双圆盾构隧道施工土体扰动特性及实测分 析

孙统立1,2,张庆贺1,2,胡向东1,2,朱继文3 (1.同济大学 岩土工程重点实验室,上海 200092;2. 同济大学 土木工程学院地下建筑与工程系,上海 200092;

3. 上海市第二市政工程有限公司,上海 200065) 收稿日期 2005-8-16 修回日期 2005-10-28 网络版发布日期 2008-3-21 接受日期 2005-8-16

摘要 以上海轨道交通6#线双圆盾构区间隧道工程为背景,通过动态监测双圆盾构施工引起土体分层沉降、水平位移、孔隙水压变化、海鸥块背土挤土现象,总结归纳双圆盾构掘进土体扰动的基本规律,提出了双圆盾构施工土体扰动的区域性、时段性特征。

关键词 隧道工程;双圆盾构;土体扰动;孔隙水压力;环境土工 影响;区域性时段性

分类号

MEASUREMENT AND ANALYSIS OF SOIL DISTURBANCE CHARACTERISTICS INDUCED BY DOUBLE-O-TUBE SHIELD CONSTRUCTION

SUN Tong-li1, 2, ZHANG Qing-he1, 2, HU Xiang-dong1, 2, ZHU Ji-wen3

- (1. Key Laboratory of Geotechnical Engineering, Tongji University, Shanghai 200092, China;
- 2. Department of Geotechnical Engineering, School of Civil Engineering, Tongji University, Shanghai 200092, China;
- 3. Shanghai No.2 Municipal Engineering Co., Ltd., Shanghai 200065, China)

Abstract

Based on the construction of Shanghai metro line No.6, the horizontal displacement, layered settlement, variation of pore water pressure caused by the construction of double-o-tube(DOT) shield in soft clay region are monitored continuously. Furthermore, the soil disturbance above sea-gulled segment is analyzed. The essential rules of soil disturbance induced by DOT shield excavation are summarized quantitatively and the characteristics of regional and time-dependent of DOT shield are brought forward.

Key words tunneling engineering; double-O-tube (DOT) shield; soil disturbance; pore water pressure; environmental influence of soil engineering; regional and time-dependent characteristics

扩展功能

本文信息

- ▶ Supporting info
- ▶ **PDF**(305KB)
- ▶[HTML全文](0KB)
- ▶参考文献

服务与反馈

- ▶把本文推荐给朋友
- ▶加入我的书架
- ▶加入引用管理器
- ▶复制索引
- ▶ Email Alert
- ▶ 文章反馈
- ▶浏览反馈信息

相关信息

- ▶ 本刊中 包含
- <u>"隧道工程</u>;双圆盾构;土体扰动;孔隙水压力;环境土工影响;区域性时段性"的相关文章
- ▶本文作者相关文章
- · 孙统立
- ・ 张庆贺
 - 胡向东
 - 朱继文

DOI:

通讯作者