

Case Study #2

John and Trudy own a single-story, brick veneer house on TC2 land. Their home has a Type B foundation (ie perimeter concrete foundation wall and piles beneath the floor). They've recently had an inspection completed by a Project Management Office (PMO).

The assessment of their home revealed that the house foundation has slumped with an 80mm differential, from the start of the slump to its extreme limit at the north western boundary.

PLAN

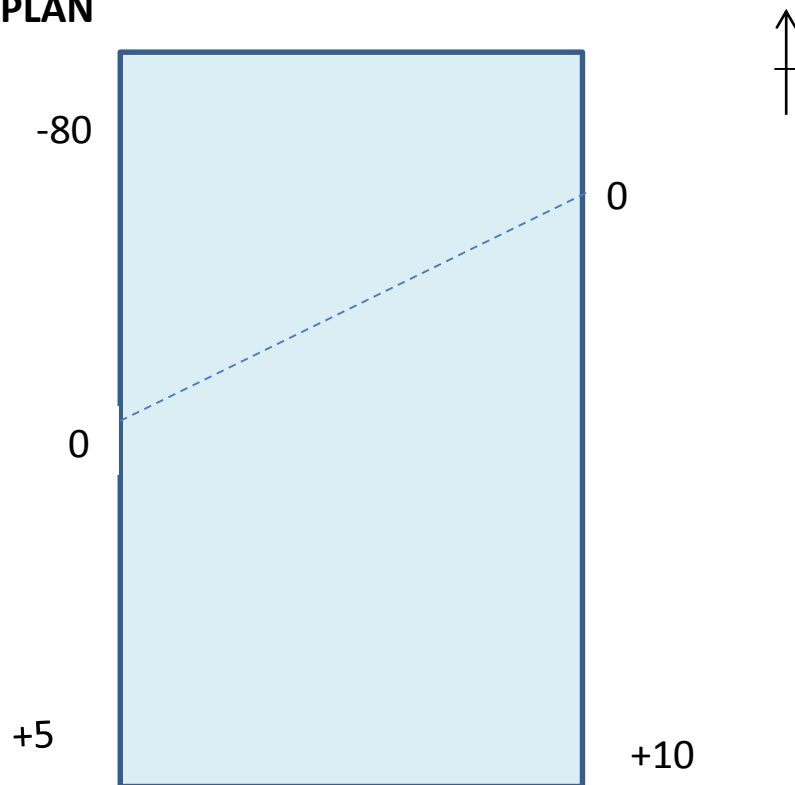


Table 2.3 of the GUIDANCE indicates that the variation in floor level would require a foundation re-level of the north-west corner and subsequent repair of the superstructure. Additionally, a shallow geotechnical investigation showed there is less than 300kPa geotechnical ULS bearing capacity so specific engineering design of the footings will be required prior to the re-level and repair. The building itself has suffered significant damage at the point at which the floor begins to slope.

Overall, the GUIDANCE indicates a re-levelling of the foundation and subsequent superstructure repair, however the onsite assessment by the PMO and Geotechnical Engineer results in John and Trudy being advised that a re-level and repair would be impractical. The overall information gathered from the assessment justifies that a partial foundation rebuild and rebuild of the affected northern part of the superstructure is required.