

GROUND TREATMENT USING REMOVE AND REPLACE METHOD

Definition

Removal and replacement shall be used for ground improvement purpose to increase the bearing capacity of ground. The work involves removing the existing unsuitable material and replacing with suitable material such as sand, etc.

Criteria

The criteria to remove unsuitable material shall be as shown on the Drawings.

However, in the case of the criteria for the removal of unsuitable material not shown on the Drawings, the unsuitable material shall be removed to a depth of minimum 40 blows/300 mm probe resistance OR up to a maximum depth of 3.0m, whichever is the earlier; all subject to the S.O. approval.



Grading Limits of Materials For Replacement of Excavated Material

Unless otherwise indicated in the Contract, materials for replacement of unsuitable material shall consist of hard, clean crushed rock, gravel or sand having grading conforming to the grading limits given in JKR/SPJ/2013-S2, Section 2: Earthworks, Clause 2.2.3.5, Table 2.1.

B.S. Sieve Size	% Passing By Weight
<u>Crushed Rock or Gravel</u>	
63.0 mm	100
37.5 mm	85 – 100
20.0 mm	0 – 20
10.0 mm	0 – 5
<u>Sand</u>	
10.0 mm	100
5.0 mm	90 – 100
1.18 mm	45 – 80
300 µm	10 – 30
150 µm	2 – 10

Table 2.1 (JKR/SPJ/2013-S2)