

TRACKS AND PATHS

Consider:

- The crucial aspects to designing paths are: steepness (grade), drainage, and use

Site and locate paths by:

- connecting them to the surrounding open space, network and community. This may include connections to any surrounding streets, parks, greenways, public transport, community facilities and cycleways
- working with the existing landforms to ensure that earthworks are kept to minimum; avoiding the fall line which is where the water will travel downslope, leading to erosion
- reducing visual impact by not locating paths on prominent ridgelines or within important view shafts. Use a backdrop of landform or natural vegetation where possible
- protecting existing site features such as sensitive ecologies, heritage features, existing trees and vegetation. Boardwalks and low impact unformed trails may be appropriate insensitive areas
- rationalising the number and alignment of paths to optimize access without unnecessary paths
- designing for multi-modal use of each route

Achieve good access and usability by:

- ensuring paths are designed to meet the needs of all existing and or potential user groups, are suited to pedestrian volumes and desire lines, and include ample signage, particularly at entrances and junctions.
- providing for universal accessibility, including wheelchairs, mobility scooters, skateboards, scooters pushchairs and access for the sight impaired, wherever practicable
- providing rest opportunities that do not obstruct movement along the paths
- ensuring paths constructed for wheelchair and scooter access have a maximum grade of 1:12. Trail grade, or steepness, should not exceed half of the grade of the hillside, overall trail grade should be 10% or less. Provide ramps as an alternative to stairs wherever possible
- maintaining the appropriate minimum widths in place for multi-modal routes and different settings
- maintaining adequate gaps in kerbs and between wheel stops on
- maintaining minimum wheelchair manoeuvring space of 1500mm x 1500mm, with four-wheeled scooters requiring larger right angles turns

Achieve safety and visibility by:

- ensuring that tracks and paths have well drained surfaces, free from ponded surface water
- using vegetation to provide shade and shelter, without compromising visibility and clear sight-lines for passive surveillance. Vegetation clearance on urban and suburban paths may be required to achieve this
- ensure tracks and paths are stable, firm, even, slip resistant (as per the Building Code) and obstacle free

- keeping track and path alignments either straight or curvilinear along a smooth alignment. Avoid short angular changes in direction. Apply CPTED and IPTED principles
- installing handrails for steps and ramps as per the Building Code, with graspable profile. In areas with children consider an additional handrail at 600mm height
- ensuring paths are free from overhanging objects such as trees and signs
- removing hazards to prevent falls and venturing off trail.

Get the right aesthetics and materials by:

- using durable materials on tracks and paths that attract high numbers of visitors, if this is achievable without causing adverse environmental effects or incurring excessive cost. For example, use concrete rather than aggregates for access ways, as it requires less maintenance.
- selecting materials that complement the parkland environment, are simple and unifying
- keeping tracks and paths should in proportion with their surroundings
- considering locally available materials for track and path surfaces wherever possible, to reflect the colour and texture of the area
- avoiding glare by using oxides in concrete and adding GAP7 to hoggin (lime paths)
- ensuring the materials used are durable and appropriate for the location, e.g. marine grade stainless steel components in coastal environments
- considering the resourceful manufacture of the elements, including ease of supply and life expectancy
- exploring the use of recycled materials to form these structures
- understanding that the minimum serviceable life for concrete is 30 years, with minimum serviceable lives of 40 years for pavers, 5 years for aggregate and 25 years for timber boardwalks
- identifying and understanding the maintenance regimes which could lengthen the life of paving types
- avoiding usage of artificial drainage features – they are expensive and need high levels of maintenance
- using sustainable grade, an outsloped trail head and robust drainage features to accommodate peak water flows and dry periods without falling apart.

Consider alternatives such as:

- marker posts, which may be a more suitable and less-disruptive approach to the construction of tracks or paths in historic sites

Good practice examples

Saint Heliers Beach, Saint Heliers

Durable materials increase the longevity of paths, which is particularly important in coastal situations.



Olympic Park, New Lynn

Alternative methods to conventional drainage can have aesthetic and ecological benefits.



Albany Lakes Civic Park, Albany

Permeable paving allows for a more natural approach to drainage.



Compacted gravel path

Anticipated user groups, numbers and maintenance should be considered with paving surfaces.



Te Puru Bridge, Beachlands to Maraetai Walkway

Ramps allow access for a wide range of users, including those with push chairs and wheelchairs.



Le Roys Bush, Northcote

Raised paths and steps offer lower impact access solutions in sensitive areas.

