

**PLACE, SUSTAINABILITY & CLIMATE CHANGE
SCRUTINY COMMITTEE
23RD NOVEMBER 2023**

**HIGHWAY ASSET MANAGEMENT PLAN –
MAINTENANCE MANUAL
PART 4.8 – HIGHWAYS ADVERSE WEATHER & WINTER
SERVICE PLAN**

Purpose: To consider and comment on Part 4.8 of the Maintenance Manual in support of the Highway Asset Management Plan (HAMP).

The Maintenance Manual forms Part 4 of the HAMP and is being developed as a portfolio of specific manuals covering the management of a range of highway asset categories. Parts 4.1 to 4.7 have been adopted previously. This report relates to the proposed Part 4.8 that covers the Highways Adverse Weather & Winter Service Plan. Further sections will be brought forward in future years.

The Scrutiny Committee is asked to

Review and assess the information contained in Report and provide any recommendations, comments, or advice to the Cabinet Member and / or Director prior to the report's consideration by Cabinet.

Reason

To formulate views for submission to the Cabinet / Council for consideration in relation to the proposed Part 4.8 of the manual.

CABINET MEMBER PORTFOLIO HOLDER:- Councillor Edward Thomas Cabinet Member for Transport, Waste and Infrastructure Services

Directorate: Place & Infrastructure

Head of Service:

Dan John

**Designations: Head of
Environmental Infrastructure**

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EXECUTIVE SUMMARY
PLACE, SUSTAINABILITY & CLIMATE CHANGE
SCRUTINY COMMITTEE
23RD NOVEMBER 2023

HIGHWAY ASSET MANAGEMENT PLAN –
MAINTENANCE MANUAL
PART 4.8 – HIGHWAYS ADVERSE WEATHER & WINTER
SERVICE PLAN

In 2018 Council adopted the Highway Asset Management Plan (HAMP) to ensure that the County Council manages and maintains the highway network in accordance with its statutory duties and to comply with best practice.

The HAMP is in line with national codes of practice and adopts a risk-based approach which targets limited resources to areas where they are most needed and where our investment will derive greatest value.

This does mean that difficult decisions have to be made and the HAMP sets out the overarching policies and methodology to ensure that those decisions are evidence led and based on an equitable and objective analysis which reduces the authority's exposure to risk and provides best value for the long-term integrity of the highway asset.

There are four parts to the HAMP:

| | |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part 1 | Explained the supporting role of the highway network in the wider policy context. |
| Part 2 | Set out the highway network policies which are in place or being developed and our objectives adopted in managing the highway network utilising a risk-based approach. |
| Part 3 | Comprises an Annual Statement which informs on the condition of the asset. |
| Part 4 | A Maintenance Manual consisting of a portfolio of topic specific manuals setting out how particular elements of the highway asset are managed in line with the risk-based approach. |

Cabinet has previously approved the following parts of the Maintenance Manual:

- Part 4.1 Highway Maintenance Management
- Part 4.2 Highway Network Hierarchy
- Part 4.3 Highway Safety Inspections & Repairs
- Part 4.4 Road Conditions Assessment and Investment Prioritisation
- Part 4.5. Highway Drainage Management.
- Part 4.6. Geotechnical Management.
- Part 4.7. Highway Emergency Response

The proposed Part 4.8 continues the HAMP risk-based methodology with policies based on the adopted Highway Network Hierarchy. Part 4.8 is discussed below with a full copy provided as a supporting document.

Part 4.8 Adverse Weather & Winter Service Plan

Part 4.8 sets out the County Council's approach to managing the highway network during the following adverse weather events.

- Heavy rain and storm events.
- Tidal, surface water and river flooding.
- Extreme winds.
- Prolonged high temperatures / heatwaves.
- Extreme winter weather.

The Highway's operational approach to winter weather has been long-established but the growing frequency and severity of prolonged and intense rainfall, extreme winds and prolonged high temperatures are new policy areas recognised within the Part 4.8 of the Maintenance Manual.

The operational objective during these events is to maintain an accessible highway network as far as is reasonably practicable and to minimise the risk to the travelling public.

The term '*as far as is reasonably practicable*' is an important qualification recognised within the Highways Act 1980 which acknowledges that the resources of a Highway Authority are finite and maintaining the whole highway network during an adverse weather event would be an unrealistic task.

This limitation is particularly pertinent to Carmarthenshire which has the second largest highway network in Wales. Therefore, in order to make the best possible use of the resources available our highway operations are focused on the most important routes within the County.

The routes of key important are set out within the Highway Network Hierarchy which was contained within Part 4.2 of the Maintenance Manual and adopted by the County Council in November 2021.

The Highway Network Hierarchy is defined in accordance with the following table:

| Carriageways | |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Category | Description (approximate daily traffic volume) |
| CHSR | Route enabling travel between locations of regional significance (NA, Strategic routes are identified based on their importance regionally rather than their traffic volume) |
| CH1 | Travel between locations (traffic volume 10,000 - 20,000) |
| CH2 | Travel between locations (5,000 - 10,000) |
| CH3 | Travel between locations (1,000 - 5,000) |
| CH4 | Access to housing (200 – 1,000) |
| CH5a | Access to properties (housing and farms) (< 200) |
| CH5b | Access to isolated properties <20 |
| CH5c | Unsuitable for vehicles |
| CH5d | Disused/impassable |

Weather Information

The Maintenance Manual explains the many sources of information used by the County Council to enable an appropriate response to an adverse weather event. These include information from the Flood Forecasting Centre, Met Office, Natural Resources.

The weather forecasts are also informed by 13 weather stations strategically located within Carmarthenshire which also provide real-time information and camera images.

Resource Management

The efficient deployment and management of resources is a critical component of the Council's response to an adverse weather event. Resources are finite and Carmarthenshire has an extensive highway network. As a consequence resources have to be prioritised towards the areas of greatest risk as identified within the Highway Network Hierarchy and the deployment of resources may need to be scaled according to circumstances.

Flooding

The Maintenance Manual recognises that there are a number of agencies with flooding responsibilities. During adverse weather events roads can become impassable and often this is due to flooding from adjacent watercourses or run-off from adjacent land. In these circumstances it may be necessary to close a road until the weather event subsides and the floodwater recedes. In normal operating conditions the focus of the highway drainage system is to take surface water off the highway as efficiently as possible. This is normally through a system of road gullies, pipe, culverts and grips to roadside ditches and the management of this is set out in Section 4.5 of this Manual.

High Winds & Gales

The main impact from high winds and gales on the highway occurs where trees fall onto the road below. During adverse weather events highway crews are equipped to deal with fallen trees and have specialist sub-contractors available where necessary. This does not absolve the adjacent landowner of responsibility for the trees on their land and this includes boundary trees.

Extreme Heat

The impacts of extreme heat are becoming more pronounced as the Met Office advise that climate change is making the UK heatwaves more frequent, intense and long-lasting. The Maintenance Manual sets out the impacts of extreme heat on highway infrastructure and the reactive measures taken to ensure road surfaces remain safe.

Winter Service Plan

Carmarthenshire County Council has had a Winter Service Plan in place for many years and has well-rehearsed procedures for treating roads ahead of forecast snow and ice. An Annual Winter Service Plan is being replaced by Part 4.8 of the Maintenance Manual which will be supported by information available on the County Council's website.

Part 4.8 explains the management of the winter service operations, how services are delivered in response to forecast weather conditions, the training regimes in place and the networks treated.

These networks are based on the Highway Network Hierarchy and consist of:

- Primary Network - A network of strategically important routes normally treated in advance of freezing weather.
- Resilience Network - A reduced core of strategic routes should treatment of the Primary Network become unsustainable.
- Secondary Network - A supplementary network of secondary routes treated in certain instances.

The current Primary, Strategic and Secondary Network would be reviewed and revised to align with the adopted Highway Network Hierarchy.

In the case of the Primary Network, the routes forming the network would consist of roads within the classes CHSR, CH1 and CH2 with the addition of specific roads necessary to ensure access to the following facilities:

- Hospitals and Ambulance Stations,
- Fire Stations,
- Main Police Stations,
- Key Public Transport Routes,
- Main Schools & Colleges,
- Train Stations and Bus interchanges,
- Ferry Ports (Trunk)

These networks are treated in parallel with the Trunk Road Network in the area which is treated by Carmarthenshire County Council's Highways Service under the instruction of South Wales Trunk Road Agency.

Part 4.8 of the Maintenance Manual also sets out how the County Council manages snow events, our approach to treating footways & cycleways, car parks, the deployment and management of grit bins, and how we suspend gritting operations at level crossings.

The Winter Service section of Part 4.8 concludes by setting out how resources are managed in terms of plant and vehicles, operational personnel and salt stocks.

DETAILED REPORT ATTACHED ?

YES – Maintenance Manual Part 4.8

IMPLICATIONS

I confirm that other than those implications which have been agreed with the appropriate Directors / Heads of Service and are referred to in detail below, there are no other implications associated with this report :

Signed: D. John

Head of Environmental Infrastructure

| | | | | | | |
|-----------------------------------------|------------|------------|-------------|------------------------|-----------------------|-----------------|
| Policy, Crime & Disorder and Equalities | Legal | Finance | ICT | Risk Management Issues | Staffing Implications | Physical Assets |
| NONE | YES | YES | NONE | YES | NONE | YES |

Legal

The County Council has a statutory duty under the Highways Act 1980 Section 41 to maintain the highway and to ensure, as far as reasonably practicable, that safe passage is not endangered by snow or ice.

Through the adoption of the HAMP and its associated Maintenance Manual, the County Council will discharge this statutory duty and operate in accordance with the national Codes of Practice 'Well-managed Highway Infrastructure'.

Finance

The budgets available to local authorities to manage the highway asset are finite and under considerable pressure.

The Maintenance Manual adopts a risk-based approach to make best use of available funding.

Risk Management Issues

The HAMP and Maintenance Manual adopt risk management as a core theme and this is discussed in detail within the report.

Physical Assets

The report discusses the operational maintenance of the road network during adverse weather events.

CABINET MEMBER PORTFOLIO HOLDER(S) AWARE/CONSULTED

Yes

Section 100D Local Government Act, 1972 – Access to Information List of Background Papers used in the preparation of this report:

| Title of Document | File Ref No. | Locations that the papers are available for public inspection |
|---------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------|
| Highway Asset Management Plan (2018) | | (Public Pack)Agenda Document for Executive Board, 02/07/2018 14:00 (gov.wales) |
| Highway Asset Management Plan - Maintenance Manual Parts 4.1 to 4.4 | | (Public Pack)Agenda Document for Cabinet, 06/12/2021 10:00 (gov.wales) |
| Highway Asset Management Plan - Maintenance Manual Parts 4.5 to 4.7 | | (Public Pack)Agenda Document for Cabinet, 13/02/2023 10:00 (gov.wales) |