



Nottingham City - Highway Asset Management Framework

Foreword

The Highway Asset Management Framework provides an overview of the Asset Management approach we have adopted to deliver effective Highway Asset Management in Nottingham.

It comprises a suite of documents which describe the strategies, processes and procedures that will provide an effective risk-based approach to managing and maintaining the Highway Asset and will be subject to regular reviews as our understanding of the use of data, risk and lifecycle planning matures and as national guidance and legislation necessitates.

Cllr Rosemary Healy

Portfolio Holder for Highways, Transport and Cleansing Services





Document Information

| | |
|--------------------------|--|
| Title (Sub Title) | Highway Asset Management Framework |
| Product Number | AMD030 |
| Author | Mark Bradbury |
| Description | Describes the Council's asset management framework of documents, their purpose, state of preparation, publication and planned revision dates |

Document History

| Version No | Status | Author | Date | Changes from Previous Version |
|-------------------|---------------|---------------|-------------|--------------------------------------|
| 01 | Draft | PW | Sep 2019 | First release for Comment |
| 02 | Final | PW | Oct 2019 | Final version |
| 03 | Final | MB | Feb 2020 | Final version |
| 04 | Final | MB | Mar 2021 | Final version |



Introduction

The **Highway Asset Management Framework** comprises the principal documents we will use to manage the Infrastructure Assets.

Highway assets may be defined as any asset within the bounds of the highway in the stewardship of Nottingham City Council and includes carriageways, footways and cycleways, structures, drainage, street lighting, traffic signals and some street furniture.

The framework documents provide processes and procedures to enable an effective, efficient, consistent and practical approach to the maintenance and management of all Highway Assets and will be updated as our knowledge and understanding of the asset improves maintaining user satisfaction

The **Highway Asset Management Policy and Strategy** establish the support of the Council in promoting an asset management approach and set out the key strategies to be implemented to ensure this supports a data driven, evidence-based approach to maintaining the assets in our stewardship while maintaining the optimal level of service within available resources.

- Table 1.1 lists the documents currently identified as part of the framework.
- Table 1.2 provides a brief summary of what each document includes.



Table 1.1 Asset Management Framework Index

| Document Ref: | Document Title |
|----------------------|--|
| AMF-001 | Highway Asset Management Policy |
| AMF-002 | Highway Asset Management Strategy |
| AMF-003 | Highway Asset Management Framework |
| AMF-004 | Highway Communication Plan |
| AMF-005 | Competencies and Training Strategy |
| AMF-006 | Highway Asset Data and Inventory Management Strategy |
| AMF-007 | Highway Asset Inventory Survey |
| AMF-008 | Highway Maintenance Hierarchy and Resilient Network |
| AMF-009 | Highway Asset Condition Policy |
| AMF-010 | Highway Inspection Manual |
| AMF-011 | Highway Risk Management Strategy |
| AMF-012 | Highway Asset Risk Register |
| AMF-013 | Highway Service Levels, Performance Management and KPI's |
| AMF-014 | Highway Reactive Maintenance Policy |
| AMF-015 | Highway Lifecycle Planning Strategy |
| AMF-016 | Highway Winter Gritting Plan |
| AMF-017 | Highway Winter Gritting Appendices |
| AMF-018 | Highway Skid Resistance Policy |



Table 1.2 Asset Management Framework

| Purpose | Status | Review Date | Owner | Recommendations | | |
|---|----------|-------------|---------------|-----------------|-----|------------------|
| | | | | Incentive Fund | CoP | Ass Mgt Guidance |
| <p>Highway Asset Management Policy</p> <p>AMF-001</p> | Complete | Apr 2022 | Mark Bradbury | 3 | 3 | 3 |
| <p>Nottingham City Council’s commitment to implementing an asset management approach to the maintenance and management of its Highway Infrastructure in line with the Council plan, its goals and objectives</p> | | | | | | |
| <p>Highway Asset Management Strategy</p> <p>AMF-002</p> | Complete | Apr 2022 | Mark Bradbury | 3, 6 | 3 | 3, 8 |
| <p>This strategy provides an overview of the strategies the City Council is implementing to manage and maintain the Highway Assets with reference to recent national and regional developments in asset management.</p> | | | | | | |



| | | | | | | |
|---|------------------------|------------------------|---------------------------------|-----------------|--------------------|-----------------|
| <p>Highway Asset Management Framework</p> <p>AMF-003</p> | <p>Complete</p> | <p>Apr 2022</p> | <p>Mark Bradbury</p> | <p>3</p> | <p>1, 2</p> | <p>1</p> |
| <p>The Highway Asset Management Framework documents provide an overview of the asset management approach Nottingham City Council has taken in delivering its maintenance and management of its Highway Infrastructure</p> <p>It sets out the key documents that define the policies, strategies, procedures and processes that have been developed to ensure a more effective and transparent approach including the:</p> <ul style="list-style-type: none"> • purpose • status • review dates • ownership • and the key recommendations met from the Code of Practice – Well-managed Highway Infrastructure (2016), Highway Infrastructure Asset Management Guidance (HMEP / UKRLG) and Incentive Fund (DfT). | | | | | | |



| | | | | | | |
|--|--|-------------------|-----------------------------|---|------------------|-----------------------|
| <p>Highway Communication Strategy</p> <p>AMF-004</p> | <p>In progress</p> <p>January 2020</p> <p>(90%)</p> | <p>N/A</p> | <p>Mark Bradbury</p> | <p>2, 12</p> <p>13,</p> <p>14,</p> | <p>24</p> | <p>2, 8, 9</p> |
|--|--|-------------------|-----------------------------|---|------------------|-----------------------|

This strategy details the approach we will take to communicate with all highway users and stakeholders. It considers the who, what, when, where, why and how we will communicate and sets out a communications matrix to ensure a consistent approach is maintained. It considers differing target audiences, types of information to be communicated and methods to be used and aims to create public awareness of the work undertaken, the reasons why and the longer-term objectives of our approach

| | | | | | | |
|--|--|-------------------|-----------------------------|-----------------|------------------|------------------|
| <p>Competencies and Training Strategy</p> <p>AMF-005</p> | <p>In Progress</p> <p>Jan 20 (90%)</p> | <p>N/A</p> | <p>Mark Bradbury</p> | <p>7</p> | <p>15</p> | <p>10</p> |
|--|--|-------------------|-----------------------------|-----------------|------------------|------------------|

The strategy sets out the processes and procedures to ensure that employees engaged in the maintenance and management of the Highway Assets demonstrate sufficient expertise, skill and competency, and ensure gaps in knowledge and understanding can be identified more efficiently and performance evaluated more effectively.

It also sets out the delivery of the staff development plan and succession planning, change management and supports the effective recruitment and selection of new staff.



| | | | | | | |
|--|---|------------|---------------------------------|-----------------|--|--|
| <p>Highway Data and Inventory Management Strategy</p> <p>AMF- 006</p> | <p>In Progress</p> <p>Jan 20 (60%)</p> | <p>N/A</p> | <p>Mark Bradbury</p> | <p>4</p> | <p>5, 8, 9, 10, 11, 16, 17, 34</p> | |
| <p>The strategy defines the data required to successfully manage the Highway Assets in the stewardship of Nottingham City Council. It considers both inventory and condition data, surveys, inspections and works records defining the methodology for regular data collection and update for each asset group appropriate to its importance in delivering a safe and reliable highway network.</p> <p>Data held for the purpose of maintaining and managing the Highway Assets meets the requirements of the Council’s Data Protection Policy and the strategy sets out the processes and procedures for collecting, validating, auditing, storing and disposing</p> | | | | | | |
| <p>Highway Asset Inventory Survey</p> <p>AMF-007</p> | <p>Subject to future workshops</p> | <p>N/A</p> | <p>Mark Bradbury</p> | <p>4</p> | <p>5, 9, 10, 16, 17, 34</p> | |



| | | | | | | |
|---|--|-------------------|-----------------------------|----------------------------|-------------------------|------------------|
| <p>The Data Inventory Survey provides an understanding of the data currently held, provides a gap analysis of the data required and complements the Data and Inventory Management Strategy by supporting an action plan to ensure accurate, complete and current data is at the heart of asset management decisions</p> | | | | | | |
| <p>Highway Maintenance Hierarchy and Resilient Network</p> <p>AMF-008</p> | <p>In Progress</p> <p>Jan 20 (60%)</p> | <p>N/A</p> | <p>Mark Bradbury</p> | <p>9</p> | <p>6, 12, 20</p> | |
| <p>This document describes the need for a maintenance hierarchy that is no longer based on the road classification system, but considers the importance, purpose, local economic and social factors and use of each road section across the City. Maintenance hierarchies will determine how the maintenance of Highway Assets will be prioritised to meet user expectations and service levels.</p> <p>It also sets out the how the Council has determined its resilient highway network, a network of roads to be maintained as vital to the City, its businesses, residents and visitors in times of extreme weather</p> | | | | | | |
| <p>Highway Asset Condition Strategy</p> <p>AMF-009</p> | <p>Subject to future workshops</p> | <p>N/A</p> | <p>Mark Bradbury</p> | <p>5, 7, 13, 14</p> | <p>17, 31</p> | <p>20</p> |



A comprehensive understanding of asset condition is essential to the delivery of cost effective planned and reactive maintenance of all Highway Assets. The **Asset Condition Strategy** provides an overview of who, what, when, where, why and how condition data will be collected, provides specifications for condition surveys and a cyclic programme of data collection. It complements the **Data and Inventory Management Strategy** by supporting an action plan to ensure accurate, complete and current data is at the heart of asset management decisions

| | | | | | | |
|---|-----------------|---------------|-----------------------|--|-----------------------|--|
| Highway Safety Inspection Manual | | | | | | |
| AMF-010 | Complete | Oct 21 | Kevin Charnley | | 15, 16, 18, 19 | |

This document sets out how Nottingham City Council manages and risk-assesses the maintenance of its highways to fulfil its statutory obligations and deliver a safe, serviceable and resilient highway network.

The objectives of this manual are to ensure that the highway is safe for all users and to provide a reference text to all staff. It will also provide a useful document to other departments and stakeholders highlighting the extent of the highway inspection regime.

| | | | | | | |
|---|---------------------|------------|----------------------|----------|--------------|--|
| Highway Risk Management Strategy | In Progress | | | | | |
| AMF-011 | Jan 20 (90%) | N/A | Mark Bradbury | 8 | 7, 14 | |



The risk strategy sets out how the Council will identify, assess and risk manage the Highway Assets to deliver a safe, serviceable and resilient highway network for all users. It defines the processes involved in ensuring a sound risk-based approach is at the heart of all decisions made in respect of the maintenance and management of the Highway Assets and network.

| | | | | | |
|------------------------------------|---------------------|------------|-----------------|----------|--------------|
| Highway Asset Risk Register | In Progress | | Mark | | |
| AMF-012 | Jan 20 (90%) | N/A | Bradbury | 8 | 7, 14 |

An assessment of the current risks identified for each asset group, the probability of their occurrence, the likely consequence and what mitigation measures have been or could be put in place to reduce the risk to users of the highway network. Those risks that still remain 'high' have been prioritised into an Action Plan, allocated and allocated a responsible officer within the following areas of interest;

- corporate
- strategic / tactical
- operational

Risks have been and will continue to be assessed, classified and quantified and plans for mitigation reviewed allowing resources to be targeted to those risks likely to have the most severe effects on service levels and the delivery of a safe and reliable highway network



| | | | | | | |
|--|------------------------------------|------------|----------------------|-----------------------|---------------|----------|
| | | | | | | |
| Highway Service Levels and Performance Management AMF-013 | Subject to future workshops | N/A | Mark Bradbury | 12, 13, 15, 16 | 26, 27 | 4 |
| <p>This document sets out the process for identifying appropriate and deliverable Levels of Service for Highway Services Assets to ensure a safe, reliable and accessible highway network is available to users. It considers how Levels of Service can be successfully monitored to assess performance, how a performance management framework can be developed and how performance can be used to inform the public, Council Members and stakeholders, Department and divisional senior managers, group and team leaders and individual officers of current performance.</p> | | | | | | |
| Highway Reactive Maintenance Policy AMF-014 | Subject to future workshops | N/A | Mark Bradbury | 10 | 16, 19 | |



This document highlights how the Council have implemented the findings of the pothole review and embedded the **Risk Strategy** into its regular safety inspections and timescales for reactive maintenance for Highway Assets. It provides the context for the **Highway Safety Inspection Manual** and how this influences the timely repair of highway asset defects

| | | | | | | |
|--|------------------------------------|------------|----------------------|-------------|-----------------------|--------------|
| Highway Lifecycle Planning Strategy | Subject to future workshops | N/A | Mark Bradbury | 6, 7 | 13, 28, 30, 31 | 5, 20 |
| AMF-015 | | | | | | |

Lifecycle planning is an important aspect of highway asset management and involves determining long-term plans for carriageways, footways, structures and other assets. It explains how the Council will take whole life costs into consideration when assessing options for maintenance, new and improved highway schemes and how lifecycle planning will be used to review the level of funding, consider investment scenarios, support investment decisions and substantiate the need for appropriate and sustainable long-term investment.

| | | | | | | |
|------------------------------------|-----------------|---------------|---------------------|--|---------------------------|--|
| Highway Winter Service Plan | Complete | Oct 21 | Richard Dunn | | 20, 21, 23, 24, 25 | |
| AMF-016 | | | | | | |



The aim of this document is to describe how the highway winter service is set up to provide for the winter season and how it is expanded to cope with more severe weather.

| | | | | | | |
|---|--|----------------------|---------------------------------|---------------------|--|------------------|
| <p>Highway Winter Service Appendices</p> <p>AMF-017</p> | <p>Complete</p> | <p>Oct 21</p> | <p>Richard Dunn</p> | | <p>20, 21, 23, 24, 25</p> | |
| <p>Contains information on our gritting routes and grit bins</p> | | | | | | |
| <p>Highway Skid Resistance Policy</p> <p>AMF-018</p> | <p>In Progress Jan 2020 (90%)</p> | <p>N/A</p> | <p>Mark Bradbury</p> | <p>7, 11</p> | <p>31</p> | <p>20</p> |
| <p>The policy sets out how the Council will manage the skid resistance of road surfaces across the City. It considers the roads it will survey, the thresholds and the actions it will take, if required. The policy is supported by the Highway Skid Resistance Procedure</p> | | | | | | |