

Contact Andrew Norris

Our Ref P2309526JC01V01

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November 20, 2023

Byron Shire Council c/o Marsden Law Group Attn: Alicia Foley

Dear Alicia,

WASTEWATER AND STORMWATER MANAGEMENT – PROPOSED DEVELOPMENT OF 467 FEDERAL DRIVE, FEDERAL. LEC PROCEEDINGS 2023/00068084

The following is provided in response to development modifications and further justification provided by the applicant in the above matter, which are provided to seek to resolved stormwater and wastewater considerations in the statement of facts and contentions (**SOFACS**) as filed on April 6, 2023.

In describing the status of the contentions, reference is made to the following as the assumed 'current' documents, on which it is understood the Applicant is seeking to rely:

- Whitehead & Associates (November 13, 2023) 'Report on matters relating to on-site wastewater following s34 Conciliation Conference held on 7 August 2023Revision following amendment of plans to show relocation of stormwater retention basin'. [referred to as 'Whitehead Letter'].
- Floodworks (November 13, 2023) '467 Federal Drive, Federal NSW Stormwater Management Plan'. [referred to as '**Updated Stormwater Plan**'].
- Associated MUSIC and DRAINS modelling files provided by the applicant solicitors on November 13, 2023 via Marsdens Law Group. [Referred to as 'MUSIC model' and 'DRAINS model' respectively].
- Amitran Pty Ltd & U+I Building Studio (12/11/2023) Plan DA40 Revision H 'Proposed Site Area Schedule Plan'. [referred to as '**Plan DA40**'].

With the exception of Contention 3, Particular i (i), the contentions and particulars addressed in this letter have been adequately addressed.



1 Contention 3: Stormwater

1.1 Particular a

This particular is resolved as the consent authority can be satisfied, on the basis of the Updated Stormwater Plan provided, that the site stormwater management solution has been prepared in accordance with relevant Council controls, the LEP and industry best practice approaches to stormwater quality and quantity modelling.

1.2 Particular b

This particular is resolved as the consent authority can be satisfied, on the basis of the Updated Stormwater Plan provided, that the development is designed, sited and will be managed to avoid any significant adverse impacts on water quality and flows. The MUSIC model has demonstrated that the developed site shall generate no greater load of priority pollutants TSS, TN and TP than the undeveloped site. The DRAINS model has demonstrated that the post development flows from the site shall not exceed pre development flows for the range of storms up to the 1% AEP event.

1.3 Particular c

This particular is resolved as the consent authority can be satisfied, on the basis of the Updated Stormwater Plan provided, that the stormwater management system satisfies clause B3.2.3 of Chapter B3 of Part B of Byron DCP 2014. The MUSIC model demonstrates the water quality objectives, and the DRAINS model demonstrates the flow objectives, have been satisfied.

1.4 Particular d

The Updated Stormwater Plan and the wastewater system as described in the Whitehead Letter, as documented jointly on Plan DA40, resolve the past inconsistency between the stormwater and wastewater solutions on the site.

1.5 Particular e

The Updated Stormwater Plan adopts appropriate reuse rates for non potable uses on the site. The proposal no longer relies on reused effluent for toilet flushing.

1.6 Particular f

The Updated Stormwater Plan adopts industry standard reuse rates for external irrigation assuming 75% of landscaping is irrigated.

1.7 Particular g

The Updated Stormwater Plan and Plan DA40, resolve the past design flaws by relocating the raingarden to a position to which the majority of the site can drain.

1.8 Particular h

The Updated Stormwater Plan, DRAINS model and MUSIC model allow for the adequate assessment of the site stormwater solution. Further, the updated design allows for the conclusion that the solution now proposed is adequate and acceptable in accordance with BDCP and BLEP.



1.9 Particular i

Item (i) of the particular remains unresolved. The updated design (see SK-04 of the Updated Stormwater Plan) retains a > 1.0 m drop from the carpark level to the basin surface. A note that a 'Handrail for Level Change Greater Than 1m' has been provided. However, this is considered inadequate for a carpark. The requirement for a W-Beam safety barrier should be considered by Council Engineering staff and, in our opinion, should be imposed as a condition of consent.

Items (ii) – (iv) are resolved by the Updated Stormwater Plan.

2 Contention 4: Wastewater Management

2.1 Particular a

This particular is resolved as the consent authority can be satisfied, on the basis of the wastewater management solution detailed in the Whitehead Letter and on Plan DA40, that adequate arrangement have been made for the management of sewage as required pursuant to clause 6.6 of BLEP 2014.

2.2 Particular b

This particular is resolved as the consent authority can be satisfied, on the basis of the wastewater management solution detailed in the Whitehead Letter and on Plan DA40, that the wastewater management solution provided satisfies the requirements of Clause B3.2.2 in Chapter B3 of Part B of BDCP 2014.

2.3 Particular c (i) – (xiii)

The wastewater management solution detailed in the Whitehead Letter and on Plan DA40, is a full redesign of the solution previously proposed. The amended design uses conventional onsite solutions to achieve an appropriate site design. Modifications to the site development layout has facilitated the creation of irrigation areas suitable for conventional subsurface irrigation and removed the reliance on the effluent absorption system under the carpark and the reliance on toilet flushing effluent reuse. Proposed sewage treatment systems are conventional and acceptable in the context of the site.

2.4 Particular d

The amended onsite wastewater solution described in the Whitehead Letter and Plan DA40 do not raise the issues raised by the previous OSSM Report.

2.5 Particular e

The geotechnical recommendations for the carpark are no longer of consequence for the onsite wastewater solution as the solution described in the Whitehead Letter and Plan DA40 do not rely on effluent absorption beneath the carpark.



2.6 Particular f

The consent authority can now be satisfied that the proposed development incorporates adequate arrangement for the disposal and management of sewage as required pursuant to clause 6.6 of BLEP 2014.

3 Contention 5: Insufficient Information

3.1 Particular c

The Updated Stormwater Plan does not rely on the past reference XP-SWMM model, the DRAINS model provided adequately addresses matters of site hydrology and hydraulics for stormwater management purposes.

4 Contention 6: Suitability of the Site

As it relates to wastewater and stormwater the Updated Stormwater Management Plan, Whitehead Letter and Plan DA40 demonstrate the suitability of the site for the development proposed.

If you require any further information, please do not hesitate to contact our offices.

For and on behalf of

Martens & Associates Pty Ltd

Andrew Norris Director, Principal Engineer