RSDA/CSS
CODE OF PRACTICE FOR
SIGNING AT SURFACE
DRESSING SITES
RSDA/CSS
CODE OF PRACTICE FOR SIGNING AT SURFACE DRESSING SITES

Published by CSS

March 2008

This document is published in an electronic format and a PDF file maybe downloaded from the Society’s website css@wiltshire.gov.uk or www.rxda-gb.co.uk

©

Whilst the Society understands that every care has been taken to ensure the accuracy of the contents of this publication, no responsibility for any loss occasioned to any person acting or refraining from action as a result of any statement in it, can be accepted by the Society and (any of) the Author(s). The publication is not intended to be an exhaustive review of the subject and it is incumbent upon any person to undertake his own research and formulate its own conclusion.

All rights including translation reserved. No part of the publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means of electronic, mechanical, photocopying, recording or otherwise, without prior permission of the publishers.
CODE OF PRACTICE FOR SIGNING AT SURFACE DRESSING SITES

This document is published jointly by the Road Surface Dressing Association and the County Surveyors’ Society. It is embedded in Chapter 8 of the Traffic Signs Manual 2006 [see D3.29.1 & O3.16.1] and the Highways Agency, the Department for Regional Development (Northern Ireland), Transport Scotland and the Welsh Assembly Government have been consulted in its preparation. It has been designed in accordance with the principles set out in Chapter 8 of the Traffic Signs Manual and should be seen as a supplement to that document.

Whilst every care has been taken to ensure the accuracy of the contents of this publication, no responsibility for any loss occasioned to any person or organisation acting or refraining from action as a result of any statement contained within it can be accepted by the joint authors. The publication will be kept under review and may be subject to amendments or additions in the light of experience.

All rights, including translation, are reserved. No part of the publication should be reproduced, stored in a retrievable system or transmitted in any form or by any means electronic, mechanical, recording or otherwise without the prior permission in writing of the publishers.
1. This Code deals only with the signing and guarding of surface dressing works and does not cover hazards such as the presence of overhead electricity lines, preparatory works, the control of material delivery vehicles, or matters relating to noise and fumes, all of which should be considered as part of the risk assessment for each location.

2. The surface dressing operation is a mobile operation travelling at speeds of up to 6 mph. In this respect, it is dissimilar to almost all other highway/road works.

2.1 The purpose of this Code of Practice is to promote uniform standards of signing for surface dressing operations throughout the United Kingdom. The Code is intended to ensure that signing is to a standard consistent with highway/road authorities’ and contractors’ statutory responsibilities to protect both the public and their employees whilst travelling or working on the road network.

2.2 Although the four examples illustrated in this Code will cover the majority of site conditions, it has always to be remembered that a risk assessment should be made for each and every site. This may result in the need for additional signing or other safeguards. Generic risk assessments may be adequate on lower traffic category sites provided that QA procedures allow site variations to be made.

2.3 Whatever method of traffic control or management is adopted, the effect which it will have in terms of hazards or inconvenience to pedestrians, motorists, operatives and properties, including those on diversionary routes where these are signed, must be fully considered and the method adopted based on the least risk after balancing all the relevant factors.

3. At surface dressing sites, the free movement of vehicles is likely to be impaired. Although delays may be of short duration and may not impose the same restrictions as other roadworks, measures should be taken to ensure that the effects of surface dressing works are reduced to a minimum. There is a statutory responsibility to warn road users of obstructions in connection with roadworks, including surface dressing.

4. The roadworks sign (number 7001) and the loose chipping with advisory speed limit sign should be located well in advance of the start of the dressing operation in accordance with Table A1.1 a similar table is also reproduced after the index in the Safety at Street Works and Road Works, code of practice. A copy of that table entitled “Size and Siting Distance: Details of Signs and Cones” appears at the end of this Code. As well as indicating the minimum distance of the first sign ahead of the roadworks, the table indicates the size of sign required, which is related to the type of road and any speed restrictions which apply to it. Notwithstanding the official guidance in these tables it is recommended that the minimum size of signs on surface dressing sites other than all purpose dual carriageway roads with speed limit of 50 mph or more (High Speed Roads) or motorways should be 750 mm. High Speed Roads and Motorways should subject to a site specific risk assessment and managed by a Traffic Management Organisation registered to National Highway Sector Scheme (NHSS) 12a & 12b.
4.1 The diagrams in this Code deal with three categories of road and signing after the completion of works, namely:

1. Carriageways wider than 7.3 metres.
2. Carriageways between 6 metres and 7.3 metres.
3. Carriageways less than 6 metres wide*.
4. Signing after the works have been completed and before the replacement of road markings

*This because it is considered that the nature of surface dressing plant makes it impractical for traffic to safely pass through the site.

- all subject to site risk assessment. (For example, a 7.4 metre cul-de-sac would not need to be treated in accordance with Diagram 1.)

Dual carriageways and motorways should be subject to specific risk assessment in accordance with Chapter 8 of the Traffic Signs Manual D6.

4.2 It will be noted that in these diagrams the “D” distance (see the siting and distance table at the back of this Code) may need to be increased in order that the other advanced signs may be evenly spaced, in the order indicated, starting with the advisory speed limit mounted below a loose chipping sign. This should not be less than the distance appropriate to the normal traffic speed for the road in question as indicated in the table for each example. This is to enable motorists to understand both what is happening ahead and to slow down in good time.

4.3 All signs should comply with the provisions of the Traffic Signs Regulations and General Directions 2002 (or any later editions). If a sign is not contained within these Regulations, it should only be used with the approval in writing of the Client’s Representative or in the case of Trunk Road works, the Overseeing Organisation. The new sub – plate to the loose chipping sign shown in paragraph 14 has been approved by the Dept for Transport.

4.4 All supervisors responsible for signing at surface dressing sites should have a copy of this Code, and be trained and certified for signing at surface dressing sites to the requirements of National Highway Sector Scheme 13a.

5. Chapter 8 of the Traffic Signs Manual (Department for Transport 2006) is the nationally recognised code of practice for all aspects of signing and management of traffic at static and mobile roadworks, designed to help all those involved to meet their statutory obligations. Although Chapter 8 gives authoritative advice, it does not have any statutory status, but all who work on the road network should comply with the principles outlined in the Chapter, and establish safe methods of working. (The book entitled “Safety at Street Works and Road Works” has statutory backing only for “Street Works” in England and Wales, and “Road Works” in Scotland. In Northern Ireland Chapter 8 does have statutory status under the Roads (NI) Order.)
5.1 Where alternate one-way working is introduced, it must be remembered that the desirable minimum width for traffic should not be less than 3.25 metres with an absolute minimum of 3 metres. In order to encourage the reduction in speed of passing traffic, the width of road available to that traffic should be kept to the minimum recommended. In the unlikely event of the road carrying only cars and light vans, the absolute minimum may be reduced to 2.5 metres.

5.2 The Traffic Signs Manual suggests that a separation distance of 1.2 metres is maintained between roadworks and moving traffic when speeds are 50 mph or more. This lateral clearance can be reduced to 0.5 metres where traffic speeds are 40 mph or less. Where this reduced lateral clearance is unobtainable, it is essential to operate in accordance with Section D7 Convoy Working of the Manual, which under these circumstances requires that passing traffic speeds ARE REDUCED TO LESS THAN 10 MPH.

5.3 Where the Highways / Roads Authority wishes to adopt mandatory speed limits during surface dressing operations, they should have regard to the provisions of the Road Traffic Regulation Act 1984, Part 2, Section 14.

6. Where surface dressing is being undertaken on motorways or trunk roads the provisions for traffic management should be subject to a site specific risk assessment and designed in accordance with Section D6 of Chapter 8. A specialist contractor accredited the National Highways Sector Scheme 12 should be employed.

7. No road which has been surface dressed, should be reopened to traffic travelling at normal speeds limited only by national or local speed limits until it has been swept. Loose chipping signs (7009) with 20 mph advisory sub-plates (see recommendation in para 14 for additional sub-plate) should remain in place and be maintained until such time as all surplus chippings have been removed from the surface. The period of time during which loose chipping signs will need to remain in position will depend largely on the type of dressing and the volume of traffic. Regular inspections by installer’s representative should be carried and sweeps organised as necessary on the basis of the following guidelines:

- 1st Sweep within 24 hours of installation
- 2nd Sweep within 3 days of installation
- 3rd Sweep within 10 days of installation

The aftercare signage should be maintained until a “final” inspection had been carried out either jointly by the installer / client or by a nominated competent person. The final inspection should be carried out within 30 days of installation. A satisfactory final inspection is the point at which the Highway/Road Authority resumes responsibility for the site. All signs used must be made of retro reflective materials to comply with Traffic Signs Regulations & General Directions 2002 Schedule 17. An example of the layout is shown in Diagram 4.

8. Traffic signs, barriers and cones should be removed as soon as they cease to be needed, as they in themselves constitute an obstruction and are contrary to the provisions of Section 174 of the Highways Act 1980.

9. Procedures should be adopted by the Client to replace road markings, particularly mandatory markings, as soon as possible and for “NO ROAD MARKINGS” signs to remain in place until the new markings are completed. Where double white lines have been obliterated signing to Diagram 632 is required, on both sides of road, at start and end of obliterated lines.
10. A “contractors board” may be required under the contract during and after the works.

11. Accidents sometimes occur because motorists ignore the warning signs provided. Accidents of this nature can result in claims against the highway/road authority and contractor. Dealing with such claims is much easier if an authenticated record sheet of the type, size and location of all signing provided is kept for each site. **However it should be remembered that the primary aim is to prevent accidents occurring in the first place.**

12. Both highway/road authorities and contractors have responsibilities for the safe signing of roadworks. If there is any doubt about what is required at any site, discussions with line management should take place and a written safe working practice instruction prepared.

13. Dimension D in the siting and distance table at the back of this code may need to be increased in order to accommodate the first Loose Chippings sign and its attendant Advisory Speed Limit sub-plate at the correct location. This sign and plate should be sited at a distance X in advance of the start of the works (see diagram towards the rear of this code.) Dimension X is given in the table below for various normal traffic speeds (not necessarily the same as the speed limit). It is required to give motorists sufficient time to understand what is happening ahead and to slow down.

<table>
<thead>
<tr>
<th>Traffic Speed</th>
<th>“X” dimension — distance from first Loose Chipping Sign and Advisory Speed Limit plate to the start of works (see diagrams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 mph</td>
<td>40 metres</td>
</tr>
<tr>
<td>40 mph</td>
<td>100 metres</td>
</tr>
<tr>
<td>50 mph</td>
<td>150 metres</td>
</tr>
<tr>
<td>60 mph</td>
<td>200 metres</td>
</tr>
</tbody>
</table>

14. To make clear to the motorist the risk of skidding which can be caused by loose chippings on the surface in the early life of a dressing an additional sub-plate is added over the recommended speed limit, reading “Skid risk” as illustrated in the diagram below.
THE EXAMPLES

Diagram 1

This is for carriageways of 7.3 metres or wider. With roads of this width, it is possible to operate alternate traffic flow controlled by “stop” and “go” signs past the surface dressing train (see Section 5.1). Although this will be at speeds of less that 10 mph, cones of the appropriate size separating the traffic from the works should be placed at about 9 metre intervals.

The roadworks sign (number 7001) and the loose chipping with advisory speed limit sign and risk of skidding sub-plate (see para 14) would be located well in advance of the start of the dressing operation in accordance with Table A1.1 which is also reproduced in metric form, in the Safety at Street Works and Road Works, code of practice. A copy of that table entitled “Size and Siting Distance: Details of Signs and Cones” appears at the end of this Code. As well as indicating the minimum distance of the first sign ahead of the roadworks, the table indicates the size of sign required, which is related to the type of road and any speed restrictions which apply to it. However it is recommended that for this type of surface dressing site a standard 750 mm size sign is adopted on surface dressing sites see note 4 above.

The length of the closure must be sufficient to allow for the operational requirements of the surface dressing train and should take account of the traffic flows involved to keep delays to an acceptable maximum. The length of a section of closure should not normally exceed 500 metres, but on lightly trafficked roads, lengths of 1000 metres could be acceptable if considered as part of the risk assessment.

NOTE: Where “Repeater sign Every 250m max” is mentioned in diagrams 1 and 1a attached, please note that this wording is NOT to be added to the sign on site.
Dimension “X” - distance from first loose chipping sign and advisory speed limit to start of the works

| Dimension “D” - Refer to table at the head of this code (Page 11) but note dimension may be varied in accordance with the text and table on page 5 |
|-----------------|--------------------------|
| 50 metres       | 30 mph                   |
| 100 metres      | 40 mph                   |
| 150 metres      | 50 mph                   |
| 200 metres      | 60 mph                   |

Notes:
1. Approach signing may need to be repeated on the offside
2. Distance plates and additional 7001 signs may be required on high speed roads
3. The traffic management design must take account of both speed and volume of traffic
4. Radio communication should be provided between Stop and Go operators
5. Additional warning signs required to indicate overhead cables as necessary
6. Loose chipping signs should be retained on completion of works with 20 mph speed
   up plates at 400m pending final sweep (refer to Diag 4)
7. Where the distance between the start of the works and the Surface dressing machines
   exceeds 500m the advanced signing arrangement must be repeated
8. A "look-out man or men" must be employed to ensure that all site personnel together with associated
   plant and vehicles are kept clear of passing traffic
9. Responsibility for sign 7012 after dressing will revert to the Highway Authority or contractor responsible for line replacement

RSDA/CSS

Code of practice - Traffic management for Surface dressing operations

For 2 Lane carriageways exceeding 7.3 metres

Date 03/04/2008

Scale Not To Scale

Drawing No. Diagram 1
RSDA/CSS

Code of practice - Traffic management for Surface dressing operations
Convoy Working for 2 Lane carriageways exceeding 7.3 metres

Notes:
1. Approach signing may need to be repeated on the offside
2. Distance plates and additional 7001 signs may be required on high speed roads
3. The traffic management design must take account of both speed and volume of traffic
   and employ convoy working if no safety zone is available (see TA 63/87)
4. Radio communication should be provided between Stop and Go operators and Convoy vehicles
5. Additional warning signs required to indicate overhead cables as necessary
6. Loose chipping signs should be retained on completion of works with 20 mph speed
   sup plates at 400m pending final sweep (refer to Diag 4)
7. Where the distance between the start of the works and the Surface dressing machines
   exceeds 500m the advanced signing arrangement must be repeated
8. A "look-out man or man" must be employed to ensure that all site personnel together with associated
   plant and vehicles are kept clear of passing traffic
9. Responsibility for sign 7012 after dressing will revert to the Highway Authority or contractor responsible for line replacement

Date 03/04/2008
Scale Not To Scale
Drawing No. Diagram 1a
Diagram 2

This is for carriageways between 6 and 7.3 metres. Such sites are treated as mobile roadworks, the surface dressing train and the “stop” and “go” operatives moving along the site until the section has been completed (see Section 5.1). The first road works sign should be placed at Dimension D before the start of works, as is the case in Diagram 1, but this time with the addition of a Mobile Road Works sub-plate.

In order to operate this signing arrangement, passing traffic speeds must be limited to 10 mph maximum. In order to achieve this, convoy working to the requirements of section D7 of Chapter 8 will be required.

The advance signing arrangement recommended should be repeated, in both directions, when the stop/go sign operators have progressed to a distance in excess of 500m along the site from the initial signing, or where the horizontal or vertical road alignment (i.e. bends/summits) require this. These signs will remain in place pending completion of the section.

Additional loose chipping signs, together with advisory speed sub-plates, should be placed at about 100 metre intervals facing in both directions. Throughout the whole length of the site, therefore, there will be warning of the surface dressing operation. Where roads are winding or with limited forward visibility for some other reason, it may be necessary to provide additional warning signs as the works progress through the site.

NOTE: Where “Repeater sign Every 250m max” is mentioned in diagram 2 attached, please note that this wording is NOT to be added to the sign on site.
Notes:
1. Approach signing may need to be repeated on the offside.
2. Distance plates and additional 7001 signs may be required on high speed roads.
3. The traffic management design must take account of both speed and volume of traffic.
4. Radio communication should be provided between Stop and Go operators and Convoy vehicles.
5. Additional warning signs required to indicate overhead cables as necessary.
6. Loose chipping signs should be retained on completion of works with 20 mph speed.
   sup plates at 400m in the final sweep (refer to Diagram 4).
7. Where the distance between the start of the works and the Surface dressing machines
   exceeds 800m the advanced signing arrangement must be repeated.
8. A "look-out men or men" must be employed to ensure that all site personnel together with associated
   plant and vehicles are kept clear of passing traffic.
9. Responsibility for sign 7012 after dressing will revert to the Highway Authority or contractor responsible for line replacement.

RSDA/CSS

Code of Practice - Traffic Management for Surface Dressing Operations

For 2 Lane carriageways 6.0 – 7.3 metres

Date 03/04/2008
Scale Not To Scale
Drawing No. Diagram 2
Diagram 3

For carriageways less than 6 metres wide. Because it is not safe for traffic to attempt to pass the surface dressing train, work on these sites are regarded as mobile roadworks, with roads being effectively closed between junctions or other places where traffic can safely pass the surface dressing train.

Temporary closure of this type will allow works to be executed in the shortest possible time. Because delays to traffic may be greater than those occurring on wider roads, advance warning of likely delays should be given several days ahead of the anticipated spraying date and/or the motorist should be advised of possible delays well in advance of the site works.

Contingency plans should be drawn up in advance for opening the road in the event of an emergency, for example, to allow the passage of fire or ambulance vehicles, should constantly be updated as works progress through the site. Wherever practical, short diversions should be signed where these are safe and otherwise suitable.

It is recommended that the management of road closures be carried out in accordance with the following protocol:

PROTOCOL FOR TYPE 3 ROAD SURFACE DRESSING PROCEDURE – informal road closure

- Surface dressing schedule to be published on Highway / Roads Authority web site.
- Advance press release with reference to website and schedule
- Submit individual streetworks notice for each road to streetworks team. (to comply with NRSWA/TMA)
- Identify roads requiring Temp Road Closure and prepare S14(2) Notices ( see below ) for each road
- One month before commencement of programme advise emergency services, relevant bus companies and district council (refuse collection service etc) of programme and likely delays and closures
- Weekly update notice to emergency services, relevant bus companies and district council
- Letter drop to affected properties 1 week prior to work.
- Advance Warning Signs erected on site on day preceding work.
- Daily whereabouts updated.
- Copies of S14(2) notice will be dated and displayed at each end of the site on the relevant day

NOTE: Where “Repeater sign Every 250m max” is mentioned in diagram 3 attached, please note that this wording is NOT to be added to the sign on site.
Temporary Road Closures for Type 3 Roads Only

Having established the need for a temporary road closure considering chapter 8 and health and safety requirements:-

- Each road will be closed by a section 14(2) road traffic regulation act 1984 (RTA) 5 day notice.

- A copy of the notice will be displayed at each end of the site on the relevant day.

- In particular circumstances closure consultation with the effected community should be considered.

Note: When a full (formal) closure is required a section 14(1) RTA order must be used. This normally requires at least 6 weeks notice to process.

**NOTE:** Where “Repeater sign Every 250m max” is mentioned in diagram 3 attached, please note that this wording is NOT to be added to the sign on site.
Notes:
1. Approach signing may need to be repeated on the offside
2. Distance plates and additional 7001 signs may be required on high speed roads
3. The traffic management design must take account of both speed and volume of traffic
4. Radio communication should be provided between Stop and Go operators
5. Additional warning signs required to indicate overhead cables as necessary
6. Loose chipping signs should be retained on completion of works with 20 mph speed
   up pistes at 400m pending final sweep (refer to diag 4)
7. Where the distance between the start of the works and the Surface dressing machines
   exceeds 500m the advanced signing arrangement must be repeated
8. A "look-out man or man" must be employed to ensure that all site personnel together with associated
   plant and vehicles are kept clear of passing traffic
9. Responsibility for sign 7012 after dressing will revert to the Highway Authority or contractor responsible for line replacement
Diagram 4

After surface dressing operations have been completed, there is a period of time during which the speed of traffic over freshly completed surface dressing should be controlled pending the thorough sweeping of the site. It will be noted that recommended maximum speeds of 20 mph replace the maximum speed of 10 mph required to meet the provisions of the Traffic Signs Manual.

The signs approaching the works from either end or from side junctions should be evenly spaced in the order indicated. Where stop and give way markings have been covered by surface dressing, temporary signs must be erected immediately.

The loose chippings signs and recommended speed plates should remain in place until the “final” inspection (see note 7 above) at which point all the signs should be removed. This interval of time will be dependant upon the volume and speed of the traffic, the type of dressing undertaken and the stabilisation period of the dressing.

All signs used must be made of retro reflective materials to comply with Traffic Signs Regulations & General Directions 2002 Schedule 17.

NOTE: Where “Repeater sign Every 250m max” is mentioned in diagram 4 attached, please note that this wording is NOT to be added to the sign on site.
Notes:
1. No overtaking signs are to be erected where double white lines are removed.
2. Essential Roadmarkings to be replaced as soon as possible and certainly within 7 days of completion of the dressing. All other markings should be replaced as soon as possible.
3. Temporary signs must be erected immediately to warn motorists of NO "STOP" OR "GIVE WAY" MARKINGS.
4. Loose chipping signs and 20 mph sup plates (7008 and 513.2) should be removed after final sweeping when no loose chippings are evident.
5. No road marking signs should incorporate relevant sup plates as required.

Code of practice - Traffic management for Surface Dressing operations
Signing after completion of Surface Dressing - Prior to final sweep and Roadmarkings

Dimension "X" - distance from first loose chipping sign and advisory speed limit to start of the works

<table>
<thead>
<tr>
<th>Traffic Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 metres</td>
</tr>
<tr>
<td>100 metres</td>
</tr>
<tr>
<td>150 metres</td>
</tr>
<tr>
<td>200 metres</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Traffic Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 mph</td>
</tr>
<tr>
<td>40 mph</td>
</tr>
<tr>
<td>50 mph</td>
</tr>
<tr>
<td>60 mph</td>
</tr>
</tbody>
</table>
### SIZE AND SITING DISTANCE: DETAILS OF SIGNS AND CONES

<table>
<thead>
<tr>
<th>Type of road</th>
<th>Minimum and normal Maximum siting Distance (D) of first sign in advance of lead-in taper (metres)</th>
<th>Minimum Clear Visibility To first Sign (metres),</th>
<th>Minimum Size of Signs (mm)</th>
<th>Minimum Height of Cones (mm)</th>
<th>Details of lead-in cone tapers (but see Note 2 below)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Width of hazard (metres)</td>
<td></td>
<td></td>
<td></td>
<td>Width of hazard (metres)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>All-purpose single Carriageway road, urban Restricted to 30 mph or less</td>
<td>23 to 46</td>
<td>60</td>
<td>600</td>
<td>450</td>
<td>Length of taper (T) in metres</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum No of cones</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum No of lamps at night</td>
</tr>
<tr>
<td>All-purpose single Carriageway road restricted to 40 mph or less</td>
<td>46 to 110</td>
<td>60</td>
<td>750</td>
<td>450</td>
<td>Length of taper (T) in metres</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum No of cones</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum No of lamps at night</td>
</tr>
<tr>
<td>All-purpose dual Carriageway road restricted to 40 mph or less</td>
<td>110 to 275</td>
<td>60</td>
<td>750</td>
<td>450</td>
<td>Length of taper (T) in metres</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum No of cones</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum No of lamps at night</td>
</tr>
<tr>
<td>All-purpose single Carriageway road restricted to 50 mph or more</td>
<td>275 to 458</td>
<td>75</td>
<td>750</td>
<td>450</td>
<td>Length of taper (T) in metres</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum No of cones</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum No of lamps at night</td>
</tr>
<tr>
<td>All-purpose dual Carriageway road restricted to 50 mph or more</td>
<td>732 to 1610</td>
<td>105</td>
<td>1200</td>
<td>750</td>
<td>Length of taper (T) in metres</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum No of cones</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum No of lamps at night</td>
</tr>
</tbody>
</table>

**NOTES**

1. On roads with speed limits of 50 mph or more, all advance signs should have plates giving the distance to the work in yards or miles. 2 Lead-in tapers used with traffic control and all exit tapers shall be about 450 to the kerb line with cones spaced 1.2 metres apart

3. The maximum spacing distance of cones in longitudinal lengths of coning shall be 9 metres but no less than 2 cones shall be used in any length between tapers

4. The range of siting distance (D) is given to allow the sign to be placed in the most convenient position bearing in mind available space and visibility for drivers

5. It may be appropriate to use the next larger size of cone in lead-in tapers, ie 750 mm cones in tapers where 450mm ones are indicated in the table, also 1 metre high cones where 750 mm ones are shown