

17 December 2018

Our ref: sd1402-007

Your ref.: BLD2018/00848

General Manager  
Northren Beaches (Pittwater) Council  
PO Box 882  
Mona Vale NSW 1660

## **GEOTECHNICAL ENGINEERING ADDENDUM\_1**

### **Re: Alterations & Additions @ 19 Rayner Rd, Whale Beach, NSW 2107**

#### **1. Introduction**

The purpose of this geotechnical addendum is to:

Support the alteration and addition at the above address to comply with Northern Beaches (Pittwater) Council condition/s of the Stop Order with reference number BLD2018/00848,

- a. New driveway
- b. New retaining walls as depicted on Figures 1 to 3.

The components shown in drawings as per HSA Architects project #88618.02 at the address as above shown have been checked and analysed by VDM Consulting Engineers Pty Ltd (VDM) in geotechnical terms to ensure that the new changes did not cause lines of failure which in turn would cause a land slip / land slide.

VDM conducted a Geotechnical Assessment ref # R-2010-08a previously and is familiar with the site. The proposed Driveway was constructed of reinforced concrete (RC) slab construction on natural rock, not impacting in the geology of the site in geotechnical terms.

During excavation stages for both driveway and retaining wall inspections were performed on, 30<sup>th</sup> January 2018 and 13<sup>th</sup> April 2018.

#### **2. Conclusion**

The changes to confirm are; that there are no changes or list of changes to the original Geotechnical Report as described above and will not affect the geology of the site. Nor there is a need to alter previous geotechnical assessments and reports. The site has been progressively geotechnical assessed during the construction process up-to-date by VDM.

The structural design for the new driveway and retaining walls additions were viewed and approved by the Geotechnical Engineer.

***This certificate shall not construe as relieving any other party of their responsibilities, liabilities or contractual obligations.***

### 3. References

- a) HAS architects design.
- b) Geotechnical Assessment – “Geotechnical Assessment-R-2010-08a report by VDM Consulting Engineers.
- c) Australian Geomechanics Society, Sub-Committee on Landslide Risk Management (March 2007) Practice note guidelines for landslide risk management, Australian Geomechanics 42 (1), March 2007.
- d) Assessment of landslides likelihood in the Pittwater Local Government area – MacGregor, P. at all, March 2007.
- e) Australian Standard 2870 (1996) Residential Slabs and Footings.
- f) AS 3700-2011: *Masonry structures*.
- g) AS 4678-2002: *Earth-retaining structures*.
- h) Pittwater Council (2009), Geotechnical Risk Management Policy for Pittwater.

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#### CERTIFICATION

Responsibility for this report is acknowledged as follows:

Name of person signing – Mario F. Benitez *BE(UTS-Struct)*

*CPEng., MIEAust. (418917), MIPENZ (111943)*

Position – Senior Structural / Geotechnical Engineer

Name of responsible firm for and on behalf of person  
is signing for – VDM Consulting Engineers Pty. Ltd.

Signature

Checked by:

Dr Manfred Hausmann - *CPE MIEAust.*, 339258,



Senior Geotechnical Engineer

Signature

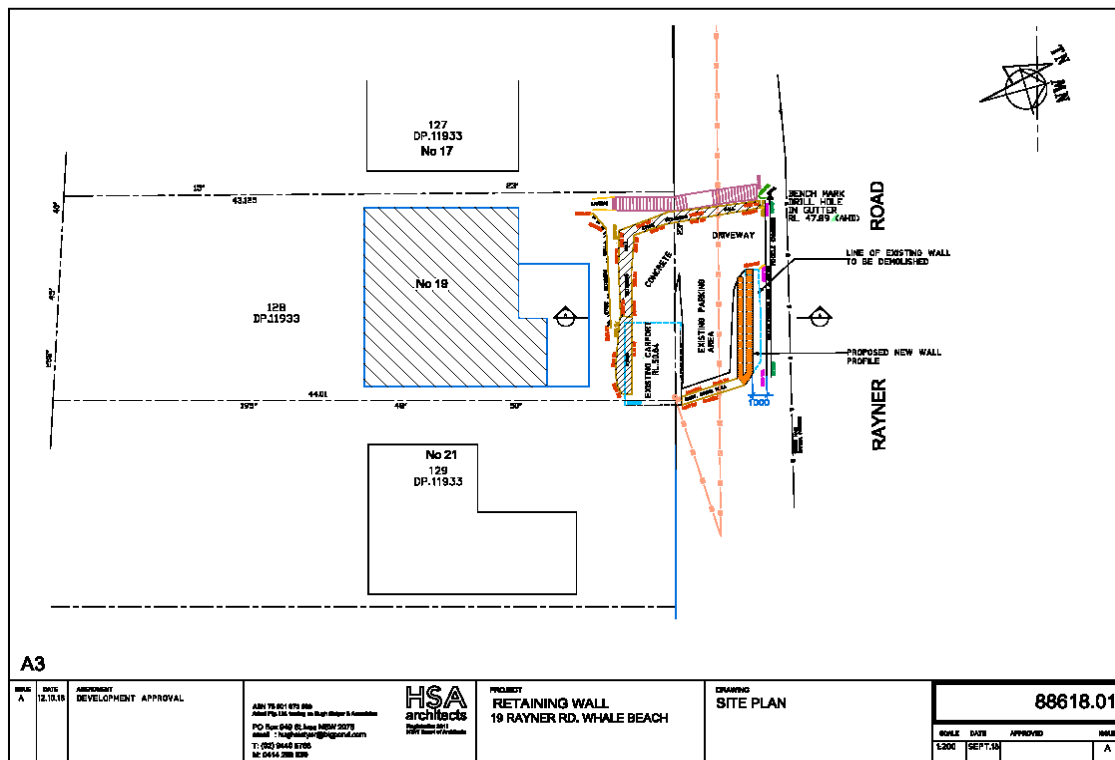


Figure 1 – Plan view - Proposed driveway & sandstone retaining walls

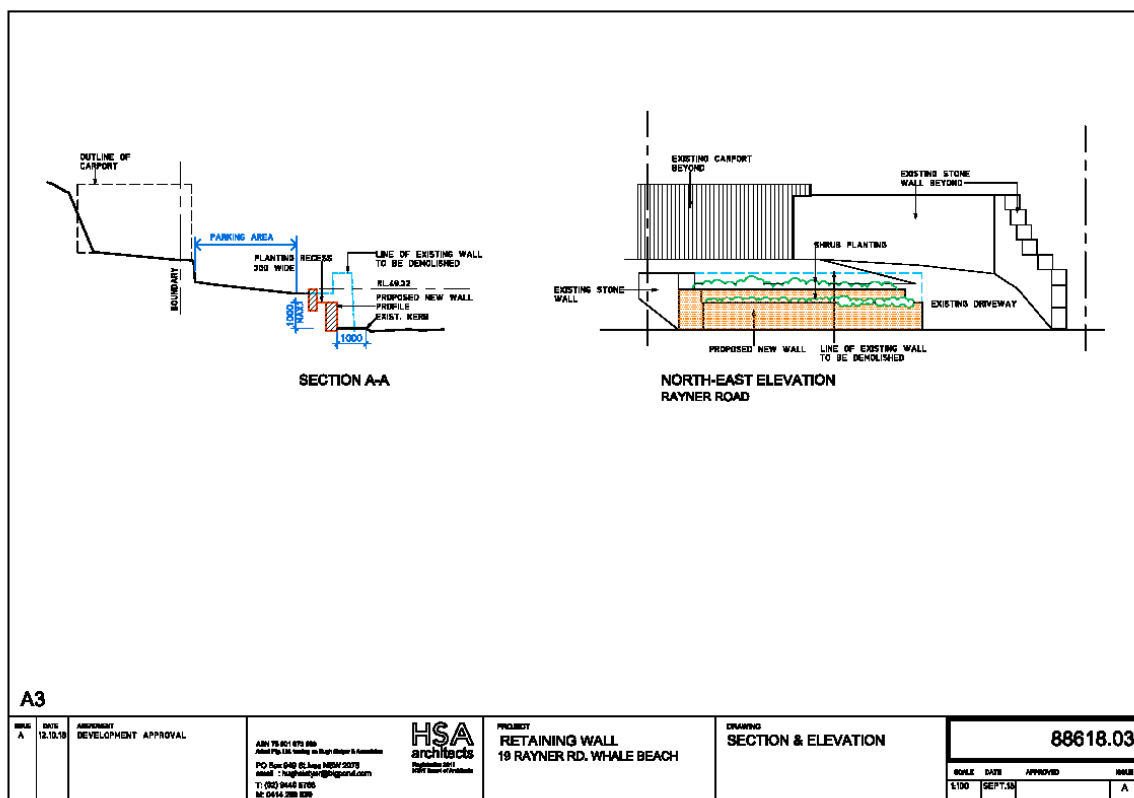


Figure 2 – Section - Proposed driveway & sandstone retaining walls

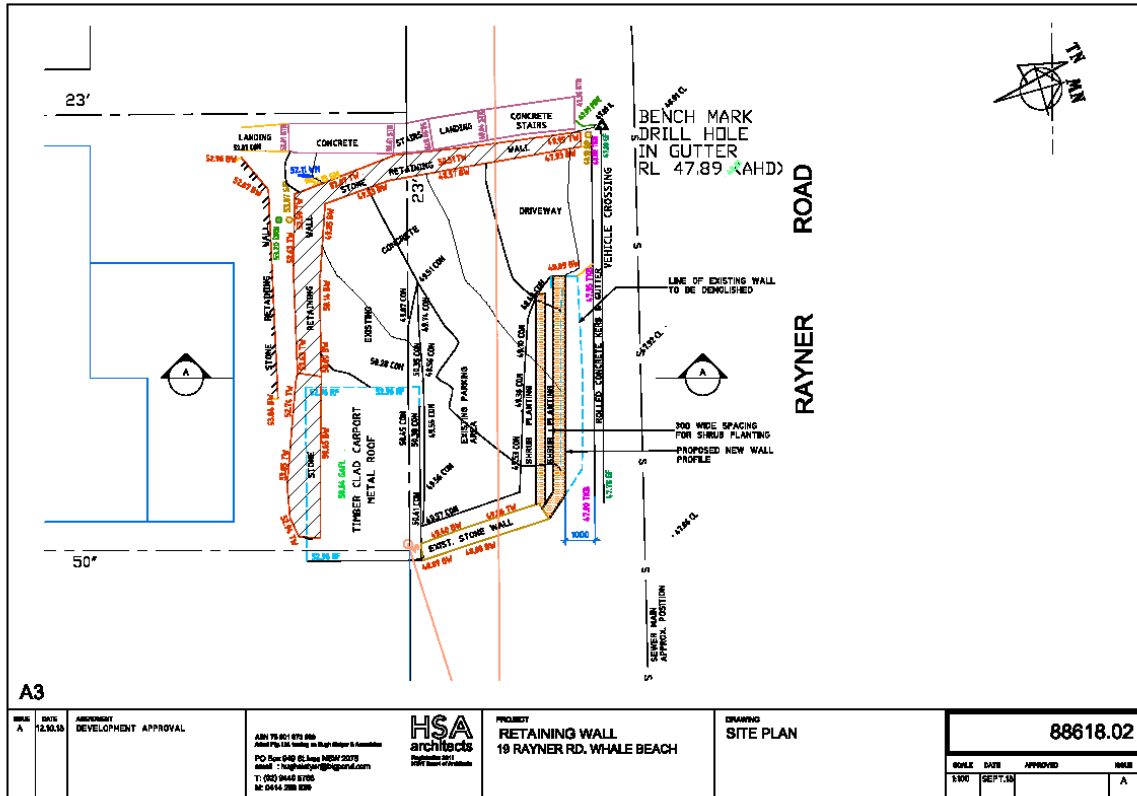


Photo 3 – Enlarge area where alterations occurred