### 9.1 Principles and General Layout

The street furniture chosen will be considerate of the character of the whole borough and individual borough centres in particular, respecting their historic character yet projecting a contemporary and robust image.

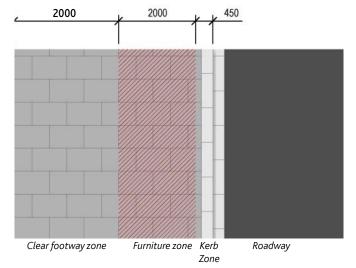
Any street furniture solution has a design implication in terms of:

- » Maintaining visual quality: to maintain and/or raise perceptions of any area (i.e. environmental standards). Stainless steel requires no painting, offers visual quality, but high replacement costs. Timber requires regular treatment and a budget must be set aside for such;
- » Safety and protection: placement, minimum height, comfort (for seating) and visibility considerations to reduce the risk of injury.
- » Compliance with minimum engineering standards and the DDA legislation of significance;
- » Location: critical to physically deter misuse of areas not design for vehicle use, and to protect pedestrians by maintaining flight lines. The choice of street furniture must be consistent and form part of an overall project design solution, and not an after thought; and
- » Energy costs: where lighting is used in schemes, where possible this should be low energy and seek to be revenue neutral. Consideration should be given to the longevity of lighting units, and risk and tolerance to vandalism.

» Considerations should be given to the amount of street furniture and the arrangement, position and the design of the elements when planning and designing public realm schemes and improvements.

#### Priorities should be:

- » Reduce the amount of clutter, by removing superfluous and redundant furniture and providing a minimum of new furniture, where demand id evident.
- » In order to reduce clutter, reduce the use of additional posts and columns and promote the doubling-up of functions. Lamp columns and posts should accommodate signs, CCTV cameras, bus lane enforcement cameras, telecommunication equipment and adverts.
- » Minimise the impact of street furniture placement on pavement width by arranging it in a defined zone near the kerb edge, with a clear and unobstructed pedestrian zone provided. The narrower the pavement, the less the equipment should be. Minimum clear width:



- Minimum obstacle-free width is 1.8m
- Widths should increase to 3m at bus stops and in shopping centres
- In existing constricted circumstances the minimum width is 1.2m
- » Do not obstruct sight lines or pedestrian desire lines. Elements should also not conflict with CCTV camera



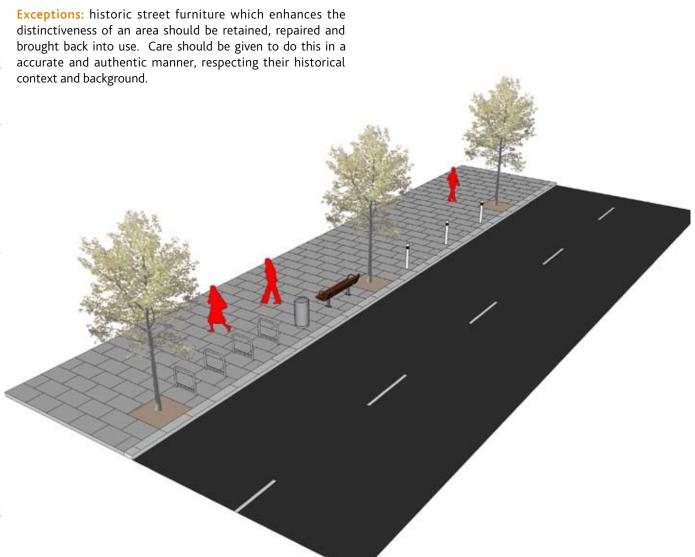
Well placed and grouped furniture

positions and view cones, thus ensuring maximum coverage throughout.

- » Do not place street furniture adjacent to blue badge parking bays.
- » Trees, cycle guards and pavement strengthening an reinforcement to be used in place of bollards wherever possible.
- The range of furniture is limited to guarantee consistency, ease of maintenance and economy of scale. The selected range, presented in the following pages, is simple and unobtrusive.
- » All the street furniture will be powder coated with a grey finish (RAL 7004 Signal grey- below).

### RAL 7004 Signal grey

All furniture and fittings for the Merton's Public Realm will be chosen for their low maintenance cost and compliance with DDA legislation. A timber & metal theme has been selected to achieve a modern aesthetic, while at the same time being comfortable to use.



Example combined setting out of furniture

## 9.1 Merton's Furniture Palette



#### 9.2 Seating

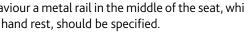
Location	Borough wide
Principles for siting	On streets wider than 4m seats should be placed at the back of pavement in front of blank walls or fences. This is the optimum position for seating.
	On streets narrower than 4m seating will have to be provided near the kerb within the designated furniture zone (see 2.9.1) facing into the pavement
Considerations	Organised within paving pattern to minimize cutting of slabs
	Armrest can be omitted from one end of seats to aid wheelchair users or parents with pushchairs
Manufacturer	Furnitubes
Model	Zenith
Materials	Galvanised steel and FSC approved hardwood
Finish	Steel - Polyester Powder Coated – RAL7004
	Wood - natural
Dimensions	W1830mm x D540mm x H 780mm

The use of seats should follow the general principles of design and layout (refer to section 2.3.1).

Seating should be located:

- » Where there is adequate space and where people are likely to want to sit, e.g. near retail and community facilities, preferably not too close to road traffic.
- » In high visibility areas, preferably where the persons' back is unexposed.
- » In sheltered areas, but still receiving some sun.
- Not longitudinally down slopes.

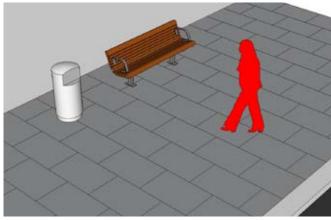
The potential for vandalism is an important consideration as is the ease of maintenance. The nature of fixings below seats and benches can make cleaning operations more difficult. As such a simple design has been chosen. In order to avoid anti-social behaviour a metal rail in the middle of the seat, which can work as a hand rest, should be specified.





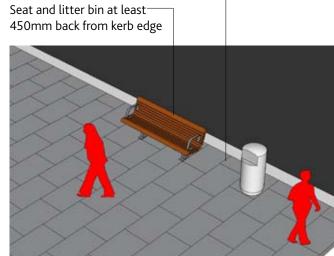
- » Historic seats in conservation areas should be retained. repaired and brought back into use. Care should be given to do this in a accurate and authentic manner, respecting their historical context and background.
- » Mitcham town centre seat, recommended by the Street Environment Study commissioned by the Council, should be replaced as they fall into disrepair.





Seat placed against wall on street wider than 4m

Seat and litter bin at least 1m apart



Seat near kerb on streets narrower than 4m

## 9.3 Litter Bins & Recycling

Location	Borough wide
Principles for siting	Set sleeve minimum 450mm back from kerb edge
	In close proximity to seating or at intervals of approximately 50-75m on well used town centre routes
Considerations	Organised within paving pattern to minimize cutting slabs
	Ensure litter bin covers the sleeve
	Paving should appear to extend under bin
	Independent metal liner

The use of bins should follow the general principles of design and layout (refer to section 2.3.1) .

» The colour of recycling bins opening flap is consistent with international recycling conventions to ensure public recognition. They should be positioned so that they don't cause obstructions or adverse impact on the street, e.g. against a wall. This sites should be regularly cleaned and tidied.

#### **Exceptions:**

» Historic bins in conservation areas should be retained, repaired and brought back into use. Care should be given to do this in an accurate and authentic manner, respecting their historical context and background.

### Type A

	D 1.6 .
Location	Borough Centres
Manufacturer	Furnitubes
Model	PET 530 Peterborough Square
Materials	Galvanised Steel
Finish	Polyester Powder Coated - RAL7004
Dimensions	W530mm x D530mm x H1020mm
Capacity	120 litres



### Type B

Location	All connecting routes and residential streets
Manufacturer	Furnitubes
Model	Zenith
Materials	Galvanised Steel
Finish	Polyester Powder Coated - RAL7004
Dimensions	Ø-500mm, H-1110mm
Capacity	120 litres



## 9.4 Cycle Stands

Location	Borough wide on streets of minimum width of 3m
Principles for siting	Minimum 600mm back from kerb edge
	45° to the kerb for streets 3-4m width
	90° to the kerb where streets are wider than 4m
	Located as close as possible to key destinations
	Placed in areas where they are well overlooked
Manufacturer	Furnitubes
Model	TFL 600
Materials	Stainless Steel
	Black visibility band and horizontal tapping rail on individually placed stands or on outermost stands where stands are grouped
Dimensions	W750mm x H750mm
Considerations	Minimum 1m between stands
	Refer to the 'London Cycle Design Guide' by Transport for London for best practice for positioning cycle stands

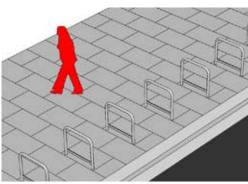
The use of cycle/motorcycle stands should follow the general principles of design and layout (refer to section 2.3.1) and in accordance with the London Cycle Network Plus standards.

Locations, in places of high visibility, should be chosen after consultation with cycle user groups.

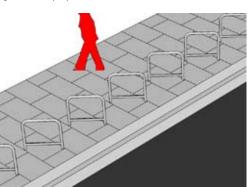


Well positioned cycle stands

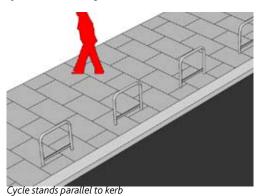




Cycle stands perpendicular to kerb



Cycle stands at 45 degrees to kerb



#### 9.5 Bollards

The purpose of bollards is to discourage vehicles from entering pedestrian space risking pedestrian injury and damage to the footway.

Bollards have generally been over-used leading to cluttered streets and pose a hazard to people with mobility and visual impairments.

Bollards should only be used where there is no alternative and other options should be considered subject to safety assessments. Where overrun is only occasional, pavement strengthening should be used (refer section 2.8.2) otherwise safety kerb (refer section 2.8.6) should be considered where levels permit.

Bollards should be used in the following situations:

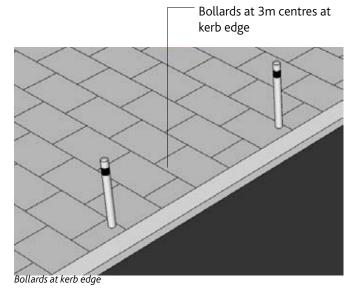
- Side road junctions: on kerb build-outs where no more than 2 bollards are necessary. If it is necessary to use a sign, this should replace the need for a bollard.
- » Major road junction: from vehicles mounting the footway.
- » On road closures. Bollards should be spaced at 1.5m apart. Try to use as few bollards as possible and where space allows substitute some bollards for trees. Drop down bollards should be used where emergency vehicles need temporary access.
- » In 20mph zones, to replace illuminated bollards on the corner of kerb build-outs that face incoming traffic.
- Where bollards need to be used to prevent vehicle overrun or parking on areas adjacent to footways, locate line of bollards on edge of kerb to provide a clutter-free and visually continuous pedestrian area, and space at 3m apart.

- » Illuminated bollards should be located at the end of the highway kerb on central reservations (refer to section 2.8.12 on staggered pedestrian crossings and central refuges).
- » A single bollard can be used at tight corners prone to vehicle overrun to protect pedestrians.

#### **Exceptions:**

- » Bell bollards should be retained where they are existing.
- » In Conservation Areas, retain and repair historical bollards. Care should be given to do this in a accurate and

Location	Town centres and connecting routes
Considerations	Minimum 1m between bollards
	Visibility strips should be integral, not applied.
Manufacturer	Broxap
Model	BX47 Sheffield
Materials	Galvanised Steel
Finish	Polyester Powder Coated – RAL7004 with a black visibility strip
Dimensions	H1000mm x Dia. 114mm





#### 9.5 Bollards

Location	Outside town centres
Considerations	Minimum 1m between bollards
Manufacturer	
Model	
Materials	Polymer
Finish	RAL7004 with a black visibility strip
Dimensions	H1000mm x Dia. 114mm



#### 2.9.6 Bus Stops

The location of bus stops should follow the general principles of design and layout (refer to section 2.3.1) and the relevant London Bus Initiative Partnership documents.

Bus shelters with no advertising should be used in Conservation areas, residential areas and close to Listed buildings and open spaces.

Bus shelters with advertising are subject to contract with JC Decaux.

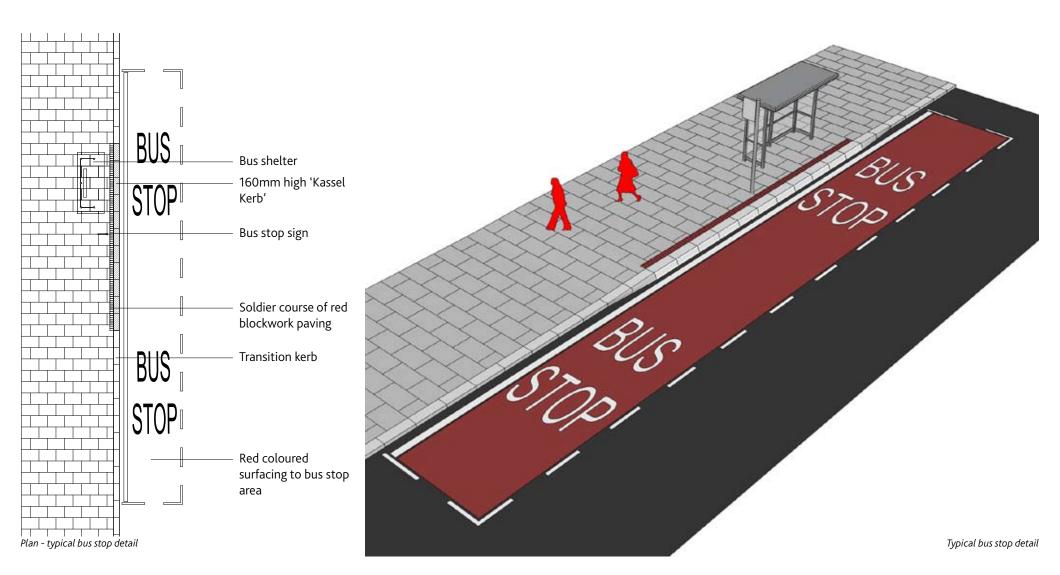
Design should provide reasonable weather protection and incorporate a seating or leaning rail element.

The size and appearance of the structure should be designed to minimise the visual impact and intrusion upon the circulation space within the street.

Length of bus stop depends on various factors, consult the 'Accessible bus stop design guidance' from Transport for London for guidance.

160mm high 'Kassel Kerb' with soldier course of red blockwork should be used to mark alighting zone.

## 9.6 Bus Stops



#### 9.7 Guardrailing

Location	Borough Wide
Principles for siting	450mm from edge of kerb
Considerations	Panels must be screw-fixed to posts, not welded, to facilitate replacement.
	All fixings to be countersunk and flush
Manufacturer	Broxap
Model	BX47 4250-SS Bespoke Pedestrian
	Guardian
Materials	Galvanised Steel
Materials Finish	oud. Gran

The main purpose of using guardrails is to protect pedestrians at vulnerable locations.

It is the intention of this guidelines to promote the reduction of as much guardrail along footways as possible, provided pedestrian safety is not compromised.

Where guardrails are considered superfluous, their removal should be subject to a safety audit to confirm that the procedure is safe.

Benefits from the removal of guardrails:

- » Avoid segregating pedestrians and cyclists;
- » Promote a shared risk approach;
- » Reduce clutter;
- » Dissuade traffic from speeding.

Guardrails should only be used where there is a perceived and demonstrable safety necessity that would benefit from their use.

Guardrails should generally not be used to impede designated cycle routes (refer to exceptions)

Guardrail panels should incorporate visibility panels, where circumstances demand, in the top section and "visirail" alignment systems for better visibility. Curved panels should be used to fit kerb radii and raked angled panels to accommodate slopes.

#### **Exceptions:**

- » Retain and repair historical railings. Care should be given to do this in an accurate and authentic manner, respecting their historical context and background.
- Staggered guardrail panels can be used to prevent motorcycle use of cycle lanes.

