

# ATTACHMENT 12

## Preliminary Structural Advice

Prepared by:

**Matter**

PLANS AND DOCUMENTS  
referred to in the PDA  
DEVELOPMENT APPROVAL

Approval no: DEV2022/1337

Date: 22 December 2023



**JAMES  
JUHASZ**

**PPA**  
Level 1, 618  
Brunswick  
Street,  
New Farm

**09 MAY 2022**

James,

**RE\_15 Anderson Street, Fortitude Valley**

With reference to your recent query regarding the constructability of the proposed basement without ground anchors, we provide the following comments:

We confirm the construction of the proposed basement is possible without the use of ground anchors encroaching beyond the property boundaries. The basement structure and levels could be constructed via a "top-down" construction sequence, consisting of:

- Internal basement columns constructed as plunge columns (via bored piers) down to required founding depth;
- Excavation of the basement progressing in stages, with permanent ground and basement floors partially constructed floor by floor from top to bottom, until the excavation reaches the lowest basement level.

Alternatively, the basement excavation could be internally propped using internal struts/props back to adjacent retention elevations or to footings closer to the middle of the site (where excavation can substantially progress with safe batters). A range of propping solutions could be designed and specified to provide sufficient support, allowing for the safe excavation of the basement. Given the size of the basement, props at capping beam level could be run diagonally across the corners of the site rather than fully across the basement excavation.

It's worth noting that the above methods of basement construction (top-down or internally propped) are generally slower than a conventional "bottom up" construction utilizing temporary ground anchors to retain the basement excavation.

We trust this satisfies your current requirements. Should you have any queries or wish to discuss, please do not hesitate to contact the undersigned.

Sincerely,



**DANIEL YAP**  
Director  
BEng(Hons) BCom MIEAust CPEng RPEQ  
M\_0423 075 883 E\_daniel.yap@matterconsulting.com.au