

Highway Winter Service

SUMMARY

- 1.1 The report outlines the proposed strategy for the provision of the Highway Winter Service to enable the Council to maintain the highways for which it is responsible during periods of adverse weather. This is set down in a new document called the Highways Winter Service Plan, which can be found in full on the Council Website (at Transport and Streets/Road and Pathway Maintenance/Road Gritting/Winter Service Plan), This has been the subject of a consultation exercise. The Plan comprises:

Part A: Executive Summary
Part B: Policy Statement and explanation
Part C: Operational Plan
Part D: Operational Manual
Part E: Appendices

A copy of Part A and B are included as appendix 5 to the Supporting Information

- 1.2 The Plan also addresses recent changes in legislation, in particular, the amendment to the Highways Act, which now requires that “a highway authority are under a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice.”
- 1.3 In terms of the legislation, the term “highway” includes the carriageway, footway or footpath, and cycle lanes, cycle paths and cycle routes.
- 1.4 Currently the legislation applies only to highways, which are maintainable at the public expense, that is, adopted highways. However, as case law develops the current practices may need to be reviewed to include other highways, or parts of the highway network.
- 1.5 The report proposes the adoption of The Highway Winter Service Plan, which has been developed in accordance with current best practice guidance and will represent the Council’s policy for such matters.
- 1.6 Subject to any issues raised at the meeting, I support the following recommendations.

RECOMMENDATIONS

- 2.1 To approve the Highway Winter Service Plan.
- 2.2 To approve the Highway Winter Service Treatment Routes set out in the Plan.
- 2.3 To approve the pre treatment of footways in the City Centre and those leading into the City Centre.
- 2.4 To grant authority to the Cabinet Member for Planning and Transportation and the Corporate Director (Regeneration and Community) to jointly authorise ongoing necessary amendments to the Priority Gritting Routes, subject to the Plan being reconsidered by Cabinet after a period not exceeding five years.

REASON FOR RECOMMENDATIONS

- 3.1 To enable the Council provide the Highway Winter Service in accordance with current legislation.
- 3.2 To enable the Council to comply with the general requirements of and meet the response and treatment times as recommended by the Code of Practice for Highway Maintenance Management, July 2005 "Well Maintained Highways".
- 3.3 To enable the Council to meet the requirements of the Local Transport Plan.



Highway Winter Service

SUPPORTING INFORMATION

- 1.1 The Council currently carries out the Highway Winter Service during the period 1 October to 30 April each year. At present five gritters are used to treat the network.

Bus routes

- 1.2 Part of the emphasis of the Local Transport Plan is to encourage the use of public transport. To facilitate this all parts of the network used as bus routes, are now included in the treatment network where the time of the first bus arriving in the City is before 7.00 am. The previous Highways Winter Service Plan did not include all parts of the bus network as it had not been routinely updated to reflect its ongoing change and expansion. It should also be noted that some roads are no longer used as bus routes and it is proposed to remove these from the gritting schedules.

Former Trunk Roads

- 1.3 Over the last few years additional lengths of highway have been added to the network as part of the de-trunking of various roads in the City. These roads were formerly treated by the Highways Agency.

Consultation

- 1.4 The Highways Winter Service Plan has been submitted for public consultation through the Pointer Survey and also by distributing copies to various other stakeholders. The Plan was also placed on the Council's website and the public were given the opportunity to submit comments. No significant changes were required to the proposed network as a result of this. A list of consultees is included at appendix 3
- 1.5 There have therefore been both additions and deletions to the treatment network. No objections to these changes were received. A list of the changes is included at appendix2 to this report.

- 1.6 **Grit bins**

The Highways Winter Service Plan also has a revised assessment method for the provision of new grit bins. A copy of the assessment method is included at appendix 4

1.7 Footways

The network of main footways in the City centre will now need to be pre treated on a more regular basis to meet the requirements of the change in highways legislation. The cost of the main gritter for this work has been included in the Street Cleaning contract but the additional salt required will be a small additional cost that can be carried in the existing Winter Service budget.

Footways in the main local shopping areas are not included in the present proposals for pre gritting but it may be necessary to include them in future, subject to developing case law. Indeed it may also be that other parts of the network are included in pre gritting, such as other well-used footways and cycle ways.

1.9 Prioritisation

All roads have been placed in a category of Priority, which reflects their importance to the overall highway network. The exact definitions of Priority are stated in the Winter Service Plan. Essentially the Priority 1 routes are the “main roads” linking the city together and providing access to emergency facilities (police, fire and ambulance). The Priority 2 routes are mainly bus routes but are also routes that penetrate communities and provide access onto the Priority 1 routes. A Plan will be displayed at the meeting showing the Priority Routes

The Code of Practice requires Priority 1 and 2 routes to be gritted within 2½ hours of the commencement of the route. The routing of the gritters has been amended so that the Priority 1 routes are now completed before gritting on the Priority 2 routes begins.

1.11 Future Increase in Gritter Fleet

The result of adding additional lengths of highway to the network is that the current fleet of five vehicles is approaching critical capacity, that is, the weight of usable material required to adequately treat the network in the required time is at the maximum that a gritting vehicle can legally carry. For the heavier rates of spread the times taken to grit the enlarged network are such that they now slightly exceed the times recommended in the Code of Practice. This is not considered to be detrimental in itself to the safety of road users but could prejudice the Council's defence in the case of a claim. It is considered therefore that a sixth gritting vehicle will need to be procured to be operational no later than the 2007/08 gritting season.

1.12 Snow clearing

Preventative treatment applied before freezing conditions occur also applies to snow conditions. The network is treated with salt to prevent the snow laying on

- the surface and to promote its rapid melting. If the snow is so heavy that the application of salt is not fast enough to prevent the snow laying then there
- 1.13 needs to be a priority of roads for snow clearance.

The Priority 1 and 2 routes also form the first and second priority roads for snow clearance. All other roads will only be treated and cleared once the Priority 1 and 2 routes have been cleared and treated. When footways are covered with snow it is normal to suspend both highways maintenance works and street cleansing operations and to transfer the workforces concerned to manual gritting and snow clearance. The Highways Winter Service Plan lists the footways that will be given priority in this clearance operation. It also lists the footways around Pride Park Stadium that will be gritted and cleared on occasions of standing snow on match days.

OTHER OPTIONS CONSIDERED

- 2.1 No change in existing provision. This is unacceptable as the risk of the Council being taken to court for not fulfilling its legal obligations is too great. The Plan is a balance between not gritting at all and covering 100% of the network. The new legislation and the recommendations of the various bodies with regard to the provision of the service have been taken into account and this new Plan prepared to provide a minimum risk to the Council at an acceptable cost.
- 2.2 Salt is a harmful material for the environment and its use has to be balanced against the damage it can cause. Salting is only carried out when freezing conditions are forecast and at the minimum rates necessary to achieve the objective of preventing the formation of ice. The spreading rates cannot be lowered as the salt would be ineffective and there would probably be an increase in accidents caused by ice.
- 2.3 Other materials such as Urea to prevent the formation of ice have been considered. These types of materials are prohibitively expensive for treating the whole network and their use has been discounted. The environmental effects of urea can be serious under some conditions.
- 2.4 Salt usage can be reduced by using some specialist methods of application such as pre-wetting but these solutions are not established as best practice at the present time. However research is being carried out into alternative methods of application but no results have so far been published.

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List of appendices:	Appendix 1 – Implications Winter Service Plan available on Council web site at Transport and Streets/Road and Pathway Maintenance/Road Gritting/Highway Winter Service Plan Appendix 2 List of roads added to or removed from the Priority routes Appendix 3 List of consultees Appendix 4 Method for assessing the need for grit bins Appendix 5 Highway Winter Service Plan, Executive Summary,

Policy Statement and explanation

IMPLICATIONS

Financial

- 1.1 To complete the treatment of the network within the recommended time an additional gritter will be required. If financed by prudential borrowing this would incur a recurring cost of £17,000 p.a.
- 1.2 The length of highway treated has increased from 231 km to 261 km as a result of the inclusion of the de-trunked roads and additional bus routes, an increase of 13%.
- 1.3 This will require an additional 3.3 tonnes of salt for a 10 g/m² treatment, 6.5 tonnes for a 20 g/m² treatment and 13.2 tonnes for a 40 g/m² treatment.
- 1.4 The current purchase price of salt is £19.50 per tonne resulting in additional salt costs of around £9,000 per year. This sum will be absorbed into the existing Winter Service budget.
- 1.5 The existing Winter Service is provided under the Highway Term Maintenance Contract. This Contract is due to expire on 3rd August, 2007. A sixth gritting route will be incorporated into the service requirements when the new contract is procured. Based on existing prices the operating costs for a new gritting route are estimated to be £30,000 p.a., although efficiency savings will be sought as part of the procurement process.
- 1.6 The total recurring cost of the increased service from 2007/08 will therefore be £56,000 p.a. £26,000 of this can be met from additional funding allocated to highways maintenance, in an earlier FSS settlement, as well as special grant funding on specific roads. These two funding sources gave an allowance for cost increases due to the City Council taking over maintenance responsibilities on de trunked roads.
- 1.7 The remainder will need to be met from the existing highways maintenance revenue allocation at the expense of structural maintenance work on the network.

Legal

2. The City Council has a legal duty under the Highways Act to maintain the highway free from snow and ice.

Personnel

3. No additional personnel are required by the City Council.

Equalities impact

4. The Highway Winter Service is designed to treat the highway network in accordance with the road classification. This, in itself, may not take full account of the Council's Equality and Diversity Policy. It is now intended to subject contents of the Plan to the recently devised procedure of an equalities impact assessment. Any amendments found necessary to the Priority Routes resulting from this will be carried out with the approval of the Cabinet Member and the Corporate Director.

Corporate objectives and priorities for change

5. The proposal predominantly comes under the Council's Objective of reducing inefficiency by improving business processes and ability to perform; and, minimising Council Tax levels and increasing value for money.

Carriageway Route Lengths Added and Removed

Appendix 2 is in two parts.

Part 1 is a list of roads which are already, or are proposed to be, included in the treatment network.

The last major policy review was in 1997. Since that time a number of roads have become the responsibility of the City Council. These have already been included in the treatment network but no provision has been made in the policy.

Other additions to the network are for route optimisation purposes, that is, the treatment routes have been redesigned and a road which was not covered previously is now travelled, and will therefore be treated.

The majority of the additional lengths are due to the inclusion of all bus routes.

Part 2 is a list of roads which no longer meet the policy, for example, former bus routes, “stopped up” roads, and re-classified roads.

These routes are still treated as part of the current treatment network.

Appendix 2 – Part 1: Carriageway Route Lengths Added

Road No	Road Name	From	To	Reason for Addition
	Priority One			
A5111	Kingsway	A38, Slip Road	A516, Uttoxeter New Road Junction	De-trunking
A5111	Manor Road	A516 Uttoxeter New Road Junction	A5250, Burton Road Junction	
A5111	Warwick Avenue	A5250, Burton Road Junction	Stenson Road Roundabout	
A5111	Kenilworth Avenue	Stenson Road Roundabout	Village Street Junction	
A5111	Newdigate Street	Village Street Junction	Sinfin Lane Junction	
A5111	Osmaston Park Road	Sinfin Lane Junction	Osmaston Road Roundabout	
A5111	Harvey Road	Osmaston Road Roundabout	Shardlow Road Roundabout	
A5111	Raynesway	Shardlow Road Roundabout	London Road Roundabout	
A5111	Raynesway	London Road Roundabout	A6, Derby Southern By-Pass Roundabout	
A52	Ashbourne Road	City Boundary	A38, Kingsway / Queensway Roundabout	De-trunking
A6	Duffield Road	City Boundary	A38, Queensway / Abbey Hill Roundabout	De-trunking
A6 (Old)	Shardlow Road	Snelsmoor Lane Roundabout	City Boundary	
A6 (Old)	Shardlow Road	City Boundary	Keldholme Lane / Bembridge Rd Roundabout	
A6 (Old)	Shardlow Road	Keldholme Lane / Bembridge Rd Roundabout	Harvey Road Roundabout	
C607	Nottingham Road	A52, Eastgate Slip Road Off (East)	Nottingham Road	Route optimisation

Road No	Road Name	From	To	Reason for Addition
	Priority One			
C1012	Kingsway Slip Off	A38, Kingsway Slip Road Off (North)	Brackensdale Avenue	Omission
C1012	Kingsway Slip On	Brackensdale Avenue	A38, Kingsway Slip Road On (North)	Omission

Unclassified Roads			
Road Name	From	To	Reason for Addition
Harrow Street	Pride Parkway	Roundabout London Road	New road network
Harrow Street	Roundabout London Road	Pride Parkway	
Pride Parkway	Harrow Street	Roundabout Pride Parkway	

Appendix 2 – Part 1: Carriageway Route Lengths Added

Road No	Road Name	From	To	Reason for Addition
	Priority Two			
C1554	Normanton Lane	Brayfield Road Roundabout	Valley Road Junction	Bus route
C1579	Valley Road	Normanton Lane Junction	A5111, Warwick Avenue	Bus route
C1614	Normanton Road	Lower Dale Road / Pear Tree Road Jct	Mill Hill Lane	Bus route
C2407	Stoney Lane	Stoney Lane	A52, Borrowash By-Pass Slip Rd On (E)	Omission
C2906	Raleigh Street	A38, Kingsway Slip Road Off (South)	Lyttelton Street	Omission
C2906	Raleigh Street	Raleigh Street	A38, Kingsway Slip Road On (South)	Omission
C3200	Babington Lane	Burton Road / Normanton Road Jct	St Peter's Street	Bus route

Unclassified Roads			
Road Name	From	To	Reason for Addition
Acton Road	Henley Green Roundabout	Westbourne Park	Bus route
Alvaston Street	Kelmoor Road	Glastonbury Road	Bus route
Arlington Road	Horwood Road	Grafton Street	Bus route
Barnard Road	St Andrew's View	Perth Street	Bus route
Beech Avenue	Shardlow Road Roundabout	Kelmoor Road	Bus route
Bonsall Avenue	Penrhyn Avenue	Repton Avenue	Bus route
Borrowfield Road	Borrowash Road	Milldale Road	Bus route
Boulton Lane	Boulton Lane	Harvey Road	Omission
Breedon Avenue	Instow Drive	Donington Drive	Bus route

Appendix 2 – Part 1: Carriageway Route Lengths Added

Unclassified Roads			
Road Name	From	To	Reason for Addition
Brentford Drive	Barnes Green Roundabout	Hounslow Road	Bus route
Bus lane	Wyvernside	Chequers Road	Bus route
Cardigan Street	Cowsley Road	Mayfield Road	Bus route
Chequers Road	Bus Lane (Wyvernside)	Downing Road	Bus route
Chevin Avenue	Western Road	University Entrance	Bus route
Church Street	Alvaston Street	Elvaston Lane	Bus route
Coleridge Street	Staunton Avenue	Sunnyhill Avenue	Bus route
Constable Lane	Middleton Avenue	Queens Drive	Bus route

Appendix 2 – Part 1: Carriageway Route Lengths Added

Unclassified Roads – continued			
Road Name	From	To	Reason for Addition
Cornwall Road	Nottingham Road	Cowsley Road	Bus route
Courtway Crescent	Duchess Way	Rowallan Way Roundabout	New road network & Bus route
Cowsley Road	Cornwall Road	Cardigan Street	Bus route
Crich Avenue	Crich Circle Roundabout	Kings Drive	Bus route
Crich Circle Roundabout	Queens Drive	Queens Drive	Bus route
Crown Way	Holmleigh Way Roundabout	Duchess Way Roundabout	New road network & Bus route
Derby University Access Road	Kedleston Road	University Campus	Bus route
Donington Drive	Breedon Avenue	Staunton Avenue	Bus route
Duchess Way	Crown Way Roundabout	Courtway Crescent	New road network & Bus route
Edgeware Road	Finchley Avenue	Henley Green Roundabout	Bus route
Fairfield Road	Porter Road	Carlton Road	Bus route
Fellow Lands Way	Snelsmoor Lane Roundabout	Acrefield Way Roundabout	Bus route
Finchley Road	Wimbledon Road	Westbourne Park	Bus route
Foremark Avenue	Repton Avenue	Littleover Lane	Bus route
Freeman Avenue	Sunnyhill Avenue	Staunton Avenue	Bus route
Fulham Road	Greenwich Drive South	Humbleton Drive	Bus route
Glendevon Way	Rowallan Way Roundabout	Drummond Way	New road network & Bus route
Glenwood Road	Swarkestone Road	Woodgate Drive	Bus route

Appendix 2 – Part 1: Carriageway Route Lengths Added

Unclassified Roads – continued			
Road Name	From	To	Reason for Addition
Grafton Street	Carlton Road	Arlington Road	Bus route
Greenville Croft	Parkway	Prestwick Way Roundabout	Bus route
Greenwich Drive South	Brackensdale Avenue	Fulham Road	Bus route
Grenfell Avenue	Sunnyhill Avenue	Kendon Avenue	Bus route
Harlesden Avenue	Holborn Drive	Wimbledon Road	Bus route
Hartland Drive	Freeman Avenue / Staunton Avenue Junction	Instow Road	Bus route
Haven Baulk Avenue	Rykneild Road	Haven Baulk Lane	Bus route
Henley Green Roundabout	Around Roundabout		Bus route

Appendix 2 – Part 1: Carriageway Route Lengths Added

Unclassified Roads – continued			
Road Name	From	To	Reason for Addition
Holborn Drive	Barnes Green Roundabout	Harlesden Avenue	Bus route
Holmleigh Way	City Boundary	Crown Way Roundabout	New road network & Bus route
Horwood Avenue	Arlington Road	Burton Road	Bus route
Hounslow Road	Brentford Road	Streatham Road	Bus route
Humbleton Drive	Fulham Road	Highgate Green Roundabout	Bus route
Instow Drive	Breedon Avenue	Hartland Drive	Bus route
Kelmoor Road	Beech Avenue	Alvaston Street	Bus route
Kings Drive	Crich Avenue	Uttoxeter Road	Bus route
Kinross Avenue	Nairn Avenue	Hampshire Road	Bus route
Mackenzie Street	Cheviot Street	Lyttelton Street	Bus route
Mayfield Road	Cardigan Street	Sussex Circus	Bus route
Mayfield Road	Roe Farm Lane	Renfrew Street	Bus route
Meteor Centre	Mansfield Road	Meteor Centre Roundabout	Bus route
Middleton Avenue	Burton Road	Constable Lane	Bus route
Moorway Lane	Blagreaves Lane	Derbymoor Community School	Bus route
Nairn Avenue	St Mark's Road	Kinross Avenue	Bus route
Overdale Road	Whitaker Road	Porter Road	Bus route
Parkway	A514, Derby Road	Greenville Croft	Bus route
Peak Drive	Osmaston Park Road	Peak Drive Roundabout	Bus route
Penrhyn Avenue	Valley Road	Bonsall Avenue	Bus route
Porter Road	Fairfield Road	Overdale Road	Bus route

Appendix 2 – Part 1: Carriageway Route Lengths Added

Unclassified Roads – continued			
Road Name	From	To	Reason for Addition
Queens Drive	Constable Lane	Crich Circle	Bus route
Reginald Road South	Nottingham Road	Chaddesden Lane	Bus route
Renfrew Street	Mayfield Road	Max Road	Bus route
Repton Avenue	Bonsall Avenue	Foremark Avenue	Bus route
Riverside Road	Pride Parkway Roundabout	Derwent Parade Roundabout	Bus route
Roe Farm Lane	Wiltshire Road	Mayfield Road	Bus route

Appendix 2 – Part 1: Carriageway Route Lengths Added

Unclassified Roads – continued			
Road Name	From	To	Reason for Addition
Rowallan Way	Courtway Crescent Roundabout	Glendevon Way Roundabout	New road network & Bus route
Royal Way	Park and Ride Car Park Entrance – Pride Park	Pride Parkway	Bus route
St Albans Road	Manor Road	St Cuthbert's Road	Bus route
St Andrew's View	Scarborough Rise Jct	Barnard Road	Bus route
St Mark's Road	Nottingham Road	Nairn Avenue	Bus route
St Peter's Road	Woodgate Drive	High Street	Bus route
Stanier Way	Wyvern Way Roundabout	Stephensons Way	Bus route
Staunton Avenue	Donington Drive	Coleridge Street	Bus route
Stephensons Way	Stanier Way	Stanier Way	Bus route
Stone Hill Road	Burton Road	St Chad's Road	Bus route
Streatham Road	Highgate Green Roundabout	Hounslow Road	Bus route
The Sidings	Wyvern Way	The Sidings Roundabout	Bus route
Westbourne Park	Acton Road	Finchley Avenue	Bus route
Wheatcroft Way	Sir Frank Whittle Road	Wheatcroft Way Roundabout	Bus route
Whitaker Road	Carlton Road	Overdale Road	Bus route
Wimbledon Road	Harlesden Avenue	Finchley Avenue	Bus route
Winchester Crescent	Hereford Road	Max Road	Bus route
Woodgate Drive	Glenwood Road	St Peter's Road	Bus route
Wyvernside	Wyvern Way Roundabout (Derwent Parade)	Bus Lane (to Chequers Road)	Bus route

Appendix 2 – Part 1: Carriageway Route Lengths Removed

Unclassified Roads			
Road Name	From	To	Reason for Removal
Priority Two			
Arthur Street	Edward Street	North Street	Non-compliance with policy
Arundel Avenue	Uttoxeter Road	Western Road	Non-compliance with policy
Berkshire Street	Wiltshire Road	Sussex Circus	Non-compliance with policy
Blagreaves Avenue	Oaklands Avenue	Blagreaves Lane	Non-compliance with policy
Borrowfield Road	Edmund Road	Langley Road	Non-compliance with policy
Buxton Road	Taddington Road	Winster Road	Non-compliance with policy
Campion Street	Wild Street	Stanley Street	Non-compliance with policy
Canterbury Street	St Andrew's View	Taddington Road	Non-compliance with policy
Cavendish Way	Uttoxeter Road	Western Road	Non-compliance with policy
City Road	Mansfield Road	Old Chester Road	Non-compliance with policy
Craddock Avenue	Arnhem Terrace	Edmund Road	Non-compliance with policy
Derby Lane	Stenson Road	Kenilworth Avenue	Non-compliance with policy
Derby Lane	Kenilworth Avenue	Village Street	Non-compliance with policy
Downing Road	Chequers Road	Chequers Road	Non-compliance with policy
Drury Avenue	Lodge Lane	Willowcroft Road	Non-compliance with policy
Edmund Road	Arnhem Terrace	Borrowfield Road	Non-compliance with policy

Appendix 2 – Part 1: Carriageway Route Lengths Removed

Unclassified Roads			
Road Name	From	To	Reason for Removal
Priority Two			
Edward Street	Duffield Road	Arthur Street	Non-compliance with policy
Great Northern Road	Uttoxeter New Road	Uttoxeter Old Road	Non-compliance with policy
Langley Road	Craddock Avenue	Borrowfield Road	Non-compliance with policy
Lodge Lane	Derby Road Roundabout	Drury Avenue	Non-compliance with policy
Mackenzie Street	Lyttelton Street	Napier Street	Non-compliance with policy
Morley Street	Napier Street	Stanley Street	Non-compliance with policy
Napier Street	Morley Street	Mackenzie Street	Non-compliance with policy
North Street	Arthur Street	Duffield Road	Non-compliance with policy
Norwich Street	Wiltshire Road	Sussex Circus	Non-compliance with policy
Old Chester Road	City Road	Mansfield Road	Non-compliance with policy
Silverhill Road	Borrowfield Road	A6005, Nottingham Road	Non-compliance with policy

Appendix 2 – Part 1: Carriageway Route Lengths Removed

Unclassified Roads – continued			
Road Name	From	To	Reason for Removal
St Cuthbert's Road	St Alban's Road	St Wystan's Road	Non-compliance with policy
St Wystan's Road	St Cuthbert's Road	St Alban's Road	Non-compliance with policy
Stanley Street	Campion Street	Morley Street	Non-compliance with policy
Westbury Street	Dean Street	Bedford Street	Non-compliance with policy
Wild Street	Uttoxeter Old Road	Campion Street	Non-compliance with policy
Winster Road	Taddington Road	Buxton Road	Non-compliance with policy

List of Consultees

BY POST

<p>Derbyshire Fire and Rescue Service</p> <p>The Mobilising Officer Derbyshire Fire and Rescue Service The Old Hall 583 Burton Road Littleover DERBY DE23 6EH</p>	<p>Police Headquarters</p> <p>Chief Constable Derbyshire Constabulary Constabulary Headquarters Butterley Hall RIPLEY Derbyshire DE5 3RS</p>
<p>Police Divisional Headquarters</p> <p>The Chief Superintendent Derbyshire Constabulary Derby Division Prime Parkway St Mary's Wharf DERBY</p>	<p>Ambulance Service</p> <p>Mr M Hinchley General Manager EMAS – NHS Trust Central Division HQ Kingsway DERBY DE22 3XB</p>
<p>Derbyshire County Council</p> <p>Director of Environmental Services Derbyshire County Council County Hall MATLOCK Derbyshire DE4 3AG</p>	
<p>Transport</p>	
<p>Midland Mainline</p> <p>Midland Mainline Midland House Nelson Street DERBY DE1 2SA</p>	<p>Network Rail</p> <p>Outside Party Engineer London North Eastern Network Rail 2A George Stephenson House Toft Green YORK YO1 6JT</p>

The Freight Transport Association Ltd Midlands Region Hermes House 20 Coventry Road Cubbington LEAMINGTON SPA Warwickshire CV32 7JN	
Others	
Post Office Mr M Varty Royal Mail Delivery Office Midland Road DERBY DE1 1AA	Chamber of Commerce Derbyshire Chamber and Business Link Marlborough House Charnwood Street DERBY DE1 2GT

VIA E-MAIL

Transport

The Transport Manager, Arriva, Ascot Drive, DERBY, DE24 8ND – godfreyr.midlands@arriva.co.uk
Derby Community Transport, Meadow Road Garage, Meadow Road, DERBY, DE1 2BH – derbyct@btinternet.com
Trent Barton Buses, Mansfield Road, HEANOR, Derbyshire, DE75 7BG – enquiries@trentbarton.co.uk

Others

Road Haulage Association

Southern and Eastern Region, (southern-eastern@rha.net)
Regional Director, Chris Wright, (c.wright@rha.net),
Deputy Director, Liam Boyle, (l.boyle@rha.net),
Mike Salmon, Area Manager, (m.salmon@rha.net).

Adjoining Authorities

Amber Valley Borough – enquiries@ambervalley.gov.uk
Erewash Borough – contactcentre@erewash.gov.uk
South Derbyshire District – civic.offices@south-derbys.gov.uk

Appendix 4: Salt Bin Risk Assessment

Location of Salt Bin:		Assessment Date:		Assessed by:	
Assigned Bin Reference No.					
Characteristic		Severity		Standard Score	Actual Score
1. Gradient (Warning sign present)	Greater than 1 in 15 (>6%)	75			
	1 in 15 to 1 in 29 (6% to 3%)	40			
	Less than 1 in 30 (<3%)	Nil			
2. Severe Bend (Bend sign and/or chevron signs present)	Yes	60			
	No	Nil			
3. Close proximity to and falling towards (See Appendix D2)	Heavy trafficked road (Traffic groups 1 to 4)	90			
	Moderately trafficked road (Traffic group 5)	75			
	Lightly trafficked road (Traffic group 6 or 7)	30			
	Not applicable (falling away from)	Nil			
4. Assessed traffic density at peak times (See Appendix D2)	Moderate (Traffic group 5)	40			
	Light (Traffic group 6)	Nil			
5. * Number of premises for which only access	Over 50	30			
	20 - 50	20			
	0 - 20	Nil			
6. Is there a substantial population of either disabled or elderly people	Yes	20			
	No	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 100 would warrant the siting of a salt bin.

Appendix 5: Executive Summary, Policy and The Policy Explained

Executive Summary

1.1 Structure of the Highway Winter Service Plan

1.1.1 This Service Plan is set out in five Parts, each of which is divided into sections:

- Part A: Executive summary, introduction to the Service Plan, and its scope and purpose
- Part B: Policy statement and explanation of the policy
- Part C: Operational plan
- Part D: Operational manual
- Part E: Appendices with more detailed information, including Glossary of Terms and References

1.2 Objectives of the Highway Winter Service Plan

- To minimise delays, accidents and damage resulting from frost, ice and snow;
- To undertake the Winter Service effectively and efficiently;
- To prevent the formation of ice on the defined priority routes by precautionary treatment with salt;
- To melt snow and ice already formed by post treatment with salt;
- To remove snow causing an obstruction on the highway.

1.3 Status of the Highway Winter Service Plan

- 1.3.1 Derby City Council has legal obligations with which they need to comply, and which will, on occasion, be the subject of claims or legal action by those seeking to establish non-compliance by the Council. The Highway Winter Service Plan defines how Derby City Council will comply with its legal obligations.
- 1.3.2 The Highway Winter Service Plan has been developed from the recommendations contained in “Well-maintained Highways – Code of Practice for Highway Maintenance Management”, (the “Code”), and in particular the recommendations contained in Section 13: Winter Service.
- 1.3.3 The recommendations contained in the Code are not mandatory for authorities. However, the Code is recognised as good practice and its contents may be considered in any claim or legal action against an authority.
- 1.3.4 Derby City Council accepts the recommendations of the Code as good practice and formally adopts these recommendations.
- 1.3.5 Any variation from the Code is identified as such along with the reasoning for such differences.
- 1.3.6 The Highway Winter Service Plan is a controlled document within the City Council’s Quality Management Regime.

Policy Statement

2.1 Policy Statement

- 2.1.1 Derby City Council as the Local Highway Authority notes that an amendment to Clause 41 of the Highways Act 1980 has from 31st October 2003 imposed a Statutory Duty upon the Highway Authorities to ensure that as far as is reasonably practicable snow and ice does not endanger users of the highway. The Council will therefore take measures to reduce the effects of adverse weather and provide travelling conditions as safe as reasonably possible having regard to financial constraints and available resources.

2.2 Derby City Council Will

2.2.1 General

- Approve, adopt and publish the Highway Winter Service Plan based on the principles of “Well-maintained Highways: Code of Practice for Highway Maintenance Management: July 2005” published by The Stationery Office.
- Provide to the residents of Derby, and those travelling on the highway network, the Winter Service in accordance with the published Highway Winter Service Plan.
- Ensure that the Winter Service is provided in an efficient and effective way within the principles of best value.
- Ensure that the Winter Service complies with the requirements of the Corporate Equality and Diversity Plan.

2.2.2 Consult

- Consult with adjoining highway and strategic authorities to co-ordinate the Winter Service to ensure that route planning and treatment regimes meet road users’ reasonable expectations for consistency and provide value for money.
- Consult annually with users and key stakeholders prior to the production of the Highway Winter Service Plan to take account of changing local circumstances.
- Review all arrangements for delivering the Winter Service on an annual basis. The Council will consult with all service partners including consultants, contractors, adjacent and strategic authorities to ensure clear terms of reference for the provision and management of all resources, health and safety, and insurance.

2.2.3 Define

- Define the hierarchy of the highway network for which it has responsibility. Each length of carriageway, footway and cycle route will be assigned to a Category in accordance with the principles of the Code of Practice for Highway Maintenance Management.

2.2.4 Design

- Design Winter Service treatment routes for carriageways, footways and cycle routes using the defined network categories to prioritise the network.

2.2.5 Manage

- Issue instructions to the Winter Service Contractor to treat the defined network.
- Monitor the performance of the Winter Service Contractor.

2.2.6 Publish

- Publish and review this Policy Statement annually.
- Publish a non-technical summary of the Highway Winter Service Plan which will include plans of the treated network and guidance on the safe use of the network.

2.2.7 Technical

- Review the Highway Winter Service Plan on an annual basis, with particular regard to changes in legislation, case law and good practice guidelines.
- Monitor new developments in weather forecasting and ice detection systems to ensure Best Value in the provision of Winter Service.
- Carry out a full technical review on an annual basis to ensure that full operational service status is reached prior to the commencement of the Winter Season. The review will ensure that the correct equipment, vehicles, plant and maintenance arrangements are in place and that salt, grit, specialist de-icing materials and fuel supplies are available.
- Ensure that all de-icing equipment and spreaders are calibrated in accordance with the required British Standard prior to the commencement of the Winter Season.
- Carry out an annual review of the personnel involved in the provision of the Winter Service to ensure that training and development needs are addressed. Where training needs are identified Derby City Council will provide the necessary training to the personnel directly employed by them in advance of the Winter Season commencing.
- Keep comprehensive and accurate records of all Winter Service activities including the timing and nature of all decisions, the information on which those decisions were based, and the nature and timing of all treatments.

- Manage the purchase, storage and use of salt and other de-icing materials consistent with the principles of Best Value and sustainability.
- Manage the purchase, storage, placement, filling and re-filling, and removal of salt bins consistent with the principles of Best Value and sustainability.

The Policy Explained

2.3 Policy Statement

- 2.3.1 Derby City Council as the Local Highway Authority notes that an amendment to Clause 41 of the Highways Act 1980 has from 31 October 2003 imposed a Statutory Duty upon the Highway Authorities to ensure that as far as is reasonably practicable snow and ice does not endanger users of the highway. The Council will therefore take measures to reduce the effects of adverse weather and provide travelling conditions as safe as reasonably possible having regard to financial constraints and available resources.

In the United Kingdom the bodies that have responsibility for looking after the country's roads are known as Highway Authorities.

In general, these highway authorities will be based on geographical regions such as county, city and metropolitan councils. However, the main highway network of motorways and principal routes, known as Trunk Roads, are maintained by the Highways Agency on behalf of central government.

In Derby, the City Council is the highway authority and, as such, is responsible for the maintenance of the road network within the city boundary, except for those roads designated as Trunk Roads.

The total length of roads within Derby City's boundary is around 792 kilometres, of which only around 31 kilometres are trunk roads. A further 13 kilometres of highway has not been adopted by the City Council, that is, they are not maintainable by the City Council.

Therefore, Derby City Council is responsible for the maintenance of approximately 748 kilometres of highway. This maintenance responsibility extends to all aspects of the highway.

The primary statutory instrument which governs a highway authority is The Highways Act 1980. This confers certain legal obligations on the highway authority. There are two main requirements in relation to a Highway Winter Service Plan.

1. Section 41(1) of the Highways Act 1980:

"In particular, a highway authority are under a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow and ice."

2. Section 150 of the Highways Act 1980:

This Section imposes a duty upon authorities to remove any obstruction of the highway resulting from “accumulation of snow or from falling down of banks on the side of the highway, or from any other cause”.

This Policy is a statement stipulating how Derby City Council will comply with the requirements of the Highways Act 1980, within the financial constraints and available resources.

2.4 Derby City Council Will

2.4.1 General

- Approve, adopt and publish the Highway Winter Service Plan based on the principles of “Well-maintained Highways: Code of Practice for Highway Maintenance Management: July 2005” published by The Stationery Office.

Well-maintained Highways: Code of Practice for Highway Maintenance Management

In order that the highway authorities can comply with the legislation a body of professional highway organisations have published, in consultation with central government, guidance on how to best maintain the country’s road network.

This guidance is a Code of Practice Manual entitled “Well-maintained Highways: Code of Practice for Highway Maintenance Management” (the “Code”) and is essentially a gathering together of knowledge, experience and best practice.

The main aim of the code is to make sure that the country’s roads are maintained in the best possible condition, within the financial constraints placed on local government.

The Code is divided into five Parts and eighteen Sections. Each Section of the Code contains recommendations on how to maintain the highways. Section 13 of the Code relates to the provision of the Winter Service.

The Code recommends that authorities produce and publish a Highway Winter Service Plan in accordance with the principles laid down in the Code.

Derby City Council has produced and published a Highway Winter Service Plan in accordance with the recommendations of the Code.

- Provide to the residents of Derby, and those travelling on the highway network, the Winter Service in accordance with the published Highway Winter Service Plan.

It is important to recognise that the highway network in Derby is of economic benefit, not only to the residents of Derby, but also to those travelling to, from and through Derby. Therefore, keeping the highway network clear of obstructions caused by snow or ice will ultimately benefit the residents of Derby.

Derby City Council has provided, and will continue to provide a Winter Service. That is, the Council will employ a competent contractor to keep the highway network within the City boundary clear of ice and snow.

- Ensure that the Winter Service is provided in an efficient and effective way within the principles of best value.

Derby City Council has an obligation to provide a good quality Winter Service while at the same time making sure that Derby's residents and taxpayers receive value for money. Examples of how the City Council aim to achieve this are:

1. Monitor the performance of the Winter Service Contractor
 2. Check that decisions are made by competent personnel
 3. Keep up-to date with changes in weather forecasting technology.
- Ensure that the Winter Service complies with the requirements of the Corporate Equality and Diversity Plan.

Derby City Council has adopted the Corporate Equality and Diversity Plan which ensures that all policies of the Council are considered in terms of how they will impact on all members of the community.

The Winter Service Policy will be developed to ensure that it complies with the requirements of the Corporate Equality and Diversity Plan.

2.4.2 **Consult**

- Consult with adjoining highway and strategic authorities to co-ordinate the Winter Service to ensure that route planning and treatment regimes meet road users' reasonable expectations for consistency and provide value for money.
- Consult annually with users and key stakeholders prior to the production of the Highway Winter Service Plan to take account of changing local circumstances.
- Review all arrangements for delivering the Winter Service on an annual basis. The Council will consult with all service partners including consultants, contractors, adjacent and strategic authorities to ensure clear terms of reference for the provision and management of all resources, health and safety, and insurance.

A key aim of the Code is that the community has the opportunity to comment on what the City Council is doing and how the money is being spent.

It is also important to achieve a degree of consistency across the City, the County and the Region to ensure that the type of road which is treated in, say, Derbyshire, is also treated in the City, and vice versa.

Therefore the consultation process aims to ensure that the City Council is treating the correct routes, when required, and cost effectively.

The annual review will ensure that changes in the road hierarchy, (e.g. new roads, changes in road classification, changes in maintenance responsibility) are addressed. It will also allow the public to influence the focus of the Winter Service (e.g. more or less emphasis on treating footways or cycle routes).

2.4.3 Define

- Define the hierarchy of the highway network for which it has responsibility. Each length of carriageway, footway and cycle route will be assigned to a Category in accordance with the principles of the Code of Practice for Highway Maintenance Management.

In order to decide which routes to treat the highway network is categorised according to the nature of the route. These categories are generally based on the highway classification (A, B, C and unclassified), which are already well-defined. However, there may be occasions where it is necessary to re-categorise a particular part of the network and include it in the Winter Service. For example, where an untreated minor road, with a steep downhill gradient, joins a road on the treated network, the minor road may need to be treated to ensure vehicles approaching the main route can stop safely. The actual classification (A, B, C or U/C) of the road would remain unchanged; however, the road category would be revised to reflect the considered risk.

In essence, this is the risk assessment process which will be carried out on each length of carriageway, footway and cycle route, in order to assign each of those lengths to a Category. As soon as each length has been assigned a category the network hierarchy, in terms of Winter Service, can be drawn up. A map showing this hierarchy is then produced.

It is important to recognise that the Winter Service hierarchy may differ quite considerably from the network classification hierarchy, particularly in relation to the Class C and Unclassified parts of the network.

The City Council has adopted the carriageway, footway and cycle route hierarchies defined by the Code. These hierarchies are described fully in the Code and reproduced in Appendix D1 of the Operational Plan. The categories are:

- | | |
|-----------------|-------------------------|
| 1. Carriageways | 1, 2, 3a, 3b, 4a and 4b |
| 2. Footways | 1a, 1, 2, 3 and 4 |
| 3. Cycle Route | A, B and C |

2.4.4 Design

- Design Winter Service treatment routes for carriageways, footways and cycle routes using the defined network categories to prioritise the network.

The hierarchy produced by the Define process in paragraph 3.2.3 is then used to design the routes which the treatment vehicles (gritters) will follow.

The Highways Agency and the Code of Practice recommend that the time taken to treat any single route in normal conditions should be a maximum of two hours. This time may vary by local agreement due to conditions, topography and the efficient use of plant.

The treatment time is calculated from a combination of the following factors:

- a. treatment speed
- b. travel speed
- c. speed limit
- d. area to be treated
- e. spread rate
- f. capacity of gritting vehicle
- g. efficiency

For example, a vehicle with a capacity of 6 tonnes, spreading salt at a rate of 20 grammes per square metre can treat a total area of 300,000 square metres.

$$\begin{aligned}\text{Area (m}^2\text{)} &= \text{Capacity (g) / Spread Rate (g/m}^2\text{)} \\ &= 6,000,000 / 20 \\ &= 300,000 \text{ m}^2\end{aligned}$$

Taking the average width of spread as 7.5 metres, the length which can be treated is around 40,000 metres (40 km, approx 25 miles).

$$\begin{aligned}\text{Length (m)} &= \text{Area (m}^2\text{) / Width (m)} \\ &= 300,000 / 7.5 \\ &= 40,000 \text{ m}\end{aligned}$$

Each route has a total length and a treatment length. The ratio of treatment length to total length is the route efficiency. E.g. where the treatment length is 40 km and the total length is 80 km, the efficiency is 50%.

The treatment speed and travel speeds are governed by the type of carriageway (single or dual).

	Maximum treatment speed	Maximum travel speed
Single carriageway	48 kph (30 mph)	60 kph (37 mph)
Dual carriageway	60 kph (37 mph)	80 kph (50 mph)

However, the treatment vehicles will **always** observe the speed limit regardless of the type of carriageway.

2.4.5 Example

$$\begin{aligned}\text{Total route length (L}_1\text{)} &= 120 \text{ km} \\ \text{Treatment length (L}_2\text{)} &= 40 \text{ km of single carriageway} \\ \therefore \text{Travel length (L}_3\text{)} &= 80 \text{ km} \\ \text{Speed limits (S)} &= 48 \text{ kph (30 mph) on 50\% of travel length}\end{aligned}$$

96 kph (60 mph) on 50% of travel length

48 kph (30 mph) on all of treatment length

$$\begin{aligned}\text{Treatment time (min) (T}_1\text{)} &= ((L_3 \times 50\%) / (S_{48} / 60)) + ((L_3 \times 50\%) / (S_{60} / 60)) \\ &+ ((L_2 / (S_{48} / 60)) \\ &= ((80 \times 0.5) / (48 / 60)) + ((80 \times 0.5) / (60 / 60)) + \\ &\quad (40 / (48 / 60)) \\ &= (40 / 0.8) + (40 / 1.0) + (40 / 0.8) \\ &= 50 + 40 + 50 \\ &= 140 \text{ minutes}\end{aligned}$$

- This exceeds the recommended maximum treatment time so the route would be revised to ensure the treatment time target is achieved.

Derby currently operates five treatment routes for carriageways which treat around 33% of the highway network. However, as a result of the proposed changes to the Council's policy along with additions to the highway network, the gritting fleet is approaching maximum capacity. That is, the total amount of salt required is almost the same as the total amount which the five vehicles can carry.

The highway network in the City is expanding. At some time in the near future the quantity of salt required will be greater than the vehicle capacity and, either, an additional vehicle will be required, or, sections of highway which are currently treated will be removed from the treatment network.

2.4.6 **Manage**

- Issue instructions to the Winter Service Contractor to treat the defined network.
- Monitor the performance of the Winter Service Contractor.

Operationally the Winter Service is undertaken by a Contractor employed by Derby City Council. Currently this service is included as part of a long term contract to maintain the highway network.

The Highways Section of the Community and Regeneration Department has overall responsibility for the day to day management of the Service, including making the decision to carry out pre-treatment of the network when the weather forecast indicates that icy conditions, or snow, may occur. The person who takes these decisions is known as the Client Controller.

It is the Client Controller's responsibility to give instructions to the Winter Service Contractor and to monitor their performance. This is a Contractual arrangement and poor performance can result in financial penalties, or in extreme cases, termination of the Contract.

2.4.7 Publish

- Publish and review this Policy Statement annually.
- Publish a non-technical summary of the Highway Winter Service Plan which will include plans of the treated network and guidance on the safe use of the network.

The publication of these documents is a recommendation of the Code of Practice. The Code also recommends that the policy and operational plans are reviewed annually. As part of central government initiatives (e-Government) these will be available on the Derby City Council website.

The non-technical summary is a brief document published in leaflet form as well as on the website.

3.4.8 Technical

- Review the Highway Winter Service Plan on an annual basis, with particular regard to changes in legislation, case law and good practice guidelines.

This Highway Winter Service Plan is a major review of the current Winter Maintenance Policy which had its last major revision in 1997. Since that time amendments have been incorporated on a regular basis.

The publication of the Code of Practice for Maintenance Management in July 2001, and the subsequent revised Code of Practice for Highway Maintenance Management, published in July 2005, has necessitated a complete revision of the existing policy in line with the recommendations of the Code.

A change in legislation has also required a review of the existing policy. On 31 October 2003 the Railways and Transport Act inserted an additional Clause into the Highways Act 1980. This Clause now places a legal obligation on Highway Authorities to ensure that the highway, which includes footways and cycle routes, is “not endangered by snow or ice”.

To date there have not been any legal judgements which have influenced the policy or procedures involved in Winter Service. The annual review of the Winter Service Plan will necessarily include any such judgements.

- Monitor new developments in weather forecasting and ice detection systems to ensure Best Value in the provision of Winter Service.

Derby City Council does not currently have an ice detection system. Weather forecast information is received indirectly from a specialist company, PA WeatherCentre Ltd., via Derbyshire County Council. This is an historic arrangement as a result of the Local Government Reorganisation during 1996 to 1998. Prior to 1997, the County Council was the Highway Authority for all highways within the City boundary. Post 1997, the responsibility for maintaining the highways passed to the City Council, including the provision of the Winter Service.

This current system operates satisfactorily, however, a full review is recommended to ensure that the principles of Best Value are being met.

It is important to note that there may be occasions when treatment of the highway is carried out when a weather forecast indicates that such action is necessary, however, the expected conditions do not occur. Also, on occasions, sudden and unexpected weather conditions can result in non-treatment of the network. This can be the nature of weather forecasting and is why it is important to keep up to date with new developments in technology in an effort to reduce the number of times unnecessary treatments are undertaken, and to ensure treatment is carried out when required.

- Carry out a full technical review on an annual basis to ensure that full operational service status is reached prior to the commencement of the Winter Season. The review will ensure that the correct equipment, vehicles, plant and maintenance arrangements are in place and that salt, grit, specialist de-icing materials and fuel supplies are available.
- Ensure that all de-icing equipment and spreaders are calibrated in accordance with the required British Standard prior to the commencement of the Winter Season.

It is important to check that the correct equipment is being employed, and that it is in full working order prior to the onset of cold weather. Incorrectly calibrated spreading equipment could mean that insufficient salt, or other de-icing materials, is applied to the highway surface. This may result in ice forming which may in turn cause an accident.

On the other hand, spreading too much material would be a waste of resources.

- Carry out an annual review of the personnel involved in the provision of the Winter Service to ensure that training and development needs are addressed. Where training needs are identified Derby City Council will provide the necessary training to the personnel directly employed by them in advance of the Winter Season commencing.

The City Council will make sure that all personnel involved in the provision of the Winter Service have the necessary qualifications and experience to allow them to perform the duties of their post. For example, the Client Controller will have experience of interpreting weather forecast information. When training is required the City Council will provide it.

The City Council will also monitor the Contractor and their personnel to ensure that only adequately trained staff are employed in the provision of the Winter Service. For example, all gritter drivers will have the correct driving licence and will have received training on the correct operation of spreading equipment.

- Keep comprehensive and accurate records of all Winter Service activities including the timing and nature of all decisions, the information on which those decisions were based, and the nature and timing of all treatments.

It is important to retain records of the Winter Service activities in the event that a claim for failure to comply with the law is made against the City Council. These

records may provide a defence against such claims. Where an incorrect decision is reached, the procedure by which that decision is reached will provide evidence to defend such claims.

- Manage the purchase, storage and use of salt and other de-icing materials consistent with the principles of Best Value and sustainability.

Derby City Council is responsible for the purchase of salt and other de-icing materials. These materials are made available to the Winter Service Contractor. It is the Winter Service Contractor's responsibility to manage these materials on a day to day basis, and to notify the Client Controller should stocks fall below the necessary levels.

The City Council currently purchases salt as part of a consortium. This arrangement is consistent with the principles of Best Value and will be monitored as part of the annual review process to ensure value for money.

The use of salt and other de-icing materials will be monitored to ensure compliance with the principles of sustainability, that is, does the use of such materials create a drain on the planet's resources.

- Manage the purchase, storage, placement, filling and re-filling, and removal of salt bins consistent with the principles of Best Value and sustainability.

It is not economically viable to treat the complete highway network to prevent the formation of ice, or clear snow. Therefore the City Council places bins containing either salt or grit at locations throughout the City.

These grit bins are placed at strategic points which are not covered by the treatment routes. Each location is assessed and scored against a set of criteria to determine its suitability. The bins will not be placed at locations which do not satisfy the criteria to ensure that resources are not allocated inappropriately.