

#### LANDSCAPE ARCHITECT

Richard Reid & Associates

#### CLIENTS

Transit NZ/NZTA; Auckland City Council

#### LANDSCAPE CONCEPT DESIGN

Pita Turei, Richard Reid, Ngarimu Blair

#### MAIN CONTRACTORS

Fulton Hogan Ltd (re-shaping of maunga); Ross Reid Ltd (landscape and cycleway)

#### OTHER CONSULTANTS AND SUPPLIERS

**Engineer:** URS Ltd  
**Carvings:** Toitu Design Ltd  
**Planting contractor:** Envirotech Maintenance Ltd  
**Planting advice:** Bernadette Papa (Ngati Whatua), Geoff Davidson (Oratia Native Plant Nursery), Sue Scheele (Landcare Research), Alan Esler  
**Cycleway advice:** John Gregory (Cycle Action Auckland)

# Puketapapa Mt Roskill & Waikaraka Cycleway

Two separate projects: a thoughtful design that allowed Mt Roskill to retain its volcanic form in the face of SH20's oncoming traffic, and the sympathetic introduction of a cycleway to the slopes of the maunga.

Words by Richard Reid Photographs by Sajeev Ruthramoorthy

**R**ichard Reid & Associates was engaged by Transit NZ (now the New Zealand Transport Agency) and Auckland City Council to redesign two transport infrastructure projects involving Puketapapa Mt Roskill Volcano, a landscape of national and international importance in Auckland.

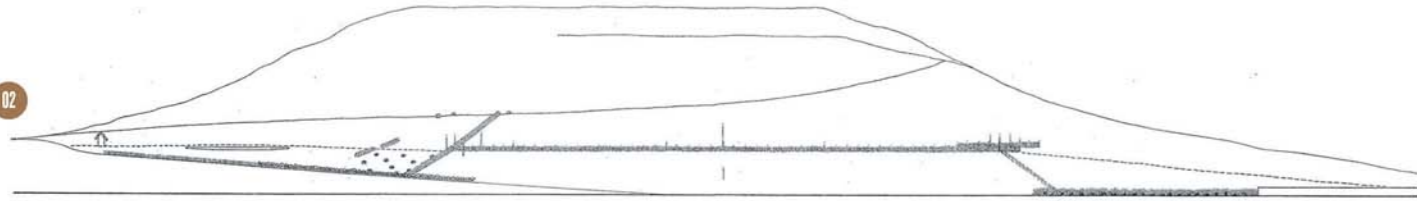
The volcano had been the key issue regarding consent for Transit's SH20 Mt Roskill Motorway Extension in 2001. The motorway's planned alignment brought it into direct conflict with the north face of the volcano. The Environment Court weighed moving the motorway to protect Puketapapa against the national benefits from building key transport infrastructure. Transit was granted the right to build the motorway in an 11 metre trench cut vertically through the lower northern face and apron.

Transit later reconsidered its approach after agreeing to comply with the Auckland City Council District Plan *Reserves and Other Lands Disposal and Public Bodies Empowering Act 1915*. This long-forgotten law prevents volcanic slopes abutting public reserves from being cut steeper than 40 degrees. Our practice was asked by the Auckland Volcanic Cones Society to explore the implications of this less intrusive cut which led to Transit engaging us for the project. We were helped by Transit finding room for the motorway to move 10 metres northwards.

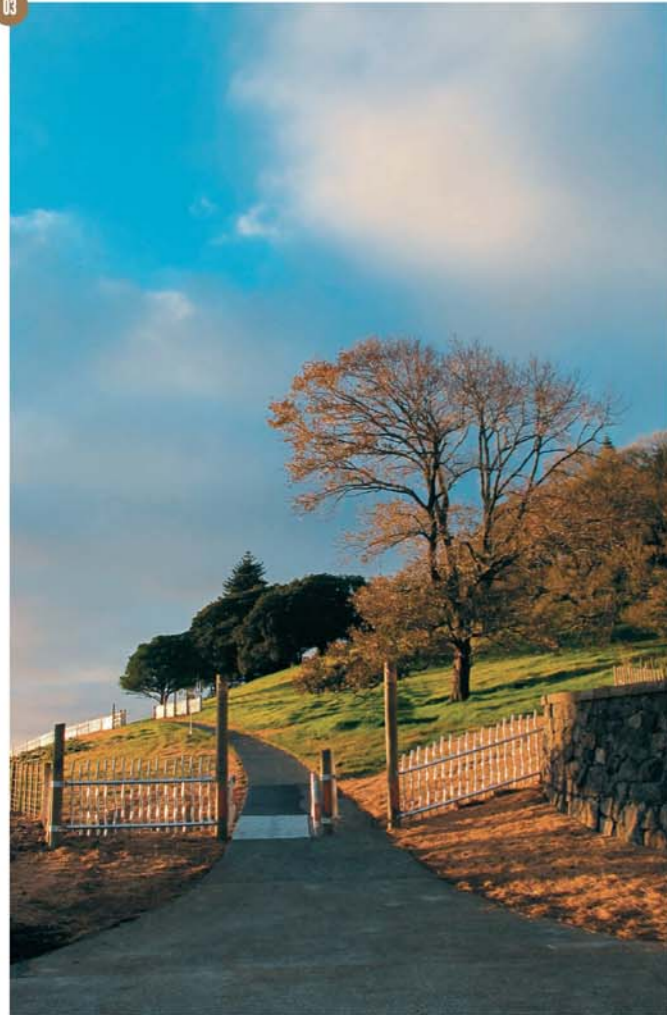
The aim for re-shaping Puketapapa was three-fold: maintain the volcano's sense of volume and curvature; remove the distinction between natural and engineered slopes; and create a joined integrity for volcano and motorway. The desired outcome was a foregrounding of Puketapapa as the primary visual experience of the motorway. Re-shaping began in 2006 and was finally completed in 2010.

At the same time, Auckland City Council was planning a regional cycleway across the same face. Their initial design largely replicated Transit's original approach but on a smaller scale, sacrificing the volcano's values for the rigid alignment of transport infrastructure. After a prolonged period of stakeholder resistance, my suggestion of a more sympathetic

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fit led to our practice being engaged to redesign the cycleway with the assistance of the engineering firm URS Ltd.

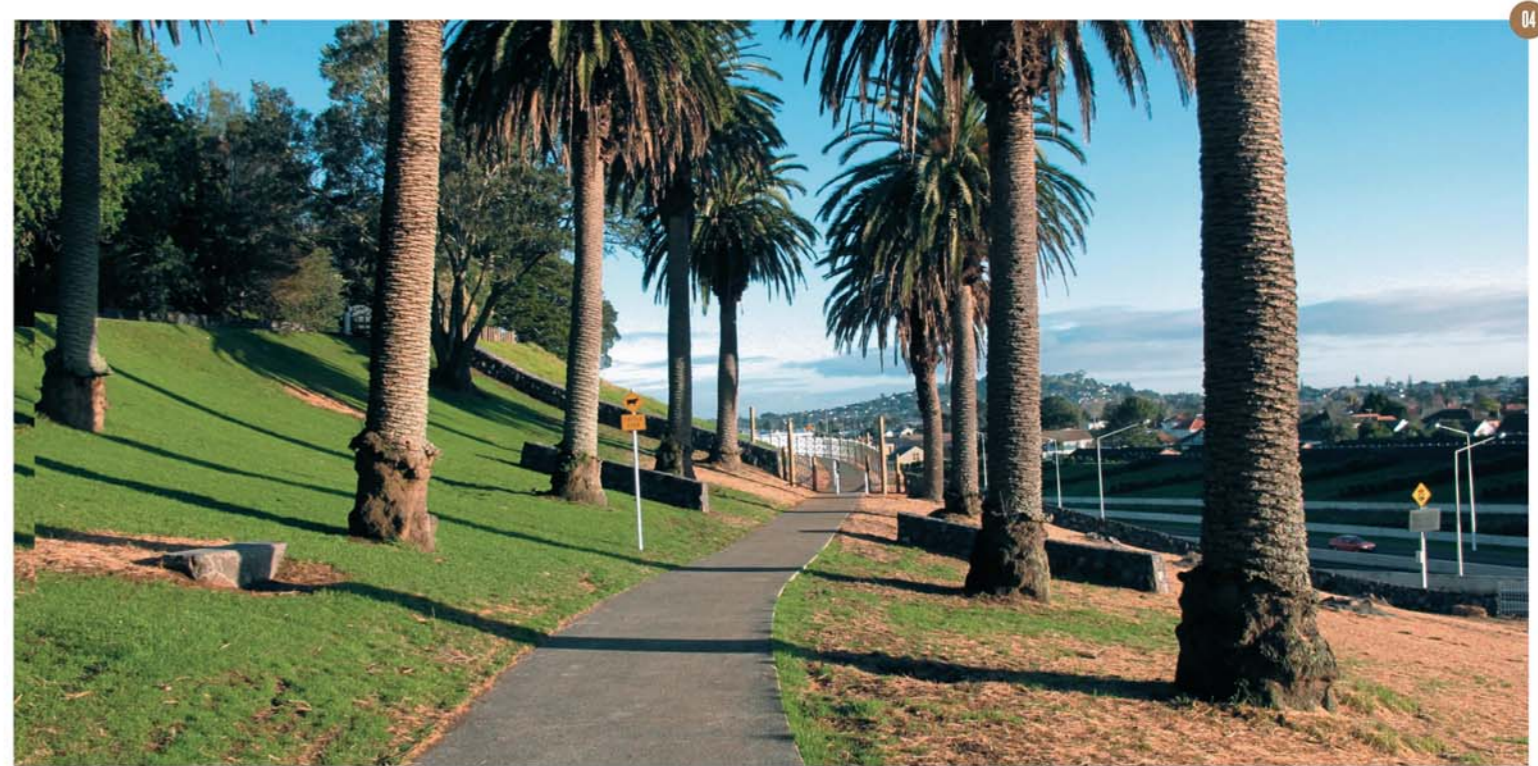
The council wisely decided that integrating the cycleway within a landscape plan for the north face would ensure a more holistic outcome, including enhancement of its cultural and natural values. We based the landscape plan on a design proposed by Ngati Whatua o Orakei and our practice for Transit in 2005 (which had not been able to progress). The plan incorporates the way Maori historically organised space on Auckland's volcanoes (maunga). In Tamaki Makaurau, maunga formed the origin points of a complex land use system, acting as foci for habitation, cultivated gardens, food storage and defensive fortifications (Pa), often built to protect the food storage.

Puketapapa's past uses and Ngati Whatua's ancestors are acknowledged with waharoa (gateways) and light palisade fencing that mark important boundaries and guide passage safely across the maunga. Reference to a volcanic slope garden is made through use of basalt stone gifted from Transit's excavation work. Typically, volcanic slope gardens were built radiating outwards from the summit of maunga like the spokes of a wheel. One segment here is designed to pass through the existing palm tree avenue, creating a transitional space which slows down cyclists and signals the changing gradient of the maunga.

New plantings dress the maunga and accentuate its curvature. Toetoe, harekeke cultivars, ti kouka and kiekie are planted for cultural harvesting; kiokio and *Doodia australis* ferns highlight spring growth; and Puketapapa's ideal grass cover, the native *Microlaena stipoides*, is re-introduced in large numbers to also enhance its historic association with Maori settlement of maunga as well as develop a seed source for the Auckland Region.

A new shared walking and cycling pathway is the thread that binds these and the existing features of the park together. Its line and width are modulated to fit the changing shape of the maunga; the rhythm of elements along its length introduces a more ceremonial and processional route; and new entrances provide better public access.

The final outcome brings together two very different transport infrastructure projects. It is a unique expression of the maunga's bicultural heritage, enhancing Puketapapa as a touchstone for Tangata whenua and the local community. The cycleway project was blessed by Ngati Whatua and publicly opened on 25th July 2010. ①



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01: Puketapapa Mt Roskill (previous spread) viewed from the Dominion Rd motorway overbridge. 02: Landscape proposal for Puketapapa by Ngati Whatua o Orakei and Richard Reid. 03: Cycleway, western entrance. 04: Cycleway and pedestrian path. Basalt walls reference traditional Maori volcanic slope gardens. 05: Ngati Whatua o Orakei design of palisade fence for Puketapapa (2005). 06: Construction drawing of palisade fence for steelworker assembly.

