

Consultation Draft Transport SPD

Environment

13 December 2019

LONDON BOROUGH OF RICHMOND UPON THAMES

TRANSPORT SUPPLEMENTARY PLANNING DOCUMENT

1. Preamble

1.1 The London Borough of Richmond upon Thames' Local Plan is currently being reviewed. This sets out the Borough's strategic policies and proposals for the use of land within its boundaries for the next 10 years. The policies in the Local Plan have the status afforded by section 54a of the Town and Country Planning Act, 1990 in deciding planning applications. Supplementary planning documents (SPD) can be taken into account as a material consideration, the weight accorded to it being increased if it has been prepared in consultation with the public and has been the subject of a Council resolution.

1.2 The Borough's Local Plan policies relating to transport have been formulated to take into account the new Local Implementation Plan approved in 2019 and the transport policies of the Mayor of London. This document supplements the policies of the Local Plan.

1.3 By promoting best practice in transport provision and highway design we aim to maintain or improve the borough's already high quality environment. This supplementary planning document is intended to complement the Local Plan and offer additional advice to assist in its implementation.

2. Introduction

2.1 Richmond upon Thames is one of London's most attractive Boroughs with many buildings being listed or located in conservation areas. High priority is placed on the street-scene and preservation of the Borough's unique character.

2.2 The London Borough of Richmond upon Thames (LBRuT) is committed to promoting sustainable travel, decreasing car use and improving air quality. The Council adopted a new Local Implementation Plan (LIP3) in 2019, detailing its vision for how the transport network will be transformed over the next 20 years. Ensuring that walking, cycling and public transport are the natural choice for trips to and from new developments is vital if these goals are to be achieved. The Local Implementation Plan can be found via the following link

https://richmond.gov.uk/local_implementation_plan_for_transport

2.3 The effective management of on and off-street parking will be critical in order to restrain unnecessary use of private motor vehicles and protect the streetscene from the harmful impacts of poorly designed parking. Strict design standards will be imposed where planning consent is required for the conversion of front gardens or ancillary land to car parking.

2.4 This Supplementary Planning Document (SPD) has been created to help applicants make successful planning applications. It provides additional guidance on Local Plan Policies related to roads and transport, detailing the expectations for planning applications and signposting to additional documents that may assist in the development of applications.

3. Transport Assessments and Transport Statements

3.1 Transport Assessments/ Statements should be submitted in accordance with Transport for London guidance and the Council's Local Plan and submitted alongside the planning application. For larger developments, it is expected that the scope of Transport Assessments would be agreed at pre-application stage, prior to submission.

3.2 Further guidance on the thresholds for producing Transport Assessments and their expected content can be found via the following link

<https://tfl.gov.uk/info-for/urban-planning-and-construction/transport-assessment-guide/transport-assessments>

4. Travel Plans

4.1 Travel plans should be developed in accordance with the Local Plan and Transport for London guidance and submitted alongside the planning application. Travel plans should include details of how sustainable travel, including reductions in the need to travel, will be achieved and private car use minimised. Travel plans should set targets for walking, cycling and public transport use, and include details of the physical and non-physical measures that will be introduced to achieve these targets, and monitoring arrangement, including potential remedies in the event of the targets not being met. A travel plan coordinator and/or group is expected to oversee the development and delivery of the travel plan. Development thresholds for when a travel plan is required are set out the London Plan and Local Plan.

4.2 Further guidance on the thresholds for producing Travel Plans and their expected content can be found via the following link

<https://tfl.gov.uk/info-for/urban-planning-and-construction/travel-plans>

5. Delivery and Servicing Plans

5.1 Delivery and Servicing Plans should be developed in accordance with the Local Plan and Transport for London guidance and submitted alongside the planning application. Guidance on the content of Delivery and Servicing Plans can be found via the following link.

<https://tfl.gov.uk/info-for/urban-planning-and-construction/transport-assessment-guide/freight>

6. Construction Logistics Plans

6.1 The building of development should be carefully managed to minimise nuisance on neighbours and minimise environmental impact. Construction Logistics Plans should therefore be developed in accordance with the Local Plan and Transport for London guidance and submitted alongside the planning application. Guidance on the content of Construction Logistics Plans can be found via the following link.

<https://tfl.gov.uk/info-for/urban-planning-and-construction/transport-assessment-guide/freight>

7. Sustainable development and active travel

7.1 Development should demonstrate its sustainable credentials in accordance with the transport policies set out within the Local Plan, the Council's Local Implementation Plan and the Council's emerging Active Travel Strategy.

7.2 Development is expected to provide high quality walking and cycling permeability, and connectivity with the surrounding highway and transport network. Developers will be expected to meet the costs of upgrading the surrounding highway network and connectivity to public transport to mitigate the impact of development and promote safe and sustainable travel to the location. Development will also require contributions to be made to meet the costs of providing or upgrading public transport necessary to make development acceptable. Developers should also demonstrate how areas of public realm will be managed and maintained. Development should help facilitate transport schemes and programmes being promoted by the Council or its partners, including those schemes and programmes within the Council's Local Implementation Plan and Mayor of London's Transport Strategy.

7.3 In July 2019, Richmond Council declared a climate emergency. As part of this declaration, the Council resolves to be recognised as the greenest London borough and to become carbon neutral by 2030. Changing how people travel will be a pivotal part of achieving this goal, with more people using clean, sustainable modes, and an Active Travel Strategy has been developed to detail the course the Council will take to realise this vision.

7.4 Earlier this year the Council adopted a new ambitious Local Implementation Plan, featuring the headline target for 75% of trips to be by sustainable modes (walking, cycling and public transport) by 2041, from a baseline of 61%. The plan also includes targets for expanding the cycle network, improving air quality, reducing road danger and increasing the use of public transport.

7.5 The draft Active Travel Strategy can be viewed [here](#), and has been developed to provide detail on how we will support these objectives, focusing on walking and cycling. Making the best use of our streets means prioritising the needs of sustainable travel users above others. Our focus is on supporting space efficient, non-polluting modes that support a healthy community. The hierarchy of street users is as follows:

1. Pedestrians and people with disabilities and/or limited mobility
2. People cycling
3. Buses
4. Zero and low emission delivery and servicing vehicles
5. Polluting delivery and servicing vehicles
6. Zero and low emission cars, motorcycles, mopeds and taxi and private hire
7. Polluting cars, motorcycles, mopeds and taxi and private hire

7.6 The Local Plan includes planning policies that seek to prioritise facilities for sustainable travel modes. Specific consideration is given to pedestrian access and high quality pedestrian routes to/from and within development sites. “Healthy Streets” checks should be undertaken to ascertain the quality of the local street network and identify potential improvements, while the Healthy Streets indicators should also be applied in the the creation of new areas public realm, resulting in environments where people from all walks of life

- feel safe
- feel relaxed
- can easily cross roads
- have places where there is shade and shelter
- have places to stop and relax
- have things to do and see
- choose to walk and cycle and use public transport
- have clean air to breathe
- are not exposed to too much noise

<https://tfl.gov.uk/corporate/about-tfl/how-we-work/planning-for-the-future/healthy-streets>

8. Cycling

Cycling facilities

8.1 Development is expected to provide for and facilitate more cycling. This will involve the provision of cycle-friendly streets, cycle lanes and tracks, and improvements to road junctions and crossings. Cycle facilities should be designed in accordance with the London Cycling Design Standards which can be found via the following link

<https://lcc.org.uk/pages/lcds>

Cycle parking

8.2 The London Borough of Richmond upon Thames has adopted London Plan standards for cycle parking. However, LBRuT has been identified as an area where more cycle parking than set out in parking standards is desirable, given the number of journeys that have been calculated as potentially being transferable to bike.

8.3 The London Cycling Design Standards provide guidance on appropriate designs for cycle parking, and this guidance should be reflected in proposals. Plans clearly showing the location, spacing and access for the proposed cycle parking should be included with the planning application. Cycle parking for inclusive cycles, cargo bikes and tricycles should be provided and clearly labelled on plans.

8.4 Planning applications for places of work should provide details on complementary facilities – lockers, changing areas and showers.

8.5 Where short-stay cycle parking cannot be accommodated in line with the standards within the footprint of the development site, a contribution will need to be made towards the Council's on-street cycle parking fund. The Council will then aim to provide cycle parking within the public highway in proximity to the site.

Richmond's cycle network

8.6 Plans for a strategic cycle network have been adopted as part of the Active Travel Strategy. Developments within 800m of this network will be expected to be required to contribute towards the development of the network in proportion to the expected trip generation of the site (total trips by all modes).

8.7 Developments more than 800m from the planned strategic cycle network will be required to contribute towards the development of the local cycle network in proportion to the expected trip generation of the site (total trips by all modes).

9. Car clubs

9.1 The Council encourages the use of car clubs as an alternative to private car ownership. There are more car club members within Richmond than in other outer London Boroughs. Zipcar and Enterprise car club operate in the Borough, although developers are not restricted to working only with these companies. The provision of car club parking and/or enrolling new occupants of development into a car club will help reduce the site parking requirement. The Council is in the process of developing a new car club strategy. Until a new car club strategy is approved, provision of car club vehicles should be discussed on a case-by-case basis.

10. Electric vehicle charging

10.1 Richmond is predicated to have a rapid take up of electric vehicles, requiring a commensurate supply of charging infrastructure. Development should make provision for 100% active electric vehicle parking. This does not mean that every parking space needs to be equipped with a charging point, as one fast or rapid charging point may cater for many vehicles. Developers should demonstrate that the development would be able to operate satisfactorily in the future expectation of all vehicles being electrically powered.

11. Car parking

11.1 LBRuT has adopted London Plan standards for car parking. However, an appropriate balance needs to be struck between minimising car use and ensuring development is able to operate efficiently, avoiding adding to street parking pressure. In areas of low Public Transport Accessibility (notably PTAL 1 and 2), car-free development will normally be considered inappropriate. Developers should contact the Council's transport planners at an early stage to discuss parking requirements (transportation@richmond.gov.uk). Developers may be required to undertake local street parking surveys to demonstrate the capacity of the highway to accommodate additional parking demand. Development, particularly larger development, is commonly excluded from eligibility for existing or future street parking permits.

12. Dropped kerbs and vehicle crossovers

12.1 A net increase in pavement crossovers is undesirable. Crossovers reduce pedestrian priority, detract from the even-ness of the footway, result in the loss of communal kerbside parking and make the provision of cycle lanes, bus lanes and bus stops more difficult. The presence of crossovers nearby should not be considered as a precedent because crossovers nearby, where lawful, would have been installed under a previous policy context and street parking supply becomes more limited as the numbers of crossovers increase.

12.2 Where a crossover is approved it should be constructed in accordance with best practice set out in the appendix.

12.3 Where the creation of an access requires planning permission, it should not be assumed that planning consent will be followed by highways consent. Planning applicants are strongly advised to contact the Council's highways team to ascertain if a crossover application is likely to be successful prior to incurring the cost of submitting a planning application. However, it should also not be assumed that highways approval would mean that a planning application would be successful.

12.4 Where a parking space is provided off the street, it should be designed in accordance with best practice. Parking in front gardens should be designed in accordance with the best practice set out in the appendix.

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Appendix – Front and Side Garden Parking

1. Taking account of the street-scene

1.1. The London Borough of Richmond upon Thames is primarily residential in character and enjoys a high standard of environment, which the Council seeks to maintain and improve. The increase in population and car ownership in general has resulted in more and more vehicles needing to find a parking space. Parking presents difficulties in many residential areas of the Borough, particularly where houses are not able to have garages and can be especially inconvenient where it is not possible for residents to park close to their homes, leading to increased demand for garden parking. The space between the road and the buildings fronting it is an important part of the environment, which can be seriously affected by the introduction of garden parking. This can be especially intrusive in front of or on the site of Listed Buildings, Buildings of Townscape Merit and in Conservation Areas.

1.2. As traditional gardens are replaced by hard surfaces and vehicles, the harmony and continuity of the street frontage is interrupted, and enjoyment of the buildings themselves can suffer as well as resulting in a reduction of wildlife habitats and permeable surfaces. The provision of crossovers and garden parking also reduces the supply of communal street parking, which itself perpetuates a proliferation of front garden parking as street parking becomes more difficult. Consequently, the Council will normally resist replacement of gardens with hard surfacing for car parking, where planning consent is required. However, in the limited cases where it would be acceptable (for example, where the removal of kerbside parking would enable the widening of a pavement, the provision of a cycle lane or relieve traffic congestion) it is very important that front, side or rear garden off street parking, should be designed to cause minimum intrusion and harm. With a little thought the visual impact of such parking and the adverse effect on wildlife can be reduced, whilst still blending in more satisfactorily with the neighbourhood, often without involving extra work or cost, as in figure 1. (Caravans, boats and other vehicles, which are larger than a private car, should not be parked in gardens).



Figure 1.

2. Planning Permission

2.1. In many cases alterations to front gardens fall within the terms of 'permitted development', in which case planning approval is not required and therefore the Council has little control over the creation of forecourt parking. However, developers are reminded that where a parking space requires a new vehicle crossover, highway engineers will assess applications for crossovers in accordance with this guidance. Planning permission from the Local Authority is required in the following cases:

1. If a vehicle access and hard-standing is proposed to be created from a Classified road **(a separate application to the Highway Authority for the construction of the access will be required after planning permission has been granted).**
2. If the property is not a single family house i.e flats, bed-sits or commercial uses, and car parking is proposed in the front, side or rear forecourt/garden area.
3. If the property is a listed building, the boundary wall and other structures within the curtilage may also be listed. Listed building consent will be required for any works or alterations affecting the character of the building.

4. If the property is within a conservation area, consent will be required for the substantial demolition of any structure exceeding 115m³ and front boundary walls, fences and railings over 1.0m in height. If the proposals affect any trees, especially those with a Tree Preservation Order, the advice of the Council's Arboricultural Section must be sought prior to the commencement of any works.

5. If a boundary wall, railings or fence over 1.0m in height is to be erected abutting a highway or 2.0m elsewhere.

2.2. In areas where the Council consider that off street parking is having a damaging effect on the visual quality of the environment, a special direction, called an Article 4 (2) Direction can be made in order to control the problem. This order would remove the permitted development rights with regard to the formation of a forecourt and the provision of a crossover.

3. Design Principles

3.1. The Richmond upon Thames Local Plan aims as part of its objectives to:

'Protect and, where possible, enhance the environment including the heritage assets, retain and improve the character and appearance of established residential areas, and ensure new development and public spaces are of high quality design'.

while the Borough's Public Space Design Guide states:

'putting quality first, in terms of design and materials, we are committed to preserving the special character of the different places that make up our borough'.

3.2. Fundamental to both policies is that the materials used enhance rather than detract from the street scene and together with appropriate planting and landscaping, add to the visual experience of residents and visitors as well as enhancing the built and natural environment.

4. Overall Aims

4.1. The general aim of any design for off street parking in gardens, where it is acceptable and approved, should be to maintain as much sense of enclosure as is practical and safe through the retention, where possible, of existing walls, fences, railings or hedging, the minimization of hard surfacing and the provision of gates and generous planting. If this can be achieved, the appearance and character of the street will be maintained and the negative visual impact of additional hard surfaces will be diminished.

Materials and landscaping in the garden

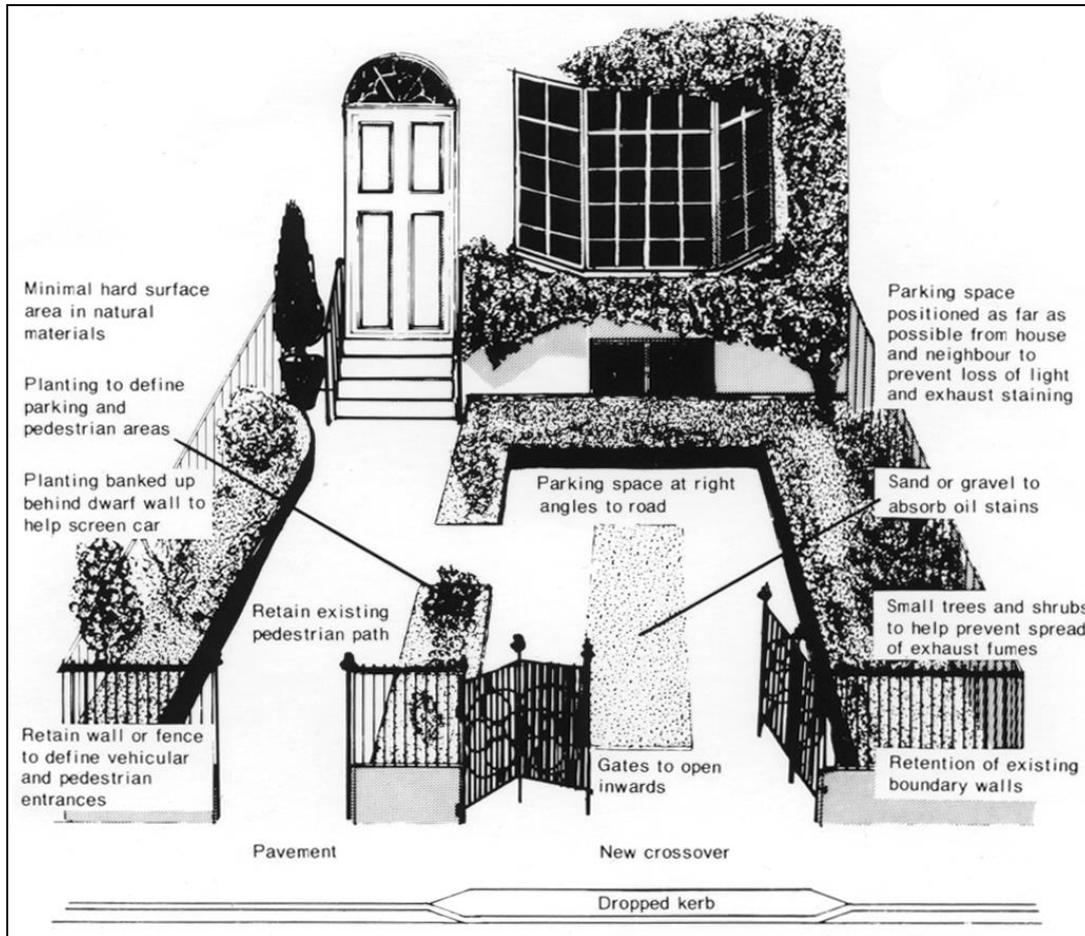


Figure 2.

4.2. Figure 2, shows a front garden parking configuration, which maintains existing planting/walls/railings and provides additional planting and gates in keeping with the locality.

The following guidelines will generally be applicable where off street parking is approved although each case will be looked at on its own merits and problems and solutions will vary from site to site:

4.3 Native planting, provided it is appropriate for the location, should be used wherever possible to encourage wildlife habitats and existing habitats should, as far as practicable, not be disturbed. Paving over of the whole front garden should be avoided if possible.

4.4. The sub-base and finished surface should be laid at a slight gradient and be of a permeable material, to allow the satisfactory drainage and absorption of rainwater. Water should not be allowed to drain from the property onto the footway therefore a length of drain or soakaway may be required at the site boundary to prevent this.

4.5. A bed of loose gravel sited in the centre of the parking space should be provided to help with the disbursement of oil.

4.6 A separate pedestrian footpath should be allowed for where there is space, as well as an area where refuse and re-cycling bins can be stored.

4.7. When choosing materials for use in the front garden, regard should be had to the colours and textures of the house and the character of its surroundings. In general traditional materials such as brick or stone are preferred as they weather well and mellow to complement existing buildings. This is particularly important where historic buildings and conservation areas are concerned. Small paving units are preferred as large slabs are easily broken. Suitable materials include:

1. Paving bricks
 2. York stone slabs or setts (imitation York stone should be avoided as it rarely looks good)
 3. Granite or other stone setts or cobbles
 4. Concrete paving blocks such as Tegula (strident colours should be avoided)
 5. Gravel needs to be contained to prevent spillage onto the footway and planted areas. Less graded aggregates such as Bredon gravel can be compacted by rolling.
 6. Open concrete blocks or other paving products that allow grass to grow through. Asphalt and concrete should be avoided where possible.
- (All the above materials should be laid on sand or granular material, which is permeable to aid drainage)

4.8. Where an opening has to be made in an existing wall, railing or fence, it should be kept to a minimum and made good at both ends to match existing materials and details, such as timber posts and piers. It will be expected that as a minimum two-thirds of the boundary wall/fence will be retained or re-provided to ensure a continued sense of enclosure. Where possible gates should be provided and visibility splays to the footway will be a requirement. These are discussed in Section 5, Vehicle Crossovers. In order to meet visibility splay requirements, it may be necessary to recess a gateway and/or splay a boundary wall or fence.

4.9. Footway crossovers if approved will be provided to the design standards set out in the Public Space Design Guide. This document has been adopted by the Borough and gives officers, developers and residents, guidance in streetscape design. It should be noted that existing crossovers do not set a precedent for new crossovers in a street and will not be accepted as argument for the provision of other crossovers which do not meet current adopted policy.

4.10. The amount of hard, impermeable surface used for parking and the width of the vehicle entrance should be kept to a minimum and should always attempt to avoid disturbance to existing trees or significant established plants or hedges.

5. Vehicle Crossovers

Highways Act, 1990 and London Local Authorities and Transport for London Act, 2003:

5.1. A crossover is the dropping of the footway kerb, to the same level as the adjacent carriageway for a short length to allow a vehicle to access the front garden of a property.

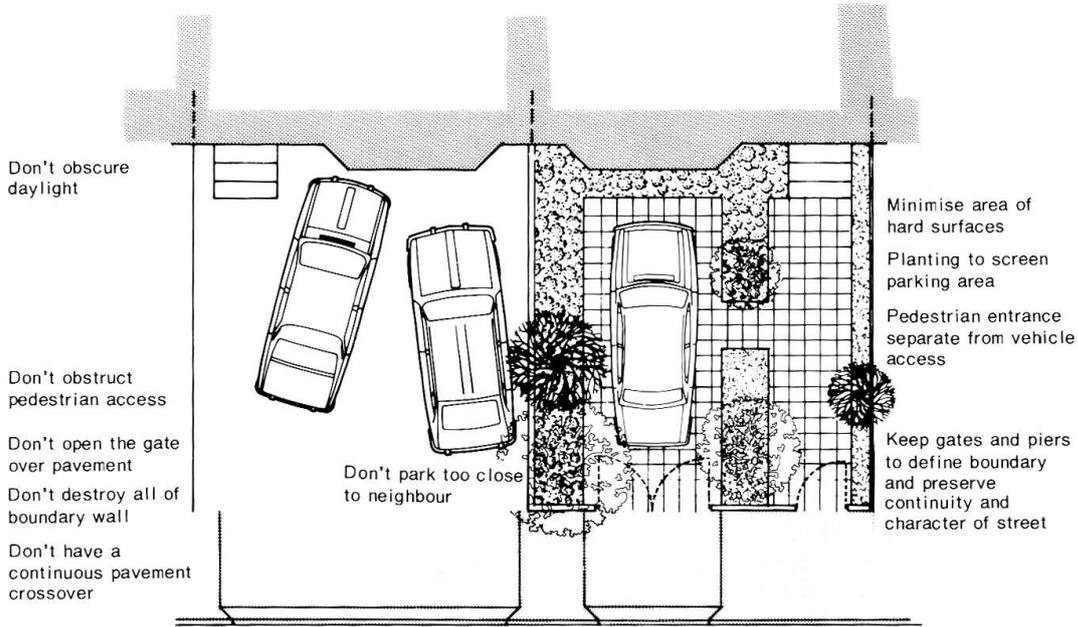
5.2. The owner of a property adjacent to a highway has a common right of access to that highway. However, under section 184 of the Highways Act 1980, if a house owner habitually takes a mechanically propelled vehicle over a footway without a properly constructed crossover, the Highway Authority can construct a vehicle crossover to the property at cost to the land owner, if such an access meets the Council's adopted crossover policy. The Council has adopted section 16 of the London Local Authorities and Transport for London Act, 2003, which allows Local Authorities to serve notice on a person taking a vehicle over a kerbed footway or verge adjacent to a road without a formal vehicle crossover, to stop doing so. If the infringement does not stop, the Authority can put in place measures to prevent a vehicle crossing the kerbed footway or verge. In serving notice the Local Authority has to have regard to the need to prevent damage to the footway or verge, safety of highway users and obstruction. The person who is served notice has the right of appeal to the Highway Authority and to the County Court. The Council will pursue this course of action where a formal vehicle crossing would not be approved because it would not meet the design requirements of this SPD, or would result in the loss of street parking or have other negative highway impacts.

5.3. In constructing a vehicle crossover, the Highway Authority will have regard to the safety and convenience of other highway users and the standards required for the provision of a crossover to a property. These standards are set out below and have been formulated using the government's Manual for Streets as a basis and also having regard to the street scene requirements outlined in section 1 above.

Single, front garden parking spaces

5.4. On non-classified roads, the garden must be able to accommodate a car parked at 90° to the footway and the car-standing area must be a minimum size of 2.5m wide and 5m long, with a further clearance of at least 1m to the front of the property (taking account of any bay windows) and 1m to public highway. The parking space should not be sited in front of the main door to the house, although it may be acceptable where a minimum of 1.0m can be provided between the parking area and the front door. This will maintain access to the building for all pedestrians, people with disabilities and in case of emergencies. The size of the parking space will allow most vehicles to be parked without overhanging the footway. If gates are to be used they must open inwards towards the parking space, to avoid obstruction to

the footway and therefore a longer garden length will be needed to accommodate this arrangement, see Figure 3. Alternatively a sliding or folding gate may be used.



“Do’s and don’ts”

Figure 3.

5.5. For classified roads within the Borough, a vehicle crossover will only be approved if it can be demonstrated that a vehicle can enter and leave the site in forward gear. This is because classified roads are heavily trafficked, support cycle and bus routes and therefore are also prone to heavy pedestrian traffic. Turning on site will avoid vehicles being reversed onto these busy roads, avoiding a road safety hazard. While each application will be looked at on its own merits, a garden turning area of 8.0 x 10.0m is the minimum size for single dwellings and it will be expected that as much landscaping as practically possible will be retained. The use of turntables within front gardens to enable a vehicle to turn on site **may** be acceptable and planning permission is required prior to construction, both for the turntable, the boundary access opening and vehicular crossover to a classified highway.

Visibility and Sightlines

5.6. Visibility splays must be provided at the back of footway so that drivers can see pedestrians, particularly small children approaching on the footway. As a minimum, pedestrian sightlines of 2.1m x 1.8m, will be required and these must be achieved within the boundary of the property so that residents can control the height of vegetation growing within these areas. Boundary treatment and landscaping within pedestrian and vehicle sightline envelopes, should not exceed 0.6m in height, although a 0.6m wall with railings above may be acceptable. This will ensure that

pedestrian and vehicular sightlines are unimpeded, so enabling safe entry and exit from a property.

Conditions for crossover provision

5.7. Crossovers will not be constructed within 15.0m of a road junction (measured from the edge of the kerb). Road safety is compromised by the proximity of a private vehicle access to a road junction, including opposite a junction, as it will generate conflicting traffic movements. A vehicle's turning movements into a private drive could be misinterpreted by other drivers, leading to an increase in accidents.

5.8. Yellow lines will normally be provided across crossovers within controlled parking zones. White lines to mark crossovers in areas that do not have parking controls will not be provided and where removed as part of highway maintenance will not be reinstated. White lines are un-enforceable and have now been superseded by powers under the 8th Local Authorities Act, which allows a 'penalty charge notice' to be issued to vehicles parked across or obstructing a vehicle crossover. White Lines are also detrimental to the visual impact of the crossover and can dilute the impact of essential lines.

5.9. Crossovers will not be constructed within the lines of a bus cage or within 10.0m of a bus stop where they would be likely to interfere with buses stopping to pick up/set down passengers. This also takes into account the likelihood of the bus stop being extended to meet the requirements of the Disability Discrimination Act.

5.10. Applications for crossovers within the zig-zag lines of road crossings and school keep clear markings will not be agreed to, as they cause hazards close to where a high number of vulnerable pedestrians may be expected to congregate.

5.11. Approval, where it is given, will be for a single crossover at a width of 2.4m with 0.5m ramps on either side. This will standardise the size of accesses, avoid large lengths of footway being made over to crossovers, minimise their visual impact on the street-scene, minimise loss of landscaping in the garden and retain as much kerbside space for general community parking as possible. Widening of existing crossovers will not be considered where the final width will exceed 2.4m flat section or where the crossover already exceeds this.

5.12. Only one vehicle access will be allowed per individual property (for the purposes of this document a house in multiple occupancy or block of flats will be considered as one property). Multiple crossovers risk causing hazards to pedestrian road users, particularly vulnerable groups such as the elderly, disabled and children. They are also detrimental to the street-scene where they result in all or most of the garden being made into hard-standing and landscaping being lost. An existing vehicle access to a property from a private access road, whether to an off street space or garage, will be considered as existing off street parking provision.

5.13. In many areas of the Borough on-street parking is in short supply because of narrow roads and/or existing accesses. In such streets provision of a crossover

where it results in a net overall loss of parking space will not be permitted. Elsewhere a crossover which would result in a net loss of on-street parking space will only be permitted where a greater supply of off-street parking is created at the same time or remaining street parking capacity is demonstrably adequate.

5.14. Where a new development is built as a row of houses on a plot of land adjacent to a publicly maintained footway and vehicle accesses are part of the scheme, where these are acceptable and they meet current policy, these will be paired to a maximum width of 4.8m flat section. Between each pair a 5.5m gap/footway width must be provided, which will allow a safe area for:

- pedestrians to stand whilst waiting for manoeuvring vehicles
- locating street furniture and utility boxes
- maintaining a useable on street parking space.

5.15. A garage must be set back at least 5.5m from the boundary of the footway with the site, so that a vehicle can pull off the road. This will prevent obstruction of the road or footway while the garage doors are opening. The sightline requirements for garages and the provision of gates remain as previously set out. Dimensions for new or re-built garages are 3.0 x 6.0m. The measurements are clear internal dimensions and will allow most vehicles to park and the doors to open sufficiently for passengers to alight. An aisle width of at least 6.8m, preferably 7.3m must be provided between rows of garages.

5.16. Underground parking spaces accessed directly from a footway require a minimum level standing area (maximum gradient 1:20) of 5.5 x 5.0m adjacent to the footway. This will allow two vehicles to pass each other, avoiding obstruction of the road and footway and achieve sightlines for emerging vehicles. The maximum crossover flat section that will be agreed in these cases will be 3.5m with 0.5m ramps. In all cases vehicles must be able to enter and leave the underground car park in forward gear. Maximum gradient of the main ramp must not exceed 1:8.

5.17. Footway crossovers grouped together for more than 2 vehicles in a row, will not be permitted on publicly maintained highways. Sightlines from these spaces are diminished and they present a large area of crossover for pedestrians to negotiate, as well as removing on street community parking.

5.18. On estates that have been built with open plan front gardens that have no formal boundaries between them and the gardens form an integral part of the landscaping of the estate, crossovers will be resisted so as to ensure the continuity of appearance of the estate.

5.19 Crossovers will be required to be located at least 2.5 metres from lamp columns, telegraph poles and other street furniture and road features such as speed cushions. This will ensure that the street furniture does not interfere with vehicle access and sightlines and the road features do not cause damage to vehicles when accessing a property.

Construction Materials for Crossovers

5.20. To lessen the visual impact on the street-scene the choice of materials used for constructing crossovers will be matched, as closely as possible, to the existing material on the main part of the footway. This will result in crossovers being constructed using paving slabs or asphalt over the full width of the crossover, avoiding the use of concrete. This also has the advantage of allowing utility companies to make non- intrusive permanent repairs after any excavation in the footway.

5.21. Some roads have been identified where the street scene would be enhanced by using different or bespoke materials. These are generally where traditional granite set or blue brick 'stable block' crossings should be reintroduced, such as areas where there is a pattern of historic crossovers in designated conservation areas.

Location of street trees

5.22. Existing street trees are an asset and the provision of trees can significantly enhance the street-scene. With such a large number of street trees within the Borough, a number of crossover applications are refused on the grounds that to construct the crossover would be detrimental to the environment, particularly where a tree will require felling or be damaged in the view of the Arboricultural officer.

5.23. Where there are street trees, applicants when providing information and a plan of the crossover location, should ensure that the position of the crossover (including 0.5m taper), will not be within 4 times the circumference of the tree, once fully grown. Approvals for new crossovers within this zone would only be given if the tree in question is deemed to be dead, dying or dangerous by the Arboricultural Officer and can be removed. Where a tree is removed the applicant will need to fund the planting of an additional tree, the location of which is to be determined by the Director of Environment in consultation with the Arboricultural officer. This will help to preserve the overall appearance of the street- scene and ensure healthy mature trees are not removed from the street environment.

5.24. Trees can often suffer if the roots are cut which may lead to damage and loss of the structural integrity of the tree, as well as adversely affecting the environment if it is removed. If roots greater than 25 mm in diameter are encountered when constructing the crossover then the Council's Arboricultural Officer may order the work to stop and the footpath replaced. The crossover would then be abandoned and any payments to the Council by the applicant in respect of the actual construction costs (not processing fee) will be refunded. Cutting of roots greater than 25mm can lead to premature death. If roots are left in situ then there is the likelihood that the root will continue to grow and cause damage to the crossover leading to a hazard for pedestrians.

Verges

5.25. Approval for a vehicle crossover will not be given where its construction requires a part of a grass verge (the verge being 1.0m in width or more), to be removed. The removal of part of the verge will have an adverse effect on the street-scene and visual amenity of the road.
