

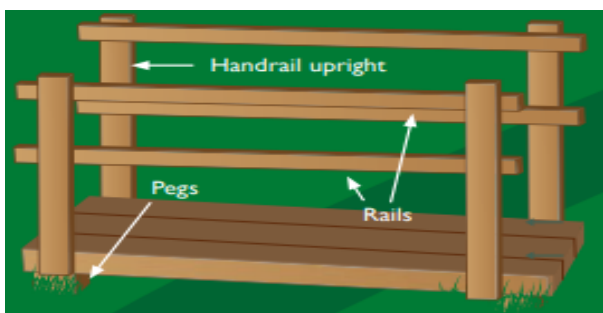
Bridge and abutment design is the area of path work which requires the most specialist knowledge. With the exception of sleeper bridges across ditches, advice must be sought from County Council officers prior to any design being agreed.

Responsibilities

Bridges over natural river courses are generally the responsibility of the County Council; however, some bridges are owned by the landowner (contact us to find out if you are unsure).

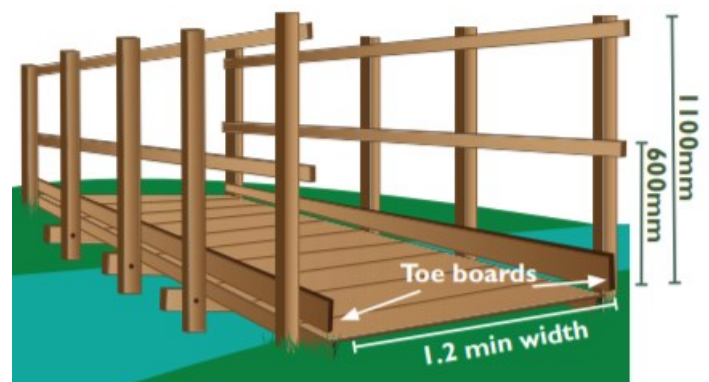
Ditch Crossings (Sleeper Bridges)

- Sleeper bridges are simple, robust bridges used to cross ditches and other very small watercourses.
- These bridges are only suitable for pedestrians or other legal users of footpaths (e.g. dogs/pushchairs/wheelchair users).
- A design is available for bridges up to 1.2m wide and 3.6m long, where both banks are roughly level.
- Bridges should be a minimum of 1.2 metres wide; unless there is a strong reason preventing this. This width is preferred as it enables use by manual wheelchairs and wider pushchairs.
- Handrails should be provided on both sides. The top of the lower rail should be set at 500mm above the sleeper surface and the upper rail secured on the top of the upright posts.
- Sleeper bridges can become slippery; heavyweight mesh or an alternative non-slip treatment may be used (see 'For all Projects' guide).
- Dig into each bank to provide firm, level ground a little way back from the edge of the bank, at sufficient depth to accommodate the bearer and the sleepers on top, so that the top surface of the sleepers are level with the ground.



Timber Single Span Footbridge up to 6m in length

- These bridges are designed to bridge wider or deeper watercourses than the sleeper bridges, up to a maximum of 6m in span from abutment to abutment. A design can be provided upon request.
- These bridges are only suitable for paths which are used by legal footpath users.
- The useable width of the bridge (between the handrails) should be at least 1.2m
- Handrails should be provided on both sides, the top of the lower rail set at 600mm above the deck and the upper rail 1100mm above the deck.
- Toe boards (rails along the edge of the deck) should be provided with a 100mm gap to the deck of the bridge to avoid debris collecting.
- Often the natural surface will suffice; in some cases an anti-slip treatment or grooved deck boards may need to be used.
- Corrosion-resistant screws or bolts should be used to secure all parts.
- Leave a small (max 12mm) gap between deck boards, to allow air to circulate around the timber; facilitate expansion in warm weather and to shed water and falling leaves.
- **All other bridges** — Contact Countryside Service for further advice with regards to bridge design.



This guidance is suitable for most situations in Hampshire; for further advice email pro@hants.gov.uk or call 0300 555 1391