COMPARISON OF RAFT-PILED FOUNDATION AND GROUP BORED PILE FOUNDATION ON NEW YORK TOWER GREEN SEDAYU APARTMENT

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ABSTRACT

New York Tower on Green Sedayu Apartment originally using a group bored pile foundation as its foundation type but it should change onto piled raft foundation because upper structure changed its function. The modification of foundation design should be reviewed and compared to obtain more effective foundation but still reached on its safety factor. Analysis that used to compare on piled raft and group bored pile foundation is conventional analytical and analyzing with PLAXIS 2D. The results of bearing capacity of piled raft foundation is 3865,35MN, otherwise group bored pile foundation get 1127,93 MN on its bearing capacity. The minimum settlement of piled raft foundation is 0,0719 m and the minimum settlement of group bored pile fondation is 0,1160 m. The safety factor of piled raft foundation reached 6,39 otherwise the group bored pile foundation reached 5,02.

Keywords: Piled raft foundation, Group piled foundation, PLAXIS 2D.