

**Nomination Form for the
NZRA Outstanding Award 2011**



Category:	Outstanding Project
Organisation:	New Plymouth District Council
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Nomination completed by:	Kathryn Scown
Date:	22 September 2011
Name of the project nominated:	New Plymouth – Bell Block Path

Attach your nomination addressing all of the judging criteria

(Note: this nomination should be no longer than four pages, minimum font size 10 point Arial)

Send SEVEN hard copies of your nomination to:

**BY POST:
NZRA
PO Box 11132
Manners Street
Wellington 6142**

**BY COURIER:
NZRA
Level 3, Mountain Safety House
19 Tory St
Wellington**

Send one PDF electronic copy of your nomination to:

info@nzrecreation.org.nz

Winning and highly commended nominations will be made available on the NZRA website.

Nominations close 5.00 pm Friday 23 September 2011



Te Kaunihera-ā-Rohe o Ngāmotu
NEW PLYMOUTH DISTRICT COUNCIL
newplymouthnz.com

TARANAKI
like no other

New Zealand Recreation Association Industry Awards
NZRA Outstanding Awards 2011
New Plymouth-Bell Block Path



NEW PLYMOUTH – BELL BLOCK PATH

The path extends the Coastal Walkway (judged the world's most Environmentally Sustainable Project, Liveable Communities Awards 2008) 4 km's from New Plymouth to Bell Block, along previously untrodden ground which, In 2007, the New Plymouth District Council (NPDC) invited entries into a competition to design and build an iconic bridge that was to be 'simultaneously utilitarian and beautiful' on the significant site. The stunning Te Rewa Rewa Bridge was the result.

The New Plymouth-Bell Block path has quickly become a potent cultural symbol for the local community and tangata whenua who have embraced it as a destination, recreation asset, tourist attraction, marketing tool and landmark. It has contributed to the local economy and greatly impacted on the quality of life and well-being of the community. The stunning Te Rewa Rewa Bridge has gained significant international recognition and its success has contributed to building the reputation of New Zealand engineering and design. Unique, challenging, innovative and economic mean the project has been a success beyond all expectations.

INNOVATION

In its isolation and historic, cultural and environmental context, the project required innovation and excellence in all areas of project delivery from communication, through to design and construction.

Land acquisition: Land was required across the Waiwhakaiho River which led to the ground-breaking agreement between the NPDC and Ngati Tawhirikura hapu. This land was acquired by the Government under the Public Works Act for defence purposes and was handed back to the people – Maori and local community – in June 2007, exactly 100 years after it was taken. Hapū chairman Rangī Kipa says "No Council has gone into a joint relationship on a reserve before". To extend the walkway even further northward, NPDC swapped 3.2 hectares of land at Hickford Park in Bell Block for 3.2 hectares of New Plymouth Golf Club land. By conducting a land swap, no money changed hands and the area is now more accessible to the public and provides better links to the Coastal Walkway.

Competition and contract: To find the most creative design for the bridge, NPDC conducted a design competition for an "iconic" bridge under an innovative single lump sum design and build contract. The winning entry was from a consortium of Whitaker Civil Engineering, Novare Design and CPG Consultants.

Bridge Design: The magnificent bridge with its 19 white ribs was designed by Novare Design to be both a memorial and sculptural bridge to honour the dead and the sacredness of the land it led to. A sense of mystery and deeper meaning was engendered by the design. The Te Rewa Rewa Bridge "connects the physical with the spiritual, and the past with the future".

Path Design: The path needed to fit in with the existing design, take account of the open and natural environment, balance cost with use and consider such issues as speed and the different kinds of users. Around the bridge the path is widened and large standing areas are provided, and in the narrow areas along the river, rock protection was placed. The path reverently skirts around the pa site and undulates with the rolling land where once war trenches were dug. Through the sand dunes the path was created by picking an alignment that least disturbed the dunes, creating curves and fantastic views. In these locations a 2.4m wide concrete path was constructed and a key lesson learnt from the Coastal Walkway was to minimise the use of the timber on the pathway which has proven slippery, a trip hazard and difficult to maintain.

COMMUNITY ENGAGEMENT

This project could not have come to pass had it not been for a collaborative approach and engagement with the community including in planning, funding, designing and creating.

Commuters: The path provides a much-needed route for commuters to travel easily and safely to and from the city. Commuters using various modes of transport including skate boards, longboards, cycles, scooters, inline skates and walking and running shoes make use of the link daily.

Recreational access: This project opened up a whole section of beach, river and reserve to recreation users such as board riders, swimmers, runners, walkers, cyclists, and people keen on fishing, whitbaiting or riding horses. This project has opened up and promoted access to Hickford Park (which includes a working farm), and is resulting in the council reconsidering its use as a recreation asset in the future. The path has also been a key factor in the opening of the first cycle touring route under Nga Haerenga, The New Zealand Cycle Trail (NZCT) – the 180km ride from Taumarunui to New Plymouth which uses this link.

Iwi Involvement: The path crosses a site historically significant where many Maori have died defending their homes in past battles and the involvement of Ngati Tawhirikura hapu was considered incredibly important. This led to initiatives such as a hapu representative on the Bridge Registration of Interest panel being given half the vote. Also, the orientation of the bridge was altered when Ngāti Tawhirikura hapū asked for the 'closed' end of the 19 ribs to be on the Te Rewa Rewa side. This was a difficult task due to every rib being unique however NPDC and the partners listened.

Community: Following the unparalleled success and public buy-in for the Coastal Walkway, the bridge and extension project has been fully embraced by the community from conception through to reality.

Neighbours: The New Plymouth Golf Club (Ngamotu Golf Course) allowed access for the superstructure to be transported to the site, the Links Subdivision (Residents Group) had access agreements in place for the walkway and the leaseholders of the reserve currently managed as farmland were regularly consulted to ensure farming operations could continue without inconvenience.

Local Industry: The Bridge pushed the boundaries of engineering and provided up-skilling opportunities for local businesses and their employees. The path required diverse skills when creating concrete path, chip seal path, boardwalks, small bridges, cattle underpass, timber rafts and driftwood sculptures and undertaking iwi liaison while working to protect the existing environment.

Historic Places: The site at the northern end of the bridge contains a Waahi Tapu/Archaeological Site, Rewarewa Pa. An archaeological assessment of the site was undertaken in collaboration with the Historic Places Trust. Through the planning and construction phases of the walkway the team were briefed by a local archeologist on the potential elements they could find during construction and the archeologist was on-call should anything be unearthed.

Other Collaboration: The Department of Conservation and the Royal Forest and Bird Protection Society were two key organisations consulted with from an early stage of the project. Also local interested groups and individuals who use the area for recreation such as surfing, fishing, whitebaiting, running and horse riding.

EXCELLENCE

The investment and leadership that NPDC provided has resulted in a facility that it is an example of true excellence in both recreation and transportation infrastructure and has already been used in case studies around the world.

Bridge Design: Te Rewa Rewa Bridge is a breath-taking iconic structure, which wows everybody who views it. Minister of Transport Steven Joyce, who formally opened the bridge, said it was "beautiful", while others at the opening called it "marvellous", "magnificent" and "amazing". According to the Structural Engineering Society of NZ Inc. the Te Rewa Rewa bridge is "stunning ... with its asymmetric steel arch and fabricated steel curved plate and tube hangers, Peter (Mulqueen, of Novare Design) has managed to create a structure that not only blends nicely into the local surrounds but also echoes local themes around movement, Maori tradition and nature ... an iconic bridge without parallel in NZ as of to date".

Walkway Design and Attraction: The path, designed by Isthmus/Richard Bain Landscape Architects, maintained the Coastal Walkway's design and functional integrity by way of a consistent use of materials such as concrete, boulder placement, hardwood timber rafts, lookouts, boardwalks and seating. The path weaves through the landscape like a ribbon of silver inviting people to explore, even for a short while, the wonders of the Waiwhakaiho, wilderness and Tasman Sea. The 'walkway' by definition falls short of its true spirit – a place where not only active but also passive recreation takes place in unprecedented volumes and occasions. Such pursuits include the role the bridge and walkway have played in local marketing and tourism periodicals, postcards, calendars, personal and corporate facebook pages and adding to regional identity. Other often overlooked encounters with the path are witnessed in an overwhelming number of memorial seat requests, and its presence in wedding photos – a subtle but salient testimony to its role in people's everyday lives.

Designed elements include a boardwalk which splits from the main path above regenerating muehlenbeckia, karo and flax and offers up stunning views toward the sea. Further on is a hardwood raft lookout and on leaving the coast the path pops out from a boardwalk section that hovers above a small wetland and heads inland toward Bell Block. At one point the path even evolves into a 'race' where people encounter 'trough' seats and a pedestrian 'overpass' that enables farming operations to continue unhindered and also future-proofs the pathway in case of future land use change.

Winner: The New Plymouth-Bell Block link project recently won the Rooding Excellence Award 2011 for a Minor Project and the Supreme Award. A very exciting accolade for project under \$5m and what is not traditional considered a 'road' but much more of a recreational pathway. "The team has designed and built this internationally acclaimed asset for the district, which has well and truly achieved the council's objectives. It is inspirational and has been embraced by the local community," the judges said.

Te Rewa Rewa Bridge was awarded the Arthur G Hayden Medal at the International Bridge Conference 2011 in Pennsylvania, USA for bridge engineering demonstrating innovation in special use bridges. The judge's comments were "eye catching ... this is a bridge you simply cannot ignore" and "it's beautiful ... I have never seen anything like this".

Te Rewa Rewa also won the INGENIUM Excellence Awards 2011, Category 2 (projects \$2m - \$10m) Award and the medium span (30m to 75m) aesthetic category at the tri-annual International Footbridge Conference 2011 in Wroclaw, Poland. The jury was unanimous in the decision and comments included – "Stunning iconic structure, yet simple form with excellent attention to detail. The change from a traditional elevation to the more oblique views gives this one the wow factor."

ACHIEVEMENT

As much as the project has been an award winner, it is the community who have funded it who have the final say. The numbers using it have surpassed all expectations and the benefits seen by all.

Connection: The goal of NPDC was to create a landmark recreational asset and an off-road commuter pathway between New Plymouth and Bell Block. The design of the 3-metre wide bridge had to be iconic, culturally significant, and capable of accommodating an ambulance and service vehicles. The project has surpassed all expectations.

Usage: People have been flocking to see the magnificent bridge and explore the Coastal Walkway extension. Since the bridge opened in June 2010 it has been crossed an impressive 430,000 times.

Healthy: The social, mental and physical health benefits of the project reach beyond anyone's expectations and predictions. NPDC did an analysis of the project's impact on society, especially people's health, and found that it would be of great benefit to all. However, the numbers of people using the area is so high that the expected benefits have tripled and the project will pay for itself in terms of health savings in just 10 years.

Recreational Users: Many different types of recreational users now have easy access to a previously unharnessed stretch of coast and river and have a new destination for exercising and fun. The path is used by everyone and in the example of cyclists; it's a common sight to see children learning to ride a bike and many of the community's older population getting back on bikes – all because they have a safe place to ride.

District promotions and tourism: The benefits of the project have continued with it quickly becoming a tourist attraction. Everyone who visits New Plymouth is told about 'the bridge', cameras are seen out at every visit, it is used in marketing material for many businesses, events and district promotions and real estate agents are now using such phrases as 'Te Rewa Rewa Bridge Zone' to help sell houses.

Attracting skilled staff: In a region known for its engineering expertise, in the oil and gas industry and boat building, employers are using images of the project and examples of its accolades to help showcase what the New Plymouth district has to offer prospective employees.

EFFICIENCY AND EFFECTIVENESS

The project has been considered incredible value for money by the NPDC, community and external funders.

Funding: The total project cost was \$4.2m. External funding was received including \$1.89M from NZTA and \$0.33M from the Whitaker Family Trust. Adherence to budget parameters was very important and due to initiatives such as the fixed price design and build bridge contract and risks taken around steel purchase timing, this was very successful. The NPDC and community have received exceptional value for an international renowned and award winning project.

Efficient use of materials: The efficient use of materials was very important for the bridge. The weight of steel works out at 375kg/m² of deck area – only 50kg/m² more than expected for a 70m arch bridge – a premium for the curved ribs. At approximately NZ\$13,000/m² Te Rewa Rewa is below average for an iconic bridge in the UK.

Contract: The bridge project was constructed under a fixed price contract. This was extremely successful in keeping the price down and it is believed the project would have cost a great deal more if this had not been put in place.

Whole of Life: It was important that the bridge and walkway be built to last. They are situated in a harsh coastal location and the construction, finishing and materials used had to be robust and appropriate for the environment. The bridge design criteria stated that durability, maintenance and whole of life costs are important, the design life shall be 100 years and that replaceable elements shall have a minimum design life of 25 years prior to major maintenance or replacement.

SUSTAINABILITY

Not only is this project sustainable and built to last, it has attracted other funding to continue creating more links and does much for sustainability in the wider sense.

Sustainable Transport: The project provides an important commuting connection between New Plymouth and Bell Block and is used by people walking, running and cycling, using bikes, trikes, scooters, wheelchairs and mobility scooters, walking dogs and pushing buggies. The project provides a safe and enticing alternative to a busy highway for people to travel to and from work or school and for recreation. It has significantly increased the number people choosing to use sustainable transport and to exercise.

Model Community: The Coastal Walkway and this project greatly contributed to New Plymouth being named a Model Walking and Cycling Community by NZTA. This ensures the sustainability of this project with many links to the Coastal Walkway being created such as around Lake Rotomanu with a bridge across to the Valley Mega Centre. This will extend off-road commuter access to shops at the valley and continue the city's ongoing commitment to inspiring people to become active.

Wildlife: The walkway extension included the laying of concrete along the existing causeway and constructing a short bridge across a tendril of the Waiwhakaiho River – the path provides users with views of a regionally significant gull population as well as schools of kahawai and the ever present shags, common seagulls, terns and herons, as well as migratory visitors such as swallows and geese.

Protection: While the path opens up a whole new area for people to access, the NPDC and the design team were committed to preserving the cultural and environmental aspects of the land. Mesh was applied to the perimeter fence of the Te Rewa Rewa block to counteract any wayward dogs finding their way to the significant gull population, and a five wire farm fence encourages people to respect the sacred site of the Ngāti Tawhirikura hapū. During construction of the pathway through dune systems, disturbance was kept to a minimum by ensuring cut and fill areas were laid back and matched in with the existing dune contour, overland flow paths were not interrupted and capping with excavated site material reduced the occurrence of sand blow-outs. Through the boardwalk sections, a similar minimum disturbance approach was taken where the absolute minimum width to construct the boardwalk was cleared, and local volunteers took the opportunity to scout for geckos in order to offer relocation in appropriate hibernacules & habitat before returning them to site.

Recreation: The path has opened up a whole area not previously available for recreation. Board riders, swimmers and people keen on fishing and whitebaiting now have easy access to this stretch of coast and river without causing damage to surrounding areas.

River disturbance: Under the bridge design brief and resource consent, there was to be minimal disturbance to the river, for both cultural and environmental reasons. No fixed structure was allowed to be in the river and it had to be built to be clear of floods and lahars during volcanic eruptions.



