

**REPORT TO:** Policy and Performance Review Committee

MEETING DATE: 29 April 2014

BY: Depute Chief Executive - Partnerships and Community

Services

**SUBJECT:** Winter Service 2013 – 2014

## 1 PURPOSE

1.1 To advise PPRC of the Winter Service carried out by Road Services on behalf of East Lothian Council for the season 2013 – 2014.

### 2 RECOMMENDATIONS

2.1 PPRC is asked to note the contents of this report.

### 3 BACKGROUND

- 3.1 The Council's Infrastructure Section is responsible for providing the winter maintenance service on adopted roads throughout East Lothian. In Scotland the statutory responsibilities are defined by Section 34 of The Roads (Scotland) Act 1984 which requires that "A Roads Authority shall take such steps as it considers reasonable to prevent snow and ice endangering the safe passage of pedestrians and vehicles over public roads". It is the Council's aim to provide an effective and efficient winter maintenance service within the resources available that will allow the safe movement of pedestrian and vehicular traffic appropriate to the prevailing weather condition.
- 3.2 East Lothian has 11 main gritting routes which are covered by large goods vehicles (LGV) and 4 town/villages routes covered by 7.5 tonne lorries. Footways and footpaths are treated by 10 mini-tractors when the weather dictates that gritting should be carried out.
- 3.3 Accurate weather prediction and information systems are the foundation for effective winter service delivery and East Lothian Council makes full use of weather forecast information from its current supplier. Road Services has access to meteorological forecasts and 6 road warning sensors strategically located at points in the Council area in accordance with the results of thermal surveys of main routes. The Met Office (MO)

provides the meteorological forecasts. The road sensor information is managed and administered by Viasala Services Ltd.

- 3.4 The sensors give various information relating to actual road conditions such as:
  - Road condition, i.e., wet, dry, frost or snow
  - Residual salt levels
  - Road surface temperature
  - Air temperature
- 3.5 The locations of the stations within East Lothian are:
  - Bara
  - Haddington
  - Oldhamstocks
  - Gladsmuir
  - Dirleton
  - Pencaitland
- 3.6 Road Services Weather Emergency facility is based at our Macmerry depot. This facility has access to computer terminals which analyse data at all of the sensors within East Lothian and also some sensors in adjoining Councils to identify weather trends and aid forecasting procedures. The information received from the stations is transmitted to the MO and Vaisala Services to be used in conjunction with other meteorological data collected separately to predict the weather conditions throughout the area.
- 3.7 Each day throughout our winter maintenance period the MO prepare and transfer, via the web, a 24 hour written forecast at 1200 hours and 2200 hours. This written forecast covers the following 24 hour period and is issued based on the traffic light colour system; green, amber or red. The definitions are:

Green - no snow or ice expected.

Amber - risk of snow or ice.

Red - snow, ice or drifting snow expected.

3.8 The forecast will include a description of the forecast weather conditions, forecast minimum road surface temperature, times between which the road surface temperature and air temperature will be at or below zero degree Celsius, comments on weather conditions and weather hazards likely to affect road conditions, and start and end times of precipitation. Updates and/or amended forecasts will be issued as required. This will be done via the Internet, fax and phone call to the duty officer.

- 3.9 The quality of treatment decisions is the key factor in determining both the effectiveness of the winter service and also how it is perceived by users and the community. Priority routes are planned on the basis that completion of the route will not exceed 2 hours, although this can be extended in severe weather conditions.
- 3.10 Treatment of East Lothian Council's Network is carried out with the following hierarchy as approved by the Council:-

# Carriageway Priorities

Priority	Туре	Description/Comment
1	Primary Routes	Trunk Roads important principal roads and bus routes - to hospitals, ambulance depots, fire stations and local danger spots (e.g. very steep hills)
2	Secondary Routes	All other classified routes.
3	Tertiary Routes	Crossroads and connecting roads, access into industrial and residential areas
4	Minor Routes:	Residential areas, unclassified roads and cul-de- sacs

# **Footway Priorities**

Priority	Туре	Description/Comment
	Urban Shopping Areas and Precincts	Footways in town centres and pedestrian Precincts
	Other Areas of High Pedestrian Concentration	Routes to health clinics, hospitals, homes for the elderly and schools.
3	Main Routes to Residential Areas	Also steep hills in housing developments
4	Less used Urban Footways	

3.11 Under the Quality Assurance ISO 9001:2000 operated by Road Services, comprehensive and accurate records are kept of all the winter service activities, including timing and nature of all decisions, the information on which they were based and the nature and timing of all treatment.

- 3.12 Improvements/efficiencies have been put in place in recent years including the installation of a weigh bridge to assist with the management and stock stake of salt usage. A new salt barn at the Macmerry depot was constructed in 2012 increasing our salt stock capacity from 2500 tonnes to 9000 tonnes. Automatic data logging improving the accuracy of records and the ability to retrieve data has also been developed.
- 3.13 The Met Office has carried out a provisional assessment of the winter period of 2013-2014 across England, Wales and Scotland comparing the 1981 to 2010 averages. Winter 2013-2014 was an exceptionally stormy season with at least 12 major winter storms affecting the UK in two spells from mid-December to early January and again from late January to mid February. When considered overall, this was the stormiest period of weather experienced by the UK for at least 20 years. There were two severe weather events involving strong winds, storm surge and high tides affecting East Lothian in early December 2013 and early January 2014. However the impact on East Lothian was minimal in comparison to other locations in Scotland and England.
- 3.14 The persistent heavy rainfall through the season resulted in this being the wettest winter in the UK. There was major flooding with the Somerset Levels remaining underwater for much of the season and flooding also affected large sections of the River Thames. High winds combined with high tides and tidal surges to cause dangerous conditions and considerable damage to many coastal areas, particularly in the south west of England and Wales. The westerly and unsettled weather meant that conditions were mild, with snowfalls largely confined to the Scottish mountains and fewer air frosts for the UK than for any other winter in a series from 1961.
- 3.15 Mean temperatures were well above the long-term average with a mean winter temperature of 5.2 °c which is 1.5 °c above the average and the fifth highest in the series. There was a notable absence of frosts, and the lowest UK temperature of the winter, -7.7 °c at Altnaharra, Sutherland on 17th February was the highest such winter value for at least 50 years.
- 3.16 An assessment of the winter period of 2013-2014 from site specific temperatures forecast received from the Met Office for roads in East Lothian are as follows

Minimum road temperature between  $0^{\circ}$ c and  $-1^{\circ}$ c = 35

Minimum road temperature between -1°c and -10°c = 31

Giving a total of 66 minimum road temperature forecasts between 0°c and -10°c

3.17 This in turn resulted in 62 morning patrols and 36 evening pre-grits being carried out to ensure the roads remained free of ice. A total of 3270 tonnes of salt was used on the network. This compares to 6127 tonnes during the same period last year and 3500 during 2011/2012. Total salt usage throughout Scotland by all local authorities and trunk road operating companies up to 26 March 2014 is 326,328 tonnes. This compares with salt usage during the same period last winter of 637,000 tonnes and salt usage of 642,340 tonnes in the winter of 2010/11 which was one of the most severe in years.

## 4 POLICY IMPLICATIONS

4.1 None

#### 5 EQUALITIES IMPACT ASSESSMENT

5.1 This report is not directly applicable to the well being of equalities groups and Equality Impact Assessment is not required.

#### 6 RESOURCE IMPLICATIONS

- 6.1 Financial the expenditure for our Winter Service for 2013-2104 is contained within the identified budgetary provision in the Road Network budget.
- 6.2 Personnel The service is provided by staff within ELC with the majority from Road Services and a number of LGV drivers from our colleagues within Amenity Services.
- 6.3 Other None

### 7 BACKGROUND PAPERS

# 7.1 None

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