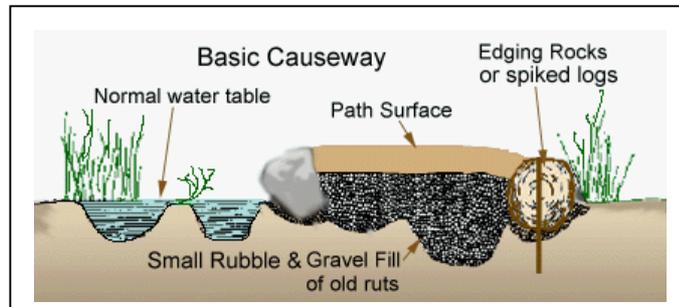


Country Causeways

Causeways

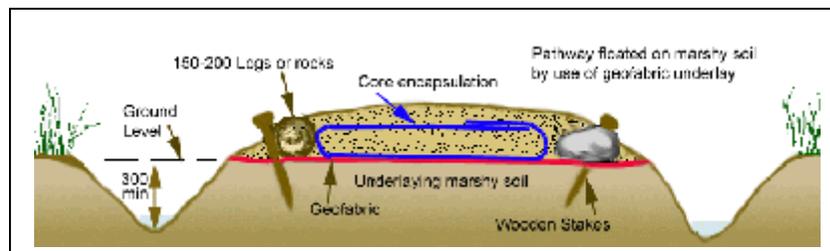
Causeways can be used to provide dry footpaths across boggy ground in an environmentally friendly way. They are better than ditched paths as they do less damage to the hydraulic flows of the area.



One causeway can replace a number of paths which are damaging the wetland. Causeways are also used to take paths across easily damaged areas such as alpine meadows where path users need to be encouraged to remain on the path.

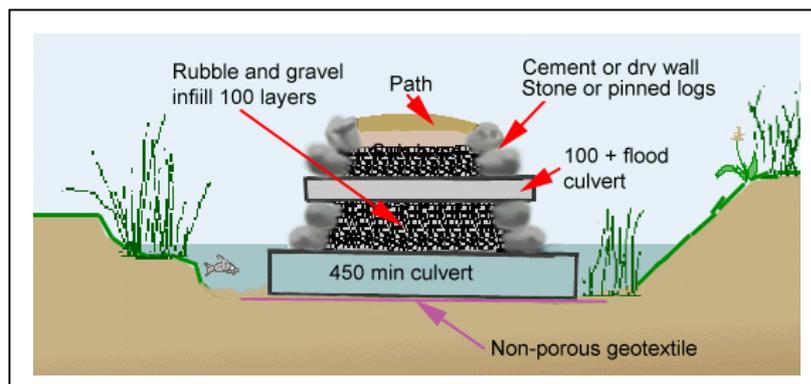
Where the path is to be used by older and people with disabilities the path should not be less than 1400 mm wide, with passing places 1800 mm wide and 2500 mm long every 10-30 metres but each successive passing place always in view of the preceding space. Edging as guidance for people with low vision is not required as the edging stones provide a tactile and colour clue.

In some cases where wetland exists on both sides of the path a culvert should be placed below the normal

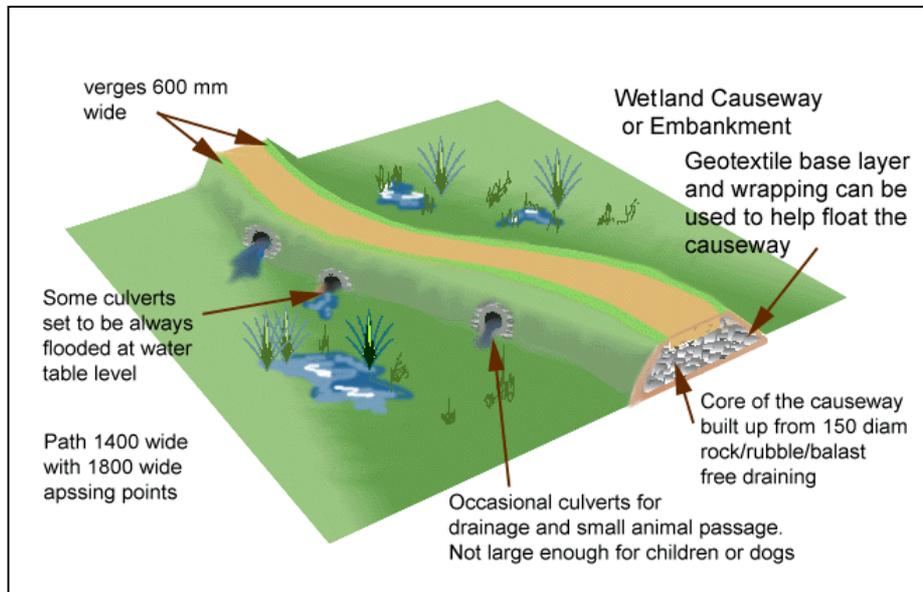


water table height to equalise water levels on both sides. These should be at no more than 6 metre intervals.

An alternative method is to float the path surface and sub-base on a layer of geofabric (red line) this spreads the weight and helps to prevent the path sinking into the soft soil. These paths can be further protected by use of drain itches which help lower the water level from he

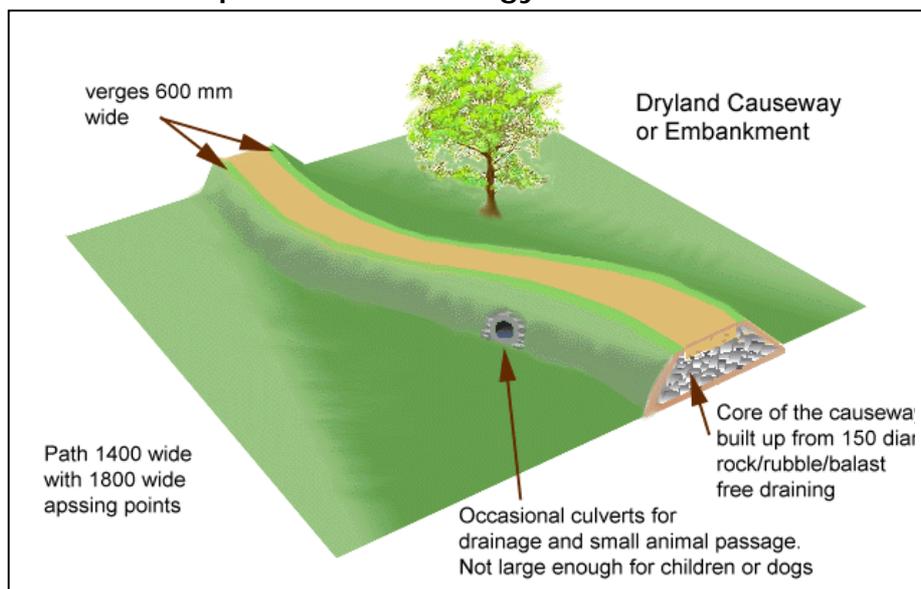


supporting soil. Where space is available extending a shoulder either side of the path will increase stability and resistance to collapse. Another related method is to encapsulate the sub-base core in a wrapping of geotextile (blue line), this method keeps the filler drier than the supporting soil which improves it's buoyancy.



In areas prone to flooding during periods when visitors are likely to use the path the causeway may need to be higher and more robustly constructed.

These can be built from dry stone walls, cemented rock, or logs spiked together for stability. Taller causeways may require a foundation layer under the walls or, a timber bed may be needed to float the construction. These type causeways must be designed by a civil engineer with wetland experience. Springs, quick sand, peat etc. can be a problem. In these locations consider a boardwalk as these are less disruptive of the ecology and are easier to construct.



Culverts should be sited where some are always submerged at the normal water table level, to allow fish and amphibians to pass unobstructed. Other culverts should be placed higher in the structure to carry flood water levels. These should be 100 – 300 mm diameter or 600 + mm diameter for child safety. These higher normally dry culverts will serve to help flood water flows and in drier periods form passageways for small animals

Tall causeways should have guardrails on both sides. Alternatively all causeways and embankments with more than 200 mm drops or water more than 300 mm deep from a path which may be used by people with disabilities should have a 600 mm wide verge on each side of the path.

See our Guides 'Country Paths and Surfaces' and 'Outdoor Surfaces' for further information about path surface choices.

©Croft Consultants



This document reflects best practice at the time of writing. While every effort is made to ensure the contents are accurate Croft Consultants does not accept any responsibility for the use made of this information.

This document may be reproduced by access groups so long as the source is acknowledged and content is not changed.

Other organisations please contact us.