

## **BOLLARDS**

### **Where to put bollards:**

- bollards are often used to restrict vehicular movement and to demarcate pedestrian or vehicle space, but they are not always necessary. First, consider alternatives such as planting, rocks, curbs, level changes or other materials which can achieve the same effect with less of a visual impact on the park
- bollards should be spaced at gaps of a maximum 1.5m
- place bollards 500mm (minimum) back from kerbs when located on footpaths adjacent to parks
- in situations where a footpath is located along the street and park interface, place bollards within the structure of path, next to the kerb

### **Ensure access and usability by:**

- placing bollards away from water drains, and keeping bollards free from ponded surface water
- incorporating continuous mowing strips along grassy edges so that mowing and cleaning around bollards can occur without damage to the bollards
- ensuring concrete pad is flush with ground so that the pad does not protrude from the surrounding ground surface on any side, and has clean edges and lines
- ensuring a minimum width of 1200mm (outside edge of bollard to outside edge) is provided for disabled access
- allowing wheelchairs, scooters and prams to pass through bollards without restriction

### **Ensure safety and visibility by:**

- applying reflective dots or strips to bollards that are next to vehicle through routes, driveways or cycle ways
- ensuring concrete footings or connections to ground are flush with ground level to avoid becoming a tripping hazard
- positioning bollards to minimise hazard and error, e.g. out of the line of travel to assist the blind and partially sighted

### **Ensure good aesthetics and the right materials by:**

- seeking uniformity and consistency in bollard types across the park
- keeping the number of bollards to a minimum
- using H4 tannalised pine for timber bollards. Slightly angle timber end-grains so that water does not pond on top of the bollard. Avoid painting, waxing or staining timber
- considering the materials, colours, and forms of bespoke bollards to ensure they complement the setting and function of the park as a whole
- using stainless steel bollards in coastal environments. The grade of stainless steel should be appropriate for the particular park
- using recycled concrete as a base course.
- considering the resourceful manufacture of the bollard elements, including ease of supply and life expectancy
- exploring the use of recycled materials or the reuse of a existing elements to form these structures
- considering alternative materials and solutions where possible, e.g. rocks, furniture, mounded earth, raised kerbs and vegetation, to avoid excessive clutter

**Ensure easy maintenance by:**

- selecting bollards that have components, materials and finishes that can be serviced and maintained by New Zealand based contractors
- selecting bollards that have a minimum serviceable life of 15-20 years

**Good practice examples**

<p><b>Hardwood timber bollards</b></p> <p><i>The use of durable materials such as hardwood increases the lifespan of bollards and reduces costs.</i></p>	
<p><b>Victoria Park, Auckland</b></p> <p><i>A mowing strip for bollards seamlessly integrates with the path to eradicate potential mowing difficulties around each of these small elements. This also stops bollards from settling to different levels, and from being pulled out or removed.</i></p>	
<p><b>Berlin, Germany</b></p> <p><i>Bollards serve a dual function as seating.</i></p>	

***Nell Fisher Reserve, Birkenhead***

*Bollards should not be used for decoration, but only to restrict the access of vehicles.*



***Barcelona, Spain***

*Bollards restrict vehicle access, but are in an aesthetically pleasing sculptural form.*



***The Promenade, Takapuna***

*Simple detailing can create aesthetically positive solutions to cost effective bollards.*



