

# **Project Profiles**

## **TOURISM**



# Ngong Ping 360 Cable Car Project Lantau

Developer/Owner  
**MTR Corporation Ltd**

Year of assessment commencement  
**2004, under HK-BEAM for new building developments**

The Ngong Ping 360 tourism project will see the completion of a 5.7 km cable car route linking a three-level Tung Chung Terminal and a three-storey Ngong Ping Terminal, as well as a themed village, Ngong Ping Village, next to the Ngong Ping Terminal. The attraction will be managed by Skyrail-ITM (Hong Kong) Ltd. The special environmental needs of the project have been recognised from the outset and issues identified early in the planning process have influenced design and construction methodology.

The cable car system technology choice and the route's alignment were planned to minimise the number of tower structures and associated impact to the local ecology. Much emphasis was placed during the design development stage on harmonising the project with its surrounding environment. As a result, the terminals and angle stations are designed with unique characters to blend in with surroundings. The Ngong Ping Village has been designed to reflect and maintain the cultural and spiritual integrity of the Ngong Ping

area, and to complement the existing attractions such as the Po Lin Monastery and the Big Buddha.

The location of the project in Lantau North Country Park required a holistic approach to managing biodiversity and conservation of natural resources. Management and monitoring systems were applied to prevent unnecessary loss of ecological habitat and ensure reuse of vegetation cleared as a consequence of project delivery. The program also provided training for project employees in the implementation of daily work practices designed for minimal disturbance to the local flora and fauna. Delivery of materials along the route during the course of construction was handled in a way to tread lightly across the region. Helicopters lifted materials and equipment to worksites while a team of imported pack mules was also used to carry materials along hillside tracks.

The project also included the diversion of about 390 m of Ngong Ping Stream to the northern boundary of the site. The client had studied the option of using the stream in its



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- 1 Ngong Ping Skyrail carries passengers across Lantau North Country Park
- 2 Key attraction in Ngong Ping Village — Walking with Buddha
- 3 Key attraction in Ngong Ping Village — Monkey's Tale Theatre
- 4 Overview of Ngong Ping Village

**“It is our agenda to work towards the sustainable development of the project.”**

**— Dr Glenn Frommer,**  
Sustainability Development Manager, MTR Corporation

existing position as a highlight feature in the Village but it was in poor condition and flood-prone, and presented safety and health issues. With input from various government departments and NGO parties, the new stream course was designed to merge with the existing environment and encourage the quick re-establishment of ecosystems.

The main contractor is committed to performing construction activities in an environmentally sensitive manner and that inevitable impacts will be reduced as much as practically possible. The company won the Gold Award in the Green Construction Award category of the Hong Kong Eco-Business Award 2004 for the Tung Chung Cable Car Project.

The placement of noise sources in completed buildings has been planned to limit sound levels. Split-type air-conditioners and cable car drive motors at the Ngong Ping Terminal will be strategically located and mitigated to satisfy HK-BEAM requirements and prevent noise carrying to nearby residents. Exterior lighting levels will be maintained according to international standards, thereby cutting light pollution.

Automatic ventilation control systems such as temperature and carbon monoxide sensors will be applied to reduce energy use. Photoelectric switching controls have been specified for lighting systems in exterior areas and timer provisions are also specified for indoor public-area lighting installations. Further credit has been received for providing sufficient natural cross-ventilation at cable car waiting areas.

Additional measures at the project that have received provisional HK-BEAM credits include using native plants in the Ngong Ping Village landscaping, and specifying a rainwater recycling system at Nei Lak Shan Angle Station near the Ngong Ping Terminal for flushing and cleansing purposes.

Architect  
**Aedas Ltd**

M&E consultant  
**Ove Arup & Partners (HK) Ltd**

Structural engineer  
**Ove Arup & Partners (HK) Ltd**

Main contractor  
**Maeda Corporation**

Completion date  
**Early 2006**