

11.1.19 Backfilling to be used for MV cables with soil resistivity below  $1.6^{\circ}\text{C}\cdot\text{m}/\text{W}$  with the following conditions:

- a) At maximum moisture content of 2% or less.
- b) At 90% of compaction

11.1.20 Single line diagram illustrating the protection schemes along with relay setting calculation shall be submitted for comments and approval at design stage.

## **11.2 GENERAL REQUIREMENTS FOR SUBSTATION CONSTRUCTION WITHIN PRIVATE PLOT**

11.2.1 The substation must be positioned in dedicated room or housing.

11.2.2 Basement substation should have transformer room in 1st basement only.

11.2.3 LV electrical room must be adjacent to substation room/space, if main panel is private.

11.2.4 Wet area above substation shall not be provided. In exceptional unavoidable situation DEWA shall be referred for specific advice refer Appendix. 13.

11.2.5 Single room substation clear height should be 3.7M (minimum) at ground floor. RMU room should have a clear height of 3.0m (minimum) in split/basement substation.

11.2.6 Transformer room height at basement should be 3.0m (minimum).

11.2.7 Finished floor level (FFL) of substation room is to be maintained 0.15m to 0.30m higher than the outside adjacent ground level (towards door side) refer Appendix 14 and 15

11.2.8 Level difference of transformer room at basement level is to be maintained between 0.075m to 0.15m higher than the outside adjacent ground level (towards door side).

11.2.9 Construction of the project should not be commenced prior to obtain the substation approval.

11.2.10 Pocket substations are not allowed to install at petrol station and inside the building.

11.2.11 No expansion joints are allowed in RMU/Transformer room and as well as roof of the room.

## **11.3 SUBSTATION LOCATION & ACCESS**

11.3.1 Substation room/RMU room to be directly located on RTA/Public Road or Sikka.