

## Highway Maintenance Treatment Types

We use a variety of treatments to repairs and maintain the highways. Listed below are the most common treatment types:



### Carriageway Reconstruction

This method is used if the substructure of the road has failed. The existing layers are removed and replaced with new ones, typically 350-600 mm deep.

This type of construction can last up to 40 years, depending on traffic and is the most expensive treatment type.



### Carriageway Inlay

This method consists of removing the upper layer or layers of the asphalt (typically 100 mm in depth) which are then replaced with new asphalt layers.

This process is less intrusive than reconstruction and is therefore quicker and less expensive and is usually used in an urban environment. Design life is typically 10-20 years depending on traffic and loading



### Carriageway Overlay

This method consists of laying a new surface without the removing the existing surface layer.

This process can only be used where there are no level constraints such as adjoining private drives, house thresholds or existing drainage systems and is therefore more suitable in rural locations. Design life is typically 10-20 years depending on traffic and loading



### **Haunching & Widening**

Many of our rural roads are not wide enough to accommodate the widths and weight of modern vehicles. A haunch/widen treatment can provide additional width and strength to carriageways.

Typically 150-600mm deep and can involve new sub-base aggregate layers or just asphalt layers to provide the structural strength required.



### **Patching**

Patching is used as a stand-alone treatment or in advance of surface dressing to address localised deterioration where most of the road is still sound. Failing areas are generally removed mechanically by a planer and replaced with new asphalt which is compacted by roller. Treatments can be carried out with only short-term disruption.



### **Surface Dressing**

(also known as tar and chippings)

Preventative treatments, like Surface Dressing are used to prolong the life of the road and help stop the formation of potholes. It also restores texture to the road surface and helps to prevent skid related accidents.

The process requires dryer and warmer weather so is undertaken each spring/summer and causes minimal disruption. Design life is typically 10-15

years depending on traffic and use.



### **Footway Reconstruction**

Similar to carriageways, footway reconstruction is the most expensive treatment option available and involves the replacement of the substructure where it has deteriorated extensively.

It is also the most disruptive option but is often required on footways which are regularly crossed by vehicles.



### **Footway Patching**

Similar to carriageway patching this is undertaken where most of the footway area is sound and may be in preparation for a further preventative treatment such as slurry sealing.

Typically, footways are patched between 20mm and 70mm deep.



### **Footway Slurry Sealing**

This treatment is carried out on footways with minor defects such as surface cracking and isolated major faults. A cold pre-mixed asphalt dressing is spread onto the surface of the footway.

This is the most cost effective and least disruptive process for prolonging the life of a footway.