

KHS Winter Service Review

KENT HIGHWAY SERVICES

**WINTER SERVICE
POLICY STATEMENT**

FOR 2009/10

Contents

	<u>Page No</u>
1. <u>Introduction</u>	4
1.1 Winter Service - Statutory Duties	4
1.2 Winter Service Standards	4
1.3 County Highways	5
1.4 Motorways and Trunk Roads	5
<u>Winter Service Objectives</u>	5
2.1 Salting	5
2.2 Snow Clearance	5
2.3 Snow Fencing	6
2.4 Roadside Salt Bins	6
3. <u>Winter Service General</u>	6
3.1 Winter Service Contracts	6
3.2 Winter Service Season	6
3.3 Alternatives to Salt	6
4. <u>Weather Information</u>	7
4.1 Weather Information Systems	7
4.2 Weather Reports	7
4.3 Principal Winter Service Duty Officers	7
5. <u>Salting</u>	7
5.1 Planning of Precautionary Salting Routes	7
5.2 Precautionary Salting	7
5.3 Post Salting	7
5.4 Spot Salting	8
5.5 Instructions for Salting of Primary Routes	8
5.6 Instructions for Salting of Secondary Routes	8
6. <u>Snow Clearance</u>	8
6.1 Instructions for Snow Clearance	8
6.2 Snow Clearance Priorities on Carriageways	8
6.3 Snow Clearance Priorities on Footways	9
6.4 Agricultural Snow Ploughs for Snow Clearance	9
6.5 Snow Throwers/Blowers for Snow Clearance	9

Contents (continued)

	<u>Page No</u>
7. <u>Severe Weather Conditions</u>	9
7.1 Persistent Ice on Minor Roads	9
7.2 Ice Emergencies	9
7.3 Snow Emergencies	9
8. <u>Roadside Salt Bins</u>	10
8.1 Provision of Roadside Salt Bins	10
9. <u>Budgets</u>	10
9.1 Winter Service Budget	10
9.2 Ice and Snow Emergencies	10
10. <u>Public and Media Communications</u>	10
10.1 Neighbouring Authorities and Other Agencies	10
10.2 The Media	10
10.3 Pre-Season Publicity	10
10.4 Publicity during Ice and Snow Emergencies	10

1. INTRODUCTION

1.1 Winter Service - Statutory Duty

1.1.1 The legal position relating to winter service changed on 31 October 2003 with the introduction of the Railways and Transport Safety Act 2003 (Section 111). This legislation added an additional sentence to section 41(1) of the Highways Act 1980 (c.66) (duty of highway authority to maintain highway). The additional sentence is as follows: -

“(1A) In particular, a highway authority is under a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice.

(This new legislation overturned the previous ruling by the House of Lords in 2000, which stated that highway authorities did not have a duty under section 41(1) of the Highways Act 1980 to prevent or remove the formation of or accumulation of ice and snow on the road).

1.1.2 The County Council recognises that the winter service is essential in aiding the safe movement of highway users, maintaining communications, reducing delays and enabling everyday life to continue. It is very important to both road safety and the local economy. The winter service that the County Council provides is believed to be sufficient so far as is reasonably practical to discharge the duty imposed by the legislation.

1.1.3 The County Council, as highway authority, takes its winter service responsibilities extremely seriously. However, it is important to recognise that the council has to prioritise its response to deal with winter weather due to the logistics and available resources.

1.1.4 The County Council provides the winter service through Kent Highway Services (KHS) which is an alliance between Kent County Council, Ringway Infrastructure Services and Jacobs Group.

1.2 Winter Service Standards

1.2.1. In order to respond as quickly and efficiently as possible to its responsibilities KHS has adopted policies and standards for each of the winter service activities and these are detailed within this document. In July 2005 the Roads Liaison Group, published 'Well Maintained Highways'. Section 13 deals with 'Winter Service' which updates the same section in the 'Code of Practice for Maintenance Management' published in 2001. Our current approach has been reviewed and found to be consistent with the guidance as recommended in the new document. The operational details for the winter service activities in Kent are detailed in the Winter Service Plan 2009/10 that complements this Policy Statement.

1.2.2 KHS provides a winter service which, as far as reasonably possible will:

- Minimise the loss of life and injury to highway users, including pedestrians, and preventing damage to vehicles and other property
- Keep the highway free from obstruction and thereby avoiding unnecessary hindrance to passage

1.3 **County Council Maintained Highways**

1.3.1 Kent Highway Service (KHS) delivers the winter service on Kent County Council maintained highways.

1.4 **Motorways and Trunk Roads**

The Department for Transport (DfT) is the highway authority for motorways and all-purpose trunk roads in Kent and the Highways Agency acts for the DfT in this respect. Responsibility for the operational maintenance of motorways and trunk roads lies with the Highways Agency. KHS therefore has no responsibility for winter service activities on these roads. However, close liaison exists between the Highways Agency consultants over action taken during the winter service operational period within respective areas of responsibilities.

2. **WINTER SERVICE OBJECTIVES**

2.1 **Salting**

2.1.1 Objectives:

- To prevent the formation of ice on carriageways (precautionary salting)
- To facilitate the removal of ice and snow from carriageways and footways (post salting).

2.1.2 Roads to be Included within Primary Precautionary Salting Routes

Routine precautionary salting will be carried out on pre-determined primary precautionary salting routes covering the following roads:

- Class 'A' and 'B' roads
- Other roads included in the top three tiers of the maintenance hierarchy as defined in the Kent Highway Asset Maintenance Plan. These are termed Major Strategic, Other Strategic and Locally Important roads.
- Other roads identified by Community Delivery Managers (based on local knowledge and experience), that are particularly hazardous in frosty/icy conditions

2.1.3 It would be impractical and financially draining to carry out precautionary salting of footways, pedestrian precincts or cycleways and therefore no provision has been made. However, there will be a certain amount of salt overspill onto footways and cycleways when precautionary salting is being carried out on adjacent carriageways. Post salting of footways and cycleways will be carried out on a priority basis during severe winter weather, as resources permit.

2.2 **Snow Clearance**

2.2.1 Objectives:

- To prevent injury or damage caused by snow
- To remove obstructions caused by the accumulation of snow (section 150 of the Highways Act 1980)
- To reduce delays and inconvenience caused by snow

2.2.2 Snow clearance on carriageways will be carried out on a priority basis as detailed in paragraph 6.2.

2.2.3 Snow clearance on certain minor route carriageways will be carried out by local farmers and plant operators, who are under agreement to the County Council, using agricultural snow ploughs and snow throwers/blowers. Snow clearance on other minor route carriageways will be carried out as resources permit. Some minor routes and cul-de-sacs will inevitably have to be left to thaw naturally.

2.2.4 Snow clearance on footways and cycleways will be carried out on a priority basis as detailed in paragraph 6.3.

2.3 **Snow Fencing**

2.3.1 Objective:

- To reduce the number of obstructions caused by the accumulation of snow (Section 102 of the Highways Act 1980)
- *Snow fencing is expensive, but in exceptional circumstances can be very useful at a limited number of sites that regularly experience severe problems with drifting snow. Community Delivery Managers can make arrangements with landowners to allow the erection of snow fencing, but without payment.*

2.4 **Roadside Salt Bins**

2.4.1 Objective:

- To provide motorists and pedestrians with the means of salting small areas of carriageway or footway, where ice is causing difficulty, on roads not covered by primary precautionary salting routes.

3. **WINTER SERVICE GENERAL**

3.1 **Winter Service Contracts**

3.1.1 Winter service in Kent is included within the Term Maintenance Contract awarded to Ringway Infrastructure Services. This contract was awarded in 2006 and will last for five years.

3.2 **Winter Service Season**

3.2.1 In Kent the weather can be unpredictable and the occurrence and severity of winter conditions varies considerably through the season, and from year to year. Severe winter weather is most likely to be experienced in December, January and February but ice and snow can occur earlier or later. To take account of all possible winter weather the County Council's Operational Winter Service Period runs from mid October to mid April. Exact dates for the coming winter are given in the Winter Service Plan.

3.3 **Alternatives to Salt**

3.3.1 A number of alternative materials to salt are now available which can be used for the precautionary and post treatment of ice and snow. The cost of these is extremely high and there are also environmental disadvantages associated with most of them. Salt will therefore, for the time being, remain in use throughout Kent for the precautionary and post treatment of snow and ice.

4. WEATHER INFORMATION

4.1 Weather Information Systems

4.1.1 An effective and efficient winter service is only possible with reliable and accurate information about weather conditions, at the appropriate times in the decision making process. KHS utilises the best weather forecast information currently available allied to the latest computer technology to ensure that decisions are based on the most accurate data available at the time.

4.2 Weather Reports

4.2.1 During the operational winter service period Kent Highway Services will procure detailed daily weather forecasts and reports specifically dedicated to roads within Kent.

4.3 Winter Duty Officers

4.3.1 Experienced members of staff from Kent Highway Services will act as *Winter Duty Officers*, throughout the operational winter service period, on a rota basis. The Officer on duty is responsible for the following: -

- Receiving forecast information from the forecasting agency
- Monitoring current weather conditions
- Issuing countywide salting instructions for primary and secondary routes
- Issuing the Kent Road Weather Forecast

4.3.2 The Kent Road Weather Forecast will be issued daily containing information about expected weather conditions together with any salting instructions. The *Winter Duty Officer* will also be responsible for issuing forecast updates and any revised salting instructions when necessary. The Kent Road Weather Forecast will be sent to alliance members, contractors, neighbouring highway authorities, and other relevant agencies.

5. SALTING

5.1 Planning of Precautionary Salting Routes

5.1.1 Primary precautionary salting routes will be developed from those lengths of highway that qualify for treatment, whenever ice, frost or snowfall is expected. Each primary precautionary salting route will have a vehicle assigned which is capable of having a snowplough fixed to it, when required. Secondary precautionary salting routes will also be developed from other important highways for treatment during severe winter weather conditions.

5.2 Precautionary Salting

5.2.1 Precautionary salting will take place on scheduled precautionary salting routes on a pre-planned basis to help prevent formation of ice, frost, and/or the accumulation of snow on carriageway surfaces.

5.3 Post Salting

5.3.1 Post salting will normally take place on scheduled precautionary salting routes to treat frost, ice and snow that has already formed on carriageway or footway surfaces. Post salting may also be carried out on roads or sections of road beyond the scheduled precautionary salting routes.

5.4 **Spot Salting**

5.4.1 Spot salting will normally take place on parts or sections of scheduled precautionary salting routes either to help prevent formation of ice, frost and/or the accumulation of snow or as treatment to ice, frost and the accumulation of snow that has already formed on carriageway or footway surfaces. Spot salting may also be required on roads and footways, or sections thereof, beyond the scheduled precautionary salting routes.

5.5 **Instructions for Salting of Primary Routes**

5.5.1 Instructions for precautionary salting of primary routes will be issued if road surface temperatures are expected to fall below freezing unless:

- Road surfaces are expected to be dry and frost is not expected to form on the road surface
- Residual salt on the road surface is expected to provide adequate protection against ice or frost forming

5.5.2 Instructions for precautionary salting of primary routes will also be issued if snowfall is expected.

5.5.3 The *Winter Duty Officer* will issue routine instructions for precautionary salting of primary routes, for the whole of Kent, by means of the Kent Road Weather Forecast.

5.5.4 The *Winter Duty Officer* or Community Delivery Managers may issue instructions for post salting and spot salting.

5.6 **Instructions for Salting of Secondary Routes**

5.6.1 The *Winter Duty Officer* will issue instructions for precautionary salting of secondary routes if heavy frost, widespread ice, or snow, is expected.

6. SNOW CLEARANCE

6.1 **Instructions for Snow Clearance**

6.1.1 The *Winter Duty Officer* and/or the Community Delivery Managers nominated representatives are responsible for issuing snow clearance instructions. Snow clearance will initially take place on scheduled primary precautionary salting routes, based on the priorities given in para. 6.2.1. Subsequently, snow clearance will take place on secondary salting routes and other roads, and footways, on a priority basis.

6.1.2 Snow ploughing shall not take place on carriageways where there are physical restrictions due to traffic calming measures, unless it has been deemed safe to do so following a formal risk assessment and a safe method of operation documented.

6.2 **Snow Clearance Priorities on Carriageways**

6.2.1 Snow clearance on carriageways should be based on the priorities given below: -

- A229 between M20 and M2, A249 between M20 and M2, A299 and A289;
- Other "A" class roads;

- All other roads included within primary precautionary salting routes;
- One link to other urban centres, villages and hamlets with priority given to bus routes;
- Links to hospitals and police, fire and ambulance stations;
- Links to schools (in term time), stations, medical centres, doctor's surgeries, old people's homes, cemeteries, crematoria and industrial, commercial and shopping centres;
- With the approval of Community Delivery Managers, other routes as resources permit.

6.3 **Snow Clearance Priorities on Footways**

6.3.1 Snow clearance on footways should be based on the priorities given below:

- One footway in and around shopping centres, and on routes to schools (in term time), stations, bus stops, hospitals, medical centres, doctor's surgeries, old people's homes, industrial and commercial centres and on steep gradients elsewhere;
- One footway on main arteries in residential areas and the second footway in and around local shopping centres;
- With the approval of Community Delivery Managers, other footways, walking bus routes and cycleways as resources permit.

6.4 **Agricultural Snowploughs for Snow Clearance**

6.4.1 Agreements will be entered into by whereby snowploughs provided and maintained by KHS are assigned to local farmers and plant operators for snow clearance operations, generally on the more rural parts of the highway.

6.5 **Snow Throwers/Blowers for Snow Clearance**

6.5.1 KHS also has a number of snow throwers/blowers, which are allocated to operators on a similar basis to the arrangements for agricultural snowploughs.

7. **SEVERE WEATHER CONDITIONS**

7.1 **Persistent Ice on Minor Roads**

7.1.1 During longer periods of cold weather Community Delivery Managers may instruct salting action to deal with persistent ice on minor roads which are not included within the precautionary salting routes.

7.2 **Ice and Snow Emergencies**

7.2.1 During prolonged periods of severe and persistent icing, or significant snow fall, delegated officers may declare an ice or snow emergency covering all or part of the County. In this event Community Delivery Managers will implement a course of action to manage the situation in either of these events.

8.1 **Provision of Roadside Salt Bins**

- 8.1.1 Roadside salt bins can be sited at potentially hazardous locations for use by the public, to treat ice and snow on small areas of the carriageway or footway.
- 8.1.2 *An assessment criteria for installing a new salt bin has been devised and is shown at Annex 1. The form will be used by Community Operations staff to assess requests.*

8.2 **Payment for salt bins**

- 8.2.1 *Once a salt bin has been approved by the assessment criteria, the cost of installation, filling and maintenance will be borne by KHS.*

9. **BUDGETS**

9.1 **Winter Service Budget**

- 9.1.1 The budget for the annual operational winter service period is based on salting the primary precautionary salting routes on 55 occasions. The main budget is managed by the Head of Community Operations as a countywide budget.

9.2 **Ice and Snow Emergencies**

- 9.2.1 There is no specific budget allocation within KHS for ice or snow emergencies. The cost of dealing with periods of icy conditions or significant snowfalls will be met by virement from other planned programmes of work on the highway or from special contingency funds for emergencies.

10. **PUBLIC AND MEDIA COMMUNICATIONS**

10.1 **Neighbouring Authorities and other Agencies**

- 10.1.1 The Kent Road Weather Forecast containing details of the winter service action for Kent will be transmitted daily to neighbouring highway authorities and other agencies so that activities can be co-ordinated regionally.

10.2 **The Media**

- 10.2.1 Local media organisations will be informed when instructions for salting of primary precautionary salting are issued.

10.3 **Pre-Season Publicity**

- 10.3.1 It is important that the public are aware of and understand the KHS approach to winter service. A leaflet for drivers and other road users relating to winter service is available.

10.4. **Publicity during Ice or Snow Emergencies**

- 10.4.1 Liaison with the news media, particularly local radio stations, is of the utmost importance and links will be established and maintained particularly during ice or snow emergencies.

Annex 1

SALT BIN ASSESSMENT FORM

Location of Salt Bin	Assessment Date	Assessed by
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	Characteristic	Severity	Standard Score	Actual Score
(i)	Gradient	Greater than 1 in 15 1 in 15 to 1 in 29 Less than 1 in 30	75 40 Nil	
(ii)	Severe Bend	Yes No	60 Nil	
(iii)	Close proximity to and falling towards	Heavy trafficked road Moderately trafficked road Lightly trafficked road	90 75 30	
(iv)	Assessed traffic density at peak times	Moderate (traffic group 5) Light (traffic group 6)	40 Nil	
(v)	* Number of premises for which only access	Over 50 20 - 50 0 - 20	30 20 Nil	
(vi)	Is there a substantial population of either disabled or elderly people	Yes No	20 Nil	
TOTAL				

* N.B. Any industrial or shop premises for which this is the only access is to be automatically promoted to the next higher category within characteristic (V).

Any site for which the summation of the weighing factors equals or exceeds 120 would warrant the siting of a salt bin.

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