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Ref: SRE/1020/BV/22 **Date:** 16th September 2022

Attn: **Matthew Schott**
Company: **Top End Projects**
1955 Pittwater Road,
Bayview NSW 2104

Dear Sir,

RE: PROPOSED BULDING AT 1955 PITWATER ROAD BAYVIEW NSW 2104 – EXCAVATION & RETAINING WALLS SITE STABILITY CONDITIONS & CURRENT DESIGN SUITABILITY

Further to the email received from Mr. Matthew Schott from Top End Projects of 13th September 20122, Soilsrock Engineering (SRE) was commissioned to analyse and verify the current site stability conditions regarding the existing excavation works and retaining/shoring wall construction supported by the steel bracing and propping system. The site actual stability visual analyses are taking in consideration the updated design drawings, to enable construction of the building to resume as soon as possible.

The following are the relevant documents provided which supports the present letter report:

- Geotechnical Assessment Report prepared by Ascent Geotechnical Ref: 19015, dated 30 January 2019.
- Ground Testing Report, prepared by Ascent Geotechnical Ref: 19015C, dated 21 October 2020.
- Section 4.55 Geotechnical Review Letter, prepared by Ascent Geotechnical, Ref.: AG 19015D, dated 1st March 2021 (including the Geotechnical Risk Management Policy for Pittwater Forms 1 & 1A).
- Piling Shoring Wall Design Drawings prepared by Soilsrock Engineering Pty Ltd, Project No. SRE/714/BV/20, REV. 2 dated 27/01/2021.
- Structural drawings prepared by Taylor Consulting Civil & Structural Engineers, dated 5 September 2022.
- Architectural Drawings prepared by Design Group, S4.55 Submission, Job No. a22039, dated 8 August 2022.
- Capping Beam Monitoring Report prepared by Waterview Surveying Services, Ref: 958 dated 7th September 2022.

Further to the analyses of the documents indicated above, Soilsrock Engineering carried out a site inspection on 7th September 2022 to observe the current site stability of the piling retaining wall and steel bracing/propping system conditions and corrosion.

As a result, the following are our comments and recommendations:

1. From the Architectural Drawings updated mentioned above analyses it is concluded that the Geotechnical Review Letter prepared by Ascent Geotechnical including Forms 1 and 1A regarding the Geotechnical Risk Assessment Management Policy for Pittwater still covers the current design updated, since no significant changes are included when comparing with the original Architectural Drawings.
2. The piling shoring wall with a temporary steel bracing/propping system were carried from January to September 2021.
3. The temporary steel bracing/propping system was design as a temporary system without corrosion protection with a normal design life duration to 6 months to allow the construction of the floors slabs to replace the temporary steel bracing system permanently.
4. The Survey monitoring report to the survey marks installed on the capping beam, prepared by Waterview Surveying Services dated of 7th September 2022, indicates that no more 5mm of movements deflection were detected from the baseline readings carried on 12th May 2021 to the readings taken on 6th September 2022. The little movements detected are acceptable within the maximum deflection design limits.
5. From the site inspection carried out on 7th September, it was concluded that the steel members and connections still present in satisfactory conditions, however some members present evident corrosion signs which will need to be monitored closely along the next weeks. The steel members including its welding connections and bolts connections seem to be satisfactory, and it is not anticipated at this stage that there will be high risk of significant corrosion damages over the next 6 months.
6. However, visual monitoring to the steel members, welding and bolts connections must be always maintained properly by the builder in weekly basis and the shoring design engineer should be engaged to carry out regular site inspections to site to also monitor the steel members and all connections conditions as the construction works advances.
7. Regular survey monitoring on a fortnight basis must be maintained, to control for excessive deflections during all the remaining construction works until all basement slabs and walls are constructed and supporting the retaining walls laterally replacing all temporary steel bracing/props system.
8. Regarding the vertical excavation slope face located at the Southeast side of the site (left hand side of site entrance), it is recommended that excavation be rectified and adjusted as soon as possible to a temporary batter slope with maximum inclination of 1(V):1.5(H), including as well as of any other cut slope batters around the site. In addition, plastics membranes must be installed temporary above the cut slope batters face when moderate to heavy rain events are anticipated forecasted to avoid rainwater

to infiltrating into the slope causing superficial and internal erosion, which can lead to landsides.

Further to the above, it is strongly recommended that the construction works to resume immediately, to permit the construction of the basement be finalised as fast as possible regarding the ongoing corrosion of the temporary steel bracing/propping system installed.

The retaining/shoring and geotechnical engineer must be informed all times of the progress of the works and carry regular site inspections and the constructions works advances to be able to identify any further stability issues and provide appropriate necessary recommendations.

Please do not hesitate to contact the undersigned if you have any questions regarding this letter report or if you require further assistance.

Yours faithfully,

For and on behalf of
Soilsrock Engineering Pty Ltd

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LIMITATIONS

Shoring Stability and Geotechnical Interpretation and advisory rely on a visual site inspection interpretation no boreholes, testing and/or sampling were undertaken for the present report. No matter how visually and comprehensive is the site inspection, onsite intrusive investigation and testing could present different interpretation results.

Recommendations are given based on the visual site inspection and interpretation carried by professional trained geotechnical and geological engineers from this office. Interpretation of the present report by others may differ from the interpretation given, there is the risk the report may be misinterpreted and Soilsrock cannot be held responsible for this.

Visual site inspections reports rely on factual interpreted, and judgement of information based on professional visual interpretation of geotechnical engineers from this office. Soilsrock Engineering accepts no responsibility if further intrusive investigations and testing results are not accurate and/or not correct if given by others. Soilsrock will not be responsible for any damages resulting from any errors or omissions.

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