

## BAB 6

### KESIMPULAN DAN SARAN

#### 6.1 Kesimpulan

Kesimpulan yang dapat diperoleh dari hasil analisis adalah sebagai berikut:

1. Dari hasil analisis yang dilakukan, besaran modulus hasil pengujian menggunakan alat uji *in-situ* yaitu Pressuremeter lebih cocok terinput sebagai nilai kekakuan tanah  $E_{50}$ ;
2. Dengan melakukan *back analysis* parameter tanah dan pemodelan 2D pekerjaan galian dalam yang telah dilakukan memberikan hasil sebesar 47.54 mm;
3. Dari hasil studi parametrik yang telah dilakukan dan berdasarkan *multivariable statistical analysis*, besarnya panjang pemasangan *soil nailing* ( $L_n$ ) dan elevasi muka air tanah ( $H_w$ ) cukup berpengaruh terhadap deformasi lateral yang terjadi;
4. Kemiringan sudut *soil nailing* ( $\theta_n$ ) tidak memberikan pengaruh yang cukup berarti terhadap deformasi lateral yang terjadi;
5. Melalui verifikasi studi parameterik terhadap studi kasus (GKM Office Tower), prediksi besarnya deformasi lateral yang terjadi adalah sebesar 49.20 mm;

6. Baik melalui studi kasus dan studi parametrik yang telah dilakukan, memberikan nilai yang cukup mendekati hasil pembacaan alat monitoring inklinometer yaitu sebesar 45.98 mm.

## 6.2 Saran

Saran yang dapat diberikan berdasarkan hasil analisis yang diperoleh adalah sebagai berikut:

1. *Chart design* yang telah dikembangkan dirasa perlu diverifikasi tidak hanya menggunakan studi kasus GKM Office Tower, melainkan studi kasus lain yang serupa;
2. Perlu dilakukan kembali studi parametrik dengan lebih memvariasikan berbagai kondisi skenario lain yang mencerminkan kondisi tanah, kondisi geometri galian maupun kondisi sistem struktur penahan tanah yang berbeda untuk melengkapi *chart design* yang telah dikembangkan.

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