



Highway Maintenance Policy

A Public Guide

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FOREWORD BY COUNCILLOR KEN BROWNE

The publication of this guide to Warwickshire County Council's Highway Maintenance Policies is another example of our on-going commitment to inform and consult with the citizens of Warwickshire.

A major public consultation exercise was undertaken as part of the process of revising the County Council's policies for Highway Maintenance. The object of this consultation was to gauge public opinion on the level of satisfaction and the importance placed on highway maintenance activities. These views have been instrumental in developing the policies, now adopted by the County

Council, to maintain its road network for the safe and effective movement of people and traffic and in doing so preserve the appearance of the highway environment. I am very appreciative of the time, effort and knowledge that everyone involved in these consultations contributed to the successful development of these policies. It is our intention to continue to improve on how the road network is maintained and to discover, through public consultation, if we are achieving this. I look forward to receiving feedback from you on the progress we are making in meeting your needs.



COUNTY COUNCILLOR KEN BROWNE
CABINET MEMBER (ENVIRONMENT)

Introduction

The purpose of this booklet is to explain how, through the application of its highway maintenance policies and associated maintenance processes, the County Council adopts and embraces the visions and priorities set out in the first community strategy produced for the county of Warwickshire, 'A Strategic Plan for Warwickshire 2002-2005'. The County Council has developed, from this strategy, six overriding objectives, which are incorporated within its corporate business plan for 2002-3, namely:-

- a) To reduce crime and improve the safety of the community
- b) To develop and maintain a vibrant local economy which promotes employment and prosperity for all
- c) To promote lifelong learning and personal development
- d) To promote health and welfare of our citizens
- e) To improve the environment
- f) To improve access to Warwickshire County Council Services and to manage those services effectively and efficiently.

Our highway policies also mirror the policies and objectives relating to highway maintenance management as set out in the Local Transport Plan (LTP) 'Warwickshire's 2000', as submitted to the Department for Transport, Local Government and the Regions (DTLR). The main objectives set out in the LTP are to:-

- a) Seek a transport system which will promote a fairer, more inclusive society
- b) Seek a transport system which will promote full employment and a strong, sustainable economy
- c) Reduce the impact of transport on the environment
- d) Improve the environment of people when they are travelling.

The County Council aims to meet these objectives by managing the highway network in a manner that increases safety, meets the needs of all users, and maintains its condition and asset value.

This impacts directly on the County Council's priorities of environment, jobs, transport, social exclusion, community safety and both old and young people.



County Highway's purpose is to: -

- a) Set the maintenance policy and carry out maintenance of the highway network within Warwickshire
- b) Ensure the network is safe for users
- c) Comply with and enforce Statutory obligations
- d) Promote the County Council objectives as stated above.

Best Value

The County Council adopts the Government's commitment to continuous improvement in the provision of County Council services by applying the principles of 'Best Value'. These principles are being continuously applied in the procurement of highway maintenance services within Warwickshire to ensure its services are provided in the most efficient and cost effective manner.

Consultation

Major public consultation was undertaken to assist in the development of these policies by gauging public opinion within the County on levels of satisfaction and the importance placed on current highway maintenance activities. Consultation of this nature is an ongoing commitment and will continue to form a major element in the development of our highway maintenance policies.

Environmental Pressures

The highway network is constantly under threat from environmental pressures caused by dramatic increases in the volume of traffic, greater vehicle weights and climatic conditions. The action of heavy vehicles repeatedly stressing the road surface causes flexing and subsequent cracking of the surface. The disturbance of the structure of the road through the digging of Utility

Service trenches and their subsequent re-installation. These activities coupled with the action of sun, frost and rain, permit water to seep into the road structure, eventually leading to its failure. These actions, if left, will result in potholes forming on the road surface and the subsequent disintegration of the carriageway.

The County Council recognises the value of its highway network both as a high value asset and as an aid to the social and economic welfare and development of the county. The careful management of this asset is therefore of foremost importance to the public, by providing safe road surface conditions and in preventing its total disintegration.

As previously mentioned the County Council is very aware of the environmental effects of its highways, caused through traffic noise, the way we maintain our verges, trees, hedges etc. and the effects of carrying out highway maintenance activities, noise associated with road works and the disruption caused to the public. These environmental factors are an overriding consideration when decisions regarding maintenance activities are taken.

The need to reduce the effects on the use of our natural resources, by careful regard in the design of, and selection of materials for maintenance works, is a further environmental measure undertaken by the County Council.

Maintaining the Highway Environment

The County Council is aware of the benefits, both from an aesthetic and a safety aspect, to the highway user of maintaining the highway environment. The highway environment can be described as the road surface, its verges and trees, fences and hedges that form the highway boundary. The County Council carries out a number of maintenance activities related to the highway environment.

Sweeping

The County Council, as the Highway Authority, only has a responsibility for sweeping the highway to ensure that the safety of the road user is not prejudiced e.g. accident damage and spillages. The District and Borough Councils, under section 89(2)(a) of the Environmental Protection Act 1990, are responsible for ensuring that the highways in their area, excluding motorways are, so far as is practical kept clean. Sweeping not only improves the environment from a cleanliness aspect it also helps to prevent damage to the road structure by minimising weed growth. Weeds can prevent rainwater running freely into the highway drain.

Chemical Sprays

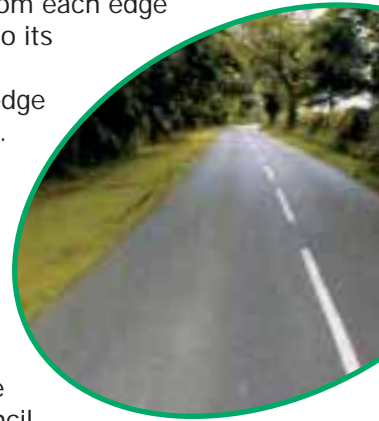
As mentioned above, weeds can cause problems when they spread prolifically and /or become established to both the structure of roads, and

footways. Therefore to avoid damage it may be necessary to use chemical sprays to eliminate weeds and control growth in the channel of kerbed roads, on the edges of kerbs and on footways. The application of chemical sprays conforms to the Control of Pesticide Regulations and is in accordance with manufacturers, MAFF and Environment Agency advice.

Verge Maintenance

The roadside verge is the grassed area extending from each edge of the road to its respective boundary hedge or fence line. The verge serves as a safety feature by providing visibility for users of the highway. The County Council carefully balances its commitment 'to maintain the road network for safe and effective movement of people and traffic generally in keeping with the environment and in a uniform manner across the County' and the environmental and ecological effects of its actions when carrying out maintenance.

Maintenance of verges can be divided into two categories, planned cyclic



operations and ad hoc works.

Planned Cyclic Operations:-

a) Verge mowing

Ad hoc Works, carried out following complaints or inspections:-

b) One off operations, treatment to hedges, trees, cutting and selective weed spraying.

Verge Mowing

Verge mowing is carried out to ensure that vegetation does not restrict visibility for the highway user and to provide a refuge for pedestrians. County Council policy is to carry out mowing on a safety basis only, by cutting a one-metre width swathe plus additional areas at junctions and on bends, for visibility purposes, twice a year. Additional cuts may be sanctioned at locations where visibility is impaired and safety jeopardised.

Control of Injurious Weeds

The County Council is committed to taking a pro-active approach to controlling 'injurious weeds', especially ragwort, growing on the highway verge. These weeds are included in the Injurious Weeds Act 1959 and the Wildlife and Countryside Act 1981. It is the County Council's policy that where areas of infestation are identified on highway land, through our own inspections and/or public complaints, that the weeds are removed and disposed of by pulling, bagging, removing from site and burning. The County Council will,

where practicable, work together with adjacent landowners where infestation covers both highway and adjoining land, to co-ordinate activities for their control.

Siding

Siding is the name given to the maintenance activity of removing vegetation that encroaches over the surface of the footway. Our policy is to undertake siding on an as needs basis.

Hedges

Hedges on rural roads normally form the boundary of the highway and are the responsibility of the adjacent landowner. The maintenance of hedges is important to the safety of the highway user. Overgrowth can restrict free passage and visibility for the road user on bends and junctions, obscure road signs and force pedestrians off the verge or footpath onto the road. The County Council's policy is to trim hedges, on an as needs basis, on highway land, where they are the County Council's responsibility. In situations where the hedge is the responsibility of the landowner or householder the County Council will request that the necessary work is carried out to remove the danger.

Trees

Trees are an important part of the highway environment. They are both important for amenity and nature conservation and should be preserved.

Trees can however be a serious hazard to the highway user and to adjoining landowners/householders if permitted to become unstable. The County Council has a responsibility to ensure that trees that are outside the highway boundary but within falling distance of the carriageway are safe. To comply with this our highway inspectors carry out scheduled safety inspections that include the identification of dangerous trees. The County Council's policy is to carry out maintenance work, on an as needs basis, on trees that are their responsibility. In situations where trees form the boundary of the highway or are in adjacent land they are the responsibility of the landowner /householder. If, as a result of our safety inspections or, following public complaints the landowner/ householder's tree is identified as placing the safety of the highway user in jeopardy, the County Council will request that the necessary work is carried out to remove the danger.

Fences

Inspection of the condition of fences is included as part of the County Council's scheduled highway inspections. Fences forming the boundary of the highway are the responsibility of the respective landowner / householder. Should, following our inspections or public complaints, it be identified that these fences are in a condition that present a safety hazard to the highway user, the County Council will request that the necessary work is carried out to

remove the danger.

Safety Fencing on county roads, designed to absorb the impact of vehicles, protect vulnerable items such as bridge piers and lighting columns and retain traffic on elevated roads and bridges, are the responsibility of the County Council and will be maintained in accordance with the Highway Agency's specifications.



Pedestrian barriers on county roads, designed to restrain or guide pedestrian's movement, usually in urban areas at controlled crossings, busy junctions and shopping centres are the responsibility of, and will be maintained by the County Council.

Fences erected by the County Council, as a measure to absorb traffic noise, are the County Council's responsibility and will be maintained in accordance with Highway Agency specifications.

Graffiti

The County Council's policy on graffiti is to remove graffiti on highway bridges, signs etc that is judged to be offensive to residents and highway users or obscure regulatory signs. The graffiti will be removed following highway inspections or in response to public complaints.

Carriageway Maintenance

The highway network is constantly under threat from environmental pressures caused by dramatic increases in the volume of traffic, greater vehicle weights and the weather. The action of heavy vehicles repeatedly stressing the road surface causes flexing and subsequent cracking of the surface. The disturbance of the structure of the road through the digging of Utility Service trenches and their subsequent re-instatement. These activities coupled with the action of sun, frost and rain, permit water to seep into the road structure, eventually leading to its failure. These actions if left will result in potholes forming on the road surface and the subsequent disintegration of the carriageway.

The County Council recognises the value of its highway network both as a high value asset and as an aid to the social and economic welfare and development of the County. The careful management of this asset is therefore of foremost importance to the public, by providing safe road surface conditions and in preventing its total disintegration.

The key to managing the highway network successfully is to monitor its condition and, by applying at the best time, the most cost effective structural maintenance treatment, maximising the whole life of the road structure. This is achieved by employing the principles of Highway

Maintenance Management.

An initial process, known as Highway Condition Assessment, is used to monitor the changes in the condition of the highway network and provide engineers with the data needed to assist them in determining the correct structural maintenance treatment and the timing of its application. The advantage of this data is that it assists engineers in targeting limited budgets to the areas of the network where maximum effectiveness can be achieved in maintaining the road structure. These principles are endorsed through our Structural Maintenance Policy, which aims to, 'effectively employ expenditure on routine maintenance activities and structural maintenance so as to improve the life expectancy, soundness and, the asset value of our roads'. The County Council will achieve this in the most efficient and cost effective way through:

- a) a policy of preparing a structural maintenance programme, based on an assessment of need and giving priority to the more important roads and footways in terms of traffic use and function.
- b) by making use of the latest available processes and techniques.

The County Council is also aware of environmental implications of noise, dirt, disruption and the use of natural resources and takes these into consideration when determining

maintenance treatments to be undertaken and during the actual maintenance work.

Maintenance of the carriageway for these purposes includes the roads surface and its underlying structure, together with any kerbs and ironwork e.g. manholes, hydrants, surface water drains.

Structural maintenance is the collective name given to various maintenance treatments namely:-

a) Surface Dressing A cost effective maintenance process in which the existing road surface is coated with a layer of bituminous adhesive over which stone chippings are spread and rolled to bind them to the road surface. See section on Surface Dressing for more details.

b) Resurfacing and Overlays Classed as intervention maintenance processes and are carried out at a point in the life of the road at which maximum benefit can be achieved in extending its life and the need for costly reconstruction eliminated. The processes consist of the replacing of the road surface (wearing course), by either planing off and relaying a new wearing course, referred to as resurfacing or, the overlaying of the existing road surface with an additional thickness of bituminous material, to provide a new road surface, referred to as overlaying. The County Council's policy is to carry out resurfacing/overlay works when the road structure has reached an

expected remaining life of ten years. The method of treatment and the materials used shall be chosen to maximise the structural life of the road, taking account of its overall condition and anticipated traffic volumes.



c) Reconstruction Is the ultimate maintenance activity and is usually carried out when the road is at the end of its serviceable life e.g. when all, or part of the road's life can no longer be extended by surface dressing, re-surfacing or overlaying. It is a high cost treatment that entails the removal of the layers of materials that make up the road's construction, and their replacement, using new or recycled materials. The new replacement structure will be designed to improve the road's ability to carry heavy traffic and restore or better its structural life. Alternative processes to full reconstruction of the road can be employed dependant on the degree of structural failure, these are: -

Haunching Is the reconstruction of the edge of the road only, and is employed mainly on unkerbed roads to repair the damage caused by vehicles overriding the edge of the road, or, when it is clear that the road structure is failing.

Retread is a process that entails rotovating the failed road surface

to a depth of 75 mm and recycling the excavated material by the addition of new binder to bond it together and compacting the material to form a new road surface.

This process may be considered if the area of road to be repaired is large enough, and of consistent specification.

The County Council's general policy is to carry out full or partial reconstruction of a section of road only when it has deteriorated beyond its useful life and cannot be viably rectified using alternative cost effective processes such as overlaying or resurfacing.

Patching and Potholes on Roads

Roads are constantly under pressure from the action of heavy vehicles repeatedly stressing its surface, the work of the Utilities (water, electricity, gas and telecommunications), disturbing the roads structure, together with the action of sun, frost and rain all contribute to its deterioration.

The most apparent sign of the initial deterioration of the road surface to the road user is in the form of potholes. Potholes present a threat to the safety of road users, especially cyclists and motorcyclists. The County Council is committed, in its Local Transport Plan, to improve the environment of travellers by reducing road traffic accidents. Therefore the repair of such damage to the road structure is a priority for safety



reasons and as a means of delaying further localised damage. Repair is carried out by either 'potholing', where the holes are filled by hand, as an emergency measure in the road surface, or "patching", where the area of failed road is excavated and the surface replaced by hand with new materials.

The priority given to the repair of the road surface following this type of deterioration is borne out by the County Council's policy on Patching and Pothole Repairs which is:-

- a) Potholes within the carriageway in urban areas and on 'A', 'B' and 'C' roads in rural areas that exceed 25mm in depth and are deemed to present a danger to the highway user shall be repaired within 24hours of inspection.
- b) Potholes within the carriageway on 'D' roads in rural areas that exceed 100mm in depth and are deemed to present a danger to the highway user shall be repaired within 24hours of inspection.

- c) Potholes within the carriageway in urban areas and 'A', 'B' and 'C' in rural areas that are above 15mm but below 25mm in depth and are not deemed to present a danger to the highway user shall be repaired within 1 working week of inspection.
- d) Potholes within the carriageway in rural areas on 'D' roads that are above 25mm but below 100mm in depth and are deemed not to present a danger to the highway user shall be repaired within 1 working week of inspection.

The incidence of localised patching and pothole repairs on a road is an indication of the condition of the road

structure. The higher the incidence of patching carried out on a section of road the more likely that there is underlying deterioration of its structure. As part of its Highway Maintenance Management procedures, the County Council closely monitors the incidence of patching and potholing in order to identify the optimum time to apply alternative road surface maintenance treatments e.g. surface dressing or micro-asphalt.

Patching and potholing is also carried out on footways and cycleways for the same reason, the safety of the user.

Highway Drainage

The County Council has an obligation to maintain the public highway for the safe and effective movement of people and traffic generally. The system of highway drainage is designed to assist in achieving this obligation by meeting two basic principles:-

- a) The removal of surface water from the carriageway and footway as quickly as possible under normal weather conditions
- b) To maintain the soundness of carriageway and footway structures.

The removal of surface water from the carriageway and footway is an important objective in creating a safer environment for the road user. Water

lying on the surface of the road reduces skid resistance and adds to the creation of spray from moving vehicles, both of which make driving conditions hazardous. The second principle of maintaining the soundness of the structure of the carriageway and footway can be achieved by preventing water penetrating and holding in the carriageway/footway structure. The action of water penetrating the structure, and its subsequent freezing during the winter months, erodes the materials that bind the road together. These actions cause the breakdown of the strength of the road and will, if not



caught in time, require costly replacement work. The maintenance of a highway drainage system is paramount in meeting the above objectives and in assisting the County Council's environmental objective of undertaking less extensive, and thus less resource costly, forms of maintenance work.

The County Council aims to meet the above objectives by undertaking highway drainage maintenance activities including the scheduled cleaning of gullies, the inspection of manholes, catchpits, grips and open ditches and, undertaking any necessary maintenance. The purpose of the inspection process is to reduce the need for costly reactive maintenance following flooding and/or public complaints.

The importance placed on highway drainage is embraced in our maintenance policies, which are to:-

- a) Clean gullies once a year on pre-scheduled routes to ensure they function.
- b) Identify gullies requiring a higher/lower cleansing frequency than stated in a) and incorporate them accordingly in pre-scheduled routes.
- c) Produce and maintain a detailed inventory of gullies, manholes catchpits and open ditches within the highway boundary.
- d) Undertake scheduled inspections of gullies, manholes catchpits and open ditches within the highway boundary.
- e) Take reasonable steps to prevent flooding and standing water on the highway having taken into account the character and nature of traffic using the road and the associated costs involved.
- f) Respond to emergency requests in connection with flooding on the County's highways.

Signing and Road Markings

Traffic signals, road signs, road studs (cats eyes) and road markings are collectively referred to as aids to movement. These highway features provide valuable assistance to traffic management and safer travelling of the highway user.

Road Signs

Road signs form a large and valuable part of highway aids to movement and can be grouped under the following headings:-

- a) **Regulatory signs** - either mandatory or prohibitive. These signs are mostly circular and those with red circles are usually prohibitive.
- b) **Warning signs** - are used to alert drivers to danger ahead. These signs are mostly triangular; they indicate a need for extra caution by road users and may require a reduction in speed or other manoeuvre.
- c) **Information signs** - giving

directions or information. These signs are usually rectangular in shape. Also included under this category are chevrons and reflector posts which are used to warn users of sudden changes in the direction of the road and also to indicate the edge of the road.

Maintenance of road signs carried out by the County Council comprises of periodic cleaning, repair of accident damage and replacement through deterioration. This maintenance is managed through a combination of scheduled safety inspections, through which damaged, missing or obstructed road signs, chevrons and reflector posts are recorded, and in response to public enquiries and complaints. The information from both these sources is then examined to determine what action to take depending on the risk to the safety of road users, financial considerations and our current policies. The County Council's current policies on maintenance of road signs are to:-

- a) Conform with the Traffic signs regulations.
- b) Replace when necessary through damage or dilapidation.
- c) Identify, record location and retain signs, milestones and milepost that are of historical interest.
- d) Investigate public complaints in relation to road signs within 24 hours. The speed of permanent repair will depend on the degree of danger. Important warning and

regulatory signs should be replaced as soon as possible.

- e) Clean signs on an as needs basis.

The County Council also has a policy of not painting road sign frames or supporting posts.

This section deals with all non-illuminated signs only; illuminated signs are discussed in the section entitled 'Maintenance of Street Lighting and Illuminated Signs'.

Road Markings & Road Studs

The purpose of road markings and road studs are to define traffic lanes and carriageway edges, provide warning, parking and waiting restrictions and to convey Give Way and other instructions to road users in a manner that is clearly visible both day and night.



Maintenance activities on road markings cover both the renewal of existing markings that, over time wear out, and the replacement of road marking following resurfacing of the road. Markings are normally applied on the road surface by hand, sprayed or laid with a specialised machine.

Transport Research Laboratory studies indicate that the contribution to safety and to the improvement of traffic flow, made by white lines, markings, and reflective studs, makes them an indispensable feature of modern roads.

Maintenance activities in relation to road studs mainly comprise of replacement or refurbishment of damaged studs.

The County Council manages the maintenance of road markings and studs in the same way as road signs, through a combination of public enquiries, complaints and scheduled safety inspections, which highlight road markings that are damaged, missing or faded. The information from both these sources is then examined to determine what action to take depending on the risk to the safety of road users, financial considerations and our current policies. The County Council's current policies on maintenance of road markings and studs are to:-

a) Consider the need for, and their compliance with current regulations before renewing or replacing road markings after

surface dressing or structural maintenance schemes.

b) Consider for replacement all mandatory markings when more than approximately 30 percent of their area becomes ineffective or worn away.

c) Replace missing or defective studs so that a minimum of 90 % shall be effective before the winter season. If a decision is made not to replace road studs on certain classes of road, then where road studs are missing, we will make good to ensure safety and prevent further deterioration of the road surface.

More and more emphasis is being placed on the introduction of new traffic schemes, and traffic calming measures, which incorporate aids to movement. The need to maintain these schemes after introduction places additional pressure on maintenance budgets. Therefore it is important that consultation takes place between all interested parties as to the need for, and maintenance requirements of, such schemes together with the provision of maintenance funding.

Winter Maintenance Service

Warwickshire County Council's objective is to provide a Winter Maintenance Service which, as far as reasonably possible, will permit safe movement of traffic on the principal road network and more important parts of the remaining highway network while minimising delays and accidents resulting from the adverse weather conditions.

Winter Maintenance is a 24 hour a day, 7 days per week continuous service carried out during the period October 1st to April 30th each year. The County Council, County wide, currently allocates £950k (1999/2000), reviewed annually, to meet the requirements of the current Winter Maintenance policy.

Winter Maintenance Service involves the treatment of the highway as follows:-

- a) Application of salt to prevent ice forming, known as 'precautionary salting'
- b) Application of salt, after ice and snow has already formed, to facilitate melting, known as 'post salting'
- c) Ploughing to remove snow.

In total precautionary and post salting is carried out on approximately 44% of the County Highway network.

The responsibility for the provision of

Winter Maintenance Services is shared between the Borough Councils of, Nuneaton and Bedworth and Rugby and Warwick District Council, who are responsible for undertaking the service in their areas, and the County Council who are, responsible for the remaining areas of the County.

The County Council is committed to providing a cost effective and efficient Winter Maintenance Service to the people of Warwickshire in line with the principles of the Government's 'Best Value' initiative. This is being achieved through competitive tendering for the provision of the service, the application of pre-planned gritting routes and the purchasing of salt.



Warwickshire County Council's current Winter Maintenance policy is:-

Precautionary Gritting when the formation of ice is predicted, it is the County Council's policy to pre-grit

- a) All A roads, most B roads and one or two other strategic routes.
- b) In addition in urban areas the

accesses to Hospitals, main industrial estates.

c) A single route into all villages.

Snow clearance in the event of snowfall

- a) The roads receiving gritting will be cleared as soon as resources allow.
- b) When snow falls are heavy at least one route into villages will be cleared
- c) Footways will also be cleared

where there is a considerable pedestrian usage

d) Resources will be targeted where snowfall is heaviest.

Salt Bins

- a) Salt bins in rural areas will be replenished with salt, where they have been provided by Parish Councils. Salt heaps are no longer provided for environmental reasons.

Surface Dressing

The highway network is constantly under threat from the action of heavy vehicles, the work of the Utilities, together with the action of sun, frost and rain. These actions if left will result in potholes forming on the road surface and the subsequent deterioration and eventual failure of the carriageway.

Surface Dressing is a maintenance process designed to

- a) Improve the surface texture and resistance to wet and dry road skidding.
- b) Seal the surface against water penetration.
- c) Arrest disintegration of the existing road surface.

The process consists of coating the existing road surface with a layer of bituminous adhesive over which stone chippings, carefully chosen for their strength, shape and size, are spread and rolled to bind them to the road surface. Surface dressing is a

nationally recognised, cost-effective, maintenance process that will maintain and extend the life of the road and aid accident reduction.

The County Council is committed to provide a cost effective and efficient surface dressing service to the people of Warwickshire in line with the Government's 'Best Value' initiative. This is achieved by the employment of inspection techniques, designed to assess the suitability of surface dressing as a maintenance solution, and to identify priority roads for treatment within budget limitations. This information is used to produce an annual surface dressing programme to be undertaken by a surface dressing contractor, following



a competitive tendering process.

The County Council is also aware of the environmental implications of noise, dust, dirt, disruption and the use of natural resources and takes these into consideration when deciding on the maintenance treatments to be undertaken and during the actual maintenance work.

Warwickshire County Council's current Surface Dressing policy is:

'To assess the need on structural and economic grounds, and where financial resources allow, carry out an annual programme of surface dressing in order to maintain, in the short term, the integrity of the highway network'.

Footway and Cycleway Maintenance

Warwickshire County Council is committed, as an integral part of its Local Transport Plan, to provide footways and cycleways as an alternative healthy option to the use of the car whether travelling to school, work or for leisure and as a link to the accessibility of public transport.

To achieve this end the County Council has commenced the introduction of a network of cycleways which make use of existing footways and roads by providing cycle lanes, and where finances permit, by the construction of dedicated combined cycleway/footways.

Footways and cycleways wear out over time due to use and the adverse effects of weather breaking down the surface of the footway and its sub-base. This results in potholes and in paved footways, cracked, rocking and raised slabs and block paving, raised or collapsed ironwork and the subsequent deterioration of the footway/cycleway. Disturbance through the work of the Utilities, vehicles overriding kerbs and parking

on the footway all contribute to damaging the footway/cycleway. Maintenance is also carried out to remove grass and weeds that overgrow and encroach onto the footway/cycleway surface. This maintenance activity is known as siding. Grass and weeds can cause problems on footways/cycleways when they spread or become established. The action of the root systems of weeds disturbs the structure of the footway/cycleway permitting water to enter into its structure and accelerating its deterioration. In these instances it may be necessary to use chemical sprays, as previously outlined in the Chemical Sprays section, to eliminate the weeds and control growth. Hedges bordering footways/cycleways, if not maintained will encroach on the footway/cycleway and obstruct the passage of its users. See separate section on Hedges for more details. In these situations the County Council



has powers to serve notice on the householder or landowner responsible for the hedge to carry out the required maintenance within 14 days. Failing this the County Council may carry out the work and recover costs from the persons in default.

The maintenance of the markings between the cyclist and other traffic, including pedestrians using footways, is an important factor in maintaining the safety of the users. Existing markings wear out and become eroded by the combined action of traffic and weather, or need replacing after resurfacing. Careful consideration will also be given where cycleways form part of the carriageway to ensure that the safety of cyclists is not jeopardised by any damage or deterioration, particularly at the edge of the road.

Maintenance is an important aspect in continuing to provide safe, accessible passage to the public and is reflected in our Footpath and Cycleway Maintenance Policy as follows:-

- a) Repair of dangerous faults that exceed 20mm in height or depth, in well used pavements and footways within 24 hours of our inspection.
- b) Carry out an annual programme of slurry sealing, identified on structural and economic grounds.
- c) Carry out an annual programme of footway/cycleway reconstruction identified on structural and economic grounds.
- d) Where reconstruction of paved footways is required these will be replaced as a general rule, by using

bituminous materials. Decisions on use of materials will be subject to consultation with local residents. In conservation areas we will endeavour to reconstruct slab/block-paved footways to their original state.

- e) When decisions to replace kerbs next to footways/cycleways are taken the needs of users with disabilities will be considered by providing, where appropriate, easier access.
- f) Damaged footpath edging kerbs will only be replaced when it can be shown that failure to do so will cause damage to the footway/cycleway construction.
- g) Siding maintenance is carried out on an as needs basis and prior to surfacing and renewal of edge markings.
- h) To carry out an annual programme of chemical spraying on kerbed carriageway channels and on urban footways/cycleways. Chemical sprays will conform with the Control of Pesticides Regulations and will be applied in accord with manufactures, MAFF and Environment Agency advice.
- i) Where it is deemed necessary, following a public complaint or by our inspections, the County Council can request that work be carried out on boundary hedges by the adjacent householder or landowner responsible. Should this work not be completed then the Authority may serve notice on the householder or landowner responsible to carry out the work deemed necessary within 14 days.
- j) Hedges that are the responsibility

of the County Council shall be trimmed on an 'as needs basis'.

- (k) Road and footway markings, which mark the separation between cyclist and other users, shall be replaced if it is judged that the safety of users is at risk

The majority of maintenance work required on footways/cycleways, including the maintenance of street/footway lighting and signing, is identified during an annual programme of carriageway and

footway inspections, together with analysis of public complaints. This information is used to identify and assess the nature of maintenance work required for inclusion in the Annual Maintenance Works Programme. Environmental implications; such as noise, dust, dirt, disruption and the use of natural resources will also be a consideration when determining the maintenance treatments to be undertaken and during the actual maintenance work.

Maintenance of Street Lighting (and Illuminated Signs)

Provision of street lighting contributes an important service in enabling the County Council to meet its commitment "to reduce crime and improve the safety of the community" and "to improve the environment" as set out in its corporate business plan 2002-3.

Street lighting achieves this by providing a night-time environment that not only aids road safety, for both motorists and pedestrians, but also public safety by the discouragement of crime and vandalism. It also enhances the aesthetic appearance in environmentally sensitive areas by the careful lighting of public places.

The County Council is aware of the adverse environmental effects of street lighting, light pollution and excessive energy usage, and continues to seek, through advances in technology, ways and means of reducing these.

The County Council is responsible for the maintenance of some 45,000

streetlights and illuminated signs under its control. Street lighting maintenance activities carried out by the County Council include routine and non-routine maintenance.

Routine or cyclic maintenance includes:-

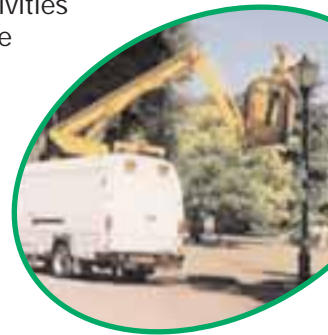
inspections for illumination, lamp changing, cleaning, electrical testing, painting, structural inspection and testing of lighting columns.

Unscheduled or non-routine maintenance includes:-

faults due to equipment failure, decay, vandalism or accident damage.

The County Council's current Street Lighting policy is:-

- a) To provide road lighting in mainly urban areas but also to consider providing road lighting in rural



- areas by evaluating the need to reduce night time accidents.
- b) To provide lighting on existing roads with a high incidence of night time accidents if the cost of the lighting can be justified by the anticipated saving in accidents.
 - c) To identify areas where there is a high incidence of crime or fear of crime and to implement lighting schemes, funding permitting, to alleviate the problem.
 - d) To maintain street lighting so that 97% of all lights are operating correctly at any one time
 - e) To allow the infilling of footway lighting systems currently maintained by the District, Town and Parish Councils, in order that they can qualify as road lighting systems. The County Council will only adopt these systems, after infilling, if they are in an acceptable maintenance condition and meet current design and safety standards.
 - f) To endeavour to encourage District, Town and Parish Councils to employ the County Council to act as the Agent/Contractor in respect of their footway lighting.
 - g) To ensure developers provide road or footway lighting on new residential developments as required by the Lighting Authority.
 - h) To provide road lighting on all new industrial developments.
 - i) To provide road lighting on all new traffic roundabouts
 - j) That in the absence of knowledge of the landowners the County Council will continue to maintain those lights currently maintained on unadopted land, but that no additional lights be provided in these circumstances.
- The County Council is committed to providing a cost effective and efficient street lighting service to the people of Warwickshire in line with the Government 'Best Value' initiative and in compliance with best practice for Highway Maintenance. This is being achieved by:
- a) Initiating scheduled patrols to inspect all lamps during the hours of darkness, every 2 weeks during October to March and every 4 weeks during April to September.
 - b) Provision of a comprehensive inventory of all street lights and illuminated signs
 - c) Provision of a dedicated 24-hour fault reporting service to the public.
 - d) Employing a street lighting maintenance and repair service.
 - e) Purchasing electricity on the open market to achieve the best price possible.

Further copies of Highway Maintenance – A Public Guide are available from:-

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