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ARKOM TECHATUNYAKUL : SOIL STABILIZATION WITH THE RRP CHEMICAL.
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This research aims at the study about the effect of using RRP chemical for soil stabilization. The clayey soil from Bangpoo Industrial Estate and clayey sand from Lam Chabung are selected as soil samples. The engineering properties of the RRP-soil mixtures such as CBR value, unconfined compressive strength, water absorption, swelling and durability are considered.

The study results showed that RRP chemical can stabilize 2 types of soil by increasing strength, reducing water absorption and swelling properties.

- Bangpoo soil sample was classified as high plastic clay (CH) having LL = 73% PI = 40% and CEC = 13.05 meq. At the optimum RRP content of 0.024%, the soaked CBR was increased from 2.72% to 3.92% while swelling was reduced from 5.77% to 3.74% and the water absorption value was reduced from 9.71% to 4.93%.

- Lam Chabung soil sample was classified as clayey sand (SC) having LL = 48% PI = 22% and CEC = 3.95 meq. At the optimum RRP content of 0.012%, the soaked CBR was increased from 7.27% to 10.90% while swelling was reduced from 0.70% to 0.11% and the water absorption value was reduced from 7.05% to 1.31%.