

Geotechnical Planning Review Report (GPRR)

Executive Summary

This Geotechnical Planning Review Report (GPRR) has been prepared to support Planning Application No. A/NE-TKLN/89 for the proposed development at Lin Ma Hang Road, DD80, Lot 516 and others. The report addresses the Civil Engineering and Development Department's (CEDD) comments, including unauthorized slope works (USW), natural terrain hazards, and the commitment to conducting a Natural Terrain Hazard Study (NTHS). Key measures include exclusion of the USW-affected area, clarification of maintenance activities, and mitigation proposals.

1. Introduction

1.1 Purpose

The purpose of this GPRR is to provide a preliminary geotechnical assessment in response to CEDD's comments. This report focuses on:

- Clarifying issues regarding unauthorized slope works.
- Reviewing natural terrain hazards impacting the site.
- Proposing practical measures, including a commitment to undertake an NTHS.

1.2 Scope

This report covers:

- Clarification of the USW-affected area from the application boundary.
- Clarification of the nature and extent of slope maintenance activities.
- A preliminary natural terrain hazard assessment for the remaining area.
- Mitigation measures and recommendations.

1.3 Project Background

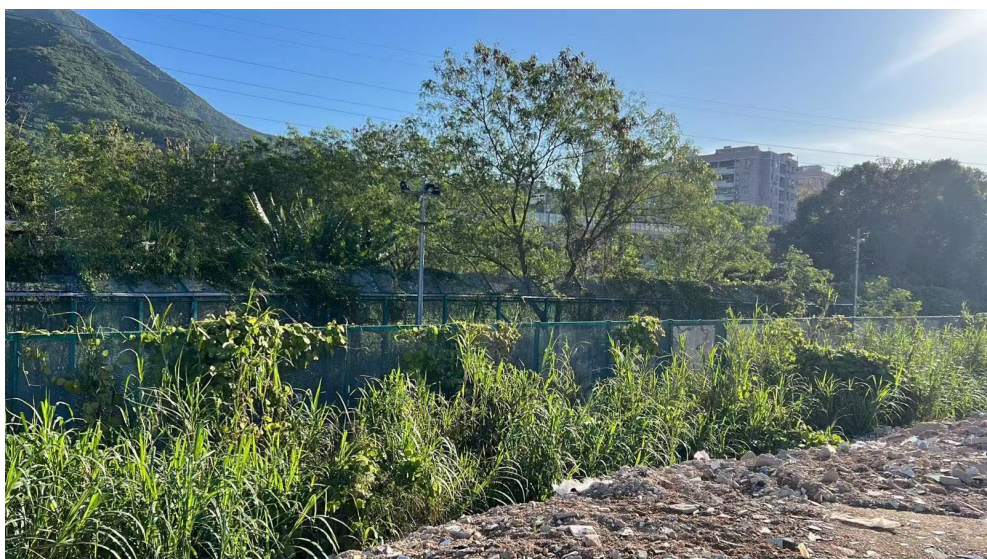
The subject site, located at Lin Ma Hang Road, DD80, Lot 516 and others, has been proposed for temporary warehouse development. The site is bordered by steep natural terrain to the north, raising concerns about potential hazards such as landslides and erosion. Recent slope maintenance near the site gate was carried out following typhoon damage from landowner. However, it is not exactly in the application area which you said.

2. Site Description

2.1 Location and Topography

The site is located at Lin Ma Hang Road, DD80, Lot 516 and others, in the New Territories. Key features include:

- A southern section with a slope gradient of approximately 3.44 (25 m length, 1.5 m height) leading from the site gate to the main road.
- Steep natural terrain to the north overlooking the site is not near the main building.



2.2 Site Features

- **Existing Use:** The site is currently used for nothing.
- **Unauthorized Slope Works:** Maintenance near the gate but not in the application area following typhoon erosion.



2.3 Climate and Hydrology

The site is subject to subtropical conditions, with heavy rainfall during the summer. This contributes to potential hazards such as surface erosion and slope instability.

3. Unauthorized Slope Works (USW)

3.1 Issue Description

Unauthorized slope works have been identified near the site, but the area indicated in CEDD's Attachment 1 does not align with the actual maintenance location. The works involved minor road repairs to ensure safety following typhoon-induced erosion. No fill soil engineering or significant slope modifications were conducted.

4. Preliminary Geotechnical Review of Natural Terrain Hazards

4.1 Identified Hazards

Based on the site's steep southern and part of northern terrain and climate, the following natural hazards are identified:

- **Landslides:** Steep slopes pose a risk of soil and rock movement.
- **Erosion:** High rainfall increases surface erosion potential.
- **Rockfalls:** Loose rocks on the slopes may impact the site.

4.2 Preliminary Assessment

- **Southern Slope Stability:** The gentle slope near the gate (3.44 gradient) shows no significant geotechnical risks.
- **Northern Terrain Risks:** Moderate to high hazard risks require mitigation.

4.3 Mitigation Recommendations

1. **Drainage Improvement:** Install surface drainage to reduce water accumulation.
 2. **Vegetation Reinforcement:** Stabilize slopes with native vegetation.
 3. **Commitment to NTHS:** Conduct a detailed hazard study to develop long-term mitigation measures.
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5. Commitment to Natural Terrain Hazard Study (NTHS)

5.1 Scope of NTHS

The NTHS will:

- Assess landslides, erosion, and rockfall risks for the southern terrain.
- Propose mitigation measures to ensure the site's safety.

5.2 Timeline

The NTHS will be initiated upon planning approval and completed within six months.

5.3 Implementation

Mitigation measures recommended by the NTHS will be integrated into the development plan.

6. Conclusion

This GPRR demonstrates the applicant's commitment to addressing CEDD's concerns and ensuring site safety. Key actions include:

- Excluding the inaccurately identified USW area.
- Providing detailed clarification of maintenance activities.
- Guaranteeing the completion of an NTHS to assess and mitigate natural terrain hazards.

We respectfully request that the planning application be approved, subject to the outlined commitments and mitigation measures.