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Accessing Suitability of High Rise Building using Transfer Slab Resting on Sloping Ground using Pile and Raft Foundation under Wind and Earthquake Load

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Abstract: The Aim of present study "Analysis and design of high rise building by staad pro" is to define proper technique for creating Geometry, cross sections for column and beam etc, developing specification and supports conditions, types of Loads and load combinations. In this study a G+15- storey high rise structure is analyzed for seismic and wind load combination using staad pro and comparison is drawn. In this project analysis of accessing suitability of high rise building using transfer slab resting on sloping ground using pile and raft foundation under seismic and wind load behavior of buildings with transfer floor and the behaviour of the piled raft foundation system considering the influence of the factors like raft thickness, pile length, diameter and number of piles. These parameters have been considered to develop an economical and effective design. Analyzing the high rise building parameters such as shear force, bending moment, story drift, deflection supported by pile and raft foundation rested on plane ground and sloping ground with the use of Microsoft Excel and Staad Pro. Our project also deals with Analysing the building by considering wind and earthquake loads.

Keywords: High Rise Building, Wind and Earthquake Loads, Transfer Floor, Raft Foundation.

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