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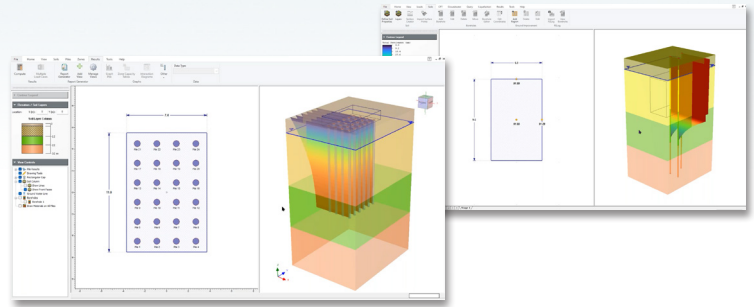
Efficient Settlement Analysis of Pile Groups Using Settle3

Q1: Can this method be used to evaluate the presence of downdrag? Can it calculate the downdrag load?

A1: You may calculate the negative skin friction as additional load on the group.

Q2: Can I bring bore logs from other software outside of your productions?

A2: Yes. we have borehole editor for both RSPile and Settle3 which allows you to define the boreholes with layers defined at different locations.

Q3: How we would apply equivelement raft in case of having moments on both directions? We will get non-uniform stress.

A3: Settlement of a group is calculated using average pressure just like what we do for footings.

Q4: What is the depth below the pile group to considered for group analysis?

A4: If we are using Settle3 the software will extend the effect of the group pressure until it fades or until the cut-off value decided by the user which is 10% of the et pressure under the footing by default, but it can be user defined as well.

Q5: Can RSpile analyze the consolidation settlement (time vs settlement output) especially with dilative clay around the pile?

A5: We currently don't have the feature in RSPile to analyze consolidation settlement with piles. However, Settle3 is the perfect program for consolidation settlement anlysis.

Q6: Can you validate the settlement using RSPile with the equivalent pile method?

A6: Usually no, but with special adjustment to the Q-z curve it is possibe to get closer results.

Q7: Does the method differentiate between coarse grained soils and fine grained soils? For coarse grained using elastic paramters but for fine grained soils consolidation parameters are requried.

A7: Yes. Settle3 includes all settlement components.

Q8: Could you please show us how you calculate Q-z multiplier for this specific case?

A8: We don't apply Q-z in the equivalent raft method.

Q9: Would you please explain again what is the difference between two analyses (Settle3 vs RSPile) causing this much of difference in settlement output?

A9: RSPile and any other pile analysis programs do not have block effect on the settlement of the group as all traditional pile settlement calculations depend on defining the soil just beneath the pilestip while if compressible layers are existing at deeper zones the effect of extended stress distribution will not be taken into consideration.