

莫拉克災後公路邊坡復建之地工挑戰

陳俊定 吳文隆 陳聰海 廖繼仁

台灣世曦工程顧問股份有限公司

摘 要

2009年莫拉克颱風侵襲台灣，接連三天在中南部降下超過2500mm的雨量，相當於以往一整年的平均雨量，造成山崩、土石流、淹水等嚴重災害。其中位於台灣阿里山地區，其累積雨量超過2500mm，豪雨重創該區，災情相當嚴重，不但民眾飽受傷亡與流離之苦外，南台灣之鐵公路交通也有相當嚴重的災情，本文列舉國內阿里山地區(台18線59.1k、嘉義縣道災後復建工程)二個復建工程案例，供作工程各界之參考。

關鍵字：莫拉克颱風、阿里山地區、豪雨。

The Geotechnical Challenges on Disaster of Highway Slope and River Bridge after Morakot Typhoon

Chun-Tin Chen Wen-Long Wu Tsung-Haw Chen Chi-Jen Liao

CECI Engineering Consultants, Inc., Taiwan

Abstract

The Morakot Typhoon attacked Taiwan on August 8, 2009. The accumulated rainfall for three consecutive days is more than 2500mm which is equivalent to the average rainfall of the whole previous year. The abundant rainfall causes severe damages, such as landslides, debris flow, and flooding. In particular, the torrential rain hit the access roads and caused a very serious disaster at the Alishan area. Also, people suffered casualties and displaced in these area. The rail and road traffic has also undergone a very serious disaster in southern of Taiwan. This article cited two engineering cases which are line No. 18 59.1k, post-disaster road reconstruction project of Chiayi County at Alishan area. It is expected that the two engineering design and construction cases could be served as the reference bases of the related engineering practices.

Key Words : Morakot, Alishan, highway, rainfall.

一、前 言

2009年莫拉克颱風侵襲台灣，接連三天在中南部降下超過2500mm的雨量，相當於以往一整年的平均雨量，造成山崩、土石流、淹水等嚴重災情。其中雨量最大、受災最嚴重區域位於台灣阿里山地區及高屏地區，豪雨重創災區進出道路，其中阿里山公路(台18線)、嘉義縣道等二個

路段附近災情相當嚴重。

本文以該二個復建工程為例，依據地形、地質、水文等資料，詳細調查分析，提出最有效可行之整治對策及方法。其中阿里山地區之案例以邊坡復建工程為主，該二個復建工程目前均已完工，特整理相關復建設計與施工經驗，供作工程各界之參考。