

# CE394M Advanced Analysis in Geotechnical Engineering: FEM

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January 16, 2019

## 1 Introduction to the Finite Element Analysis

# Finite Element Analysis

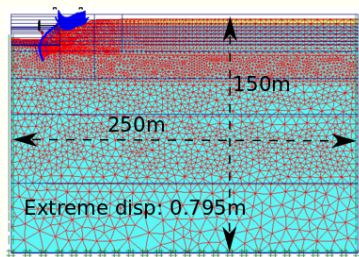


Fig. FE Mesh

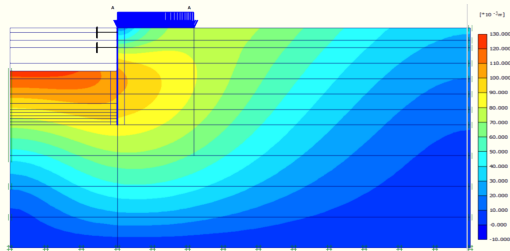
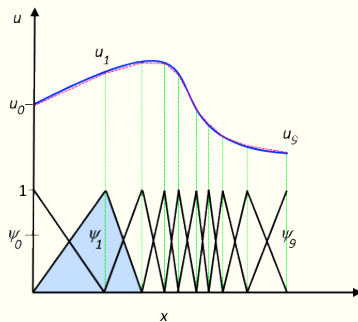
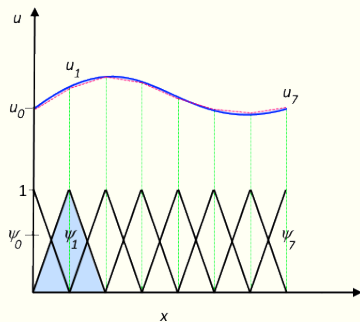


Fig. Displacement profile

Singapore Nicoll highway excavation FE analysis

# Finite Element Approximations



FE basis functions