

FIG.1 Static load test method using reaction piles as an anchorage system



FIG. 2 Comparison of load-displacement curve of real static load test with simulated test using Mohr-Coulomb and Hardening Soil Models



FIG.3 Interpretation of load-settlement curve using Davisson method

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| (a) |

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|  |
| (b) |

FIG.4 Three-dimensional finite element model used in simulation: (a) plan view (b) three-dimensional view



(a)

(b)

FIG.5 Plan view of a simulated static load test with (a) two reaction piles (b) four reaction piles



FIG.6 Comparison of interaction of two and four reaction piles with the test pile

(Dtest pile=dreaction pile and Ltest pile=Lreaction pile)



FIG.7 Comparison of load – displacement curve of test pile in different distances of reaction piles (Dtest pile=dreaction pile and Ltest pile=Lreaction pile)



FIG.8 The effect of reaction pile length on the test pile with a length of 9.5 m

(Dtest pile=dreaction pile)



FIG.9 The effect of reaction pile diameter on test pile with a diameter of 1.3 m

(Ltest pile=Lreaction pile)

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FIG.10 The effect of different reaction piles (a) concrete pile (b) steel pipe pile with fully unplugged behavior (c) steel pipe pile with partially plugged behavior on test pile with a diameter of 1.3 m (Ltest pile=Lreaction pile)



FIG.11 The effect of steel pipe pile as the reaction pile on the test pile