:59 AM
Tweed Shire Council	Caution	30-03-2022 10:42:59 AM	30-03-2022 10:42:59 AM
Tweed Shire Council	Caution	30-03-2022 10:42:59 AM	30-03-2022 10:42:59 AM
Tweed Shire Council	Caution	30-03-2022 10:42:59 AM	30-03-2022 10:42:59 AM
Tweed Shire Council	Caution	30-03-2022 10:42:59 AM	30-03-2022 10:42:59 AM
Tweed Shire Council	Caution	30-03-2022 10:42:50 AM	30-03-2022 10:42:50 AM
Tweed Shire Council	Caution	30-03-2022 10:43:02 AM	30-03-2022 10:43:02 AM
sTweed Shire Council	Caution	30-03-2022 10:42:49 AM	30-03-2022 10:42:49 AM
Tweed Shire Council	Caution	30-03-2022 10:42:55 AM	30-03-2022 10:42:55 AM
Tweed Shire Council	Caution	30-03-2022 10:42:58 AM	30-03-2022 10:42:58 AM
Tweed Shire Council	Caution	30-03-2022 10:42:51 AM	30-03-2022 10:42:51 AM
Tweed Shire Council	Caution	14-03-2022 6:22:48 PM	14-03-2022 6:22:48 PM
Tweed Shire Council	Caution	30-03-2022 10:42:52 AM	30-03-2022 10:42:52 AM
Tweed Shire Council	Caution	30-03-2022 10:42:58 AM	30-03-2022 10:42:58 AM
Twood Shire Council	Caution	07-04-2022	07-04-2022
I weed Shife Council	Caution	2:11:24 PM	2:11:24 PM
	Tweed Shire Council  Tweed Shire Council	Tweed Shire Council Caution  Tweed Shire Council Caution	Tweed Shire Council   Caution   01-04-2022   2:30:12 PM

Numinbah Rd - Pat Smiths Crossing	Tweed Shire Council	Caution	30-03-2022 10:43:03 AM	30-03-2022 10:43:03 AM
Numinbah Road	Tweed Shire Council	Caution	30-03-2022 10:42:49 AM	30-03-2022 10:42:49 AM
Numinbah Road	Tweed Shire Council	Caution	30-03-2022 10:42:49 AM	30-03-2022 10:42:49 AM
Numinbah Road - Queensland Road to l Harbour	Tweed Shire Council Boat	Caution	30-03-2022 10:43:02 AM	30-03-2022 10:43:02 AM
Ophir Glen Road	Tweed Shire Council	Caution	05-04-2022 6:53:59 AM	05-04-2022 6:53:59 AM
O'Reillys Road, Numinbah	Tweed Shire Council	Caution	30-03-2022 10:42:56 AM	30-03-2022 10:42:56 AM
Palmers Road	Tweed Shire Council	Caution	30-03-2022 10:42:54 AM	30-03-2022 10:42:54 AM
Pearl Street, Kingscli	ff Tweed Shire Council	Caution	30-03-2022 10:43:04 AM	30-03-2022 10:43:04 AM
Piggabeen Road	Tweed Shire Council	Caution	01-04-2022 2:33:12 PM	31-03-2022 9:24:55 AM
Pinnacle Road Pumpe	enbilTweed Shire Council	Caution	30-03-2022 10:42:58 AM	30-03-2022 10:42:58 AM
Pumpenbil Road Pumpenbil	Tweed Shire Council	Caution	30-03-2022 10:43:01 AM	30-03-2022 10:43:01 AM
Ripps Road Stokers Siding	Tweed Shire Council	Caution	30-03-2022 10:42:58 AM	30-03-2022 10:42:58 AM
Rob Cole Road	Tweed Shire Council	Caution	30-03-2022 10:42:55 AM	30-03-2022 10:42:55 AM
Round Mountain Roa	nd Tweed Shire Council	Caution	06-04-2022 11:05:57 AM	06-04-2022 11:05:57 AM
Rowlands Creek Road	d Tweed Shire Council	Caution	30-03-2022 10:42:56 AM	30-03-2022 10:42:56 AM
Rowlands Creek Road	d Tweed Shire Council	Caution	07-04-2022 2:09:16 PM	07-04-2022 2:09:16 PM
Scenic Drive between Mount Bilinga Circui and Warringa Drive, Bilambil Heights		Caution	30-03-2022 10:42:53 AM	30-03-2022 10:42:53 AM
Settlement Road	Tweed Shire Council	Caution	30-03-2022 10:42:55 AM	30-03-2022 10:42:55 AM
Skyline Drive, Tweed Heads West	Tweed Shire Council	Caution	30-03-2022 10:42:58 AM	30-03-2022 10:42:58 AM
Smiths Creek Road	Tweed Shire Council	Caution	30-03-2022 10:43:03 AM	30-03-2022 10:43:03 AM
Smiths Creek Road, Stokers Siding	Tweed Shire Council	Caution	30-03-2022 10:43:03 AM	30-03-2022 10:43:03 AM

Sproules Road, Eungella	Tweed Shire Council	Caution	30-03-2022 10:42:58 AM	30-03-2022 10:42:58 AM
Stokers Road, Dunbible	Tweed Shire Council	Caution	30-03-2022 10:43:05 AM	30-03-2022 10:43:05 AM
Stokers Road, The Bloodwoods Road, Tunnel Road - Stokers Siding	Tweed Shire Council	Caution	30-03-2022 10:43:05 AM	30-03-2022 10:43:05 AM
Terranora Road, Terranora	Tweed Shire Council	Caution	30-03-2022 10:53:21 AM	30-03-2022 10:53:21 AM
Tomewin Road, Tomewi	n Tweed Shire Council	Caution	30-03-2022 10:43:02 AM	30-03-2022 10:43:02 AM
Tumbulgum Road, Murwillumbah	Tweed Shire Council	Caution	30-03-2022 10:43:01 AM	30-03-2022 10:43:01 AM
Tweed Coast Road south of Cudgen Road	Tweed Shire Council	Caution	30-03-2022 10:42:52 AM	30-03-2022 10:42:52 AM
Tweed Valley Way - Burringbar Range	Tweed Shire Council	Caution	30-03-2022 10:43:02 AM	30-03-2022 10:43:02 AM
Tweed Valley Way - Dinseys Creek to Farmer Market	Tweed Shire Council	Caution	30-03-2022 10:43:01 AM	30-03-2022 10:43:01 AM
Tweed Valley Way at Blacks Drain	Tweed Shire Council	Caution	30-03-2022 10:43:02 AM	30-03-2022 10:43:02 AM
Tweed Valley Way at Tumbulgum	Tweed Shire Council	Caution	04-04-2022 9:20:33 AM	04-04-2022 9:20:33 AM
Tweed Valley Way southbound at M1 interchange (Oakes Ave)	Tweed Shire Council	Caution	04-04-2022 9:46:03 AM	04-04-2022 9:46:03 AM
Tweed Valley Way, abou 500 m south of Crabbes Creek Road turnoff	t Tweed Shire Council	Caution	30-03-2022 10:43:04 AM	30-03-2022 10:43:04 AM
Tweed Valley Way, Crabbes Creek	Tweed Shire Council	Caution	30-03-2022 10:43:05 AM	30-03-2022 10:43:05 AM
Tweed Valley Way, Mooball	Tweed Shire Council	Caution	30-03-2022 10:43:05 AM	30-03-2022 10:43:05 AM
Tyalgum Creek Road Tyalgum	Tweed Shire Council	Caution	30-03-2022 10:42:57 AM	30-03-2022 10:42:57 AM
Upper Burringbar Road	Tweed Shire Council	Caution	30-03-2022 10:42:56 AM	30-03-2022 10:42:56 AM
Urliup Road Urliup	Tweed Shire Council	Caution	01-04-2022 2:28:50 PM	30-03-2022 10:42:57 AM
Urliup Road, Urliup	Tweed Shire Council	Caution	01-04-2022 2:29:34 PM	30-03-2022 10:42:57 AM
Zara Road	Tweed Shire Council	Caution	30-03-2022 10:43:02 AM	30-03-2022 10:43:02 AM

Balfours Road, Bungalora	Tweed Shire Council	Roadworks	28-02-2022 4:33:55 PM	28-02-2022 4:33:55 PM
Corner Heffron and Oxley streets, Tweed Heads South	Tweed Shire Council	Roadworks	30-03-2022 10:43:05 AM	30-03-2022 10:43:05 AM
Creek Street, Hastings Point	Tweed Shire Council	Roadworks	29-04-2022 3:19:41 PM	29-04-2022 3:19:41 PM
Cudgen Road	Tweed Shire Council	Roadworks	30-03-2022 10:52:10 AM	30-03-2022 10:52:10 AM
Ducat Street, Tweed Heads	Tweed Shire Council	Roadworks	30-03-2022 10:52:10 AM	30-03-2022 10:52:10 AM
Fingal Road, Fingal Head	Tweed Shire Council	Roadworks	20-04-2022 2:07:55 PM	20-04-2022 2:07:55 PM
Florin Lane, Murwillumbah	Tweed Shire Council	Roadworks	30-03-2022 10:43:04 AM	30-03-2022 10:43:04 AM
Laura Street and Elsie Street intersection, Banora Point	Tweed Shire Council	Roadworks	30-03-2022 10:42:53 AM	30-03-2022 10:42:53 AM
Marine Parade, Kingscliff	Tweed Shire Council	Roadworks	04-05-2022 1:51:09 PM	04-05-2022 1:51:09 PM
McLeod Street, Condong	Tweed Shire Council	Roadworks	30-03-2022 10:43:06 AM	30-03-2022 10:43:06 AM
Purlos Bridge, Ophir Glen Road, Upper Burringbar	Tweed Shire Council	Roadworks	30-03-2022 10:43:06 AM	30-03-2022 10:43:06 AM
Shackles Bridge, Upper Burringbar	Tweed Shire Council	Roadworks	13-04-2022 9:33:37 AM	13-04-2022 9:33:37 AM
Tombonda Road, Murwillumbah	Tweed Shire Council	Roadworks	30-03-2022 10:43:06 AM	30-03-2022 10:43:06 AM
Tweed Coast Road, Bogangar	Tweed Shire Council	Roadworks	29-04-2022 11:06:03 AM	29-04-2022 11:06:03 AM
Tweed Coast Road, Casuarina	Tweed Shire Council	Roadworks	02-05-2022 2:37:29 PM	02-05-2022 2:37:29 PM
Tweed Coast Road, Cudgen	Tweed Shire Council	Roadworks	30-03-2022 10:43:04 AM	30-03-2022 10:43:04 AM
Tweed Coast Road, Hastings Point	Tweed Shire Council	Roadworks	04-05-2022 1:41:57 PM	04-05-2022 1:41:57 PM
Tweed Coast Road, Kingscliff/Cudgen	Tweed Shire Council	Roadworks	30-03-2022 10:43:05 AM	30-03-2022 10:43:05 AM
Tweed Valley Way, Crabbes Creek	Tweed Shire Council	Roadworks	04-05-2022 2:02:59 PM	04-05-2022 2:02:59 PM
Tweed Valley Way, Mooball to Burringbar	Tweed Shire Council	Roadworks	02-05-2022 2:20:43 PM	02-05-2022 2:20:43 PM
Tweed Valley Way, Mooball to Byron Bay border	Tweed Shire Council	Roadworks	30-03-2022 10:43:04 AM	30-03-2022 10:43:04 AM

Tweed Valley Way,	Tweed Shire Council Roadworks ong	29-04-2022	29-04-2022
Quarry Road to Condo		3:09:47 PM	3:09:47 PM
Tweed Valley Way,	Tweed Shire Council Roadworks	02-05-2022	02-05-2022
Stokers Siding		2:30:16 PM	2:30:16 PM
Wollumbin Street,	Tweed Shire Council Roadworks	30-03-2022	30-03-2022
Murwillumbah		10:43:06 AM	10:43:06 AM