

- 1.7 Removal of anchors shall be done on site after obtaining written approval from the consultant.
- 1.8 The main contractor and shoring contractor and the consultant shall appoint qualified engineers with experience in geotechnical field for site supervision.
- 1.9 Rise of the ground water levels shall be verified for the duration of the design to consider the natural changes (such as tidal peak, change of land use, increase of the ground water due to irrigation or global warming) and insure that it shall not impact the firmness and stability of the retaining wall.
- 1.10 Depth of shoring and internal excavations shall be sufficient enough to ensure safety against soil swelling and the possibility of ground water seeping in to the excavations, and ensure the compatibility of the design of the retention wall and the dewatering machine. The main shoring contractor and the consultant shall review the dewatering design prepared by specialists in the field; and ensure that wall deformation shall be within the acceptable limits and the dewatering system does not impact the adjacent structures and infrastructures.

## 2. Design of retaining walls

Considering various excavation depths, nature and conditions of the site, the data in the bellow table shall be followed:

Shoring Type	Depth of excavation
All types	Up to 5 meters depth or one basement
All Types except (H) pile	More than 5 meters – in case of no buildings or water bodies in surrounding plots
Waterproof shoring	in case of buildings or water bodies in surrounding plots or high ground water level
Waterproof shoring	Projects close to sources of water

- According to the soil investigation report, ground water level, existence of water sources, adjacent buildings or surrounding facilities, recommendation of shoring system other than the above mentioned is possible.
- Auditing shall be done by a third party geotechnical consultant for projects with four or more basements, special projects, or projects near bodies of water.

In addition, compliance with the following instructions:

Minimum limit for additional loads	Consideration to be made for adding (20Kn/m <sup>2</sup> ) to the loads from the direction/side of the road and adjacent plots; and by reviewing the site
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