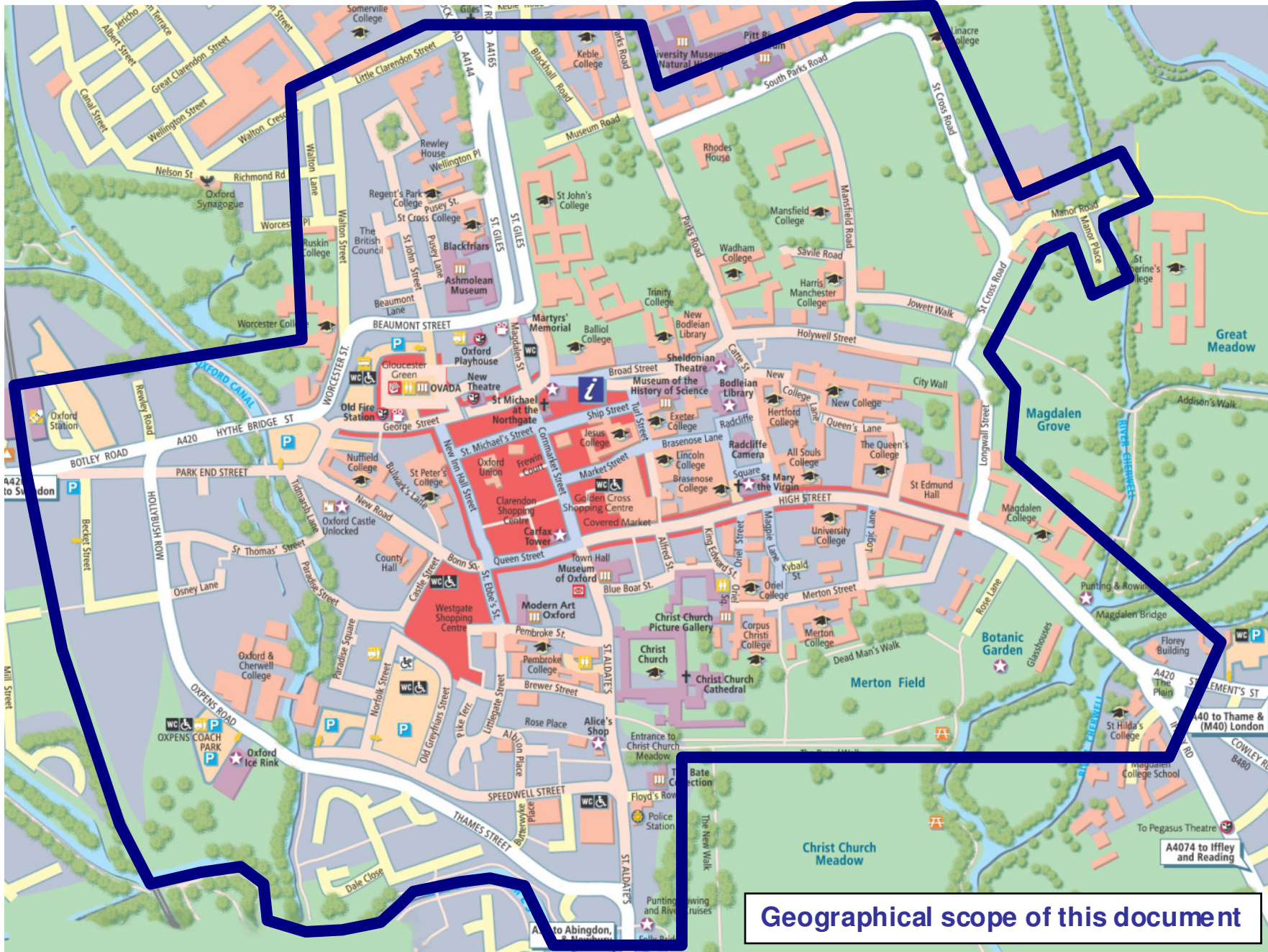




Oxford City Centre Street Scene Manual

Part one: policies, process & materials







Introduction

The public realm of Oxford has a rich and dynamic character that has evolved through the centuries. Oxford City Council, Oxfordshire County Council and the West End Partnership are committed to continually improving the appearance and function of the city centre's streets and spaces. It is our belief that a high quality street environment is fundamental to the success of the city as a place where people want to live, work and visit. An attractive street scene as well as having aesthetic benefits also has social, economic, environmental and safety benefits.

Part One of the Street Scene Manual provides general guidance for the design and management of streets in Oxford city centre primarily to guide the partners' work although its' principles can be more widely applied. It is structured as follows:

Policies - policies for the design and management of streets

Process - clear process for developing street designs

Materials - guidance on materials to be used in the city centre and their application

Part One of the Street Scene Manual sets out the key principles to guide the design and management of streets and spaces. There are statements of policy where it was felt a particular approach needed to be formalised and agreed between partners which will be applied in all but exceptional circumstances. Part One also sets out a design process for the street enhancement schemes that will follow. This process importantly incorporates an assessment of the ambitions for a scheme and a context analysis to ensure that the right questions are asked of the right people at the right points in the design process. If projects follow this process it will ensure that they have all considered the myriad of issues that are involved in the design of a successful street scheme. The final section of Part One is a palette of materials for use in ground surfaces and street furniture. The palettes will apply throughout the city centre but are provided with additional guidance to assist with their application and specification.

Part Two (and any other subsequent parts) of the Street Scene Manual will follow in the years to come. At the current point in time it would seem appropriate for there to be a series of detailed technical notes dealing with the various elements of the street scene and how they are to be handled with in the city centre. For example technical notes would address issues ranging from road markings to street cafes and planting to street cleansing.



Civilised streets

Oxford city centre's streets and spaces form the arena for a wide range of important activities performed by a variety of different users. Streets are routes for all, pedestrians, cyclists, public transport users and private vehicles drivers and passengers. However, the vast majority of journeys in the city centre are carried out by pedestrians¹ and other road users at the start or end of their journey. It is also important to remember that streets are not only paths that connect one place to another; they are also social places where people can sit, read, eat, talk or simply relax. Streets are also the waiting areas for bus passengers and needed to accommodate delivery and servicing traffic, cycle and car parking. Many people live in the city centre and their needs must also be considered.

There are numerous and diverse demands placed on streets, particularly in a busy city centre. Streets must cater for a wide range of activities and people. Attempting to meet all these needs is what makes designing and managing streets so challenging, and can ultimately lead to cluttered, incoherent street scenes.

The first step in achieving an attractive and successful street scene must therefore be an acceptance that streets cannot always meet all

¹ "pedestrians" includes users of wheelchairs and mobility scooters.

demands equally. Clear priorities must be set, both "globally" (across the city centre) and "locally" (for individual streets). This manual sets the global priorities; local priorities for particular streets must be informed by the global priorities and through the street design process set out in this manual.

Within the city centre there are many spaces that whilst appearing to be public, are in fact privately controlled and maintained. The managers of such spaces will be encouraged to apply the principles contained in this manual where applicable.

Redressing priorities: pedestrians first

This manual seeks to establish the concept that city centre streets belong first and foremost to pedestrians and that all other road users are guests in their space and therefore should behave accordingly. This does not mean that other modes are not welcome, merely that they are welcome on certain terms. Indeed, the majority of pedestrians in the city centre will have travelled there by another mode.

Whilst this pedestrian-centric philosophy should underpin all decisions about city centre streets, it will be applied differently depending on the circumstances (pedestrian flow, traffic flow etc).

For example, the level of pedestrian flow varies greatly within the city centre. Some streets (particularly the main shopping streets) have a very high pedestrian flow, whereas many of the smaller side streets are less populated and more free-flowing.

SS1: The design and management of streets in Oxford city centre will prioritise the needs of pedestrians.

Both councils have for decades promoted non-car modes for journeys to Oxford city centre for environmental and economic reasons. This manual fully supports the continuation of that policy. However, promoting non-car modes does not have to mean sacrificing the quality of the street scene or the pedestrian experience. A “pedestrians first” policy may well lead to situations where features that might help promote cycling and public transport are not considered acceptable for pedestrian amenity reasons. These can be difficult situations to resolve, because both policy objectives are very important. It should be noted that emergency vehicles will need to be able to access all streets and spaces.

SS2: Where Policy SS1 conflicts with other objectives, for example promoting sustainable transport, the following hierarchy of users will be applied (in descending order of priority):

- **Pedestrians²**
- **Cyclists**
- **Bus passengers**
- **Taxi passengers; those delivering to or servicing properties; blue badge holders**
- **Private motor vehicle drivers and passengers, including motorcyclists**

Cycling

Bicycles are an important part of movement in Oxford, its street scene and culture: cycling is strongly encouraged by both councils as a healthy, environmentally friendly and space-efficient mode of transport. The councils will therefore continue to promote excellent cycle routes in the city centre, complemented by cycle parking in convenient locations.

The focus of this manual is not the promotion of cycling, but the application of the manual will help to create a safe and attractive environment for cyclists as well as for pedestrians. However, there may be instances where the needs of cyclists and pedestrians conflict. For example, allowing cyclists to use busy shopping streets provides useful links for cyclists but can intimidate some pedestrians. Similarly, abundant cycle parking is very important for cyclists but may obstruct pedestrian movement

²All pedestrians – irrespective of how they travelled to the city centre





and so creativity is required. These conflicts must be carefully examined in consultation with cyclists and pedestrians to find a solution that is right for the circumstances, bearing in mind the hierarchy in policy SS2.

“Pedestrianisation”

Removing all wheeled traffic (except wheelchairs and other mobility aids) from a street twenty four hours a day is the most extreme way of giving pedestrians priority. However, such an extreme intervention is rarely possible or desirable. The table below sets out the possible ways in which wheeled traffic may be restricted to improve the pedestrian environment:

Method	Description
Full-time pedestrianisation	Complete exclusion of all wheeled traffic 24 hrs a day
Part-time pedestrianisation	Complete exclusion of all wheeled traffic at certain times of day only
Restricted access: shared space	Selected wheeled traffic allowed, either all the time or at certain times only; street design creates look and feel of a pedestrianised street

Unnecessarily restricting access for wheeled traffic can create lifeless and impermeable streets, particularly at night when there are fewer people around. However, in some cases there may be a justification for such restrictions (for example in very busy and crowded streets). Any proposals to restrict access for wheeled traffic must consider the impact on other objectives, such as encouraging cycling and public transport. Where vehicular access is restricted seating placed at regular intervals and use of the shopmobility service will be of assistance to those with mobility difficulties.

SS3: Consideration will be given to restricting access for wheeled traffic (except wheelchairs or other mobility aids) if doing so will significantly enhance pedestrian safety or comfort.

Crossing points

People should be able to cross streets in the city centre easily and in a direct, uncomplicated manner. If a street is designed with true pedestrian priority in mind, pedestrians should feel happy crossing at any point along its length without needing to rely on specific features to help them cross. It will be the case however, that some pedestrians (particularly those with mobility problems, visual impairment or those with small children) will require some assistance in crossing the busier roads. Easily negotiable

street crossing points can significantly enhance the walking experience.

When introducing a crossing place there must be careful consideration of the location and the type of crossing. Crossing places should be as informal as is practical for the setting, taking into account issues such as traffic flow for example. This approach will help avoid the visual clutter associated with zebra and traffic light controlled crossings and will also reinforce the concept that the streets in the city centre belong to the pedestrian and that other road users are the guests and should therefore wait for the pedestrian rather than forcing the pedestrian to wait to cross. However there are likely to be circumstances where more formal crossings are required. Where a more formal crossing is required, zebra crossings are preferred in the first instance, because they allow pedestrians to cross immediately and without a time limit.

SS4: Streets will be as crossable as possible, even without specific features to help pedestrians cross: traffic speeds and volumes will be reduced to achieve this. Any features designed to help pedestrians cross must be located on genuine pedestrian desire lines and be consistent with the following hierarchy:

- Informal “courtesy” crossings (consider first)
- Zebra crossings

- **Traffic signal controlled crossings (consider only if other options are unsuitable)**

Where possible crossings will be raised to reduce traffic speeds and provide a flush, level crossing surface. Bus passenger comfort and safety must be considered in specifying ramp gradients.

Where a high pedestrian flow on a street is disrupted by the presence of a side street it is often necessary to assist pedestrians in establishing priority over vehicles entering and leaving the side street. In these situations, raised pedestrian tables can be introduced. These consist of a raised area of carriageway between footways which effectively make the footway continuous. The raised table should be constructed from carriageway materials in order to contrast with the footway. They should also incorporate tactile warnings. Raised pedestrian tables have advantages for wheelchair users, allowing a continuous crossing, and effectively slow down vehicles entering or leaving the side street thereby creating a safer environment.

SS5: Pedestrian priority will be given at minor side roads by reducing the kerb radius to a minimum and raising the road to the level of the footway.





Signs and lines

Road markings and road signs must follow national legislation in order for traffic regulations to be enforceable and to communicate restrictions clearly to road users. However, road markings and signage can be intrusive and garish and significantly detract from the quality of the city's streetscape. They can also reinforce the message that the highway is for motorists. Road markings and signage should therefore be kept to a minimum and not applied unless legally required or genuinely needed for some other reason. When considering introducing a restriction or reviewing an existing one, the visual impact of the required signs and lines must be considered against the benefits of the restriction.

National legislation allows a reasonable degree of variation in the size and design of road markings and signs. In some cases, legislation even allows for certain elements of a marking to be omitted. The minimum enforceable size, layout and variant should always be used for all road markings and signage.

SS6: For road markings and traffic signs associated with a traffic regulation order or other legally enforceable restriction, only the minimum enforceable number, layout, design and variant will be used.

SS7: Road markings and signs not associated with a traffic regulation order or other legally enforceable restriction will not be used. Examples of such markings include centre lines, hatching, directional signage etc.

Street furniture

The street furniture in the city centre will be rationalised; only essential street furniture, such as seating, should be provided. Street clutter can be reduced through routine maintenance or as part of street enhancement schemes. Consideration must always be given to the necessity as well as the appearance of street furniture.

SS8: Surplus, shabby or poorly placed street furniture will be removed or improved.

Where the location of street furniture on the footways is unavoidable, care needs to be exercised to ensure that clear routes are still available for pedestrians and so that effective cleansing can be maintained.

Where items such as signs and light fittings are required, initial consideration should be given to locating them on nearby building facades. If this is not possible or desirable, for instance on sensitive listed buildings, consideration should be given to the combination or grouping of these elements to limit the proliferation of posts.

The design and location of street furniture must be appropriate to its context. In general street furniture should be designed from the palette set out in the Materials – Street Furniture section to ensure there is appropriate consistency throughout the centre. However some schemes will require the inclusion of special street furniture that may sit better within the overall design concept.

SS9: All new street furniture will be placed in such a way as to avoid creating hazards or obstructing the movement of pedestrians and be designed in accordance with the street furniture palette.

Bus stops

Bus stops are an important part of the street scene. They should be positioned carefully to ensure that queues do not obstruct passing pedestrians. Good quality bus stops create a more desirable environment for passengers to wait. Tatty bus stops however can spoil the general appearance of the street.

Bus shelters in the city centre are mainly provided and maintained by ClearChannel UK under a contract with the city council. In the city centre “Landmark Plate” shelters must be used as these are simple, elegant and comply with the street furniture palette in this manual. Seating, printed information and real-time information

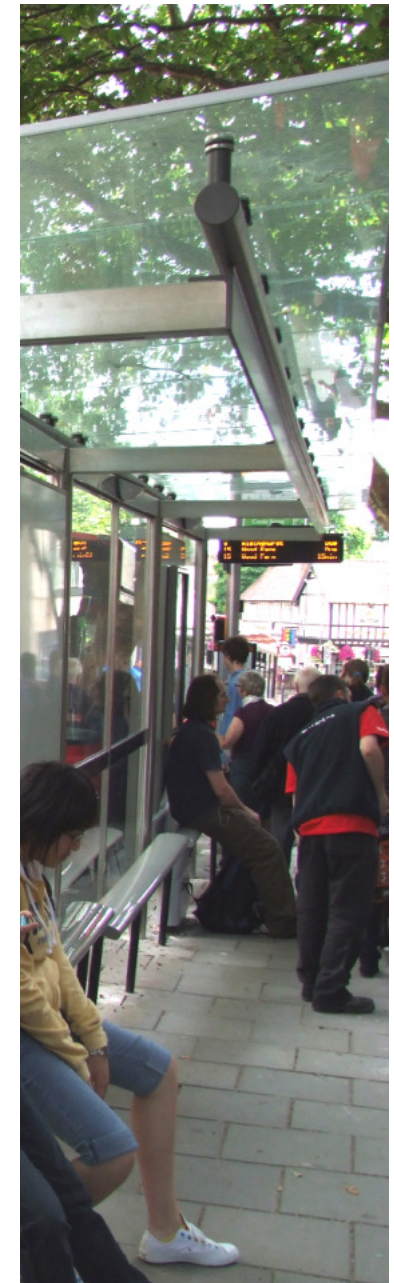
displays should be incorporated into bus shelters or flags.

Bus stop flags are now standardised across Oxfordshire to provide simple, tidy and user-friendly information and ensure that bus stops are easily recognisable. The standard flag is a simple stainless steel post with integral timetable cases and flag. These have replaced the array of information formerly provided separately by bus operators and have reduced clutter considerably.

SS10: Bus shelters will be provided where possible and will be stainless steel and glass of the ClearChannel “Landmark Plate” design and will incorporate seating, real-time and printed information. Bus stop flags will be of the county council’s standard design; operators may not provide separate flags or timetable cases. 140mm kerbs will be provided at bus stops to allow level boarding.

Wayfinding

Wayfinding signage plays a very important role in a city such as Oxford particularly because of the large numbers of tourists and other visitors. It is important that new-comers to the city feel able to orientate themselves and feel confident finding their way around between the sights. Similarly wayfinding signage plays an important role in directing those more familiar with the city,





to areas or buildings they use less frequently. The West End is likely to see major change over the next 10 years and signage will be important to help people understand it and its relationship with the existing centre.

Finger posts are likely to be the major feature of the wayfinding signage approach in the city centre. These are small post-mounted signs that point in the appropriate direction. These are appropriate for Oxford as they are a relatively unobtrusive form of signage that can fit in small spaces and narrow streets; and they are a traditional and therefore expected form of signage. Users of Oxford, whether local or tourist, will easily understand and be able to follow a well designed set of fingerposts to their chosen destination. In certain locations it may be appropriate to mount signs on walls or other structures.

In appropriate locations such as key arrival points and gathering places, where there is sufficient space and where they would not detract from the street scene, monolith map panels will be provided. These will help the user identify their location and help them plan their journey by providing a combination of text and map information. Each panel would be double sided, with information orientated towards the direction the reader is facing.

Oxford has a distinctive traditional design of street nameplates with white uppercase text on a

black background. New street nameplates should continue this theme with modern additions to the street scene referencing this tradition.

A new wayfinding strategy will be produced for the city centre. This will audit the existing signage, and propose a new signage scheme and design. It would seem appropriate for new wayfinding signage to use white lettering on a black background so it is clear to read and also reflects the nameplate tradition.

SS11: Wayfinding signage must be accurate, appropriately positioned, consistent in style and easy to read.

Miscellaneous structures

There are a wide range of other structures and objects such as advertising, telephone kiosks and equipment/control boxes that form part of our street scene. With all elements in the street scene it is important that they are sited in appropriate locations. As well as functional convenience, factors such as visual impact, potential obstruction and safety should be considered.

Equipment boxes should be robust and regularly maintained, with panelled surfaces to discourage fly-posting. They should be sited at the back of the footway and painted an appropriate colour,

consistent with the theme for the street. In recent years a proliferation of different telephone kiosks has appeared on the streets; whilst these provide a helpful service for city centre users, they can add to street clutter. It is particularly important that the chosen design of new telephone kiosks in the city centre is as small, light and transparent as possible. Bulky structures are far more likely to be visually intrusive on the street scene and inappropriate. “A boards” or folding shop boards and advertising boards tied to railings or street furniture can cause obstruction on the pavement and in particular can cause problems for pedestrians with visual or walking impairments. Any obstruction on the pavement is an offence and the County Council can remove the item and issue a penalty notice.

Oxford has a particularly sensitive city centre, with numerous historic features, important views and often narrow streets. This makes it particularly important to minimise structures in the street scene and locate essential structures carefully. In general terms there is often benefit in co-locating elements of the street scene in a cluster; this gives benefits of minimising clutter elsewhere and helps people with visual impairments.

SS12: All structures should be placed so as to minimise visual impact and potential obstruction. Utility companies and other relevant parties will be encouraged to select

options that assist with this aim and to commit to a regular maintenance regime.





Historic & contemporary character

Oxford has a wealth of historic buildings with some 1500 listed buildings and a large number of unlisted historic buildings that are of local importance. However the character of Oxford is not solely derived from the listed buildings or the scheduled ancient monuments. Other elements contribute significantly to the character including the spaces, road layouts and surfaces, rivers and canal, paving materials, street furniture, commemorative plaques and works of art. This rich context must be taken into consideration when proposing changes in an area. Oxford's city centre has evolved over a long period of time and it is important to recognise that contemporary additions will become one more layer of the city's history over time.

Street patterns

The urban pattern of Oxford has intrinsic value as a mostly intact historic development form which has proved to be robust, capable of adapting to changing uses and permeable to pedestrians. The structure about which the city grew is the cross roads at Carfax. A loose grid pattern of narrow streets and alleys grew around this and together this established and simple structure makes the city legible to pedestrians, cyclists, and motorists.

It is important that street scene schemes should preserve and enhance this established pattern and maximise its pedestrian permeability. The use of the public realm reflects the buildings that enclose it. These have changed over time and are likely to continue to do so. Street scene schemes have to meet the needs and quality aspirations of modern users and create a sense of continuity with the past.

The street pattern in the West End has been disrupted by redevelopment over the more recent decades and has fewer positive urban design qualities; schemes should seek to re-integrate this area and link through to the established city centre street pattern. The resulting street pattern has to be sufficiently simple, robust and flexible to provide a stage on which the public life of the city will be able to be played out in the future.

SS13: Changes to the street scene or new additions to the street pattern will be simple, robust and flexible to be able to adapt to changing uses.

Special character

Oxford has one of the finest collections of buildings in Europe representing every period of British architecture but it is not just read as a series of discrete buildings and spaces. A picturesque sequence of views and vistas bind the city centre together. The historic development of the urban pattern has created idiosyncratic nuances in streets and spaces that have built up a wonderful visual richness. Elements that contribute to this should be retained and the long established pattern of using visually appropriate natural materials be re-established. The treatment of the public realm should be consistent in a way that enhances the visual linkage between buildings and spaces whilst allowing for specific treatment of areas of differing character.

Where possible areas of historic pavement should be restored; however modern materials can be used in a way that respects the heritage value of a space and also makes surfaces more walkable. It is vital to ensure that the public realm achieves the highest standards of design into the 21st century and meets the needs and demands of the modern users of the economic and social city.

Responding to the visual richness and diversity of character types found in Oxford can be difficult when selecting items such as street furniture. It is good practice to use elegant modern rather

than attempting to use “traditionally” styled items which can often result unsatisfactorily in a pastiche of one particular architectural style or period of time in the city’s history.

SS14: Materials, street furniture and other elements in the street scene will be based on the palettes provided in this document, be simple and exemplify elegant modern design.

Planting and landscaped spaces

Trees and planting can help to soften the city environment, add a sense of human scale to the urban landscape and enhance biodiversity and local air quality. However, there is not much of a tradition of planting within the street scene itself in Oxford; most planting is located within the private spaces behind walls and buildings. Therefore additional planting may not be appropriate for some streets and proposals must always be assessed with regard to the character of the area. In Oxford there is a distinctive local tradition for specimen trees located within private spaces overhanging high walls or planted within private spaces that form part of the street scene, for example the tree in the grounds of St Michael’s Church, Cornmarket. Further opportunities will be sought to carry on this tradition.

Finding appropriate space for street tree planting in the city centre however can be difficult for a





number of reasons. The impact that a tree would have on a view, particularly when fully grown is a vital consideration. There are also other practicalities to consider including the high volume of underground services and possible surviving archaeological remains.

Where tree planting is possible, the position and the type of tree need to be carefully considered. The tree species that are chosen must be appropriate to the conditions and context of the locality, including taking historic or significant sightlines into account. When choosing a position to plant a tree, consideration should be given to how the tree will look in maturity. It is important to consider the impact of trees on CCTV, signage, lighting and highways visibility and that tree roots will not create a trip hazard.

SS15: Additional street trees are encouraged but should be introduced in historic streets with caution; where they are proposed as part of a public realm scheme their inclusion must be justified in the context and their impact must be fully assessed.

Attractive planters of various kinds can enhance the urban environment and also be used to add seasonal colour to the street scene. Planters must be carefully designed to relate effectively to their context and take account of the needs of people with visual impairment. Planters must be located so as not to obstruct pedestrian movement or block sightlines. The maintenance

implications of planters and planting beds should be considered at an early stage and a maintenance regime agreed with the city council. It is important that planters are not left empty or bare for any part of the year as such it may be more appropriate to use temporary planters that can be removed after the display. This principle also applies to hanging basket posts, when not in use they should be removed.

Available space for the creation of new landscaped areas in the city centre is limited but, where it is appropriate to the area's character, the introduction of landscaped areas is encouraged. Reconfigured traffic schemes can result in space being released that is no longer taken by vehicles and this space can be used to form new landscaped areas. Redevelopment schemes frequently include the formation of new spaces or the re-landscaping and upgrading of existing spaces. New landscaped spaces can also offer the opportunity to provide seating areas, public art or water features, thereby enhancing the public realm and the pedestrian experience. Schemes should be designed to relate effectively to the context and function of the area and particular care should be taken in conservation areas or adjacent to listed buildings. The accessibility and maintenance implications of schemes must be considered at an early stage.

The city centre benefits from the presence of the Rivers Thames and Cherwell, the Castle Mill and

Wareham Streams as well as the end of the Oxford Canal. These waterside spaces offer significant benefits to the public realm providing hidden pockets of green open space in the heart of the city centre. Where possible these hidden pockets should be opened up and enhanced; for example, as part of the West End project there are plans to create a linear park alongside the Castle Mill Stream to the River Thames frontage. These spaces should be carefully designed with the appropriate materials and planting for the benefit of local people and visitors.

SS16: New landscaped and waterside spaces will be provided and existing spaces enhanced.

Arts and events

Works of art can give quality, character and a human dimension to public spaces. They can make a positive contribution to the character of the place, especially if they draw inspiration from local themes or associations, creating a positive image for an area. Public art is always bespoke and site-specific and created by a professional artist. Working with artists offers opportunities to design schemes that go beyond the purely functional and create places that reflect the life and aspirations of an area and its people. The effects of both temporary and permanent public art not only creates a long lasting social and cultural legacy but has an impact of which can

be seen in growth in creative industries, tourism, enhancing perceptions of an area and positive economic effect.

It is also important to provide opportunities for people of all ages and backgrounds to gather together to celebrate on the streets and in open spaces. Such events bring together large numbers of people of all ages and backgrounds, providing a shared experience and sense of enjoyment, and helping to promote intercommunity understanding. Events can range from the large-scale to the small, informal scale and they can change people's perceptions of space and their sense of connection with the city. Recent years have seen an increased interest in organising large-scale cultural events in the city centre. When designing a street enhancement scheme it is important to consider early on whether the space offers any opportunity for hosting events and therefore whether any details can be specified to assist future events in that space. Issues such as careful positioning of trees and other fixed items in the street scene; availability of power supplies; and flexibility in terms of adjusting lighting levels and colours, can assist greatly in hosting large-scale events in the space.

SS17: Installation of public art will be encouraged. Opportunities for hosting events will be considered in the design of public spaces with appropriate details specified to assist with this.





Safe and inclusive streets

Residents and visitors to Oxford alike should be able to enjoy spending time in the streets and spaces of the city centre, this means feeling safe, comfortable and welcome. We aim to create a public realm in the city centre that is accessible to all regardless of age or ability; an environment that all feel comfortable and safe within. The street scene should operate well as a series of functional streets and spaces; an attractive street scene is not enough if people do not feel safe or are unable to access the city centre.

Crime

It is important that schemes are designed to minimise the opportunities for crime and the perceived threat of crime (often greater than the actual threat). This does not mean that schemes need to be bland or sterile. Simple measures such as considering the location of resting places and areas of planting so as not to create pockets too hidden from general view, and the adequate lighting of spaces, can make a real difference.

Good cleansing and maintenance of streets has also been shown to have an effect on perceived safety and also on the incidence of low-level

crime. If a place appears cared for, people generally feel safer within it and are also less likely to drop litter or spray graffiti for example. Good maintenance has been shown to be an effective measure against low-level crime and benefits the aesthetic aims of street scene schemes.

CCTV is now an established tool for the management of our city centre and needs to be considered from the outset. Thames Valley consider CCTV to be an important tool for providing evidence for prosecutions and deterring crime.

However, CCTV is not a cure-all and is more effective in deterring certain types of crime than others. High crime rates may indicate a fundamental problem with the way a street is designed and/or used; in such cases CCTV may relieve the symptoms but not deal with the cause. Good urban design promotes passive or “natural” surveillance (surveillance by passers-by or building occupants). Opportunities to improve natural surveillance should therefore always be explored instead of (or in addition to) the provision of CCTV.

It is also important to recognise that excessive or very obtrusive surveillance may make a place feel less safe because it suggests to users of the street that there is a major crime problem. For

this reason (and for aesthetic reasons) CCTV should have a clear justification and the design and placement of cameras should strike a careful balance between discreetness and effective deterrence.

CCTV only works well when cameras are placed in the optimum position and offer unobstructed views. This does not mean that there should not be trees or other attractive features in areas covered by CCTV, merely that the management of the landscaping and of the CCTV system need to be co-ordinated with decisions taken by each party only after consultation with the other.

SS18: The following steps should be taken to reduce crime and fear of crime:

- **Create the conditions for natural surveillance: welcoming, well-lit public spaces that are overlooked by the active fronts of occupied buildings**
- **Keep streets clean and tidy**
- **The requirements of CCTV visibility must not lead to featureless or uninteresting street designs, but must be considered.**

Accessibility and inclusiveness

Street designers must try to create streets that meet people's diverse needs. This is in some respects a street designer's greatest challenge. Every person is different and has different abilities. Many people have an impairment of

some kind that affects the way they use a street. This impairment may be a temporary (e.g. a broken leg) or permanent. It may also be an impairment that arises from specific circumstances (e.g. carrying heavy bags or pushing a buggy). It is essential that street designers take the time to understand how their design decisions may affect people with impairments of all kinds.

The best way to do this is to consult users of the street who have disabilities and to carry out an equality impact assessment (EQIA) on all schemes that result in a major change to the way a street operates. The Department for Transport has published practical guidance to help street designers cater for people with disabilities – "Inclusive Mobility" (available online). The county council has subscribed to this guidance and street designers will consider it (alongside other local and national guidance and best practice) when developing designs.

SS19: Street designers will consult disabled users of a street at the start of a project and at appropriate subsequent stages in the design process. An equality impact assessment (EQIA) will be carried out on street designs. Designers will consider the guidance in *Inclusive Mobility* and follow it where possible.





SS19 will help to ensure that the needs of disabled people are considered in scheme designs, but is generic. Detailed design guidance is beyond the scope of this part of the manual, and Inclusive Mobility includes very detailed design guidance in any event. However, some particularly important design features that can help people with disabilities to use streets more easily and safely are set out below.

Policies SS8 and SS9 require street furniture to be minimised and essential street furniture to be designed and located in such a way as to avoid creating a hazard. Designers should consider people with visual impairments in particular when positioning street furniture.

Street furniture with text (e.g. bins with separate sections for recycling and general litter) should have embossed lettering or a similar tactile system to allow identification by visually impaired people.

Areas of paving should have a smooth 'walkable' surface. Uneven surfaces can cause problems for people using sticks or crutches and wheelchair users. "Rougher" finishes can be used in areas outside the main walkways to provide areas of visual variety and relief.

SS20: Surfaces for pedestrians must be "walkable" – i.e. smooth, non-slippery, even and level. This should not lead to bland or

uniform paving design – texture differences are encouraged where pedestrians can easily avoid rough surfaces if they wish.

Resting places are an important aspect of a good pedestrian environment. Encouraging people to walk also involves providing them with comfortable seating areas at frequent intervals. Long stretches without benches can make journeys strenuous for the older people and people with disabilities. Seating areas are also a vital lunchtime resource for many workers and visitors. The quality of the seating environment is very important. Benches and other seating areas should be positioned to offer a combination of pleasant views, protected backs, good climate and comfort.

Some form of protection from the weather such as a canopy may be appropriate in some locations to provide seating that can be used in any weather. Similarly, seating within larger shops or covered shopping precincts will be encouraged.

Where possible, schemes should provide accessible seating with backs to the seats and intermediate arms to assist those with ambulant disabilities.

SS21: Public seating is encouraged and should ideally be provided every 50 metres to help people with mobility impairments. This must be compliant with policy SS9.

Inclusive shared space

Busy streets across the globe have generally been designed to separate motor traffic from other road users and to separate cyclists from pedestrians, in the belief that a high degree of separation and regulation reduces accidents.

There is growing evidence from the UK and abroad that regulating road users in this way can in some circumstances be counter-productive, because it makes road users *feel* safe, gain confidence, take less care, and ultimately behave less safely.

Increasingly, street designers are reducing carriageway widths and the degree of formal regulation in streets (traffic signals, signs, road markings, guard railing etc) in favour of simpler designs with far less regulation and a “design speed” of 15 – 20 mph rather than the more traditional 30 mph. This approach requires the individual road user to take more personal responsibility for their own safety and the safety of others.

In addition to the casualty reduction benefits, a decrease in formal regulation can also reduce vehicle speeds which in turn reduces the anxiety caused to pedestrians and cyclists when they are near fast-moving traffic.

Finally, reducing regulation can lead to major public realm benefits, because fewer signs, road

markings and other highway equipment are needed. Reduced separation encourages pedestrians to make more use of the whole width of the street, so they are not confined just to the pavements.

This reduction of regulation of streets has become known as “shared space”.

“Shared space” does not imply any particular design features; indeed street designed according to shared space principles can look very different from one another.

Shared space appears to be an extremely promising way of reconciling the many conflicting demands placed on busy city centre streets. However, it is not without its problems. As the shared space approach gains popularity in the UK and elsewhere, perhaps the largest challenge is designing shared spaces that meet the needs of people with disabilities.

There are two particular aspects of shared spaces that appear to cause practical problems for people with disabilities: road crossings and kerb delineation.

Road crossings

People with disabilities tend to rely more on formal systems and controls when they use streets than people without disabilities. For example, a person with no mobility or sensory





impairment will often be happy to cross a busy street without the assistance of a crossing to stop the traffic. A person with a disability may not be willing or able to do the same because it may take them longer to cross, or they may be less able to judge the position and speed of approaching traffic.

People with certain disabilities therefore have a greater need for formal pedestrian crossings (often signal-controlled crossings) than people who are very mobile and have no sensory or cognitive impairment. One of the techniques often used in shared spaces to slow traffic and encourage greater driver awareness of pedestrians is to omit signal-controlled pedestrian crossings.

Kerb delineation

Similarly, people with visual or cognitive impairments have a far greater need for a clear delineation between the part of the street where traffic is allowed (the carriageway) and the part where traffic is not allowed (the footway). This delineation normally takes the form of a footway that is 4-5 inches higher than the road, with a vertical kerb to keep traffic off the footway. This is clear to people with cognitive impairments and can be easily detected by visually impaired people using a cane or aided by a guide dog. Again, for the same reasons as the omission of signal-controlled crossings, some shared spaces reduce the height of the level difference between

the carriageway and footway or even remove the level difference entirely to create a single-level street.

Groups representing people with disabilities have therefore opposed many shared space schemes because they do not include signal controlled crossings and easily detectable kerbs.

Given these problems, should street designers ignore the potential social, economic and environmental benefits of shared space and continue to design streets with a high degree of separation and regulation with all their inherent shortcomings?

The city and county councils believe this would be a mistake, but recognise (and take very seriously) the need to create **inclusive shared spaces**. Inclusive shared spaces could in fact provide major benefits for people with disabilities if the problems mentioned above can be solved. For example, single-level streets offer wheelchair users the same freedom of movement within the street as walking pedestrians because they are no longer reliant on periodic dropped kerbs. The councils consider that more research and experimentation is needed, working closely with disabled people, to create inclusive shared spaces.

SS22: Street design practices are changing. A move away from traditional systems, controls and regulations is strongly

supported in appropriate locations for economic, environmental and social reasons. However, great care must be taken to ensure people with disabilities are not excluded by this approach to street design. The councils will dedicate time and funding to further research and experimentation in this area.

Lighting

Lighting has an important role to play in creating the atmosphere in streets and spaces. It can also be used to great effect to modify behaviour within them.

Street lighting reduces the likelihood of road traffic accidents for pedestrians, cyclists and vehicle users. It also increases the safety of our environment and property by reducing crime, vandalism and the fear of crime.

Whiter light from metal halide or high-pressure sodium sources is preferable to orange low-pressure sodium lighting. White lighting also assists in the operation of CCTV cameras, providing a better quality image and should therefore be favoured.

It is important to choose the appropriate level of lighting for the street in terms of the level of traffic (both vehicular and pedestrian) that uses it, and to take account of other light sources, such as floodlit buildings and lit shops. Lights should be effective but unobtrusive. Lighting

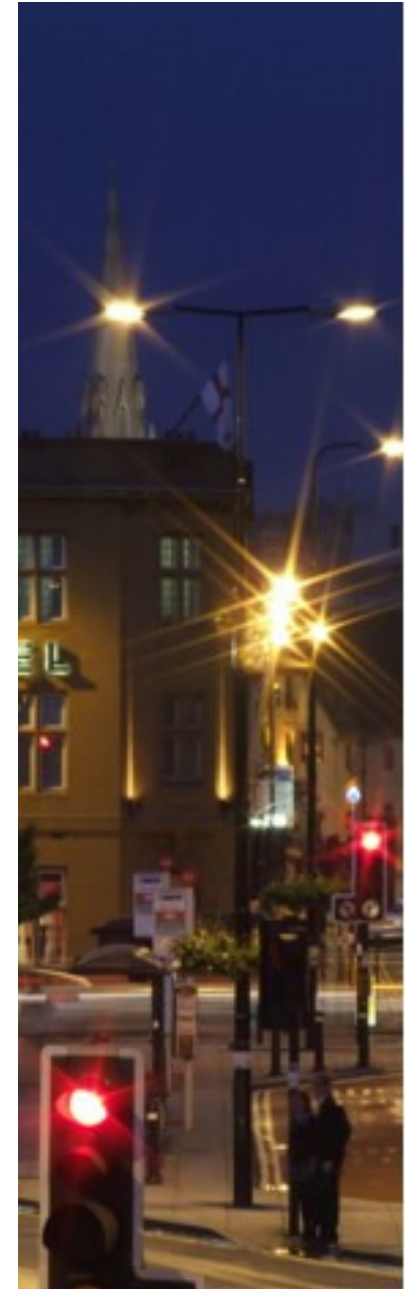
should be selected that reflects the function of the place – urban and commercial or residential. The temptation to over-provide should be avoided as this leads to clutter, potential light pollution and wasteful energy consumption and associated carbon emissions.

Other forms of lighting such as architectural, tree canopy uplighting and festive lighting can add to the character and atmosphere of the city centre and will be encouraged in the right settings.

SS23: Lighting will be used to enhance the public realm as well as to provide functional illumination, though this must be balanced against reducing energy consumption. White light is preferred.

Public toilets

Public toilets are part of the public realm and should be maintained and cleaned to a high standard.





Management and maintenance

The design and construction of a street scene project is not the end of the story; the on-going maintenance and management of that scheme is key to its success. If there is no programme of maintenance planned then spending significant amounts of money on a scheme will only have very short-lived success. When specifying special materials, the budget implications for their maintenance and future repair / replacement must be considered.

In surveys of visitors and regular users of city centres, the overall impression is very much determined by the level of cleanliness and state of repair that is apparent. When questioned, people often state issues such as litter and uneven paving as indicators of a poor quality environment and experience of a city centre. As such much can be achieved through devising and implementing a detailed programme of management and maintenance.

In choosing street furniture its future maintenance and the cleansing requirements for the area around it should be considered. Bus shelters are cleaned by the supplier as part of the contract.

SS24: All street enhancement schemes will be designed to ensure streets can be cleaned and maintained effectively.

Ground surfaces

Defects in ground surfaces look unsightly and can cause a trip hazard. Defects will be rectified swiftly.

Litter

Bins

In a busy city centre such as Oxford managing litter and waste is a complex task but one that has significant benefits. The careful positioning of litter bins, particularly in locations where there is heaviest pedestrian traffic, close to bus stops and in the environs of take-away food retailers, helps to manage the litter problem significantly. Bins must be carefully designed to facilitate easy emptying and emptying must be carried out frequently enough to prevent problems of overflowing. All bins must be wind and fox proof. The outside surface of all litter bins must be stain-resistant, burn-resistant and easily washed.

Separate recycling bins are encouraged. To minimise clutter, waste should be sorted after collection. Bins must be clearly but neatly labelled to identify whether they are for litter or recycling.

Other receptacles are also required for disposal of cigarette litter and chewing gum. Where possible these will be provided in conjunction with bins or other items of street furniture.

SS25: Litter and recycling bins will be provided to help reduce ground litter; all bins must be compliant with policy SS9.

Litter picking

Even if sufficient bins are provided, streets must be litter picked regularly to remove litter. Some busy streets such as Queen Street and Cornmarket may require almost continuous litter picking at peak times. Litter picking by machine in the middle of the day when the streets are busy is logistically tricky but efforts should be made to do this if possible because it demonstrates to the public that streets are being cared for which in turn may help prevent littering. Sweeping is also required to remove smaller pieces of litter and detritus.

SS26: Streets will be litter picked regularly to remove ground litter. Streets will be litter picked at intervals so as to maintain the standards set. In addition to litter picking the

streets will require sweeping. For the city centre the streets will be swept at least daily.

Fines for littering

The city council has powers to fine individuals who drop litter, and will use these powers to help reduce littering in the city centre. Publicity campaigns will be used to ensure visitors to the city centre are aware that they will be fined if caught littering, with a particular focus on chewing gum and cigarette butts, which are difficult and expensive to clean up.

SS27: The city council will use and advertise its powers to fine people who drop litter in the city centre.

Trade waste

Trade waste collection is a complex matter as there are several companies providing the service to traders within the city centre. The key elements to minimising the impact trade waste has on the street scene are making sure that waste is left out for only a short time before collection and ensuring that the waste containers themselves are strong enough to prevent rips and subsequent spillages. The use of rigid bins or boxes instead of bags should be investigated. The city council will set collections 'windows' and will enforce against persistent offenders. It helps visually impaired people if waste is left in the





same location each time, so this will be encouraged.

SS28: Trade waste will be put out for collection as close as possible to the agreed collection time. Waste containers will be robust enough to avoid leakages that stain the street surface; the use of rigid bins instead of bags will be considered.

Washing

Washing is a key part of the cleansing regime in the city centre. No matter how frequent the sweeping the busiest streets in particular will never stay clean and will require washing to remove stains, grime and other marks not removed by sweeping. Regular washing can have an effect on the joints in paving schemes; it is important to monitor this issue over time.

City Works operates a cold wash machine that removes most of the day-to-day dirt, and (from spring 2010) an advanced hot wash machine that quickly removes stains, grease, ground-in dirt and chewing gum.

SS29: The busiest city centre streets will be cold washed AND hot washed at least weekly. A small number of streets will be washed up to daily.

Graffiti and flyposting

The city council has a successful online system for reporting graffiti. The city council aims to remove racist or obscene graffiti within one working day; other graffiti within 14 working days.

Flyposting refers to advertisements applied illegally to walls, street furniture or any other surface. The city council aims to remove flyposting from street furniture and public highways within seven working days. The council will pursue those responsible for flyposting, including initiating legal proceedings where necessary.

The city council provides a number of sites in the city centre where advertisements may legally be displayed free of charge in order to reduce illegitimate flyposting.

Empty premises

Empty shops and other premises can quickly attract flyposting and other problems. Even without these problems, empty premises can be a depressing sight and do not make for an attractive and vibrant street scene. The City Centre Manager will work with landowners and tenants to ensure empty premises in the city centre do not become an eyesore.

Cycle parking management

The provision of cycle parking helps encourage more people to cycle. The management of cycle parking and dealing with abandoned bicycles is a particular issue in Oxford city centre given the very high level of cycle use within the city.

Cyclists can sometimes find it difficult to find an available cycle rack in the centre often because bicycles have been chained up for prolonged periods of time or even abandoned. Bicycles are also regularly chained to posts and railings or leant against walls throughout the city centre; often causing an obstruction in the footway. This can cause particular problems for people with disabilities who cannot easily negotiate an obstruction. Increasing the number of cycle parking spaces will help reduce this practice.

City Works operate an abandoned bikes policy whereby a bike classed as abandoned is tagged notifying the owner that if it is not removed within 14 days it will be removed and held for 6 weeks. A routine of periodically clearing bikes in cycle racks through a similar process of tagging and removing those undaimed would be likely to help significantly in the availability of cycle parking spaces. A more radical option could be to introduce short-stay cycle parking whereby parking is limited to say 24 hours. This would require significant resourcing to enforce.

SS30: Abandoned bicycles will be cleared six times per year. Bicycles causing a

dangerous obstruction will be removed as soon as possible after they are reported to City Works. Additional cycle parking will be provided where possible.

Utility companies

Underground equipment

The impact of works by “Statutory Undertakers” (gas, water, telephone and other utility companies) on our streets cannot be overestimated. The county council gives notice to Statutory Undertakers and sets up embargoes against planned schemes where the new surfaces are laid. The most common duration of embargo is three years for newly surfaced carriageways and footways. Although the county council can impose these embargoes against major planned works in newly surfaced streets by Statutory Undertakers, newly laid surfaces are often excavated for permitted necessary statutory works such as service connections or repairs to restore or maintain service. Quite often this leaves behind scarred surfaces which can have a detrimental effect on the appearance of the street scene.

A Statutory Undertaker excavating a street surface has a statutory duty under the New Roads and Street Works Act 1991 to reinstate the street surface to comply with standards laid down in the Highway Authorities and Utilities Committee (HAUC) Specification for the





Reinstatement of Openings in Highways. The Highway Authority, in this case Oxfordshire County Council, can take action against undertakers who fail to reinstate the street to the standards laid down in the HAUC specification. The existing legislation allows undertakers to lay and maintain an interim reinstatement for a period of six months before carrying out a permanent reinstatement. This can be frustrating for the council, especially when placed in areas of high amenity surfacing.

Where special materials such as stone paving and other non-standard materials have been used the council is required to advise the utilities of their existence and provide them with the specification and the source of the material. All scheme designers must ensure they inform the county council's street works team of any special materials used in their schemes to ensure Statutory Undertakers have the correct information available to them.

In certain locations in Oxford city centre and elsewhere, the county council has come to an informal agreement with Statutory Undertakers whereby the council carries out reinstatements in special surfaces itself instead of the Statutory Undertaker's own contractor. This allows the council to use skilled gangs to ensure reinstatements are of a high standard. Statutory Undertakers have no obligation to comply with this informal agreement, so it is vital that scheme designers make sure materials specifications are

provided to help the informal arrangements operate as smoothly as possible. The county council's street works team should be contacted for advice on choosing materials that are easy and economical to reinstate; again, this will help ensure the informal agreement with Statutory Undertakers continues to operate.

SS31: The county council will provide up-to-date information about special surfaces to Statutory Undertakers and continue to work with them to reduce the impact of reinstatements on the street scene.

Above ground equipment

Public utility companies require equipment above ground such as access boxes. Neither the city nor county council has any direct control over this equipment. If poorly maintained, above ground equipment quickly becomes an eyesore. The councils will work with utility companies to minimise the amount of above ground equipment, place any necessary equipment in an unobtrusive and safe location, and maintain equipment to a high standard.

Reporting problems

A reporting process whereby the public are aware of a single point of contact to report problems in the street scene offers significant benefits. Problems such as overflowing bins,

abandoned bikes causing obstruction, pot-holes, missing or incorrect bus information or litter for example could be responded to swiftly when reported. The swift response to particular problems as they arise is what the public would like to see. Many cleansing issues arise as a result of the evening activity in the city centre or from particular events but other circumstances can also arise which require urgent attention. Having a good reporting system and a team with the appropriate equipment on stand-by to react quickly to problems as they arise are key to maintaining the high standards set by the regular programme of cleansing.

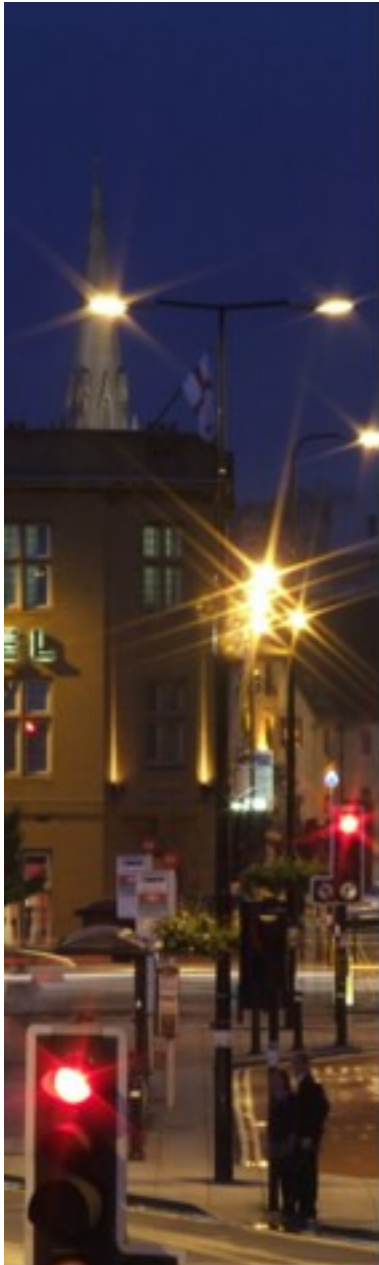
The city council's "Report It Online" webpage lists all the services offered relating to reporting problems in Oxford. It can be used to report services offered by Oxford City Council, those offered by Oxfordshire County Council, and services offered nationally. Many problems can be reported online and using an interactive map. The county council also operate an online reporting service whereby all problems can be reported in one place and are then forwarded on to the appropriate authority.

The city council also operates a scheme whereby the public can email a photograph of an environmental problem. These photographs are then posted on the website and an update is provided as to how the problem has been dealt with. In particular the scheme thus far has been

popular for the reporting of graffiti and abandoned vehicles.

Problems can also be reported to the county council by telephone on 0845 310 1111; and the city council on 01865 252900.





Sustainability and ethics

As with all large scale projects, consideration should be given to the potential effects on the environment at an early stage in the design process. Projects which require significant works and the introduction of large volumes of new materials can impact on the environment, both locally and on a broader scale. Local issues such as sustainable drainage and broader issues such as responsible sourcing of materials must be considered at the earliest stages of a street scene design project.

Minimise elements & energy use

A general principle of minimising the number of elements to be introduced should always apply when designing a street scheme. By restricting the elements to be introduced in a scheme we can minimise the use of natural resources in creating them. This principle can also have beneficial effects on the aesthetics of the street scene in terms of minimising street clutter and using multi-functional elements as discussed above.

The use of innovative techniques to reduce energy use in construction should also be investigated.

SS32: The introduction of elements into the street scene will be minimised so as to reduce the use of natural resources and energy.

Life cycle

All elements in a street scene project should be chosen after consideration of their durability. Where possible the most durable materials and elements should be selected. Selecting durable materials and elements will mean they are less likely to require maintenance and early replacement. Whilst this helps with the maintenance and management regime, this also helps to minimise the draw on natural resources.

Where elements have reached the end of their life and where they are to be replaced for example, consideration should be given to re-use or recycling. Where items of street furniture are removed to be replaced by a new style but are still functional and in a good state of repair,

consideration should be given to whether these can be used in another scheme elsewhere in the city or county and so have a productive second life. Other materials such as tarmac that are being removed can also go on to have a productive on-site after-use, being broken up to form a base for the new road surface.

There is a growing market in the production of street furniture and other elements from reclaimed and recycled materials. Reclaimed timber for example can not only prove to be a responsible selection but also an aesthetically pleasing choice for items such as benches. The palette of materials set out in the Materials – Street Furniture section also recommends the use of stainless steel in the street furniture. Stainless steel is a very durable material that does not require on-going maintenance. All stainless steel products consist of approximately 60% recycled material.

As with durability, what happens with an element when it reaches its end of life needs to be considered when it is initially selected. The choice of materials therefore is very important; as a basic rule the more processing the material has been through in production, the more difficult it is to recycle. The more “honest” and natural materials such as wood and stone are easier to recycle than plastic or composite materials for example.

SS33: Elements will be chosen with regard to their life cycle including their durability, on-

going maintenance, incorporation of recycled elements and re-use or recyclability at end of life

Ethical and local sourcing

The majority of paving materials traditionally used in the street scene are those that could be sourced easily and locally. It is this that helps give cities their local distinctiveness. Nowadays it is not so easy to source local stone for example and the designer is often faced with the problem of choosing between easily available, but less appropriate materials, or materials that would usually be more appropriate but need to be sourced from the other side of the world. Sourcing materials across large distances also brings with it the concerns of sustainability in terms of the transportation involved and the ethics of buying from countries with very different regulatory requirements. There are clearly several important considerations to be had when considering the sourcing of materials.

Other items in the street scene should also be selected after consideration of the sourcing; for example, all timber used should be from sustainable and certified sources. It is still possible to find locally based suppliers of the various elements required in a street scene project. Sourcing products locally helps keep money and jobs in the local economy and should therefore be encouraged, particularly as most of





these projects will be led by the public sector through the city and county councils.

SS34: Ethical issues will be considered when sourcing materials and where possible local producers and suppliers will be used.

Sustainable drainage

Oxford has suffered in the past from flood episodes and has a very high water table as well as several major watercourses running through it. It is vital therefore that the designs for schemes do not exacerbate these problems. This is particularly important as much of the street scene in the city centre will be hard landscaping and as such the risks and effects of water run-off will be all the greater. The cumulative impact of such development will be significant, and may increase water flows, which may damage the natural environment and increase the risk of flooding.

It is vital, therefore, to minimise this impact through incorporating sustainable drainage systems where new hard-surfacing is created. Sustainable drainage systems (sometimes referred to as SUDS) control surface water run-off by mimicking natural drainage processes through the use of measures such as pervious surfaces, soakaways (or other infiltration devices) and surface water storage areas for example.

SS35: Sustainable drainage measures will form part of any scheme that involves significant areas of hard-landscaping where this can be achieved without expensive or wasteful reconstruction of existing surfaces.

Street design process

There are many issues to consider when designing a scheme. In order to ensure that none of these is omitted from a design this section sets out a street design process. The flowchart below sets out a simple process to be followed for the majority of schemes. In some cases there will be particular circumstances that add new steps to this process and there may be occasions when earlier steps in the process will need to be repeated as a consequence of later steps. However in broad terms the process below should be followed.

SS36: All projects involving the design and redesign of streets and spaces in the city centre will follow the street design process including completion of the ambitions assessment and context analysis.

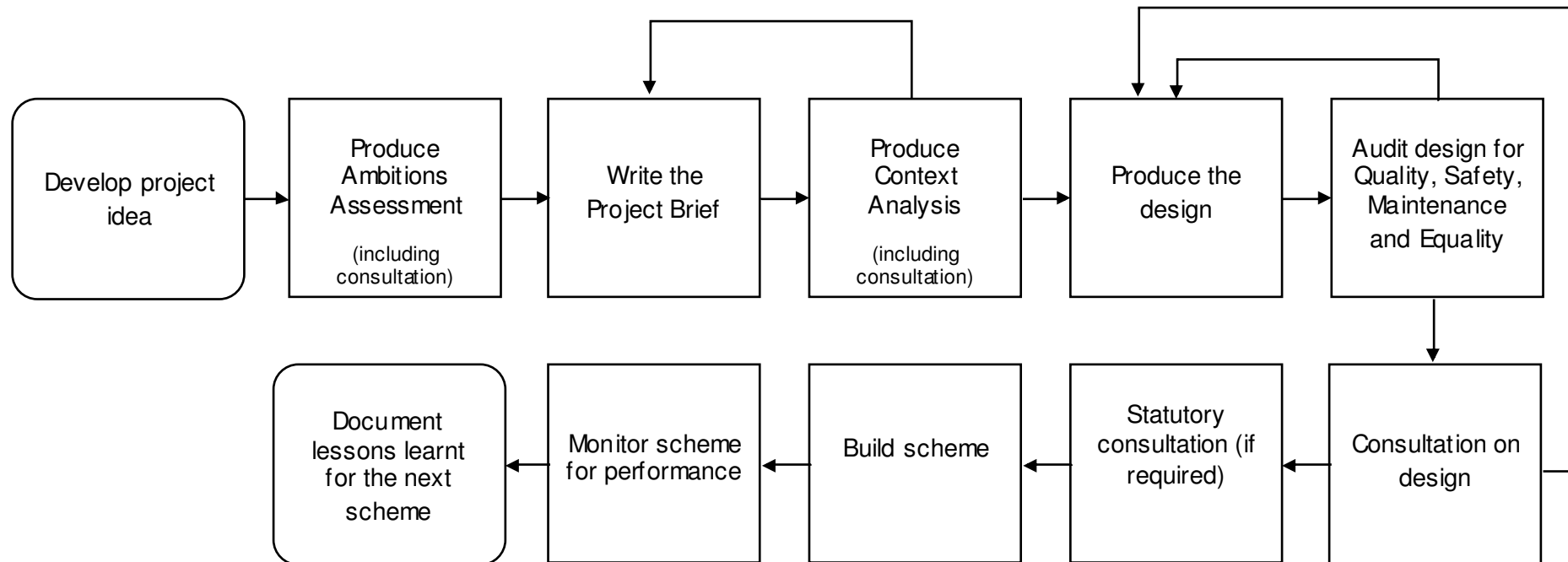
Two important steps in this process are the production of the Ambitions Assessment and the production of the Context Analysis. These steps have been introduced to ensure that none of the key issues to be considered in the design of a

street scheme have been omitted, and importantly, to ensure that the appropriate officers and stakeholders have been consulted along the way.

On the following pages templates are provided for both the Ambitions Assessment and the Context Analysis. These should be completed for each project and the appropriate officers and stakeholders consulted for their views and input into the design. To assist with the templates, examples are provided for the Queen Street enhancement project.

An audit of the design should take place before the scheme is implemented. This will check to see if quality, safety, access and maintenance issues are addressed appropriately. An audit team consisting of city and county officers with a range of skills in the areas of conservation, planning, transport planning, implementation and maintenance should be used for this task.

Street design process flowchart



Ambitions Assessment template:

Answer the following questions:

Consider: political / community ambitions

Which of the following are particular ambitions for the street/scheme?

Improve appearance
Improve safety
Improve pedestrian experience
Improve cyclist experience
Improve equality of access
Improve bus passenger experience
Improve driver and motorcyclist experience
Improve access
Improve air quality; reduce noise
Improve building occupier experience
Protect or enhance heritage
Improve condition of street / frontage buildings
Facilitate art and cultural events
Increase social activity
Improve economic performance
Redevelop or enhance frontage buildings



Consult:

Councillors (city and county council)
City council officers (Planning, Conservation, Arts, Licensing, City Works, Accessibility)
County council officers (Transport Planning and Engineering, Accessibility)
City Centre Manager
Residents and other users of the street
User groups
Businesses

Consider: sustainability and environmental ambitions

What are the ambitions of the scheme with regards to the following?

Choice of ground surfaces materials/finishes
Choice of street furniture materials
Sourcing policy
Sustainable drainage
Planting



Consult:

City and county council Sustainability and Tree Officers
County council Drainage Officer

Note - the word "experience" in this context can cover for example: feeling comfortable, welcome, at ease and having a sense of enjoyment.

Context Analysis Template:

Answer the following questions:

Consider: historic context

- What are the origins of the street and how can they be reflected?
- What were the previous uses of the street and the buildings on it?
- What changes have happened to the street over the years e.g. layout, materials, furniture and what will be important to retain?
- What is the street's historic significance and its role in the changing street pattern?
- What historic character / local distinctiveness can be protected or enhanced?

Consider: contemporary urban context

- What are the social/economic uses of the space (markets/fairs/ceremonies etc)?
- What are the uses of buildings along the street?
- What is the status/significance in the local street pattern?
- What contemporary character is there in the street to be protected or enhanced?
- What are the various architectural forms: heights, colours, materials, shapes, textures and how will they influence the scheme?
- Are there any known potential / proposed changes to the above?

Consider: functional context

- What are the traffic volumes, speeds and types, pedestrian, cycle and bus flows?
- What speed is desired in the street? The design speed is not necessarily linked to the regulatory speed, but will inform other design decisions.
- What are the movement patterns for the various modes?
- What are journey times and where do queues form?
- What do air quality measurements show? What reduction strategies can be employed?
- What do noise measurements show? What reduction strategies can be employed?
- What do problems if any, do accident statistics show?
- What is the street's strategic importance for movement / public transport interchange?
- What are the requirements for servicing, utilities, parking and emergency services? Are there any specific access requirements—e.g. access for students at start and end of term?
- What are the requirements in terms of cleansing?
- What role does CCTV play?
- What are the requirements in terms of accessibility?
- What street furniture is in place and what are the ground surfaces materials / finishes?
- Are there potential / proposed changes to any of the above?



Consult:

- City council Conservation Officers
- English Heritage
- Historic and amenity groups
- Refer to the Historic Context Analysis; consider using a community audit



Consult:

- City council Planners, Landscape Architect, Arts Officer, Conservation Officers, Licensing Officers
- City Centre Manager



Consult:

- County council Transport Planners and Engineers
- City council Access Officer, County Council Disability and Equality Advisers, City Works Officers and CCTV Officer
- City and county council Access Officers and access groups
- City Centre Manager
- Emergency services
- Utility companies
- Bus companies

Example Ambitions Assessment - Queen Street:

Consider: political / community ambitions
Which of the following are particular ambitions for the street/scheme?
Improve appearance Improving the appearance of the street is a key ambition of the project given the high profile nature of the street and the high levels of footfall.
Improve safety Safety is not really a problem in the street and so this is not a particular ambition of the project.
Improve pedestrian experience This is the key driving force for the project. It has been a long held ambition of both councils to reduce the impact of buses on the street to improve the pedestrian experience and is the first phase in the Transform Oxford project.
Improve cyclist experience The removal of buses will help the cyclist experience.
Improve bus passenger experience This is not the ambition of the project, in fact removal of bus stops from the street will not help the bus passenger experience in the street itself. However the impact of this inconvenience for bus passengers will be mitigated by improvements to the bus stops at the new locations such as new bus shelters.
Improve driver experience This does not apply in a street closed to general traffic.
Improve access The project will remove bus access to the street but will improve pedestrian access with more road space and priority given over to pedestrians.
Improve air quality / reduce noise This is an ambition of the project; the removal of buses will make a significant difference to the air quality in the street.
Improve building occupier experience The retailers along the street will benefit from the improved pedestrian priority and access as this will create a more pleasant shopping experience.

Protect or enhance heritage The project will enable improvements to the open space at Carfax will enhance the setting of the tower.
Improve condition of street / frontage buildings The project will result in an improved setting for the frontage buildings, in particular the setting of Carfax Tower.
Facilitate art and cultural events There is unlikely to be a significant change after the project.
Increase social activity This is linked to improving the pedestrian experience in terms of the activity of shoppers and other pedestrians.

Consider: sustainability and environmental ambitions
What are the ambitions of the scheme with regards to the following?
Choice of ground surfaces materials/finishes The interim footway material will be designed to minimise abortive work when the final scheme is implemented. York stone is highly durable.
Choice of street furniture materials Street furniture materials will be chosen from the palette – use of stainless steel is responsible in terms of its recycled nature and durability.
Sourcing policy In order to provide consistency, where the same materials have been used in neighbouring streets they will be sourced from the same manufacturer/supplier.
Sustainable drainage In order to fit a sustainable drainage system it would necessitate removing the concrete base layer below the tarmac. This would involve a significant cost and closing the street entirely for a period of time – in this respect it is not considered appropriate.
Planting The existing tree at Carfax would be retained. The hanging basket posts would be removed.

Example Context Analysis - Queen Street:

<p>Consider: historic context</p> <p>What are the origins of the street and how can they be reflected?</p> <p>Queen Street was originally known as the Bailey in the 13th century due to its proximity to the castle. It became known as Old Butchers Row (1657) and Butchers Row (1772) after the butchers' shambles that were erected there in 1556. The street market moved to the Covered Market in 1774 and the shambles were demolished. It came to be known as Queen Street in 1788 following a visit by George III and Queen Charlotte. In the late 19th century St Martins Church was demolished at Carfax to ease the congestion problems, leaving the tower as the focal point. The tower was restored and altered in 1897 although it dates from the 14th century. The commercial role of the street will continue and the focus should remain on Carfax.</p>
<p>What were the previous uses of the street and the buildings on it?</p> <p>Queen Street has been a commercial and retail-dominated street for a considerable length of time. In the 17th century it was a street market and it has operated a shopping street ever since. It remains one of the core shopping streets in the city centre. In the 19th Century Queen Street was virtually rebuilt and some of those buildings remain with interesting features above ground floor level.</p>
<p>What changes have happened to the street's design through the years – layout, materials, street furniture?</p> <p>The first major public realm work took place in the late 19th century with more road space provided to ease congestion particularly at the Carfax end. Protruding signs, pumps and posts that cluttered the street were removed and signs were removed and the street's appearance transformed. Another significant change occurred in the 1960s when Queen Street was closed to general traffic with only buses, emergency services and taxis remaining. This had a fundamental influence on how the street operated and how it was laid out with pedestrians given more space and priority. It has become a key bus route on the city's network.</p>
<p>What is the street's significance in the city's historic street pattern and its role in the changing street pattern?</p> <p>The street has been a major structural element of the city's road network from the very beginning – forming the main east-west route through the centre. The crossroads at Carfax has been in place since the beginnings of the city and informed the layout of the streets around it.</p>
<p>What historic character is in the street and/or buildings that can be protected or enhanced?</p> <p>Carfax Tower is the dominant historic feature that should be enhanced. It could be enhanced through de-cluttering and a fresh treatment of the space around it and</p>

possibly through cleaning and lighting of the tower itself. Above ground floor level there are some interesting historic features of commercial buildings dating back to the late 19th and early 20th century. Examples include Nos 36-37 which originally operated at the Morris Garages Showroom, no 45 which is grade II listed, nos 31-32, and nos 34-35 which were originally the Temperance Hotel.

<p>Consider: contemporary urban context</p> <p>What are the social/economic uses of the space (markets/fairs/ceremonies etc)?</p> <p>Queen Street forms a key part of the retail heart of the city centre and plays an important role in the life of the city therefore. Carfax forms an important meeting point in the centre; many groups gather here and people arrange to meet under the tower – it is an important landmark in that sense. Currently it is an important link on the bus network with many buses stopping on the street itself and others passing through on their way through the centre.</p>
<p>What are the uses of buildings along the street?</p> <p>The main uses of the buildings are for retail A1 use; there are also banks and other retail-related buildings along its length.</p>
<p>What is the status/significance in the local street pattern?</p> <p>Queen Street is highly significant in the local street pattern, it is one arm of the famous crossroads at Carfax which operate as the major city centre streets. It is a core structural route. It also links the two important public open spaces of Bonn Square and Carfax.</p>
<p>What contemporary character is there in the street to be protected or enhanced?</p> <p>Contemporary elements of the street's character include the shop fronts with their window displays and signage and the glass fronted entrance to the Clarendon Centre. It would be important that the entrance to the Clarendon Centre is considered in the design and layout of the street treatment and remains clear and open.</p>
<p>What are the various architectural forms: heights, colours, materials, shapes, textures?</p> <p>The architecture of Queen Street is very varied reflecting how individual plots and buildings have come forward for redevelopment at different times over its lengthy history. There are narrow fronted properties which broadly reflect the historic pattern and there are wider frontages where individual properties have been amalgamated in the past. The roofscape, materials and colours are very varied, again reflecting these piecemeal changes over time. In contrast the building line is</p>

<p>general very uniform (with the exception of Marks and Spencers with its set back).</p> <p>Are there any known potential / proposed changes to the above?</p> <p>The major changes proposed for the street include the removal of bus stops in the short-term and the removal of all bus traffic in the longer-term. There is a planning permission for large-scale redevelopment of the Westgate Shopping Centre at the end of Queen Street and there is a planning application for a retail-led development on the St Aldates/Queen Street site just behind the Queen Street frontage; both schemes would have important entrances onto Queen Street.</p>
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<p>Consider: functional context</p> <p>What are the traffic volumes, speeds and types?</p> <p>The major element of motorised traffic on Queen Street is buses with 80 an hour passing through and 6 very busy bus stops. In addition, there is something in the region of 4,500 pedestrians an hour. Cycling is 2-way through the street between 6pm and 10am and is not permitted outside these hours. Similarly deliveries are permitted between 6pm and 10am and not outside. There is also a taxi rank in the evenings and on Sundays.</p> <p>What are the movement patterns for the various modes?</p> <p>Buses, taxis and delivery vehicles travel from west to east through the street and cycling is permitted 2-ways within the set period. Pedestrian traffic is very varied with many crossing movements between shops as well as along the length of the street. In addition there is a significant pedestrian movement pattern associated with the bus stops.</p> <p>What are journey times and where do queues form?</p> <p>Occasionally there is bus congestion and the street gets very busy with the combination of buses and pedestrians however there is no significant issue with queuing and journey times.</p> <p>What do problems if any, do air quality measurements show?</p> <p>Monitoring shows that Queen Street is one of the worst streets for air quality in the city as a result of the number of buses and narrow form of the street.</p> <p>What do problems if any, do noise measurements show?</p> <p>There is anecdotal evidence of noise problems within the street, this is mainly associated with the noise of buses starting and stopping at bus stops.</p> <p>What do problems if any, do accident statistics show?</p> <p>There are very few accidents recorded in the street (8 minor accidents in 5 years) particularly given its high level of usage.</p>
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<p>What is the streets strategic importance for movement?</p> <p>The street is very important in terms of the bus network as described above.</p> <p>What are the requirements for servicing, utilities, parking and emergency services?</p> <p>Deliveries are required to be made from the street as very few of the units have rear access for servicing. There are no requirements for parking on the street beyond the taxi rank. The street will need to remain as a possible route for emergency vehicles.</p> <p>What are the requirements in terms of cleansing?</p> <p>Given the very high footfall and the high profile nature of the street, cleansing is a high priority. The large number of people inevitably generates a large amount of litter with a particular problem with chewing gum.</p> <p>What role does CCTV play?</p> <p>CCTV is important in the street given its role in the city centre and the high number of people there.</p> <p>What are the requirements in terms of accessibility?</p> <p>The street needs to be accessible for all given its role in the city centre and the services and facilities it provides for residents and visitors. The street given its retail nature needs to be easily crossable along its length and in both directions.</p> <p>What street furniture is in place and what are the ground surfaces materials/finishes?</p> <p>Currently there are some bins, bollards and hanging basket posts. In Carfax there are some benches and cycle stands. The street is paved with concrete pavers in the footway with tarmac in the carriageway.</p> <p>Are there any known potential / proposed changes to the above?</p> <p>The most significant change proposed for the street in functional terms is the removal of bus stops in the short-term and the removal of all bus traffic in the longer-term.</p>
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Materials: ground surfaces

General principles

Ground surfaces must be:

- Used to influence the behaviour of road users
- Safe and comfortable for all pedestrians – even, level, slip-resistant, free from trip hazards and puddles of water
- Robust, safe and appropriate for the type and volume of traffic passing over them
- Easy to keep clean and repair and chosen with regard to whole life costs
- Easy to reinstate to a high standard after works by utility companies or other localised works
- Appropriate for the character of the space in which they are laid, respecting the space's distinctiveness, history, proportions and forms
- Constructed from simple, high quality materials that are sustainable and ethically sourced
- As free as possible from road markings, within the constraints of legal requirements
- Skillfully and traditionally laid, with careful attention to details such as laying patterns and jointing

The effect of materials on behaviour

Experience from the UK and elsewhere suggests that surfacing materials can have a significant impact on road users' perception of a street, their behaviour and their place in it.

Materials associated with high-speed roads (e.g. tarmac and concrete) will tend to result in higher vehicle speeds and reduce drivers' awareness of pedestrians. Materials more associated with pedestrian-dominated streets (e.g. stone setts or bonded gravel) tend to achieve the opposite effect – slower speeds and greater awareness of pedestrians. The choice of materials must exploit the potential to influence the behaviour of road users, but recognising that some materials commonly found in pedestrian areas will not be durable enough to withstand heavy traffic loadings especially without careful detailing and good quality workmanship.

Often a change in colour or texture is sufficient to indicate pedestrian priority in a street, without making use of expensive materials.

Palette

Overleaf is an approved palette from which materials may be selected for streets in the city centre. The aim is to ensure a degree of consistency, but not bland uniformity. Local distinctiveness should be enhanced by the choice of materials.

Acknowledging that street design is a complex process, this section does not specify particular finishes for specific streets. Functionality, durability, cleaning, road safety, heritage, and other factors must all be assessed by the design team when choosing which of the materials in the approved palette to specify.

The **street design process flowchart** sets this out in more detail.

Special spaces

In special spaces (e.g. Carfax, Frideswide Square, Gloucester Green) the approved palettes should be used as a starting point. However, these spaces will often call for a more individual treatment, so other materials may be introduced as long as they conform to the general principles set out above.

SS37: Only materials from the ground surfaces palette may be used for ground surfaces in the city centre, unless there is a specific justification for a departure.

Restoring existing materials

Where existing materials are considered to be attractive and aesthetically and functionally appropriate, they should be restored rather than replaced if it is economical to do so. Recent examples of the success of this practice include the flag stones on Magdalen Bridge and the granite kerbing on Folly Bridge.

If materials cannot be restored in-situ or are no longer appropriate for the street, they should be stored for future use in another street wherever possible.

This approach helps to conserve natural resources, saves energy, and preserves historic character.

Ground surfaces palette





York stone

and similar honey-toned natural stone

Rationale

- Sandstone and limestone are used extensively in central Oxford. This is the material most associated with Oxford.
- Durable, attractive natural material.
- Creates a smooth walkable surface.
- Easy to clean, particularly with coating.
- Available in the UK but many suppliers import from Asia.
- Extremely durable and recyclable, but by definition not recycled.

Recommended use

- Footways
- Large open spaces
- Lightly-trafficked lanes

Design guidance

- Stone used in High Street and other recent schemes is preferred stone
- “Fan” patterns should be used at corners to echo kerb radii or building lines
- Joints should be 10 mm
- Course widths and slab lengths must be appropriate to the scale of the street and width of footway and must be agreed by the city council’s conservation team to ensure local distinctiveness is retained
- Coatings must be applied to aid cleaning; consult CityWorks for specification
- Reinstatements should use original stone (if still intact and in good condition) or matching new stone. For larger reinstatements, any new stone required should be interspersed with original slabs to disguise the reinstatement as well as possible.
- Natural stone is not permeable, but it may still be possible for rain water run-off to be controlled as part of a sustainable drainage system.



Granite/Porphyry

and similar igneous rock in various colours

Rationale

- Used extensively in Oxford's central streets, traditionally to form reinforced areas on rammed earth roads for carts and other wheeled vehicles.
- Highly durable, attractive material.
- Range of colours and textures available add interest. Complements York stone well.
- Creates a smooth walkable surface when saw-cut modules are used.
- Easy to clean.
- Not generally available from the UK.
- Extremely durable and recyclable, but by definition not recycled.

Recommended use

- Footways
- Large open spaces
- Carriageways (where traffic conditions allow)
- Kerbs
- Vehicle accesses
- Traffic islands
- Pedestrian crossings
- Drainage channels
- Feature details (e.g. tree pits)

Design guidance

- Colours: buff, light grey, dark grey and light pink
- Adopt a more formal approach to wider, grand main streets and formal spaces (e.g. High Street, St Giles, Frideswide Square) and areas with predominantly post-1930s buildings (e.g. Westgate)
 - o Use one or two colours rather than a mix
 - o Focus on light and dark grey, not buff and pink
 - o Tend towards larger module sizes and sawn finishes
- Adopt a less formal approach to narrower, more intimate streets and informal spaces (e.g. New Inn Hall Street, Pembroke Street, Bonn Square, Radcliffe Square) and areas with predominantly pre-1930s buildings.
 - o Use a mix of the colours above
 - o Focus more on buff, light grey and pink
 - o Tend towards smaller module sizes and rougher cropped finishes

Blue clay pavers

Rationale

- Used in some parts of Oxford city centre.
- Associated in particular with waterside and 19th century industrial areas (e.g. St Thomas').
- Durable, attractive material.
- Creates a smooth walkable surface.
- Easy to clean.
- Available from UK sources.
- Very durable and reusable, recyclable.

Recommended use

- Footways
- Large open spaces
- Lightly-trafficked lanes
- Feature details (e.g. tree pits)

Design guidance

- Particularly well-suited to streets with a high number of red brick 19th century buildings (e.g. many streets in the Thomas' quarter)
- Pavers may be smooth or have a diamond-patterned relief
- Use larger pavers for wider, grand main streets and formal spaces
- Use smaller pavers for narrower, more intimate streets and less formal spaces





River washed cobbles

Rationale

- Used in several special places in the city centre (Radcliffe Square, Broad Street etc)
- Highly durable, attractive material
- Creates a distinctive, random appearance that is very different from angular paving
 - Complements York stone and other stones well
 - Recyclable.

Recommended use

- Large open spaces or footways, but only where pedestrians are not expected to walk or where a smoother, more walkable alternative surface is also available for pedestrians
- Areas that carry very little or no traffic (i.e. access only)
- Areas that cyclists cannot use or would never wish to use

Design guidance

- River washed cobbles create a highly uneven walking surface. However, this should not preclude their use where the above conditions are met.
- Normally appropriate only in streets with predominantly pre-19th century buildings
- Particularly suited to laying small, informal areas with curved, rather than geometric, forms in both the surrounding buildings and street features (e.g. curving footways or building lines)
- Maintenance may be expensive; specialist contractors should be used for installation and repairs to achieve a good finish and minimise future problems



Gravel

Resin bonded or resin bound

Rationale

- Used in many places in the city centre, particularly in college quads, Oxford Castle, parks etc
- Attractive natural finish; cost-effective and quick to lay
- Creates a smooth walkable surface
- Easy and economical to resurface
- Available from UK sources
- Thinner surface means reduced consumption of natural resources and energy
- Permeable versions available for use as part of sustainable drainage systems or for tree pits

Recommended use

- Footways
- Large open spaces
- Carriageways (where conditions allow)
- Lightly-trafficked lanes
- Pedestrian crossings
- Traffic islands
- Feature details (e.g. tree pits)

Design guidance

- Resin **bonded** gravel has a very rough texture which can be very difficult to keep clean. Chewing gum removal is particularly difficult. Avoid using resin bonded gravel in areas prone to chewing gum littering.
- Resin bound gravel is available in smoother, more sealed finishes. These may be used in areas more prone to chewing gum, but only if no other material in the approved palette could be used instead.
- Buff-coloured gravel should be used; chipping size normally 6 mm and below
- Where possible, permeable versions of these materials should be used as part of a sustainable drainage system. This may be harder to achieve in existing streets without resorting to wasteful and expensive reconstruction, but where new streets are built or existing streets are re-constructed from scratch as part of a structural maintenance scheme, permeable versions must be used.
- Where tarmac or gravel finishes are used, a limited quantity of higher quality natural materials should be incorporated into the footway design in appropriate places to lift the overall quality without major expense. Examples include using granite kerbs, or using stone cubes at the base of trees.
- Reinstating gravel finishes after road or utility works is difficult because a new surface always has to be applied. To ensure the neatest possible finish, reinstatements should cover the entire width of the footway as shown below, not just cover the trench width.

Buff asphalt

Hot rolled asphalt (HRA) with buff chippings or buff stone mastic asphalt (SMA)

Rationale

- Used in some streets to create an attractive natural-looking and robust finish – e.g. New Inn Hall Street, Queen Street and Cornmarket Street.
- Similar properties to black asphalt but with a greatly enhanced appearance.
- Can withstand heavy traffic if specified and laid correctly
 - Creates a smooth walkable surface.
 - Available from UK sources.
 - Recycled asphalt is available
 - Recyclable
- Permeable versions available for use in sustainable drainage systems

Recommended use

- Carriageways

Design guidance

- Chipping size should be 10 - 14 mm
- Skid resistance standards are not written with very low speed environments in mind. The county council's road safety team may consider below-standard skid resistance to be acceptable in some streets, which allows a greater choice of aggregates for either HRA or SMA. Consult road safety team for advice
- Both HRA and SMA take some time to mellow and achieve the desired effect.
- Permeable versions should be used where feasible without unreasonable cost or wasteful reconstruction
- For HRA, chippings should be spread densely and evenly. Refer to technical notes for further guidance
- HRA is easy to reinstate as long as the original aggregate is still available - do not use hard-to-find aggregates
- Coloured SMA can be problematic to reinstate unless the exact product is still available. Use large suppliers with a well-established product to minimise the risk of supply problems in future.
- HRA and SMA are often used where heavy vehicles operate. Ensure the specification will withstand heavy loadings and are resistant to rutting caused by constant heavy traffic over the same part of the road (e.g. bus traffic).





Black asphalt

Usually stone mastic asphalt (SMA)

Rationale

- Used extensively in the city centre since the early 20th century.
- Highly durable and economical to install and repair.
- Creates a smooth walkable surface.
- Can look attractive when in good condition and without excessive road markings.
- Available from UK sources.
- Recycled asphalt is available.
- Recyclable.
- Permeable versions available for use in sustainable drainage systems.

Recommended use

- Carriageways

Design guidance

- Aggregate size 10 - 14 mm for carriageways
- Where possible, permeable versions should be used as part of a sustainable drainage system. This may be harder to achieve in existing streets without resorting to wasteful and expensive reconstruction, but where new streets are built or existing streets are re-constructed from scratch as part of a structural maintenance scheme, permeable versions must be used.
- Where tarmac finishes are used, a limited quantity of higher quality natural materials should be incorporated into the street design in appropriate places to lift the overall quality without major expense. Examples include using granite kerbs, or using stone cubes at the base of trees.
- Reinstating tarmac finishes after road or utility works is difficult because a new surface always has to be applied. To ensure the neatest possible finish, reinstatements should cover the entire width of the footway as shown below, not just cover the trench width.



Concrete blocks

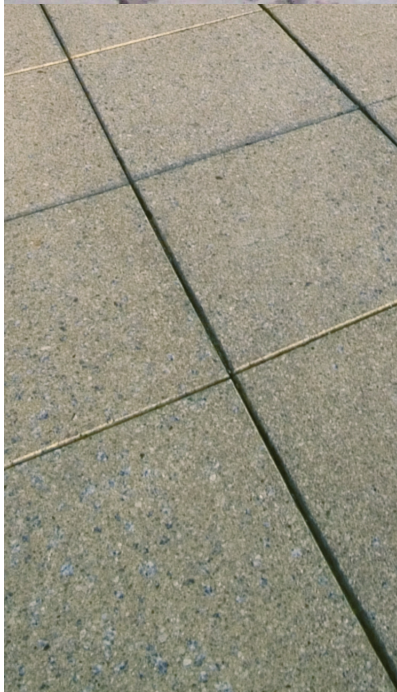
Including reconstituted stone blocks

Rationale

- Used in several less busy streets in the city centre (Holywell Street; Longwall Street; Pembroke Street)
- Creates a smooth, reasonably attractive appearance suitable for a range of architectural styles
- Much lower cost than natural stone; reconstituted stone may sometimes be a suitable alternative
- Easy to repair as blocks are bedded on sand and dry jointed
- Can be made from recycled materials and can be recycled.

Recommended use

- Footways
- Kerbs
- Large open spaces
- Lightly-trafficked lanes
- Tactile guidance paving*



Design guidance

- **Use with caution:** restrict use to less busy streets on the periphery of the city centre where more expensive natural materials cannot be justified
- Avoid using these products in streets with very high pedestrian flows where regular cleaning is required: intensive cleaning can wash the sand bedding away, causing blocks to become unstable and cause a trip hazard
- Use “natural” pink/grey Formpave blocks (see above left) or conservation slabs with exposed natural aggregates (see below left), not blocks coloured with pigments
- Adopt a more formal approach to wider, grand main streets and formal spaces and areas with predominantly post-1930s buildings (e.g. Westgate). Tend towards larger, uniform module sizes and saw-cut blocks.
- Adopt a less formal approach to narrower, more intimate streets and informal spaces and areas with predominantly pre-1930s buildings. Tend towards smaller, random module sizes and more rounded blocks.

* Detailed guidance on the design and use of tactile guidance paving is to be provided in a technical note in Part 2

Materials - street furniture

General principles

Street furniture must be:

- Limited to essential items such as seating and cycle parking
- Located in a way that minimises its visual impact and obstruction of pedestrian flows
- Constructed from simple, attractive materials that are sustainable and ethically sourced
- Robust, safe and appropriate for the function it is intended to perform
- Easy to keep clean, repair and replace, and chosen with regard to whole life costs
- Easy to reinstate to a high standard after works by utility companies or other localised works
- Appropriate for the space in which it is used, respecting the space's distinctiveness, history, proportions and forms
- Compliant with Inclusive Mobility to ensure it does not cause problems for people with sensory or mobility impairments

Palette

Overleaf is an approved palettes of materials that should be used in Oxford city centre. The aim is to ensure a degree of consistency, but not bland uniformity. Local distinctiveness should be enhanced by the choice of materials.

Special spaces

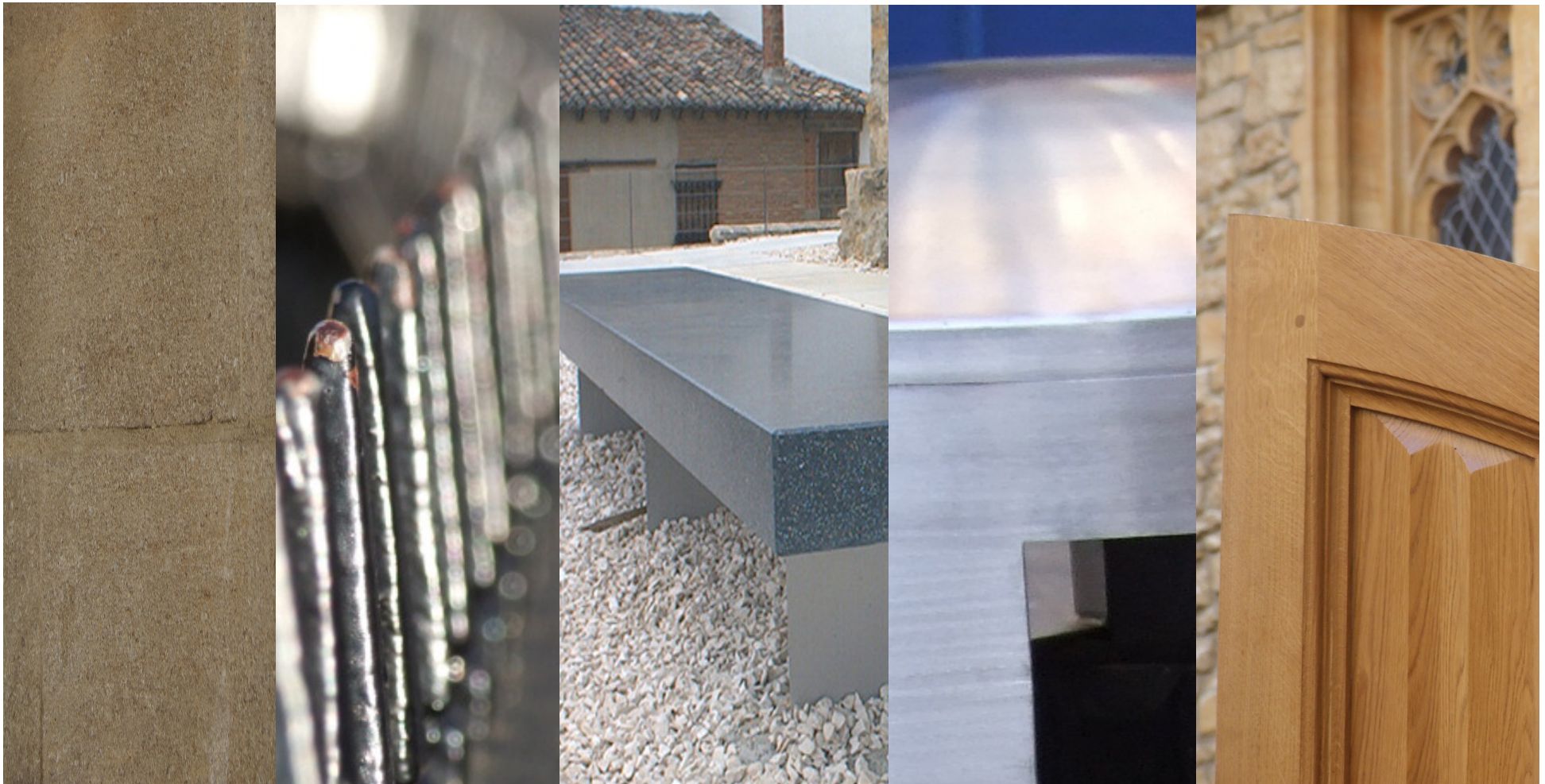
In special spaces (e.g. Carfax, Frideswide Square, Gloucester Green) the approved palettes and products should be used as a starting point. However, these spaces will often call for a more individual treatment help make them distinctive, so other products and materials may be introduced as long as they conform to the general principles set out above.

SS38: Only materials from the street furniture palette may be used for street furniture in the city centre, unless there is a specific justification for a departure.

Restoring existing features

Where existing features are considered to be attractive and aesthetically and functionally appropriate, they should be restored rather than replaced if it is economical to do so. High quality replicas may be used to replace damaged historic features, but for completely new items in a comprehensive scheme, quality contemporary design is preferred.

Street furniture palette



Stainless steel

Rationale

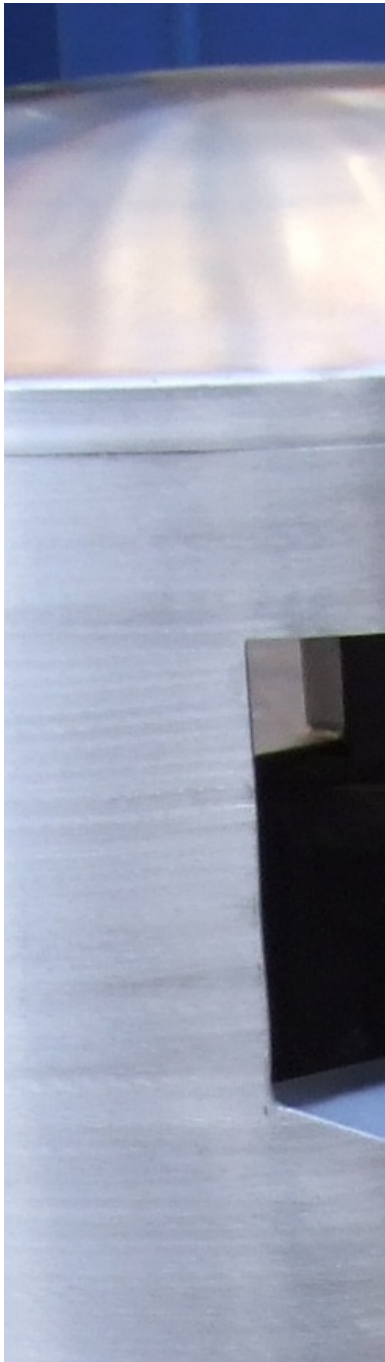
- Attractive, durable material
- Complements natural materials well
- Reflects the colours of the surroundings
- Widely available, making replacements easy
- Easy to clean
- Will not corrode, chip or scratch
- All stainless steel products are approx 60% recycled and 100% recyclable

Recommended use

- Seating (alone or in conjunction with stone/timber)
- Sheffield stands
- Fingerposts (post only, not sign plates)
- Bollards
- Hanging basket posts
- Litter/recycling bins
- Traffic signal poles
- Bus shelters and flag posts
- Hooped traffic signs
- Art features
- New lighting columns where appropriate
- Other traffic signs where possible
- Other structures

Design guidance

- Stainless steel should be used for all metal street furniture in the city centre, except selected black items as described under “Black metal”.
- The preferred finish is **brushed** stainless steel (not satin polished or bright polished)
- Stainless steel may not be appropriate for certain green spaces, waterside spaces and in narrower, more intimate streets with predominantly pre-19th century buildings, where timber is likely to be more appropriate for most items.



Timber

Rationale

- Attractive, durable, simple, natural material
- Widely used in Oxford's built environment
- Widely available, making replacements easy
- Pleasant to sit on and touch; does not get too hot or too cold
- Easy to clean
- Can be sanded and re-varnished
- Will not corrode, chip or scratch
- Sustainable when responsibly sourced
- Recycled timber available; timber is 100% recyclable.

Recommended use

- Seats (alone or in conjunction with stone or stainless steel)
- Bollards
- Outer cladding on litter bins
- Art features

Design guidance

- Timber is a preferable choice for seating because it is safe and comfortable to sit on in most temperatures. It can be combined with stainless steel or stone for variety or to create a contemporary appearance.
- Many timbers require periodic refinishing. A programme of refinishing should be agreed with CityWorks when specifying timber products.
- Timber is particularly suitable for bollards, benches and other street furniture in green spaces, waterside spaces and in narrower, more intimate streets with predominantly pre-19th century buildings.





Granite/Porphyry

and similar igneous rock in various colours

Rationale

- Used extensively in Oxford's central streets
- Highly durable, attractive material.
- Range of colours and textures available add interest. Complements York stone well.
- Easy to clean.
- Not generally available from the UK.
- Extremely durable and recyclable, but by definition not recycled.

Recommended use

- Seating
- Raised planters
- Access restrictions (e.g. bollards)
- Art work



Design guidance

- Reserve for special spaces as cost is likely to be high
- Restrict use to larger formal spaces where a grand appearance is required
- Consider opportunities for creative design (e.g. engraved lettering etc)
- Stone may not be comfortable surface to sit on in some locations - timber slats or tops may be incorporated to increase comfort



Buff limestone

and similar honey-toned natural stone

Rationale

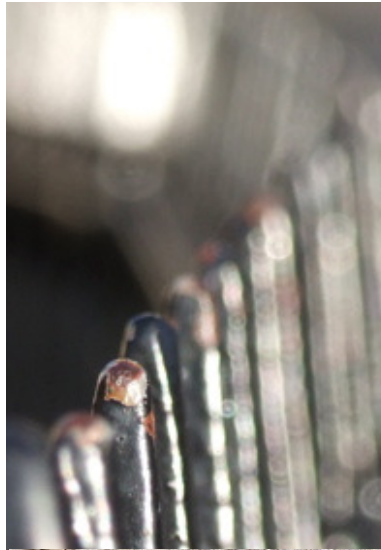
- Sandstone and limestone are used extensively in central Oxford. This is the material most associated with Oxford.
- Durable, attractive natural material.
- Easy to clean, particularly with coating.
- Available in the UK but many suppliers import from Asia.
- Extremely durable and recyclable, but by definition not recycled.

Recommended use

- Seating
- Raised planters
- Access restrictions (e.g. bollards)
- Art work

Design guidance

- Stone must be carefully selected in consultation with the city council's conservation team to ensure it is of the correct colour and type
- Reserve for special spaces as cost is likely to be high
- Restrict use to larger formal spaces where a grand appearance is required
- Consider opportunities for creative design (e.g. engraved lettering etc)
- Stone may not be comfortable surface to sit on in some locations - timber slats or tops may be incorporate to increase comfort



Black metal

Painted or anodised

Rationale

- Widely used in Oxford for railings, street name plates etc
- Black painted metal chips easily, and looks very unattractive when chipped
- Anodised black metal is more durable, but is only likely to be appropriate for new items in a contemporary style. It can still scratch and is difficult to recoat.



Recommended use

- Quality reproductions of traditional street furniture
- Items that will not be chipped or scratched by vehicles or bicycles – i.e. finger post sign plates, street name plates, high-level lanterns.
- DO NOT use for bollards or cycle parking as it will chip very quickly.

Design guidance

- Black metal is most suited to existing traditional features and should not be used for mock “period” items.
- Black metal finishes are most likely to be appropriate when physically attached to listed buildings whose character might be compromised by the use of even very high quality contemporary fittings.



Special metals

Lead, bronze and copper

Rationale

- Attractive, durable, natural materials
- Widely used in Oxford's built environment
- Easy to clean
- Recyclable

Recommended use

- Reserve for special spaces (e.g. bronze has been used in Bonn Square)
- Could be used for most items of street furniture, but best suited to "feature items" such as seating, lighting, bins, bollards, planters etc - not traffic signal poles or other purely functional items

Design guidance

- Reserve for special spaces as cost is likely to be high
- Restrict use to larger formal spaces where a grand appearance is required
- Consider opportunities for creative design (e.g. engraved lettering etc)
- Take steps to prevent theft



Glass

Rationale

- Attractive, durable, simple, natural material
- Widely used in Oxford's built environment, old and new
- Transparency minimises the visual impact of new structures on the street scene and does not block sunlight or street lighting
- Requires regular cleaning, but is easy to clean
- Will not corrode or scratch
- Recyclable and often recycled

Recommended use

- Bus shelters (side panels and roofs)
- Street trading kiosks
- Structures that project from buildings over the street (e.g. shop canopies)

Design guidance

- Consider maintenance. Cleaning and repairs will be needed, but this should not be seen as a reason to specify cheaper, opaque materials if glass would be more appropriate.
- Glass structures will be difficult to see for people with visual impairments, so they must be designed and positioned carefully to avoid creating a hazard. This may include incorporating a contrasting band into larger panes.

Summary of policies

SS1: The design and management of streets in Oxford city centre will prioritise the needs of pedestrians.

SS2: Where Policy SS1 conflicts with other objectives, for example promoting sustainable transport, the following hierarchy of users will be applied (in descending order of priority):

- Pedestrians
- Cyclists
- Bus passengers
- Taxi passengers; those delivering to or servicing properties; blue badge holders

Private motor vehicle drivers and passengers, including motorcyclists

SS3: In streets will the highest pedestrian flow consideration will be given to restricting access for wheeled traffic (except wheelchairs or other mobility aids) if doing so will significantly enhance pedestrian safety or comfort.

SS4: Streets will be as crossable as possible, even without specific features to help pedestrians cross: traffic speeds and volumes will be reduced to achieve this. Any features designed to help pedestrians cross must be located on genuine pedestrian desire lines and be consistent with the following hierarchy:

- Informal “courtesy” crossings (consider first)
- Zebra crossings
- Traffic signal controlled crossings (consider only if other options are unsuitable)

Where possible crossings will be raised to reduce traffic speeds and provide a flush, level crossing surface. Bus passenger comfort and safety must be considered in specifying ramp gradients.

SS5: Pedestrian priority will be given at minor side roads by reducing the kerb radius to a minimum and raising the road to the level of the footway.

SS6: For road markings and traffic signs associated with a traffic regulation order or other legally enforceable restriction, only the minimum enforceable number, layout, design and variant will be used.

SS7: Road markings and signs not associated with a traffic regulation order or other legally enforceable restriction will not be used. Examples of such markings include centre lines, hatching, directional signage etc.

SS8: Surplus, shabby or poorly placed street furniture will be removed or improved.

SS9: All new street furniture will be placed in such a way as to avoid creating hazards or obstructing the movement of pedestrians and be designed in accordance with the street furniture palette.

SS10: Bus shelters will be provided where possible and will be stainless steel and glass of the ClearChannel “Landmark Plate” design and will incorporate seating, real-time and printed information. Bus stop flags will be of the county council’s standard design; operators may not provide separate flags or timetable cases. 140mm kerbs will be provided at bus stops to allow level boarding.

SS11: Wayfinding signage must be accurate, appropriately positioned, consistent in style and easy to read.

SS12: All structures should be placed so as to minimise visual impact and potential obstruction. Utility companies and other relevant parties will be encouraged to select options that assist with this aim and to commit to a regular maintenance regime.

SS13: Changes to the street scene or new additions to the street pattern will be simple, robust and flexible to be able to adapt to changing uses.

SS14: Materials, street furniture and other elements in the street scene will be based on the palettes provided in this document, be simple and exemplify elegant modern design.

SS15: Additional street trees are encouraged but should be introduced in historic streets with caution; where they are proposed as part of a public realm scheme their inclusion must be justified in the context and their impact must be fully assessed.

SS16: New landscaped and waterside spaces will be provided and existing spaces enhanced.

SS17: Installation of public art will be encouraged. Opportunities for hosting events will be considered in the design of public spaces with appropriate details specified to assist with this.

SS18: The following steps should be taken to reduce crime and fear of crime:

- Create the conditions for natural surveillance: welcoming, well-lit public spaces that are overlooked by the active fronts of occupied buildings
- Keep streets clean and tidy
- The requirements of CCTV visibility must not lead to featureless or uninteresting street designs, but must be considered.

SS19: Street designers will consult disabled users of a street at the start of a project and at appropriate subsequent stages in the design process. An equality impact assessment (EQIA) will be carried out on street designs. Designers will consider the guidance in *Inclusive Mobility* and follow it where possible.

SS20: Surfaces for pedestrians must be “walkable” – i.e. smooth, non-slippery, even and level. This should not lead to bland or uniform paving design – texture differences are encouraged where pedestrians can easily avoid rough surfaces if they wish.

SS21: Public seating is encouraged and should ideally be provided every 50 metres to help people with mobility impairments. This must be compliant with policy SS9.

SS22: Street design practices are changing. A move away from traditional systems, controls and regulations is strongly supported in appropriate locations for economic, environmental and social reasons. However, great care must be taken to ensure people with disabilities are not excluded by this approach to street design. The councils will dedicate time and funding to further research and experimentation in this area.

SS23: Lighting will be used to enhance the public realm as well as to provide functional illumination, though this must be balanced against reducing energy consumption. White light is preferred.

SS24: All street enhancement schemes will be designed to ensure streets can be cleaned and maintained effectively.

SS25: Litter and recycling bins will be provided to help reduce ground litter; all bins must be compliant with policy SS9.

SS26: Streets will be litter picked regularly to remove ground litter. Streets will be litter picked at intervals so as to maintain the standards set. In addition to litter picking the streets will require sweeping. For the city centre the streets will be swept at least daily.

SS27: The city council will use and advertise its powers to fine people who drop litter in the city centre.

SS28: Trade waste will be put out for collection as close as possible to the agreed collection time. Waste containers will be robust enough to avoid leakages that stain the street surface; the use of rigid bins instead of bags will be considered.

SS29: The busiest city centre streets will be cold washed AND hot washed at least weekly. A small number of streets will be washed up to daily.

SS30: Abandoned bicycles will be cleared six times per year. Bicycles causing a dangerous obstruction will be removed as soon as possible after they are reported to City Works. Additional cycle parking will be provided where possible.

SS31: The county council will provide up-to-date information about special surfaces to Statutory Undertakers and continue to work with them to reduce the impact of reinstatements on the street scene.

SS32: The introduction of elements into the street scene will be minimised so as to reduce the use of natural resources and energy.

SS33: Elements will be chosen with regard to their life cycle including their durability, on-going maintenance, incorporation of recycled elements and re-use or recyclability at end of life

SS34: Ethical issues will be considered when sourcing materials and where possible local producers and suppliers will be used.

SS35: Sustainable drainage measures will form part of any scheme that involves significant areas of hard-landscaping where this can be achieved without expensive or wasteful reconstruction of existing surfaces.

SS36: All projects involving the design and redesign of streets and spaces in the city centre will follow the street design process including completion of the ambitions assessment and context analysis.

SS37: Only materials from the ground surfaces palette may be used for ground surfaces in the city centre, unless there is a specific justification for a departure.

SS38: Only materials from the street furniture palette may be used for street furniture in the city centre, unless there is a specific justification for a departure.