

Many countryside paths have a natural surface; this is often trodden earth within Hampshire. In most cases, this is fitting, works well, and requires only a minimum amount of maintenance. Where paths cross clay or marshy areas, or are habitually muddy through heavy use, then it may be appropriate to surface them. Solutions will be site-specific; it is strongly recommended that advice be sought from County Council officers at the design stage.

Responsibilities

The County Council is legally responsible for ensuring that the surface of rights of way is suitable for the public to use, including taking action if the surface is damaged by 3rd party use, such as farm vehicles or utility works.

Is it necessary to surface the route?

Many countryside paths have a natural surface which is adequate for public use, this is the preferred surface wherever possible as it is in keeping with its environment and requires minimal maintenance.

Where a path is regularly muddy or waterlogged, the first consideration should be enabling the water to drain or evaporate. Often, a path surface will dry out if the vegetation is cleared to allow light in. Grips or small ditches allow the water to flow off the path onto lower ground (see drainage guide).

When considering any muddy areas, push a stick or spade into the mud at various points to see what is underneath. It may be that leaf litter has built up and turned to mud; if this is the case, scraping off the mud can reveal a good underlying surface which is often sufficient.

However, surfacing may be required where drainage and scraping alone will not solve the problem.

Considerations for surfacing work

- Look at the immediate area is the ground around the path waterlogged? If so, the path level will need to be raised above this. What is the soil type? If very wet or clay, a membrane may need to be used to stop the new surface sinking into it.

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

- Where is the water coming from and where could it go to? Is it rainwater draining from neighbouring land? Could it be diverted onto lower ground off the path? Are there ditches or pipes already there which need clearing?
- Can contractors get to the path with machinery and vehicles? Can materials be delivered close to the path? Is landowner permission required to obtain access?
- Are there legal restrictions on path width (see the widths guide) or are permissions needed? For example, if the path has a ecological designation such as SSSI or SPA/SAC, consent will be needed and there may be restrictions on materials.
- Who will undertake maintenance when required? Regular vegetation cutting and clearance of ditches and drainage pipes once or twice a year will considerably lengthen the life of the surface.
- What is the expectation for the finished surface? If, for example, a path is mainly used for leisure walkers, then a lower specification may be more appropriate for this path than if it is a path promoted for active or commuter travel, where people walk or cycle to get to work (expecting to use the path in work clothes/shoes without getting muddy). Paths which are used by horse-riders or vehicles will need to be more substantially constructed.

Technical Guidance

For all except urban paths, a non-metalled surface (ie 'a stone aggregate' path - not tarmac) is strongly preferred. This should be smooth, of adequate width, well compacted and firm underfoot (but with a little 'give'). It should also be well-drained and therefore useable in all weathers.

Most path construction will follow this process:

- Check the path and surroundings for underground services (see 'All Projects' sheet).
- Start by removing the mud down to the reasonably dry, hard substrate of the width of the finished path. This is known as a 'path tray', which is usually 60-100mm deep.
- Lay a geo-textile membrane if needed.
- For paths used by cyclists and/or horse-riders (eg bridleways), lay a sub-base of larger material.

- Acceptable sub-base materials in Hampshire include washed rail ballast (granite), recycled aggregates, road planings and washed rejects (flint, chalk, crush).
- For all paths, lay a 'wearing course' of finer material typically 'type 1' which means natural stone material graded to 40mm diameter to dust. In urban areas or where wheelchair use is likely 20mm-dust, and compact with a vibrating roller or wacker-plate. Acceptable materials in Hampshire include scalpings, natural stone aggregate.
- A camber or crossfall (slope of around 2% across the width) should be used to shed rainwater off the path; choose whichever will lead the water to lower ground.
- A membrane (sometimes referred to as a geo-textile) is matting which is used in wet areas to stop the new surface materials sinking away into the wet ground. Terram, Biddum and Geogrid are commonly used in Hampshire.
- A 3-d cellular containment system (cellweb) can be used where a path crosses tree roots, to protect them.

Timber Edges

- Paths generally do not need timber board edges, and look more fitting without them; they can also trap water on the path once the surface has settled, and can be a slip risk for cycle wheels and horse hooves.
- However, timber edges may be desirable to retain materials if the ground drops away to one side or if the path level is well above that of the surrounding ground (eg in wet areas).

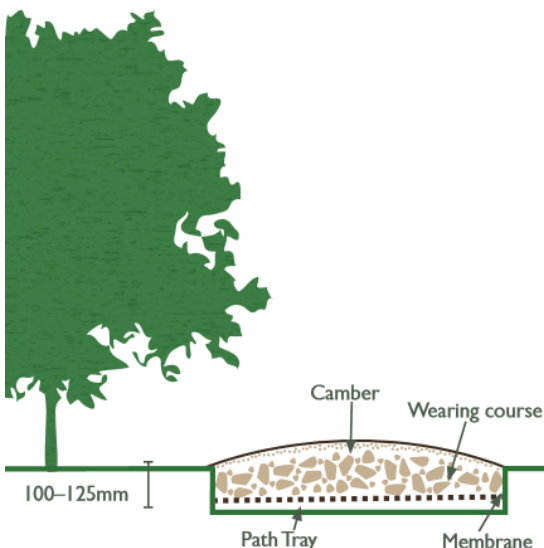
Typical Footpath Specification

The following is suitable for a path used only by walkers. This is a guide and officers' advice should be sought at the design stage.

Path should be 1.5m wide (if possible)

Dig out path tray to path width and 60mm deep, or to dry ground if deeper.

If needed, lay a geotextile membrane or cellular confinement system.



Lay wearing course: 100-125mm depth of compacted material (usually scalpings or natural stone aggregate), extending over edges of path tray.

Compact with vibrating roller or wacker-plate, leaving a camber or crossfall as appropriate to shed the water.

Typical Bridleway Specification

The following is suitable for a path used by walkers, cyclists and/or horse-riders. This is a guide and officers' advice should be sought at the design stage.

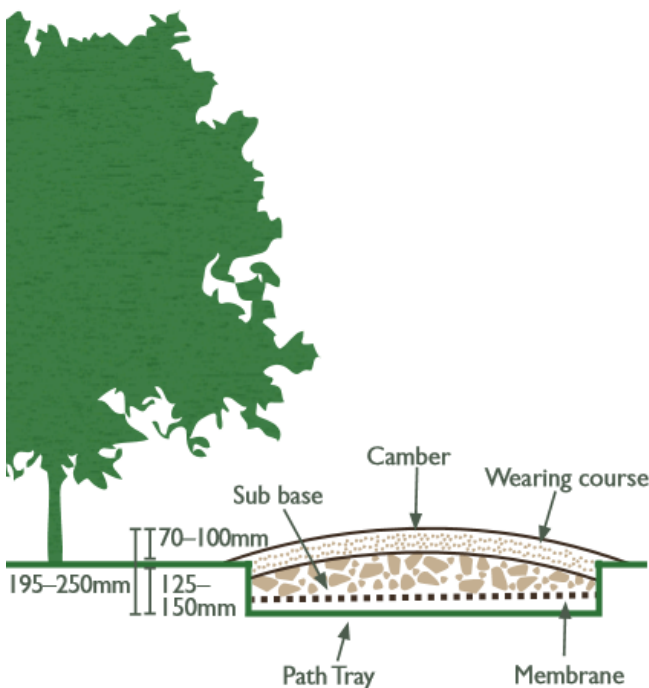
Path should be 2.5m wide (if possible)

Dig out path tray to path width and 100mm deep, or to dry ground if deeper.

If needed, lay a geotextile membrane or cellular confinement system.

Lay sub-base: 125mm-150mm depth of material when compacted, with a camber or crossfall as appropriate.

Lay wearing course: 70-100mm depth of material when compacted, extending over edges of path tray and lea



ving a camber or cross-fall as appropriate.

For paths which are used by horse and carriages and/or motor vehicles, please seek advice from County Council Officers.