

Item 2

26th August 2015



Glasgow City Council

Sustainability & the Environment Policy & Development Committee
26 August 2015

Report by Executive Director of Land and Environmental Services

Contact: Andy Waddell Ext: 70438

WINTER MAINTENANCE PLAN 2015-16

Purpose of Report:

The purpose of this report is to advise and update committee on the winter maintenance policy and how winter maintenance will be undertaken during winter period October 2015 to April 2016.

Recommendations:

It is recommended that committee notes the terms of the report and the updated Winter Maintenance Plan.

Ward No(s):

Citywide: ✓

Local member(s) advised: Yes No ✓

consulted: Yes No ✓

1. Introduction

- 1.1 The purpose of this report is to outline the policy and management procedures for the Winter Maintenance Service.
- 1.2 **Winter 2014/15** - Last year, the winter gritting operations commenced on 4 November 2014 and continued until 1 April 2015. 74 treatments were instructed, using a total of 14,590 tonnes of de-icer. The winter was generally mild and often wet, with January being the coldest month of the winter period. Snowfall was much less frequent than usual, however these were followed by prolonged cold spells. The gritting operation continued on a 24/7 basis and all priority carriageways and footways were maintained free of ice.
- 1.3 **Communication Strategy** – A detailed strategy has been developed to provide severe weather information, including winter gritting operations and school closures, to residents and businesses. Twitter will again be promoted as being the primary means of communicating information about emergency school closures this year. The MyGlasgow App also provides severe weather forecast information, gritting operational updates and emergency school closures to those who download the app.

2. Legislation

- 2.1 The Council has a statutory obligation 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.
- 2.2 The Glasgow City Council Winter Plan is based on the principles contained within the code of practice “Well–Maintained Highways”, and sets out how the winter maintenance service will be provided for Glasgow. It can be viewed from 1 November 2015 at www.glasgow.gov.uk.
- 2.3 The Council’s aim is to provide an effective and efficient winter maintenance service in accordance with Land and Environmental Services’ Service Plan and within the resources available to allow safe passage of vehicles and pedestrians, minimise delays due to winter weather and ensure operations are undertaken safely.
- 2.4 The service is designed to cope with an average winter but having the capability to be extended or adapted when winters are more severe or of a longer duration than average.

3. Resources

- 3.1 The gritting of the road network will be carried out mainly by night shift operators based at Gartcraig depot. By operating on a nightshift basis, this addresses issues with drivers' hours legislation and reduces disruption to normal day time work activities, however, resources will also be available to carry out gritting during normal hours as and when required.
- 3.2 Special arrangements are made every year to ensure the availability of sufficient specialist plant and vehicles, trained operators and supervisors. A full description of these resources is available within the Winter Plan. All of the gritting fleet has had Global Positioning Satellite technology installed. This technology has improved the level of service provided in terms of accuracy, health & safety, monitoring and recording resulting in a more cost effective service.
- 3.3 This winter, 24 temporary drivers will again be available to supplement 16 permanent nightshift drivers. The temporary drivers' primary duty is driving carriageway gritting vehicles as required by the weather conditions. When carriageway gritting is not required, temporary drivers can be used for cleansing, lighting, emergency response and any other duties directed by management.

3.4 Mechanised Carriageway & Footway Plant:

- 7 permanently mounted carriageway gritting vehicles;
- 12 demountable carriageway gritting vehicles;
- 2 demountable mini carriageway gritting vehicles;
- 12 trailer carriageway gritters;
- 37 carriageway snow ploughs;
- 32 trailer footway gritters;
- 9 pedestrian gritters;
- 13 large tractor units with mounted gritters and ploughs;
- 13 mid range tractor units with mounted gritters and ploughs;
- 16 all terrain vehicles/small tractor units with mounted gritters and ploughs;
- 56 pedestrian mowers with footway ploughs.

4. Treatment Priorities

- 4.1 The following criteria has been applied to determine the Priority 1, 2 and 3 (P1, P2 & P3) categories for carriageway and footways -

(a) Priority 1 Carriageway Routes

- All bus routes registered at the end of summer in any year within the City.

- Roads or parts of roads not used by buses but being A or B class roads or other roads connecting the preceding category to complete the major road network.
- The dropping-off points on public carriageways from the nearest gritted route for special school buses and ambulances.
- The start points to the gritted route from fire stations, police stations, bus garages and emergency vehicle locations.
- Roads to Park and Ride car parks.
- Hills steeper than 1 in 10 gradients.
- Specially designated industrial areas.
- Arrangements are also in place with SPT for the treatment of Park and Ride station car parks, Buchanan Street bus station and bus turning areas.

(b) Priority 2 Carriageway Routes

- Locations which include the following amenities –
 - local shopping;
 - health centres;
 - day care centres;
 - community sports centres;
 - libraries;
 - places of worship and any other places of local significance.
 - appropriate link routes to main Priority 1 carriageways within each neighbourhood.

(c) Priority 3 Carriageway Routes

- All remaining carriageways.

(d) Priority 1 Footway Routes

- Pedestrian precincts;
- Prioritised city centre footways with high pedestrian traffic;
- Shopping centres outwith the city centre;
- Access routes to schools;
- Hills steeper than 1 in 10 gradient with moderate pedestrian traffic.

(e) **Priority 2 Footway Routes**

- Locations which include the following amenities –
 - local shopping;
 - health centres;
 - day care centres;
 - community sports centres;
 - libraries;
 - places of worship and any other places of local significance;
 - appropriate link routes to main Priority 1 footways within each neighbourhood;
 - a designated access through route has also been determined for each park.

(f) **Priority 3 Footways**

- All remaining footways.

4.2 On road, cycle routes will be treated at the same time as the road on which they are located and off-road cycle routes will be treated at the same time as Priority 2 Footways.

4.3 The pre-salting of P1 carriageways and footways will be instructed should the weather forecast predict that ice or snow is likely to be present on road surfaces. The post treatment of P2 carriageways and footways will be instructed given the presence of ice or snow and a forecast that these conditions will last for a period longer than 48 hours and depending on available resources. The post treatment of P3 carriageways and footways will be considered during any extended period of sub zero road surface temperatures resulting in ice and/or snow.

It should be noted that if P1 routes require treatment during any extended period of ice or snow, their treatment will take precedence over P2 and P3 route treatment.

During such sustained periods of freezing conditions, all LES resources (Roads, Parks & Cleansing) will be deployed to salting and/or snow clearing operations. Arrangements are in place in order that sub-contractors can also be called upon when conditions dictate.

5. **Decision Making Process**

5.1 At approximately 7.00am every morning, LES receives a summary weather forecast for the day ahead. This alerts the senior manager who is the Duty Controller, other appropriate managers and winter supervisors as to whether any salting operations are likely that day. For the purposes of winter weather forecasting, Glasgow has been divided into two 'climatic domains' – City Centre and Outer. The weather systems and temperature affecting these domains

often differs considerably and they are often dealt with in a separate manner. All forecasts received are supplemented by road sensors situated throughout the City which provide real time information on road surface and weather conditions.

- 5.2 At around midday, a detailed weather forecast is received for the next 36 hour period. A summary forecast for the next 2-10 days is also provided at this time. This detailed 36 hour forecast highlights any expected hazards such as ice or snow and details the time periods when these can be expected. From this forecast, a minimum of 2 duty controllers will decide upon the treatment required. Wherever possible, pre-salting will be carried out in advance of any anticipated frost, ice or snow. The timing of any treatment will be heavily influenced by any predicted precipitation.

Re-salting will normally be restricted to priority carriageway and footway routes and be carried out by nightshift personnel.

- 5.3 Once instructed, the treatment decision is relayed to managers, supervisors and depots by means of an email.
- 5.4 The type of treatment prescribed will vary on the type of weather conditions predicted. Further treatment may be instructed as necessary as conditions dictate. In marginal conditions, it may sometimes be necessary to instruct loaded gritters to patrol through the night and report back any hazards found.
- 5.5 The final daily summary weather forecast is received at around 7.00pm for review by the Winter Controller. Any further changes in the predicted weather will be notified to the Winter Controller by telephone by the forecast provider, MeteoGroup.

6. Salting and Grit Bins

- 6.1 The salt used for precautionary treatment of Priority 1 carriageways is a proprietary product called Safecote. Safecote has an additive which enhances the performance of rock salt in terms of accuracy, placement and longevity. The additive is an agricultural co-product which allows Safecote to be applied at lower spread rates than untreated salt. This results in gritting vehicles travelling greater treatment distances and also allowed for a reduction in the gritting fleet.

In addition to Safecote, untreated rock salt is used for reactive gritting and as required during severe weather situations.

- 6.2 As Safecote uses lower spread rates it is less harmful to the environment. There is also the added benefit that Safecote is 82% less corrosive than untreated salt thereby reducing damage to vehicles, plant and the roads infrastructure.

- 6.3 In designated city centre shopping pedestrian areas, white marine salt has been used successfully to minimise discolouration at shop frontages and entrances.
- 6.4 In addition to the gritting service and to promote 'self help', 1,242 salt bins will be sited in the city at the commencement of the winter season to allow members of the public to grit in areas outwith the priority gritting routes. These bins will be filled with rock salt and their locations can be viewed on-line using the ATOM mapping system.

Members of the public can also obtain small quantities of salt for their own use at strategically sited larger stock piles throughout the city. These addresses are included in various publications and can be viewed on the Council's Connect web-site.

Also in any prolonged severe weather periods, large one tonne temporary grit sacks will be placed strategically within neighbourhoods to assist community resilience during severe weather.

7. Review of the Winter Maintenance Plan

The review of the Winter Maintenance Plan has included the following:

- Development of a third 'climatic domain' for the following higher areas of the City - Drumchapel: Springburn: Easterhouse and Castlemilk to inform decision making.
- Completion of the procurement process to replace 12 demountable gritters, with lease expiry on 31 March 2015, with 7 larger permanent mounted gritters so that they are available for the commencement of the 2015-16 winter season.
- Routes have been redesigned and optimised without any reduction in the overall area gritted.
- Adoption of revised precautionary treatment of ice and snow clearance salt spread rate matrices compliant with Code of Practice Well Maintained Highways Appendix H and SCOTS winter sub group recommendations.

8. Policy and Resource Implications

Resource Implications:

Financial: There is a budget of £1.395m within LES to deliver this.

Legal: To meet the requirements of Section 34 of the Roads (Scotland) Act 1984

Personnel: None

Procurement: None

Council Strategic Plan: Provision of an effective winter maintenance service supports the Council's Key Objective to build a prosperous city and ensures that it is open for business during the winter months.

Equality Impacts:

EQIA carried out: No

Outcome: No significant impact

Sustainability Impacts:

Environmental: The lower spread rates applicable to Safecote and the optimised gritting routes reduce the environmental impact of the Service.

Social: N/A

Economic: N/A

9. Recommendations

It is recommended that committee notes the terms of the report and the updated Winter Maintenance Plan.