

Trail Barrier Remediation – Least Restrictive Access



December 2023



We continue to hear about the significant challenge physical gates and barriers present for enhancing the accessibility of outdoor tracks and trails across Aotearoa, New Zealand. There are many people, not just people with a disability, whose experiences are affected by these barriers.

Human-made gates and barrier structures along trails should not be a barrier to access for trail users.

We also acknowledge that restricting motorcycles and other prohibited vehicle access on trails, while at the same time allowing access for mobility equipment, modified cycles or cycles with child trailers, adaptive equipment, and parents with prams, that also isn't hazardous for people who are Blind or vision impaired, is not easy.

In response to this common enquiry and concern, Recreation Aotearoa are working with the Outdoor Accessibility Working Group, supported by the University of Canterbury's Department of Mechanical Engineering, to develop a decision-making-matrix to support more effective decision making about the use of barriers and access control mechanisms on trails.

In the meantime, we wanted to share the most up-to-date guidance relating to improving barrier accessibility:

Consider in the first instance, do you need that barrier or gate? ...Really, though?

It is well documented that barrier structures can completely prevent trail access for people with disabilities and access needs.^{1 2}

Several gate structures have historically been implemented to address motorbike concerns on trails.

It's important to **re-consider if historic rationale for barrier use is still valid on your trail**. [Read about an example cycle trail in the UK that re-assessed the need for such barriers and implemented a trail period to understand the effect of changing a barrier](#) (spoiler alert, no negative effects were reported).

Unless there is a well-documented and informed health and safety concern or issue to address on your trail, barrier removal should be a priority.

Sustrans³ in the UK who manage a significant percentage of the National Cycle Network, are **getting rid of barriers altogether**. [In their trial of barrier removal in London](#), Sustrans report a 20% increase in the total number of trail users. Survey respondents who utilised the trails also noticed an increase in accessibility for all users, and a reduction in anti-social behaviour.

What other control mechanisms can you utilise? Have you considered:

- Signage discouraging the use of prohibited vehicles and motorcycles (including information on relevant consequences, such as confiscation of prohibited vehicles and equipment).
- Partnering with local police and authorities to provide more frequent surveillance of areas identified as problematic with anti-social behaviour.
- Bluetooth keypads with changeable pin-codes (with clear, readily available guidance on how users obtain a code for access).

Think about the Least Restrictive Access⁴...

The principle of Least Restrictive Access (LRA) is that all new work and maintenance repairs should aim to achieve the most accessible option. Least Restrictive Access is achieved by identifying the least restrictive option for a specific feature, such as a gate or barrier⁵. This is not just about selecting the type of structure, but also how to make and install the chosen structure in the least obstructive way for trail users, to maximise accessibility for as many people as possible.⁵

Least restrictive access in practice

modified from By All Reasonable Means, Least restrictive access to the outdoors, Sensory Trust on behalf of Natural England.

A gap, or no barrier, is less restrictive than the modified squeeze gate (specifications below), which is less restrictive than a traditional squeeze gate. So, when a traditional squeeze gate needs repair or removal, the first option is to remove it entirely. If this is not an option, it is replaced by the modified squeeze gate. The last resort is to replace the traditional squeeze gate.

A note on existing barrier structures:

- **Bollards & Concrete blocks**
 - These mechanisms do not prevent motorcycle access.
 - If you are using bollards or concrete blocks to prevent 4-wheeled, or car, access, make sure that there is **at least a 1.2m** clear width between adjacent

bollards or structures, there is no linking chain or rope of any kind between bollards, the bollard strongly colour contrasts to the background, and there is lighting or a reflector band around the top (visible from any direction).³

- Chicane gates, Croquet hoops and Squeeze gates

- They can limit access for prams, child bike trailers, larger mobility equipment, like mobility scooters, and many pieces of adaptive equipment such as adaptive mountain bikes, recumbent cycles, tandem cycles, trikes, as well as e-bikes and heavier equipment that users must lift or manoeuvre to navigate the chicane or squeeze gate.
- If there is a grass area around the side of the chicane, squeeze gate or croquet hoop, this will not prevent motorcycle access.
- If you have identified that you **must** have a croquet hoop, or squeeze gate, traditional specifications have been modified, in consultation with local trail users, to be made more accessible (plans listed below in Appendix 1):



Hot tip: Powder coating the barrier (in a high-contrasting colour to the background) also enhances its accessibility for people who have low vision.

Please note: Although these specifications are more accessible than the traditional squeeze gate and croquet hoop design, **they are not 100% accessible** for all types of mobility devices or adaptive equipment.

Evaluating the absolute necessity of this barrier, including its appropriateness for your type and grade of trail, and its placement on the trail, remain important considerations.

“Since [the modified] hoops went in, I have still not seen an escalation in motorbikes on the trail, so they have made no apparent negative impact, with a lot of positive impact. I love seeing the groups of mums with pushchairs out there, they are regular now.” – Jim Robinson – Motu Trails

If you do have an access control barrier (that you really need) make sure you let people know about it:

Trail users will want to know ahead of time:

- Where is the barrier on the trail?
- What does it look like? Can you attach a photo or diagram to your map?
- What are the dimensions of the barrier? What equipment do you know can fit through?
- Are there alternate entrances, such as nearby gates which can be unlocked, that users can arrange ahead of time?
- Who can users contact for more information?

Motu Trails have a great example of displaying this information. Read more about their barrier access on trails, with supporting access information here. [Read the Motu Trail Dunes Trail & Waiōtahe Trail Accessibility information document here.](#)

For further advice on trail accessibility and barriers, or to be kept up to date with the barrier guidance, please contact [Katie Owen, Disability and Inclusion Programme Manager.](#)

¹ Sustrans Disabled Citizens Inquiry (2023) – Improve off-road routes <https://www.sustrans.org.uk/media/11708/sustrans-disabled-citizens-inquiry-full-report.pdf>

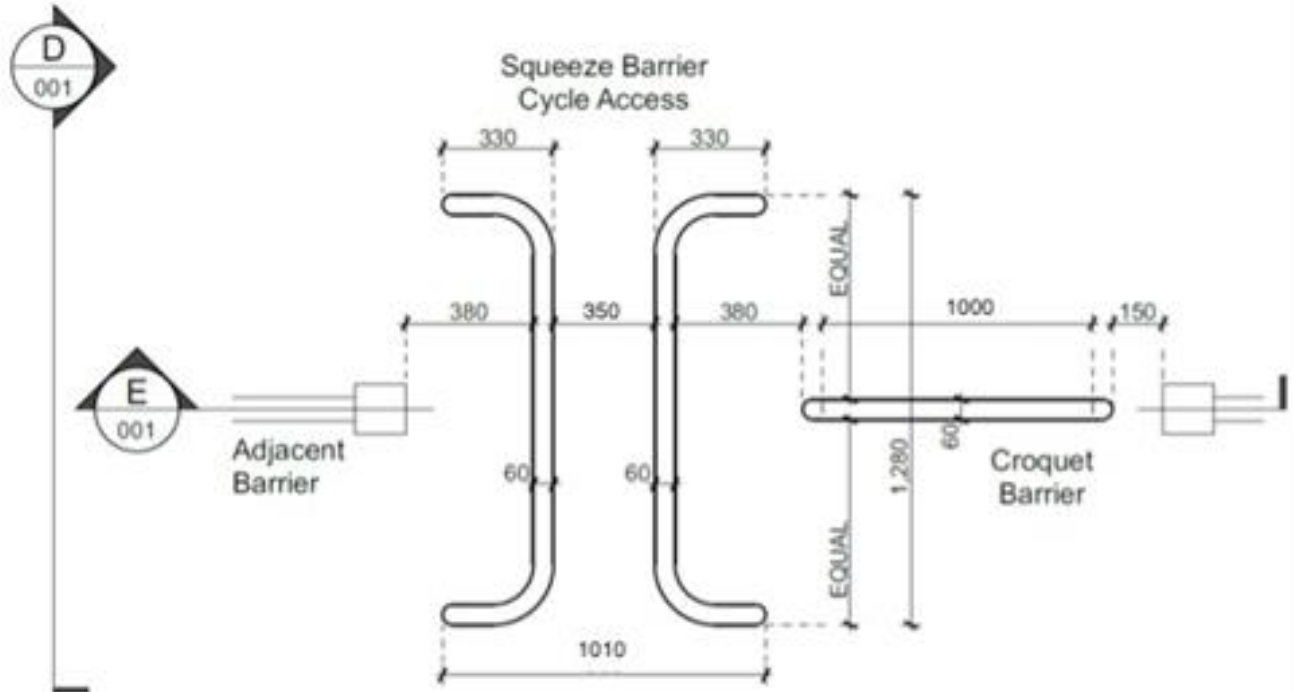
² Great Outdoors – A guide for accessibility (2018) IWA Sport in partnership with Sport Ireland <https://www.sportireland.ie/sites/default/files/2019-10/great-outdoors-a-guide-for-accessibility.pdf>

³ [Sustrans](#) are the custodian of the UK National Cycle Network of over 12,000 miles of signed paths and routes for walking, wheeling, cycling and exploring outdoors.

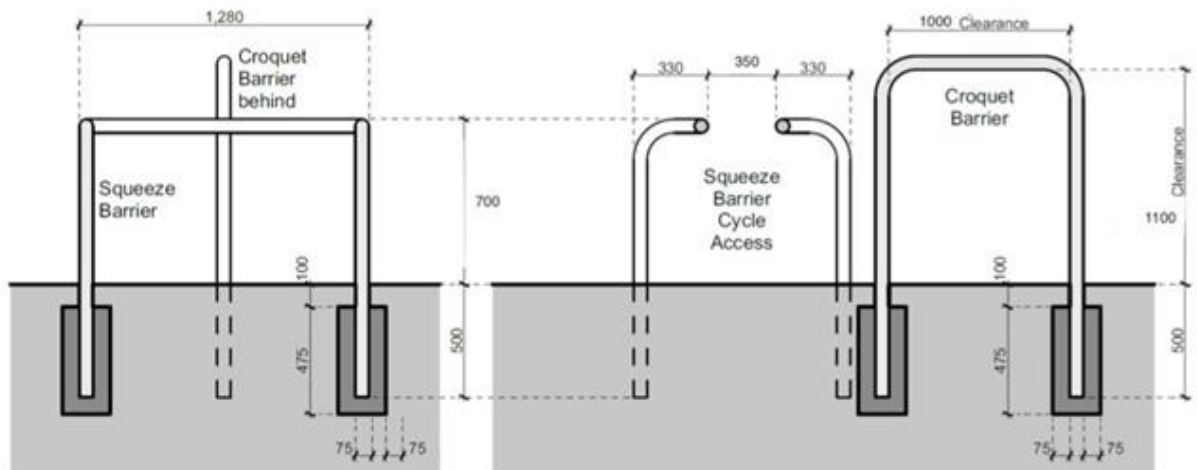
⁴ Outdoor Accessibility Guidance, supporting inclusive outdoor access in the UK (2023) Paths for all, Sensory Trust <https://www.pathsforall.org.uk/mediaLibrary/other/english/outdoor-accessibility-guidance-2023.pdf>

⁵ All Reasonable Means, Least restrictive access to the outdoor (2020) Sensory Trust on behalf of Natural England <https://www.sensorytrust.org.uk/uploads/documents/ByAllReasonableMeansEnglandAug2020.pdf>

Appendix 1: Plan of Squeeze Barrier and Croquet Barrier



C Plan of Squeeze Barrier & Croquet Barrier
001 not to a particular scale



D Elevation of squeeze barrier
001 not to a particular scale

E Section through c/l of squeeze barriers
001 not to a particular scale