Reinforced Soil Retaining Walls
Design Examples

Numerical solutions on black board
26-7-2012
Continuation of the 19th July problem
• H=6m, horizontal soil fill
Soil properties

Wall with horizontal backfill

Reinforced soil fill: $\phi_r = 35^\circ \gamma_r = 20 \text{ kN/m}^3$

Backfill soil: $\phi_r = 30^\circ \gamma_b = 18 \text{ kN/m}^3$

Foundation soil: $q_{na} = 200 \text{ kPa}$

Loads: deadload surcharge = 15 kPa

Live load surcharge = 25 kPa

Horizontal load on flat slope wall = 15 kN/m
• Pullout capacity of anchor and welded wire meshes
• Treatment of vertical loads applied through bridge abutments
• Wedge stability analysis