TRAFFIC MANAGEMENT IN HISTORIC AREAS

Introduction

Wales is predominantly rural. Cities and large towns did not appear on the Welsh scene until the end of the nineteenth century, and there is no historic tradition of grand urban townscape. With the exception of the cities on the south coast, formal paved squares with fountains or statues are rare in Wales, as are grand terraces and boulevards. This is a country of smaller market towns and villages, many of them ancient settlements with their origin in the early years of Christianity in Wales. Their character is subtly informal and their street plans are often still recognizably medieval. In such an environment the spaces between the buildings can be as important as the buildings themselves. Street surfaces have historically been bold and simple, relying upon locally available materials, so that the streetscape contributes significantly to the vernacular character of the settlement. In this context modern traffic, and the way in which it is managed, can often pose a major problem.

2. This guidance outlines ways in which traffic engineering and highway improvements can be designed sensitively in historic areas. Wales has 500 designated conservation areas where local authorities have a statutory duty to "preserve or enhance the character or appearance of the area", and over 26,000 listed buildings where local authorities must "have special regard for the desirability of preserving the listed building *or its setting*". Circulars 61/96 and 1/98 set out detailed policies on historic buildings and conservation areas.

Traffic Management

3. There has been increasing use of traffic engineering techniques, particularly traffic calming, to reduce vehicle

speeds, address accident problems and improve environmental quality. However, street works and highway improvements can also have a dramatic impact on the visual appearance of historic areas. In order to meet transport, planning and environmental objectives, such works are most appropriately carried out as part of an integrated approach to townscape management, and within the context of a traffic management strategy for the wider area. There are no standard solutions. Some features or particular designs may be more appropriate in some conservation areas than in others. A prime consideration will be whether the physical measures preserve or enhance the character or appearance of the conservation area, while meeting operational and safety requirements. Instrumental in this is an approach that advocates simplicity of design, and the use of materials that match — rather than contrast with — their surroundings.

Analysis

4. The design of a scheme in an historic area can be aided by an understanding of what has existed historically and what still survives. This can involve archival research, particularly of early photographs and engravings, townscape analysis and an audit of the area noting the materials used and their details. From this the special character of the area can be defined. An appreciation of the wider surroundings of the scheme area and the relationship of buildings and the spaces between them can also be of assistance. Many local authorities in Wales are already undertaking such conservation area appraisals as part of the planning process. Such historical precedent can inform the method, design and choice of materials selected for new traffic management schemes. 5. Historic areas can often be improved by the partial or total removal of traffic, through pedestrianization or the use of shared surfaces. However, in historic areas the traditional form and appearance of the street remains vitally important. The traditional distinction between the carriageway and the footway may be important both visually and historically, and this may counsel against the adoption of a single wall-to-wall surfacing. An informed analysis of the existing situation will show whether traditional kerb lines and changes in level should be retained.

6. Some basic principles to be followed in such cases should be to:

develop an understanding of the special qualities of the place and depart as little as possible from the traditional form of the streets and their materials;

- respect existing or established traditional materials and detailing;
- review existing signing and consider scope for rationalization;
- anticipate and minimize new signing requirements at the earliest design stage;

limit formal designs to formal spaces;

provide for maintenance and invest in quality.

7. The resulting scheme can often help in generating a

sense of civic pride and ownership in the scheme.

Materials

8. Historically, local materials such as Pennant sandstone and slate were used for paving. Where such historic materials survive these should be retained wherever possible, and matching natural materials used in repairs. The use of alien paving stones, such as buff or yellow York stone, should be avoided. It should also be noted that traditional materials are most appropriately used in combination with traditional detailing. In situations where the traditional material is in limited supply, the important factors to seek in alternative materials are the colour and texture of the paving. Several artificial paving materials have been developed which convincingly look like stone.

9. The scale and layout of materials also need to be considered. Features such as the introduction of patterns into paving schemes need to be based on local tradition, and a useful rule-of-thumb is to restrict formal patterns to formal areas. In many places there has been a long-established tradition of interlocking rectangular 3' x 2' slabs for footways and this should normally be continued.

10. There is a tendency in designing paved areas to incorporate too many changes of scale, pattern and colour. The result is usually visual confusion, which can pose dangers for pedestrians and motorists alike. The safest policy, and one that accords with Welsh tradition, is to keep things bold, clear, and simple.

Signing and Street Furniture

11. In the past, many streets were characterized by a pervading sense of pleasing simplicity. Modern usage of streets has demanded an increasing provision of street furniture including seats, litter bins, traffic signs, guard

rails and bollards, sometimes at the expense of visual order. In these situations it is always advisable to reduce clutter and integrate street furniture into the wider townscape. For example, changes in layout or level may provide suitable alternatives to ranks of bollards where these would be unsightly. Where bollards are used these should be in keeping with the character of the area: for example, square oak posts may be more appropriate in some settings than cast-iron.

12. Some modern street furniture uses historical styles. While there is certainly a role for reproductions, particularly where locally distinctive designs are used, there is also a place for modern designs to give continuity to a tradition of craftsmanship. An audit of existing traffic signs, with a view to rationalization and maintenance, can be a useful way of improving the effectiveness of signs as well as removing clutter.

13. Narrower yellow lines can be used in conservation areas for the control of parking. A paler colour may also be used. In some areas, however, any yellow lines could be regarded as intrusive. Where waiting restrictions are uniform, and traffic conditions suitable, the designation of a restricted zone can obviate the need for yellow lines. Such an initiative would require authorization from the Welsh Assembly Government. This would be given initially for an experimental period, and only where co-operation regarding the enforcement of the restrictions was assured.

Lighting

14. The almost universal illumination of built-up areas is a relatively recent phenomenon. The problem in historic areas is that, if light levels which ensure safety and security are to be achieved, the light sources must either be higher (to give a wider spread), or more frequent, than the traditional lamp-post.

15. A review of light coverage requirements can take into account the need for security and whether a contribution may be made from other sources such as illumination from buildings. Modern, discreet wall-mounted fittings may be more effective than reproduction cast-iron columns. The use of light fittings designed to aim light downwards and so reduce "light pollution" should always be considered.

16. Colour can also play a valuable role. Simply changing from orange low pressure sodium lighting to white high pressure sodium or tungsten can provide a significant enhancement of historic environments.

Access

17. The access needs of all road users should be considered from the outset in scheme design. The installation of poorly laid cobbles or setts can result in discomfort to some road users such as people in wheelchairs, or those pushing prams. However, much can be achieved through forethought. Special provisions, such as dropped kerbs combined with tactile surfaces at pedestrian crossing points, will assist pedestrians who are mobility impaired, blind or partially sighted. It is accepted that in historic areas some colour contrasts may not be considered visually acceptable; grey materials can therefore be used as appropriate, rather than buff or pink. It is important to give careful thought to the design of crossing points to avoid the tactile surfaces forming awkward geometrical shapes, which can detract from the appearance of historic streets. As far as possible they should be visually integrated into the scheme as a whole and not treated as an afterthought.

18. Bollards can be an obstacle, particularly for people who are visually impaired. It is often useful to discard preconceptions and to question why bollards are necessary. For example, vehicular access can often be denied or discouraged by other means. To minimize the risks for pedestrians who are visually impaired, if bollards are installed it is recommended that they are 1m high and of a distinguishing colour.

19. Further guidance on the access issues in the historic environment can be found in the Cadw publication *'Overcoming the Barriers'.*

Traffic Calming

20. A number of features can be employed to control vehicle speeds. Care will need to be taken in historic areas to ensure that the design of schemes incorporating these features does not diminish or detract from the visual amenity or character of the area.

21. Some historic areas already include townscape features that can have a natural traffic calming effect. They might include tight kerb radii, narrow carriageways, cobbled and setted streets and traditional gateways or pinch-points. New entry treatments and gateways could be based on appropriate local townscape features such as these, producing a wide variety of designs. Speed cushions provide a less obtrusive alternative to humps, and can be constructed using materials and colours sympathetic with the highway surface and surrounding environment.

22. As a general rule, road humps and other traffic calming devices must conform with the Highways (Road Humps) Regulations 1996 and the Highways (Traffic Calming) Regulations 1993. If a road is subject to a 20mph speed limit the normal requirements for the signing and illumination of road humps and traffic calming works do not apply.

Costs

23. The cost of high quality materials may often seem prohibitive. However, any cost assessment should consider the durability of many natural materials and the benefits to the local economy of quality schemes in historic areas. Many Welsh towns derive considerable financial benefit from tourism, and maintaining or enhancing the historic environment can bring significant advantages by increasing visitor appreciation. Carefully maintaining or re-using historic paving materials is a prudent management of resources and also promotes sustainability. There may also be some saving on maintenance with a well-detailed scheme

24. There can be a case for combining lower-cost materials for extensive surfaces with the fine detailing of granite kerbs, setted gutters and stone-paved footways to make effective use of the financial resources available.

Advice and Enquiries

25. Advice on conservation aspects of street works can be obtained from the conservation officers within local planning authorities. Local history societies, civic and amenity societies and public libraries can often provide historical information.

26. Comment on specific proposals may be sought from Cadw, an Executive Agency of the Welsh Assembly Government. Cadw carries out the Assembly Government's statutory duties in respect of ancient monuments and buildings of historic interest in Wales. Cadw may be contacted at:

Plas Carew, Unit 5/7, Cefn Coed, Parc Nantgarw, Cardiff, CF15 7QQ

Telephone: 01443 33 6000

Fax: 01443 33 6001

Email: Cadw@wales.gsi.gov.uk

27. Professional and technical queries on traffic management, traffic calming and authorisation issues should be addressed to:

Transport Directorate

The National Assembly for Wales

Crown Building, Cathays Park, Cardiff CF10 3NQ

Telephone : 029 2082 6436

References

Highways Act 1990

Traffic Calming Act 1992

Highways (Road Humps) Regulations 1990 (SI 1990/703)

Highways (Traffic Calming) Regulations 1993 (SI 1992/1849)

Highways (Road Humps) Regulations 1996 (SI 1996/1483)

Welsh Office Circular 61/96

English Heritage - Street Improvements in Historic Areas - 1992

English Heritage: Conservation Area Practice - 1995

Civic Trust/English Historic Towns Forum: Traffic

Measures in Historic Towns - 1993

English Historic Towns Forum: Traffic in Historic Towns Centres - 1994

Civic Trusts/English Historic Towns Forum: Traffic in Townscape: Ideas from Europe - 1994

Road Lighting and the Environment - DOT 1993

Traffic Advisory Leaflet 7/91: 20 mph Speed Limit Zones

Traffic Advisory Leaflet 2/93: 20 mph Speed Limit Zones Signs

Traffic Advisory Leaflet 3/93: Traffic Calming Special Authorisation

Traffic Advisory Leaflet 7/93: Traffic Calming Regulations

Traffic Advisory Leaflet 11/93: Rumble Devices

Traffic Advisory Leaflet 12/93: Overrun Areas

Traffic Advisory Leaflet 13/93: Gateways

Traffic Advisory Leaflet 2/94: Entry Treatments

Traffic Advisory Leaflet 4/94: Speed Cushions

Traffic Advisory Leaflet 7/94: "Thumps": Thermoplastic Road Humps

Traffic Advisory Leaflet 9/94: Horizontal Deflections

Traffic Advisory Leaflet 7/95: Traffic Islands for Speed Control

Traffic Advisory Leaflet 2/96: 75mm High Road Humps

Traffic Advisory Leaflet 4/96: Traffic Management and Emissions

Traffic Advisory Leaflet 6/96: Traffic Calming: Traffic and Vehicle Noise

Traffic Advisory Leaflet 7/96: Highways (Road Humps) Regulations 1996

Traffic Advisory Leaflet 8/96: Road Humps and Groundborne Vibrations

Traffic Advisory Leaflet 1/98: Speed Cushion Schemes

Traffic Advisory Leaflet 9/98: Sinsoidal 'H' and 'S' Humps

Traffic Advisory Leaflet 9/99: 20 mph speed limits and zones

Traffic Advisory Leaflet 5/01: Traffic Calming Bibliography

Cadw,

Plas Carew, Unit 5/7 Cefn Coed, Parc Nantgarw, Cardiff, CF15 7QQ Fax: 01443 33 6001Plas Carew mjiojiojiopg Email: cadw@wales.gsi.gov.uk