

扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF\(196KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [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](#)

[“土力学; 损伤软化; 剪胀软化; 双安全系数; 衰减速度”
的 相关文章](#)

▶ [本文作者相关文章](#)

· [唐 芬](#)

·

· [郑颖人](#)

· [赵尚毅](#)

土坡渐进破坏的双安全系数讨论

唐 芬^{1, 2}, 郑颖人¹, 赵尚毅¹

(1. 后勤工程学院 军事土木工程系, 重庆 400041; 2. 重庆交通大学 应用技术学院, 重庆 400042)

收稿日期 2006-10-31 修回日期 2007-2-20 网络版发布日期 2007-7-20 接受日期 2006-10-31

摘要 边坡的破坏是一个渐进累积破坏过程, 在边坡剪切带的形成过程中, 土体的强度参数以不同衰减速度进行衰减, 因此, 应有不同的安全储备。对不同土性的软化特征进行分析, 黏性土土坡随着剪切带的形成, 将发生损伤软化, 黏聚力c衰减远快于j的衰减; 砂性土土坡随着剪切带的形成, 发生剪胀软化, 衰减快于c衰减。根据不同衰减速度, 提出了黏性土土坡按 的方式进行双安全系数分析, 砂性土土坡按 方式进行双安全系数分析。同时, 提出在不同土性的土坡中, 按不同的方式进行配套折减, 供工程界参考和讨论, 以逐渐形成共识。

关键词 [土力学; 损伤软化; 剪胀软化; 双安全系数; 衰减速度](#)

分类号

DISCUSSION ON TWO SAFETY FACTORS FOR PROGRESSIVE FAILURE OF SOIL SLOPE

TANG Fen^{1, 2}, ZHENG Yingren¹, ZHAO Shangyi¹

(1. Department of Military Civil Engineering, Logistic Engineering University of PLA, Chongqing 400041, China;

2. School of Applied Technology, Chongqing Jiaotong University, Chongqing 400042, China)

Abstract

Slope destroy is a progressive process. During the process of formation of the shear bands, the shear strength parameters have different decay rates. So the margin of safety is different for parameters c and . The different softening characteristics of different soils were analyzed. The softening damage is found in the cohesive soil slope as formation of the shear bands, so the decay rate of cohesive c is more rapid than that of internal friction angle . The dilation and softening are disclosed in the sand soil slope, like the formation of the shear bands. The decay rate of internal friction angle is more rapid than that of cohesive parameter c. According to the different decay rates of parameters , the modes of in the cohesive soil and in the sand soil were put forward. The different modes in the different soils were discussed to offer some references to relevant studies in geotechnical engineering.

Key words

[soil mechanics; damage softening; dilation and softening; two safety factors; decay rate](#)

DOI: