

Estate Layout

Public Space Framework



2.2 Public Space Framework

It is important that the design of a housing layout should be based around a unified framework of public open spaces linked by streets or footpaths with main entrances on the outside. This structure should result from a linkage of the entrance points across the site following existing routes where possible. The most important open spaces are best located at junctions of such routes. This public space framework will also include the retained elements identified in the previous section i.e. landform and landscape, water courses, wayleaves etc. It is important that the principles of good public space should apply equally to street spaces as to designated "greens" or landscaped areas of civic or special community status.

New Entrances: Whilst access points into any site should be located to continue existing public routes from shops, bus stops and other local facilities, some new entrance locations may be required. The actual location of an entry along a frontage is very important. Where junction standards allow, an entrance should avoid being located at either end of a street frontage i.e. immediately adjacent to the adjoining site, because of the following disadvantages:

- (i) a proper gateway design is not achieved, denying the benefits of natural surveillance and legibility.
- (ii) the exposed side boundary to the site is more difficult to soften visually, or maintain in the future and will create an unattractive outlook for the housing.

In the case of a site with a countryside edge access points should be provided at appropriate points (see para 2.3 **Countryside Edges**).

Routes: The Council's road guidelines identify a road hierarchy consisting of main distributor roads, general and minor access loops and cul-de-sacs which this Guidance Note requires to be limited in length i.e. "short".

Internal linkages should be as direct as possible, not tortuous or circuitous. There should be no barriers between adjacent public spaces.

However a gentle curving of the roadway may be allowed to give a continuous closure of space and create visual interest.

As a general rule a new footpath or cycleway must not be located to the rear of the houses and should instead form a component part of the roadway hierarchy referred to. This should ensure best natural surveillance and use of public space, discourage nuisance activities and avoid the poor appearance and maintenance problems associated with exposed rear screen fencing.

Clearly there will be instances where such "remote" footpaths or cycleways already exist along the perimeter of a site. Advice on the treatment of such in terms of access and frontage is provided under para 2.3 **Built Edges**.

Public Open Space: All new housing proposals over 10 units should consider the provision of amenity public open space within the development, located to take account of existing site characteristics e.g. vista opportunities, existing landscaped areas of quality, water courses and utility wayleaves and proposed junctions of throughroutes.

The well appointed open space area, taking the form of a "village green", accessible from an enclosing housing frontage, is generally preferred to the "gap site" set between buildings on a street frontage. This is to ensure that pressure to develop the site for building development in the future is minimised. Such a principle should apply even where purpose designed open space activity areas or facilities are planned, the area being sufficiently large to absorb high fences etc. within a landscape framework.

Where possible, roadways should not be continuous around public open spaces to allow at least one point of car free access from the housing opposite. The design of any planting should avoid creating screened areas which might conceal criminal or anti-social behaviour.

Dimensional standards for passive and active open space are set out in para. 2.7. **Other Planning Considerations.**

Estate Layout

Built Edges

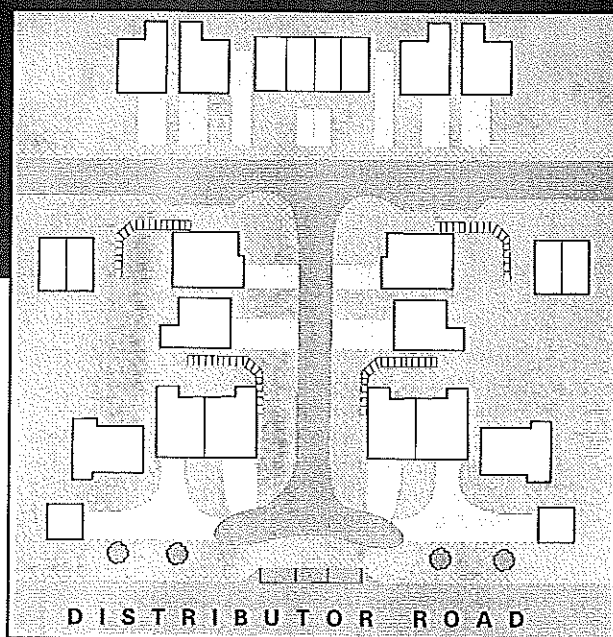


Figure 4 DISTRIBUTOR ROAD FRONTAGE OPTION

6 house "terrace" served from rear access cul-de-sac and regulation 2 house driveways



Figure 5 UNSATISFACTORY MAIN ROAD FRONTAGE

Screen fencing and bland rear elevations

2.3 Built Edges

General Edges: The edges of all public streets and landscaped amenity areas should preferably be defined by continuous building frontages with main door entrances. This will improve the appearance, surveillance and use of public space as well as avoiding the problem relating to exposed fencing, referred to above.

Narrowing the gap between the street edges will provide an interesting visual contrast with the more open greens or squares.

Corners: these should preferably be closed off by building to create visual focal points and enhanced surveillance at the junction. Special corner house units will be encouraged with formal front elevations onto both streets, thus ensuring a minimum of exposed high garden enclosure.

Distributor Road Edges: A formal frontage of typical house and garage units is more difficult to achieve alongside a distributor road because road standards do not permit individual direct vehicular access from it. This means that a standard housing development will tend to turn its back to the road behind a stockade fence. The following are options for achieving an acceptable frontage configuration on a distributor road:

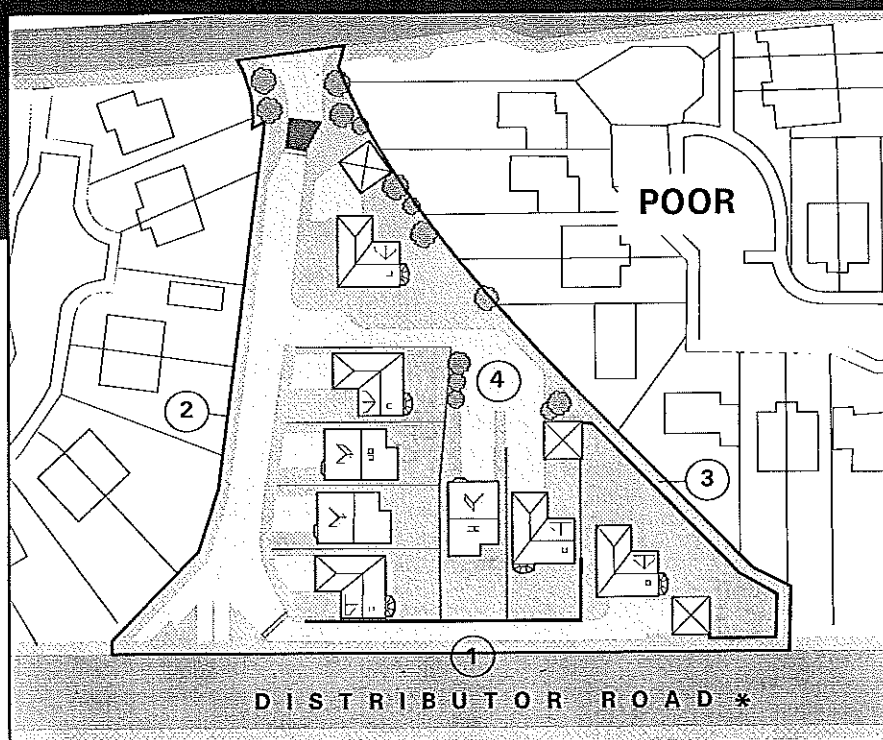
- a parallel secondary road giving direct vehicle access to the housing frontage.
- parallel driveways served off both sides of a cul-de-sac turning head connecting back to the internal loop road, in the normal way capable of providing a 6-house frontage, but less visually intrusive and wasteful of space than a full width secondary road.
- flatted development with front doors onto the roadway and parking concealed to the rear.

Where front gardens line a distributor road, the heel of the pavement should be defined by a low robust enclosure (e.g. a plinth and/or a railing), preferably reinforced by avenue planting.

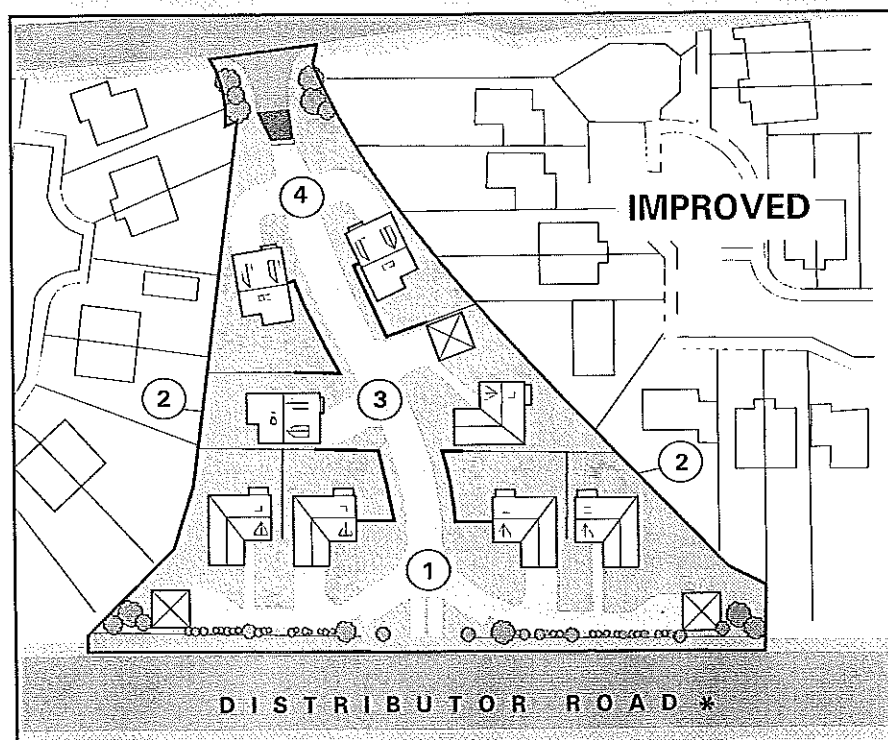
This convention should be applied to a flatted frontage in any location except where the urban design context requires the building itself to be on the heel of the pavement.

Estate Layout

Built Edges



- ① Unstructured fenced road frontage/ wasteful, convoluted driveway link
- ② Exposed fenced boundary: poor outlook from houses / ambiguous maintenance responsibilities
- ③ Hidden, unsafe footpath link
- ④ Backland development: poor outlook/ security



- ① Formal structured building frontage to distributor road
- ② Edges closed off from public view/ private maintenance responsibility
- ③ Centralized shared vehicle/ footpath route (right of way): better surveillance
- ④ Defined gateway into development

Figure 6: IMPROVING SITE LAYOUT

Building Frontage, entrances, linked/permeable routes, surveillance, outlook, aesthetic quality, boundary edge and maintenance

* direct vehicle access to individual properties prohibited

Estate Layout

Built Edges

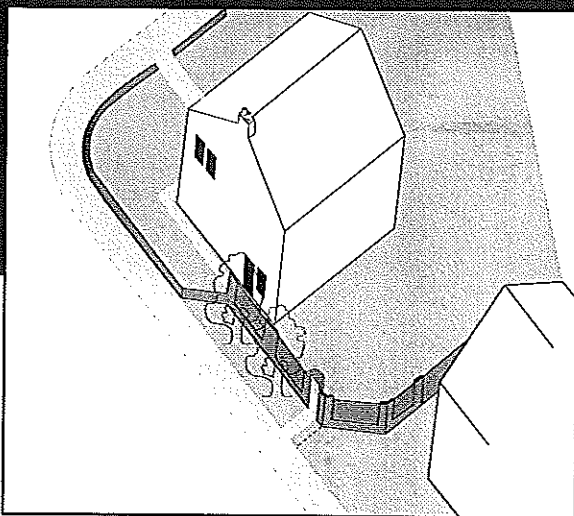


Figure 7 CORNER GABLE TREATMENT

Image, window openings, garden enclosure, surveillance, access, security.

Exposed Fenced Edges: Where it becomes absolutely essential that a private rear garden enclosure is exposed to a roadway or open space, consideration should be given to the following combination of measures to improve the appearance of such an edge:

- formal window arrangements on both street elevations of corner houses or end gable with windows onto lesser road
- a high profile architectural treatment to the garden enclosure (e.g. walls or fenced panels framed by low plinths and piers) with additional landscaped softening, if necessary
- the same quality of treatment to the rear house elevations as for the main frontages
- formal private entrances to the rear gardens from the public street.

Countryside Edges: New housing developments adjoining the countryside generally have high fencing defining the boundary. These have a stark external appearance and the countryside edge, hidden and inaccessible from the housing, can be vulnerable to fly-tipping and other nuisance activities. The following options are offered to address the situation:

- Housing fronting the countryside and accessing a perimeter road or driveway arrangement (as per a Distributor Road frontage). This would improve access, surveillance and outlook from the houses and provide a more attractive town edge.
- Where the costs of a single fronted roadway are prohibitive, a fenced edge may be conceded where it is broken at regular intervals by well designed building and landscape "gateways" accessed from a perimeter footpath. An additional edge of planting between fence and footway would help to soften any appearance of starkness.

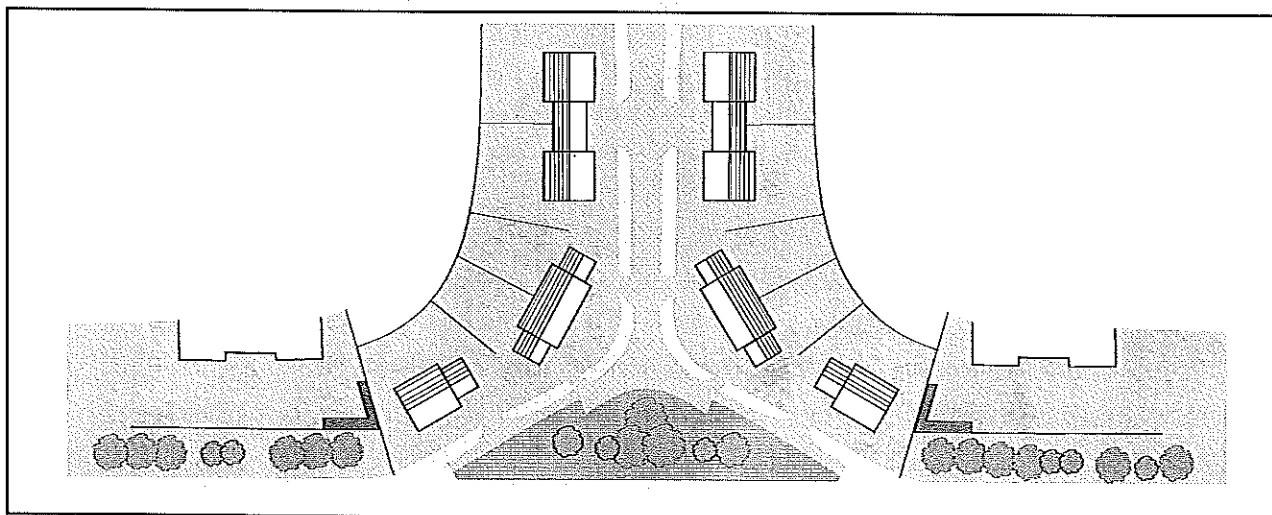


Figure 8 COUNTRYSIDE EDGE/ENTRANCE

Access/linkage, surveillance, buffer, visual appearance, vitality and use.



2.4 Models for House Grouping

The Issue

A well integrated framework of spaces and associated built edges to those spaces has the potential to give to a housing estate the desirable sense of place and connection. However this can be compromised by an unsatisfactory spacing or scale configuration to the housing units which form the edges to the public spaces.

This is unfortunately the case with many volume builder housing estates today where the layout is determined by 2 related aspirations for an idealised private home i.e.

- detachment from its neighbour
- distinctive from it in appearance

In the main, contemporary housing estates seek to implement this ideal while at the same time maximising the number of houses on the site. The result is that a minimum separation of standard detached houses dictates the density i.e. 1.0m. from the side boundary between houses and 18m. front and rear (determined by the minimum distance required between the windows to habitable rooms). Similarly visual distinction is sought by placing different house types next to each other on the street, sometimes only differentiated by nominal changes in features and finishes.

The problem with this grouping pattern is that houses appear too close together and can have a claustrophobic effect on the street. The elevational differences tend to create visual conflict rather than the attractive variety intended. The true character of the house, as illustrated on the marketing brochure is significantly diminished. Conversely the houses remain too far apart and poorly related to achieve an appropriate "town" streetscape or to mark a focal point.

Tried and tested grouping models:

To address the above concerns developers are encouraged to adopt one or both of the following models for house grouping i.e.

"URBAN" MODEL - Terrace/ Joined Form - enclosing space:

The elevation generally follows a continuous building line and the elevation is made up of repeating house designs or a differentiated but harmonious overall design.

"RURAL" MODEL - Arcadian/Detached Form - enclosed by space:

Houses are sufficiently well spaced to be potentially dominated by landscaping, allowing significant differences in the character and appearance of each plot.

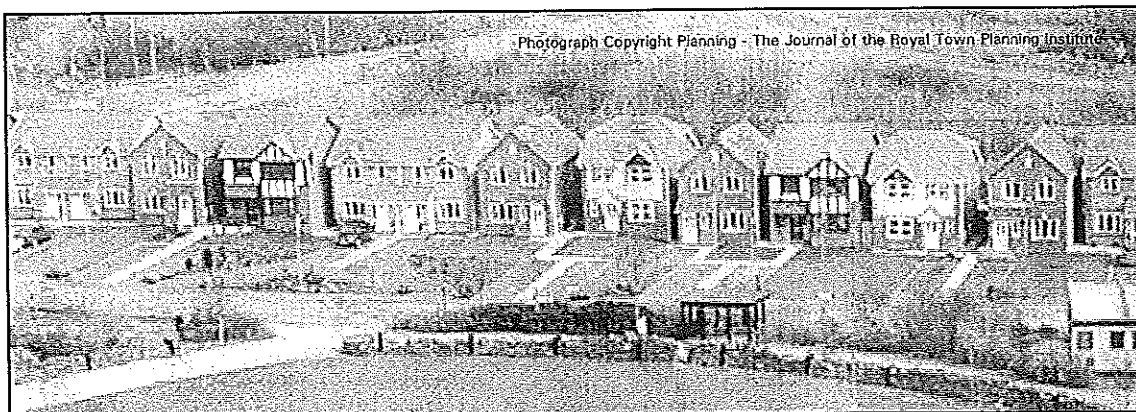


Figure 9 UNSATISFACTORY SUBURBAN HOUSE LAYOUT

Detachment and distinctiveness from one another but no "place"

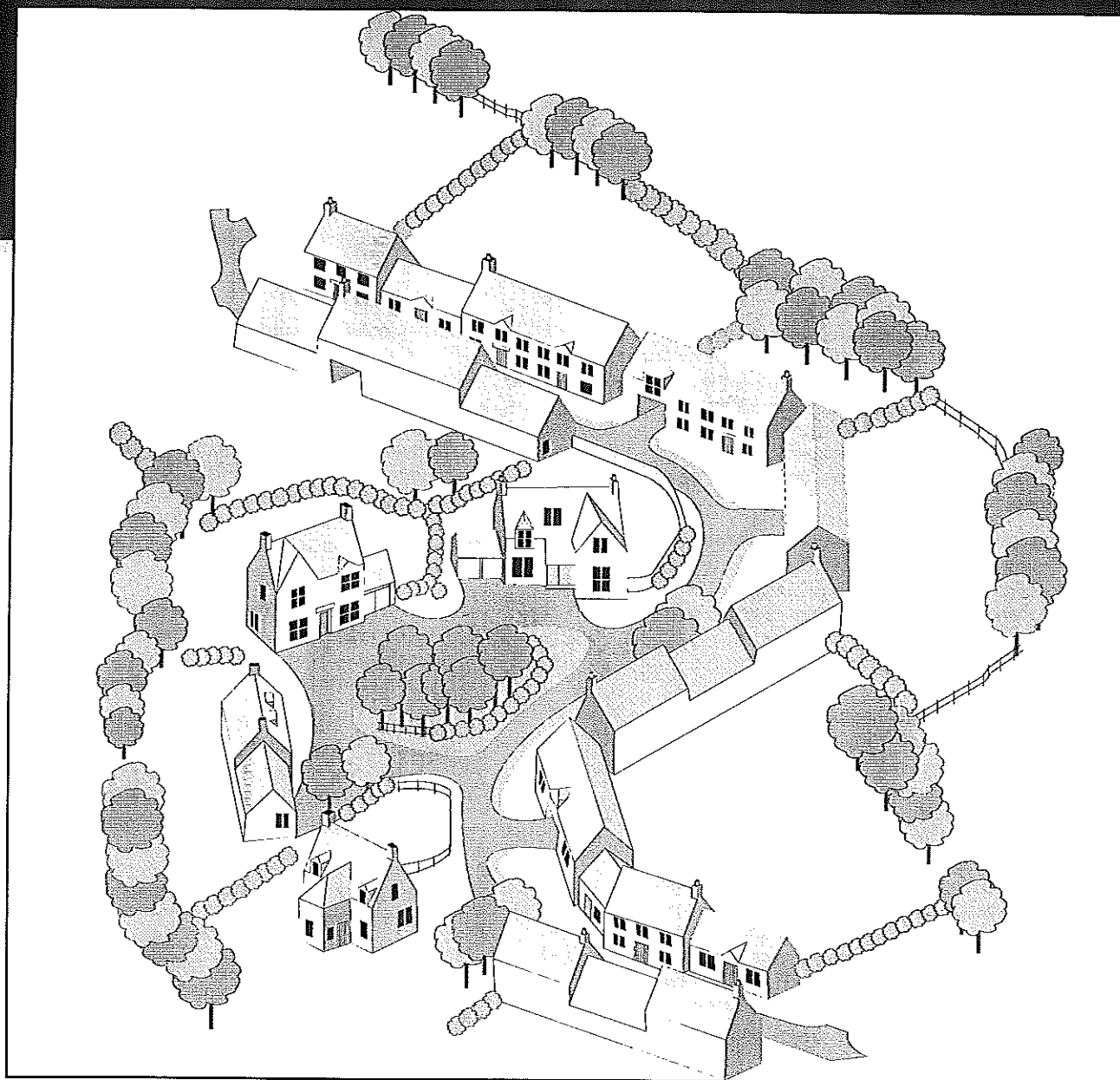


Figure 10 "URBAN" & "RURAL" HOUSE MODELS

Shown in appropriate relationship to each other and to location of open space.

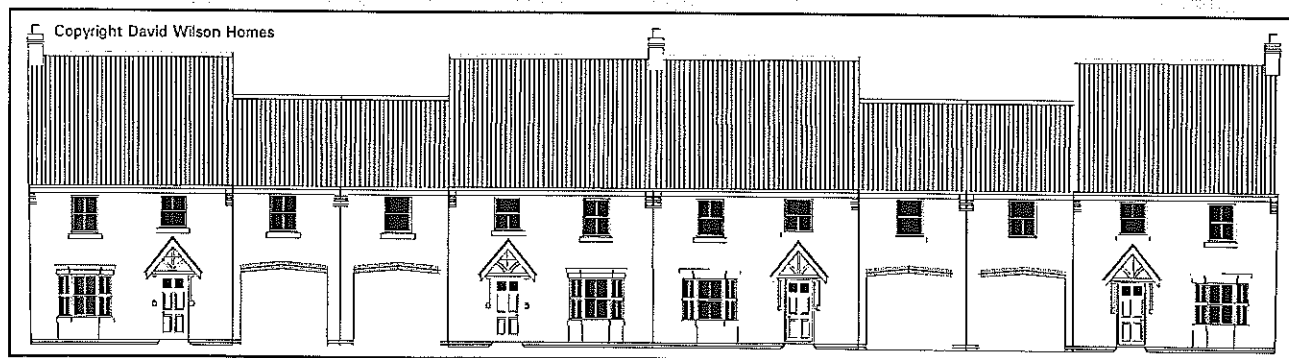


Figure 11 "URBAN" MODEL : TERRACE HOUSING

Pend access - potential for street narrowing concealing private cars and assisting individual identity.

Estate Layout

Models for House Grouping



Figure 12 "URBAN" MODEL : TERRACE HOUSING
Illustration of built development

The urban model would ideally be in a joined or terraced form, other benefits of which being higher density and energy efficiency. Pend accesses within a terrace will conceal car parking as well as providing a greater sense of detachment and allowing the development to be closer to the street.

However, the standard layout of minimally detached houses may also be made more acceptable where a more formal configuration is proposed to ensure the visual continuity of the street frontage. Grouping matching house types together in a symmetrical arrangement will assist this, especially where a single finished floor level is used throughout.

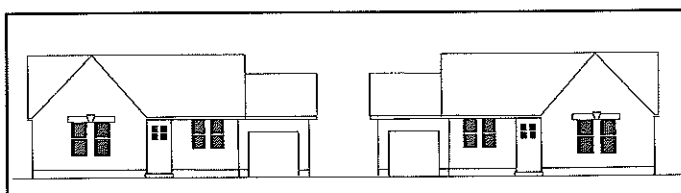


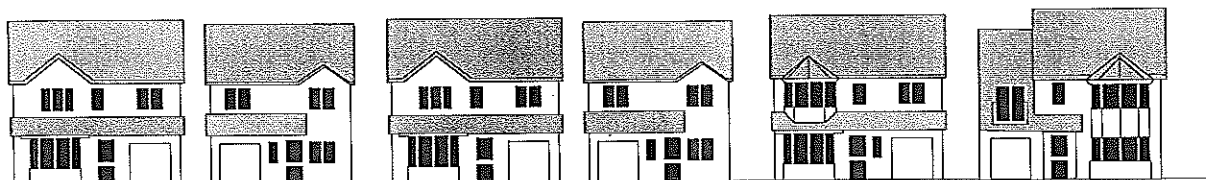
Figure 13 "URBAN" MODEL : DETACHED HOUSING
Twinning and visual linkage can give appearance of terrace.

Consideration should be given to limiting the number of main gables on a street frontage to avoid a cluttered appearance.

Straight gabled buildings will always be necessary to achieve visual continuity and should not be mixed with hipped roofs on a street frontage except where houses are sufficiently widely spaced, following the rural model. Similarly the composition of roof and wall finishes should reinforce rather than disintegrate the formal street configuration.

For the widely spaced rural model plot sizes should be no less than 1/6th acre and the ratio of ground floor (minus garage) to overall plot should be between 1:5 and 1:6. Critically the dimension between the house and the side boundary should be no less than 3.5 m. which will allow a vehicle to pass alongside. A random scattering of detached houses would be appropriate at this density.

POOR



IMPROVED

Figure 14 "URBAN" MODEL : MODIFYING SUBURBAN MODEL
reduce house types from 4 to 3, hand twin and group, structure material palette ; variety remains but focus and visual continuity is enhanced.

2.5 Distribution of House Grouping Models

All new housing developments should adopt combinations of the "urban" and "rural" housing grouping models identified above. Estates consisting entirely of minimally detached houses will not normally be acceptable.

It is important nevertheless that the models are not located arbitrarily or separately zoned but are related appropriately to the centre or edge of a town and to the framework of public routes, spaces, entrances and edges at the local site level.

Town

Denser "urban" forms are generally most appropriate in more traditional town centre areas and on former industrial sites within the town, at least where immediately adjacent to denser built up areas. However this model will also be appropriate in any new development where there is a need for an urban focus, perhaps adjoining a local centre which includes shopping and community facilities. Conversely, the more widely spaced "rural" model should not be precluded from the more historic urban areas e.g. within a site bounded by Victorian villas.

Site

The established lines and orientation of the built frontages to the Public Space Framework should provide a template for the distribution of the 2 housing grouping models identified.

The **urban model** can create the more formal visual impact appropriate to the more important, busier routes where it is also able to provide a noise barrier to more informal areas to the rear. Main gateway entrances to a site or to a minor cul-de-sac/ courtyard space as well as corners and other focal points are also appropriate locations for this model. Formal continuous built enclosure can sometimes be the preferred character for the frontage to an important public space or "village green". Flatted accommodation with limited private amenity space may benefit from such a location. Denser linked forms are also appropriate in discreet mews courtyard locations.

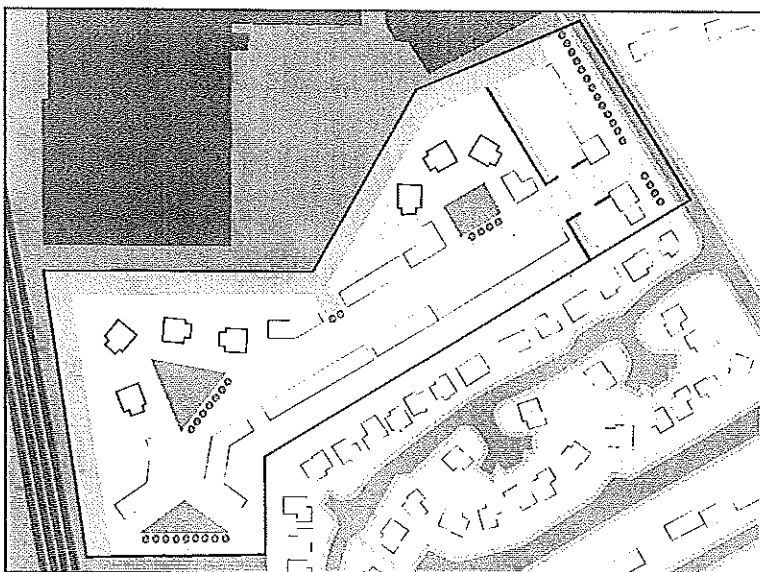


Figure 15 DISTRIBUTION OF HOUSE GROUPING MODELS

Flatted option along main road, internally site shape determines location of open space and, in turn differentiation of urban and rural house models.

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Distribution of House Grouping Models

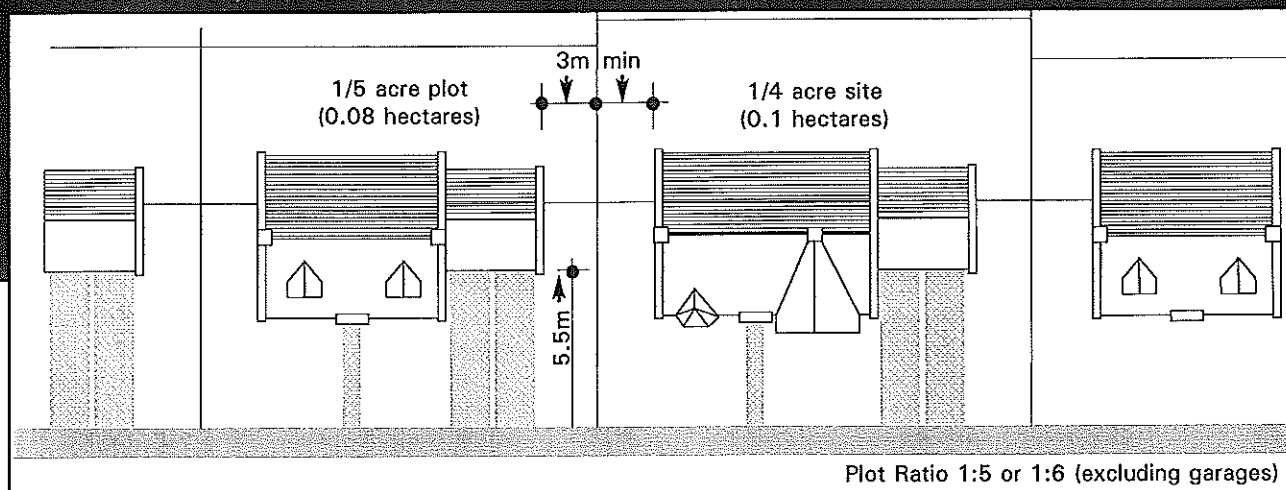


Figure 16: "RURAL" MODEL ARCADIAN / INDIVIDUAL PLOTS

Minimum dimensions - enhance visual differences

The rural model is most appropriately located within a discrete courtyard or cul-de sac and, indeed, it is in this context that large self-build type plots are best located, preferably the lesser component of any development site. On a general access road, fewer, more widely spaced, houses will result in a quieter, less trafficked street. This model would be equally acceptable to define the edge to a village green where it might continue the parkland character of the open space. In this circumstance the fewer but more prestigious houses may afford better control and foster a higher standard of maintenance for the enclosed green. This model can also provide an attractive main road frontage where a landscape character is sought.

Building Height

Options for greater height should naturally accompany the urban housing model. Where two storey housing predominates, primary edges, entrance points, and corner junctions offer the opportunity for combinations of 2½ or 3 storey buildings or, at inner town locations, even greater height. Increased storey height at focal points will assist in establishing a general sense and understanding of the place.

In the case of flatted development, storey height may be restricted according to the quality of the greenery in the enclosed court or associated car parking area.

Density

The Council's Local Plan provides indicative house numbers for certain identified sites. Otherwise housing densities will be subject to the general guidance provided in paras 2.4 and 2.5 in terms of : public open space and roads, private garden ground, daylighting and privacy and house grouping models and the location of each type.

2.6 Street Design and Road Standards

Road Hierarchy and Parking Standards

All roads, footpaths and car parking areas intended for adoption by Falkirk Council must conform to "Design Guidelines and Construction Standards for Roads in the Falkirk Area". This sets out standards for the road hierarchy of distributor road (individual direct vehicle access prohibited), general access road, minor access road and cul-de-sac (a shared surface permitted for max 20 units). Parking is required at the rate of one space for a house less than 3 bedrooms and 2 spaces for larger houses. Visitor parking is at the rate of 1 per 4 houses.

Street Widths

In addition to achieving more intimate spaces (see para. 2.3. Built Edge), narrowing the street width will encourage slower vehicle movements. This is more feasible where

- (i) car parking is to the rear, accessed to the side of the house or through a pend allowing the house frontage to move forward,
- (ii) there remains an acceptable distance between windows on either side of the street or
- (iii) habitable rooms are not directly opposite one another.

PEND ACCESS: Where this serves an approved parking provision to the rear, missives must ensure that the entrance remains open and is not enclosed as a garage.

WINDOW TO WINDOW DISTANCES: The general standard applied is that "habitable" rooms (living rooms, bedrooms) must be 18m. apart if directly opposite. Thus, in order to achieve the appropriately narrowed street, such openings must not be directly opposite but may be angled from each other.

Turning Heads/Visitor Spaces

Road geometry should fit tidily with the housing layout and avoid a turning head leg or end-on visitor parking bay intruding into a front garden. The "Y" turning head and lay-by parking are preferred.

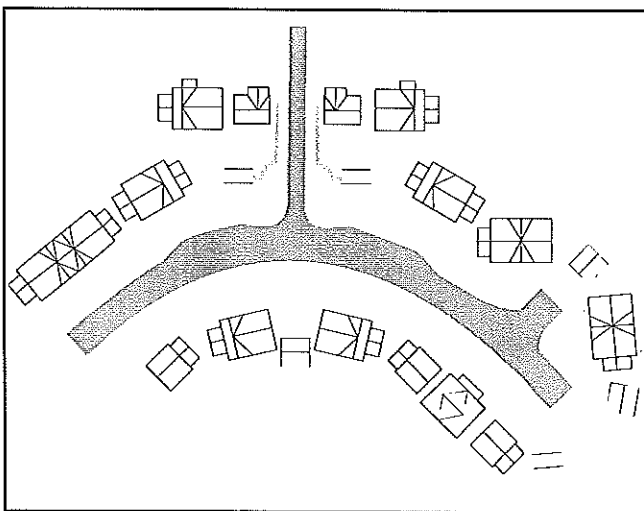


Figure 17 HOUSING LAYOUT & ROAD COMPOSITION

Geometrical harmony and symmetry are the important design tools.

Estate Layout

Street Design and Roads Standards

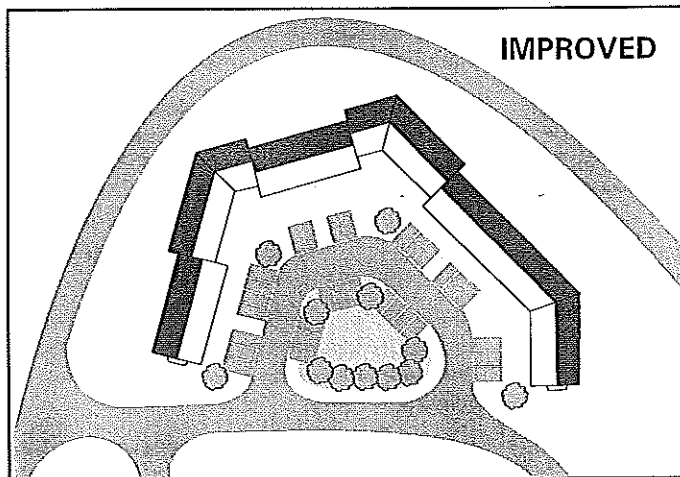
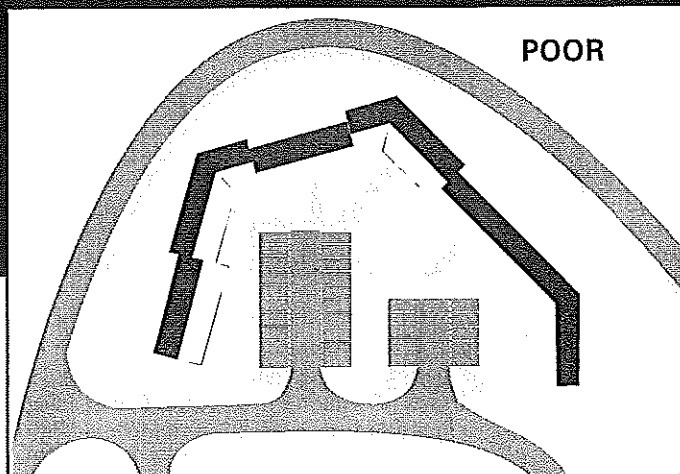


Figure 18 GROUPED PARKING SPACES (e.g. for flats)
Civic place not parking lot.

Grouped Parking Spaces

These should take the form of a traditional courtyard or square, not a parking lot, and should look attractive when empty and be easily supervised from the adjacent housing, street or courtyard.

Refuse Collection

Housing developers should be aware of the current 3-bin collection system and allow flexibility of design for future adaptations of the system.

SUDS Ponds

Sustainable Urban Drainage Systems (SUDS) require ponds whose purpose is to retain rainwater from a developed and hard surfaced area so that it can be dispersed into the drainage system at a rate no greater than would be required if the land had remained a greenfield. Para 2.1 **Site Characteristics and Constraints** notes that these and any other water courses and features should be designed integrally with the open space framework within any housing development. This should determine the location of any SUDS pond to achieve its potential as public amenity and focal point, i.e. at the front of houses for best surveillance, safety and maintenance. In general they should be positioned adjacent to, but not be part of, any water course on the site.



Figure 19 HOUSING AS PART OF LOCAL CENTRE

Contemporary, traditional patterns, 24 hour life.

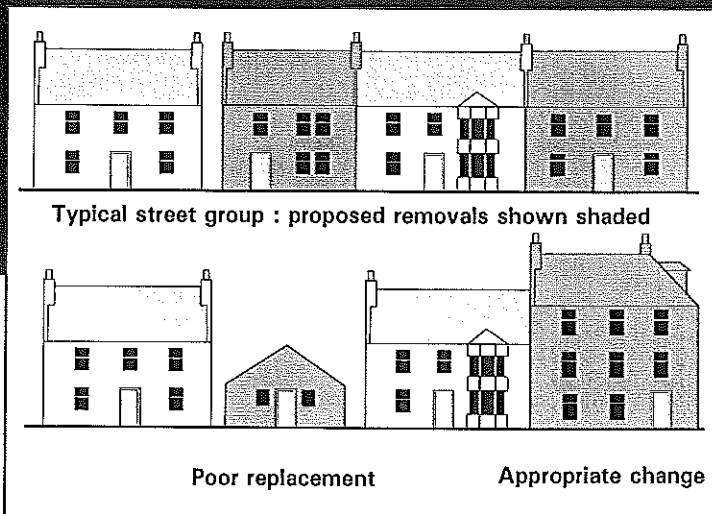


Figure 20 INFILL DEVELOPMENT
Replacing buildings in street

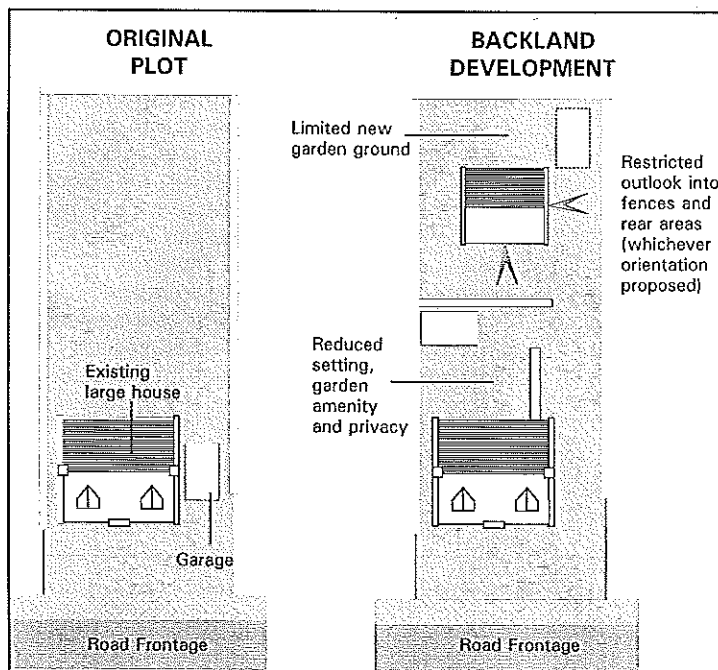


Figure 21 BACKLAND DEVELOPMENT LIMITATIONS
NB. Development may be given consideration where designed in mews or minor outbuilding form with

2.7 Other Planning Considerations

Infill Development

Where there is a gap site, whether in an urban terrace or within a looser group of buildings, it is important to achieve a harmonious "fit" of new with existing. This should pay attention to the adjacent building line, height, scale, window and other door arrangements, proportions and detailed decoration and materials.

Tandem and Backland Development

Tandem development is a form of infill development where one or more houses are proposed within a large garden to the side of a house fronting a road. Backland development is, similarly, located within a large garden but to the rear, with no road frontage.

There will be a general presumption against both of these types of development within large gardens where the concerns are as follows:

- The visual setting and continued dominance of the original house.
- The amenity and size of the resulting private gardens (min. 9 m. length must remain)
- The front outlook from the resulting houses (a particular problem for backland development where the plot may be entirely enclosed with fencing)

The following development forms may be given some consideration:

- Tandem: where the existing garden creates an inappropriate gap which the new development will sympathetically fill
- Backland: a small scale mews type development to the rear with a shared vehicle entrance from the street (preferred to one or more houses plots with separate accesses)

NB Separate plot development in a front garden to an existing house will generally be presumed against.

Estate Layout

Other Planning Considerations



Sloping Ground

Buildings should integrate with the slope and major underbuilding which creates extensive areas of blank walls will not be acceptable. Housing may be placed parallel with the contours but care should be taken to avoid too regimented an effect from a distance. Consideration should also be given to split-level houses. If the sloped arrangement reveals gable ends, window openings should be added where no conflict of privacy exists.

Rear gardens designed to be as level as is possible on a sloping site may result in steeper slopes linking one level area to the next. In pure landscaping terms it may seem more attractive to create a continuous planted strip across the sloping area, fenced off from the private gardens. However such an arrangement will require to resolve potential problems relating to public maintenance, fly-tipping (adjoining properties included) and social nuisance. It may therefore be preferable to include these steeper slopes as extensions to the private gardens rather than as public or community land. A developer may consider stabilising and planting these slopes even if they are intended to be in private ownership.

Roofscape is an important consideration on a steeply sloping site.

Overshadowing

In order to minimise the possibility of a shadow being cast across the window of an adjacent house or garden, any extension should not project from the rear building line beyond either:

- a line drawn at a 45° angle from the midpoint of the nearest ground floor window of the adjoining house, on the rear building line or
- a maximum of 3.5 metres from the rear building line of the house.

Open Space Standards

The consultation draft **Scottish Planning Policy 11: Physical Activity and Open Space** sets out minimum standards for new residential developments. Essentially, for developments with over 10 units, public open space should be provided as follows (in addition to any private garden ground):

60m² total open space per household to include:

40m² divided between parks, sports areas, allotments, green corridors, semi-natural space and civic space, as set out in the development plan.

20m² of informal play/ recreation space and equipped play areas.

The purpose designed open space activity areas or facilities referred to in para 2.2 **Public Space Framework** will generally be required in larger new housing areas. However some such facilities, e.g. sports pitches, athletics tracks or even a fully equipped play facility, have certain critical dimensions which may not be appropriate for certain smaller housing developments of over 10 units. In this case a developer may be required to contribute to their provision off-site by way of a planning agreement.



2.8 Security for Properties and Public Places

The Guidance Note seeks to apply the principles of "Safe by Design". Whilst acknowledging the need for individual houses to be adequately secured, the greater concern is to ensure that public streets and spaces are as safe as can be. This is to be achieved as follows:

- clearly defining and differentiating public, semi-public and private space by the design of appropriate boundaries and entrances.
- maximising opportunities for surveillance from the houses.
- arranging the framework of public routes and spaces to encourage greater use by the general public thus reducing opportunities for nuisance activities.

The following is a compilation of the specific measures identified in the Guidance Note which should foster the desired "defensible" environment:

- public areas fronted by buildings (with doors and windows) rather than by high screen fences
- the prohibition of footpath linkages to the rear of houses which can be threatening to legitimate users, conceal criminal activity and provide unsupervised escape routes
- the creation of "permeable" through routes for pedestrian and vehicular traffic to encourage greater usage and thereby better protect the housing environment
- the provision, off the main routes, of smaller culs-de-sac/courtyards, with "gateway" entrances which will maximise potential communal surveillance opportunities and discourage trespass.
- a structure of focal point buildings which makes the area more "legible" (or easily comprehended), enhances civic status, signals a robust, defensible environment and securely absorbs non-housing neighbourhood uses, e.g. shops.