



# Working together

## DEVELOPING A LOCAL HIGHWAYS TREATMENT MATRIX

### Background

LBB's Term Maintenance Contract is delivered by TKJV through the TfL (North) framework. The programme was developed in Q1 2022 to support the 2022/23 surfacing programme. The LBB road network consists of 627km of evolved and designed highways. Much of the network is laid over hoggins: a clay-bound aggregate material, whilst large sections were developed in the inter-war years and contain concrete, much of which is past its service life and has deteriorated to the point where it has failed.

### New approach to highways maintenance

London Borough of Barnet (LBB) was keen to develop a cohesive and consistent approach to highways work to support their Network Recovery Programme. To

do this Tarmac supported TKJV in developing a Treatment Matrix which aligned with the council's key objectives; sustainability, resilience, value for money. The intentions were laid out in a motion supported by a cross-party group of councillors and passed by the Council, thus becoming policy. The Head of Highways briefed the Tarmac Technical team to deliver a Treatment Matrix. This was developed in collaboration with the LBB Highways Team and considers three road types; Residential, Commercial and Trunk for both composite and flexible construction types. In addition, various Specialist Treatments – multi-lane junctions, bus stops, roundabouts etc were covered.

### Climate conscious delivery

With the exception of one

specialist material, all asphalt supplied into LBB will be manufactured as 'Warm Mix' to support the Council's climate change declaration. Condition surveys were undertaken to determine which parts of the network most needed to be addressed. In total, 29 schemes were identified for treatment in the financial year 2022/23. TKJV undertook a programme of coring to determine whether tar was present and the pavement make-up and condition in the areas to be resurfaced. Where tar was present, additional cores were instructed to determine the extent and these schemes were put to the back of the programme. Non-contaminated schemes were reviewed by a team consisting of Capita Re, TKJV and Tarmac. The condition survey and core results allowed the team to

assess the asset and rate it; Good, Average, Poor or Very Poor on the Treatment Matrix.

### Reducing disruption to road users

The appropriate treatment was then selected depending on local factors and the LBB's appetite eg. where traffic volumes are high and road closures extremely disruptive, the client may lean towards a single layer treatment to minimize the programme length and duration of road closures necessary to complete it. The design drawings were then completed and issued to the Contract Manager and the scheme was programmed for delivery. Once contaminated sites had been further cored and the extent of the tar contamination confirmed, these sites were reviewed by the team and added to the programme.

### Clear, consistent approach

By following this process, a clear and consistent approach is possible and material types and depths are defined for the Design Engineers. In total the 2022/23 programme will deliver c20,000 tonnes of material. For the LBB the Treatment Matrix offers an opportunity to deliver the

Network Recovery Programme with a consistent approach using materials which offer sustainability and are specifically designed to manage the issues which are often encountered in local authority roads and meet the texture standards defined in Table 9/13 of the Specification for Highways Work. Tarmac are supporting LBB by offering a 5-year guarantee on all surface courses.

### Successful delivery

The client was extremely happy with the Treatment Matrix and

the collaboration shown by the LBB Highways Team, TKJV and Tarmac. The client is now keen to submit the Treatment Matrix for industry awards for the use of sustainable materials and showcasing the concept of Early Contractor Involvement. The first schemes have now been delivered successfully and the use of single layer materials has demonstrably saved time, and therefore reduced disruption, across the borough. At the end of the 2022/23 programme the CO<sub>2</sub>e calculations will be run to demonstrate the savings achieved.

