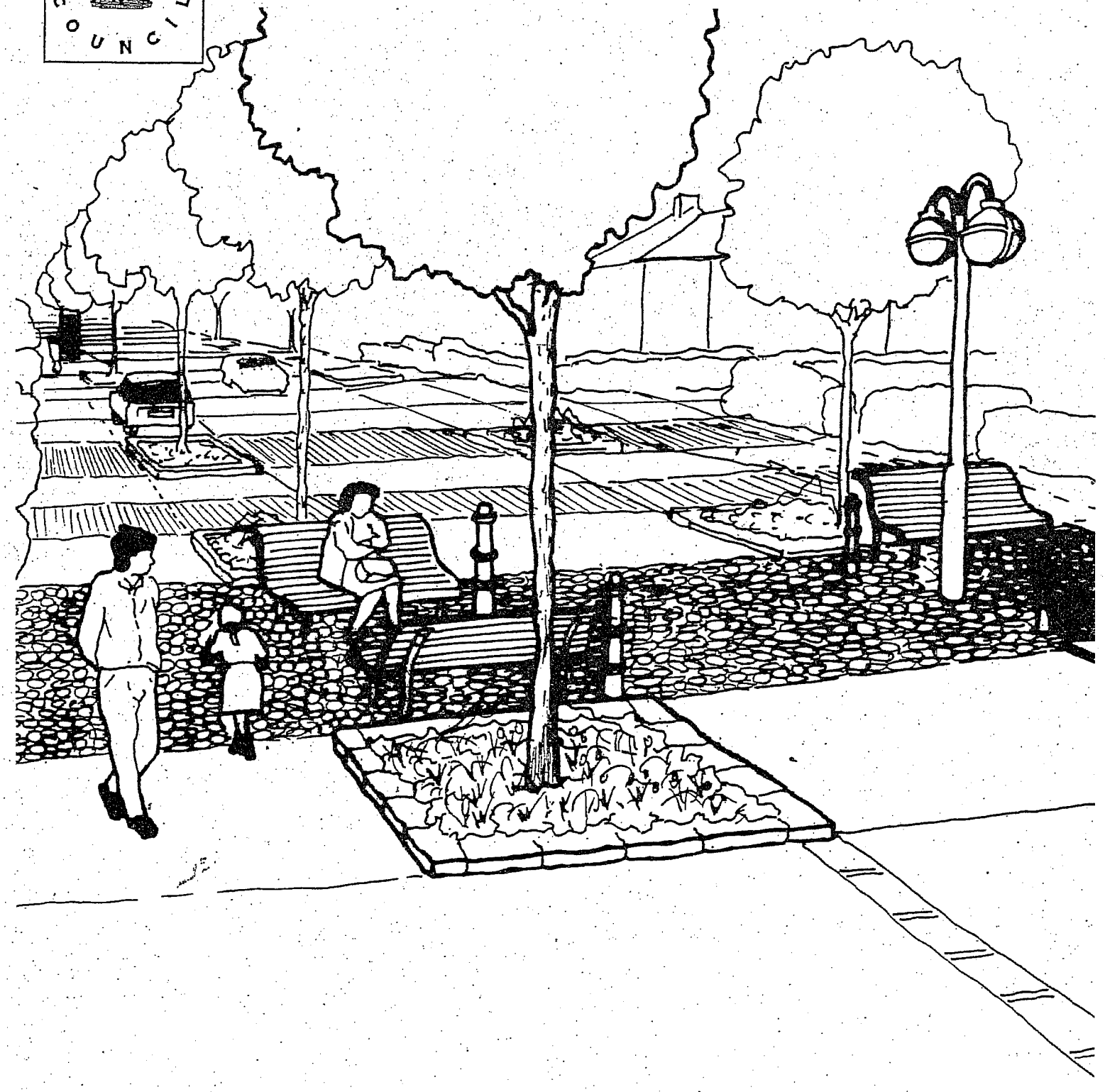
SPG 13

LAYOUT STANDARDS FOR ACCESS ROADS

BRENT COUNCIL

SUPPLEMENTARY PLANNING GUIDANCE NUMBER 13



You will need Planning Permission for developments involving new roads. This leaflet will help you to understand the factors Brent Planning Service will take into account when deciding whether to accept or reject your Planning Application.

The detailed information provided here supplements the policies of Brent's Unitary Development Plan (UDP). The UDP is a comprehensive set of planning policies for Brent which form the basis for regulating development across the borough. If you don't conform with the guidelines in this leaflet, you may find you are refused Planning Permission.

These guidelines do not necessarily apply if the site your Planning Application refers to falls within a Conservation Area or involves a Listed Building. Contact your local Area Planning Team for details.

Please remember, apart from Planning Permission, you may need Building Regulations consent for your scheme (telephone 0181 937 5499 for further information).

This leaflet is one of a series of 18 Supplementary Planning Guidance (SPG) leaflets. A full list of the leaflets is given on the back page for your reference. If you need further information, calll your local Area Planning Team. Their number, together with a list of other useful contacts, is given on page 12.

You may also find SPG3 useful - 'Forming an access onto a road'. This includes advice on visibility splays.

Contents

What the UDP says...

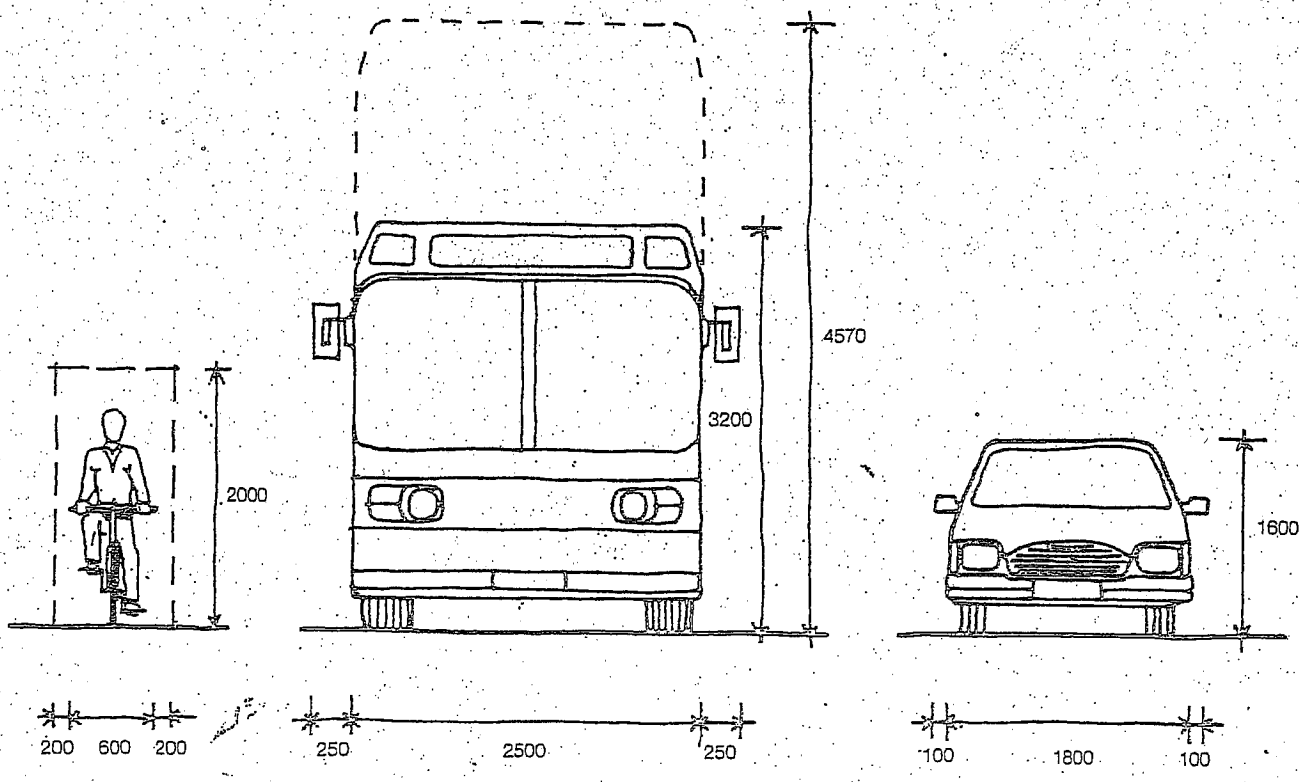
It's well worth taking into account the policies of the Council's UDP before you submit a Planning Application. If you don't comply with its policies, you will need to set out convincing reasons why your proposals should be approved. If you need a full explanation of the policies and standards given here, please refer to the UDP itself. You can see the UDP at the Brent House One Stop Shop (see page 12) or at your local library.

The following UDP policies may be relevant to your application.

T10: The Council will require all new developments to conform with the Council's standards with regards to access widths, junction spacing and radii, visibility, and pedestrian facilities...

T11: All highways should be designed to a satisfactory standard in accordance with the Council's specifications as contained in the Council's Supplementary Planning Guidance, in terms of function, appearance and safety.

H10: New residential development should provide safe and convenient pedestrian and traffic access and parking, in accordance with the Council's standards. The layout of new developments should normally facilitate ease of mobility for the elderly, young children and disabled people.



Detailed planning guidance

A. Layout standards for access roads

A1. Non-residential development

Carriageway widths for industrial districts

- If full sized heavy goods vehicles have to turn on or off the carriageway to reach the main entrance of the premises or industrial estate, the width of the carriageway should be 9.0 metres.
- If access to the premises or industrial estate from the carriageway is indirect, or if the carriageway serves only small industrial or commercial units, the width should be 7.3 metres.
- If the access to the premises or industrial estate is one way, the width of the carriageway should be 6.0 metres.

Carriageway widths for commercial districts

- If the carriageway forms the main access to the commercial district, its width should be 7.3 metres.
- If the carriageway provides a rear service road to shops (loading on one side only), the width of the carriageway should be 6.0 metres.
- If the carriageway provides a rear service road to shops (loading on both sides), the width of the carriageway should be 9.0 metres.

Footway widths

- In industrial districts where the carriageway forms the main access, footways should be two metres wide.
- In business zones where the carriageway forms the main access, footways should be three metres wide.
- If the carriageway forms a frontage to a row of shops in a town centre, the footway should be 3.5 metres wide.
- If the carriageway adjoins rear service roads, the footway should be one metre wide.

Junction radii (see Fig. 2)

- If the carriageway forms a junction with local roads, the radii should be 10 metres.
- If the carriageway forms a junction with main roads, the radii should be 12 metres.

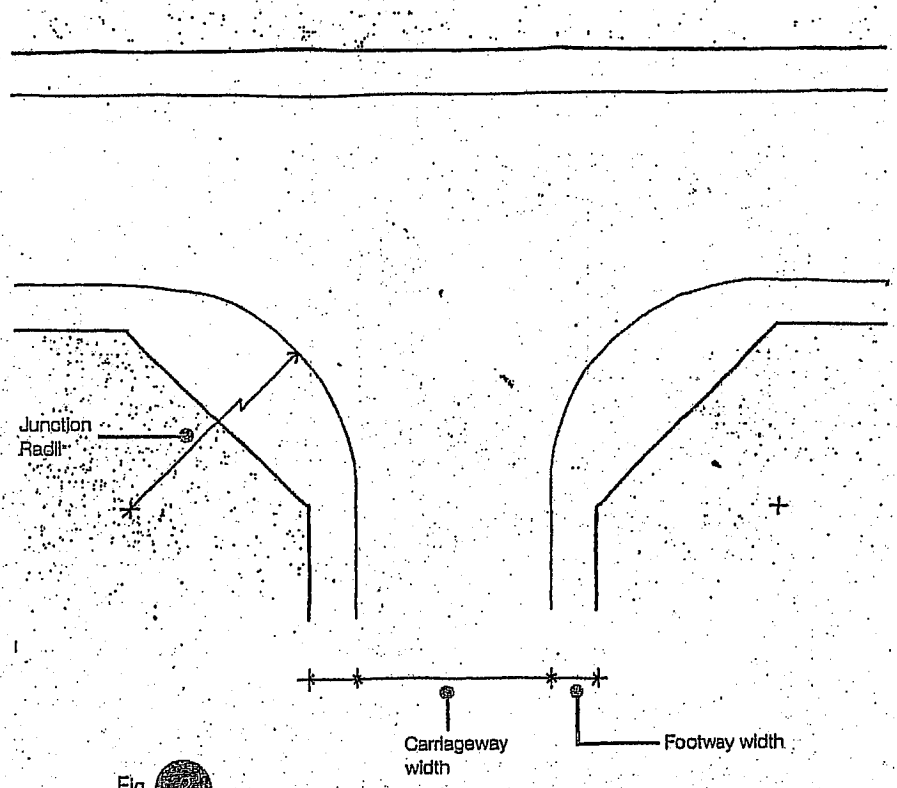


Fig. 2

B. Residential development

The guidelines in this section are based on the HMSO 1992 publication, 'DB32 Residential roads and footpaths: layout considerations'. These allow sufficient space to be devoted to landscaping by ensuring that roads and footpaths don't occupy space unecessarily. (See Appendix A page 14 for details of how these guidelines apply to road adoption).

B1. Overall layout

- Traffic flow along any given part of the road layout should be minimised and evenly distributed. Most stretches of road should serve dwellings directly (see fig. 3). Access to new developments should normally be provided via residential roads which serve up to 300 dwellings.
- Road layouts should be designed so the front of each property faces a stretch of road. This improves both visual appearance and security.
- Road networks should be made up of linked roads, rather than cul-de-sacs. Cul-de-sacs should be limited to those parts of a site which cannot be served in any other way.
- If there are more than 50 dwellings in the development, an alternative means of traffic access should be provided wherever possible. This assists the emergency services and reduces the impact of vehicular breakdowns etc. When calculating the number of dwellings you should include any existing cul-de-sac which provides access to the development.
- The number of dwellings that can be served off an access road is shown in Figure 4

B2. Access for buses

- If some households are more than 400 metres from a bus stop, special bus provision - including space for buses to wait and turn if necessary - should be considered.
- If a development is alongside a bus route, a bus lay-by or other stopping facilities should be considered.
- All developments should cater for ambulance mobility buses.

Fig. 3

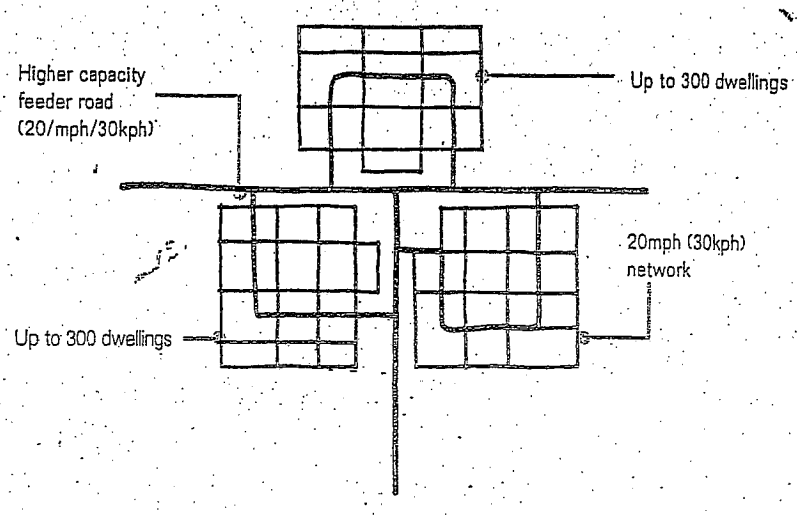
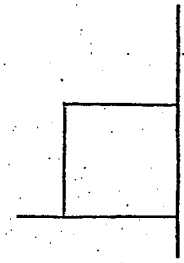
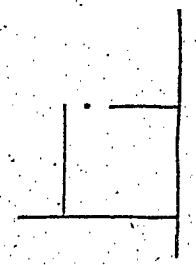


Fig. 4 THE MAXIMUM NUMBER OF DWELLINGS THAT CAN BE SERVED OFF A SINGLE ACCESS POINT.

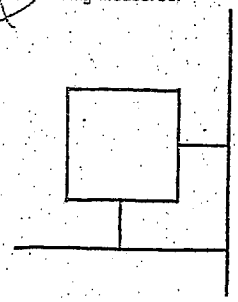
(a) A road serving up to around 50 dwellings may be either a loop or through road, a cul-de-sac with a footpath link that could be made available for use by vehicles in an emergency or a cul-de-sac without such a footpath link.



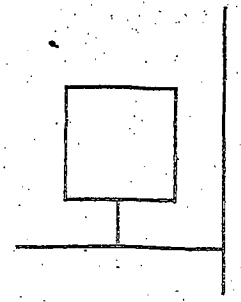
(b) A road serving more than around 50 dwellings and up to 100 dwellings should preferably be a loop or through road, or at least have a footpath link for use by emergency vehicles.



(c) For a road serving more than 100 dwellings and up to around 300 dwellings two points of access with a convenient connection between them, and traffic-traffic calming measures.



or where only one point of access is available the road layout should form a circuit and there should be the shortest practicable connection between this circuit and the point where a choice of routes is available.

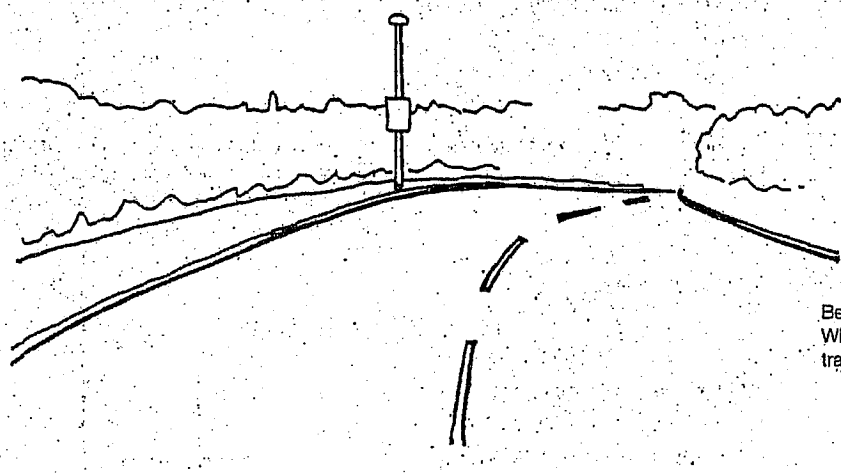


Special measures to maintain access may need to be considered when alternative access cannot be provided in the manner described above and a road serves more than 300 dwellings.

B3. Traffic calming

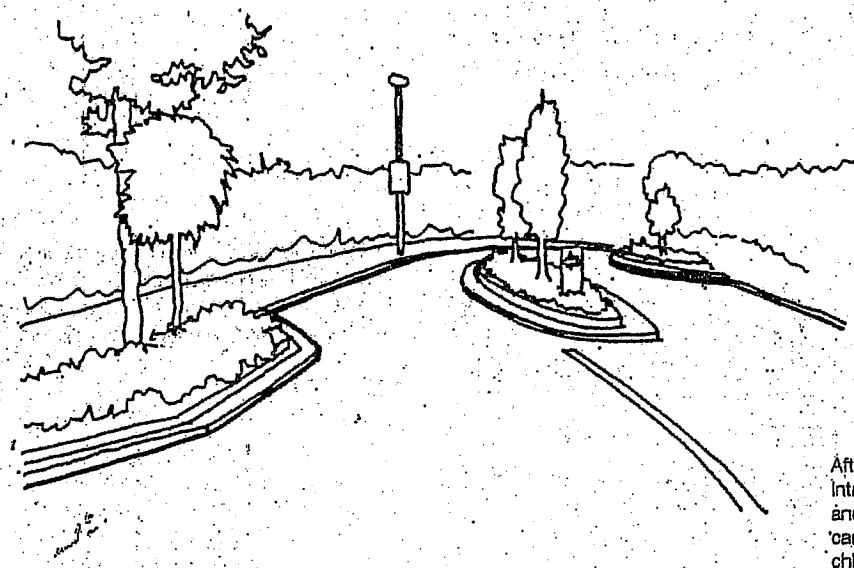
Traffic calming measures should be seen as an integral part of new residential developments and they must be considered at the same time as road layout. Vehicle speed can be contained by 'changes in horizontal alignment' and 'changes in vertical alignment'.

Fig. 15 HORIZONTAL ALIGNMENT BEFORE



Before
Wide open carriageway traffic speed high

Fig. 16 HORIZONTAL ALIGNMENT AFTER (CONCEPTUAL ONLY)



After
Introduction of central island and kerb extensions reduces carriageway width, produces chicane and lowers traffic speed. Planting improves environment.

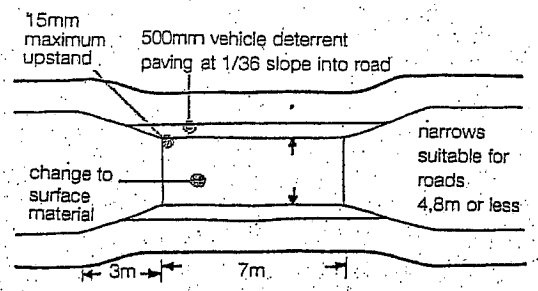
Horizontal alignment

Horizontal alignment entails measures to keep unrestricted lengths of road to a minimum by introducing devices like short cul-de-sacs, carriageway offsets, junctions, small radius 90 degree bends, carriageway offsets, chicanes and islands (also see fig 6 on page 6).

Fig. 7 CHANGES IN HORIZONTAL ALIGNMENT

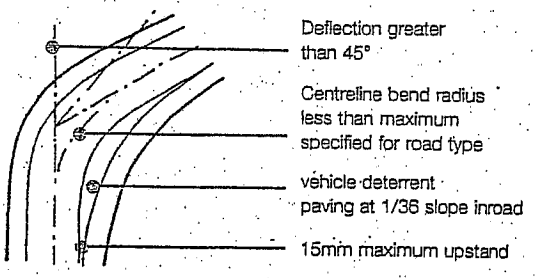
NARROWS

The narrowing of the carriageway to 2.7 metres for a length not exceeding 7 metres will make drivers wait for oncoming traffic to pass. A 500mm mountable shoulder either side will allow service vehicles to negotiate this obstruction. This measure is not appropriate for shared surfaces.



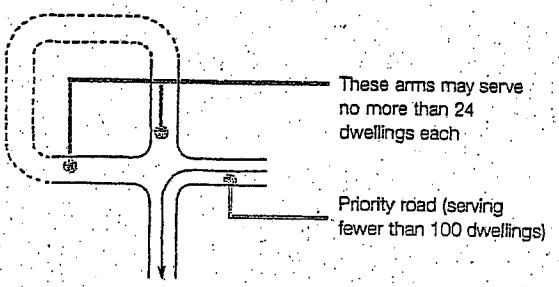
BENDS

For deflections greater than 45 degrees, a mountable shoulder may be used to enable larger vehicles to overrun.



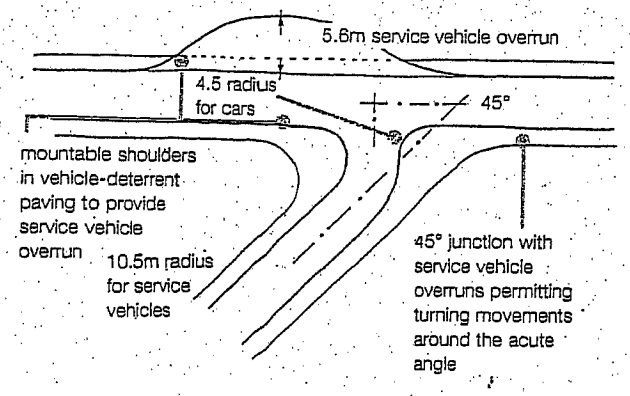
CROSS-ROADS

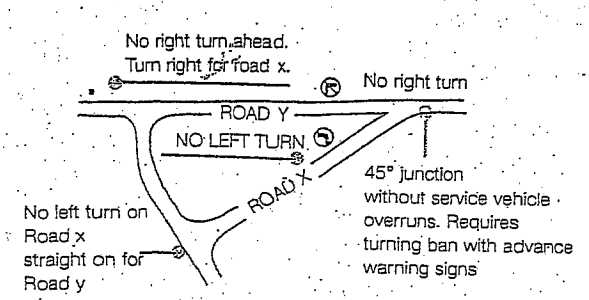
These should be used where two adjacent arms each directly serve fewer than 25 dwellings and the priority (major) road serves no more than 100 dwellings.



NON-RIGHT ANGLE JUNCTIONS

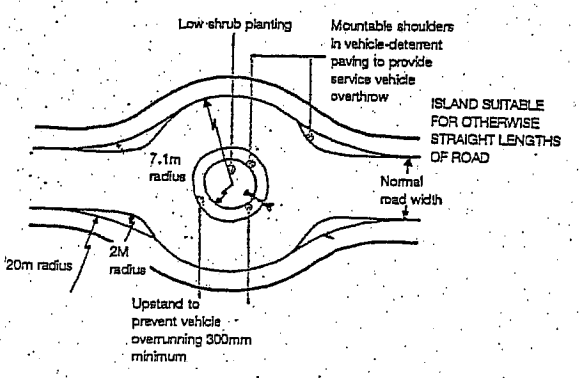
Within the 20mph (30kph) residential network these are allowed down to a limit of 45 degress, and will accomodate all car turning movements within the carriageway. Below 80 degrees overrun spaces for service vehicles become necessary and instead it may be preferable to ban service vehicle turning movements around the acute angle, provided an alternative route is available and signed in advance.

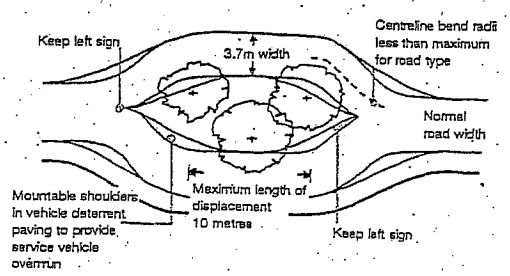




ISLANDS

The island should result in a lateral displacement of the running lane by at least 2 metres. Mountable shoulders may be used to enable passage of service vehicles, but the centre of the island should not be overrunable by any type of vehicle. The measure is not appropriate for shared surfaces.





Vertical alignment

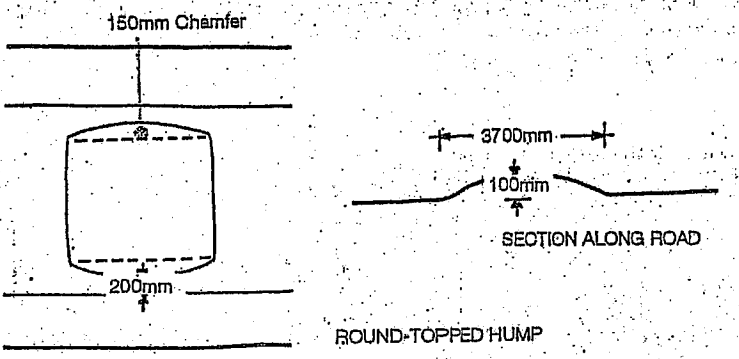
Vertical alignment entails measures like road humps, raised junctions and speed tables. The noise made by vehicles passing over them should be considered and designs which provide special provision for emergency access are preferable.

Combined measures are often the most effective way of implementing traffic calming, particularly when they are combined with visual features which emphasise that drivers are in residential surroundings - changes in paving and planting for example and signs which highlight the location of speed restraints.

Fig. CHANGES IN VERTICAL ALIGNMENT

HUMPS

Round-topped humps should be 100mm high and no longer than 3700mm. They are not appropriate for shared surfaces.



SPEED TABLES

A plateau may be created approached by ramps rising 100mm over a minimum length of 600mm. Unless there is a junction, such a plateau should be no longer than 7 metres. If it is at the same level as the footway, tactile surfaces should demarcate carriageway and footway for the benefit of the visually impaired. This may be a good way of slowing up traffic for a footpath crossing.

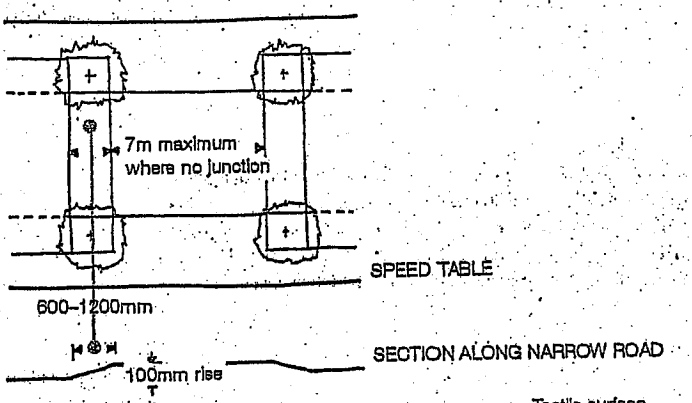
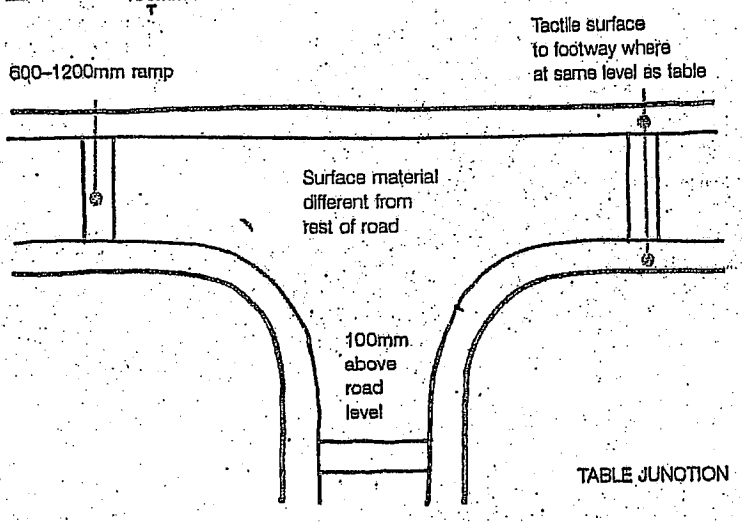


TABLE JUNCTION

A traffic junction may be treated as a plateau approached by ramps as described under 'Speed Tables' above. Again, tactile surfaces should demarcate carriageway and footway.



B4. Provision for pedestrians and cyclists

- Footpath and cycle links should be provided if they are significantly shorter than those through residential roads and if they help users reach their destination without using heavily congested routes. The links should be located between the road layout and between the layout and the surrounding area.

- The links should be kept as short as possible and you should be able to see from one end to the other. Wherever links are provided they should be busy, well-lit and overlooked by houses.

B5. Carriageway speeds

- For residential developments of up to 300 dwellings, design speeds (ie. the maximum speed the road is normally designed to accommodate) should generally be 20mph or less in order to create a safe environment for pedestrians. If however a road layout is likely to cause queuing on important links to the main road network, design speeds of 30mph may be considered. In these cases more than one link to the main road network may be required. Such roads should be avoided because of their impact on pedestrians and on the environment..

In cases where a design speed of 30mph is necessary, guidance is given in the HMSO's 'Roads and Traffic in Urban Areas' (1987).

B6. Carriageway widths

Roads with direct access to dwellings

- Roads serving up to 25 dwellings - 4.8 metres wide

- Roads serving 26 to 300 dwellings - 5.5 metres wide

Roads with no direct access to dwellings

- Roads serving up to 25 dwellings - 4.1 metres wide

- Roads serving 26 to 50 dwellings - 4.8 metres wide

- Roads serving 51 to 300 dwellings - 5.5 metres wide

Parallel parking spaces which adjoin the carriageway may fall within the minimum width, providing the remaining carriageway has a width of at least three metres (see below).

B7. Carriageway narrowings

If roads narrow for traffic calming and other reasons, the width may be less than 4.1 metres, but special provision will need to be made for cyclists. As a general rule, roads can normally be narrowed to three metres for a maximum stretch of 15 metres to limit traffic speeds or help solve a problem (a tree that needs preserving for example). *Fig.* 7 shows a design which allows narrowing to 2.7m for a maximum length of 7m. If a pinch point is created to slow traffic down or provide a pedestrian crossing, a width of three metres is normally adequate. In all cases of carriageway narrowings, clearance is needed so vehicle occupants have room to get out of the car if necessary.

If carriageways allow for only single-file traffic in places and large numbers of dwellings are served, it will usually be necessary to provide alternative access - either permanent access or access for use in an emergency.

If on street parking or a carriageway narrowing means a road with two way traffic is only wide enough to allow traffic to pass in one direction at a time, the two vehicles should be able to see each other before they reach a passing bay.

B8. Emergency and refuse access

- Providing the road is free of parked vehicles, the minimum road width needed for emergency access is three metres. Fire appliances need to gain access to a point that is within 45 metres of a suitable entrance to any given dwelling.

- Access points for refuse vehicles should not normally be further away than about 25m from wheelbin collection points in houses and 9m from Eurobin enclosures in flats.

B9. Shared surface roads

Shared surface roads are where there is a uniform surface which doesn't give the impression of a division between carriageway and footway. They usually serve up to 25 dwellings in a cul-de-sac, and up to 50 dwellings where junctions at either end are with roads which have footways. Shared surface roads should provide the following:

a. tight kerb radii and/or a ramp at the entrance. Traffic speeds should be kept to well below 20mph by using traffic calming measures;

b. sufficient width for vehicles to manoeuvre and pedestrians and vehicles to pass comfortably;

c. clearly marked spaces for vehicles that need to be parked outside house boundaries;

d. space between the shared surface and any adjacent garages or entrances to dwellings which allows emerging pedestrians and vehicles to see and be seen by approaching traffic;

e. the ability for vehicles and pedestrians to see each other at all times, particularly where the shared surface begins and ends. Sufficient street lighting should be provided outside daylight hours.

Shared driveways (unadopted paved areas which serve house driveways) should be used by no more than five houses and should be a minimum of 4.8m wide.

Where a shared surface roads meets a road with a 30mph speed limit, an intervening road with a width of 5.5 metres for a distance of 20 metres from the junction should be provided. The intervening road should have a footway and it should not normally include junctions with other roads or accesses to driveways.

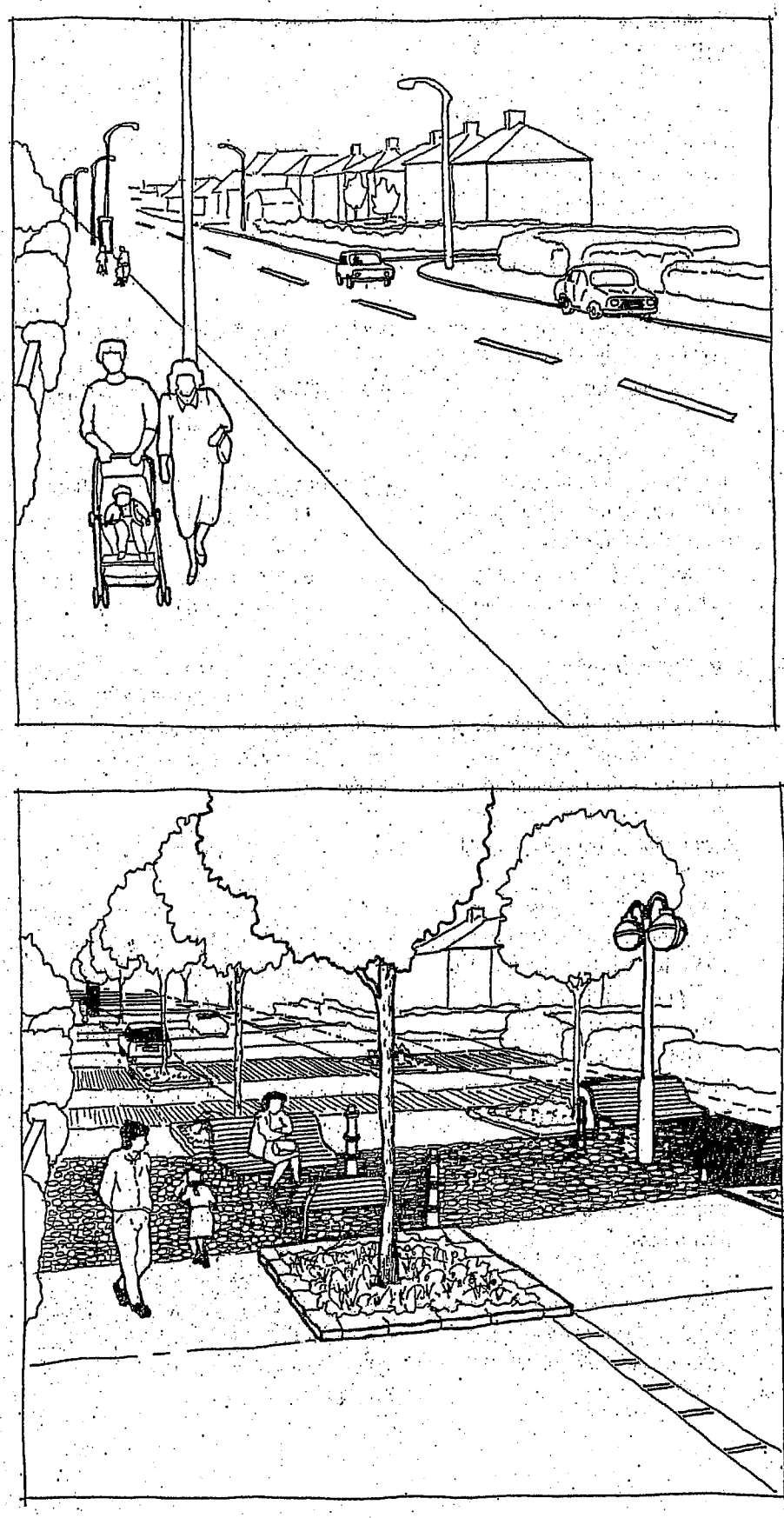


Fig. 9 BEFORE AND AFTER (CONCEPTUAL ONLY)

B10. Turning spaces (see fig. 10)

If vehicles would otherwise have to reverse over long distances, or turn in locations where they could cause damage to verges or footways, turning spaces will normally be required.

Turning spaces should normally allow refuse vehicles to turn where they would otherwise have had to reverse for more than 40 metres, and for other large vehicles like furniture removal vans to turn when they would otherwise have had to reverse for more than 60 metres. If it's assumed that these large vehicles should reverse into the road, the road should not serve more than 100 dwellings and a six metre kerb radii should be provided at the junction.

Parking spaces should be provided outside the turning space - especially at the head of a cul-de-sac.

B11. Footway widths

If roads serve more than 50 dwellings, pavements should be at least two metres wide to allow wheelchairs and pushchairs to pass.

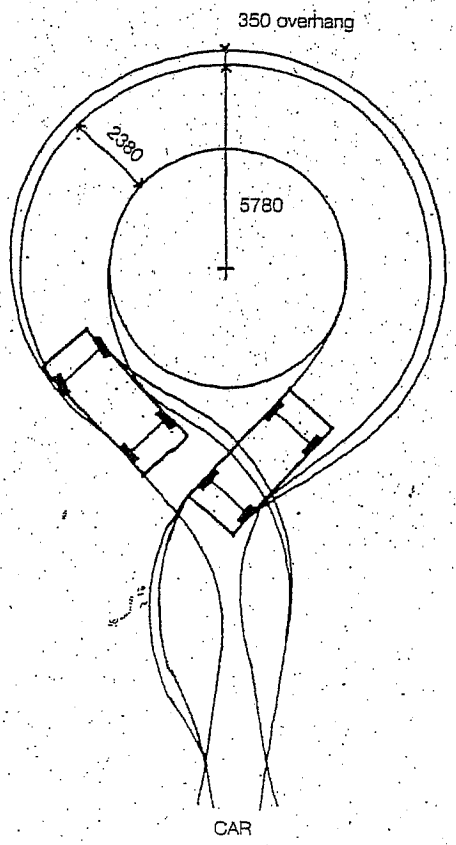
Pavements widths of a minimum 1.35 metres are only acceptable for roads which serve less than 50 dwellings and where there are no pavement obstructions.

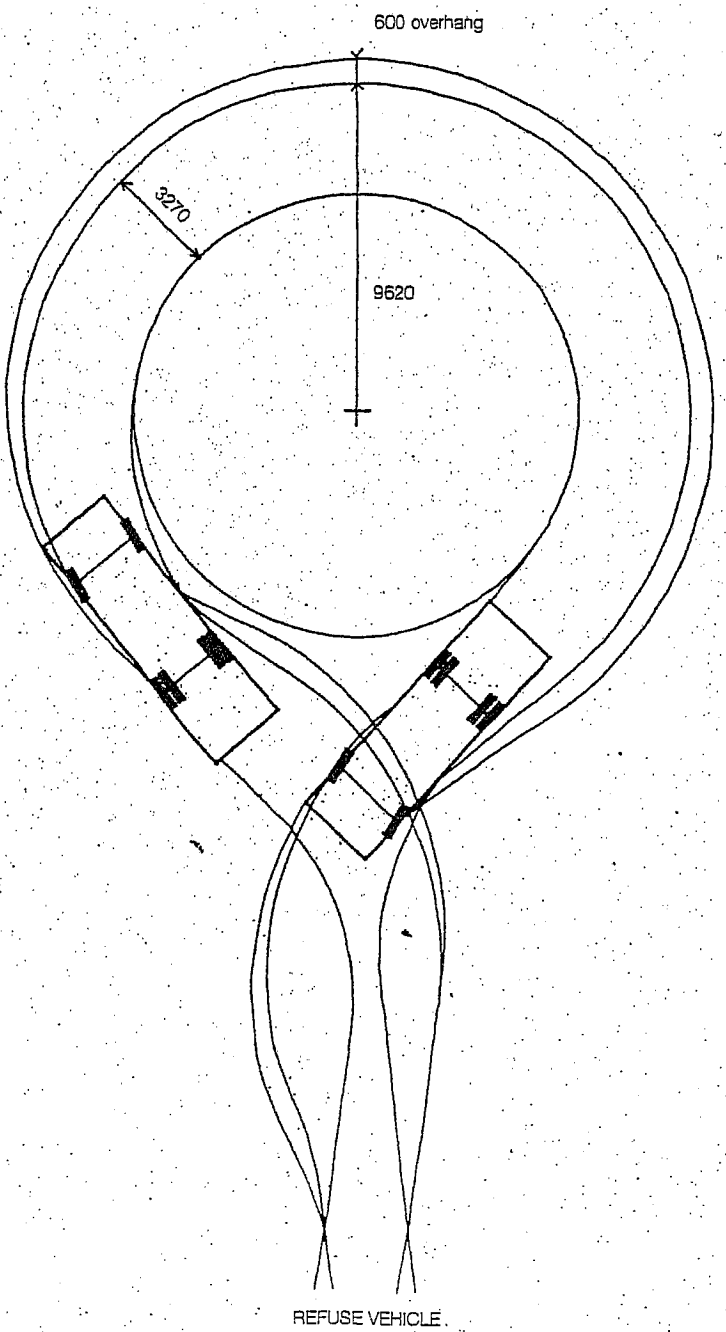
The width should be increased to three metres outside schools and community buildings, and when the pavement is designed for occasional use by maintenance vehicles.

An extra 800mm should be added to the footway width to allow for vehicle overhang where parking is at right angles to the footway.

An extra 500mm should be added at busy junctions so pedestrian barriers can be installed.

Fig. 10





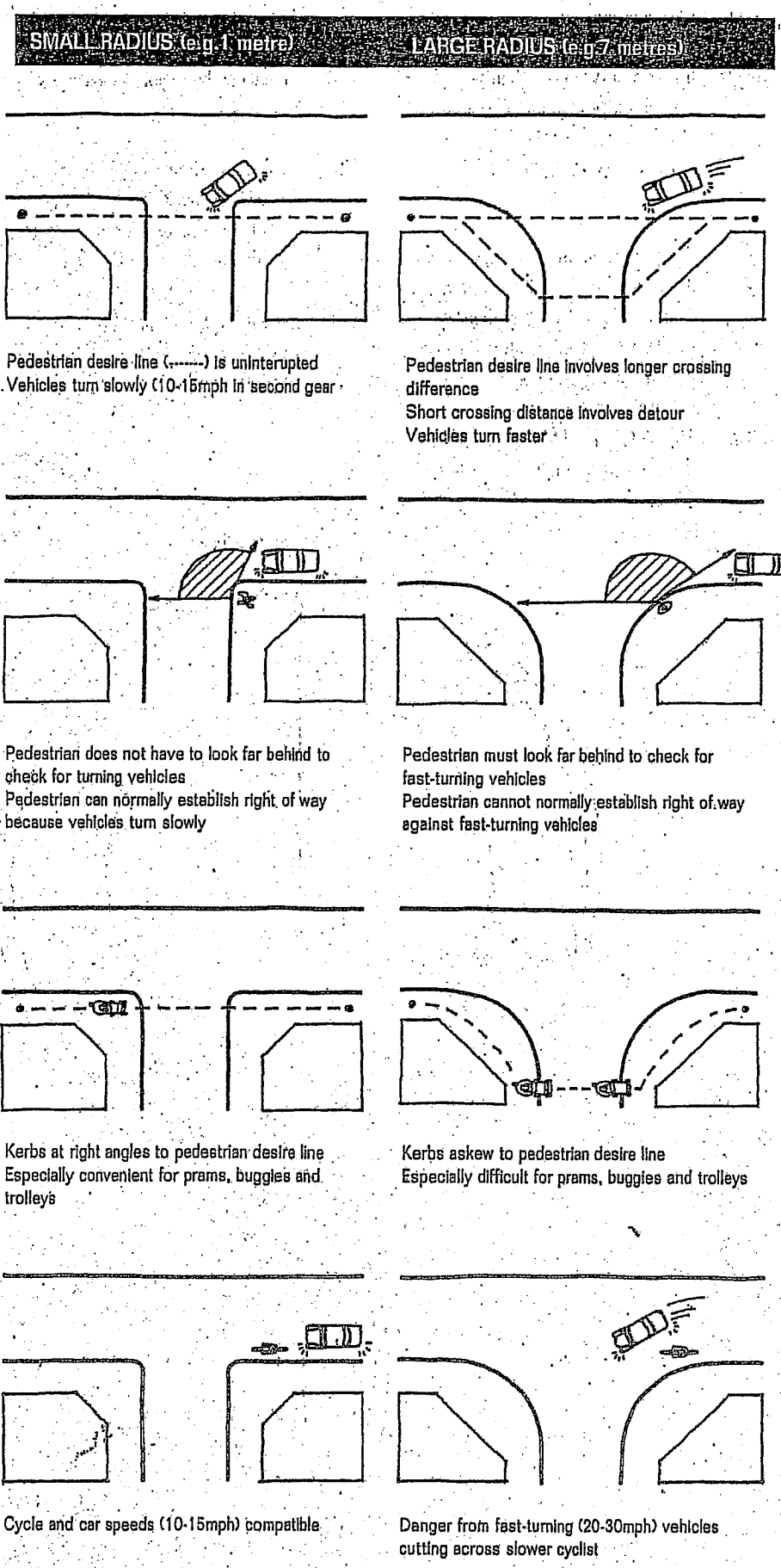


Fig. EFFECTS OF CORNER RADII ON PEDESTRIANS AND CYCLISTS

B12. Junction radii

Junction Radii should be the minimum practical to ensure that the development can be conveniently serviced by refuse and fire vehicles. Normally kerb radii will be 1-2m, however:

- Kerb radii should be 8m at junctions with local distributor roads (See UDP appendix T2) and 6m at junctions between residential roads where either serves more than 50 dwellings.
- 4m kerb radii at junctions between residential roads where both are 5.5m wide and the non-priority road serves 25-50 dwellings.
- No driveways should enter the area where a junction opens onto the adjoining road (a bellmouth).
- Dropped kerbs should be provided at junctions for wheelchair and pushchair users.

B13. Junction spacing

- If the priority (major) road serves no more than 100 dwellings, there are no restrictions on junction spacing, and crossroads may be used (providing two adjacent arms directly serve fewer than 25 dwellings).
- If the priority road serves between 101 and 300 dwellings, junctions on the same side of the road should be at least 30 metres apart (measured from centre line to centre line) and junctions on opposite sides of the road should be at least 15 metres apart.
- A residential road should be at least 5.5 metres wide for a distance of 20 metres before it reaches a junction with a road with a 30mph speed limit. Footways should be provided along the 20 metres length and there should be

no junctions with other roads or accesses to driveways for this distance. This is to ensure that parking does not cause problems close to the junction.

B14. Location of parking spaces (see figs. 12 and 13)

Each small group of dwellings should be self-sufficient in terms of parking provision. Unallocated communal parking provides maximum flexibility and is preferred.This can be achieved through the measures listed below.

- By grouping parking areas as close to the dwellings they serve as possible so they can be seen directly from kitchen or living room windows.
- By placing parking areas for visitors and servicing as close to the dwellings they serve as possible.

Parking provision can normally be conveniently located in relation to dwelling entrances if it is planned to serve dwelling groups of approximately:
- 16 for flats - assuming access via driveways or communal parking areas
- 8 for terraced houses - assuming access via mews courts or housing squares;
- 4 for semi-detached houses - assuming access via shared driveways, access ways or access roads.

If parking spaces are provided alongside roads, they should be six metres long by two metres wide. If there is no footway or paved margin, parking spaces should be 2.4 metres wide.

If spaces are at right angles to the carriageway, they should be at least 4.8 metres long and 2.4 metres wide. A six metre wide aisle should be provided in front of the bays to allow access (this can be reduced to 5.5m if the bays are 3m wide) and there should be an additional 800mm strip at the back to allow for vehicle overhang. These spaces should not normally be provided on roads which serve more than 100 dwellings.

Supplementary Planning Guide 12, paragraph A1 gives special dimensions for parking for disabled people or for wide bays for pushchair users.

Fig. 12 PARKING BAYS AT RIGHT ANGLES TO AND CONTIGUOUS WITH CARRIAGEWAYS

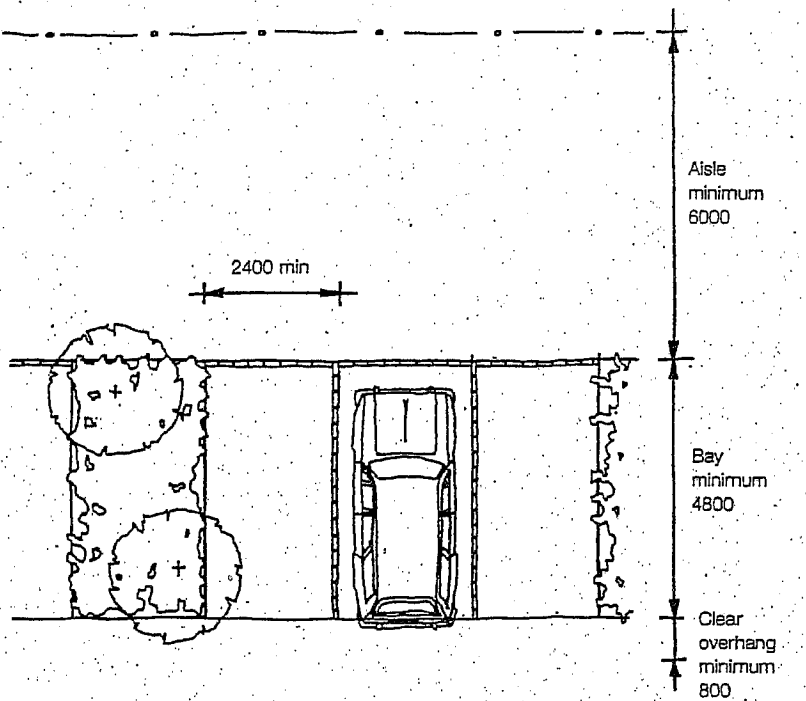
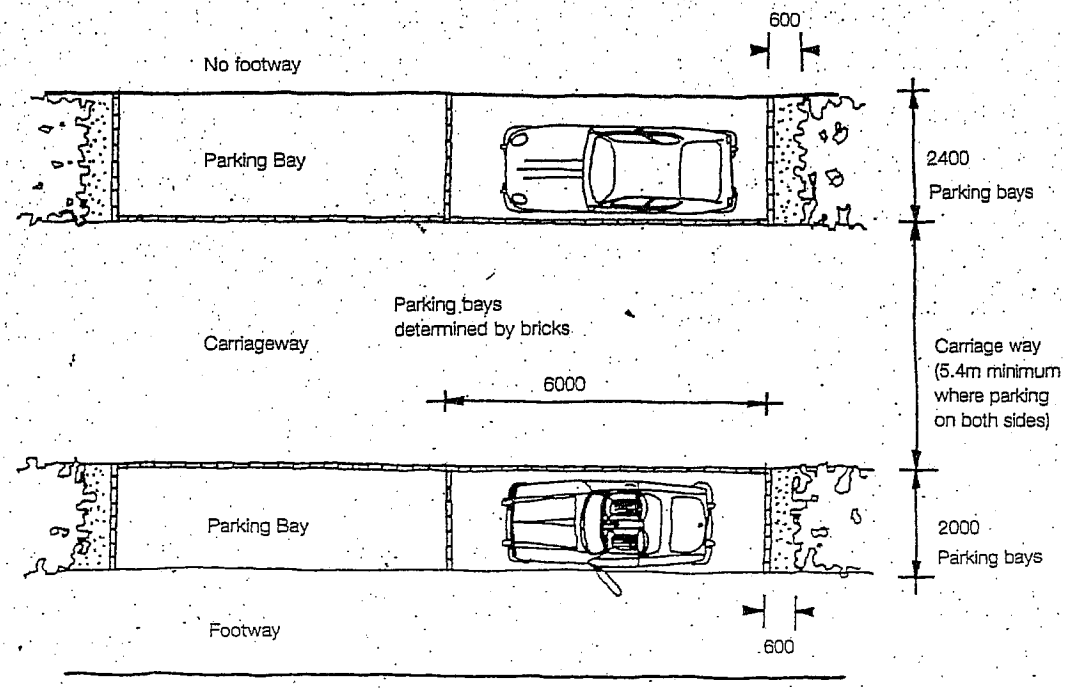


Fig. 13 PARKING BAYS PARALLEL AND CONTIGUOUS WITH CARRIAGEWAYS



APPENDIX A

The adoption of highways, parking areas, street lights, public art and open spaces

Brent Council may adopt and maintain public areas which it considers essential to the functioning and appearance of residential development in the borough.

If however adoption is not practical, developers will need to make alternative arrangements to ensure that unadopted areas are maintained properly.

1.1 Highways

Highways include carriageways, footways, turning heads, verges, sight splays and forward visibility curves, pedestrian/cycleways and footpaths (including shared surface roads).

Highway details should be submitted at an early stage for approval by Brent Council's Highways Consultancy (telephone 0181 937 5128). The consultancy will approve the size and layout, construction and drainage of roads and footpaths within housing areas, with a view to adoption.

If highway verges are provided, they should make a visual contribution to the character of the scheme. Trees, shrubs and features which are an integral part of vehicle speed restraints will be considered for adoption. Soft landscaping and tree planting should be in species which do not need high levels of maintenance.

If the adopted verges are contiguous with private gardens, the householder should be made fully aware of the rights of the highway authority and statutory undertakers like gas and electricity companies. Covenants and/or conditions may be required to ensure that the householder does not build walls and fences, and carry out tree and hedge planting on highway land.

1.2 Parking spaces and parking courts

Individual or communal parking spaces which are provided for the specific use of individual householders will not be adopted or maintained by Brent Council. These spaces must be transferred to the ownership of the leaseholders or freeholders.

Communal parking spaces (including parking spaces provided for use by visitors which are immediately adjacent to carriageways) may be adopted by Brent Council if they are provided in parking courts, mews courts, parking squares and widened sections of roads (whether parking is parallel or perpendicular to the road), and if they are not allocated for the regular use of any specific dwelling. Contact Brent's Highways Consultancy for details (telephone 0181 937 5128).

1.3 Street lighting and public art

Suitable street lighting and public art will be adopted by Brent Council. Schemes should be submitted by the developers to the Council for approval (telephone 0181 937 5063 or 5065). Items with a high maintenance cost may require a commuted sum to be agreed with the developer (normally over a term of five years).

1.4 Adoption procedures

Individual circumstances will be taken into account when considering the adoption of paved areas which serve grouped hardstandings and garages, entrances and refuse chambers in blocks of flats.

To secure the adoption of estate roads, the developer is strongly advised to enter into an agreement with Brent Highways Consultancy under Section 38 of the Highways Act 1980.

When a development receives approval under Building Regulations, Brent Council will seek a guarantee that all roads, footpaths, verges etc. will be completed in accordance with the authority's standards.

A variety of surface materials may be adopted, providing they are constructed in an approved manner to avoid high maintenance costs.

Before any building construction work begins on a site the developer must:

(i) complete payment of the estimated costs of the works under the Advance Payment Code of Section 219 of the Highways Act 1980

(ii) or enter into a Section 38 Agreement and provide a bond for due completion.

Before work has started on site, Brent Highways Consultancy should be notified so that arrangements can be made for regular inspection and approval. Any highway work which has not been made available for adoption will remain unadopted until relevant tests have been carried out at the developer's expense.

1.5 Public open spaces

If landscaped amenity open space and children's play areas are proposed for adoption, the agreement of Brent's Parks Manager is necessary (telephone 0181 937 5613). These areas should consist of space which is either useful or which enhances the appearance of the development. All other soft landscaped areas should remain in private ownership, unless they meet the criteria set out in section 1.1 (however planning conditions will be imposed to ensure their continued maintenance).

Brent Council will adopt public open space - although this may be on the basis of a commuted sum agreed with the developer, normally for a five year term. The land will then need to be dedicated or conveyed to the authority for purposes of maintenance.

How do I make a complaint?

If you want to make a complaint about any aspect of the service you receive from Brent Planning Service, you should address your complaint in the first instance to the Complaints Officer.

Brent Council operates a detailed three stage complaints procedure designed to settle as many complaints as possible. If you are unhappy with the outcome you can appeal and a senior manager will deal with your complaint. If you remain unhappy you can go on to appeal to the Council's Chief Executive.

If you do not feel that the Council has dealt satisfactorily with your complaint you can then write to:

The Local Government Ombudsman
London SW1H 9BU
0171 915 3210

Other Supplementary Planning Guidance (SPGs)

SPG1	Making a Planning Application
SPG2	Commenting on a Planning Application
SPG3	Forming an access onto a road
SPG4	Parking in front gardens
SPG5	Extending your home
SPG6	Satellite dishes
SPG7	Shopfronts and shop signs
SPG8	Advertisements (other than shops)
SPG9	Special needs housing
SPG10	Community safety
SPG11	Non-residential development adjoining residential gardens
SPG12	Access for people with disablities: designing for accessibility
SPG13	Layout standards for access roads
SPG14	Childcare facilities
SPG15	Medical practice accommodation
SPG16	Special standards for Hassop Road
SPG17	Residential design standards
SPG18	Employment development

C o n t a c t s

Area Planning Group
Brent House
349-357 High Road
Wembley, Middlesex HA9 6BZ

Eastern Team
Covers: Burnt Oak, Cricklewood, Dollis Hill, Kenton, Kingsbury, Neasden, Queensbury and Wembley Park.
Tel: 0181 937 5225

Western Team
Covers: Alperton, Park Royal, Sudbury, Wembley and Wembley Stadium Estate.
Tel: 0181 937 5241

Southern Team
Covers: Brondesbury, St Raphaels, Harlesden, Kensal Green, Kilburn and Willesden.
Tel: 0181 937 5231

Brent House One-Stop Shop
(information, publicity material etc)
Brent House (address as above)
Tel: 0181 937 1220
Open for Planning Advice from 0900 to 1700 Monday, Tuesday, Thursday and Friday and on Wednesday from 0900 to 1900. You are welcome to drop in, but to be certain of seeing the person you want to see, it is often better to make an appointment.

For independent planning advice:
Planning Aid for London (PAL)
5 Calvert Avenue, London E2 7JP
Telephone 0171 613 4435

For an overall guide to the Brent planning system, consult the Brent Planning Handbook. It's available at the Brent House One Stop Shop and local libraries. If you would like a copy sent to you call 0181 937 1220.

AREA PLANNING group

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