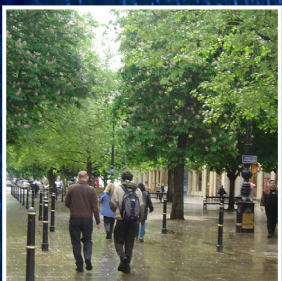
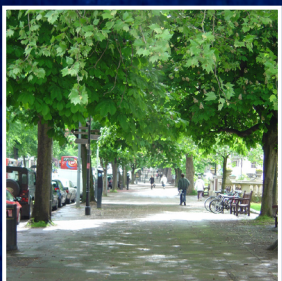
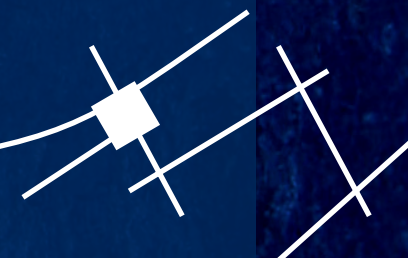


cheltenham  
urban design  
framework  
FEBRUARY 2008



# public realm strategy





cheltenham urban design framework

***Halcrow***



## 1.0 INTRODUCTION

Cheltenham Borough Council (CBC), Gloucestershire County Council (GCC) and the South West of England Development Agency (SWRDA) have established a Partnership with the purpose of taking forward an Urban Design Framework (UDF) for Cheltenham under the banner of Cheltenham Civic Pride.

The UDF comprises of a suite of documents which will provide a planning context for decisions generally in Cheltenham town centre on development, transportation and the public realm and specifically on design, and development issues relating to landholdings in the Council's property portfolio.

The Public Realm Strategy presented in this document follows the publication of the Baseline Report in July 2006 and the Urban Design Strategy and Transport Strategy in October 2006. Together with an implementation strategy these documents form the Urban Design Framework for Cheltenham which will become supplementary planning documents. At the same time the development of 3 publicly owned key sites will be used to generate revenue to fund the public realm improvements.

The draft Public Realm Strategy was the subject of public consultation in summer 2007, both at a public exhibition and stakeholder workshops. The consultation showed general support for the approach which is set out in this document.

Civic Pride is a measure of a community's respect for public spaces and the overriding aim of the Civic Pride Initiative is: 'to make people feel good about the places in which they live, work and relax. There is widespread concern at the poor quality of many places in the region. There are many tangible benefits to be gained from investing in a high quality public realm, which go well beyond the 'feel-good factor'.

The Civic Pride Initiative is built around the following objectives which are intended to support sustainable development:

- Support the objectives of urban and rural renaissance, by improving the character of townscape and landscape, and hence the economic and social prospects
- Promote good design
- Increase access to public spaces, making them more welcoming, and promoting social inclusion
- Encourage better management and a more effective use of public spaces
- Create and reinforce local

distinctiveness, respect built heritage, and foster peoples attachment to places

- Promote accessibility by making places that connect with each other and are easy to move through, putting people before traffic and integrating land uses and transport
- Reduce the opportunities and motivation for crime and other anti-social behaviour

The purpose of this Public Realm Strategy is to set out a basis for achieving these objectives in the public realm. It does so by providing a cohesive approach to the unifying elements of urban design such as street design, signage, lighting, public art, planting and materials.

Also of importance is the Cheltenham Borough Council Local Plan, from which a series of policies covering planning, design, transportation, accessibility and other issues have now been adopted for development control purposes. Until the adoption of Local Development Framework Documents, which will supersede these policies, they provide the context along with the SPD's within which development proposals within the town must be progressed.

The Local Plan identifies the priorities and objectives for Cheltenham. These are set within a broader vision that in the year 2020 the Borough should be, "...a vibrant, safe and sustainable town where residents, workers and visitors enjoy the benefits of social, environmental and economic well being." (Cheltenham's Community Plan 2003-2007)

In 2007 Highways Agency responsibilities transferred from the Borough to the County which creates a clear distinction between management responsibilities for highways and other elements of the public realm. This is a key factor in considering any long term management and maintenance. A co-ordinated approach with clear implications for budgetary responsibility for public realm maintenance responsibilities between the County and the District will be key to the success of the UDF.



# cheltenham urban design framework

The Cheltenham Spa Civic Pride Initiative report (2002) reiterated the importance of character areas, and recommended that “the distinct character of each could be articulated and enhanced and that their connectivity and inter-relationship re-enforced”. This was continued as part of the Urban Design Strategy and developed into the Quarters Concept, Figure 1

Although distinct quarters of the town have been identified it is not the intention to apply a different range of materials and elements to each.

How the strategy is organised:

Chapter 2 sets out a definition of public realm; considers its context and quality within Cheltenham; and establishes objectives for the public realm. Chapter 3 allocates each street in the Civic Pride area to a broad typology according to function and character.

Chapter 4 sets down some general principles for the management of the public realm.

Chapters 5-10 consider general approaches to a series of key themes.

Chapters 11 and 12 suggest design approaches to development sites and key spaces in the Civic Pride area.

The approach will take each identified public realm theme and lay out a set of general principles across the Civic Pride area, Figure 2. The themes will include surface materials, lighting, signage, trees and green spaces, street furniture and public art. Each theme will offer general guidance first followed by more specific detail relating to a particular area

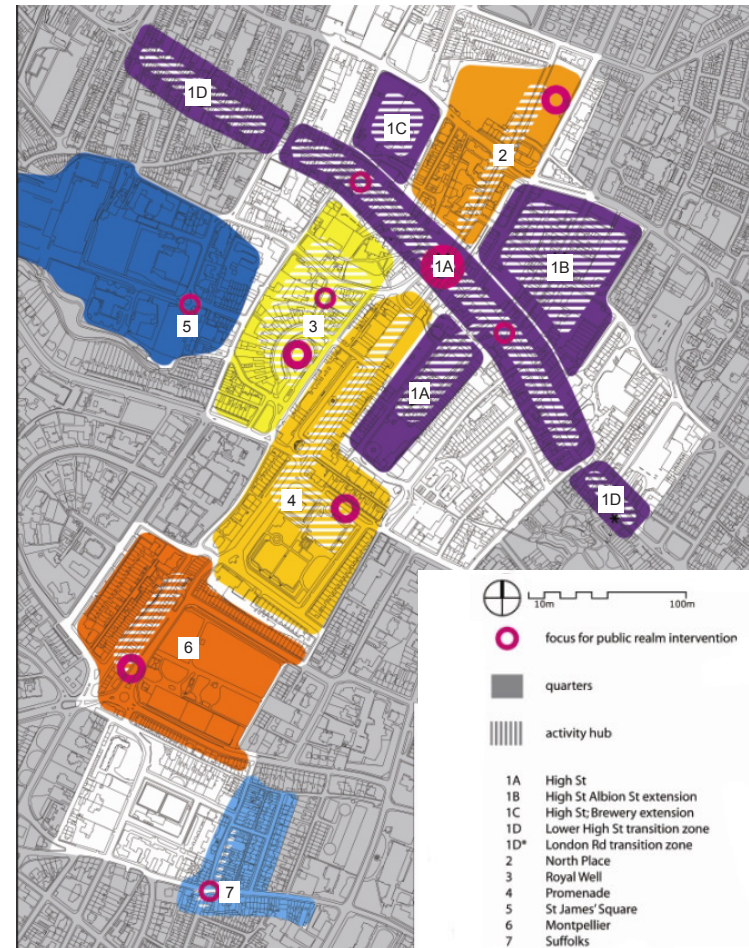


Figure 1- Cheltenham's Quarters taken from the UDS realm and themes

and/or building depending on the theme. After considering each theme the document will go on to consider site specific public realm principles for the three development sites and the other proposed focus areas for public realm intervention. Colour, scale, texture and quality of materials respect both the character and function of the street. Therefore it is appropriate that in most cases materials will be applied in the same manner within more than one identified quarter, thereby contributing to the overall sense of coherence of the town. It is equally important to enhance distinctiveness and improve legibility within different areas of the town. Some of the themes, signage for example can offer subtle variations to achieve this.

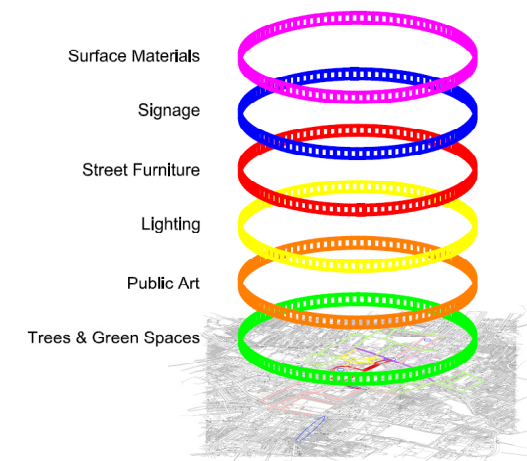


Figure 2 – The layered public realm themes





## 2.0 CHELTENHAM'S PUBLIC REALM

### What is Public Realm?

English Partnerships' "Urban Design Compendium" 2007 publication, states that:

"A comfortable and stimulating public realm that encourages social interaction requires detailed attention to the structure of a space and the elements it contains. This involves the surfaces; what is hard, what is soft; what forms of planting are appropriate; and what surfaces are for vehicles as well as pedestrian use, for example. It also requires that the issue of security, public art, street furniture, lighting and signage and so on be looked at in tandem".

SWRDA's Guidelines for the Civic Pride Initiative splits the elements of public realm into:

- The street and its links to adjacent areas, and the sense of community engendered by that relationship
- Pedestrian friendly spaces such as squares parks and gardens
- Views, vistas, townscape and landmarks, whether buildings or public art
- Street furniture and lighting
- Pedestrian and cycle routes, and safe crossings
- Civic buildings with civic functions, whether town halls or village libraries
- Other buildings fronting onto public space with public access, such as shop fronts, cafes or theatres for example.

### Historical Development of the Public Realm in Cheltenham

Much of the existing character of Cheltenham dates back to the 18th Century and the discovery of mineral waters. Coupled with a period of Regency architecture, the fashionable spa resort rapidly grew with a new and distinct character. Gracious villas, regal crescents and grand terraces contribute to what is the most complete Regency town in England.

The structure of the 18th century areas of public realm still hold strong in the promenades, the broad avenues, the ornamental gardens and the local squares. Today, although clearly well used and much loved, they suffer from the dominance of the vehicle and a lack of thoughtful design.

### Quality of the Existing Public Realm

Cheltenham's famous image of Regency architecture, tree avenues, green spaces, spas and pump rooms is important and must be retained as it forms much of the town's character. However, relying solely on this image or perception will not move Cheltenham closer to 'improving its environment by making it a beautiful and sustainable town', (as stated in the Community Plan "Our Future, Our Choice").

The Urban Design Strategy and early studies concludes that the downgrading of Cheltenham's public realm is a result of increased volumes and speeds of vehicular traffic, which generate barriers, reinforces separation between areas, and undermines the integrity of the town. The dominance of the inner ring road within the town centre has a negative impact on safety, generates noise and air pollution, and devalues the attractiveness of the town. As it stands, high quality, meaningful public realm intervention is lacking in the centre of Cheltenham which must be addressed in order for the town to become 'the most beautiful town in England'.



Bustles in a bustling Promenade of the 1880's



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Three key development sites have been identified as part of the Urban Design Framework; North Place, Royal Well and St. James. These three publicly owned sites will be brought forward in the near future and their development in combination, offer significant opportunity for public realm improvements. As well as new development sites it is essential that existing areas of public realm are enhanced. Figure 3, taken from the Urban Design Strategy, shows the three development sites and the proposed focus areas for public realm intervention. The area fronting the Town Hall, The Promenade, Crescent Place and the High Street are all considered important existing or potential areas of public realm intervention.



Figure 3 - Development Sites And Areas For Public Real Intervention

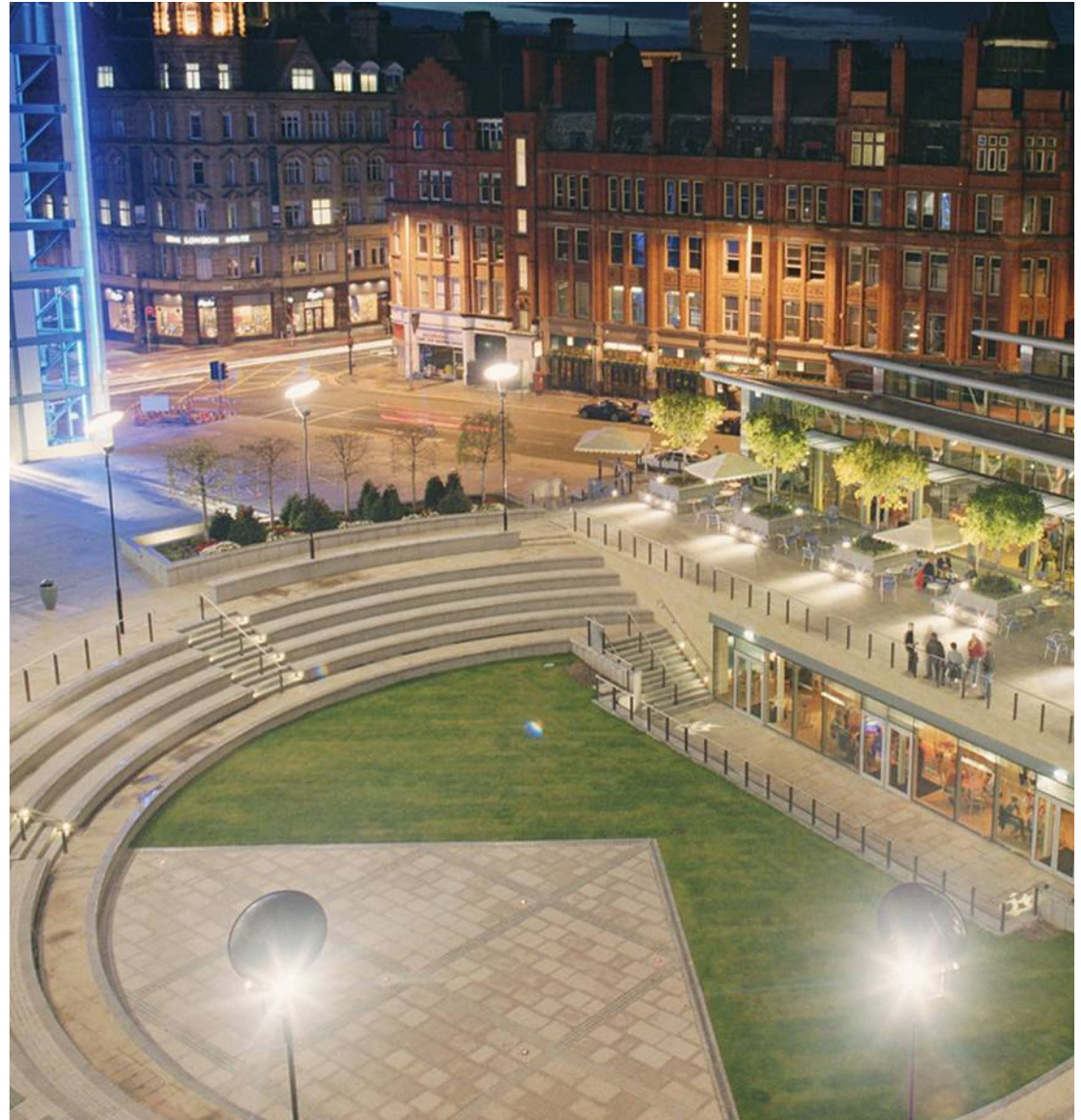


### PUBLIC REALM OBJECTIVES

The public realm should be designed to:

- Meet the needs of Cheltenham as an attractive, thriving, economic and social centre in the region
- Improve connectivity and integration between areas, celebrating their individual histories as well as realising Cheltenham's potential as a 21 Century town
- Promote sustainable transport modes and particularly encourage pedestrians.
- Provide a unifying structure, drawing together the historic and more contemporary elements of the town into a legible whole
- Encourage innovative design, avoiding pastiche by reinterpreting the existing fabric through the use of new materials
- Achieve high quality spaces using durable materials incorporated into uncomplicated designs focusing on the correct balance and proportions of elements
- Avoid street clutter and co-ordinate furniture, signs, posts, bus shelters and lighting to give due regard to surrounding buildings and the overall street scene composition
- Provide access to areas of public realm which meet the needs of all groups in society
- Be carried out in phases if budgets are limited, rather than compromising quality
- Meet the needs of maintenance requirements and recognise replacement and whole life costs of materials
- Utilise locally sourced natural materials and skills where possible
- Enrich the evening economy and offer a safe and rewarding visit

The successful design of the public realm will be achieved through the involvement of multi-disciplinary design teams including artists, landscape architects, highway engineers, urban designers, lighting designers, as well as consultation with the public, local businesses and user groups.



Integration of elements creating a high quality area of public realm. - Great Northern Square, Manchester



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## 3.0 STREET DEFINITIONS

The street scene is an essential component in any urban fabric and is a key element of a town's identity. Figure 4 defines streets that should be treated consistently through out the town centre. The definitions take into account the function and character of each street derived from the site analysis carried out for the Baseline Report and the Urban Design Strategy.

### Street Definitions

#### • Principal Regency Street

The heart of Cheltenham's regency area defined by the high density of activity, width of street and historic architecture

Materials - High quality choice only

#### • Secondary Regency Street

Predominantly regency form and servicing the core regency area with a slightly reduced density of activity

Materials - High quality choice or where budgets don't allow secondary choice of reduced quality

#### • Core High St Retail

This is the section of the retail area that contains the main 'high street' stores and the principal entrances to two shopping. Less grand and reduced width with high density of activity

Materials - High quality choice only

#### • Secondary High St Retail

Streets leading north and south from the high street. The functions of these streets are secondary retail (smaller stores) and a mix of some residential, bars, restaurants and offices.

Albion Street has been include as this has been outlined as an area of retail expansion

Materials -High quality choice or where budgets don't allow secondary choice of reduced quality

#### • Cultural Core

Although the smallest of defined street functions it is important as it consists of the historically important St. Mary's Church and grounds and Clarence Street with the library, art gallery and museum

Materials -High quality choice only

#### • Civic Pride Standard

All other streets within the Civic Pride area which have a less specific function and character.

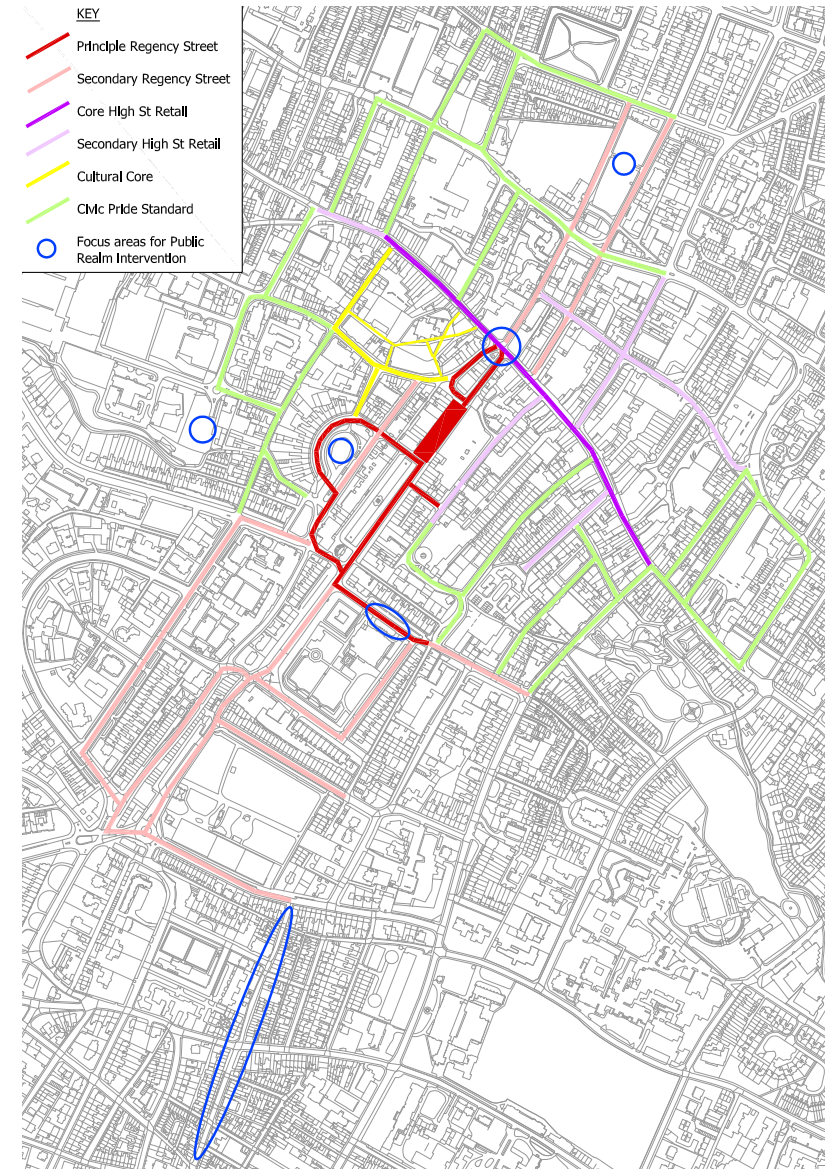


Figure 4 - Street Typology





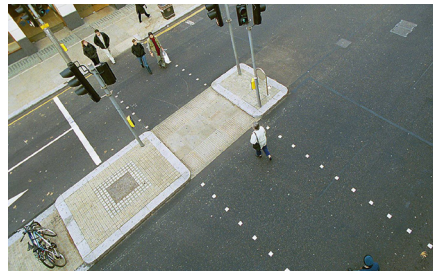
## 4.0 GENERAL PRINCIPLES FOR IMPROVING THE STREET SCENE

### Avoiding Street Clutter

In parts of Cheltenham, as found in many towns and cities today, the public realm is increasingly littered with clutter, including signposts, railings, lampposts, bollards, fingerposts, bins, poorly placed street furniture, traffic lights, CCTV, and service inspection boxes. Often these items are owned and managed by different bodies and placed to accomplish only one function, with little consideration to the overall street scene or pedestrian user. The fact is that clutter undermines the quality of a space is confusing and can create hazards.



A cluttered junction on the lower High Street



An uncluttered Kensington High Street

A joined up approach is required and can be achieved through communication and agreement between the Borough Council, the highways authority, the utility companies and the design and engineering fields.

The general principles are as follows:

- Remove redundant and obsolete elements and establish clear messages
- Design the space in relation to the wider context. The function of the space should be made clear for pedestrians, cyclists and drivers and the need for signs, railings etc. minimised
- Essential elements such as service inspection boxes should be of a minimal scale and placed within planting beds or at the building edge in order not to impede the pedestrian or contribute to visual clutter
- If the element is required to be sited in the open, a lamppost for example, then the design, colour, scale and level of illumination must be selected to suit the location
- Both bespoke and 'off the shelf' items are appropriate as long as the designs are modern and of good quality rather than continuing with the black and gold 'heritage' range which inevitably equals pastiche.

### Appropriate Paving

Surface materials are applied to footways, cycleways, kerbs and carriageways. The various streets will carry different capacities of vehicles and pedestrians and will have to be designed to accommodate the function that each street holds.

The function of a street is to facilitate the movement of people, vehicles and cyclists but is not the only role. Paving materials play an important role in the street scene because in most views half of what we see is the ground. Paving can unify and integrate space and helps accentuate the visual continuity of a street.

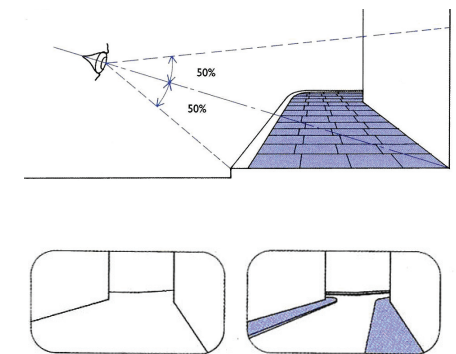
### Concealing inspection covers

The paving surrounding inspection covers and other services should be cut neatly and tightly to again avoid small cuts and the need for large mortar infill joints. Where possible paving should be cut and inset into recessed inspection covers which helps to conceal their visual intrusion.

Additionally, where possible covers should be realigned and positioned squarely within the paving to minimise cutting.



Inspection cover with paving inset



Streets for all – English Heritage



# cheltenham urban design framework

## 5.0 SURFACE MATERIALS

Figure 4 defines the street types within the study area and recognises the function and character of the street in the provision of guidance on materials selection. Section 5 provides general guidance on specifying and designing surface materials as well as more specific guidance on material selection.

### 5.1 General guidance

#### Workmanship

A high standard of workmanship in the laying and setting out of paving is key to a quality finish. It is not practical to prepare detailed design drawings for each individual pavement layout. Therefore straightforward simple principles which are easy to interpret by a mason on site are more successful.



Careful laying and setting out

#### Laying Patterns

Paving blocks and small modules such as the 400x400mm units frequently used in Cheltenham should be avoided. Their small

scale and relentlessly repetitive jointing is too fussy and tends to provide a chaotic foreground rather than a simple calm carpet of paving. Where the use of natural stone cannot be justified, rectangular 900x600mm concrete stone paving should be used, (refer to section 5.2).

Paving should always be laid perpendicular to the line of the kerb and in traditional staggered rows.



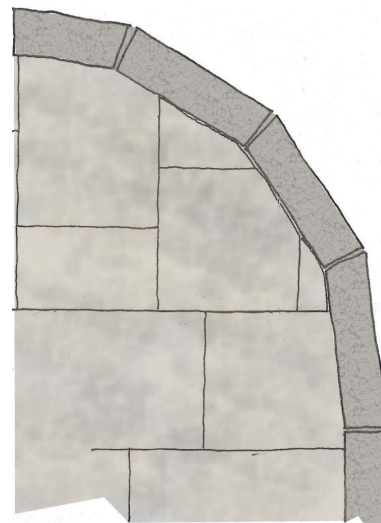
Avoid laying paving parallel with kerb which emphasises lines and the number of joints



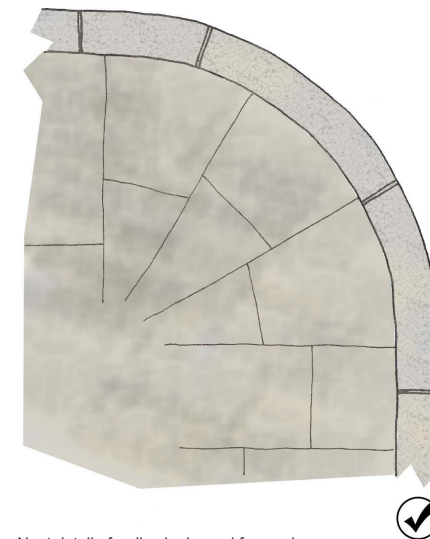
Paving laid perpendicular to the kerb

Small strips or cuts of paving look untidy and produce weak areas which will inevitably crack and break up. The adjacent slab should also be cut to make two large cuts rather than one small.

Similar problems occur at corners where the paving has been poorly finished. Small cuts of paving and large joints or voids filled with mortar again look messy and create weak areas. Radius kerbs and a radial laying pattern installed to a high standard of workmanship provide a neat, clean finish to an awkward intersection.



Poor detailing leaving large joints and small cuts



Neat detail of radius kerbs and fan paving





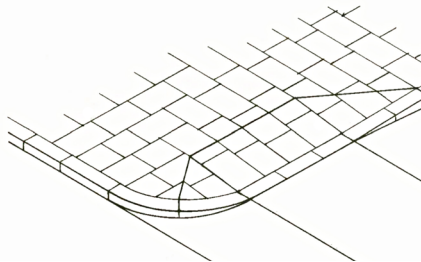
## Paving at dropped kerbs

Without careful consideration and a skilled contractor the paving around a dropped kerb can easily fail and look untidy. The example below from the Promenade shows how excessive cutting and vehicle overrun has caused considerable damage to a relatively new installation.



Damaged paving

The number of diagonal cuts required to attain the level change should be minimised and should not leave small segments.



Minimal diagonal cross cuts

Alternatively quadrants can be used to return the kerb into the footway forming a single gradient between levels avoiding any diagonal cuts.



Kensington High Street - by David Cowlard, Courtesy of CABE.

## Hazard warning

Hazard warning materials must comply with the function for which they are intended, but must be appropriate to the surrounding surfaces. Much of the town centre is designated a conservation area and therefore a tactile surface should be employed that blends rather than contrasts with the surrounding materials. The following examples indicate crossing points. Brass studs with non slip surfaces provide a contrast in colour and texture without being visually intrusive. Corduroy and tactile paving can be supplied in natural stone to suit the adjacent material.

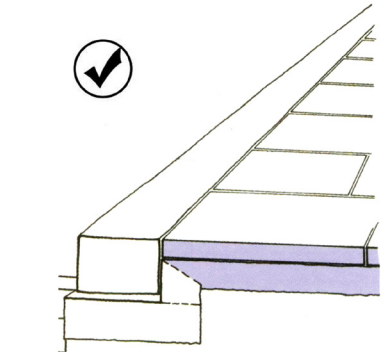
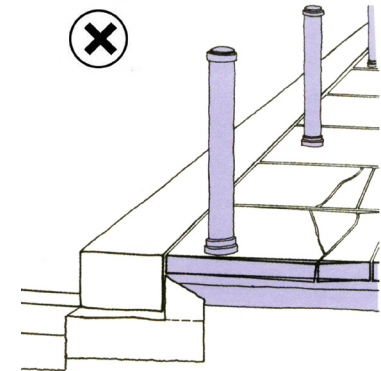


Brass stud tactile



Stone tactile

## Footway Construction



Where vehicles are prone to mount the pavement it is not necessarily appropriate to install lines of bollards which will only add to the street clutter. Paving slabs laid on flexible base courses will inevitably be damaged by overriding vehicles. Where vehicle overrun is likely paving slabs should be strengthened by being laid on a concrete base and tapped down to ensure continuous support and no air pockets.



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## 5.2 Materials Palette

The focus areas for public realm intervention shall be treated individually as they must respond to the specific site function and characteristic. However the materials will compliment the defined palette but offer distinctiveness and appreciation of a sense of place within an overall framework of continuity.

### Principles for material selection

- When budgets for renewal are limited it is preferable to implement a reduced scheme to the highest standard rather than one of a lower quality over a large area
- Natural stone slabs are to be used for focus areas of public realm: sawn cut for contemporary places such as North Place and Boots corner
- Shared surfaces within focus areas of public realm intervention should be treated with stone setts to withstand vehicle overrun
- Although more costly, traditional natural materials are more sustainable as they have proven to be durable and visually attractive
- Wherever possible, materials should be sourced locally
- The scale and texture of materials should complement the proportions of the adjacent buildings and street function

### Principal Regency Street

High quality materials only

Footways	Yorkstone paving 600mm coursing x random length
Kerb	Natural sandstone 200mm wide x random length
Carriageway	Macadam
Shared surface	Yorkstone setts appropriate for traffic overrun

### Secondary Regency Street

High quality materials preferred.

Footways	Yorkstone paving 600mm coursing x random length
Kerb	Natural sandstone 200mm wide x random length
Carriageway	Macadam
Shared surface	Yorkstone setts appropriate for traffic overrun

Where budgets don't allow secondary choice of reduced quality

Footways	600x900mm square edged concrete paving laid 2/3 stretcher in grey
Kerb	Reconstituted stone kerb 200mm wide x 915 long
Carriageway	Macadam
Shared surface	Tumbled concrete blocks

### Core High St Retail

High quality materials preferred.

Footways	Yorkstone paving 450mm coursing x random length - a second paving material with an alternative texture/scale/colour would be accepted to help define space within larger areas
Kerb	Natural sandstone 200mm wide x random length
Carriageway	Macadam
Shared surface	Yorkstone setts appropriate for traffic overrun

Where budgets don't allow secondary choice of reduced quality

Footways	450x 600mm square edged concrete paving laid 2/3 stretcher - a second paving material with an alternative texture/scale/colour would be accepted to help define space within larger areas
Kerb	Reconstituted stone kerb 200mm wide x 915 long
Carriageway	Macadam
Shared surface	Tumbled concrete blocks





## Secondary High St Retail

Albion Street has been included as this has been outlined as an area of retail expansion  
High quality materials preferred.

Footways	Yorkstone paving 450mm coursing x random length - a second paving material with an alternative texture/scale/colour would be accepted to help define space within larger areas
Kerb	Natural sandstone 200mm wide x random length
Carriageway	Macadam
Shared surface	Yorkstone setts appropriate for traffic overrun

Where budgets don't allow secondary choice of reduced quality

Footways	450x 600mm square edged concrete paving laid 2/3 stretcher - a second paving material with an alternative texture/scale/colour would be accepted to help define space within larger areas
Kerb	Reconstituted stone kerb 200mm wide x 915 long
Carriageway	Macadam
Shared surface	Tumbled concrete blocks

## Cultural Core

High quality materials only

Footways	Yorkstone paving - variety of course widths 400-900mm x random length
Kerb	Natural sandstone 200mm wide x random length
Carriageway	Macadam
Shared surface	Natural stone setts if traffic flows are reduced or macadam as a reduced quality option

## Civic Pride Standard

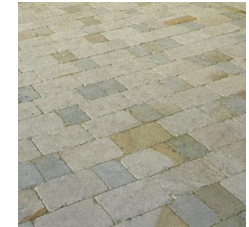
Footways	600x900mm square edged concrete paving laid perpendicular to the kerb, 2/3 stretcher in grey
Kerb	Standard HB concrete kerb
Carriageway	Macadam



Natural Yorkstone paving  
600mm wide x random length  
with sawn cut finish



Natural Yorkstone paving -  
secondary paving material



Natural Yorkstone setts for  
areas of shared space



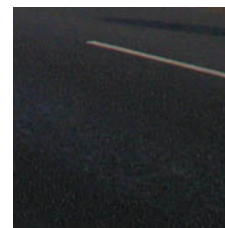
Natural stone kerb 200mm  
wide by random length



Reconstituted stone kerb



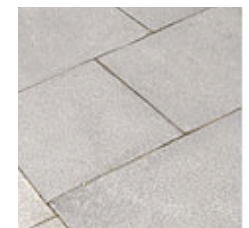
British standard HB2 Concrete  
Kerb



macadam for carriageway



Tumbled concrete blocks



Squared edge concrete paving  
600x 900mm



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## 6.0 SIGNAGE

### 6.1 General guidance

Signs and sign systems are a ubiquitous presence in the public realm. Functional excellence is a fundamental criterion of success, covering not only legibility, ease of use and consistency of application, but also longevity, durability and flexibility. Signs can also contribute to, or detract from, the image of the public realm. A design strategy for all aspects of the public realm will identify benchmark standards for each respective component, clarifying the relationship between parts and securing a clear and achievable vision for the future. Signs are one such component and have to be considered within the context of this vision making design and image of paramount importance.

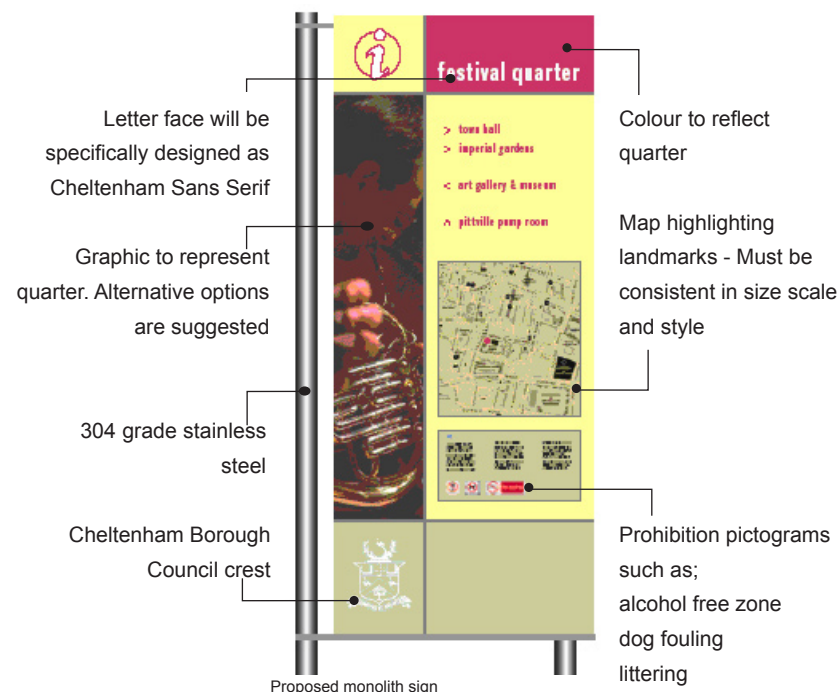
The principles which relate to this view of signage are:

- Signs should offer clear information and be located only in places where the information is relevant and necessary. The signs should be easy to find, but should not dominate the streetscape
- Signs not only offer directions but also reinforce a qualitative statement about the value of the public realm
- Whilst signs identify destinations unique to

particular towns and places, many towns use identical signage: this weakens the sense of local identity

- Signs which follow a faux heritage style severely limit their efficacy in sites of new development. Signs of genuine antiquity in sites of historic importance should be retained
- In general, signs should not follow any specific period style; if reference to this is required it should be supplied as an independent panel fixed to a standard sign

- Signage systems must be coordinated and applied consistently to maintain the confidence of the user. Co-ordination and consistency do not mean that the same signage detail is used in all instances
- Legibility is an obvious prerequisite for signs, but signage can offer other dimensions to legibility rather than merely pointing the way; colour coding, graphic additions and materials selection can reinforce particular qualities of a district to give the user both specific and contextual information



- Distance to destination to be shown in metres and /or time
- Signs which employ mapping should make use of specifically designed maps, rather than reproductions from printed tourist guides etc.
- Maps should make use of identifiable landmarks in the townscape as 3D graphics, rather than rely solely upon the abstraction of the 2D form
- Map boards or monoliths should form the basis for information and orientation; finger posts; either in association or independent of these, merely offer reassurance of the correct general direction. Finger posts should only be arranged in quadrants in order to prevent masking of information
- All components of a signage system should have flexibility to change information easily as required, and all components should as far as possible be "future proofed" or else have allowance for future change
- Signage strategies should take account of other interventions in the public realm, such as programmes of public art, to offer orientation and gateway information and to provide more creative approaches to way finding
- The legibility of all signage material must conform to DDA regulations and follow best practice in the design and manufacture of its respective components.





## 6.2 The Signage of Cheltenham's Quarters

Each Quarter will reinforce its character through variations in the treatment of the public realm. Monolith signs are proposed following the same structure for all Quarters. The graphic images and colour way will vary from Quarter to Quarter.

Decisions relating to colour choice should be made following a colour study which will identify the appropriate colour palette for each area. This colour will be applied to the graphic image, the lettering and the finger posts in each Quarter.

The letter face should be specifically designed for the town as Cheltenham Sans Serif and then applied for all public lettering, as proposed in the baseline document. Cultural opportunities should be exploited in developing this font, building upon the nationally significant collection of Arts and Crafts scripts held at the Art Gallery. A residency based at the Gallery may be the most effective means of moving this forward.

The graphic images within the signage contextualise the character of each Quarter, and appear in the same place on each monolith. This device should also be applied to interpretation boards and poster cabinets to reinforce the legibility of the Town.



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Town maps should employ 3D as well as 2D graphics, making the most of existing landmarks to help orientate the user. These maps will cover the same area for each monolith, but each Quarter will be identified separately on signage relevant to that area. Map design must be undertaken by a qualified graphic designer.

Monolith signs offer space to add in prohibition pictograms; these should never be mounted on individual posts and only as a last resort onto finger posts. Panels which form the monoliths should be manufactured separately, such that changes in information can be accommodated without changing the entire sign.

Monoliths and finger posts should be manufactured from 304 grade stainless steel and vitreous enamel. These materials, whilst quite expensive, provide excellent durability, low maintenance and a very high standard of finish which would reflect well on the town. The same palette of materials should be used for information display cabinets and interpretation boards across the town.

The detailed design of the signage suite will be commissioned separately and rolled out in a single phase throughout the town centre. A greater depth of consideration will be given to graphics, colours and arrangement of details at the detailed design stage.





## 7.0 STREET FURNITURE

### 7.1 General guidance

Signage has been considered separately as above, therefore under street furniture this guidance covers items such as seats, benches, litter bins, bollards, cycle racks, bus shelters and tree surrounds. Many of the principals described under signage apply equally to street furniture.

Street furniture should not reflect any heritage style or imitate a point in history. The following principles should be adhered to:

- The street furniture selection should be a co-ordinated contemporary range implemented throughout the town centre
- The materials must be durable, able to resist vandalism and be easily maintained. Ease of replacement must be considered
- The designs should be simple, stylish and elegant capable of accompanying a range of settings
- The placing of the elements must respect pedestrian flows allowing unimpeded access along the footways. Equal consideration should be given to the proposed function and the needs of less able users
- The furniture range should complement lighting styles and paving design and, in focus areas of public realm intervention, could be integrated to become a piece of bespoke public art with multiple functions
- The design and the materials should be 'Future - proofed' rather than what's in fashion to encompass a timeless quality

To assist with improving legibility and employing a sense of place, subtle modular variations to the standard items could be introduced. As with the signage details covered in section 6.0, coloured detailing could be incorporated in the form of infill strips or illumination to reflect the quarter in which the furniture is situated. Additionally in key areas it is acceptable to move away from the guidance and implement bespoke design to tie into specific sites such as Boots Corner or North Place.



Co-ordinating Bollard



Co-ordinating Bench



Co-ordinating Seat



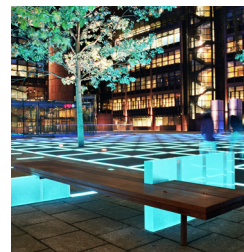
Bus Shelter



Stainless Steel Cycle Stand



Stainless Steel Bin



Integrated paving, seating and lighting - Courtesy of Maurice Brill Lighting Design



Bespoke design - Integrated paving, seating and lighting



Tree surround with paving infill



# cheltenham urban design framework

## 8.0 LIGHTING

### 8.1 Objectives of lighting strategy:

The lighting of the public realm will enhance the town after dark by providing a clear sense of place and vibrancy to complement Cheltenham's heritage, whilst providing a safe environment for all users of the town centre. Key issues are as follows:

Improve safety for users of the town centre

- Highway safety for all users – pedestrians, cyclists, vehicle users
- Reduce crime and fear of crime, and aid detection
- Light to appropriate part of BS5489
- Use light sources with good colour rendering properties ( $Ra \geq 20$ )

Enhance economic activity

- Leisure activity – pubs and after dark shopping
- Support Cheltenham festivals

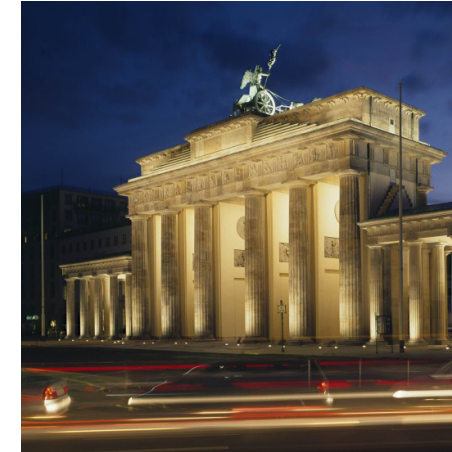
Enhance the architecture of the town centre and create a sense of place

- By integrating public highway and private building lighting to provide a distinctive night time environment
- Provide gateway features by day and by night
- Co-ordinating with street furniture
- Enhance the architecture of selected buildings by effective lighting schemes
- Support public art proposals with lighting

Environmental

- Energy
- Using energy efficient light sources
- Efficiency of luminaire
- Providing effective lighting controls to ensure lighting can be operated flexibly to meet changing needs
- Stray light
- Comply with the requirements of 'Guidance Notes for Reduction in Obtrusive Light' published by the Institution of Lighting Engineers.
- Sustainability

- Select equipment and materials to minimise whole life waste
- Provide appropriate lighting for public transport, walking and cycling provision.



Lighting of key building in Belgium (left) and Germany (right) which could be applied to the Town Hall for example.

### 8.2 Existing provision

Existing lighting provision was primarily designed for highway safety purposes, although there are significant decorative lighting columns within the town centre itself. These decorative columns have not, however, been co-ordinated with the street furniture, and are generally reproduction Victoriana style. This style can be seen across many cities in the UK and therefore contributes little to Cheltenham's unique sense of place.

Low pressure sodium light source has been used in secondary roads, which is limited to a mono-chromatic range of light and therefore does not represent colour at night. This lack of colour means it is visually harder to define threats or impediments to personal safety.

### 8.3 User safety

A basic requirement for lighting the public realm is to ensure highway and community safety: Highway safety to reduce collisions and facilitate the use of sustainable transport, and community safety to reduce crime and fear of crime and provide an environment where all sections of the community feel safe.

This is achieved by the professional application of lighting standards to the public realm, rather than by a slavish following of particular lighting levels.





## 8.4 Integration of public realm

The effective integration of public highway lighting and the lighting of private building facades creates one of the biggest challenges, but offers the greatest potential rewards of any element of the lighting strategy.

Historically, integration has been achieved more effectively in continental Europe than in the UK. This has largely been due to the government structure and legal framework that makes integration easier to achieve in Europe.

In Cheltenham, effective liaison with stakeholders to gain agreement on technical, legal and financial aspects is vital to achieve integration objectives. However, successful liaison would provide a solid basis on which to deliver a truly distinctive night time environment.

## 8.5 Festivals

Festivals will be supported by providing controllable building lighting so buildings are lit to support individual festivals that take place throughout the year. For example, it is proposed to light Cheltenham Town Hall façade with a controllable system to allow different colour shades to reflect the wide variety of events. This would need careful consideration to ensure that the lighting effects are appropriate and in keeping with the ambience of Cheltenham and the heritage status/context of the building. Nevertheless, this approach would be distinctive and would help enhance the atmosphere generated by these festivals and events.

## 8.6 Sustainability

The environmental impact of detailed proposals must be considered at all stages of the design process. Consideration of the type and amount of material waste that would be produced by differing design solutions must be considered, together with efficiency of light sources and luminaires and control systems to minimise energy consumption. Good lighting design, management and consideration to life expectancy of systems will inevitably lessen carbon impacts.

The environmental impact of lighting itself is an increasing concern. Professional lighting design in accordance with the requirements of 'Guidance Notes for Reduction in Obtrusive Light', published by the Institution of Lighting Engineers, is required to manage this issue effectively.



Terra Aberdeen - Uplighting the columns as well as the silhouette of the trees



Tanner Street Bridge - Well lit foot ways under the bridge for pedestrian safety and feature lighting to bridge elevation



## cheltenham urban design framework



St. Gregory's church



St. Mary's church



Eagle Tower



Holy Trinity church



St. Andrew's URC



St. Philips & St. James' church

### 8.7 Legibility through lighting

Some of the town's spires are lit, but coverage is not complete. A possible project which could be developed as a separate lighting scheme encompassing the whole town centre would be to light all of the town's spires. With the exception of the Eagle Tower, Cheltenham is a town with very few tall buildings. This provides frequent glimpses of the towns spires amongst the urban fabric. Although not technically a 'spire' the Eagle Tower both accepted and hated, could be included and utilised to enhance legibility.

The spires could be lit externally and/or internally from within a spire window. Subtle use of colour could provide a sense of locality.







A suite of lighting elements should be selected to co-ordinate with each other as well as complement the other public realm themes. However, selection should not be restricted to a single supplier.

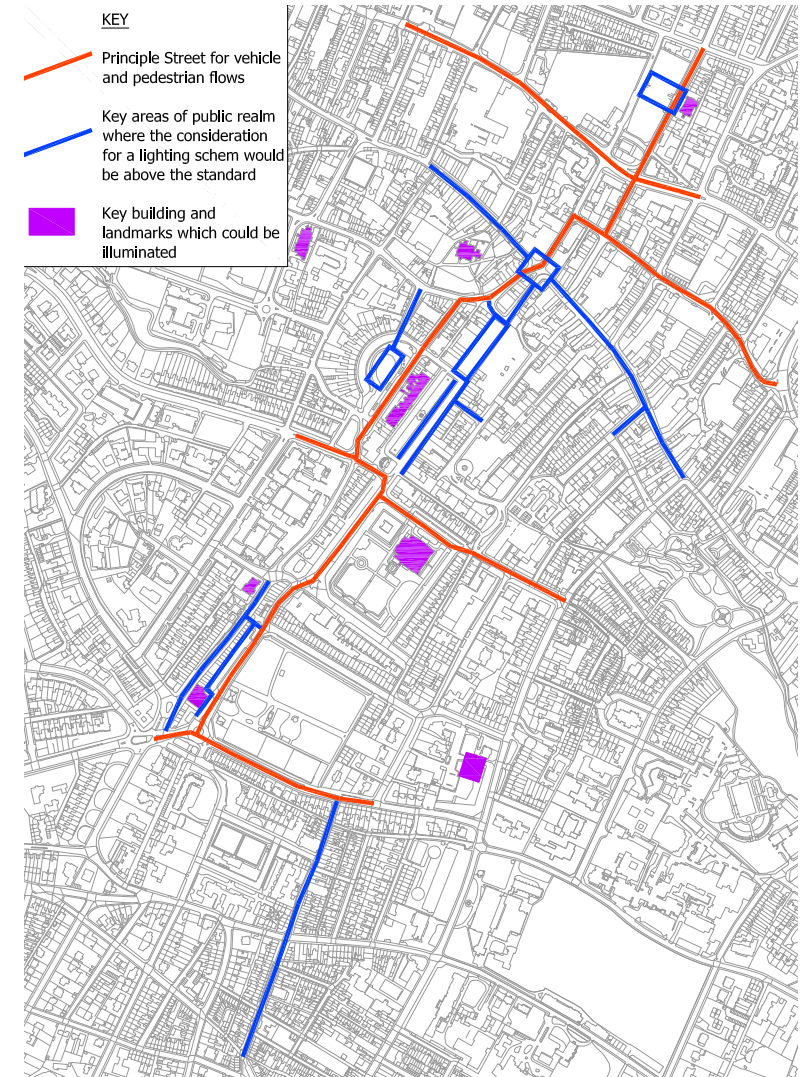


Figure 5 - Specific lighting considerations required for Principle Streets, key areas of public realm, key building and landmarks. All other streets within the Civic Pride area are considered connecting streets and should be treated consistently



# cheltenham urban design framework

## 9.0 PUBLIC ART IN THE PUBLIC REALM

Public art is playing an increasingly visible role in the streetscape of towns and cities. At its most effective, it creates resonant images in viewers' minds, adding a layer of meaning and significance to the public realm; at its worst, it adds to clutter and illegibility.

Public art can and does contribute significantly to Cheltenham's townscape, but its introduction must be planned for strategically.

The urban design framework establishes a coherent pattern to analyse and understand the Town, expressed through Quarters, gateways, linkages and movement. Translating these concepts into tangible reality requires coordinated policies and cross departmental action. A strategic approach to public art engages fully with that modus operandi, ensuring the location, scale, function and procurement of future artwork conforms to and enhances the vision for the Town.

Public lettering and signage should also be considered within the context of public art, with the intention of creating a unique and specific public realm. Standard products and letter faces should make way for individual design which reinforces the legibility and identity of the town and its Quarters.

Within the urban design framework, a number of sites and types of work recommend themselves:

- North Place redevelopment
- Boots Corner
- The link between the Promenade and Boots Corner
- The Suffolks
- Clarence Place

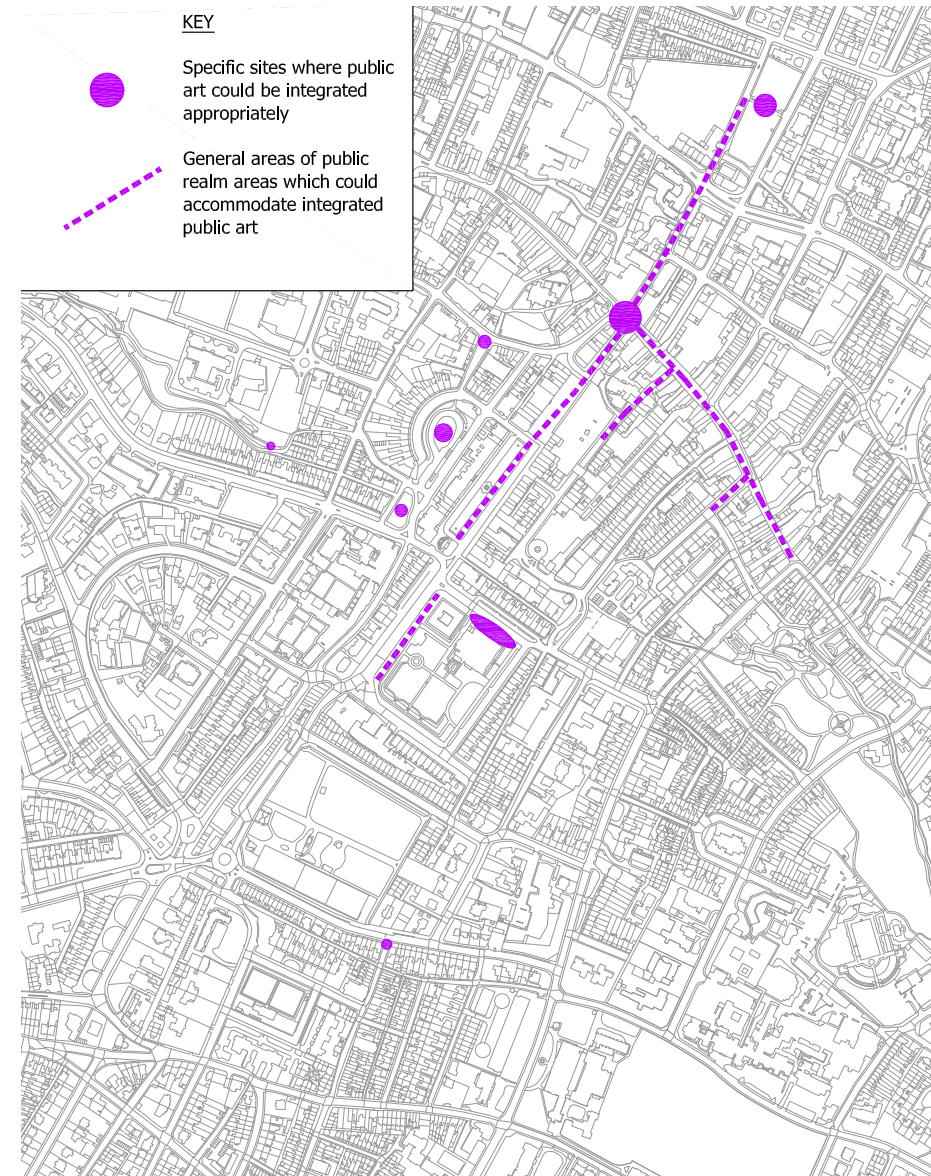


Figure 6 - Specific location and general areas of public realm where public art could be integrated





In order for public art to achieve its potential, it must be considered at a fundamental level, not left to last, and it must be funded to realistic budgets. It is better to create one major work successfully than several smaller failures.



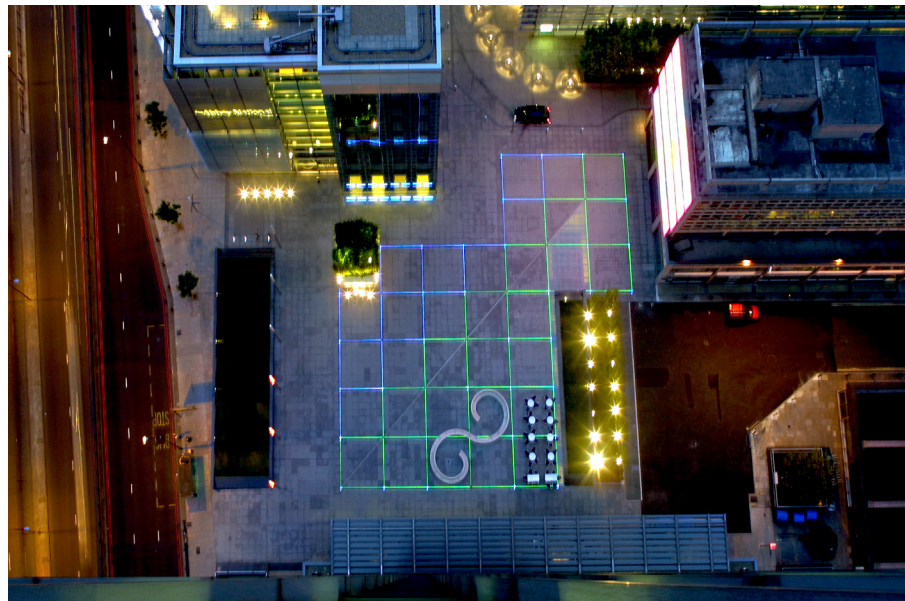
Birmingham



Manchester



Sculpture with fibre optics



Regency Place - Courtesy of Maurice Brill Lighting Design

# cheltenham urban design framework

## 10.0 TREES AND GREEN SPACE

### General Guidance

In order to preserve and enhance the numerous tree avenues within the town, as well as greening the proposed Town Boulevard, significant planning and consideration must take place to ensure the desired effect is achieved and maintained for the life of the tree.

Although Cheltenham is well known for its parks, promenades and tree avenues with over 8000 street trees, there are gaps particularly along the High Street. Trees are important for a number of reasons.

Birmingham Civic Society commented recently on the air quality effects of trees - 'Our trees keep us healthier; they filter polluted air alongside our busy roads, they provide shade and a calming setting for recreation and relaxation. They absorb carbon dioxide, one of the world's major greenhouse gases so they are very important in the fight to reduce the rate of global climate change'.

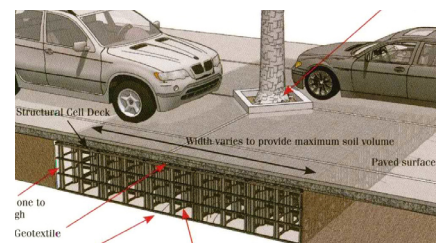
Additionally the Trees for Cities web site considers the energy saving elements 'Trees can also save as much as 10% of annual energy consumption around buildings by moderating the local climate keeping it cool in summer and warmer in winter'.

During a seminar "It Takes Brown to Make Green", (28.02.2007), James Urban, an authority on trees in built-up areas and principal of Urban Trees and Soils in Annapolis, Maryland, said that in many vehicle dominated cities around the world it has been shown that there is up to 2% less oxygen compared to areas outside of the city. Small trees do not have a significant impact on rectifying this balance.

If the intention of the tree planting is to retain the characteristic of large avenues of trees then where the environment allows for it large species should be planted which are allowed to grow to their full potential. The detail of this planting should be considered carefully.

New tree planting must consider climate change and respect the fact that temperatures in the UK are going to rise. An adaptable mix of species must be selected that will thrive well into the next century. In many UK towns and cities the growth of urban trees has been significantly restricted because of an inadequate volume of soil and water supply. The benefits of large trees are numerous, ranging from aesthetic beauty to stormwater management, to urban heat island mitigation. With modern technology from suppliers like DeepRoot, it is possible to provide a structure beneath the surface to accommodate soil which is not compacted as

well as supporting a hard vehicular trafficked surface above. Parking bays are ideal areas to introduce Sustainable Urban Drainage Systems which not only help reduce stormwater flows but provide much needed water to tree roots.

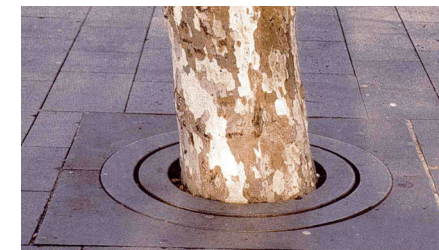


Courtesy of DeepRoot

Where trees are proposed close to structures, there will be strict consideration of their suitability. This will include an understanding of dimensions at maturity, density of shade, water demand and tendency to fail. Species will be determined by the function of the planting, the nature of the site and the proportions of the highway. In some cases the use of cultivars of common species with a more columnar form are likely to be appropriate (see list below). The use of root barriers will be necessary and all trees should be planted with watering tubes. Neat tree surrounds are required to integrate the paving and allow adequate space for pedestrian flows.

The County Council is responsible for the planting and management of trees in the highway. All new trees in the highway will be the subject of a commuted sum. This money will then enable the Highways Authority to have the necessary funds to carry out the required future maintenance. The likely required maintenance will be in the first five years with watering, mulching and monitoring and then little until later in its life in pollarding deadwood removal, and crown thinning.

An overall tree strategy should be undertaken which takes into account the condition of the existing tree network in the town centre.



Neatly paved tree surround



York stone tree surround





### Relatively Upright Columnar Form Trees

Species	Cultivar	Max Height Potential (Meters)	Max Radius Spread (Meters)	Soil
Acer platanoides	Columnare	15-20m	6m	All soils apart from V wet sites
Acer campestre	Elsrijk	12m	4-5m	Most soils
Acer saccharinum	Pyramidale	20m	8m	Most soils
Acer rubrum	Scanlon	10-12m	4m	Tolerates clay
Betula pendula	Fastigiata	10-15m	5m	Tolerates clay
Carpinus betulus	Frans Fontaine	10m	3m	Most soils
Corylus collurna		15-20m	4-6m	Prefers calcareous soil
Crataegus monogyna	Stricta	10m	3m	Most soils
Fagus sylvatica	Dawyck	20-25m	3m	Needs well drained rich soil
Fraxinus ornus	Obelisk	8-10m	3-5m	Prefers dry calcareous soil
Liriodendron tulipifera	Fastigiatum	8-10m	4-8m	Most soils
Malus tschonoskii		8-10m	3-4m	Soil
Platanus X hispanica	Pyramidalis	15-20m	4-8m	Most soils
Prunus Amanogawa		6m	1-2m	Most soils
Prunus X schmittii		10m	2-3m	Most soils
Pyrus calleryana	Chanticleer	8-10m	4m	Most soils
Quercus robur	Fastigate Koster	10-15m	3-4m	Tolerates clay
Ginkgo biloba		30m	8-10m	Most soils

Various other "Streetwise" varieties are also available