



4th July, 2024

Stephen Targett
Director of Engineering Services
Junee Shire Council
29 Belmore Street
Junee NSW 2663
Stephen.Targett@junee.nsw.gov.au

Dear Stephen,

Re: Residential Subdivision
For: Troy Raulston Homes
Address: 14 John Potts Drive, Junee NSW 2663
Xeros Piccolo Reference: 230781

I refer to the proposed residential subdivision development at 14 John Potts Drive, Junee. Further to discussions between the Council and Xeros Piccolo Consulting Engineers regarding the site, particularly the fill material, I have the following comments to make.

The lot layout and the building envelopes will be manipulated in great detail to minimise incidents where buildings are located on any fill material, particularly material greater than 0.4 m deep. Furthermore, we have stated our intentions regarding the construction of houses to Aitken and Rowe Testing Laboratories, refer to the following email. Aitken and Rowe have made comments in red and have agreed that there are no technical obstacles, provided the extent of the fill is known and footings are supported through it. It should be noted that natural consolidation has taken place over many decades, and Aitken and Rowe agree with this. Further, measures during construction can be taken to ensure footings are extended into suitable natural material (including further geotechnical testing), further minimising any risk of buildings issues due to the existing fill.

As discussed previously with the Council engineer Stephen Targett, the developer is prepared to remove up to approximately 1 m of fill from the relevant sites. This will not only reduce the amount of fill, but it will also allow good site drainage to be achieved and, therefore, reduce potential saturation of the fill material. It is noted that that no moisture was identified in any of the boreholes.



5 Bye Street
Wagga Wagga NSW 2650
Phone (02) 69 255 855
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We also propose to apply for a variation in the building setback on a small number of selected lots, which will allow the houses to be moved away from the fill area and contribute to minimising construction in the deep fill.

The Council engineer Stephen Targett has advised that a limited number of lots, 6 in total in the proposed subdivision, would be allowed where houses could be constructed over fill material greater than 0.4 m. Based on the rigorous soil testing, the technical solutions available to the engineers, and the adjustment to the site levels and building setbacks, there is no technical reason to limit the number of sites. Our preliminary layouts indicate that 12 lots in total would be needed where fill exceeds 0.4 m. It is considered that this is not a significant number and therefore does not represent a significant risk for the developer, engineers, contractors, or the Council.

We ask that you make a DA determination on behalf of our clients.

Please contact our office if you require anything further.

Yours faithfully

XEROS PICCOLO CONSULTING ENGINEERS



PHILIP XEROS - Director

B.E. (HONS) L.G.E. MIEAust CPEng NER APEC Engineer IntPE (Aus)

From: Pete Forbes-Taber <Pete@artl.com.au>
Sent: Friday, 21 June 2024 5:03 PM
To: Saxon Xeros | Xeros Piccolo Consulting Engineers <saxon@xerospiccolo.com.au>
Cc: Philip Xeros | Xeros Piccolo Consulting Engineers <philip@xerospiccolo.com.au>; Jarrod Gornall <Jarrod@artl.com.au>
Subject: RE: 14 JOHN POTTS DRIVE JUNEE SOIL REPORT - 230781

G'day Saxon, please see comments in red below

Kind regards,

Peter Forbes-Taber
Geotechnical Engineer



Aitken Rowe Testing Laboratories Pty Ltd
4/2 Riedell St, Wagga Wagga, NSW 2650
PO Box 5158, Wagga Wagga, NSW 2650

Ph: (02) 6939 5555 | Mobile: 0435 293 762

NATA Accredited Geotechnical Labs since 1992.

From: Saxon Xeros | Xeros Piccolo Consulting Engineers <saxon@xerospiccolo.com.au>
Sent: Friday, June 21, 2024 1:26 PM
To: Pete Forbes-Taber <Pete@artl.com.au>; Jarrod Gornall <Jarrod@artl.com.au>
Cc: Philip Xeros | Xeros Piccolo Consulting Engineers <philip@xerospiccolo.com.au>
Subject: RE: 14 JOHN POTTS DRIVE JUNEE SOIL REPORT - 230781

Hello Jarrod and Pete.

We are looking to send an email/letter to Council outlining our position with respect to the subdivision, supporting the inclusion of a number of lots with uncontrolled fill with depths from 0.4-2m (roughly). As part of this, we would like you to review the below and provide comment.

We note the following:

- Based on the geotechnical report:
 - o The uncontrolled fill material is generally considered to be material cut from the site, noting that the underlying natural soil is granite and sandy clay. **ARTL agrees.**
 - o Neither the natural soil or the uncontrolled fill material is considered a reactive material, being sandy-clay in nature and composition **Clay-based material is considered moderately reactive, with no highly reactive soil encountered.**
 - o The uncontrolled fill is generally moderately dense, and noting that it has been in place for decades, it will therefore have undergone notable natural consolidation. **ARTL agrees.**
 - o On this basis, it is reasonable to leave the uncontrolled fill in place and provide a deep footing system with suspended slabs. Only landscaping, footpaths, and driveways will be placed on and be supported by the uncontrolled fill. **ARTL agrees based on the boreholes drilled.**
- We propose the following:

- In the proposed subdivision construction works, the sites will be graded to have good drainage and fall (minimum approximately 3%) and some of the existing uncontrolled fill be removed in this process. This will reduce risk of the uncontrolled fill undergoing significant settlement or consolidation due to poor site drainage
 - Further, individual site drainage and stormwater management (in accordance with AS3500 and AS2870) is considered reasonable to further reduce potential drainage issues
- At the time of building design and construction, individual site classifications with DCP tests will be undertaken to confirm the extent of uncontrolled fill. **ARTL agrees and highly recommends.**
- Proposed buildings would be designed to have deep footings (bored piers) and suspended slabs as appropriate. **ARTL agrees where fill deeper than 0.4m.**
- During construction, bored piers founding on natural material would be confirmed by further DCP tests in each individual hole. **ARTL agrees and highly recommends.**

Based on the above, do you have any further comments?

The above is based off the boreholes drilled to date, however we cannot guarantee adverse conditions in other areas where we have not investigated.

Would it possible for you to get back to me this afternoon?

Let me know if you have any questions or wish to discuss further.

Appreciate your time and help.

Kind regards,
Saxon



Saxon Xeros
Deputy Civil Manager
Civil Engineer

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