APPENDIX D PARKING STANDARDS

This document sets out the parking space provision for new residential areas throughout Oxfordshire. It sets out the principles of allocated and unallocated spaces. It includes related space dimensions, parking layout and general street design issues. Example calculations are included.

This policy document sits under the overarching polices set out in the Council's Local Transport Plan.

It is part of a suite of documents for use by people involved in developments requiring the provision or alteration of roads. It is aimed at developers, promoters, consultants, architects, highway engineers, planning officers, the public and any other interested parties.

Throughout the policy some illustrations are used to help explain some of the important design principles but should not be interpreted literally.

In this document the term 'highway' refers to roads, footways, footpaths, cycleways and verges which are generally open to the public.

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1. INTRODUCTION

- 1.1. These parking standards replace those published in the County Council's Residential Road Design Guide 2003. The standards were revised as it is now generally accepted that, while constraining parking provision at the journey destination (such as town centres) limits private vehicle trips, it is not necessarily the case at the journey origin (residential properties). Residents will own cars and if necessary park them on streets where there are no parking controls. In doing so it often causes conflict and access problems. In recent years there has been a growing feeling that there is insufficient parking provided in new residential developments. Furthermore, there are emerging national statistics which indicate that car ownership is growing higher than predicted even though the vehicle-kilometres travelled is lower than predicted.
- 1.2. The county and district councils in Oxfordshire jointly commissioned consultants to look at car ownership in new developments. It identified that the most important factors influencing car ownership were
 - Dwelling size and tenure
 - Location: there was lower car ownership for the urban areas of Cherwell and lower again for Oxford - related to better public transport and accessibility to local facilities.
 - Overall numbers of car parking spaces in a development could be reduced if some spaces were provided that were not allocated to specific properties.
- 1.3. This led to a matrix approach to parking provision which is used in this policy. This follows a similar methodology used in national guidance published by the Department of Communities and Local Government in May 2007 as "Residential Parking Research."
- 1.4. The general content of this policy should be read in conjunction with: 'Manual for Streets' (MfS) published in 2007 by the Department of Transport Communities and Government; Manual for Streets 2' published in 2010 by the Chartered Institution of Highways and Transportation, "Car Parking What Works Where" (English Partnerships) published in March 2006 and 'Urban Design Compendium' published in August 2000 by the English Partnerships.
- 1.5. This policy is not intended to be construed as 'anti-car' but reflects the need to control parking levels according to need without creating over provision nor creating indiscriminate parking.

2. THE NUMBER OF PARKING SPACES TO BE PROVIDED

2.1. This policy provides a simple method of determining parking provision for new residential developments as follows:

Appendix A: Oxford

Appendix B: Cherwell Urban Areas

Appendix C: Rest of Oxfordshire

Appendix D: An example of calculating car parking spaces

- 2.2. Some deviation from the parking standards may be acceptable for small-scale developments involving domestic extensions, subdivision of a dwelling house into self-contained flats, and infill development where no new access road is created. Discussion with the planning authority should take place at an early stage to establish if a variation will be permitted.
- 2.3. For the purposes of parking numbers, houses which are considered to be 'houses in multiple occupation' shall be considered as a single dwelling.
- 2.4. Parking for visitors and operational needs are included in the figures.
- 2.5. It is recommended that the number of allocated spaces is chosen first, followed by the additional number of unallocated spaces. An iterative process can be used to get the most appropriate total number of spaces to suit the development. The design of the road and housing layout should also be part of this process.
- 2.6. When for reasons of good urban design more allocated spaces are provided than the standard amount (eg space in front of a garage for the reason of road safety) then the number of unallocated spaces may be reduced.
- 2.7. When calculating the numbers of spaces, especially where the dwelling numbers are low, the decimal remainder will be rounded down for up to and including 0.50 and rounded up otherwise.
- 2.8. The main principle is to include an element of unallocated parking to maximise flexibility and economy of land use. In some circumstances parking can be accommodated entirely without allocated spaces.
- 2.9. Allocated spaces can be individual spaces within the curtilage of a house, a private space within a parking court conveyed specifically to a flat or house, or a group of spaces owned by a third party where the spaces are leased to individuals.

- 2.10. Unallocated spaces are those which can be generally used by anyone and where possible they should generally be provided off-street in parking courts. In this case it is strongly recommended that they are controlled by a third party such as a management company on behalf of those who use the spaces. This way, whilst not being allocated to a specific property, they can be assigned to particular groups of houses or flats.
- 2.11. Unallocated spaces can be provided on the public highway. They cannot be allocated to specific properties or residents, and are the only car parking spaces that will be maintained by the Highway Authority.
- 2.12. Parking spaces on a private road generally cannot be allocated to specific residents and the Highway Authority will ensure that suitable control and maintenance of the road is provided for through the planning process.
- 2.13. On-street parking (whether adopted or private) can be controlled by traffic regulation orders to restrict vehicle type and or length of time of use although this is not a preferred solution on new estates. If the surrounding area suffers parking problems then other means of controlling parking should be considered. Developers are encouraged to design the road and housing layout to create an effective self controlling arrangement to reduce the need for traffic regulation orders.
- 2.14. The provision of car clubs within new developments can be part of an overall package of measures to reduce car ownership. A variation in parking standards may be appropriate where car clubs are introduced and secured for the long term.
- 2.15. When areas within residential development are being considered as 'car free' or where reductions in car parking provision beyond levels required in this policy then the implications and remedies must be addressed in the Transport Assessment and Travel Plans which accompany the planning application. Care must be taken to ensure that cars are not parked on surrounding roads causing problems to existing residents or for highway safety.
- 2.16. When car parking spaces are being reduced to very low levels then consideration must be given to allow some spaces for people with mobility difficulties.
- 2.17. Parking for private, shared ownership and rented dwellings should be to be to the same standard with no identifiable distinction between the different tenures. This has the advantage that should tenures change in time there are unlikely to be parking difficulties.

3. DESIGN CONSIDERATIONS

- 3.1. The placing of parking spaces within new residential areas should be considered as an essential part of achieving a high quality urban design.
- 3.2. Developers are encouraged to design developments such that the carriageway widths, the road width and location of parking, both on and off street, avoid irresponsible parking and allow access for public service and emergency vehicles.



Poor urban design (left) of parking spaces can lead to indiscriminate parking but good design (right) will result in reducing indiscriminate parking and a better living environment.



Parking Space Dimensions

3.3. The following tables show the minimum space sizes acceptable:

Perpendicular: eg.on driveways and parking courts	Length	Width
	(m)	(m)
Space for people with mobility difficulties	5.5	2.9+1.0
Standard space (unobstructed)	5.0	2.5
Standard space (obstructed on one side)	5.0	2.7
Standard space (obstructed on both sides, includes	5.0	2.9
car ports and undercrofts))		
Inside garage	6.0	3.0

Parallel: eg. adjacent to streets and driveways	Length	Width
	(m)	(m)
Space for people with mobility difficulties	6.5	2.9+1.0
Standard space	6.0	2.5

Echelon parking	Permitted	Length	Width (m)
	overhang (m)	(m)	
60°	0.1	5.6	As above
45°	0.2	5.3	As above
30°	0.1	4.7	As above

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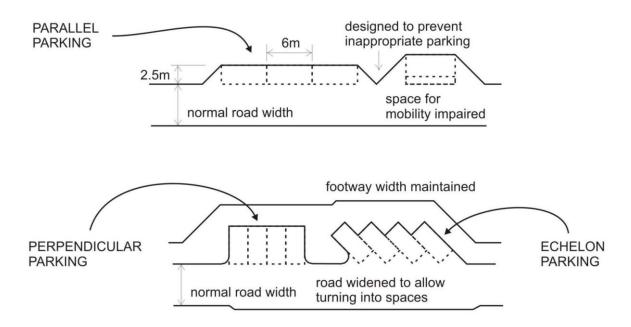
Parking for People with Impaired Mobility

- 3.4. Consideration must be given in the design to the provision and location of spaces for impaired mobility people (Blue Badge Holders). Generally the spaces should be within the curtilage of the property and have level access to the main pedestrian access. At the least, these parking spaces must be within 50m of the dwelling entrance (Blue Badge Holder range).
- 3.5. Where developers are proposing to build flats with unallocated off-street parking and the level of mobility impaired residents is unknown then 5% of spaces should be designed and allocated for their use. They should be located near to the main pedestrian access to the building and have level access. Reference should be made to Department for Transport's Inclusive Mobility standards.
- 3.6. The bay should be marked with a British Standard Disabled Symbol to conform to BS 8300:2009. Further guidance can be obtained from Department for Transport Traffic Advisory leaflet 05/05.
- 3.7. Buildings specifically for the elderly or mobility impaired people should comply with the relevant higher specific requirements and standards (as shown in the parking space dimension tables above).

Parking Space Layouts

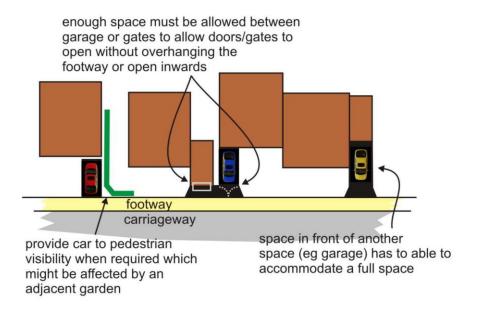
- 3.8. A vehicle/pedestrian sight splay of 2m x 2m (back of highway to side of driveway) will normally be required where the parking space abuts the back of footway or highway boundary.
- 3.9. Parking bays which are side by side allow car doors to be opened partly into the adjacent bay. Where parking spaces are adjacent to structures adequate room for pedestrian movement should be provided on one or both sides accordingly.
- 3.10. Tandem (in line) parking is inconvenient and generally must be avoided where possible as both spaces are rarely used. It should not be used off-site, however, it may be appropriate on-plot if an additional vehicle parking on the highway would not have unacceptable consequences.
- 3.11. Where parking is to be provided on-street, parking bays adjacent to the general carriageway may be appropriate in certain cases but it should be broken up in maximum groups of about 4 spaces. This not only limits the visual impact but allows kerb build outs to be provided for pedestrians to cross the street with minimum sight line obstruction.
- 3.12. Where lay-by parking is provided on street it should be constructed to carriageway standards. The parking bay should be differentiated from the carriageway preferably by change of surface treatment.

3.13. An indication of how parking spaces relate to the street are shown in the following figures:



- 3.14. Always sufficient space must be allowed to achieve a safe and appropriate approach for vehicles into a car parking space. A width of 6.0m to swing into a parking space and 7.3m to get into a garage must be provided for.
- 3.15. Where garages or gates into parking areas are constructed less than 5.0m from the back of the highway, a set back from the back of the highway should be either 0.5m to allow for 'up and over' garage doors (0m if roller shutter or similar) or greater than 5.5m to allow for car parking in front of the garage or gates. Care should be taken as to where this approach is applied. On busier streets space should be allowed to provide space for a vehicle to rest temporarily whilst the gates or doors are being opened or closed.

3.16. Set out below are examples of off street parking layout in relation to the footway. This arrangement will be required especially where the footway and carriageway is to be adopted by the Highway Authority.



3.17. Variation to the above may be acceptable in certain circumstances but the onus is on the developer to provide supporting evidence.

Garages

- 3.18. Most family cars are about 2.0m wide and a minimum clearance of at least 0.5m each side is required to open car doors on both the driver and passenger side. An average car length is about 4.5m.
- 3.19. Research has indicated that about 50% of garages in Oxfordshire are not used for parking of vehicles but are used for storage or other purposes. This may be due to garage sizes being too small to accommodate most family cars and for storing bicycles and other domestic goods. To allow for some storage and/or cycle parking the garage size should reflect this (see Parking Space Dimensions above). Garages below these dimensions will not be counted as a parking space.
- 3.20. Where a garage is counted as a parking space it will be normal practice to place a planning condition to ensure its continued use for that purpose.
- 3.21. The garage doors must not open onto or over the adopted highway area, and vehicle/pedestrian sight splays apply as for the parking spaces.

- 3.22. Garage courts require a minimum of 7.3m between garage fronts. Adequate drainage must be provided for the paving in front of the garages.
- 3.23. The minimum entrance widths and headroom to garage courts are the same as for parking courts (shown below).

Car ports and Undercroft Parking

3.24. Car ports and undercroft parking areas are less likely to be used for purposes other than parking a vehicle. Car ports 5.0m long by 2.9m wide and greater will count as a parking space.

Parking Courts

- 3.25. Rear parking courts can reduce the visual intrusion of cars. But there are disadvantages including inefficient use of land, reduced garden sizes and loss of security and privacy to the rear of the home. "Car parking What Works Where" by English Partnerships states "The recent fashion for placing parking spaces behind buildings has led to many schemes around the country being blighted by cars parked to the front of the house where there is no space designed to accommodate them." Careful consideration therefore needs to be given to the location and design of parking courts to minimise any adverse impact. A balance needs to be struck between on-street and on-plot parking.
- 3.26. Parking courts work best when they:
 - Have no more than about 10 spaces
 - Have single point of access to the highway
 - Are overlooked by living rooms or kitchens
 - Have adequate lighting
 - Have boundary treatments to allow overlooking and avoid blank walls
 - Have direct access to dwellings
 - Are high quality in design terms materials, planting etc
 - Are located in accessible areas
 - Have sense of place
 - Feel secure to users.

This is an example of good design in terms of being overlooked from living space but the nearby space could be wider.





This is an example of non allocated spaces off street and also being overlooked.

- 3.27. The entrance to parking courts should generally be a minimum width of 3.0m for up to 9 parking spaces and 4.1m wide for 10 or more spaces. Where the entrance to a parking area is built over, the headroom should be a minimum of 2.5m. (Separate building regulations may apply where fire tender or emergency access is specifically required.)
- 3.28. Parking squares in the appropriate setting can also be used as an alternative form of providing parking provision. Designs using 'Homezone' principles provide the opportunity to integrate parking within the street. However, shared surfaces need careful consideration to ensure parking does not occur outside designated parking areas thereby causing road safety problems and impairing the overall amenity of the development.
- 3.29. Designers should be aware that on-street parking may cause problems for vehicles manoeuvring on the street particularly where the carriageway width has been reduced as part of the overall design. The effect and implications of on-street parking must be considered in the layout design.

Minimising Parking on the Footway

- 3.30. Unplanned parking on roads and footways which causes obstruction to the passage of pedestrians, bicycles and vehicles (including service vehicles) tends to take place where planned parking provision is inadequate or less convenient. Adherence to the policies in this document should prevent this, but where less convenient forms of parking (tandem on-plot and rear parking courts) are proposed, developers will need to demonstrate that unacceptable, unplanned parking will not occur. Careful consideration will need to be given to road widths and designs that deter inappropriate parking.
- 3.31. Wide areas of footway or open space may also be attractive for casual parking. Bollards, planters or other street furniture can assist in the definition of parking areas and be used to indicate where people should park. However a compromise needs to be reached to avoid street clutter.



The result of a missing bollard or poor design? (designs have to eliminate poor parking habits)

APPENDIX A – Parking Standards for Oxford

- A.1. Oxford has lower parking standards than the rest of the county as it has lower rates of car ownership and good accessibility by non-car modes to a wide range of facilities. Even within the city there are differing degrees of access to local facilities and public transport and car ownership is typically lower in the city centre than the outer areas. For these reasons there are two parking standards that will apply: within the Transport Central Area as defined by the City Council in its planning policy documents and outside that area.
- A.2. These standards should be treated as maxima, reflecting good overall accessibility by non-car modes, and the need to use land efficiently. Also, shared off-plot parking, combined with on-plot parking where appropriate, will be encouraged.
- A.3. Proposals which are considered to have over-generous parking provision will not be supported. Equally, proposals with substantially reduced parking provision may be unacceptable in some circumstances, for example where this would result in unacceptable parking pressure on existing streets, which could not be reasonably mitigated. The onus is on the developer to show that the implications of the parking provision are acceptable.

Parking Provision – Outside the Transport Central Area

A.4. The amount of parking that would be required to meet forecast demand in new developments is shown in Table A1. These will be treated as maximum standard provision.

Table A1- Car parking provision in new developments in Oxford outside the Transport Central Area						
Number of bedrooms per dwelling	Maximum number of allocated spaces	Maximum number of spaces when two allocated space per dwelling is provided		Maximum number of spaces when one allocated space per dwelling is provided		Maximum number of unallocated spaces when no allocated spaces
		allocated	unallocated	allocated unallocated		
		spaces	spaces	spaces spaces spaces		
1	1	N/A N/A 1 0.4				1.0
2	2	2	0.3	1	0.7	1.5
3	2	2	0.4	1	0.9	1.8
4+	2	2	0.5	1	1.2	2.1

A.5. In new small scale development outside the Transport Central Area and in the tighter built up areas where densities are high and traditionally no on-plot parking is provided

- then proposals may not need to provide on-plot parking. In other cases the above table will form the basis of the assessment.
- A.6. Where local circumstances allow, a substantial element of shared off-plot parking will be preferred over the provision of 2 or more spaces per unit.

Parking Provision within the Transport Central Area

- A.7. Proposals will be assessed case by case in the context of the Oxford Local Development Framework and will be lower than the parking provision recommended outside the Transport Central Area. Car free development or low level of parking provision will be encouraged, and when in a controlled parking zone will be enforced through exclusion from that controlled parking zone.
- A.8. No more than 1.0 spaces per dwelling will be permitted within the Transport Central Area. Within the West End, flats will be car-free with disabled parking only.
- A.9. Car parking spaces provided within the Transport Central Area can be provided by an allocated and unallocated mix to suit the specific location and development layout.

Student Accommodation

A.10. For both inside and outside the Transport Central Area student accommodation will be car free in terms of parking. However provision of parking for the mobility impaired will be provided of one space per bedroom for 5% of the total number of bedrooms provided.

Houses in Multiple Occupation

A.11. Table A1 will be used primarily to assess dwellings in multiple occupation. However where 7 or more occupants are proposed in an area where parking congestion occurs then the Council may require additional spaces to ensure that a suitable and appropriate number of spaces are provided.

Car-free development

- A.12. Car-free development is defined in this document as accommodation for people who are prepared to relinquish their right to keep a private car in Oxford. Car-free development is encouraged, which can bring significant benefits where properly implemented in appropriate locations.
- A.13. Car-free development will be acceptable in Oxford provided that there are excellent alternatives to the car, shops and services are located near by, and the car-free status of the development can realistically be enforced by planning condition,

- planning obligation, on-street parking controls or other means. The onus is on the developer to demonstrate that there are no adverse implications.
- A.14. Many smaller residential proposals, involving domestic extensions, subdivision of a dwelling house into flats, and small infill development, do not specifically provide additional parking. These may be described as 'car parking free'.
- A.15. The addition of a few dwellings without the provision of additional parking spaces to a particular area may be acceptable, either where there is reasonable and safe onstreet parking capacity (as made clear by appropriate supporting information) or where there is excellent accessibility for those without a car and on-street parking controls are in place or will be provided.

Low car housing

A.16. An alternative to car-free residential development is 'low car' (or 'low parking') housing, where the proposed parking provision is significantly below the parking standard. Such proposals will generally be assessed using the same principles as for car-free development.

Car clubs

- A.17. Car-free or low car developments will be encouraged to incorporate or otherwise support a car club, which can be an attractive alternative to private car ownership and boost the attractiveness of such housing.
- A.18. A car club provider makes cars available to local residents, and they are then shared between the households on a 'pay-as-you-go' basis.
- A.19. Car clubs are particularly suited to areas of high-density development and areas with good accessibility to local services and public transport.

Unallocated parking

A.20. In general proposals with unallocated parking will be supported with up to 100% unallocated parking within a controlled parking zone or a Home Zone.

Garages

A.21. The provision of residential car parking in the form of garages will be discouraged within the city, as evidence suggests they are less well used than other forms of residential parking.

Conversion of Front Gardens to Parking Areas

- A.22. Many planning applications propose the conversion of private amenity space at the front of dwellings to hard-standing, to provide additional on-plot parking. This is particularly common where houses are subdivided into flats, and may be considered necessary to prevent undue pressure on the public highway.
- A.23. However, the cumulative impact of multiple hard-surfaced parking areas can change the character of an area and also significantly increase surface water run-off, which can, in turn, increase local flood risk. Also, the benefit of providing off-street spaces as 'front garden parking' will need to be weighed against the loss of existing on-street capacity as a result of new or extended drop-kerb access. Therefore each case will be considered on its merits.

B. APPENDIX B – Parking Standards for Cherwell Urban Areas

- B.1. The parishes which define the urban areas in Cherwell are: Banbury, Bicester, Kidlington, Bloxham, Bodicote, Adderbury, Yarnton and Gosford and Water Eaton.
- B.2. The car parking provision in new developments for the urban areas in Cherwell area are set out in Table B1.

Table B1: Car parking provision in new developments for urban areas in Cherwell							
Number of bedrooms per dwelling	Maximum number of allocated spaces	Maximum number of spaces when two allocated space per dwelling is provided		Maximum number of spaces when one allocated space per dwelling is provided		Maximum number of unallocated spaces when no allocated spaces	
		allocated unallocated		allocated	unallocated		
		spaces	spaces	spaces	spaces		
1	1	N/A	N/A	1	0.4	1.2	
2	2	2 0.3		1	0.6	1.4	
2/3	2	2 0.3		1	0.7	1.5	
3	2	2 0.3		1	0.8	1.7	
3/4	2	2	0.4	1	1.0	1.9	
4+	2	2	0.5	1	1.3	2.2	

Note 1: The rows in the table for 2/3 bedrooms and 3/4 bedrooms can be used when there are additional rooms in the dwelling which are not shown as bedrooms but where there is a high chance that they could be used as bedrooms.

Note 2: The Council will consider North West Bicester Ecotown as a special case provided that certain minimum criteria are met. If there is a full range of every day services provided within easy walking or cycling distance of the dwelling and convenient access to an efficient public transport system accessing a wider range of services including employment, one allocated car parking space per dwelling will be required, regardless of dwelling size or tenure. This may be on plot or off plot. Off plot provision may be grouped in a parking court provided the courts are small, close by, secure and conveniently accessed. Additional unallocated off plot car parking may also be provided according to the principles of this document up to a maximum of one space per dwelling. A lower standard of parking may be acceptable dependent upon the layout and accessibility to services and to other modes of transport in agreement with the Highway Authority.

C. APPENDIX C – Parking Standards for parking standards for all areas in Oxfordshire (other than Oxford and Cherwell Urban Areas)

C.1. Car parking provision for all other areas of Oxfordshire (other than defined above) are set out in Table C1.

Table C1: Car parking provision in new developments for all areas of Oxfordshire (other								
than Oxford and Cherwell urban areas)								
Number of bedrooms per dwelling	Maximum number of allocated spaces	Maximum number of spaces when two allocated space per dwelling is provided		Maximum number of spaces when one allocated space per dwelling is provided		Maximum number of unallocated spaces when no allocated spaces		
		allocated unallocated		allocated	unallocated			
		spaces spaces		spaces	spaces			
1	1	N/A	N/A 1 0.4		1.2			
2	2	2	2 0.3 1 0.6		1.4			
2/3	2	2 0.3		1	0.8	1.6		
3	2	2 0.4		1	0.9	1.8		
3/4	2	2	0.5	1	1.1	2.1		
4+	2	2	0.6	1	1.5	2.4		

Note: The rows in the table for 2/3 bedrooms and 3/4 bedrooms can be used when there are additional rooms in the dwelling which are not shown as bedrooms but where there is a high chance that they could be used as bedrooms.

D. APPENDIX D – Example Calculation of Parking Allocation

Example 1

A proposed development has 22 No. 2 bed and 5 No. 3bed houses and 11 No I bed flats. The site is located in a market town (not Cherwell) so table C1 is used. The developer has decided that the houses will have 2 allocated spaces each and the flats will have one unallocated parking space per flat. The tables are now used to calculate the remaining unallocated spaces for the houses and the total number of spaces for the flats.

Table 1: Example Forecast Parking Demand Example 1

Dwelling Type	No.	Allocated	Unallocated Spaces	Total Spaces
	Units	Spaces		
1 bed Flat	11	-	11 x 1.2 =13	13
2 bed House	22	44	22 x 0.3=7	51
3 Bed House	5	10	5 x 0.4=2	12
Totals	38	54	22	76

The result of the calculation may have an impact on the design of the road and housing layout. The developer in consultation with the Planning and Highway Authorities may wish to alter the layout design and refine the parking mix and exact location.

Example 2

Taking the same example but the 2 bed houses have only one allocated space each. The 3 bed houses still have 2 allocated spaces each.

Table 2: Example Forecast Parking Demand Example 2

Dwelling Type	No.	Allocated	Unallocated Spaces	Total Spaces
	Units	Spaces		
1 bed Flat	11	-	11 x 1.2 =13	13
2 bed House	22	22	22 x 0.8=18	40
3 Bed House	5	10	5 x 0.4=2	12
Totals	38	32	33	65

This is a clear indication of a choice which would be more efficient and demonstrates very clearly the benefits in terms of land use of a greater proportion of unallocated spaces. However it still needs a concerted effort in producing a street and parking layout which allows vehicular and pedestrian access, and, discourages indiscriminate parking.