عنوان فارسی مقاله:
تأثیر تثبیت با خاکستر بادی بر تقلیل مدول سختی رس های متورم شونده

عنوان انگلیسی مقاله:
Effect of Fly-Ash Stabilization on Stiffness Modulus Degradation of Expansive Clays
Conclusions

Based on the fly ash stabilization of moderately expansive soil, the following major conclusions can be drawn from the current research:

1. With increase in dosage of fly ash, the optimum moisture content increases, and the maximum dry density decreases. The increase in optimum moisture content is because of the increase of fines content and corresponding increase in specific surface area. The presence of fly ash, which has a lesser specific gravity, causes the reduction in the maximum dry density.

2. The liquid limit and plastic limit of the expansive soil increase, whereas the plasticity index of the soil decreases with an increase in the fly ash content. The increase in liquid limit and plastic limit is because of flocculation and the conglomeration of the clay particles, which increases the water holding capacity and hence the liquid limit and plastic limit of the soil. However, the increase in plastic limit is greater than the liquid limit, causing a corresponding decrease in the plasticity index of the soil.