

About the liquefaction judgment by the standard penetration test

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The Tohoku district Pacific coast offshore earthquake that occurred on March 11, 2011 and its maximum aftershock caused liquefaction/fluidization phenomena of the stratum and the terrestrial wave phenomenon. Due to this earthquake, fluidization of embankment and embedding was observed not only in coastal areas but also in inland areas. After this disaster, the standard penetration test and the simple liquefaction judgment using penetration test specimens are rekindled, especially at the site of construction drilling. Also, in this earthquake disaster, the liquidization has occurred in the embankment/buried land of inland rivers and lakes, overturning the image that was supposed to occur in the coastal area, so oneself Concerned about the geological condition of the land currently living and the risk of liquefaction. Also, in the real estate related industry, we must recognize the necessity to pay attention not only to the land to be traded but also to the city unit. Currently, we are publishing free of bowling data on WEB on a municipal unit basis including the Ministry of Land, Infrastructure, Transport and Tourism, and it will not go all the way but it can be viewed if there is an Internet environment. Also, on the homepage of Chuo Kaihatsu Co., Ltd., drilling column map drawing software, section drawing software, liquefaction judgment software are downloaded free of charge and it is available at the general individual level. In the case where the continuous penetration test and the standard penetration test were carried out for the judgment result of this liquefaction simplified judgment software(CKC-Liq) using continuous penetration test data in liquefied/fluidized land conducted in April 2011. However, with regard to N-value implementation in liquefied/fluidized area, automatic falling equipment should not be used until it reaches the non-liquefaction/fluidized layer. This is because the weight of the automatic falling device is about 13.5 kg, so that an appropriate N-value can not be obtained.

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