

Report to Report to Transport and Environment Committee

13 October 2021

Agenda Item:5

REPORT OF THE CORPORATE DIRECTOR, PLACE

HIGHWAYS WINTER SERVICE 2021/22

Purpose of the Report

1. To seek endorsement of the procedures associated with provision of the Winter Maintenance Service and the preparation for Winter 2021/22.

Information

Background to Service

- 2. The Highways Act 1980 places a duty of care upon Highway Authorities "to ensure, as far as reasonably practicable, that safe passage along a highway is not endangered by snow or ice". It also states that it is a duty to remove obstructions arising from an accumulation of snow on the highway. The Council meets these statutory duties through the provision of both a planned and reactive winter service, which meets the national standards that are set out in the Code of Practice: Well Managed Highway Infrastructure (October 2017) and associated documents.
- 3. Currently, two key documents provide the basis of the service delivered to the public by the County Council in response to winter weather, these are:
 - Highway Network Management Plan, which sets out the policies associated with the provision of the winter service.
 - Winter Service Plan sets out the County Council's policies, operational arrangements, procedures, routes, equipment associated with delivering the highway winter maintenance services.
- 4. In accordance with the above documents and the Code of Practice: Well Managed Highway Infrastructure, each year the Council publishes on its web site information about the winter service including the routes where precautionary gritting is undertaken and general advice to the travelling public and to motorists.
- 5. The overall size of the County Council's gritting network is considered good given the geography of the County and currently 35% (approx. 1,712km) of the network is treated as precautionary measure. This compares with the audit commission's recommendation of 24%-38% treated network length.

- Via EM Ltd. will make and circulate the daily gritting decision by e-mail to all Members and interested stakeholders, NCC communications team will use this information to inform all other parties through the County Council's website and social media.
- 7. All Members of the County Council are provided with a document which explains winter service arrangements in October/November of each year. This document includes useful information, advice, contact telephone numbers for constituents and specific contact information for Members only. This document is being updated for the coming season in conjunction with the County Council communications team and will be published shortly.
- 8. During the winter of 2020/21 Covid-19 did at times impact upon the availability of gritter drivers however, Via EM Ltd. was able to mitigate against this and ensured the service was not adversely effected. Continuity was achieved through a mix of technological solutions and the operational flexibility offered by Via EM Ltd.'s experienced pool of drivers, it is anticipated that this situation will continue through the forthcoming coming winter season.
- 9. There are a number of weather related factors which may adversely affect gritting operations:
 - When temperatures fall to minus 6 degrees celcius and below the effectiveness
 of road salt is reduced therefore in these circumstances it is possible that ice
 can form even though gritting has taken place.
 - When salt is applied to highway surfaces it does not directly melt snow, it first
 has to form a saline solution. During prolonged periods of wintery weather snow
 can fall faster than saline solution can be produced, this may result in snow
 accumulating on road surfaces.

Service Improvements and Changes for the 2021-22 Winter Season

- 10. Via EM Ltd. has procured and installed a replacement vehicle tracking & navigation system for Nottingham's fleet of gritters. The winter of 2021/22 will be the first full season where this system is available for use and work is ongoing to realise the reporting and route optimisation opportunities it offers.
- 11. The new system is web-based and allows driver performance to be monitored more effectively because it is possible to produce reports with greater ease. All the functionality of the previous GPS system has been replicated i.e. the ability to monitor the whereabouts of each vehicle centrally during the gritting operations and to record time, location, gritting activity, vehicle speed etc.
- 12. In addition to the above, the new system also provides real time 'in-cab' route guidance. This enhances the resilience of our winter service operations because it allows drivers to complete routes they may be unfamiliar with, this functionality proved to be invaluble during the winter of 2020-21 to mitigate against the impact of Covid-19. All vehicles are also equipped with an on-board CCTV system.

Decision Making Process

- 13. Precautionary gritting runs are undertaken where the forecast road surface temperatures are predicted to fall below zero degrees centigrade.
- 14. The daily forecast is issued around midday by weather forecast service provider. This is interrogated and the gritting decision made which will take into account predicted

- temperatures, rainfall, and timings. In the event of a marginal or extraordinary forecast, another member of staff having received the appropriate training will verify the decision.
- 15. In addition to the forecast, Ice Prediction software will be utilised which will show in graphical form the predicted road surface temperatures and road surface condition. This will be monitored throughout the forecast period.
- 16. The gritting instruction is issued by email and the gritting shift organised as necessary. From 20:00hrs each night the weather forecast is verified.
- 17. The weather forecast service provider will make any amendment to the forecast. In severe weather, salting treatment will be extended to Priority 2 Routes as resources allow once Priority 1 Routes are in a satisfactory and passable condition.
- 18. Snow fall of less than 25mm will normally be treated with precautionary salting rather than ploughing. Where moderate snowfall occurs (25mm-100mm), consideration will be given to ploughing. Lower amounts will usually be treated by slush blades fitted to gritting vehicles. This can be supplemented by additional lorry mounted ploughs where conditions dictate. During heavy snowfall (>100mm), gritting routes will be augmented by additional ploughs. Only once main routes are passable will resources be transferred to other parts of the network.

Preparation for the Winter of 2021/22

- 19. Arrangements are being made for Parish and District Councils to be supplied with a quantity of rock salt in advance of the winter season to allow for some local resilience to amenity infrastructure and self–help among local communities.
- 20. The County Council currently has approximately 17,000 tonnes of grit available, this is more than the amount used in an average winter and 7,000 tonnes more than the nationally recommended stock levels specified in the Code of Practice. The Code recommends that Highway Authorities should hold sufficient salt stocks at the beginning of the winter season to deliver 12 days or 48 gritting 'runs', which for Nottinghamshire equates to 10,000 tonnes. As a consequence, the Council is in an excellent position to respond, operate and maintain around-the-clock treatment in severe weather conditions. Salt supplies will be replenished over the winter period as required.
- 21. Via EM Ltd.'s frontline gritter drivers operate on a night-shift basis from the beginning of November through to the end of March each year in order to provide a guaranteed flexible response to differing weather conditions. The drivers are supported and coordinated by a night controller who monitors the weather conditions from the forecast provided by the weather service forecast provider and through a bespoke arrangement that includes data from the Council's own weather stations, located at:
 - A606 Tollerton
 - A611 Coxmoor
 - A60 Costock
 - A631 Beckingham
 - B6045 Blyth
 - A614 Perlethorpe
 - A614 Burntstump

- A608 Annesley
- Mapperley Top
- 22. In addition, the Council has shared access to four weather stations owned by other authorities, located at:
 - A1 Claypole
 - A57 Newton
 - A453 Clifton
 - A52 Saxondale
- 23. All drivers are trained and assessed annually to achieve the City and Guilds qualification in Winter Maintenance Operations. All winter action decision makers will undertake training to fully understand forecasts provided by the weather forecast service provider. In addition, all decision makers have completed the IHE Professional Certificate in Winter Service which is now the benchmark qualification amongst practitioners. All decision makers have between 6 and 28 years' experience in the role.
- 24. Operations take place from four depots Countywide in Gamston, Markham Moor, Bilsthorpe and Newark. The County Council has a fleet of 30 gritting lorries *three of which have been purchased this year to replace older vehicles* this ensures there is adequate availability throughout the season to cover the 23 routes. In addition, there is one towable gritting unit which can be mobilised during severe weather.
- 25. 1,405 grit bins are located across Nottinghamshire providing a resource to enable members of the public to self-help in the event of snow and ice. These bins are placed at highway junctions, where there is a steep gradient or in heavily pedestrian traffic areas, predominantly on roads not subject to routine precautionary gritting. The grit bins are inspected and refilled at the beginning of each season and maintained throughout the winter.
- 26. Communications strategy is agreed between, highways officers and communications teams at the start of each season, this includes details about operational arrangements, publication of key facts & figures, out of hours contact numbers and contact with local media. During the winter communications are managed through Council's communication team using social media to advise on conditions and activities.

Winter Service Plan for 2021/22

27. The County Council and Via EM Ltd. are completing their preparations and will stand ready for the forthcoming winter maintenance season, these preparations included undertaking the annual review of the Winter Service Plan which determined that no substantive changes are required for 2021/22.

Other Options Considered

28. Ensuring, as far as reasonably practicable, that safe passage along a highway is not endangered by snow and ice is a statutory duty under section 41(1A) of the Highways Act 1980. Removing any obstructions arising from an accumulation of snow on the highway is also a statutory duty under section 150 of the Highways Act 1980. As such the County Council as highway authority is responsible for the fulfilment of these duties.

Reason/s for Recommendation/s

29. The manner in which the service is provided, the routes, operational, management and recording arrangements have been developed over a number of years and reflect current industry best guidance. Whilst the highway officers continue to review operations and routes no significant alternative options for the delivery of the service are considered suitable at this time.

Statutory and Policy Implications

30. This report has been compiled after consideration of implications in respect of crime and disorder, data protection and information governance finance, human resources, human rights, the NHS Constitution (public health services), the public sector equality duty, safeguarding of children and adults at risk, service users, smarter working, sustainability and the environment and where such implications are material they are described below. Appropriate consultation has been undertaken and advice sought on these issues as required.

Financial Implications

31. The Highway Winter Service is funded from the Highways Revenue Budget which has already been approved.

RECOMMENDATION/S

It is recommended that Committee:

1) Endorses the procedures and communications arrangements - set out in this report - which will ensure Nottinghamshire's highway winter service is fully prepared to meet the challenges of the forthcoming winter season

Adrian Smith Corporate Director, Place

For any enquiries about this report please contact: Martin Carnaffin, Contract Manager, Tel: 0115 9774227

Constitutional Comments (SJE – 14/09/2021)

32. This decision falls within the Terms of Reference of the Transport & Environment Committee to whom responsibility for the exercise of the Authority's functions relating to the planning, management and maintenance of highways and pavements has been delegated.

Financial Comments (SES 14/09/2021)

33. There are no specific financial implications arising directly from this report.

Background Papers and Published Documents

Except for previously published documents, which will be available elsewhere, the documents listed here will be available for inspection in accordance with Section 100D of the Local Government Act 1972.

- Highway Network Management PlanWinter Service Plan

Electoral Division(s) and Member(s) Affected

• All