

Summary of Decisions of the Structural Engineer
SEC 11/2013 held on 22.10.2013

(a) Case 11/2013

- Issue: Use of Glass Fiber Reinforced Polymer (GFRP) bars as reinforcement for diaphragm walls at 18 nos. of launching and retrieving positions of Tunnel Boring Machine (TBM)
- Recommendation: To accept the use of GFRP bars (25mm and 40mm in diameter) adopting ACI440.1R-06 “Guide for the Design and Construction of Structural Concrete Reinforced with FRP Bars” as reinforcement for diaphragm wall at 18 nos. of launching and retrieving positions of Tunnel Boring Machine (TBM).
- Decision: After considering RSE’s justification and making reference to precedent cases, members endorsed the recommendation on the condition that:
- (a) GFRP bar tests should be carried out by laboratories accredited under HOKLAS. The minimum testing frequency should make reference to the requirements specified in CS2 for testing of steel reinforcing bars;
 - (b) Qualified site supervision to the GFRP works should be provided by the CP and the Registered Specialist Contractor.