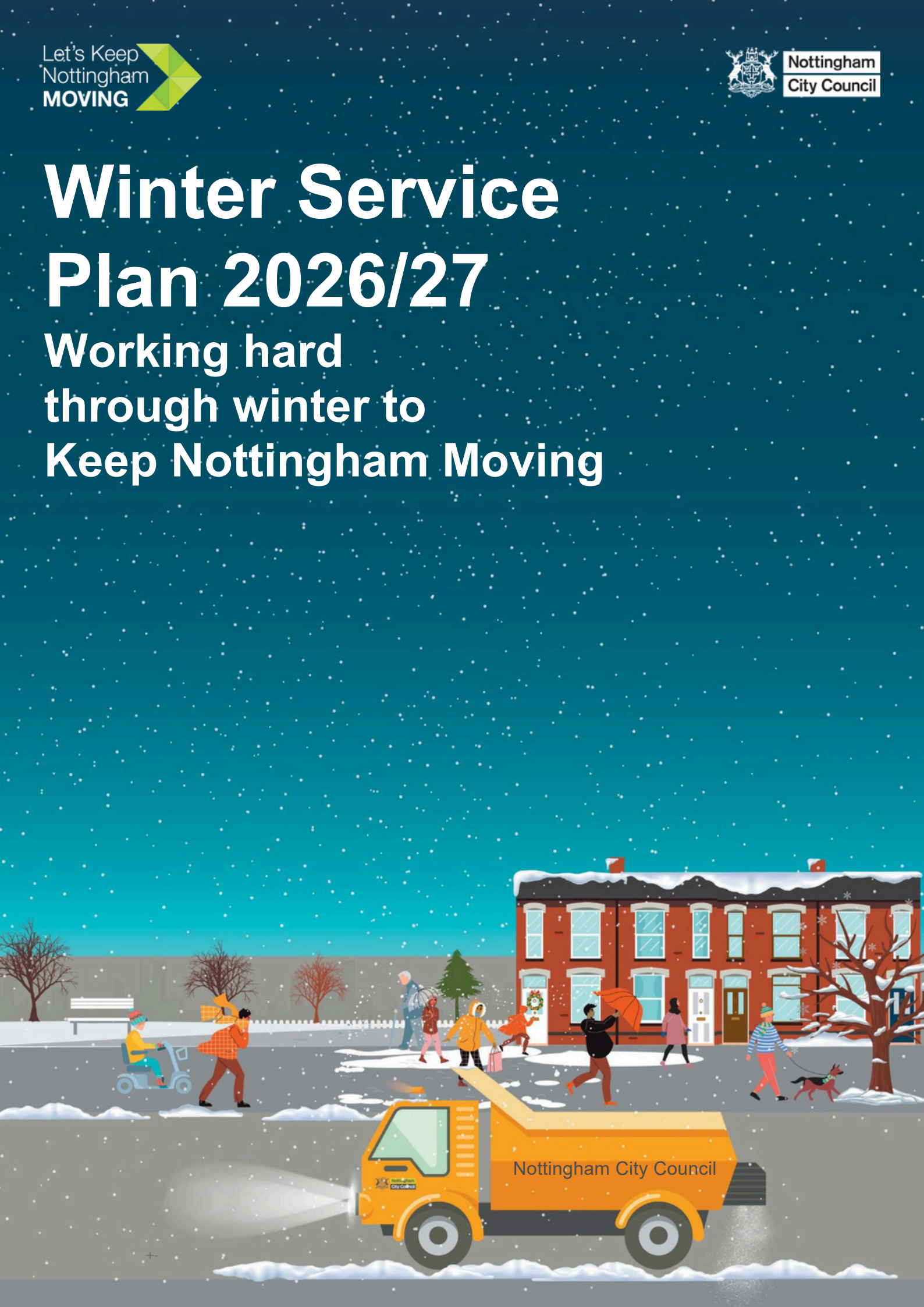
Let's Keep Nottingham MOVING

Nottingham City Council

Winter Service Plan 2026/27

Working hard through winter to Keep Nottingham Moving



Document Control

The information contained in this document was accurate at the time of printing.

Please access **www.transportnottingham.com/driving/winter-travel/** to download subsequent updates

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For further information on this document please contact winter.service@nottinghamcity.gov.uk

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Policy Statement

Nottingham City Council aims to provide a highways winter service which, as far as possible, allows the safe movements of traffic on the primary highway network, while minimising delays and accidents directly caused by adverse weather conditions.

The service will consist of carrying out precautionary salting on the primary network including all principal roads and selected secondary roads.

Snow clearing will be carried out throughout the network where appropriate and practicable.

The services we provide:

Highway & Public Realm Services are responsible for providing the winter service for Nottingham City Council, including:

- Implementing the Council's annual highway winter service provision
- Advising the Council on policy issues
- Day-to-day management of operations
- Liaison with adjoining authorities, emergency services and other key stakeholders
- Supporting the Council during severe weather situations

1. Our legal duties and responsibilities

1.1 Introduction

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.

For operational purposes the winter season will start each October, and end the following April and is split into five separate periods as defined in the table below:

Period	Time	Weather Conditions
Marginal	October	Severe not expected
Low	November	Severe may occur
High	Dec – Feb	Severe probable
Low	March	Severe may occur
Marginal	April	Severe not expected

Before the start of the winter season, the following will be checked:

- All of the pre-treatment routes to ensure that they remain appropriate, suitable, and available for treatment
- Certification from a recognised Vehicle Plant Authority that all vehicles, plant and equipment are fit to perform the services
- That the training of operatives is adequate
- That the training of supervisors is adequate
- An appropriate supply of salt is in store
- That salt bins are serviceable and filled with an appropriate amount of grit/salt
- Setting up / ordering / maintaining system for weather forecasting service
- The decision-making process is in place and transmission systems checked
- Weather forecasts and systems checked
- Response times and distribution of salt spreading is understood by staff.

1.2 Policies and objectives

Nottingham City Council has a statutory obligation under **Section 41** & **150** of **The Highways Act 1980** to maintain the highway. The introduction of legislation in the form of **The Railways and Transport Safety Act 2003**, extends the requirements of Section 41 of the Highways Act to place a duty on the highway authority to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice.

Our aim is to provide an effective and efficient winter maintenance service to allow:

- the safe passage of vehicles on priority routes,
- to control delays due to winter weather, and to carry out operations safely.

The Plan has been developed and revised in accordance with the recommendations set within:

- The Code of Practice – Well Managed Highway Infrastructure (Oct 2016) Code of Practice | CIHT
- The design and practice guide for highway winter maintenance published by ICE (Institution of Civil Engineers) in 2000 Winter Maintenance IHE Handbook
- Midland Highways Alliance Plus (MHA+) guidance and sharing of best practice.
- National Winter Service Research Group (NWSRG) guidance. Practical Guidance Documents - NWSRG

1.3 Responsibilities

Highway & Public Realm Services (Highways) is responsible for providing the highway winter service. This involves the following regular activities throughout the winter season:

- Obtaining and recording weather information and forecasts
- Prevention of, so far as is reasonably practicable, the formation of ice on carriageways
- Prevention of, so far as is reasonably practicable, the build-up of ice on carriageways as soon as is possible
- The removal of built-up frost, snow, and/or ice, so far as is reasonably practicable, from carriageways and footways.

Our main responsibilities include, but are not limited to, the following:

- Providing and maintaining vehicles such that they are adequate to carry out the salting of all routes within the specified response times.
- Providing skilled drivers for salting vehicles, plough, and loading shovels, with skilled and experienced supervisors to manage and complete operations
- Providing and managing the stock of salt
- Establishing communication networks to relay decision for action to emergency services, public transport companies, schools and other main stakeholders
- Ensuring that all operatives are appropriately trained in winter service operations
- Ensuring that workshop facilities and appropriate skilled personnel are available on standby during the winter period to repair and maintain vehicles.

The clearance and treatment responsibilities are, however, not limited to clearing any snow and ice. The amendment to **Section 41a** of **The Highways Act 1980** puts a duty on the highway authority to ensure ‘safe passage is not endangered by snow and ice’ and, because of this, preventative, rather than just reactive, action falls within this duty.

However, the Public Highway within the City Council area increases in shape, length and area every year. Any salting treatment must be done within a reasonable time limit, and without a limitless resource of materials, plant and personnel, it is an impossible task to pre-treat the entire highway before every forecasted frost, snow or ice event.

2. Salt treatment process

2.1 Weather Forecasts

The weather is in a constant state of flux, and changes do occur in the type, temperature, water content, direction, speed and amount at any time. Consequently, forecasts are a forecast and not a statement of intent.

All forecasts are issued with the following degrees of confidence:

- H for High, in that this weather is most likely to occur
- L for Low, in that this may occur but is likely subject to later change.

Because action has to be taken before the arrival of the weather event, our decisions for action are based on forecasted events, which are subject to a multitude of possible changes. These decisions for action, and the timings and extent of treatment are subject to a degree of personal interpretation of the possible risk.

The length of time over which a severe weather event is forecasted to take place, and what precedes it and follows, must be considered when planning any treatment, as this will limit its effectiveness as the salt store capacity is finite and there is a limit to the area that can be treated over any period.

Because of this, only the major carriageways (primary routes) will normally be pre-treated when there is the possibility of frost, light ice or snow as forecasted. In the case of snow fall at the start of a period of severe weather, the treatment area may be extended by the inclusion of the secondary route, unless the weather condition is expected to continue for some considerable time, when the conservation of salt stocks will have to take place.

Once the severe weather has ceased, all other carriageways and areas will be treated reactively when and where possible.

2.2 Primary carriageway routes for pre-treatment

There are five primary routes, North, South, East, West and Central, that cover the main roads, main bus routes, and other selected busy roads / hills within the City Area. These are all served by dedicated gritting vehicles and are gritted when road temperatures are forecast to drop near zero and there is a potential for hazards on the routes.

The target completion for the primary carriageway routes is 4 hours.

These routes will be changed and updated as necessary, for example, due to new constraints imposed on access through traffic calming measures, parking problems or temporary closures etc.

Nottingham City Council has cross boundary agreements with Notts County Council where it is more economical and efficient for one or other Council to grit a road as part of their route. This is reviewed and confirmed prior to every winter period. Details of gritting routes can be found here: **www.transportnottingham.com/driving/winter-travel**

2.3 Secondary carriageway routes for post-treatment

A secondary salting route has been established and is under constant review to treat roads, hills and junctions during periods of snow and widespread ice predicted to be more than just the short term. This route has flexibility to enable temporary occurrences to be dealt with. The secondary route will be started if prolonged severe weather is forecast and once the primary routes are clear and there are sufficient levels of salt stocks.

In consultation with other service areas, in severe weather additional support can be put in place to cover public access to schools, care homes and for waste collections. Should waste collection services be adversely affected in severe weather conditions, vehicles can be deployed which will specifically treat roads previously identified as difficult for waste collection vehicles to navigate in ice and snow conditions, with a view to ensuring the next day's waste collection services can be successfully completed. This is subject to available resources, materials etc.

2.4 Ad-hoc post-treatments

If resources allow, additional vehicle(s) will be available during periods of snow and widespread ice to respond to ad-hoc calls. These will also be used on emergency, secondary and other routes when required. A Multi-Hog tractor fitted with a mini-plough and spreader unit is also available for treating footways, pedestrianised areas and other less accessible routes.

Operatives from across Resident Services may be redeployed to assist with salt spreading and snow/ice clearance during severe weather.

Other severe weather operations

The gritting vehicles can be fitted with snow ploughs if heavy snow clearance is required.

It should be noted that ploughing in a city environment is not a good method of managing snow fall and will only be undertaken during a period of very heavy snow, as ploughs do not remove snow; they only move it to one side – covering side roads and access points in the process and causing possible distress to pedestrians or cyclists who may be in the snow's path. Ploughs also must travel at a minimum speed of around 27mph in order to keep the plough operational and to maintain forward progress, which can prove difficult in traffic and will only remove the top few inches of snow – they do not leave a clean road surface.

In the event of a prolonged severe snow event, the excavators normally used on road construction can be used for snow clearance work on the highway, under the direction of Highways.

2.5 Routes for footway treatment

In prolonged severe weather conditions front line staff from Highways, Waste and other areas are redeployed from their normal duties to spread salt and clear footways of snow and ice in areas with high footfall or higher risk.

The footway treatment routes are composed of selected footways with high footfall (e.g. shopping or pedestrianised areas), or increased risk (e.g. near medical centres or schools). This action is subject to staff and vehicle availability and any salt conservation action.

2.6 Location and maintenance of grit bins

Grit bins are provided to support residents in their neighbourhoods and are located across the city at high risk locations. They are provided for public use on the highway and should not be used for private roads or driveways. They are generally not sited on the primary salting routes. An up-to-date location map of grit bin locations can be seen and downloaded from the City Council website on **www.transportnottingham.com/driving/winter-travel**

Before and during the winter season, the grit bins will be checked and refilled when required. All grit bins are mapped and set into routes on the Asset Management Database. Information regarding when grit bins were attended to and what action took place enables resources to be directed to the appropriate location and to assist when reviewing the need for additional grit bins. Refilling grit bins will take place provided there are sufficient levels of salt and personnel available, and salt conservation is not in operation.

When assessing locations for new grit bins, the following needs to be considered:

- Grit bins will not obstruct the passage of pedestrians
- Grit bins will not be provided in or for any private areas
- Grit bins will not be provided under, or adjacent to trees, or on verges
- Grit bins will not be provided within 50 metres of another grit bin, except where extreme conditions prevail.

New grit bin requests passing the above requirements will be entered onto a list, and will be subject to a scoring system, taking into account local conditions and usage to assist in providing a fair comparison between sites so that the best use of finance is made. Any grit bin requests that fail to be allocated at the time will be retained on the list for the following years.

3. Weather prediction and information

3.1 Forecasting

A designated highway weather forecasting service supplies a forecast specifically for the Nottingham City area, based on the national conditions, computer modelling and information from our own weather stations.

3.2 Decision making

Daily forecasts are received from the forecast provider, giving forecasted weather conditions for the following 36 hours, as well a medium to long range forecast. Colour status indicators are used as a guide to the weather conditions only, and are not an indication of the need action:

- **Green** = No frost or ice likely.
- **Amber** = Frost and ice likely but may not be in sufficient quantity to form a danger.
- **Red** = Ice and frost highly likely.

The following decision matrix is used as guidance for planning any gritting treatments. Decisions will be taken using the weather forecasts and live data, along with knowledge and experience of the topography and known conditions on the gritting routes.

<table>
<tr><th colspan="5">Decision Matrix Guide</th></tr>
<tr><td colspan="2"></td><td colspan="3">Predicted Road Conditions</td></tr>
<tr><td>Road surface temperature</td><td>Precipitation</td><td>Wet</td><td>Wet patches</td><td>Dry</td></tr>
<tr><td>May fall below 1°C</td><td>No rain
No hoar frost*
No fog</td><td rowspan="3">Salt before frost</td><td rowspan="2">Salt before frost</td><td rowspan="2">No action likely, monitor weather</td></tr>
<tr><td rowspan="3">Expected to fall below 1°C</td><td>No rain
No hoar frost*
No fog</td></tr>
<tr><td>Expected hoar frost*
Expected fog</td><td colspan="2">Salt before frost</td></tr>
<tr><td>Expected rain BEFORE freezing</td><td colspan="3">Salt after rain stops</td></tr>
<tr><td>Expected rain DURING freezing</td><td colspan="3">Salt before frost, as required during rain and again after rain stops</td></tr>
<tr><td>Possible rain
Possible hoar frost*
Possible fog</td><td colspan="2">Salt before frost</td><td>Monitor weather conditions</td></tr>
<tr><td colspan="2">Expected snow</td><td colspan="3">Salt before snow fall</td></tr>
<tr><td colspan="5">The decision to undertake precautionary treatments should, if appropriate, be adjusted to take account of residual salt or surface moisture. All decisions require continuous monitoring and review.</td></tr>
</table>

*a hoar frost is when water vapour in the air comes into contact with solid surfaces (e.g. roads) which are below freezing point, causing the water vapour to freeze immediately and form ice crystals.

During the winter season, a daily bulletin is issued to provide information and guidance. This bulletin is sent via the Gov Delivery system, where colleagues, Ward Councillors, stakeholders, members of the public, and anyone else who may find the information useful can sign up. Relevant information from the forecaster is added to this bulletin to keep subscribers up to date with forecasts, conditions and any actions taking place.

3.3 Forecast Updating

The weather forecasts are checked and updated at regular intervals by the forecaster provider. The duty supervisor will be informed via the telephone by the forecaster provider of significant forecast changes, so they are aware of any need to change the action or timings if required.

3.4 Weather records

Copies of all forecasts issued are retained by the forecaster provider and are available for use in compiling reports, and to the Duty Supervisor for assisting with the decision.

Copies of all the atmospheric and road surface condition data are also accessible for each day of the year from our weather stations, and from stations adjacent to the city area owned by Nottinghamshire County Council, Derby City Council and National Highways. Collaboration with these surrounding authorities enables information from additional weather stations to be accessed and monitored.



4. Organisational arrangements

4.1 Employee duty schedules, rotas and standby arrangements

Duty schedules, rotas and standby arrangements will be arranged prior to the winter season.

Drivers and supervisors will be on an on-call duty rota, with each on call period lasting 7 days, Monday p.m. to Monday a.m. Weekly operations will be led by a Duty Supervisor each week, who will lead on decision making, operations and resource planning including drivers.

This covers Monday to Friday, 16:00 to 07:30, plus all day Saturday, Sunday and Bank Holidays. Drivers will be on call every one week in three/four (dependent on the number of drivers), and supervisors one week in three (dependent on the number of supervisors).

In the event of treatment being required outside these hours, the Highways team will use its own drivers to cover the routes, as well as drivers from other services as and when they become available.

In the event of severe weather:

- The duty supervisor will receive backup from other off duty supervisors
- Drivers can be backed up by utilising other off duty drivers, and any additional staff from the Highways and other services.

4.2 Plant and vehicle manning arrangements

Highways Maintenance will ensure that adequate manning and standby requirements are in place to carry out a service for a normal winter.

4.3 Training and development arrangements

Highways shall ensure that all drivers of the gritters have received proper training and instruction in the safe and efficient operation of the vehicles and their equipment.

Operators of loading shovels shall hold a Certificate of Training Achievement issued by the Construction Industry Training Board, or equivalent.

Supervisors will keep up to date with the City and Guilds 6159 Winter Service Training as well as receiving annual internal training.

4.4 Health and safety procedures

Highways will provide risk and Control of Substances Hazardous to Health (COSHH) assessments for materials and for operations and explain the significance of these to all operatives. Operatives and Supervisors will be issued with all appropriate Personal Protective Equipment (PPE) prior to the start of the winter season.

5. Plant, vehicles and equipment

5.1 Fleet inventory including license requirements and capacity

The vehicles/plant available prior to the winter period include:

- 6 No. gritters
- 1 No. JCB loader
- 1 No. Multi-Hog tractor mini plough

The service will operate from the Eastcroft Depot, at London Road, Nottingham, NG2 3AH, where the vehicles, plant and materials will be stored and maintained.

5.2 Servicing and maintenance arrangements

The vehicles shall be stored and maintained in an efficient and workable condition, with collaboration with Fleet Services.

5.3 Calibration procedures

The calibration of the salt spreading equipment shall be in accordance with BS 1622.

5.4 Fuel stocks and locations

Highways will ensure that there is access to a guaranteed supply of fuel for the vehicles, which will be available during prolonged periods of severe weather and during overnight gritting.

6. Salt and de-icing materials

6.1 Location and capacity of stocks for salt and other materials

The base of operations is from Eastcroft Depot where the salt store is located and maintained for use on the Public Highway by the Council. This stockpile will vary in size during the Winter Season but shall be available and accessible at all times for delivery or loading/collection.

Two types of loose de-icing material will be stockpiled:

Material	Minimum pre-season stockpile	Replenishment triggerlevel	Storage
6mm natural rock salt	1000 tonnes	525 tonnes (covers 3 runs per day for 7 days)	Under cover in Salt Dome
6mm rock salt mixed 60/40 with grit sand	200 tonnes	50 tonnes	Outside in storage bays.

Investigation into the use of other de-icing materials and coatings will take place as and when the possibility arises, and these will be trialed and documented for use in the service to provide additional support to, or as a replacement for, mineral salt.

6.2 Supply and testing arrangements

The salt that is used on highways during winter is a naturally occurring rock salt, and shall be to the requirements of BS 3247 Salt for Spreading – Coarse Rock Salt (6mm & 10mm nominal particle size). The 6mm salt will be stored under cover in the salt dome to stabilize moisture content, while the 10mm will be stored outside against walling.

6.3 Delivery arrangements

Highways Maintenance will ensure that the necessary mechanical loading shovel, other plant, and labour to off load and stack the salt is available. Restocking will normally take place outside the winter period but may be at any time in the year if stock levels require it.

6.4 Treatment requirements including spread rates

The considerable changeable and variable nature of winter conditions makes it difficult to define exact treatments and salt applications that will cover all the possible variants.

Typical guidance on the appropriate spread rates is given below:

For pre-treatment salting:

- 10g/m2 is the normal rate, increased to 15-20g/m2 in damp/wet conditions
- 20 to 40 g/m2 if freezing conditions are expected after rain
- 20 to 40 g/m2 if continuous snow is forecast according to the anticipated severity of the snowfall

For treatment of settled snow/ice:

- 20 to 40gms/m2 for ice depending on the amount and temperature
- 20 to 40 gms/m2 for moderate snowfalls
- 40gms/m2 for prolonged snowfalls.

Successive treatments of 20 to 40gms/m2 for hard packed snow/ice mixing with grit sand or other available abrasives if necessary.

It is to be noted that below -11°C, rock salt treatment is ineffective. For use in these conditions, a stock of sand/salt mix may be used on carriageways, and bagged Potash/Salt Mix (effective down to -18°C), is kept in 1 tonne bags for emergencies only.

7. Operational communications

7.1 Technical systems information

It is important that good communications are maintained during the winter period to ensure that the response to poor weather conditions is effective.

At all times the duty supervisor should be available by mobile phone. Contact between drivers and the supervisors is to be maintained at all times during winter service operations, so that salting progress can be monitored and to provide a rapid and efficient response in emergency situations.

During normal working hours the duty supervisor will be available via their mobile phone. Confirmation of verbal instructions and change of decision will be issued by the Duty Supervisor or other trained Supervisor via email.

During periods of severe weather (snow and widespread ice) problem areas may be identified by phone calls received from the Police and members of the public via the Contact Centre. These will be logged via the Confirm Highway Asset Management System.

7.2 Reporting arrangements and protocols

The daily decision email, sent via the GovDelivery system (Nottingham City Stay Connected) confirms the action that is proposed, along with a weather forecast. This is circulated to over 8000 subscribers, which may include:

- Operational Services across the City Council
- Traffic & Safety (Traffic Management, Road Safety and Network Management)
- Network Rail, Nottingham City Transport, NET
- Nottingham City schools.
- Adjacent Winter Maintenance Services - Nottinghamshire County Council, National Highways
- Local MPs
- Local Ward Councillors
- Police, Fire, and Ambulance authorities

8. Information and publicity

8.1 Local press and broadcast contact information

Nottingham City Council's website will provide updates on Winter Service information **www.nottinghamcity.gov.uk**

A daily snow bulletin may be issued during periods of extreme winter weather to provide information and guidance via email. **www.nottinghamcity.gov.uk/snow**

Where appropriate, Nottingham City Council will release information to press/broadcasters.

Regular updates will also be given online **www.transportnottingham.com**

8.2 Contacting Nottingham City Council

Telephone: **0115 915 2000 (24 hour)**

Online: **www.nottinghamcity.gov.uk/report-a-problem-in-your-neighbourhood/**

9. Improvement Actions

A key aspect of this Plan is to facilitate a process of continuous improvement. This Winter Service Plan includes a number of improvement actions.

9.1 Delivery of improvements

During the life of the Plan, it is anticipated that improvements will continue to be identified, assessed and scheduled. Some improvements will be short-term, some may take longer to enact. It is important that the action plan allows for capturing all of these.

Improvement actions will be programmed and monitored by the following activities:

Improvement Programme	A meeting will be held at the end of the winter season.
Winter Service Plan	A formal review and updating of this plan will take place annually.

9.2 Plan review and updating

The Winter Service Plan will be reviewed annually.

9.3 Issues and improvement actions

Below are listed all the issues and improvement actions needed to ensure that the Plan is current and reflects the current position and processes within Nottingham City. The following section includes a Plan for implementation of these improvement actions.

Improvement Action No.	Action Officer	Issues	Improvement Actions
1 – Vehicle Replacement Programme	**Richard Dunn Fleet Services**	Vehicle replacement programme. Gritters are now 10 years old.	Work with Fleet team to look at options for replacing vehicles over the next 3 winters. Two have been replaced. **Ongoing** ➔
2– Resilience Route (Minimum Winter Network)	**Richard Dunn**	Part of the carriageway network normally treated in extreme winter weather which provides a minimum essential service.	To produce a resilience route. This would be enacted in the event of a national salt shortage. **Ongoing** ➔

Improvement Action No.	Action Officer	Issues	Improvement Actions
3 – Primary Route Review	**Richard Dunn**	There are five primary routes that cover the main roads, main bus routes, and other selected busy roads. A comprehensive review has not been undertaken of these for over ten years.	To review the primary gritting routes. **Ongoing** ➔
4 – Secondary Route Review	**Richard Dunn**	Asecondary salting route has long been established to treat roads, hills and junctions during periods of snow and widespread ice predicted to be more than just the short term.	Carry out assessment of secondary route –is it fit for purpose? **Ongoing** ➔
5 – Route Mapping	**Richard Dunn**	Routes alterations are difficult to carry out and need an outside company to carry them out.	Carry out a review of the process. Speak to mapping companies regarding route optimisation **Ongoing** ➔
6 – Weather Station Review	**Richard Dunn**	The current weather station is approaching end of life.	Six IoT weather sensors installed across the whole City, giving a wider and more detailed view of weather conditions, and improving forecasting. **Ongoing** ➔