

Place Management
Roads Operations

WINTER MAINTENANCE SERVICE

OPERATIONAL GUIDE

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1. REVISION HISTORY

Rev. No	Revision Date	Revision Summary
0	02/09/2009	Document update approved by RSMT.
1	23/09/2009	Version control added.
2	21/10/2009	Hyperlink to Appendix 1 – Winter Maintenance records added to Section 12.
3	5/2/2013	Document Update
4	21/2/2013	This Operational Guide is currently under review and is being brought up to date with WWT methods
5	03/02/2015	Guide updated with WWT methodology
6	14/05/2015	Guide updated for Equality purposes. Awaiting approval by RSMT
7	20/08/15	Approved by RSMT
8	27/08/2018	2018/19 Roads Operations - Annual Review
9	15/10/2019	2019/20 Roads Operations – Annual Review
10	16/10/2020	2020/21 Roads Operations – Annual Review
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12	27/10/2022	2022/23 Roads Operations – Annual Review
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2. INTRODUCTION

Roads Operations leads the Winter Maintenance Service for the City of Edinburgh Council in conjunction with other teams within Place Management. The purpose of this service is to allow all road and pavement users safe movement during wintry weather.

The City of Edinburgh Council has a statutory duty (under Section 34 of the Roads (Scotland) Act 1984) to take such steps as it considers “reasonable to prevent snow and ice endangering the safe passage of pedestrians and vehicles over public roads”. The intention of this duty is not that the Council will take immediate and simultaneous steps to clear and/or treat every road whenever ice or snow exists. It is recognised by the Courts that this would be impossible and beyond the limits of available resources.

This document describes the procedures adopted by Roads Operations for the provision of the Winter Maintenance Service.

Reference should also be made to all relevant Roads Operations’ Safe Working Methods that apply to winter maintenance operations.

3. WINTER MAINTENANCE GUIDANCE

Roads Operations has a major responsibility for providing the Winter Maintenance Service on adopted roads throughout the City of Edinburgh.

Winter Maintenance essentially comprises the following types of treatment:

- Precautionary Salt Treatment (Pre-grit)
- Treatment of Ice
- Treatment of Snow
- Treatment of Hard Packed Snow and Ice

The principal period covered will normally extend from mid-October to the mid-April each winter, a risk assessment of the weather conditions 2 weeks either side of this period will be undertaken and the period amended accordingly.

4. COMMUNICATIONS

The Roads Operations Winter Weather team has a communications plan “Be Prepared For Winter” which is reviewed, developed and implemented annually. The key elements of this plan are:

- Be Prepared For Winter Leaflets
- Be Prepared For Winter Posters
- Be Prepared For Winter Radio Advertisements on Forth 1&2
- Social Media campaign

- Local Newspaper Advertisements
- Website Information www.edinburgh.gov.uk/winterweather
- Twitter Information [www.twitter.com/edinburgh_cc](https://twitter.com/edinburgh_cc)

5. SERVICE MANAGEMENT AND CONTROL

5.1 Overall Control

The Council recognises two distinct winter weather situations, 'normal' and 'emergency'. The default situation is 'normal' and an 'emergency' situation will only be declared following a decision by Silver Command. The system of control and management of the operational response is dependent upon the situation.

Irrespective of whether the situation is 'normal' or 'emergency', the winter maintenance response is available on a 24 hour basis including weekends and public holidays. Full use of weather forecasts, and information from the Meteorological Office, will be used along with ice sensors in assessing courses of action.

5.2 Normal Situation

In a 'normal' situation a Duty Manager from Roads Operations is on-call and in overall control of the Winter Maintenance Service. The Duty Manager checks weather forecasts and road condition information before deciding on whether any treatment is required.

Similarly, a Duty Officer is on-call at all times and is responsible for the management and control of the Winter Maintenance Service outside normal working hours. All Duty Officers are fully aware of the road and pavement priorities in the City. Before they go on duty, they check the weather forecast, the proposed treatment/action and the condition and location of all salting equipment. Duty Officers have a current roster of on-call Supervisors and Operatives. A comprehensive register of telephone numbers for on-call staff members is held in Roads Operations' Bankhead Depot.

Throughout the winter period, frontline staff are on-call and available to deal with winter emergencies. This includes a number of other Place Management staff who assist Roads Operations in the treatment of pavements and cycle paths.

During snow events, further assistance in the treatment of pavements can be obtained through the use of external contractors if this is considered necessary.

A fleet of vehicles containing the most up-to-date salt spreading and snow clearing equipment undertakes the treatment of roads. All gritters are calibrated and checked regularly to ensure efficient operation and are road speed related to ensure that the rate of salt spread is constant irrespective of vehicle speed.

All gritter vehicles and mini tractors remain in contact with depots and supervisory staff by means of a two-way radio system.

Pavement and cycleway routes are treated by mini-tractors that are capable of snow clearing and salt spreading. The mini-tractors are supplemented with hand-barrows that spread salt by means of a belt driven spinner.

On occasion, additional winter maintenance vehicles are required. Before the start of each winter period contract hire prices are received from private hauliers for gritter vehicles with drivers, in accordance with the Council's purchasing procedures. These vehicles carry out salt spreading but are not capable of snow clearing activities.

5.3 Emergency Situation

A move from 'normal' to an 'emergency' situation will be taken by a member of the Council's Management Team. This decision will be communicated to the Winter Weather Silver Commander who will advise key staff via a text alert.

This prompt will result in the Silver Command team becoming established and this team, under the control of the Silver Commander, is responsible for the Winter Maintenance response until the situation reverts back to 'normal'. The Silver Command team will have a base in Bankhead depot alongside the Duty Officer.

5.4 Silver Command

The move to Severe Winter Weather working will be determined by the Director of Place Management / Council's Corporate Management Team or the duty Chief Officer acting on the Team's behalf. At that point this Severe Winter Weather Plan will be activated specifically:-

- Roads Operations will already be operating and will increase activity in response to the forecast or actual weather conditions.
- The Silver Co-ordination Team will be mobilised to manage any contracted resources and deploy them where necessary across the City.
- The Silver Command Team will be alerted and will meet during the first available working day to review the situation and service demand.
- The Silver Command Communications Lead will liaise with all parties to provide comprehensive summary of situation, operations and plans.

6. TREATMENT PRIORITIES

The road priorities have been amended to support the needs of emergency/essential services and people with protected characteristics recognised within the Equality Act 2010.

The Council operates a priority system for the treatment of roads, pavements and cycleways within the city boundary. This covers the treatment of 1400 kilometres of roads and some 300 kilometres of priority pavements and cycleways. Certain major roads, known as trunk roads (for example the A720 City of Edinburgh Bypass, the M8 and M9), are the responsibility of Transport Scotland.

In a 'normal' winter situation, outside normal working hours, (7.30am to 4.00pm Monday to Friday), only Priority 1 routes will be treated during freezing conditions. During snow conditions, all available resources will be deployed on all categories of route in priority order for as long as the snow and its effects prevail.

6.1 Road Priorities

The road priorities have been amended to support the needs of emergency/essential services and people with protected characteristics, as recognised within the Equality Act 2010.

Road Priority 1 - these routes will be treated first and include important principal roads, all bus routes and roads to fire stations, police stations, ambulance depots, hospitals, clinics, care homes and schools. Bus Park & Ride Sites at Ingliston, Hermiston and Straiton will also be treated as Road Priority 1. Treatment will be on a precautionary and reactive basis.

Road Priority 2 - Priority 2 routes cover a select number of roads outwith Priority 1 but which have specific known access challenges or support the Priority 1 network. Treatment will be on a reactive basis.

Road Priority 3 - Priority 3 routes cover the remaining Council maintained roads including residential streets and cul-de-sacs. Treatment will be on a reactive basis.

6.2 Pavement Priorities

Pavement Priority 1 - these routes cover busy pavements, pedestrian routes to hospitals, clinics, care homes and schools, as well as prioritised higher altitude areas and will be treated first whenever conditions dictate. These routes will be pre-treated, wherever possible, in forecast conditions of frost, ice or snow. These routes typically cover the busiest City Centre pavements and higher altitude areas to the South and South West of the City.

Local Areas - these areas will be treated in prolonged conditions following Priority 1 treatment, where resources can be allocated. Treatment will be on a reactive basis and bases on local access.

6.3 Cycleway Priorities

Cycleway Priority 1 - these routes will be the first to receive treatment, whenever weather conditions dictate, and will be pre-salted, where possible, when frost, snow or ice is forecast. Areas treated include:-

Middle Meadow Walk.

Leamington Walk in Bruntsfield Links.

Innocent Railway Path (Partial).

Sections of the Caledonian Cycle Track (North Edinburgh Cycle Network).

All other parts of the Council's off-road cycleway network will be treated as per Local Area footpaths.

Priority gritting routes can be viewed on our interactive map at www.edinburgh.gov.uk/winterweather.

6.4 Treatment Decision

On receipt of a weather forecast the Duty Manager will check the road condition information before deciding on whether any of the following is required:

- Immediate treatment
- Treatment to start at a later specified time
- Immediate patrolling of roads to monitor conditions
- Patrolling of roads to start at a later specified time
- No action

A Duty Officer is on-call at all times and is responsible for the management and control of the Winter Maintenance Service outside normal working hours. The Duty Manager's decision on treatment is communicated to the on-call Duty Officer and other appropriate staff.

The Duty Officer has authority to amend any decision made by the Duty Manager on the basis of updated weather forecasts or changes in road conditions.

6.5 Treatment Options

Winter Maintenance essentially comprises the following types of treatment:

- Precautionary Salting
- Treatment of Ice
- Treatment of Snow
- Treatment of hard-packed Snow and Ice

The Council will endeavour to spread salt, as necessary, before the formation of ice or the settling of snow on roads and pavements. When the road surface temperature is expected to fall below 0°C and freezing conditions are forecast, precautionary salting shall take place unless:

- the road is expected to be dry;
- the residual salt level on the road can deal with the expected road conditions;
- the weather forecast information indicates that the road could not be salted before the road surface temperature is expected to rise; or
- the weather forecast information indicates that there will be no frost to cause the formation of ice.

6.6 Agreements with Adjoining Local Authorities

The City of Edinburgh Council has mutual agreements with the adjoining Lothian Councils for the treatment of roads that cross the City boundary, to ensure full coverage of the road network.

The Scottish Executive's agent for the maintenance of the trunk road network (A720 City Bypass, M8 and M9) including the slip roads is BEAR Scotland. The City of Edinburgh Council has an agreement with BEAR Scotland for the treatment of roads that interface with the trunk road network.

7. SALT BINS

To enable people to carry out immediate self-help treatment of roads and pavements, salt bins are presently positioned throughout the City. These bins are checked and refilled on a cyclical basis during the winter months. Requests for new bins or reports of empty bins can be made to Clarence on freephone 0800 23 23 23 or through the Council website.

In an 'emergency' situation the Council will deploy a number of 1tonne bags of salt at strategic points throughout the City as well as provide 5t salt dumps at pre-determined locations.

8. DE-ICING SALT

Salt is the prime material for dealing with snow and ice.

Roads Operations purchase rock salt by means of a competitive tender, with a bulk order placed with the successful tenderer before each winter period. The terms of the salt supply contract allow for top-up orders to maintain adequate stocks throughout the winter.

Roads Operations use 6mm rock salt for winter maintenance, with 100% covered storage to ensure salt consistency.

9. ICE PREDICTION AND DETECTION INFORMATION

The Council receives detailed current and historical information on road conditions at selected points on the network by means of a web-based road monitoring system.

Sensors are located within the surface of the road at the following locations:

- A1 – Milton Road West
- A71 – near Addiston Farm Road (Dalmahoy)
- A772 – Drum Street
- A90 – at Dolphington Junction
- A90 – Hillhouse Road (Davidson Mains)
- A901 – Trinity Crescent
- Cockburn Crescent, Balerno (Balerno)

Each road sensor continuously records road surface conditions (such as road temperature and salt status), air temperature, wind speed and direction, dew point temperature and relative humidity. Each sensor is calibrated annually.

The system also allows access to information from other sensors sited within the adjoining Councils and on the Trunk Road network.

10. WEATHER FORECAST INFORMATION

The Council receives detailed weather forecasts by means of a web-based weather information package.

The following information is received on a daily basis:

- a detailed 24-hour weather forecast;
- a 2 to 5 day weather forecast for planning purposes; and
- a forecast graph for road forecasting sensors at A90 Hillhouse Road (Davidson Mains) and Cockburn Crescent (Balerno)

The forecasts, which are issued at 11am, concentrate on the hazards expected, including weather conditions, minimum road surface temperature and time periods during which road surfaces are expected to be below zero degrees Celsius. These are continually monitored by the MetDesk Forecasters and are updated daily.

10.1 Weather Radar

Real-time weather radar information is received by means of a web-based weather information package.

The system details the position of weather fronts and differentiates between the various types of weather including snow, freezing rain, sleet, hail and rain. Each sequence can be animated to view the movement of bad weather.

11. RECORDS

The records of our Winter Maintenance operations are contained within Roads Operations' Vaisala Manager software.