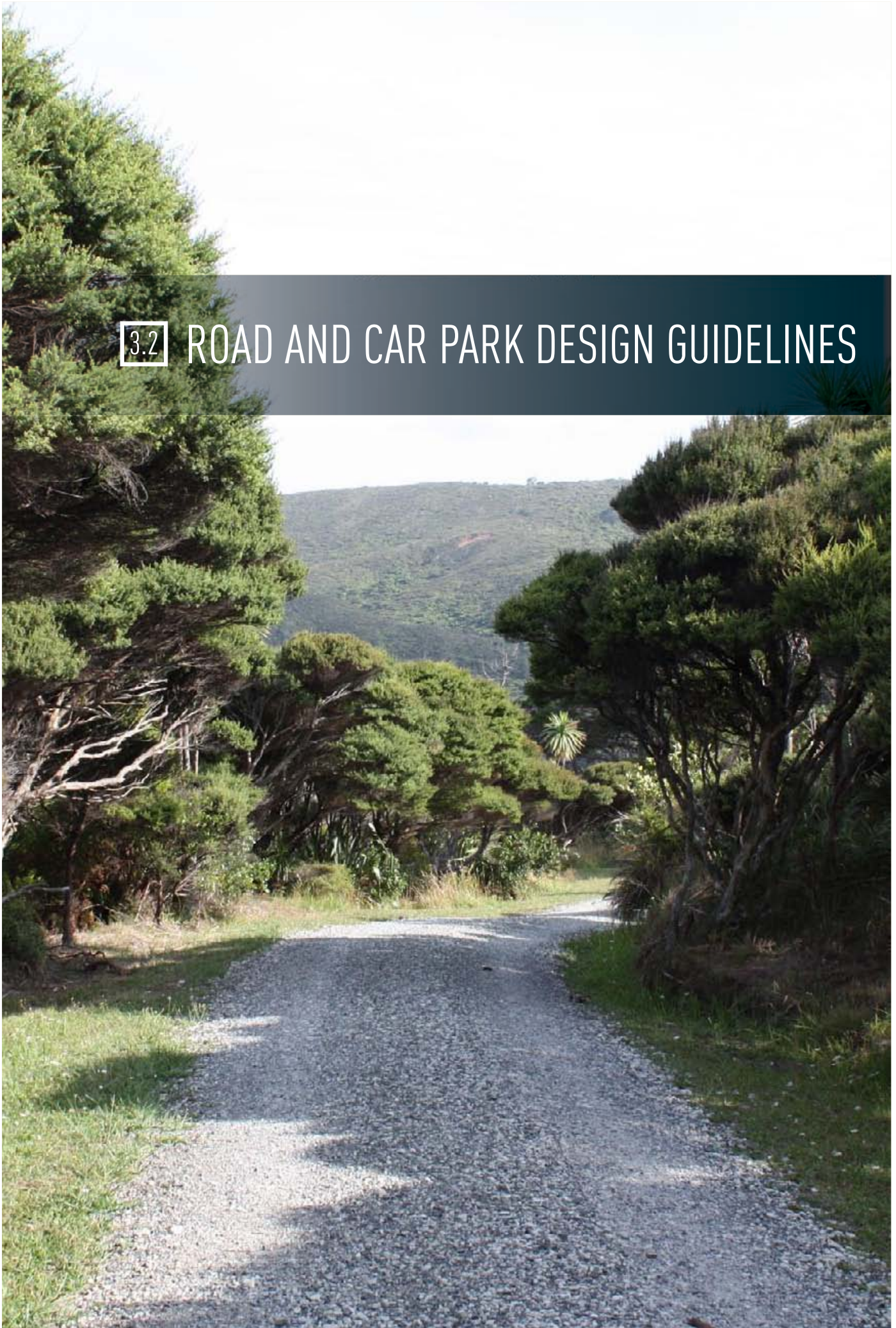


3.2 ROAD AND CAR PARK DESIGN GUIDELINES



Existing Road and Car Park Photos:



North Piha carpark



Anawhata carpark



Winstone Track carpark off Piha Road



North Piha carpark

Roads and Car Parks on Regional Parkland at Piha:

Park roads and carparks provide convenience and direct access to popular destinations at Piha. However, wide roads and carparks at Piha can significantly detract from the enjoyment of the qualities of the natural setting and they can affect biological corridors and fragment habitats by creating barriers to growth.

Roads and carparks need to be designed to withstand wear and tear, provide the service of proximity to destinations while minimising ecological disturbance. The use of vegetation in a carpark or alongside a road is not only important for biological function, but also for mitigating adverse effects of the development. Where possible, vegetation should be used instead of structural barriers for traffic calming measures.

Carparks are often large open-spaced areas in close proximity to natural attractions. It is recommended that carparks are based on single-lane circulation (one way in, one way out) to minimise the width of surface area across the carpark.

Potential Design Improvements:



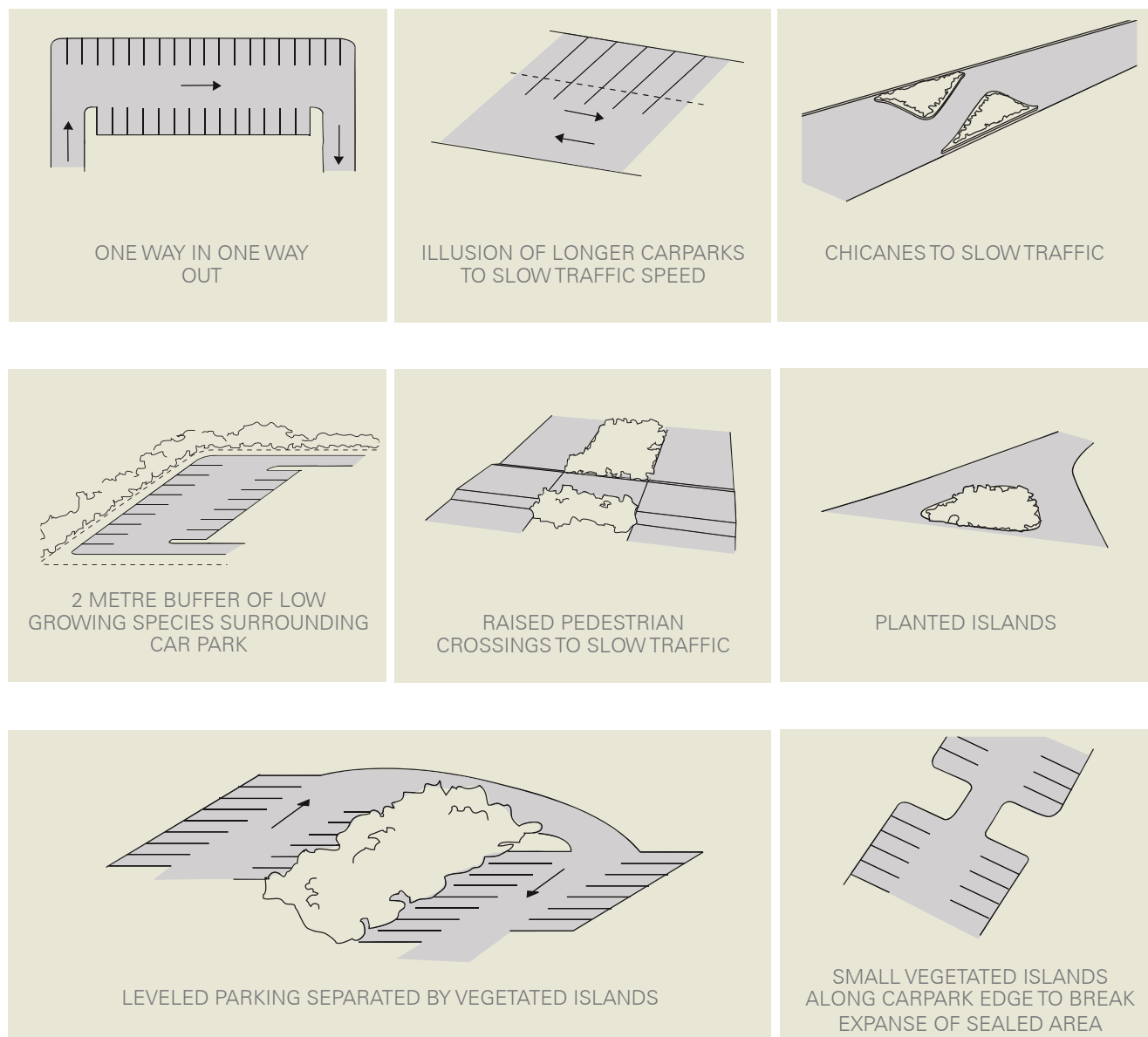
- | | |
|-------------------------------|--------------------------|
| ■ SITING AND LOCATION | ■ AESTHETICS AND BALANCE |
| ■ ACCESSIBILITY AND USABILITY | ■ COLOUR AND TEXTURE |
| ■ VISIBILITY | ■ SCALE |
| ■ DESIGN WITH NATURE | |

KEY: ■ EXCELLENT ■ ADEQUATE ■ NOT ADEQUATE



IMPROVEMENTS :
Low planted 'islands' sporadically placed along car park edge to break expanse of sealed area.

Road and Car Park Guideline Diagrams:



Design Exemplars:



Scandrett Regional Park



Ngarunui Beach, Raglan



Muriwai Regional Park



Ngarunui Beach, Raglan

Road and Car Park Design Checklist:

DESIGN WITH NATURE AND SENSE OF PLACE	
<ul style="list-style-type: none"> • <i>Responds to site history, culture, geology and landscape</i> • <i>Earthworks kept to a minimum</i> • <i>Energy conscious and renewable materials</i> • <i>Vegetation undisturbed on car park boundary</i> 	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> ADEQUATE <input type="checkbox"/> NOT ADEQUATE
SITING AND LOCATION	
<ul style="list-style-type: none"> • <i>Shade and shelter from existing trees</i> • <i>Backdrop of landform or vegetation</i> • <i>Car park does not sit on ridge line</i> 	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> ADEQUATE <input type="checkbox"/> NOT ADEQUATE
FIT FOR PURPOSE/ ACCESSIBILITY	
<ul style="list-style-type: none"> • <i>Design for main user groups</i> • <i>Close to important recreation areas</i> • <i>Barrier free where possible</i> • <i>Surface design appropriate for climate and classification</i> • <i>Circulation (one way in, one way out)</i> 	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> ADEQUATE <input type="checkbox"/> NOT ADEQUATE
FORM	
<ul style="list-style-type: none"> • <i>Tie into the natural landform - follows contours (leveled parking where appropriate)</i> 	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> ADEQUATE <input type="checkbox"/> NOT ADEQUATE
AESTHETICS	
<ul style="list-style-type: none"> • <i>Design enhances appeal of the natural environment</i> • <i>Design acclimatises people to the setting</i> 	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> ADEQUATE <input type="checkbox"/> NOT ADEQUATE
COLOUR AND TEXTURE	
<ul style="list-style-type: none"> • <i>Materials and colours that blend with the local landscape</i> • <i>Natural materials chosen that weather with time</i> 	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> ADEQUATE <input type="checkbox"/> NOT ADEQUATE
SCALE AND BALANCE	
<ul style="list-style-type: none"> • <i>Car park scale relative to location</i> • <i>Relative to human scale</i> • <i>In context of other developments, buildings and structures within the vicinity.</i> 	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> ADEQUATE <input type="checkbox"/> NOT ADEQUATE

VISIBILITY	
<ul style="list-style-type: none">• <i>Site lines and view shafts maintained</i>• <i>Create new visual cues towards roads and car parks when proposing new development</i>	<div><input type="checkbox"/> EXCELLENT</div> <div><input type="checkbox"/> ADEQUATE</div> <div><input type="checkbox"/> NOT ADEQUATE</div>
CLUSTERING AND ECOLOGICAL FOOTPRINT	
<ul style="list-style-type: none">• <i>Ecological footprint of carpark kept to a minimum</i>	<div><input type="checkbox"/> EXCELLENT</div> <div><input type="checkbox"/> ADEQUATE</div> <div><input type="checkbox"/> NOT ADEQUATE</div>
SAFETY	
<ul style="list-style-type: none">• <i>Community ownership of asset encouraged</i>• <i>Car park in close proximity to high activity areas to encourage informal surveillance</i>• <i>Use of traffic calming measures - narrow lanes, central islands/medians, curved road, raised crossings, chicanes.</i>• <i>Use of shared space techniques if appropriate (pedestrians/ cyclists/ vehicles)</i>	<div><input type="checkbox"/> EXCELLENT</div> <div><input type="checkbox"/> ADEQUATE</div> <div><input type="checkbox"/> NOT ADEQUATE</div>
MAINTAINENCE	
<ul style="list-style-type: none">• <i>Regular maintainence can be undertaken with ease</i>• <i>Cost efficient design</i>• <i>Flexible to seasonal change, weathering and erosion</i>• <i>Construction materials should be easily transported to the site</i>• <i>Vandalism deterrant stratagies should be considered</i>• <i>Materials chosen that withstand wear and tear</i>	<div><input type="checkbox"/> EXCELLENT</div> <div><input type="checkbox"/> ADEQUATE</div> <div><input type="checkbox"/> NOT ADEQUATE</div>
CULTURAL HERITAGE	
<ul style="list-style-type: none">• <i>Respect cultural heritage sites (refer to section.4.5)</i>	<div><input type="checkbox"/> EXCELLENT</div> <div><input type="checkbox"/> ADEQUATE</div> <div><input type="checkbox"/> NOT ADEQUATE</div>
ALTERNATIVES	
<ul style="list-style-type: none">• <i>Alternative sites considered</i>	

ON SITE NOTES:

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A photograph of a forest path with wooden steps and lush green ferns. The path is made of wooden planks and steps, winding through a dense forest. The ground is covered in brown mulch and fallen leaves. The ferns are vibrant green and fill the left side of the frame. The background shows more trees and a bright sky.

3.3 TRACK DESIGN GUIDELINES

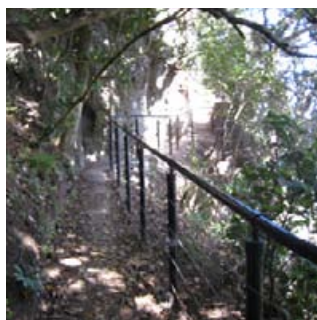
Existing Track Photos:



Lion Rock Track



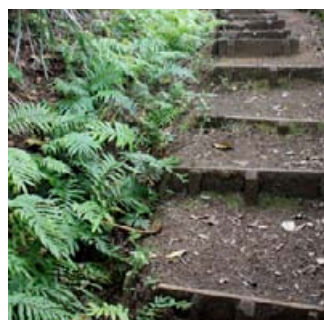
Marawhara Track



Tasman Lookout Track



Kitekite Track



White Track



White Track







White Track



Kitekite Track

Track Descriptions and Standards (refer to Regional Parks Management Plan):

Track type	Description	Location
Paths 	<ul style="list-style-type: none"> Commonly consist of sealed, concrete or compacted gravel surfaces, and may contain timber boardwalks and bridges over permanent waterways Sensitive ecosystems and tree roots will be avoided or, if necessary, bridged Sign-posted with directional signs at track entrances and junctions and safety signs where required Easy grades, with all-weather surfaces, and if necessary, steps Seats and viewing platforms may be provided at areas of interest and limited mobility access will be provided in a range of selected locations 	Arrival zones only and selected destinations designed for people with disabilities or limited mobility.
Walking tracks 	<ul style="list-style-type: none"> Generally consist of a compacted and drained surface and may contain timber boardwalks and bridges over permanent wet areas and waterways Sensitive ecosystems and tree roots will be avoided or, if necessary, bridged Sign-posted with directional signs at track entrances and junctions and safety signs where required Easy to moderate grades with drained surfaces with limited provision of steps on excessively steep areas. Suitable walking foot ware is recommended Seats may be provided at areas of interest and key views maintained 	Commonly offering walks of up to 1 hour from arrival zones.
Tramping tracks 	<ul style="list-style-type: none"> Tramping tracks will consist of formed and drained surfaces Permanent wet areas may be bridged with rafts, where appropriate, but waterways will not generally be bridged Sensitive ecosystems and tree roots will be avoided or, if necessary, bridged Tracks may contain steep grades and difficult terrain where suitable tramping foot ware is recommended Track entrances and key junctions will be signposted Seats may be provided at areas of interest and key views maintained 	Generally outside main arrival and destination zones but may provide direct access to remote areas from arrival areas.
Routes 	<ul style="list-style-type: none"> Consist of unformed trails with marker posts only Seats may be provided at areas of interest and key views maintained 	Open farmland and areas outside main arrival and destination zones.
Shared-use Tracks and Roads	<ul style="list-style-type: none"> Walking and tramping tracks that have appropriate topography and track design may be used for other purposes such as mountain biking Internal park roads and service roads may be used as shared-use tracks but walking, tramping and running will take precedence Sign posted as multi-use with user hierarchy outlined 	Appropriate tracks and internal park roads and service roads within a park.

Tracks on Regional Parkland at Piha:

Tracks in the Piha area provide recreational opportunities within bush and coastal settings that are removed from many of the sounds, sights and smells of the city. They enhance the physical and social wellbeing of people in the region, provide accessible routes from one location to another and connect to significant natural or cultural sites. Tracks in the Piha area can reach quite steep terrain and are exposed to high levels of rainfall during the winter months. Material specification is often hard to propose to ensure the track is suitable from both an aesthetic point of view and is practical from a maintenance perspective.

New tracks and the realignment of existing tracks should follow these recommendations:

- Track surfaces should be relative to the type of activity they have been designed for whether it be walking or tramping (refer to Track Description Chart on page 44)
- Tracks should be maintained at a reasonable standard consistent with their historical use.
- Tracks need to be designed to withstand wear and tear but avoid formalisation through straight lines and hard surfaces (urban elements). The

use of natural surfaces and structures is desired as long as the design is consistent with levels of use

- Re-routing of tracks should be considered to avoid dips, wet spots and rare plant species.
- Care must be taken when managing/clearing track side vegetation to ensure continued protection of threatened plants.
- Mitigate adverse environmental impacts such as erosion or impacts on sensitive ecosystems, tree roots and areas affected by pathogens, such as Kauri dieback and disease.
- Signage should be kept to track entrances and car parks. If required, low-impact signage may be implemented along the route to notify changes in track type or to ensure only well-equipped trampers proceed past a certain point on the track.
- Provision of looped tracks or consideration of return journeys by linking a number of tracks where appropriate.

Potential Design Improvements:

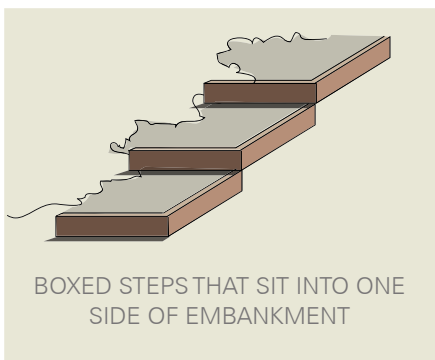
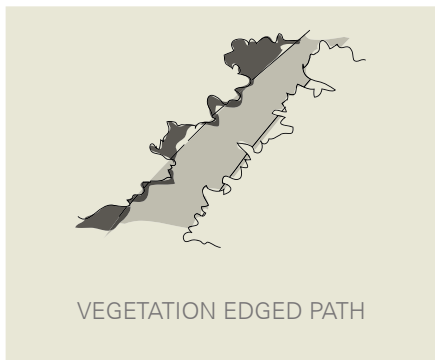
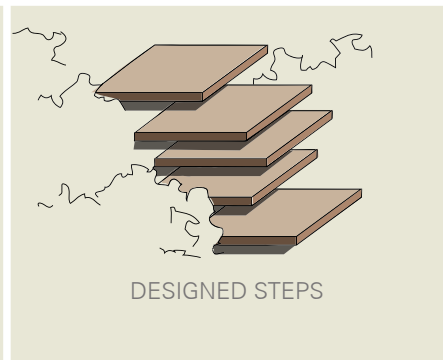


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|----------------------------|--------------------------|
| ■ SITING AND LOCATION | ■ AESTHETICS AND BALANCE |
| ■ ACCESSIBILITY AND SAFETY | ■ COLOUR AND TEXTURE |
| ■ DESIGN WITH NATURE | |
| ■ FORM | |

KEY: ■ EXCELLENT ■ ADEQUATE ■ NOT ADEQUATE

IMPROVEMENTS:
Low planting surrounding the track softens the wooden structure and reinforces the visual path.

Track Guideline Diagrams:



Design Exemplars:



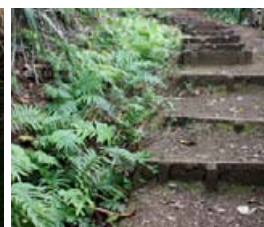
Boardwalk design



ARC Piha track



Footbridge design



ARC Piha track



Waitangi Park, Wellington

Tracks Design Checklist:

DESIGN WITH NATURE AND SENSE OF PLACE	
<ul style="list-style-type: none"> • <i>Responds to site history, culture, geology and landscape</i> • <i>Earthworks kept to a minimum</i> • <i>Energy conscious and renewable materials</i> 	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> ADEQUATE <input type="checkbox"/> NOT ADEQUATE
SITING AND LOCATION	
<ul style="list-style-type: none"> • <i>Vegetated edge</i> • <i>Where possible ensure tracks do not sit on ridge line or in highly visible location</i> • <i>Logical location for track</i> • <i>Track destinations considered</i> • <i>Avoid tree roots and rare plants on track side when proposing track location</i> 	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> ADEQUATE <input type="checkbox"/> NOT ADEQUATE
FIT FOR PURPOSE/ ACCESSIBILITY	
<ul style="list-style-type: none"> • <i>Design for main user groups</i> • <i>Barrier free where possible</i> • <i>Surface design appropriate for climate and classification</i> • <i>Appropriate for seasonal use patterns</i> 	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> ADEQUATE <input type="checkbox"/> NOT ADEQUATE
FORM	
<ul style="list-style-type: none"> • <i>Tie into the natural landform</i> 	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> ADEQUATE <input type="checkbox"/> NOT ADEQUATE
AESTHETICS	
<ul style="list-style-type: none"> • <i>Design enhances appeal of the natural environment</i> • <i>Design acclimatises people to the setting</i> 	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> ADEQUATE <input type="checkbox"/> NOT ADEQUATE
COLOUR AND TEXTURE	
<ul style="list-style-type: none"> • <i>Materials and colours that blend with the local landscape</i> • <i>Natural materials chosen that weather with time</i> 	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> ADEQUATE <input type="checkbox"/> NOT ADEQUATE
SCALE AND BALANCE	
<ul style="list-style-type: none"> • <i>Track scale (height above ground and width) relative to location</i> • <i>Relative to human scale</i> • <i>Relevant in context of other developments, buildings, structures and viewpoints within the vicinity.</i> 	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> ADEQUATE <input type="checkbox"/> NOT ADEQUATE

VISIBILITY	
<ul style="list-style-type: none">• <i>Site lines and view shafts maintained</i>• <i>Create new visual cues towards tracks when proposing new development</i>	<div><input type="checkbox"/> EXCELLENT</div> <div><input type="checkbox"/> ADEQUATE</div> <div><input type="checkbox"/> NOT ADEQUATE</div>
CLUSTERING AND ECOLOGICAL FOOTPRINT	
<ul style="list-style-type: none">• <i>Ecological footprint of track kept to a minimum</i>	<div><input type="checkbox"/> EXCELLENT</div> <div><input type="checkbox"/> ADEQUATE</div> <div><input type="checkbox"/> NOT ADEQUATE</div>
SAFETY	
<ul style="list-style-type: none">• <i>Community ownership of asset encouraged</i>• <i>Well maintained and good quality structures to encourage high use of track</i>	<div><input type="checkbox"/> EXCELLENT</div> <div><input type="checkbox"/> ADEQUATE</div> <div><input type="checkbox"/> NOT ADEQUATE</div>
MAINTAINENCE	
<ul style="list-style-type: none">• <i>Regular maintenance can be undertaken with ease</i>• <i>Cost efficient design</i>• <i>Flexible to seasonal change, weathering and erosion</i>• <i>Construction materials should be easily transported to the site</i>• <i>Vandalism deterrent stratagies should be considered</i>	<div><input type="checkbox"/> EXCELLENT</div> <div><input type="checkbox"/> ADEQUATE</div> <div><input type="checkbox"/> NOT ADEQUATE</div>
CULTURAL HERITAGE	
<ul style="list-style-type: none">• <i>Respect cultural heritage sites (refer to section.4.5)</i>	<div><input type="checkbox"/> EXCELLENT</div> <div><input type="checkbox"/> ADEQUATE</div> <div><input type="checkbox"/> NOT ADEQUATE</div>
ALTERNATIVES	
<ul style="list-style-type: none">• <i>Alternative sites considered</i>	

ON SITE NOTES: