

5 Kooloora Avenue, Freshwater

Pre- Excavation Inspection

The site was inspected on the 20th May 2024.

The extent of the basement plan has been reduced since the original geotechnical report was conducted so the Western neighbouring house is well outside the zone of influence of the basement excavation. Where the excavation is closest to the Western common boundary (Extent defined by the red arrow in Figure 1) it is set back 0.9m from the boundary accounting for backwall drainage. The excavation depth is a maximum of 1.5m deep. The sand portion of the profile is 0.6m deep and overlies sandy clay. It is recommended as the excavation progresses it be supported by braced form ply or similar temporary support, installed systematically so the excavation faces are not left unsupported. The support is to be designed/ approved by the Structural Engineer and is to include the return portions of the cut.

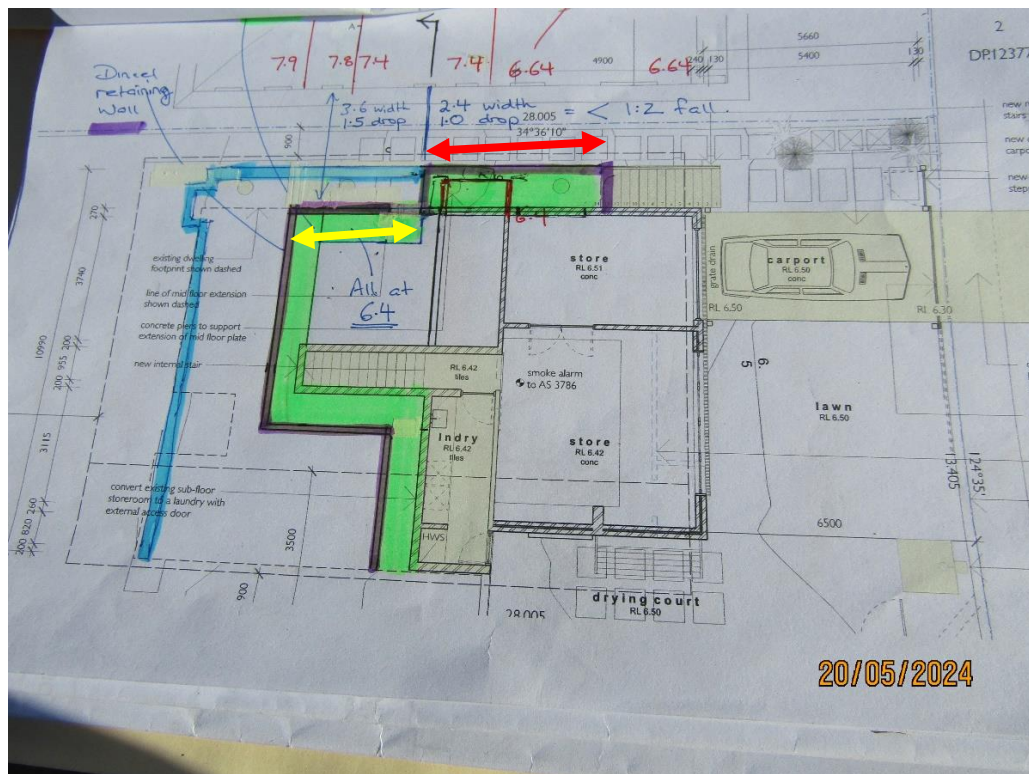


Figure 1

The excavation steps back from the western boundary so it is ~ 1.5m away accounting for backwall drainage (Extent defined by the yellow arrow in Figure 1). The excavation is up 2.0m deep. It is recommended for this section bulka bags be filled with free draining material (gravel or sand) to provide the temporary support. The filled bags are to be on site before the excavation commences so they can be installed progressively as the excavation progresses and cut faces are not left unsupported. Any voids between the back of the bags and the excavation face are to be filled with sand and compacted as this occurs. A customised ram like compaction tool will be required for this work.

The existing house walls that are to remain will need to be underpinned 0.3m below the base of the proposed excavation before the excavation works in this area commence. The underpinning will need to extend beyond the proposed excavations a distance such that any existing wall foundations extend below a theoretical 30° line from horizontal (1.0 V : 1.7 H) extending from the margin of the proposed excavation towards the wall foundations. The theoretical line mentioned is the Zone of Influence.

White Geotechnical Group Pty Ltd.



Ben White M.Sc. Geol.,
AIG., RPGeo Geotechnical & Engineering.
No. 10306
Engineering Geologist

