



ENVIRONMENT & PUBLIC PROTECTION

**HIGHWAY MANAGEMENT
AND
MAINTENANCE PLAN**

April 2016

FOREWORD

Bracknell Forest Council has a statutory duty to manage and maintain the (public) highway network within the Borough. The network is the single most important and valuable asset managed by the Council. Well maintained highways are essential places where our residents and visitors live and travel upon. The network contributes to delivery of the Council's strategic objectives and the shared priorities of national and local government.

Efficient transport links are vital for a thriving population and economy, providing access to employment, education, healthcare, retail outlets, leisure and to all the other services and supplies we rely upon to support our needs. Maintenance of the network is vital to ensure it can continue to provide the principal element of the overall transport network.

The Council's Highway Management and Maintenance Plan (HMMP) provides guidance on the policies and procedures informing our highway maintenance practices, consistent with the Council's Vision and Values. It is based upon the Codes of Practice published by the Roads Liaison Group with the support of the Department for Transport, which the Council adopts subject to our local variations described in this HMMP.

- "Well-lit Highways - Code of Practice for Highway Lighting Management", published in November 2004 (as updated).
- "Well-maintained Highways - Code of Practice for Highway Maintenance Management", published in July 2005 (as updated)
- "Management of Highway Structures - A Code of Practice" published in September 2005 (as updated).
- Management of Electronic Traffic Equipment 2011

The HMMP recognises that our highway maintenance cannot operate in isolation from the Council's other functions and responsibilities. The underpinning strategy demands a logical and systematic approach to achieve value for money and continuous improvement. It encompasses our statutory duties, the wish to maintain and enhance the value of the network asset and the necessity to be responsive to the needs of the community.

Executive Member for Planning & Transportation

INTRODUCTION

The highway network is a key community asset, supporting both the local and national economy, contributing to the character and environment of the Borough. A well maintained network supports community mobility and accessibility essential to the wider aspirations of sustaining an inclusive society. The singular importance of management and maintenance of the highway network, for all categories of users, places an increasing demand on management systems to support service delivery.

The Council has a statutory duty, under the Highways Act 1980, to maintain the highway network within Bracknell. Management and maintenance of the network is the responsibility of the Highways Asset Management Group within the Environment, Culture and Communities Department. The Council maintains a network of approximately 430 kilometres of road, 700 kilometres of footpaths and cycle ways, thousands of street lights and signs and over 22,000 roadside/footway gulleys. It also maintains hundreds of highway structures including our bridges, underpasses, and other highway structures. All of these must be maintained in a safe condition in spite of the increasing pressures created by increasing traffic volumes, heavier and larger lorries and works carried out by public utilities.

The Highways Management and Maintenance Plan (HMMP) describes the policies, strategies and processes which shape the way the Council will develop and deliver its highway network maintenance service. It is linked to the Environment, Culture and Communities Department's Service Plans and to the Council's Local Transport Plan 3. It aims to deliver a safer highway network with improved travelling conditions for all users and to take greater care of the environment.

The Codes of Practice, listed above, identify three core objectives of highway maintenance:

- Safety
- Serviceability
- Sustainability

The aims of this HMMP may be summarised as:

- Maintaining safety for all users of the network.
- Maintaining the value of the network asset.
- Ensuring consistent and appropriate maintenance standards throughout the network with regard to strategic importance and usage.
- Maintaining, so far as possible, safe and efficient traffic movement throughout the Borough by coordinating works in the highway.
- Ensuring optimum use of available funds.
- Facilitating technical and financial monitoring to establish network condition trends and assessing performance against expenditure.
- Ensuring that all highway maintenance is carried out with due regard for the community served and the local environment.
- Implementing the recommendations and principles outlined in the Codes of Practice and continuing development of our current systems and practices.
- Promotion of the constant review of policies and standards to ensure continual development of network maintenance strategies.
- To provide a systematic approach to decision-making within a consistent framework of policies, standards and procedures.
- To provide a uniform and common basis for assessing maintenance needs and resource requirements.

All our highway management and maintenance activities are shaped in the first instance by the legal framework which places statutory duties and powers on all highway authorities. The following Acts and Regulations place mandatory requirements on the Council (this is not an exhaustive list):

- Highways Act 1980
- Environmental Protection Act 1990
- New Roads and Street Works Act 1991
- Road Traffic Reduction Act 1997
- Road Traffic Reduction (National Targets) Act 1998
- Control of Pollution Act 1974
- Land Drainage Act 1991
- Health and Safety at Work Act 1974
- Traffic Signs Regulations and General Directions
- Environment Act 1995
- Countryside and Rights of Way Act 2000
- The Noxious Weeds Act 1959
- Road Traffic Act 2000
- The Transport Act 2000
- Rights of Way Act 1990
- Disability Discrimination Act 1995
- Human Rights Act 1998
- Freedom of Information Act 2000
- Management of Health and Safety at Work Regulations 2015
- Construction (Design and Management) Regulations 2015
- Railways and Transport Safety Act 2003
- Traffic Management act 2004
- Local Authorities (Transport Charges) Regulations 1998

Other guidance and advice on management and implementation of highway maintenance include:

- The Local Government Associations' Code of Practice on Highway Maintenance (LGACP)
- European and British Standards
- Pesticides Regulations
- European Noise Directive
- Department for Transport Design and Advice Notes
- The Woolf Reforms
- Well-maintained Highways – Code of Practice for Highways Maintenance Management 2005
- Well-lit Highways – Code of Practice for Highway Lighting Management 2004
- Management of Highway Structures – Code of Practice 2005
- Highway Risk and Liability Claims 2005
- Management of Electronic Traffic Equipment 2011
- Maintaining a Vital Asset 2005

HIGHWAY NETWORK INVENTORY AND HIERARCHY

Inventories

The Highways Act 1980 requires highway authorities to maintain a register of roads maintainable at public expense. There is a further requirement under the New Roads and Street Works Act 1991 to maintain information for the purpose of:

- Identifying streets, described as ‘traffic sensitive’, where works should be avoided at certain times of day.
- Identifying structures under or over the street which need special consideration when work is planned.
- Identifying reinstatement categories used by Statutory Undertakers in their reinstatement of roads and footpaths.

All this information is maintained and updated on a regular basis to take into account new developments, changes or amendments to the network and is managed within the framework of the National Street Gazetteer (NSG) in a format that the Statutory Undertakers can access electronically.

Detailed inventories of the street lighting and structural assets are similarly maintained in electronic formats within the Highway Management System.

Network Hierarchies

The network hierarchy is the foundation of the maintenance strategy. The hierarchy adopted by the Council reflects the needs, priorities, strategic importance and actual use of each road in the network. The dynamic nature of the network is taken into account as the hierarchy is regularly reviewed to reflect changes in street characteristics and use.

The Code of Practice ‘Well-maintained Highways’, defines hierarchies for roads, paths and cycle ways as shown in Table 1, 2 & 3 below:-

Table 1 - Carriageway Hierarchy

Category	Hierarchy Description	Type of Road General Description	Detailed Description
1	Motorway A329(M)/ A329(O)	Limited access motorway regulations apply	Routes for fast moving long distance traffic. Fully grade separated and restrictions on use.
2	Strategic Route	Trunk and some Principal “A” roads between Primary Destinations	Routes for fast moving long distance traffic with little frontage access or pedestrian traffic. Speed limits are usually in excess of 40 mph and there are few junctions. Pedestrian crossings are either segregated or controlled and parked vehicles are generally prohibited.
3a	Main Distributor	Major Urban Network and Inter-Primary Links. Short-medium distance Traffic	Routes between Strategic Routes and linking urban centres to the strategic network with limited frontage access. In urban areas speed limits are usually 40 mph or less, parking is restricted at peak times and there are positive measures for pedestrian safety.

3b	Secondary Distributor	Classified Road (B and C class) and unclassified urban bus routes carrying local traffic with frontage access and frequent junctions	In rural areas these roads link the larger villages and HGV generators to the Strategic and Main Distributor Network. In built-up areas these roads have 30 mph speed limits and very high levels of pedestrian activity with some crossing facilities including zebra crossings. On-street parking is generally unrestricted except for safety reasons.
4a	Link Road	Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions	In rural areas these roads link the smaller villages to the distributor roads. They are of varying width and not always capable of carrying two-way traffic. In urban areas they are residential or industrial inter-connecting roads with 30 mph speed limits, random pedestrian movements and uncontrolled parking.
4b	Local Access Road	Roads serving limited numbers of properties carrying only access traffic	In rural areas these roads serve small settlements and provide access to individual properties and land. They are often only single lane width and unsuitable for HGVs. In urban areas they are often residential loop roads or culs de sac.

Table 2 - Footway Hierarchy

Category	Category Name	Brief Description
1a	Prestige Walking Zone	Prestige areas in towns and cities with exceptionally high usage.
1	Primary Walking Route	Busy urban shopping and business areas and main pedestrian routes linking interchanges between different modes of transport such as railways and underground stations, bus stops etc.
2	Secondary Walking Route	Medium usage routes through local areas feeding into primary routes, local shopping centres, large schools, industrial centres etc.
3	Link Footway	Linking local access footways through urban areas and busy rural footways.
4	Local Access Footway	Footways associated with low usage, short estate roads to the main routes and culs de sac.

Table 3 - Cycleway Hierarchy

Category	Description
A	Cycle lane forming part of the carriageway, commonly 1.5 metre strip adjacent to the nearside kerb. Cycle gaps at road closure point (exemptions for cycle access)
B	Cycle track, a route for cyclists not contiguous with the public footway or carriageway. Shared cycle/pedestrian paths, either segregated by a white line or other physical segregation, or un-segregated
C	Cycle trails, leisure routes through open spaces. These are not necessarily the responsibility of the highway authority.

These maintenance designations are not directly matched to the national classifications such as A, B, or C class roads and the required designations as stipulated by the New Roads and Street Works Act. It was never intended that these hierarchies be the same as they cover different aspects of network traffic and purpose. A reasonable correlation has been established, however, between these and other designations and shown in the schedule below.

Table 4 - Network Designation Categories and Road Lengths

	Road Hierarchy	2	3a	3b	4a	4b
		Strategic Route	Main Distributor	Secondary Distributor	Local Roads/ Inter-connecting	Local Access Road
National Road Classification						
Principal (A)		20	32	15		
Classified (B)				40	5	
Classified (C)				19	17	3
Unclassified				18	39	222

The network hierarchies adopted by the Council for highway maintenance purposes are based upon the recommendations of the Code of Practice ‘Well-maintained Highways’, but there are variations from the guidance to suit local circumstances. Experience of individual roads and their maintenance requirements guided by risk assessments have been used to develop the most appropriate hierarchy for Bracknell and this is detailed in Table 4.

Highway Inspections

A system of highway inspections is necessary to identify potential defects, the need for routine/planned maintenance work and unlawful obstruction/interference with the public highway. To ensure a consistent Borough-wide approach, a formalised system that details the frequency of inspections, the method of assessment, recording and repair of highway defects has been adopted.

Policy

- To carry out a range of technical surveys and safety inspections on the highway network to support a cost-effective maintenance regime.
- To carry our safety inspections on the highway network to ensure, so far as practicable, the safety of the public in their lawful use of the highways.

The minimum frequency of scheduled inspections is described in Table 5 below.

Table 5 - Scheduled Safety Inspection Frequencies

Category	Feature	Code of Practice Frequency	BFC Frequency
Roads			
2	Strategic Routes (Driven)	1 month	1 month
3(a)	Main Distributor (Driven)	1 month	1 month
3(b)	Secondary Distributor	1 month	3 month
4(a)	Local Interconnecting Roads	3 months	6 months
4(b)	Local Access Roads	1 year	
	Rural		6 months (1 year)
	Urban		1 year
Footways			
1a	Prestige Walking Route	1 month	n/a
1	Primary Walking Route	1 month	1 month + weekly patrol in Bracknell TC
2	Secondary Walking Route	3 months	4 months (3 Months)
3	Link Footway	6 months	6 months
4	Local Access Footway	1 year	1 year
Cycle tracks			
A	Part of Carriageway	As for Roads	As for Roads
B	Remote from Carriageway - Surfaced	6 months	1 year

The above number of inspections per year is an absolute minimum. If the Highway Asset Manager decides it necessary to increase the number of inspections per year, he shall issue the relevant instruction to do so.

All defects identified from scheduled and specific highway inspections shall be categorised into treatment types according to the severity of the defect as shown in Table 6 below. This prioritisation shall also determine the timescale for remedial works:

Table 6

Category 1A	Emergency situation for which an immediate response is required to make the defect safe within 1 hour of notification
Category 1B	Work to be completed within 24 hours of the date of inspection
Category 2	Work to be completed within 28 days of the date of inspection

Other minor defects not prioritised as above do not require any remedial works action and shall be monitored for deterioration or included in planned maintenance programmes.

Risk Assessment

Assessment of risk of each observed defect is a standard component of all highway safety inspections; categorisation will depend upon:

- The extent of the defect (depth, area)
- The location of the defect relative to highway features such as bends, junctions etc
- The location of the defect relative to use of the highway (particularly by vulnerable users) such as wheel tracks, cycle lanes, sight lines, cross fall of footways
- The relationship to other nearby defects, if any
- The expected weather conditions and seasons

Carriageway and Pavement Safety Investigation Levels

Table 7A - Carriageway

Hierarchy	Defect	Investigation Level	Action up to 0.25m ²	Action above 0.25m ²
2, 3 and 4	Pothole	>100mm	Cat 1	Cat 1
2 and 3	Pothole Edge failure Ironwork	50-100mm depth	Cat 2	Cat 1
4	Pothole	50-100mm depth	Cat 2	Cat 1
4	Edge failure Ironwork	50-100mm depth	Cat 2	Cat 2

Hierarchy	Defect	Investigation Level	All sizes
2, 3 and 4	Pot-hole Edge failure Ironwork	>100mm	1 hour (Cat 1A)
2, 3 and 4	Pot-hole Edge failure Ironwork	50-100mm depth	24 hours (Cat 1B)
2, 3 and 4	Pot-hole Edge failure Ironwork	40-50mm depth (following risk assessment)	28 days (Cat 2)

Table 7B - Pavements (Footways and Cycleways)

Hierarchy	Defect	Investigation Level	All sizes
1, 2, 3 and 4	Pot-hole Trip Tree root	>50mm depth	1 hour (Cat 1A)
1, 2, 3 and 4	Pot-hole Trip Rocking slab Tree root Ironwork	Between 20-50mm depth	24 hours (Cat 1B)

1, 2, 3 and 4	Pot-hole Trip Rocking slab Tree root Ironwork	Between 15-20mm depth (following risk assessment)	28 days (Cat 2)
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The Borough Council's carriageway and pavement investigation levels have been set with due regard to legal proceedings and either meet these levels or are higher. It must however be stressed that the "final intervention will be a matter of judgement".

Service Inspections

These will be carried out as appropriate as specifically indicated for the various highway functions.

Condition Surveys

These will be carried out as annual programmes to monitor the condition of the network, to prioritise larger programmes works and to contribute towards local and national performance measure (National Indicators). Details of the survey type and annual network coverage are listed below:

- Scanner – a single direction run on 100% of the classified (A, B and C) roads plus unclassified D roads.
- Coarse Visual Inspection (CVI) - 25% of the unclassified roads.
- SCRIM (Skid resistance) – 100% coverage of the classified (A, B and C) roads plus unclassified D roads.
- Footway Network Survey - 50% coverage of the entire footway network

Skid Resistance

The aggregate in the surface of the carriageway contributes to the skid resistance between vehicle tyres and the surface. When a new surfacing is laid, the aggregate properties are specified in accordance with national guidance with a view to providing an appropriate level of skid resistance throughout the life of the surface.

However, many factors can affect the rate and extent to which an aggregate will wear and/or polish under any particular circumstances. Accordingly, to ensure potential risks are managed effectively, there is a need to monitor skid resistance in service, particularly on the more heavily trafficked parts of the network. This document outlines Bracknell Forest Council's policy for monitoring and maintaining the skid resistance of the road network.

Relevant Standards and Documentation

The Code of Practice for Highway Maintenance Management
The Highways Agency Standard HD28/15 'Skid Resistance'

Policy

- This Policy follows recommendations for methods of working set down in Section 9.8 of the Code of Practice clarified to reflect the detailed procedures followed by Bracknell Forest Council. The Code of Practice in turn is based on the Highways Agency Standard HD28/15, Skid Resistance, modified for use on local authority highway networks.

- In Bracknell skid resistance testing is carried out routinely on the Critical Network (defined below) and additionally, on a site-specific basis, anywhere on the network where the surfacing is suspect or where there is a history of wet skid accidents.
- Any site identified as being “deficient”, as defined in paragraph 9.1, will be included in the annual surface treatment programme as a priority 1 site.

Routine Testing

Routine testing is carried out on a network basis using SCRIM according to the frequency and procedures stated in the Skid Resistance Procedure. Following data processing, a list of prioritised sites is produced for signing and/or further investigation as appropriate.

Site-specific testing

Site-specific testing is normally undertaken using the Grip tester or, occasionally, using the Pendulum skid resistance tester.

Critical Network

The critical network comprises all principal roads (local A roads), all B-class roads and those C-class and unclassified roads which are more heavily trafficked, have relatively high HGV flows, form major diversion routes or have characteristics similar to carriageway hierarchy 3a Main Distributor in the Code of Practice. In addition some routes with a known accident history shall be considered for routine assessment irrespective of their traffic loading or strategic importance.

Test Methods




- Network scale testing shall normally be carried out using the SCRIM. Raw data from this machine is processed by fitting against the referenced network of sections and comparing the levels with assigned investigatory levels.
- Shorter length site-specific surveys are normally tested using the Grip tester. As no network fitting is required, results can be reported soon after testing if necessary. For very small areas of carriageway, the Stanley portable skid resistance tester (pendulum test) may be used.
- Where necessary, the results are factored to adjust for seasonal variation to calculate equivalent mean summer skid resistance values.
- In all cases results shall be compared with defined investigatory levels of skid resistance to assess their significance and to take the appropriate actions as described in the procedure document.

Investigatory Levels

- The approach followed for setting investigatory levels is described below and Investigatory levels are reviewed following a site investigation and are set by staff authorised to do so.
- The Council has adopted the investigation levels set out in HD28/15 as the benchmark to carry out all future evaluation and assessment and in accordance with guidance these have been set at the lower end of the banding.
- The introduction of intervention levels for S2 bends with radius 250m to 500m has increased the number of sections on the network at investigation level from 15% to 30% - single carriageway. Under the previous investigation levels, these sections would be treated as non-event and historical evidence from the network suggest that these event sections can be set at a lowered investigation level.

Table 8

Site category and definition		Investigatory Level at 50km/h							
		0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65
B	Dual carriageway non-event								
C	Single carriageway non-event								
Q	Approach to and across minor junctions								
Q	Approach to and across major junctions and approaches to roundabouts								
K	Approaches to pedestrian crossings and other high risk situations								
R	Roundabouts								
S1	Bend radius <500m – dual carriageway								
S2	Bend radius <250m – single carriageway								
S2	Bend radius 250 to 500m - single carriageway								

1. Light shade indicates a lower Investigatory Level that will be appropriate in low risk situations, such as low traffic levels or where the risk present are well mitigated and a low incidence of accident has been observed. 
2. Dark shading indicates the range of Investigatory Levels that will generally be used for Principal Roads carrying significant traffic levels. 
3. Roads within each category with no exceptional risk of skidding accidents will be assigned the lowest Investigatory Level. It is envisaged that this will apply to the majority of sites. 
4. A reduction in Investigatory Level of 0.05 is permitted for categories A, B, C and S2 in low risk situations, such as low traffic levels or where the risk present are well mitigated and a low incidence of accidents has been observed.
5. Categories S1 and S2 bends are to be categorised as non-event where the speed limit is 40 mph and below.

Investigation Levels

On review of the sites that fall below investigation levels, deficient sites (Priority 1) are defined as:

- CSC is 20 units below the investigatory level
- CSC is 10 units below the investigatory level and with 1 wet accident
- CSC is at or below investigatory level and has 2 wet accidents
- For the non-target network 2 or more wet accidents will trigger investigation

Use of Warning Signs

The sheer number of sites identified at investigation level would lead to an overuse of warning signs. The Council will only use signs in exceptional circumstances and authorised by the Asset Manager.

WINTER SERVICE

Policy

- It is the Council's policy to attempt to maintain safe road surfaces at all times, as far as the resources available for undertaking this work permit. The objective of the Council is to initiate and manage procedures for dealing with weather emergencies, enabling as far as reasonably practicable, the safe movement of traffic on the highway network throughout the Borough.
- At times of predicted low temperatures, the Council aims to provide a winter maintenance service enabling as far as is reasonably practicable the safe movement of traffic on all A- and B-class roads and other well trafficked roads throughout the Borough (Primary routes).
- The Council has agreed that its Term Works Contractor will provide a standby and basic facility for a period of twenty-one weeks. This will commence on the second week in November and finish the last week of March.
- Pre-salting and snow clearance of the Primary routes will be carried out based on information received from the weather forecasting service. In certain circumstances, it may be necessary to apply salt after the formation of icy patches due to unforeseen circumstances such as burst water mains for example
- For precautionary salting, response and treatment times are 1 hour and 3 hours respectively.
- When snow falls and accumulates on highway surfaces, ploughs and other appropriate plant will be used to remove snow and salt will be spread to help melt the snow and to prevent ice forming on the highway network throughout the Borough.

The Council has a duty under section 150 of the Highways Act 1980 and section 111 of the Railway Safety Act 2003 to remove accumulations of snow:

"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 is not an absolute duty, given the qualification of "reasonable practicable". Given the scale of financial and other resources involved in delivering the Winter Maintenance Service and obvious difficulties in maintaining high levels of plant utilisation for specialist equipment, it is not practically possible either to:

- Provide the service on all parts of the network;
- Ensure running surfaces are kept free of ice or snow at all times, even on the treated parts of the network.

Roads will, therefore, be cleared of snow in descending order of priority until such time as all the Primary pre-salting routes are cleared. Then, if other roads are physically blocked or particularly hazardous and there is a need for access, further action will be taken.

The Council has agreed that the primary network of footways and cycleways in town centres, neighbourhood centres and outside schools and subway approaches will also be cleared of snow. Town and neighbourhood centres and footways outside schools and cycleway approaches to subways are to be cleared as part of the first and secondary priority snow clearing routes.

Salt bins are provided at specific locations where there is a need to undertake regular spot salting. The following criteria for the placement have been adopted whereby both points have to be met:

- (i) The bin should not be sited on a primary salting route unless it is intended for use on an adjoining road, which is not on the route.
- (ii) Only sited where there is a continuous steep and/or hazardous gradient of at least 10% (1 in 10) and where there are occupied buildings nearby.

Priorities for Winter Service treatment

All public highways within the Borough shall be allocated to one of three groupings depending upon the level of traffic carried and the strategic importance of the highway to the road network and the community.

Priority Treatment Categories

- **Priority 1 (Primary salting routes):** to be treated as routine pre-salting, in advance of any forecast frost, ice or snow.
- **Priority 2 (Secondary salting routes):** to be treated only where there is prolonged and persistent frost or ice which is expected to continue, or following snow.
- **Priority 3 (Tertiary salting route):** to be treated only after significant snow has fallen on carriageways where steep gradients or access issues are encountered.
- **Priority 4/5:** these would only be treated should resources become available and only after the Primary, Secondary and Tertiary Salting Networks are deemed 'clear'.
- **Core Network–** to be treated during conditions of extreme salt shortages or as directed by Central government.

Priority 1

The Primary salting network comprises all Category 2, 3a and 3b roads, and some heavily trafficked Category 4a roads. There are 3 'Priority 1' routes and the total length of the Primary Salting Network is 178 kilometres (111 miles) which represents 41% of the highway network. These include:

- Main traffic routes ("A" class roads)
- Main access routes to important industrial and large educational establishments
- Roads used as major bus routes - exceeding 50 buses/day urban 25 buses/day rural
- Roads passing through major shopping centres
- Other routes busy during peak traffic periods

Priority 2

The Secondary salting network comprises Category 4a residential roads. There are 2x 'Priority 2' routes and the total length of the Secondary Salting Network is 56 kilometres (35 miles) which represents 13% of the highway network. These include:

- Roads near other schools
- Roads used as other bus routes
- Roads passing through other shopping centres
- Lightly trafficked rural roads, which become hazardous if left untreated during prolonged periods of particularly severe weather conditions

Each Primary & secondary routes takes approximately 3 hours to complete gritting.

Category 1 and 2 footways (Primary footway salting network) including:

- Major pedestrian precincts and pedestrianised areas – other footways in Bracknell Town Centre will be salted locally as the need arises
- Busy urban areas, including footways leading to schools
- Cycleway approaches to subways

Priority 3

The Tertiary salting network comprises of roads due to their particular location or gradient, and are treated with smaller demountable gritters as resources allow in times of snowfall

- residential roads
- other pedestrian precincts and busy footways
- cycle tracks
- other public highways

In addition, 4th and 5th tier salting networks have been identified which would only be treated should resources become available and only after the Primary, Secondary and Tertiary Salting Networks are deemed 'clear'.

The Core network

The Core Network comprises strategic routes only. Salting of the Core Network will be implemented only in conditions of extreme salt shortages, or as directed by Central Government. At such times no other salting of routes takes place. The Core Network is detailed in Appendix (C). The total length of the Core Salting Network is 118 kilometres (73 miles). This represents 27% of the highway network.

Procedures

Detailed procedures relating to the Council's winter maintenance operations can be found in the following document: The Bracknell Forest Council Winter Service Plan. This document contains all details concerning the Council's winter maintenance procedures and is reviewed on an annual basis.

EMERGENCY RESPONSE

Introduction

Emergency repairs are necessary to keep the network safe and these works are generated from formalised inspections and reports from highway users.

Policy

- The Council as the Highway Authority shall be available day and night on a 24-hour basis.
- The Council shall attend emergencies where safety is an issue within 1 hour of notification and take such action as is necessary to make the area 'safe' as a minimum immediately on attendance.

Highway Claims

Third Party claims against the Council can be for either personal injury accidents or damage to personal property such as cars, clothing or premises, caused by alleged defects in the publicly maintainable highway or a nuisance caused or permitted by the Council.

Policy

- The Council will adopt a systematic process of highway safety inspections, intervention and repair to satisfy its statutory obligation under Section 58 of the Highways Act 1980.
- The Council will keep records of its inspections on the highway and construction and maintenance activities, together with any defect reports received from third parties.
- The Council's Insurers will determine liability using evidence to ascertain whether it has been negligent or in breach of its statutory duty. Such decisions will be based on legal principles.
- The Council must process all claims in accordance with the Civil Procedure Rules.
- The Council will investigate and consider each claim on its merits, irrespective of value. The Council will defend claims where liability is disputed. If liability is established claims will be settled promptly.
- The Council will act on a report of a highway defect in the interest of safety, without prejudice to any claim that might be associated with it.

Maintenance of Existing Highway Drainage Systems

Drainage systems for the sole purpose of accepting surface water run-off from the highway are the responsibility of the Highway Authority unless they have been specifically adopted by the statutory undertaker (Thames Water Utilities).

Highway drainage systems are installed to capture surface water run-off to reduce flooding and protect the fabric of the road.

Many open ditch drainage systems are historic and are the responsibility of the adjoining landowner for maintenance. The Council has powers to cleanse and restore the profile of these ditches as appropriate.

Policy

- To provide safe and efficiently maintained highway drainage structures.
- To identify through a system of regular inspections, highway drainage systems requiring maintenance.
- To prioritise any necessary maintenance (repairs) identified through the regular inspection regime or from other sources.
- To arrange for cyclic maintenance (cleaning) to be carried out at appropriate frequencies.

STREET LIGHTING

There is no statutory duty to provide street lighting but where it exists we have a duty to maintain it. There is no statutory requirement on local authorities to provide public lighting - Local authorities are empowered to provide lighting but are not duty-bound to do so. Highway authorities have a duty of care to road users however this does not imply any duty on the highway authority to keep the public lighting lit. However an authority who is responsible for the maintenance of public lighting should be able to demonstrate that they have systems in place to maintain lighting equipment in a safe condition, including the detection of dangerous equipment.

The majority of street signs are required to be illuminated where street lighting exists.

Policy

The Council has no statutory obligations to provide street lighting and the Council's approach to the provision of street lighting is as follows:

- Roads in rural areas are generally not lit except where problems of night-time road safety and perceived personal security exist.
- Roads in urban areas are generally lit.

Maintenance

All street lighting units managed by Bracknell Forest Council shall be maintained to a standard that ensures so far as reasonably practicable, their safe, economic, effective and reliable operation. We shall:

- Provide and maintain an up-to-date inventory of all illuminated street assets to assist satisfactory implementation and management of the network and to ensure accurate assessment of the electrical energy consumed.
- Carry out planned inspections that attempt to act in a preventative manner to reduce in-service faults. For example, we will operate a night-time scouting regime to detect street lighting faults; these will be carried monthly during the summer months and fortnightly during winter. Other inspections will take place on a cyclical basis on all electrical assets to test for satisfactory operation and verify the inventory details.
- We will operate reactive repair procedures to ensure prompt responses to identified defects within timescales appropriate to the problem.

Maintenance of Existing Road Markings

The objective of road markings items is to define carriageway lanes and edges, warning, parking and waiting restrictions and to convey 'Give Way' and other instructions to road users in a manner clearly visible both by day and by night.

Policy

- The Council shall identify road markings requiring maintenance using a system of regular highway inspections.
- The Council shall consider for renewal road markings on category 2, 3a and 3b roads, pedestrian crossings and at known injury accident sites when more than 30% (approximately) of their area becomes ineffective. Road markings on other roads shall be replaced when they have become ineffective.

Maintenance of Non-Illuminated Traffic Signs

The Council shall clean all signs on roads every year. Signs that require additional cleaning shall also be identified using a system of regular highway inspections.

Maintenance of Existing Reflective Studs

Policy

The Council shall identify reflective studs requiring maintenance using a system of regular highway inspections. The Council shall consider replacement of reflective studs when more than 10% are missing or defective.

Fencing (including Safety Barriers)

In general the decision to fence land rests with the owner and occupier of the land fronting onto the highway, although in most locations he will be liable in negligence if damage is caused by his animals straying onto the highway.

The Council on the other hand has no general obligation to fence off its highways, although there is a power to fence highways in Section 80, as modified, of the Highways Act 1980. Any fencing along the boundaries of the highway is therefore generally the responsibility of the adjoining landowner/user. In some circumstances, however, fencing for the protection of wildlife may be the property of the Council.

Fences may be installed by the Council for the protection of drivers and/or pedestrians either by segregation and channelling of pedestrians to a safe crossing point or by deflecting vehicles back onto the carriageway. Fences may also be used to define the edge of carriageway and/or the boundary of an adjacent property owner's land. Fences covered under this policy include steel safety fences, pedestrian guard rail, concrete barriers, fences (excluding safety fences), walls, anti-glare screen fences and environmental barriers.

Policy

- The Council shall ensure that all fencing owned as the highway authority is inspected in accordance with the Inspections Policy. Where remedial works have been identified to any fencing owned, these shall be prioritised for repair.
- Where remedial works have been identified to any fencing not owned by the highway authority, these shall be referred to the owner.
- The Council does not clean or paint steel fences/railings.
- The Council shall clean all chevron markings on safety barriers in accordance with the Maintenance of Non-Illuminated Traffic Signs Policy.

HIGHWAY VERGES

The highway verge comprises of the generally unsurfaced areas of the highway within the limits of the defined highway. Highway verges are generally un-trafficked although they may be used by pedestrians and equestrians for passage.

Highway verges contain significant quantities of street furniture and signing, as well as trees and shrubs. The primary maintenance obligation is to ensure the safety of the highway user by ensuring that visibility is not restricted and verges are free from obstructions and without defects which would be detrimental to the user. Protection and enhancement of biodiversity - it is also recognised that verges are important sites for rare flora and fauna and some areas are identified as special interest areas and receive special treatments.

Policy

- There is no particular policy directly relating to the physical condition of highway verges. The Council will carry out grass cutting along verges forming part of the highway to the

extent that it is needed to control grass growth and permit the safe passage of vehicles and pedestrians.

- The Council no longer applies weed killer to or clears weeds from the highway network.
- The Council will maintain existing trees within the highway boundary in a safe condition for so long as they remain healthy unless public safety or significant damage to the highway requires removal. Any replacement trees or new plantings will be selected according to their suitability for their location.

Inspection of Highway Verges

Highway verges shall be inspected in accordance with the frequencies outlined in the Policy for Highway Inspections.

Embankments and Sides of Cuttings

Highway verge slopes shall be maintained to preserve their stability and prevent damage by erosion. Where signs of erosion, slope failure slides and falls have been identified through the Highway Inspection system, they should be prioritised and regularly monitored until the remedial action has been completed.

Siding Out

Highway verges shall be maintained to prevent the encroachment of verge soil and growth onto the carriageway and footway. Where siding out has been identified this shall be carried out under cyclic or reactive maintenance (currently identified through inspection and included with reactive maintenance, no set frequency). Siding out shall also be carried out as required before routine maintenance works such as surface dressing, edge lining and special maintenance schemes.

Vehicle Overrun

From time to time, accident damage and vehicular overrun may cause rutting and erosion to the highway verge.

Where verge damage has been identified and considered as an unacceptable safety risk having due regard to the location, this may be prioritised prior to remedial works being carried out.

Biodiversity

The Council recognises that highway verges can support habitats and species of nature conservation value. Some areas are specially designated for their biodiversity.

Advice will be sought from appropriate experts when any of the following sites are likely to be affected by maintenance works:

- Sites of Special Scientific Interest (SSSIs)
- Sites of Importance for Nature Conservation (SINCs) and
- Road Verges of Ecological Importance (RVEIs)

Consent from Natural England will be obtained before undertaking any works which are likely to damage the special interest feature of an SSSI.

Trees, Shrubs and Hedges (including third party trees adjacent to the highway)

- The Council recognises that trees are important for amenity and nature conservation reasons and should be preserved, but they can present risks to the highway users and adjoining land users if they are allowed to become unstable. Under the Highways Act 1980, the Council has the power to require the cutting or felling of any hedge, tree or shrub which is dead, diseased, damaged or insecurely rooted and is likely to cause danger by falling on the highway.
- The Council shall attend to trees and shrubs on the highway to abate a statutory nuisance or a hazard or to carry out remedial work to make good damage or decay or deformed growth.
- Where a tree identified as a potential hazard is considered likely to support bats, advice from an appropriately qualified officer will be sought prior to works commencing.
- The Council will carry out other work such as pruning to reduce shade or to remove branches overhanging adjacent property only in exceptional circumstances.
- The Council shall cut back all highway hedges to ensure visibility sight lines and road signs are not obscured once per annum on rural classed roads in late winter to accord with the Wildlife & Countryside Act 1981.
- Where an obstruction to a sight line, street light, road sign etc or a potential hazard (as defined in the appropriate Procedure) has been identified, these shall be prioritised to allow works to be undertaken as part of the cyclic maintenance programme.
- The Council may, in exceptional circumstances, consent to additional maintenance of a limited number of ornamental beds in high profile public places. Maintenance shall include weed control and pruning.

Any person(s) responsible for the design of a new planting scheme on highway land shall seek the approval of the Head of Environmental Services.

Grass Cutting

The Council shall cut highway verges to prevent obstruction of sight lines ensuring the adequate visibility of traffic signs and oncoming traffic at junctions.

Urban Grass Cutting

This section includes roads and footways designated as urban including village roads that are urban in character. The cutting regime shall be organised so that the grass does not exceed 150mm in height.

Carriageways and Footways

All verges adjacent to the edges of urban carriageways and footways shall be cut over their full width a minimum of three times per annum (current SLA) for the purposes of maintaining safety, preventing obstructions of sight lines, inhibiting the growth of injurious weeds, maintaining a tidy appearance and to prevent encroachment.

Strimming

The cutting of highway verges adjacent to the edges of urban carriageways and footways shall include strimming around all street furniture and trees a minimum of three times per annum (current SLA) commencing concurrently with each cut and completed within the same cutting period.

Removal of Clippings

The cutting of urban highway verges shall include the removal of clippings from all metalled surfacings commencing concurrently with each cut and complete within the same period.

Rural Grass Cutting

Rural roads shall include routes that are not urban. The cutting regime shall be organised so that the grass does not exceed 450mm in height above the adjacent carriageway level (taking account of verge height above the carriageway and the growth on rural verges 450mm would be a more realistic target).

Rural Carriageways

All verges adjacent to the edges of rural carriageways and footways shall have a 1-metre swathe cut a minimum of two times per annum for the purposes of maintaining safety, preventing obstructions of sight lines, inhibiting growth of injurious weeds, to prevent encroachment by overhanging vegetation and to provide a pedestrian refuge and conserve the natural habitat and plant species.

Rural Footways

All rural footways shall have a 1-metre swathe immediately adjacent to either edge of the footway cut a minimum of two times per annum (current SLA) to ensure that the available footway width is not reduced by overhanging vegetation.

Wide Flat Verges to the Back of the Fence/Hedge Line including Ditches

Over a three-year cycle all remaining verge areas to the edge of rural carriageways and footways shall be cut back to the highway boundary (i.e. fence or hedge lines) a minimum of once in that period to prevent them from becoming overgrown.

Significant Slopes

All significant slopes (greater than 2 metres in height or a gradient of 1 in 2) within the highway shall have a 2-metre swathe cut immediately adjacent to the carriageway. The swathe shall be cut a minimum of two times per annum to prevent encroachment by overhanging vegetation.

Junctions and Bends

- At all junctions in rural roads where the verge widths permit, an additional area shall be cut on either side of the junction a minimum of two times per annum to ensure that minor road drivers have adequate sight lines in each direction to see oncoming major road traffic in time for them to manoeuvre safely. Sight lines may require additional cuts during June or July.
- The area cut shall be a triangle from the edge of the carriageway to a distance of 4.5 metres, on A and B class roads, 2.5 metres on all other roads where the width permits, along the centre of the minor road tapering to the edge of the carriageway at a distance 200 metres on A and B roads, 100 metres on all other roads preceding and proceeding the junction.
- Where the verge width is less than 4.5 metres, the offset from the edge of the carriageway may be reduced accordingly.
- On the inside of all bends, where verge widths permit a 3-metre swathe on A and B class roads and 1-metre swathe on all other roads over the length of the bend additional area

shall be cut a minimum of two times per annum to ensure that adequate sight stopping distances are maintained. Sight lines may require additional cuts during June/July. (Need to define a bend; on rural roads this could include extensive lengths of the network, alternatively these areas could be identified and included in the third (full width) cut).

Road Signs and Milestones

On the approach to all road signs and milestones, an additional area shall be cut a minimum of two times per annum to ensure that adequate sight lines are maintained in accordance with TD 42/95. Sight lines may require additional cuts during June/July. The area cut shall be from the edge of the carriageway to the signpost furthest from the carriageway tapering to the edge of the carriageway at a distance of 150 metres on A and B class roads and 75 metres on all other roads preceding the sign (signs are mainly obstructed from overhanging vegetation). Any overhanging vegetation obstructing signs within the visibility splay shall be removed at the same time.

Sponsorship of Roundabouts

In recognition of the potential benefits to the environment and cost saving of reduced maintenance, the following policy for the sponsorship of roundabouts has been approved.

Policy

The Council supports the concept of roundabouts on the public highway being enhanced by means of a sponsorship agreement with a third party (local business, Parish Council etc) if the agreement is in accordance with the guidelines outlined in the sponsorship of roundabouts procedure.

HIGHWAY ENCROACHMENTS AND OBSTRUCTIONS

The Council has a responsibility to keep public highways open and remove obstructions and encroachments which may affect the use and safety of the highway.

This policy covers the regulatory matters relevant to this responsibility, which include issues such as obstructions, encroachments, highway obstructions and licences related to permitted activities on the highway.

Policy

Bracknell Forest Council shall take all reasonable measures to ensure that the public maintained highway is safe to use and can be enjoyed by the public.

Encroachments on the Highway

Any encroachment on the public highway is preventing the legitimate use of the highway and every time an encroachment likely to cause a significant obstruction resulting in public risk has taken place on the public highway measures shall be taken by the Authority to remove the encroachment. (Or if appropriate and the land is considered surplus to highway requirements the extinguishments of Highway Rights may be pursued under Section 116 of the Highways Act 1980.)

Removal of obstructions

Obstructions on or over the highway prevent the legitimate use of the highway and are a potential safety hazard for road users and measures shall be taken by the Authority for the removal of the obstruction.

Obstructions on the highway take various forms and the most commonly encountered occurrences are as follows.

- Items placed on the highway causing an obstruction (unauthorised signs, erections, materials or trading booths).

When deemed necessary the Council shall serve notice under the appropriate section of the Highways Act to deal with the removal of the obstruction.

Overhanging trees and hedges

The Council has powers to serve notice under Section 154 of the Highways Act 1980 on the owners of overhanging hedges and trees requiring that they are cut back to provide the necessary clearance and abate any nuisance.

Unauthorised Signs on the Highway

It is necessary to place signs on the highway to give information and direction to the road user in the interests of road safety and mobility. These signs, for highway purposes, are placed under statutory powers and regulations are in place in relation to the type and positioning of these signs.

Policy

The Council has no power to authorise any signs placed on the highway other than for highway purposes and shall in appropriate circumstances invoke its powers under section 132, 137 and 143 of the Highways Act 1980 to remove unauthorised signs.

Dealing With Clinical Waste on the Highway

Clinical waste is defined in Regulation 1(2) of the Controlled Waste Regulation 1992 (SI 1992/588) as meaning:

"Any waste which consists wholly or partly of human or animal tissue, blood, other body fluids, excretions, drugs or other pharmaceutical products, swabs or dressings or syringes, needles or other sharp instruments, being waste which unless rendered safe may prove hazardous to any person coming into contact with it."

The five clinical waste categories identified by the Health and Safety Commission and Health Services Advisory Committee are detailed in Table 10.

Clinical waste which has properties that are hazardous, such as toxic, very toxic, harmful, corrosive, irritant, infections etc, as specified in the Special Waste Regulations 1996 is therefore also classified as special waste.

Due to the fact that on finding this waste the department is not always able to establish if it is non-hazardous, the worst scenario will be assumed and it should be dealt with as special waste.

Adoption of Highways

- Highway Rights are conveyed on any area that is adopted by Bracknell Forest Council under Section 37 and 38 of the Highways Act 1980.
- The Council shall establish prior to adoption that the area under consideration will serve a useful highway function by having the status of 'Highway'.
- Any road, footway, footpath, cycle track or verge that has been constructed in accordance with the Council's specification and is to be used routinely on a regular basis by pedestrians, cycles or vehicles shall be designated as highway and adopted as such.
- The area of adoption shall include margins as required to achieve the necessary visibility standards or maintenance of the infrastructure. The adopted areas shall include any specific design features such as regulatory signs, street lighting and speed restraint points.
- The adopted area may include margins (service strips) to accommodate Statutory Undertakers' apparatus.
- It is recognised that trees and shrubs have an important environmental role and may relate to particular highway features.
- In themselves, the areas of land incorporating such landscaping features seldom warrant the status of 'Highway' and conveyed Highway Rights. There is a presumption against the adoption of verges where the sole purpose is landscaping, screening and amenity usage. Such areas shall primarily be the responsibility of the Council as the Local Authority or in certain situations it may be appropriate for the developer or landowner to take on the responsibility. Any such arrangements shall be subject to consultation and agreement of the Council prior to the granting of detailed planning permission and approval of the layout.
- Remote footways forming a separate access to the individual or small group of properties shall not normally be adopted.
- Separate areas allocated for vehicle parking/or access to remote garages and parking areas and drives to individual or small groups of properties shall not normally be adopted.
- There is scope for external bodies to manage and maintain planted and landscaped areas of designated highway subject to agreement and licence arrangements with the Council.

EXTINGUISHMENT OF HIGHWAY RIGHTS

Introduction

Where areas of public highway are considered to be unnecessary by the Council, i.e. surplus to current and potential future requirements, the highway rights can be extinguished by application to the Magistrates Court.

Policy

The general presumption will be against the extinguishment of highway rights unless following the assessment of the criteria detailed below there is a strong case in favour of extinguishment.

Where land forms part of the public highway, the following criteria will be considered when making a decision:

- (i) Is the land required for sight line purposes, forward visibility splays for pedestrians, equestrians, cyclists and vehicular traffic?

- (ii) Is the land required for a future highway improvement scheme, e.g. road/footpath widening or cycle track provision? May it be needed for an improvement scheme at some time in the future?
- (iii) Could the extinguishment and disposal of the land result in a change to the character of the street scene, possibly through development by a private owner?
- (iv) Is the land owned by the Council and would need to be retained for other purposes?

Where areas of publicly maintainable highway are affected by new development, an application should be made to the Secretary of State for the 'stopping up' of such areas.

STREET CAFES

Introduction

There is an increasing demand on the Council to allow tables and chairs outside restaurants and cafés, particularly in pedestrian areas and locations where there are wide footways. Provided that free and safe passage for pedestrians can be maintained then such amenities can be beneficial and permission may be granted (subject to meeting certain conditions) on an individual basis.

Policy

- The provision of tables and chairs on the highway shall be regularised by the granting of licences.
- Suitable conditions shall be drawn up by the Council relating to the extent of the tables and chairs, clearances, pedestrian access provisions and signs together with obligations relating to Statutory Undertakers' plant.
- The licensees shall conform to conditions laid down in the licence and these shall be enforced by the Council.

Neighbourhood Watch Schemes and Signboards

Requests are made from Neighbourhood Watch Scheme organisers to place notices advertising these schemes on street furniture, and street lighting columns in particular. It is recognised that these schemes are a benefit to local communities and this policy sets out the protocol required.

Policy

Bracknell Forest Council will act under the Town and Country Planning (Control of Advertisements) (Amendment No 2) Regulation 1987 with respect to the display of Neighbourhood Watch notices on the highway in accordance with agreed guidelines.

Eviction of Trespassers on the Highway

Introduction

There have been instances in Bracknell where non bona fide Romanies have trespassed on the publicly maintainable highway or illegally entered onto land or facilities owned by the Council in its capacity as Highway Authority. This has resulted in calls for their removal/eviction by affected Council Tax Payers either directly or through their elected representatives.

Policy

That the Council shall secure and safeguard the highway as reasonable to prevent any foreseeable trespass and illegal occupation.

Non-Illuminated Traffic Sign Materials and Construction

This policy covers non-illuminated traffic signs which may be regulatory, warning, direction signs or advice and information signs placed by the Council for highway purposes.

Policy

The Council shall ensure that:

- Sign faces shall be comprised of a class 1 High Illumination, retro reflective material complying with BS873 Part 6.
- Where there is a history of damage or theft of signs, consideration shall be given to the use of anti-theft devices or using low value materials for the sign backing.
- Construction of non-illuminated signs shall be carried out in accordance with Bracknell Forest Council's standard details.
- Any signs mounted on posts larger than 150mm in diameter on high speed roads shall have appropriate safety fence protection.

Road Marking Implementation and Materials

The objective of road markings is to define carriageway lanes and edges and to give instructions to road users in a manner clearly visible in all conditions.

Policy

- The Council shall implement road markings in the locations and using the layouts described in the 'Traffic signs regulation and general directions (TSRD)' as supplemented by the procedure attached to this policy.
- Materials and application of road markings shall be in accordance with the Specification as supplemented by Council requirements.

Kerbing and Channel Block Implementation

Kerbs are used to delineate a footway and carriageway edge to provide a channel for water and to support the carriageway edge.

Policy

- **Kerbing Rural Areas**
The Council has a general presumption of no kerbing in rural areas unless it is to prevent overrunning, or to assist drainage, or within villages. However, where engineering factors deem kerbing to be necessary, the 'countryside' type kerbs shall be used. Where kerbing is used to prevent over-running on bends or at junctions, the kerbing shall be laid to a batter to help reduce tyre damage.
- **Kerbing Urban Areas**
The Council has a general presumption towards the use of hydraulically pressed kerbs complying with BS 7263 (half batter pattern).

Where it is considered desirable to moderate the appearance of the kerbing a 'county' kerb to a BS pattern which features a riven finish may be used.

- **Kerbing in Special Areas**

The Council has a general presumption that in special areas consideration shall be given to the use of natural and special materials to blend sympathetically with the environment. Specific advice shall be gained from the Borough Planning Officer.

Channel Blocks

The Council has a general presumption against the use of channel blocks. Where channel blocks are deemed necessary, they shall be limited to troughs or crests in the vertical road alignment where the gradient is between 8.3% and 5%.

ENVIRONMENTAL FACTORS

Sustainable development encompasses the following principles which can be adopted for highway maintenance operations:

- A reduction in the consumption of natural resources, including energy. Non-renewable resources should be substituted with renewable resources.
- Waste should be reduced.
- Waste should be re-used or recycled.
- Biodiversity should be preserved or enhanced.
- Valuable natural and physical assets and amenities should be preserved and protected.

Policy

Bracknell Forest Council, shall consider environmental factors whenever designing a maintenance scheme or planning a maintenance operation. The choice of materials and processes that preserve or enhance the environment should have due regard to the health and safety of the road user.

HIGHWAY STRUCTURES

- Highway Structures includes all bridges and other structures for which the Council has some liability as described below and private structures as also described.
- Bridges includes all structures other than footbridges with individual spans of 1.5 metres or more. Pedestrian subways are included in this category.
- Footbridges are those structures which carry footpaths and bridleways as defined under the Wildlife and Countryside Act 1981 or which carry footpaths adjacent to fords and road bridges. Bridges carrying only footpaths/footways/bridleways over roads and railways are also included in this category.
- Small culverts and pipes are those that fall outside the definition of 'bridges' with a lower limit of 0.9m diameter/span and where the Council has a Technical Approval function.
- Ancillary structures are those structures such as earth retaining and reinforced soil structures with retained height of 1.5 metres or more and retained face at a slope steeper than 45°, sign gantries, cantilever road signs, noise barriers, cellars and vaults, high mast and catenary lighting installations. In addition, Section 167 of the Highways Act gives highway authorities special powers for retaining walls with a retained height of greater than 1.35m (4'6").
- Private structures are those structures over or under highways that are vested in and maintained by bodies other than the Council.

Policy

- To carry out a range of technical surveys and safety inspections on the highway structures to support a cost effective maintenance regime.
- To carry our safety inspections on the highway structures to ensure, so far as practicable, the safety of the public in their lawful use of the highways.

Technical Approval of Highway Structures

- A technical approval procedure shall apply to the design, load assessment, alteration and strengthening of all Highway Structures as defined above.
- The technical approval procedure for all other Highway Structures prepared by Bracknell Forest Council Consultants or Suppliers shall comply with the requirements of the Department of Transport procedures BD 2/05 and BA 32/89, or any update or replacement of these documents.
- The Technical Approval Authority responsible for giving Approval in Principle and subsequently accepting relevant certificates for all Highway Structures is the Environment, Culture and Communities Department with delegated authority to the Highways Asset Manager.
- Where a development includes a new structure or involves modification to an existing structure, which will become the responsibility of the Council; a commuted sum payment will be agreed for the ongoing maintenance and replacement for a 60-year period. This shall be agreed in accordance with the CSS guidance document.

Structures database

- A database of highway structures that fall within the definitions, for which the Council have some liability, is maintained and updated by the Highways Asset Management Group staff. Some small culverts and pipes are also included.
- Private structures, including bridges owned by Network Rail or Rail Property Limited (formerly British Rail Board Residuary) and disused railway bridges which carry highways, are also included.

Inspection of Highway Structures

General

- The purpose of carrying out inspections is to ensure the safety and long-term serviceability of all Highway Structures and ensure that any maintenance works which are programmed has been targeted to address the highest priorities. Inspections (along with assessments and emergency works) provide the key inputs into the maintenance works planning process.
- All bridges and Ancillary Structures and certain Footbridges included in the database for which the Council has maintenance responsibility shall be programmed for inspection at least once every two years. All inspections on Council structures shall be completed and any findings returned to the Highways Asset Management Group.
- All bridges inspections are carried out in accordance with the Inspection Manual for Highway Structures.
- Following completion of the inspection, a review is carried out against previous inspections; to check for change in condition, cause of deterioration, rate of deterioration, identification and quantification of maintenance works and effectiveness of maintenance works. When an inspector identifies maintenance items prioritised as 'Emergency', he (or she) shall immediately arrange for safety works to be carried out and report the defect to the Highways Asset Management Group by the quickest means available. He shall

confirm verbal advice in writing at the earliest possible date thereafter. Any permanent repairs shall be carried out as a priority.

- All inspections shall be carried out in a safe manner, with consideration of traffic, working at heights, confined space access etc. The inspections shall include preparation of a risk assessment, method statement and an on-site documented review of the risk assessment.

Categories of Inspections

The various levels of inspection are categorised and defined as follows:

- **Safety Inspection**

The purpose of a safety inspection is to identify and report obvious defects which, if ignored, might lead to collapse, accidents or high maintenance and repair costs.

- **General Inspection**

This inspection requires the examination of all parts of the structure that can be inspected from a position of safety. Visual aids such as binoculars shall be used where necessary. Where the river bed is susceptible to scour, a check for scour/undermining of structural foundations shall be made, using a boat if necessary. Where appropriate, confined space equipment, boats shall be used for access.

- **Principal Inspection**

Each Principal Inspection shall normally be carried out by a member of staff who is suitably qualified and experienced, and reviewed by an Incorporated or Chartered Engineer. This inspection is a detailed tactile (within touching distance) inspection of the structure utilising, as necessary, suitable access equipment and inspection techniques. Database checks shall be carried out and colour photograph records of defects obtained together with bridge elevations if not on file. Where necessary, measurements affecting the serviceability (i.e. actual steel thicknesses), maintenance works planning, performance of the structure or individual elements shall be taken and recorded using a suitable method.

- **Special Inspections**

Special inspections are inspections carried out in addition to planned inspections. They include inspections:

- for monitoring of sub-standard structures;
- following flooding, where the integrity of the structure is considered to be at risk;
- following accident damage or other incidents, where the integrity of the structure is considered to be at risk;
- to establish condition of elements by testing or investigation.

External Consultant's Engineers are responsible for carrying out initial inspections of river bridges after exceptional rainfall or flooding and of damage to bridges from vehicle accidents. In the case of river bridges after flooding conditions, particular regard should be given to movements, settlement of foundation and approach training walls and the removal of waterborne debris.

The Highways Asset Management Group shall ensure that lists of bridges potentially at risk due to flooding are maintained, in the Structures Risk Register.

- **Acceptance Inspections**

These inspections provide a formal mechanism for exchanging information prior to changeover of responsibility and as a result of developer promoted schemes.

- **Inspection for Assessment**

This is used to provide information required to undertake a structural assessment or structural review.

Frequency of Inspection

Bridges and Ancillary Structures

- Generally bridges and ancillary structures will be subject to inspection on a six-year cyclic basis, the sequence being as follows:
- Year 2 - General inspection Year 4 - General inspection Year 6 - Principal inspection Safety Inspections shall be carried out at intervals to ensure the timely identification of safety defects and reflect the importance of a particular route or asset.
- A review of the inspection cycles shall be carried out by engineering staff and agreed with the Highway Asset Manager. The review will address the risk of failure of the structure against the consequence of failure, to determine a more accurate inspection regime based on the type and condition of the structure.
- In the case of new structures, an Acceptance Inspection shall be made as soon as practicable after the structure is completed and to coincide with the inspection carried out at the end of the Contract maintenance period.
- Structures which require inspection by divers shall normally be inspected on a six-year cycle to coincide with Principal Inspections.

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Private Structures

The highest category of inspection for Private Structures will be the general inspection to be carried out at two-year intervals. This takes account of the fact that the Council has no responsibility for maintaining the structure. The purpose of the inspection is to ensure that it is maintained by the owner to an adequate standard to ensure the safety of highway users.

Footbridges

- Most footbridges for which the Highways Asset Management Group are responsible, together with certain bridges on footpaths and bridleways for which the Countryside Team are responsible, will normally be inspected on a two-year cycle.
- More significant footbridges such as those spanning railways and roads are separately identified within the database and will be subjected to the same inspection regime as "Bridges and Ancillary Structures".

Inspection of small pipes, culverts and other footbridges

- Where details are known, small pipes and culverts which fall outside the definition of 'bridges' and footbridges not covered above are included in the database of Highway Structures. They are allocated an inspection cycle number "zero" and are not routinely inspected by Engineering Consultancy staff.
- The Highways Asset Management Group arranges for inspections and routine maintenance as required.

Inspection Reports

- Reports of annual inspections carried out are to be submitted to the Highways Asset Management Group as soon as possible after inspection. Separate report forms are to

be submitted in respect of each structure and the details entered into the database. For General Inspections, the report shall include the CSS Inspection proforma only. For Principal Inspections a report shall be produced in accordance with BD63/07 and BD63/94 Inspection of Highway Structures.

- Bridge inspection report forms have the various elements of the bridge structure listed separately. Any of the headings that do not apply should be marked N/A and any parts of the structure not inspected should be marked N/I. The elements that are present but not inspected are marked with B.
- Recommendations on remedial works considered necessary shall be made together with an indication of the priority. Subsequent reports shall indicate whether the recommended repairs have been carried out.
- In the case of General and Principal Inspections, severity, extent, defect code, cost estimates of recommended work, with costs, against each element shall be made and entered in the appropriate column of the form. Where deterioration is such that the permitted vehicle load capacity is suspect, a recommendation should be made that a structural review of the load capacity be considered.

Assessment of Load Capacity

The assessed bridge capacity is used for the planning of abnormal load movements, planned maintenance works, as well as strengthening works. To determine the load capacity of the structure various methods can be used as described below.

Structural Reviews

- Structural reviews are a regime of ongoing structural reviews to ascertain their adequacy to support traffic and should be carried out every 12 years. Where required structural reviews will also be carried out, in accordance with the Code of Practice, e.g. where an abnormal load is planned to be using the bridge, where regulations change governing the configurations and weight limits of roads and where significant damage has been caused to the bridge.
- Structural reviews can be used to initially determine the capacity of the structure to support normal traffic (HA loading), abnormal load (HB and SV loading) or a specific vehicle.
- Where the structural review is inconclusive or if a more rigorous analysis method is required, a bridge assessment shall be carried out.
- Bridge Assessments shall be completed using a more rigorous and accurate method of assessment as outlined in BA79 *The Management of Sub-standard Highway Bridges*. This will include additional assessments for parapet incursion assessments, parapet integrity, wing wall integrity and column impacts.
- Where a newly discovered or reported structure is accepted as a highway 'Bridge', an assessment of load capacity should be carried out without delay, unless it can be shown that it falls outside the scope of technical requirements for the load assessment and strengthening programme described in BD34/90 and BD46/92.
- A check should be made with the Abnormal Loads Officer to establish if an assessment of HA, HB or SV vehicle capacity is required.

Management of Abnormal Loads

- An abnormal load is any vehicle that is outside the classification of normal permitted traffic by virtue of its gross weight, length, width or axle configuration according to current axle configurations.

- Abnormal loads shall be processed in accordance with the elementary system as defined in the Code of Practice for the Management of Highway Structures and in accordance with the requirements of the Construction and Use Regulations.
- The Electronic Service Delivery of Abnormal Loads (ESDAL) shall be utilised and fully implemented to work alongside the existing system, at such time that the system is available.

Works Affecting Bridges

Bridges Vested in the Council

General Management

Regular maintenance, planned maintenance and reactive maintenance works are prioritised in accordance with the CSS Bridge Condition Indicator and their known assessed capacity. All works are agreed on an individual basis with the Highway Asset Management Group and programmed at the beginning of the financial year, allowing a provision sum for reactive works. The Council's assets shall be managed and programmed in accordance with Code of Practice for Highway Structures and the Asset Management Plan.

- Regular maintenance works includes inspections, assessments and monitoring of sub-standard bridges and routine maintenance works. These are works that are required to maintain the structures stock in a *fit for purpose* condition.
- Planned maintenance works include preventative maintenance works (re-painting, re-pointing etc), component renewal and upgrading of individual elements or components (parapet replacement, bearing replacements etc), widening or headroom improvements and replacement of structures.
- Reactive maintenance works includes emergency works (accident damage, vandalism etc) and essential maintenance (major structural repair works).

Emergency Works

- Engineering Consultants employed by the Council are responsible for carrying out initial Safety Inspections of accident damage and for arranging any immediate measures necessary to ensure public safety.
- All accident damage shall be reported to the Highways Asset Management Group without undue delay. Where damage to the structure is considered to affect the strength and/or integrity of the structure the Highways Asset Manager shall immediately request a Special Inspection and take appropriate action to maintain the safety of the public.

Structures Carrying Highways

- Details of proposed work at bridges shall be submitted to the Highways Asset Management Group for approval. The nature and extent of the work including any alterations in level must be indicated together with existing heights of bridge parapets and the weight and location of plant proposed to be used. A dimensioned cross-section of the highway at the bridge should always be included. Work must not be started without agreement of the Highways Asset Management Group. Where applicable, the Highway Asset Management Group shall highlight any works which require a full Technical Approval process.

Structures Spanning Highways

- When resurfacing carriageways under structures, the headroom at all critical points shall be measured and recorded, both before and after the work is done and the Highways Asset Management Group informed. Standard minimum headroom shall be maintained except for signed 'low' headroom structures above 16'6" (5.029m). Any necessary reduction in the indicated headroom of low headroom structures must be made without delay.
- Records of original and new measured headroom shall be sent to the Traffic Management and Road Safety Group and maintained as part of the structures records.
- Where more significant works are proposed, eg carriageway widening or realignment, the procedures will be as described above.

Network Rail Bridges

These come within one of the following categories:

- (a) Bridge vested in and maintained by Network Rail, normally those carrying the railway over the highway.
- (b) Bridge vested in the Council and maintained by Network Rail as the Council's agent, normally by agreement.
- (c) Bridge vested in and maintained by the Council, normally those bridges carrying the highway over the railway.

Bridges in categories (a) and (b) are not routinely inspected by the Council.

Responsibilities for Network Rail Bridges

- Network Rail is responsible for the maintenance and repair of their bridges excluding (in most cases) the surfacing, kerbs and footways.
- By virtue of Section 116 of the Transport Act 1968, highway surfaces over railway bridges are maintained at public expense by the Council excluding bridge waterproofing and bridge expansion joints.
- Network Rail are responsible for ensuring that the bridge is capable of carrying loads in accordance with BE4 design loads for bridges constructed at or before 1968. This translates to 24-tonne capacity for live loading to today's standards. Where the bridge is known to have a capacity less than the required design loading, Network Rail are responsible for any signing and costs associated with this weight restriction.
- The Council is responsible for ensuring that the parapet meets modern load requirements; Network Rail is responsible for ensuring the general integrity of the parapet.
- In one or two cases, the maintenance costs incurred by Network Rail are rechargeable to the Council on an annual basis.
- There will be no routine inspection of Network Rail bridges by the Highways Asset Management Group.

Emergency Works Affecting Network Rail Structures

- Where a bridge is maintained by Network Rail, any damage must be reported to Network Rail. All Network Rail bridges carry a plaque stating the emergency contact number and reference and this should be used to report the accident. Network Rail operates a stringent policy for accident damage to bridges and a copy of this is maintained by the Engineering Consultants.

Structures Carrying Highways

- Where the Council intends to carry out works to these bridges including: strengthening of the bridge or parapet; alteration of existing levels of carriageway, footway and verges; realigning or widening of carriageways; or laying of statutory undertakers' apparatus or surface water drains or surface water drains, the requirements are set out below.
- The Highways Asset Management Group shall notify Network Rail as appropriate of proposed works affecting their structures.
- The requirements of Network Rail shall normally be complied with except where considered unreasonable, in which case reference should be made to the Highways Asset Manager for consideration and advice.

Structures Spanning Highways

The Council is responsible for the installation and signing of low bridge sites.

- Where the Council intends to carry out works altering the existing levels of carriageway, footway and verges; realigning or widening of carriageways; or laying of statutory undertakers' apparatus or surface water drains or surface water drains, the requirements are set out below.
- The Highways Asset Management Group shall notify Network Rail as appropriate of proposed works affecting their structures.
- The requirements of Network Rail shall normally be complied with except where considered unreasonable, in which case reference should be made to the Highways Asset Manager for consideration and advice.

Privately Owned Structures

General Responsibilities

By virtue of the Highway Act, Section 41 the Council is responsible for ensuring the safety of the general public crossing the carriageway.

- Where the bridge is owned and maintained by an experienced and responsible owner, the Council shall inform that owner of any defects that require attention. Any defects shall be corrected at the expense of that owner.
- Where the bridge is owned and maintained by a member of the general public, charitable group, resident group etc then an agreement will be made with that group or individual, to ensure the safety of the general public and if necessary consideration shall be given to the use of existing powers under Section 93 of the Highways Act 1980 to transfer the ownership and maintenance of the structure to the Council.

Emergency Works Affecting Other Owners' Bridge

Works affecting other owners' bridges shall be reported to the Highway Asset Management Group without undue delay. Where damage to the structure is considered to affect the strength and/or integrity of the structure the Highways Asset Manager shall immediately request a Special Inspection and take appropriate action to maintain the safety of the public, either directly or in liaison with the land owner. Any costs associated with the inspection, on site attendance by the contractor and repairs shall be sought from the bridge owner.

Statutory Undertakers' Apparatus

- A Statutory Undertaker (SU) intending to carry out work affecting highway structures is required to consult with the Highways Asset Management Group a minimum of seven days prior to the issue of a formal notice. The Highways Asset Management Group shall respond within three working days of receipt of the preliminary notice.
- The formal notice (Form N) is submitted by the SU to the Highways Asset Management Group. If the notice does not confirm agreement following preliminary consultations, the Streetworks Co-ordinator shall obtain the Highways Asset Management Group's comments before acceptance and entry to the Streetwork Register.
- Work done on, under or adjacent to Highway Structures by Statutory Undertakers (or their Contractors) shall always be inspected by Highways Asset Management Group staff or their Engineering Consultant's staff to ensure that damage to the structure and/or any waterproofing membrane is avoided. Where the opportunity occurs, advantage should be taken to examine elements of the structure that are exposed in the course of the Works and any defects reported to the Highways Asset Management Group.
- All highway structures are considered as sites of Special Engineering Difficulty (SEDs) and as such any works will be subject to the formal consent of the Highway Asset Management Group.

Roadside Memorials

Introduction

It is increasingly common for families and friends to place memorials on the highway in memory of loved ones who have died in road accidents. The Council recognises and respects the wish of the bereaved to mark road deaths in this way but has a duty to keep the public highways safe. The Council therefore has to balance the wishes of the bereaved with public safety. The distraction of motorists and the safety of those placing or maintaining memorials are the overriding safety issues in the consideration of road side memorials.

The Highways Act 1980, however, has no express provision to licence or permit memorials on the highway.

Notwithstanding the above, some Highway Authorities have been criticised in the media for insensitive intervention and handling of the situation by insisting that all types of memorials are removed after a short time. The Scottish Authorities have produced a procedure which follows a similar line to the policy proposed for Bracknell. It is proposed that these situations are dealt with in a sympathetic, understanding and sensitive way, where and when appropriate staff liaise with those who wish to place memorials on the highway.

It is also recognised that Thames valley Police are opposed to roadside memorials in general on the grounds of safety, both of the people tending the memorial and other motorists being distracted.

Relevant Legislation and Documentation

The provisions of the Highways Act 1980 Section 132
Traffic Signs and general directions regulations 2002
RoadPeace and Brake - National charities for road traffic victims (web site address
(www.roadpeace.org)

Policy

Low key memorials such as the discrete placing of a small floral tribute at certain times of the year and for limited durations at the roadside may be acceptable provided there is no significant risk of driver distraction or undue risk to the individual visiting the location. Any items should be placed clear of any locations where highway maintenance is likely to be undertaken, e.g. grass cutting. They should also be placed away from locations that are hazardous to access, such as carriageway central reservations and busy roundabout central islands.

Permanent Monuments are prohibited on the highway and will be removed on safety grounds.

RoadPeace ‘Remember Me’ signs

- RoadPeace have promoted the placing of small memorial signs saying ‘remember me’ to mark road accident fatalities. The signs have no official sanction with the Department for Transport (DfT) and hence there is no current legislation or guidance for the Borough Council to approve the placing of these on street furniture. They are therefore unauthorised until such time further advice is received from the DfT.
- These signs are usually put up instead of roadside flowers or memorials and may provide a low maintenance and a more acceptable alternative. Concerns remain, however about the proliferation of these signs, should they be widely used and promoted.

Further details on the issue of Memorials are available on the Council’s website.