4 November 2015

Our Reference: 15017
Council Reference: MCUI 4077/2006 (461843)

The Chief Executive Officer
Douglas Shire Council
Via email: enquiries@douglas.qld.gov.au

Attention: Neil Beck

Dear Neil,

RE: RESPONSE TO FURTHER ISSUES LETTER
PERMISSIBLE CHANGE AND EXTENSION TO THE RELEVANT PERIOD- APPROVED SERVICE STATION DEVELOPMENT AT 5946 DAVIDSON STREET, CRAIGLIE, LOT 1 ON RP739151

Further to council's further issues letter dated 16 September 2015, please find below our formal response to all information requested.

In support of this request, please find the following attachments to this response:

- Stormwater Drainage Report, prepared by Flanagan Consulting Group
- Amended Site Layout Plan (Drwg No. 03_E) with trees from survey overlayed

For ease of reference, we have adopted council's numbering and have provided commentary on each matter.

1) Recent flood modelling for Craiglie associated with drainage upgrades for the Port Pacific development has established a more up-to-date understanding of the Craglie stormwater environment. The drainage report submitted in support of the (Flanagan Consulting Engineers 2006) will need to be revised in line with this more recent modelling and the updated downstream parameters.

Comment:
The applicant has engaged Flanagan Consulting Group (Flanagan) to review the latest flood modelling for the catchment and provide comment on the design of the service station as currently proposed and subject to the permissible change application.

This stormwater drainage report is attached to this letter response, with key conclusions from the report referenced below:

- The report findings note that any significant filling through the site may increase flood levels in surrounding areas

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- The report notes the proposed design approach, of a raised concrete platform in place of fill, and confirms that where the under-side of the slab and supporting beams are above the 100 year ARI level, the proposal will not alter the existing flood levels of the site or the surrounding area.
- The report further notes that the service station building will be approximately 1m above the Q100 flood level
- The report considers that the site is able to be developed without adversely impacting on the existing hydraulic conveyance corridor

2) The revised model must also reconsider the roughness parameters adopted for this drainage path. Council officers consider the roughness values adopted in the 2006 model to be lower than would be anticipated for this drainage path. The review is required to assess the sensitivity of the model (capacity and flood levels) to increased channel roughness. Justification with photographs and appropriate drainage manual references is required to substantiate the roughness values selected in the modelling.

Comment:
The above has been factored into the revised stormwater drainage report (primarily sections 5.3 and 5.6).

3) As a more general comment, it appears there may be potential to optimise the site footprint further to reduce the intrusion into the drainage line and to reduce the extent of suspended slab. This may also have significant positive cost implications for the applicant.

Optimising the orientation of the building and the fuel bowsers and locating these as far south as possible appears to allow greater flexibility with the northern extent of the footprint. From the information provided it appears that turning templates can accommodate this site optimisation. From an engineering perspective it would also appear that it may offer drainage benefits through less intrusion into the drainage line.

Comment:
We have undertaken a number of layout revisions to establish the proposed / current layout as the most appropriate. Key to the design brief is separate truck and car refuelling areas to maximise convenience and safety for both types of patrons. In short, a reduction in the area of suspended slab requires the development footprint to push further towards the rear of the site. Two key design implications result from this scenario:

1. A reduction in suspended slab to the side results in a need to provide fill to the rear of the site to allow heavy vehicles sufficient turning provision. It is noted from the Flanagan report that additional fill over the site may have implications for flood storage – thereby further endorsing our current suspended slab design
2. A deeper but narrower site footprint raises issues with traffic management and reduces the ability for heavy vehicles to manoeuvre up the side of the car canopy – the wider suspended slab design is therefore considered safer from a traffic management perspective

Drawing from our experience in designing service stations, we submit to council that we have given the appropriate due consideration to all alternative design layouts and consider the proposed suspended slab option as the most relevant to the site and scale of the development. This is further supported by the Flanagan report endorsing the suspended slab design.

4) The response provided in your letter to the issue of vegetation loss indicates the removal of one tree (as arrowed in Figure 1). Notwithstanding this response, it would appear that there will be a total loss of vegetation along road frontage, given ingress and egress pavements, road widening and sight-line requirements. It will also be highly likely that the Raintree that is shown in Figure 1 as being retained, will also require removal.

As previously advised, this part of Craiglie is an important gateway into Port Douglas as a premium tourism destination of international renown. It was anticipated that a response referencing a survey plan would provide better clarification to this issue rather than photographs provided in the response.

Comment:
Refer to the amended site layout plan (Drwg No. 03_E) which now clearly identifies all trees along the street frontage, as identified by survey plan, onto the proposed plan. The trees highlighted in red are those which are expected to be removed.

With regards to council's query in relation to Figure 1 of our previous correspondence dated 11 August 2015 and again attached below, we submit that the trees indicated as being retained are those within the drainage culvert area which, when reviewing against the attached site layout plan, would be retained.

Figure 1: Southern view of the site frontage

As stated in our previous correspondence, we acknowledge the importance of the site serving somewhat of a gateway function into the town centre and express a willingness to comply with additional conditions of approval for any tree replanting where required. This is considered most appropriately addressed at operational works stage and within the detailed landscaping plan which will be prepared.

On balance, the proposed service station is considered a more appropriate form of development, with reduced site footprint, that the combined service station / fast food development originally approved by council. We therefore respectfully request council to now proceed with the determination of our permissible change / extension to relevant period request.

Please contact myself on 3854 2923 or via email at john.rowell@tfa.com.au if you have any further queries.

Yours faithfully,

John Rowell
Associate Town Planner
BA, MURP, MPIA