

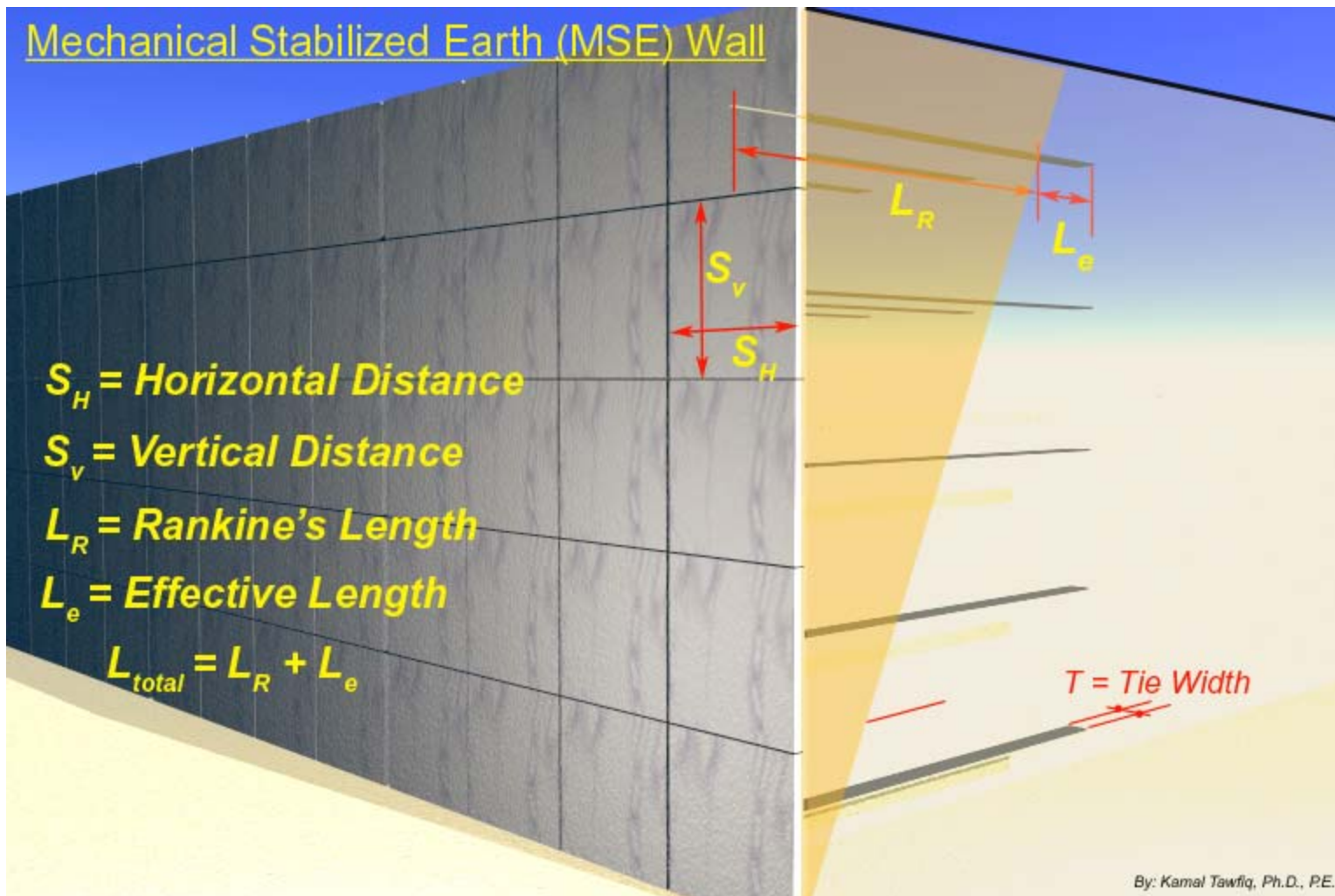
MSE Wall Project

Geotechnical Design

CEG 4801

Fall 2009

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A reinforced earth retaining wall is to be 8 m high. The properties of the backfill material are $\gamma = 16.6 \text{ kN/m}^3$ and $\phi = 30^\circ$. Galvanized steel ties are to be used for the construction of the wall. Design the Reinforcements with $FS_{(B)} = 3$, $FS_{(p)} = 3$, $f_y = 2.4 \times 10^5 \text{ kN/m}^2$ and $\phi = 20^\circ$. The properties of the in situ soil below the retaining wall are $\gamma = 18 \text{ kN/m}^3$, $\phi = 30^\circ$, and $c = 52 \text{ kN/m}^2$.

