

13 October 2016

Our Ref: KFOR 16/76 Pt 1

General Manager
Tweed Shire Council
P O Box 816
Murwillumbah NSW 2484

Attention: Ray Clark

Dear Sir

Land and Environment Court Appeal No. 2016/178476 – Major Project Approval No. 08-0194
Modification No. 3 Kings Forest, Precinct 1 Service Station and Fast Food/Drinks Outlet

The current MP08_0194 MOD3 Application is before the Land and Environment. Several issues relating to the Old Bogangar Road/Tweed Coast Road intersection and proposed access arrangements to the service station/fast food/drink premises have arisen as follows:

1.0 OLD BOGANGAR ROAD/TWEED COAST ROAD INTERSECTION

Condition 27 of Major Project Approval No. 08_0194 (Kings Forest Stage One) is in the following terms:

"Old Bogangar Road Access

27

- 1) *Detailed design of the proposed intersection between the Old Bogangar Road service road and Tweed Coast Road, endorsed by the Director of Engineering and Operations of Tweed Shire Council (the Road Authority), shall be provided to the satisfaction of the Secretary within 24 months of the date of this approval.*
- 2) *The detailed design shall take into account the proximity of, and access arrangements at, the Kings Forest Parkway / Tweed Coast Road intersection, and the Precinct 1 access driveway, incorporating the relevant specifications of AUSTRROADS, Roads and Maritime Services, and Standards Australia.*
- 3) *Options to be considered to achieve compliant intersection arrangements shall include (but not be limited to):*
 - a. *Relocation of the Precinct 1 driveway to create a four-way intersection with old Bogangar Road;*
 - b. *Appropriate intersection treatment of the four-way intersection created by (a);*
 - c. *Provision of U-turn facilities on Tweed Coast Road;*
 - d. *Connection of Old Bogangar Road to Kings Forest Parkway.*
- 4) *Individual and adjacent intersection modelling be provided to ensure all movements achieve adequate levels of service, queue lengths and time delays, to the satisfaction of the Road Authority.*

- 5) Any preferred option that requires the realignment of Old Bogangar Road from its existing connection to Tweed Coast Road requires stakeholder consultation and separate planning approval from Council.
- 6) The detailed design shall be submitted to Council with an application under s138 of the Roads Act 1993 for approval prior to the issue of a construction certificate for any works on a public road."

In accordance with the provisions of Conditions 27, Bitzios Consulting prepared a submission to Council dated 16 October 2014. A copy of the submission including the Kings Forest Rural Retail Intersection Assessment, Bitzios, 16 October 2014 was emailed to Council Officers (Ray Clark and Danny Rose) on 17 October 2014. Specifically, the submission and accompanying Traffic Modelling Assessment was prepared to seek agreement from Council on the intersection configuration in order to proceed to detailed design stage.

Subsequently, Tweed Shire Council Traffic Engineer, Mr Ray Clark advised by email, dated 14 November 2014 as follows:

"The proposed layout as described in your document dated 16 October 2014 is consistent with previous discussions and I have no concerns with the progression of the design on this basis to satisfy Condition Item 27."

A copy of the submission to Council and Council's response is **attached**.

Bitzios Consulting has prepared an updated Traffic Impact Assessment (TIA) dated 5 October 2016. A copy of the Assessment Report is **attached**.

The TIA includes, at Appendix C, the Kings Forest Rural Retail Intersection Assessment prepared by Bitzios dated 16 October 2014.

The TIA addresses the proposed Service Station and Food/Drink Premises based on the amended Site Layout Plan (PUSH, Issue O).

The TIA contains the following conclusions:

The key findings of the Kings Forest Service Station traffic impact assessment are as follows:

- the site was previously approved for a "Rural Retail" development which included a GFA of 2,036m² and 135 parking spaces. This site generated a total of 122 trips in the AM and 244 trips in the PM peak hour;
- it is important to note that Condition Number 26 in the Consolidated Project Approval 08_0194 (incorporating Mods 1 and 2) states that 'a two lane roundabout shall be constructed in general accordance with Mortons Urban Solutions Drawing Number 12301-EMAW-101 (Amendment D) at the intersection of Tweed Coast Road and the Kings Forest Parkway prior to the release of the first residential lot in Precinct 5 or the development of Precinct 1'. The Service Station is located in Precinct 1;
- the development is calculated to generate 180 trips in the AM and 222 trips in the PM peak hour;
- the results of the Aimsun traffic model of Tweed Coast Road including the Service Station and Kings Forest residential development are as follows:
 - overall, the operations and performance of the traffic network is adequate to cater for both 2016 and 2026 demands;
 - queues and delays remain within acceptable thresholds and do not adversely impact the traffic network in the scenarios tested; and
 - the four lane (median divided) Tweed Coast Road configuration is sufficient to cater for traffic in 2016 but requires extensions by 2026 to the Tweed Coast Road northbound lanes and the Kings Forest Parkway approach to the roundabout as shown previously in Figure 3.16;

- a turn warrants assessment showed that the development access warrants an AUL and CHR treatments. The design of these treatments was undertaken in accordance with Austroads Guide to Road Design Part 4a: Signalised and Unsignalised Intersections;
- the development has provided car parking in excess of Council's requirements;
- the development provides 6 visitor and 12 staff bicycle parking spaces which is less than Council's requirement but considered appropriate given the type of land uses and that there is additional space for more bicycle parking should the need arise;
- the parking and internal road layout was designed in accordance with AS2890 and Council's Parking Code;
- the development has supplied an SRV and HRV parking spaces in accordance with Council's Parking Code;
- swept paths have shown that a RCV is able to enter and exit the site in a forward gear and access the bins in a safe and efficient manner; and
- the development has catered for active transport trips by including direct pedestrian links and crossing points.

We conclude that the proposed development does not introduce any significant traffic or transport impacts that would preclude its approval."

To demonstrate that the intersection configuration identified in the Bitzios Report and the amended Site Layout Plans is feasible, the Project Consulting Engineers (Mortons Urban Solutions) prepared an amended Indicative Plan and Section Tweed Coast Road and Kings Forest Parkway Ultimate Intersection. A copy of the plan is **attached**.

2.0 ACOUSTIC AND LIGHTING IMPACTS

The Stage 1 Kings Forest Major Project Approval No. MP08_0194 Environmental Assessment Report (JBA Planning Pty Ltd, November 2011) is accompanied by an Environmental Noise Impact Report (ENIR) (CRG, 11 March 2011, Annexure U).

The ENIR forms part of the Major Project Approval as the Environmental Assessment Report prepared by JBA is called up by Condition A3 of the Project Approval.

Section 6.0 (Page 18) of the ENIR contains the following recommendations in relation to the existing dwellings fronting Old Bogangar Road.

"For the 12 existing dwellings fronting the Tweed Coast Road (ie. directly to the north of Kings Forest Park Road) we recommend construction of a 2.5m high acoustic barrier fronting the Tweed Coast Road and Kings Forest Parkway to reduce the predicted levels to within 2dB of the Tweed Coast Road noise criteria; and below the Kings Forest Parkway criteria."

The recommendation was based on the originally proposed and approved Stage 1 Project Application, which included the Rural Supplies Building in Precinct 1.

MDA Consulting Engineers Pty Ltd prepared a Position Paper relating to external lighting impact assessment (Revised 5 October 2016, Issue D). The Position Paper indicates that the properties at 234, 238, 240 and 242 Old Bogangar Road will be able to view the façade illuminated signage of the service station and it is therefore proposed to mitigate any view impacts by increasing the height of the acoustic fence to 2.9m north of the Old Bogangar Road/Tweed Coast Road intersection.

The Landscape Statement of Intent **attached** shows the proposed landscaping treatment within the Tweed Coast Road/Old Bogangar Road road reserves to screen and soften the proposed acoustic fence.

In accordance with Condition 27(1), the Director of Engineering and Operations is requested to endorse the proposed intersection works, lighting, acoustic fencing and landscaping within the road reserve.

Please do not hesitate to contact Darryl Anderson should you require any further information in relation to this matter.

Yours faithfully
DAC Planning Pty Ltd

A handwritten signature in black ink, appearing to read 'D Anderson', is positioned above the printed name.

Darryl Anderson
Director

Encl.