

Job No: 7747/39 Our Ref: 7747/39-AC-R1 13 February 2020

Redbank Communities PO Box 262 NORTH RICHMOND NSW 2754 Email: andrewflaherty@redbankcommunities.com.au

Attention: Mr A Flaherty

Dear Sir

## re: Redbank Development - Yeomans Precinct Grose Vale Road, North Richmond Site Classification Report (Lots 901 (697) to 923 (719))

This report provides site classification of Lots 901 (697) to 923 (719), as per AS2870-2011 "Residential slabs and footings".

Site classification in accordance with AS2870-2011 is only applicable for design of footing systems for a single dwelling, house, townhouse or similar structure that would be detached or separated by a party wall or common wall including buildings classified as Class 1 and Class 10a in the Building Code of Australia (BCA). AS2870 is not suitable for dwellings situated vertically above or below another dwelling. Therefore, a geotechnical investigation would be required for other dwellings to be classified in accordance with the BCA.

It is understood that the proposed dwellings are to be of brick veneer construction and that wall loadings are expected to be in the range of 15kN/m to 50kN/m. The maximum working load (safe bearing pressure) would be in the order of 50kPa for ground supported floor slabs and 100kPa for strip and pad footings (AS2870-2011).

## **Background Information**

Geotechnique previously conducted geotechnical investigations at Yeomans Precinct (Report Ref. : 7747/39-AA-Final, dated 29 August 2018) and Yeomans Entry (Report Ref. : 7747/41-AA, dated 21 November 2018) to assess subsurface conditions and provide site classification (AS2870-2011) of the proposed lots. The following lots were covered in the above reports:

Yeomans Precinct	Yeomans Entry
601 to 696	
720 to 787	501 to 552
800 to 817	

Subsurface conditions revealed by the test pits excavated for the above investigations generally consisted of silty clayey fill, overlying natural silty clays, overlying shale bedrock. Clayey fill was generally found to be of low to medium plasticity and natural clays to be low to high plasticity.

7747/39-AC (Lots 901 (697) to 923 (719)) Yeomans Precinct - Grose Vale Road, North Richmond

## Site Classification (Lots 901 (697) to 923(719))

Based on the previous investigation results, review of cut and fill drawings (Ref 11018511/DA25, DA26 and DA27, August 2016, Prepared by JWP) and our experience with the subdivision site we expect that the subsurface conditions at the proposed lots (901 (697) to 923 (719)) will consist of silty clayey fill, overlying natural silty clays, overlying shale bedrock. The fill at the site is generally assessed as controlled based on site fill testing (Report Ref. : 7747/31-AA, dated 10 September 2018).

Based on the above information, site classifications of the proposed lots are summarised below. It should be noted that lots containing more than 400mm of clayey fill (assessed as controlled fill) would be classified as Class "P" (i.e. problematic) in accordance with AS2870-2011. However, based on the results of the previous investigations and site fill testing, the lots are re-classified as shown below.

Lot Number	Site Classification	Lot Number	Site Classification
901 (697)	Class "M"	913 (709)	Class "M"
902 (698)	Class "M"	914 (710)	Class "M"
903 (699)	Class "M"	915 (711)	Class "M"
904 (700)	Class "M"	916 (712)	Class "M"
905 (701)	Class "M"	917 (713)	Class "M"
906 (702)	Class "M"	918 (714)	Class "M"
907 (703)	Class "M"	919 (715)	Class "M"
908 (704)	Class "M"	920 (716)	Class "M"
909 (705)	Class "M"	921 (717)	Class "M"
910 (706)	Class "M"	922 (718)	Class "M"
911 (707)	Class "M"	923 (719)	Class "M"
912 (708)	Class "M"		

M : Moderately reactive (20 - 40mm)

It is recommended that footings for the proposed dwellings are founded on the same stratum, below any topsoil, loose or deleterious material, to minimise the potential for differential movement. In the event that bedrock is encountered in any portion of the footing excavations, the remainder of the foundations must be supported on bedrock to ensure even bearing.

The classifications presented above are made on the following assumptions:

- The design and construction requirements of AS2870-2011 must be followed.
- The recommendations for foundation performance and site maintenance set out in Appendix B of AS2870-2011 must be followed.
- The proposed dwellings must be in accordance with AS2870-2011. A detailed geotechnical investigation will be required for other dwellings to be classified in accordance with the BCA.

2

7747/39-AC (Lots 901 (697) to 923 (719)) Yeomans Precinct - Grose Vale Road, North Richmond

It is recommended that house owners are made aware of recommendations in the CSIRO publication, "Guide to Home Owners on Foundation Maintenance and Footing Performance" and AS2870 Appendix H of AS2871-2011.

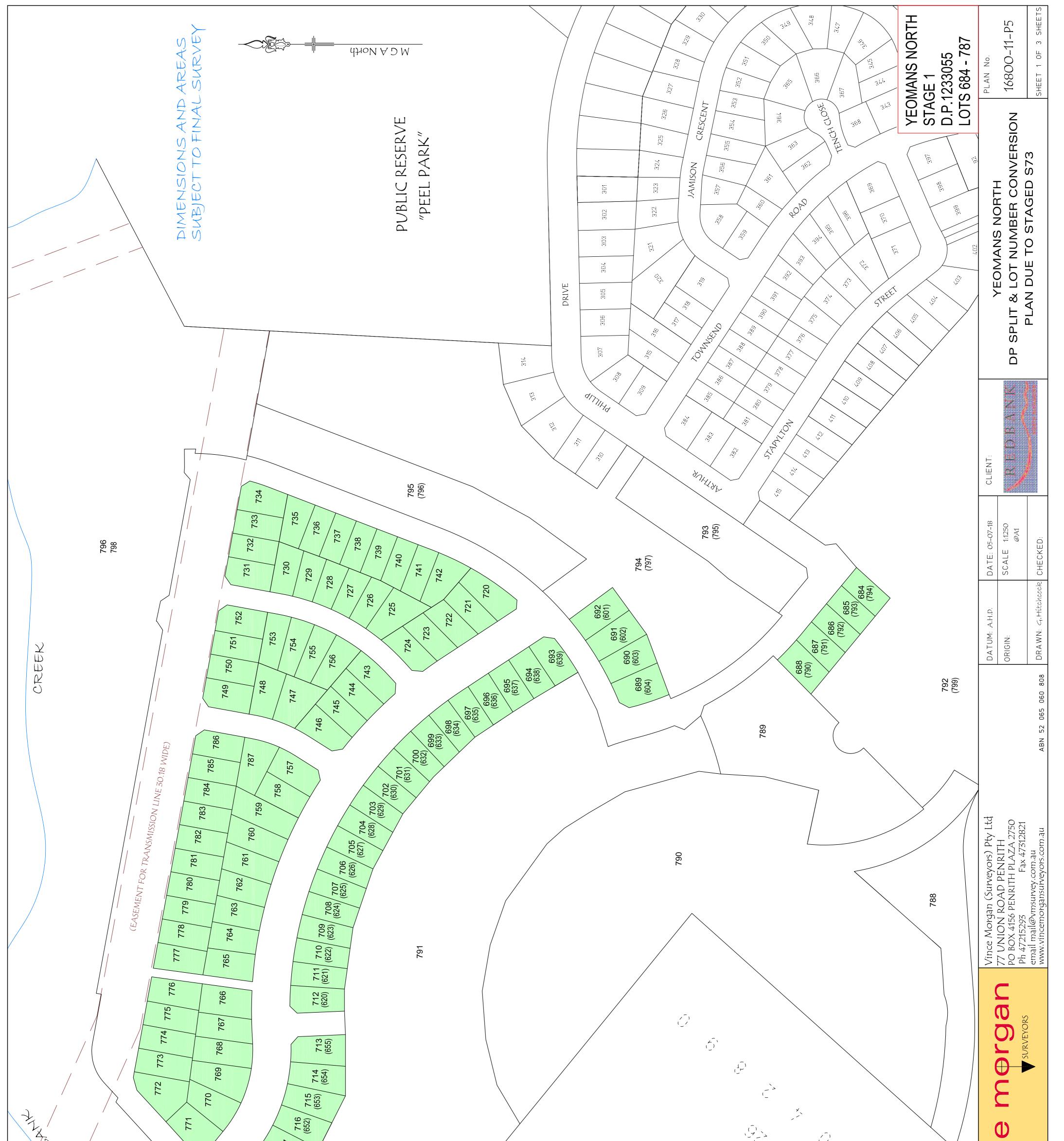
## Conclusion

The above investigation and fill testing at the site were conducted as per relevant Australian Standards. Based on the investigation and site fill testing results we confirm that the lots at the site are acceptable for residential building construction.

Yours faithfully GEOTECH TESTING PTY LTD

ZIAUDDIN AHMED Associate Geotechnical Engineer

Attached : Yeomans Precinct Lots



	719 (650) 717 (651) (651)				vinc
YEOMANS NORTH SYDNEY WATER SYDNEY WATER STAGED S73 & SUBDIVISION CERTIFICATE (D.P. & S88B) RELEASE 1		FARM	LOT NUMBERING KEY: Eg.719 (649) (649) (649) for staged lot number for staged S73 = 719 ( <i>NBOLD</i> ) • Original lot number pre-staged S73 = (649) ( <i>NBRACKETS</i> ) Eg.771 • Nil change of lot number required	COPYRIGHT (© VINCE MORGAN SURVEYORS NO PART OF THIS DRAWING MAY BE REPRODUCED. COMMUNICATED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM, WITHOUT THE WRITTEN PERMISSION OF THE COPYRIGHT OWNER WITHOUT THE WRITTED BY THE COPYRIGHT ACT 1968. ANY PERMITTED DAWLOADING, ELECTRONIC STORAGE, DISPLAY, PRINT, COPY, REPRODUCTION, COMMUNICATION OF THIS DRAWING SHOULD CONTAIN NO ALTERATION OR ADDITION TO THE ORIGINAL DRAWING. THIS NOTICE MUST NOT BE ERASED	No. AMENDMENT DATE DATE

