How do we typically maintain roads and footways?

Maintenance Processes

Inlay – removal of the existing road surface layers that are becoming unsafe or are past efficient repair by routine maintenance, and replacement with new material layers.

Overlay – where the existing road surface layers are not failing structurally and the repairs may be needed to restore skidding resistance or prevent future structural deterioration it is sometimes possible to overlay the existing road or footway with new material.

Reconstruction – where the road construction is inadequate to support the loads of heavy vehicles, it may be necessary to dig out the existing construction and design and build a replacement road to current standards

Maintenance Materials

Surface dressing: A sprayed binder with stone chippings applied to retexture the surface of the existing road. It is generally only utilised on the Borough's rural road network to seal the existing road surface to attempt to extend the life of the road pavement and to improve the skidding resistance properties of the road. It is a cheap alternative to overlaying the existing road albeit that the life of the material is accepted as often less than five years.

Microasphalts and slurry seals: Thin surface overlays, generally sprayed or scree'd over the existing road surface.

Microasphalt laying

These materials are applied for similar reasons to surface dressing but have shown a greater resistance to wear in harder wear rural areas e.g. through villages or at busy junctions. These materials are also used in urban areas, generally on unclassified roads. They are more expensive than surface dressing but still cheaper than a conventional surfacing material overlay or inlay. The design life of these materials is between seven and ten years.

Conventional road surfacing materials: Asphalts and asphalt concretes (formally bitumen macadam's) are the materials that generally make up the upper layers of a flexible road pavement (bound layers). Varying specifications of these types of materials are suitable for use on all classes of road including Principal (A Class) roads. They are generally a mixture of crushed rock and binder (usually bitumen based), laid from a paving machine and compacted using various types of rollers. This is the process most people associate with road resurfacing.

Conventional road surfacing process

For the main running layer (surface course) the materials are laid generally between 25 and 40mm thick. These materials when used as inlays represent the most expensive carriageway maintenance option. Typically the life of these materials can be up to 20 years before replacement.

If you require further information on the M4 or A419 please contact:

The Highways Agency

- **A419 - RMS**
  01285 640048
- **M4 - Inter Route (Jnct 15-16)**
  01454 452300
- **M4 - Raynesway (East of Jnct 15)**
  0845 6034466

If you require further information please contact:

Address: Highways
Swindon Borough Council
Watt Tyler House West - 3rd Floor
Beckhampton Street
Swindon
SN1 2JG

Email: highwayasset@swindon.gov.uk