

## HAMS MODULE F – MAINTENANCE STRATEGIES

**What...** A maintenance strategy is an approach to managing homogenous asset groups with consistent works proposals. These proposals are decided from considering the most efficient means of meeting the required performance targets, based on whole life cost analysis.

**Why...** To create a suite of works improvement options that can be drawn upon for the asset type and condition. Benefits include:

- Time saved in going through the treatment selection process for individual assets.
- A consistent aesthetic and performance across the Borough.
- Ease of comparing new treatment options on the markets.
- A better understanding of how treatments behave over time.

**Who...** The responsibilities for the ‘Maintenance Strategies’ module lie with:

Defining strategies	<b>Asset Strategy &amp; Technical Support Manager/Asset Manager</b>
Whole life costing	<b>Commercial Manager/Asset Manager</b>

Updating & reporting module

**Asset Compliance Manager/ Commercial & Investment Management Strategy**

**How...** Lewisham uses decision trees to determine the most suitable treatment to be adopted for homogenous asset groups, Figure F1. This decision tree sets the process to be undertaken and shows the various criteria that need to be considered when selecting the maintenance treatment. For carriageways these are namely:

- Road hierarchy, which represents a specific traffic loading category.
- Construction type, which determines the likely defects to be present.
- Major defect visible, which establishes the depth of the required treatment.
- Profile adequacy, which determines whether vertical realignment is necessary.
- Cumulative defect size, which outlines whether the treatment should be carried out under the Council’s reactive or planned maintenance procedures.

This process then leads to specific treatment options. The various options are assessed for the best whole life cost solution, based on treatment performance and cost. This determines the best maintenance solution for a homogenous asset group. This approach lends itself to ensuring different strategies for different asset types provide a ‘right for asset’ approach to long-term maintenance.

**Reporting...** Maintenance strategies are reviewed periodically, or when new treatment options come on-line. They are reported through investment modelling reports and business cases as an integral element of Module G - Investment Strategies.

**Success Measures...** To be able to demonstrate an on-going reduction in the whole life cost of asset maintenance, through the use of the most efficient maintenance strategy for the particular asset group. Provide a quality public realm for the borough.

<b>Further Information:</b>
<a href="#">LoTAG Londonwide Asphalt Specification</a>
<a href="#">DMRB Volume 7 – Pavement Design and Maintenance</a>

**Table F2: Preferred maintenance strategies.**

Asset	Subgroup	Safety Intervention	Interim Intervention (Amber Roads)		Major Intervention (Red Roads)	
			Defect Triggers	Treatment	Defect Triggers	Treatment
<i>Carriageways</i>	All roads	50mm pothole	Wearing course deterioration and surface deterioration	Thin Surface Overlay	Wearing course and surface deterioration. Wearing course or surface deterioration or wheel track cracking or subsidence.	Plane and Inlay (40mm)  Plane and Inlay (100mm)
<i>Footways</i>	1, 2 and 3	20mm pothole	Damaged Footway with trip hazard Equal to or greater than 20mm	Take up and relay flags Overlay bituminous surface	Large areas of damaged footway, tree root damaged, damaged by vehicles, substandard utility reinstatement	Take up and relay flags Overlay bituminous surface Reconstruct footway
	4	20mm pothole	Damaged Footway with trip hazard Equal to or greater than 20mm	Take up and relay flags Overlay bituminous surface	Large areas of damaged footway, tree root damaged, damaged by vehicles, substandard utility reinstatement	Take up and relay flags Overlay bituminous surface Reconstruct footway
<i>Street Lighting</i>	Managed through PFI.					
<i>Highway Structures</i>	Managed in Bridgestation.					