

02 Site-Wide Codes

DETAILED SITE-WIDE MASTERPLAN AND THE REGULATING PLAN

- 2.1

Based on the design principles which were established at the Hybrid Planning Application stage, discussions with Wokingham Borough Council Officers, and more detailed design work a Detailed Site Wide Masterplan has been prepared. This plan is similar to the Illustrative Masterplan submitted with the hybrid planning application, but provides more certainty and clarity on the relationship between uses, and form and layout of the proposals. The level of detail shown has been agreed with Officers and appropriate to discharge this element of Condition 4.
- 2.2

Based on the Detailed Site-wide Masterplan, a Regulating Plan has been prepared for this Design Code. The Regulating Plan identifies and signposts the key design principles which will guide the subsequent detailed design at the Reserved Matters stage.

- 2.3

The South Wokingham Development Brief SPD 2011 requires the following design principles to be at the heart of the design of the Strategic Development Location. This Design Code illustrates compliance with the design principles throughout the document.

SPD Design Principle	Explanation	Compliance
a) Character	‘somewhere with a sense of place and local distinction’	
b) Legibility	‘a place which is easy to understand and navigate’	
c) Permeability	‘achieving a form of layout which makes for efficient pedestrian, vehicular movement and public transport provision ensuring places connect with each other’	
d) An articulated townscape	‘creating an interesting, contextually responsive townscape utilising building height, scale and massing, all of which should be related to human scale’	
e) An integrated landscape	‘a place which responds to its landscape setting and draws green space and infrastructure into the heart of the development’	
f) Human scale	‘the arrangement of building forms which are easy for the human eye to read and provide a sense of scale and perspective’	
g) Secure, natural surveillance	‘creating places which are properly overlooked and make for effective passive and active policing’	
h) Detailing, richness and interest	‘promoting ornamentation, rhythm, consistent vernacular, richness and intrigue to the built environment’	
i) Quality within the public realm	‘promoting routes and spaces which are attractive, safe and uncluttered’	
j) Continuity and enclosure	‘promoting the continuity of the street frontage and the definition of public and private space’	
k) Adaptability, robustness and sustainability	‘the layout of the SDL and individual buildings should all contribute towards the minimisation of resources from the design stage’	
l) Diversity	‘promoting diversity and choice through a mix of developments and uses, responding to local need’	



Regulating Plan

Miller Homes

Kier Venture Ltd

- 2.4
- The Regulating Plan sets out the design code development parameters, which include
- Proposed land uses;
 - Character Areas
 - Key frontages;
 - Key buildings location;
 - Landscaping/open space typology areas; and
 - Higher order Street/Movement hierarchy (vehicular and pedestrian);



CHARACTER AREAS & BUILT FORM

	CA1(A) PARKSIDE CONTEMPORARY
	CA1(B) LUDGROVE CONTEMPORARY URBAN
	CA2(A) WATERLOO EDGE
	CA2(B) NEIGHBOURHOOD RESIDENTIAL
	CA3 RURAL EDGE
	LOCAL CENTRE- SUBJECT TO A SEPARATE BRIEF
	INDICATIVE LOCATION OF A KEY BUILDING
	DEVELOPMENT PARCEL BOUNDARY
	PARCEL NUMBERS

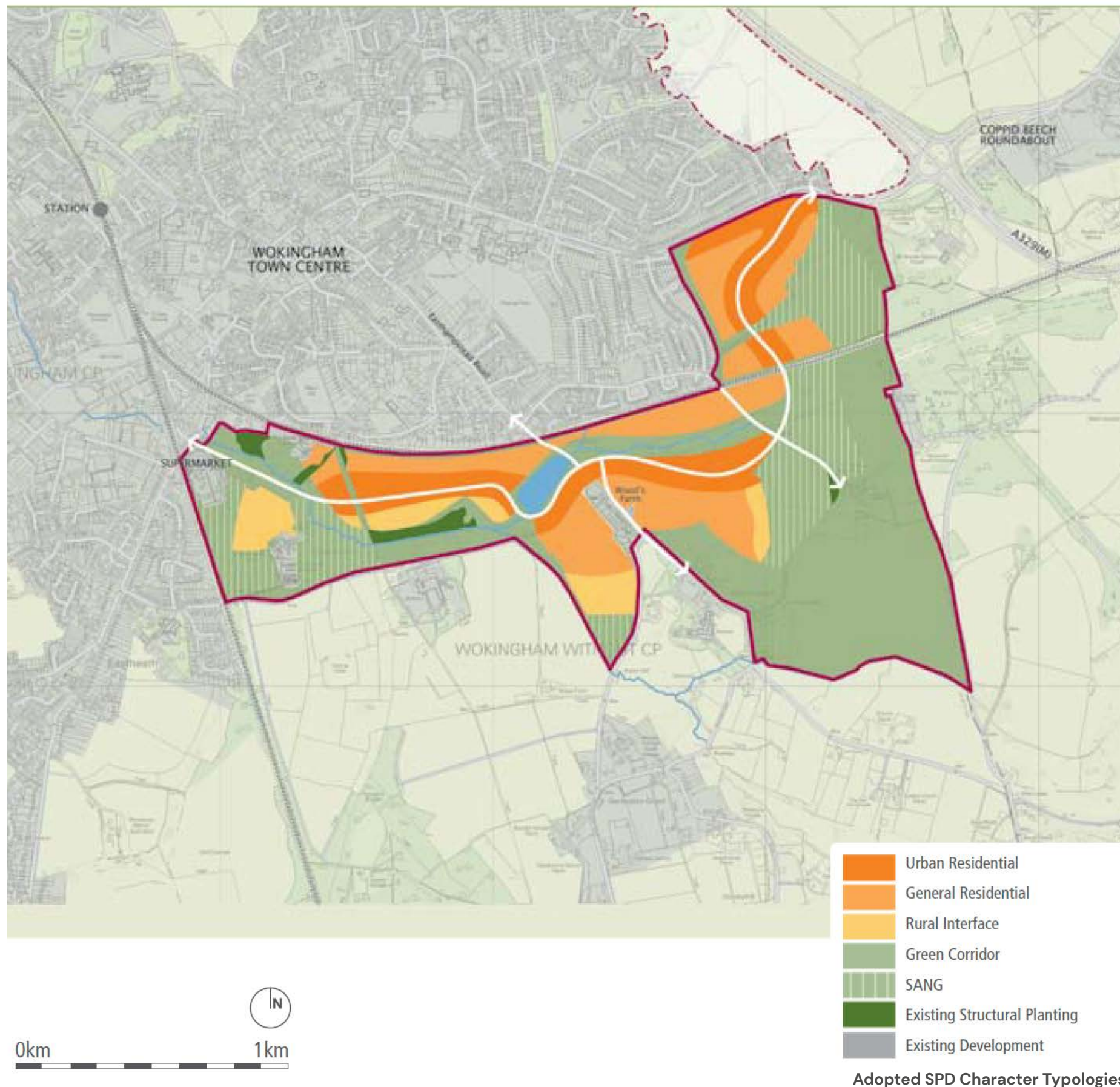
GREEN INFRASTRUCTURE

	APPROVED SUITABLE ALTERNATIVE NATURAL GREEN SPACE (SANG)
	PUBLIC OPEN SPACE
	ATTENUATION BASIN

	EXISTING VEGETATION TO BE RETAINED
	PROPOSED ALLOTMENTS / COMMUNITY ORCHARD
	CHILDREN'S PLAY AREA (EQUIPPED)

MOVEMENT

	S.W.D.R. / S.W.D.R. INTERNAL LINK ROAD WITH BUS ROUTE		EXISTING LOCAL ROAD - WITH SHARED FOOTWAY / CYCLEWAY
	SECONDARY STREET WITH BUS ROUTE		EXISTING LOCAL ROAD - WITH FOOTWAY
	INFORMAL PEDESTRIAN / CYCLE ROUTE		EXISTING LOCAL ROAD
	INFORMAL FOOTPATH		EXISTING RIGHT OF WAY - BYWAY OPEN TO ALL TRAFFIC
	INFORMAL FOOTPATH / EMERGENCY ACCESS		EXISTING RIGHT OF WAY - FOOTPATH
			PERMISSIVE FOOTPATH

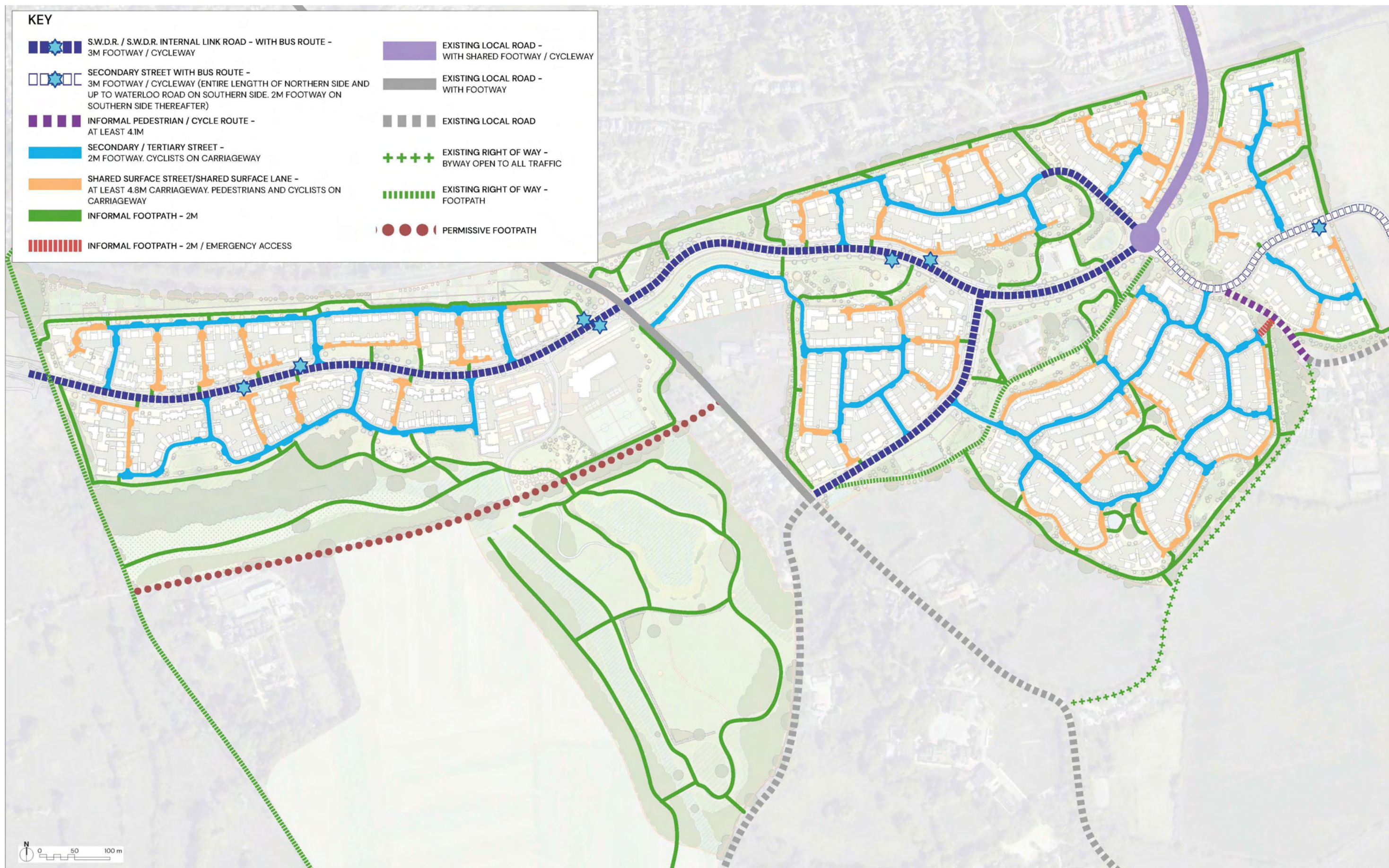


IDENTITY

- 2.5 The Design and Access Statement (DAS) prepared in support of the Hybrid Planning Application identified four character areas within Land at Phase 2b. These character areas were informed in turn by the four areas identified within the South Wokingham Strategic Development Area SPD, and comprised:
- CA1 Urban Residential
 - CA2 General Residential
 - CA3 Rural Interface
 - CA4 Neighbourhood Centre
- 2.6 The CA4 Neighbourhood Centre is covered by a separate Condition as part of the Hybrid Application Planning Permission. As a consequence, this Design Code covers areas CA1-CA3.
- 2.7 The DAS envisaged that each character area will contain its own individual design elements, which aid in making it distinct from other areas, whilst still being part of an identifiable whole. It also foresaw that the boundaries between character areas are not fixed and that these would evolve through detailed design.
- 2.8 The approach envisaged within the DAS has been advanced to continue the three character area approach and respect the requirement of Condition 4 – a cohesive development with distinct character areas within it. However, for place-making reasons, this Design Code has identified sub character areas to the comparatively large Urban Residential and General Residential Character Areas. This promotes a more contemporary approach flanking the SDR leading to the Neighbourhood Centre.
- 2.9 The Character Areas Plan opposite is based on the Detailed Site-Wide Masterplan and responds to the evolution of the design approach whilst still perpetuating the three character area approach. This Plan should read in conjunction with **Part 3 – Character Areas** – which provides instructions for each area.



Character Areas Plan



Pedestrian and Cycle Movement Plan

MOVEMENT

- 2.10 National Planning Policy Framework requires the promotion of sustainable transport at the earliest stages of plan making and formulating development proposals. Key to this aim, and relevant to this Design Code, are that:

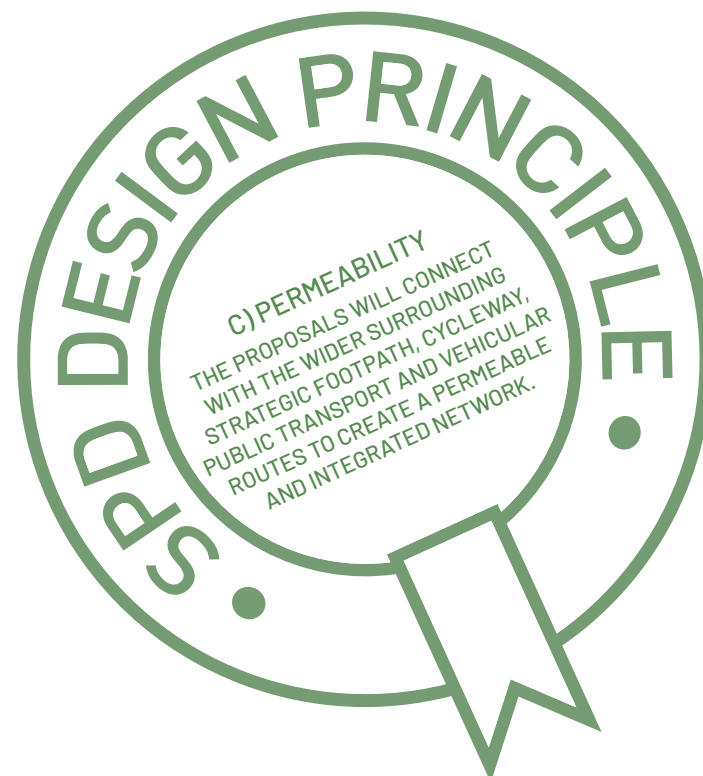
'c) opportunities to promote walking, cycling and public transport are identified and pursued' and; 'e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places'.

Manual for Streets

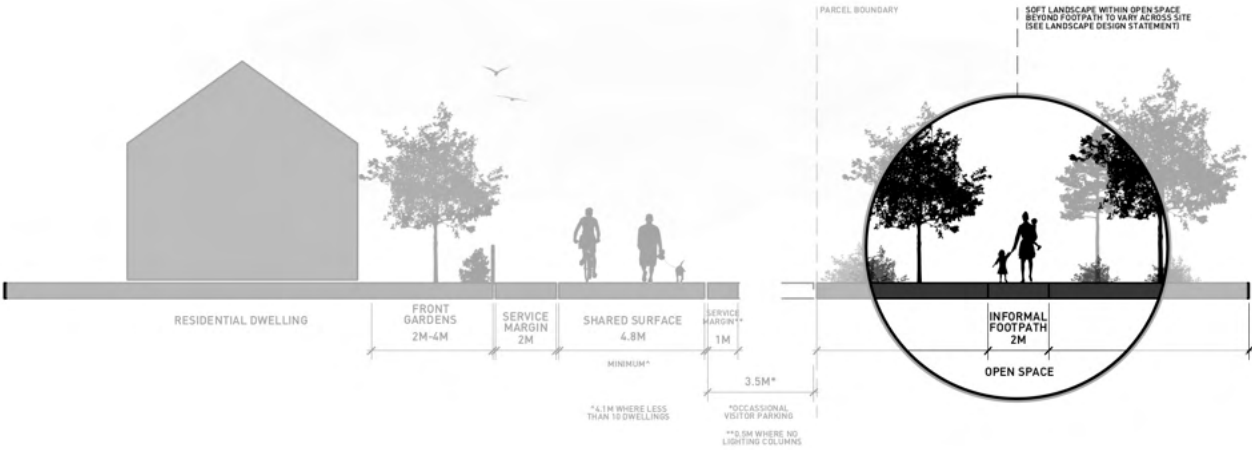
- 2.11 Manual for Streets (MfS) published in 2007, represented a step change in approach to designing streets, as part of a commitment to transform the quality of the built environment. Central to this aim was the promotion of a more holistic approach to street design, assigning a higher priority to the needs of pedestrians, cyclists and public transport.
- 2.12 MfS sets out the need to apply a user hierarchy to the design process, with pedestrians at the top. It also recognises, among other objectives, the importance of the community function of streets as spaces for social interaction; and promoting an inclusive environment that recognises the needs of people of all ages and abilities.

Living Streets –Highways Design Guide

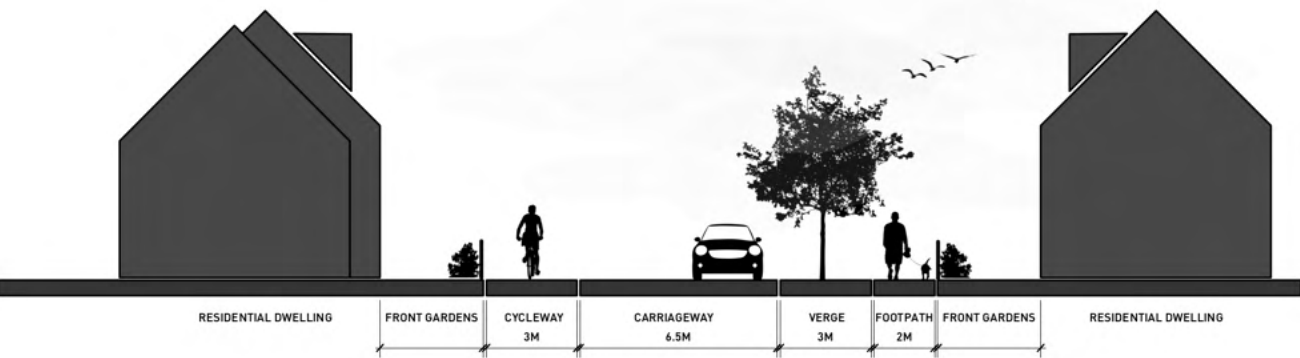
- 2.13 Adopted in 2019 by WBC, Living Streets reaffirms its support for the design principles advocated within MfS and encourages developers to apply these in the design process. The access hierarchy is reiterated and the guide sets out the design principles and standards for all new development in Wokingham. It covers detailed matters ranging from provision of emergency and refuse vehicles, to designing for low traffic speeds, carriageway widths and specifications, and materials and maintenance.
- 2.14 This Design Code has been informed by the national and local policy and best practice documents to promote a design approach that will embed the access hierarchy and high quality place-making into the development proposals for Phase 2b at South Wokingham.



Informal Path



Secondary Street with Bus

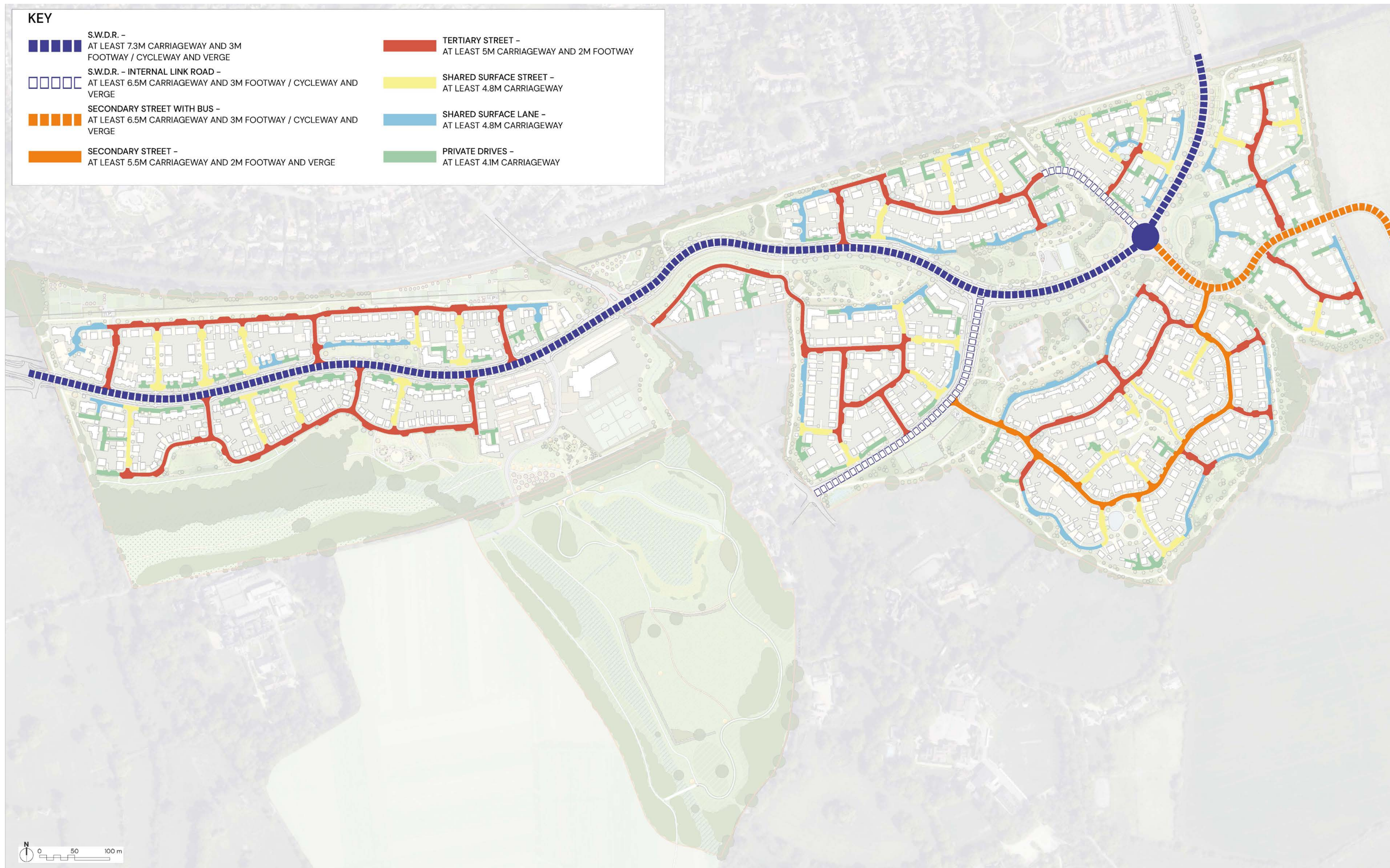


Secondary Street with Bus Vignette

PEDESTRIAN AND CYCLE MOVEMENT

- 2.15 To support the Site Wide Masterplan, the overarching transport strategy is built upon providing travel choice through a range of sustainable travel options.
- 2.16 To deliver this objective, the Design Code has been developed to encourage active travel (walking and cycling) within and beyond the development through a combination of high quality shared foot/cycleways, separate footways and footpaths.
- 2.17 A Secondary Street known as the 'R14 Link Road', to the east of the development has been designed with a minimum carriageway width of 6.5m to accommodate a potential future bus route. This route includes a 3m footway/ cycleway on the northern side of the carriageway and a 2m footway on the southern side of the carriageway.
- 2.18 Within the southeast of the development Plot R11 will contain a Secondary Street with a carriageway designed with a minimum width of 5.5m. Cycle movement will be on-carriageway and pedestrian movement via 2m footways on both sides of the carriageway. This follows the design principles of the Illustrative Masterplan and Design and Access Statement submitted with the Phase 2B hybrid planning application.
- 2.19 Tertiary Streets within the development provide several connections to the SWDR and are supported with 2m footways on both sides of the carriageway. The design width of these streets is based with a minimum carriageway width of 5m, which will accommodate on-carriageway cycle movement. These design principals also follow those set out in the original Illustrative Masterplan and Design and Access Statement that supported the Phase 2B hybrid planning application.
- 2.20 The SWDR is an east-west multimodal transport corridor, which is being delivered by WBC and designed to accommodate future bus services and a series of bus stops. Its design includes parallel dedicated 3m footway/ cycleways on both sides of the carriageway, which provide connection to the Montague Park residential development to the east with its local amenities, including the Floreat Montague Park Primary School.
- 2.21 The SWDR also provides connection for pedestrians and cyclists to Easthampstead Road, which runs north-south through the development. This provides a direct route to Wokingham Town Centre on foot or by cycle of approximately 1km to the north and an on-carriageway cycle route to Crowthorne, which is approximately 4km to the south.
- 2.22 Within the development, the new Primary School and District Centre have direct pedestrian and cycle access via the SWDR. Pedestrian access to this multimodal transport corridor will also be possible via a combination of Shared Surface Streets or connections with the 2m footpath network that runs throughout the Site Wide Masterplan.
- 2.23 The network of Shared Surface Streets and supporting Shared Surface Lanes are 4.8m in width, reducing to 4.1m, where they serve 10 dwellings or less (See Street Hierarchy Table for further details). These streets contain reduced design speeds and distinct surface finishes to raise awareness to vehicle drivers that they are entering a different environment that is shared with cyclists and pedestrians.
- 2.24 The footpath network provides a series of vehicle free, landscaped routes that have been designed to minimise the need to cross carriageways within the development, thereby increasing their attractiveness as quiet and safer routes for journeys on foot.
- 2.25 The footpath network provides pedestrian access to destinations within the development including the play areas, allotments and the SANG and, along with the Primary School and District Centre, will be supported by a series of wayfinding signage throughout the development.





Street Hierarchy Plan

MOVEMENT HIERARCHY

- 2.26 The strategic movement framework was established as part of the hybrid application, governed by the Access and Circulation Parameter Plan, and the Access and Movement Plan, and Footpath and Cycleways Plans in the DAS. These plans established an integrated and permeable framework both within the site and to the wider surrounding area, with particular focus on connectivity to the town centre.
- 2.27 The Pedestrian and Cycle Movement Plan in this Code (see previous spread) updates and expands upon the information provided in the original application to demonstrate a comprehensive, connected and integrated approach to movement by sustainable modes across the site as part of informing subsequent reserved matters.
- 2.28 The street hierarchy illustrated defines the framework of development parcels and is supported by the Street Hierarchy Table and cross sections on subsequent pages of this Code, which provide detailed guidance on the criteria for each street.



Criteria*	Target Speed	Traffic Calming *2	Direct Access	Parking Provision*4	Bus Access	Carriageway Width	Footway Width	Verge*5	Service Margin
Secondary Street**	• 20mph	• Junctions at frequent spacing • Lay-bys for parking • Visual cues*3	• Yes	• Lay-by	• No	• At least 5.5m	• 2.0m footway both sides	• 2m wide verge adjacent to the carriageway (if street trees provided)	• N/A
Tertiary Street	• 20mph	• Tighter corner radii • Junctions at frequent spacing • Lay-bys for parking • Visual cues*3	• Yes	• Parallel on-street	• No	• At least 5.0m	• 2.0m footway both sides unless against open space	• None	2m both sides unless against open space. If adjacent to open space, 2m one side and 1m against open space, reducing to 0.5m if no services or lighting columns.
Shared Surface Street	• 15mph	• Tighter corner radii • On street parking • Visual cues*3	• Yes	• Parallel and perpendicular onstreet	• No	• At least 4.8m • 4.1m where less than 10 dwellings	• Shared surface	• None	• 2m both sides
Shared Surface Lane	• 15mph	• Tighter corner radii • On street parking • Visual cues*3	• Yes	• Parallel and perpendicular onstreet	• No	• At least 4.8m • 4.1m where less than 10 dwellings	• Shared surface	• None	2m one side and 1m against open space, reducing to 0.5m if no services or lighting columns.
Private Drives	• 15mph	• Tighter corner radii • On street parking • Visual cues*3	• Yes	• Parallel and perpendicular onstreet	• No	• At least 4.1m	• Shared surface	• None	• N/A

Notes:

*Street Character: The street typologies in the table above have been informed by the Street Hierarchy at Appendix A of the Living Streets: Highways Design Guide, comprising: Secondary Streets; Tertiary Streets; Shared Surface Streets; and Private Drives. A Shared Surface Lane typology has also been introduced to the hierarchy. This is very similar in all technical aspects to the Shared Surface Street, but the key difference relates to this street having development on one side only. Therefore, the service margin criteria differ on the open space side of the street, reducing the extent of hard surfaced area and dominance of the street.

*2 Junction Design: Junction designs will reflect the highway code, which identifies that pedestrians and cyclists have priority when using a footway or cycleway which crosses an access, such as through a change of carriageway materials. The layout of streets will reflect both Wokingham guidance and Manual for Streets so that the street geometry controls vehicle speeds rather than having to rely on unsympathetic traffic-calming measures.

*3 'Visual clues' can include: Surface material changes at junctions and potential carriageway narrowing; Secondary Streets – Trees, formal crossings; Tertiary streets – formal crossings Shared streets – variations in planting where provided, variation in building lines

*4 Parking spaces provided on the adopted highway will be unallocated or for the use of visitors. In this respect, care will be taken to ensure the on-street parking areas are designed so that they do not impinge on the operation of the street or footways.

*5 Street trees are an important component within the streetscape contributing towards water and carbon management as well as promoting health and wellbeing. Trees will be chosen for their scale, form and ability to thrive within the streetscape environment. Appropriate rooting and growing space will be provided for all trees, more guidance on street trees can be found within the Landscape Design Statement.

*6 Where overrun-able areas are proposed, then Table A2 of Wokingham's guidance document

Living Streets: Highways Design Guide identifies granite setts or Marshall's Mistral paving. The technical specification should be agreed with the Wokingham Section 38 Team.

*7 RNIB guidance states that for a kerb to be reliably detectable it must have an upstand of at least 60mm. Where footways are provided, such as the secondary and tertiary streets, then kerbs are provided in excess of this. Shared space streets are then utilised where the volume and speeds of traffic are low in accordance with WBC guidance.

Gradient	Gradient (min)	Centreline Radii	Swept Path	Junction Radii (min)*2	Junction Sightlines (min)	Forward Vis (min)	Street Lighting Height/ Spacing	Carriageway Material*6	Kerbing*7	Pavement Material*6
• Generally 1 in 20	• 1 in 125 absolute minimum	• Determined by tracking	• Car and Refuse	• 6m	• 2.4m x 25m	• 25m	• 5m columns/ 25m spacing	• Tar Macadam. Block paving to key areas	• 125mm upstand	• Tar Macadam and/or block paving
• Generally 1 in 20	• 1 in 125 absolute minimum	• Determined by tracking	• Car and Refuse	• 6m	• 2.4m x 25m	• 25m	• 5m columns/ 25m spacing	• Tar Macadam. Block paving to key areas	• 125mm upstand	• Tar Macadam and/or block paving
• Generally 1 in 20	• 1 in 125 absolute minimum	• Determined by tracking	• Car and Refuse	• 4–6m	• 2.4m x 17m	• 17m	• 5m columns/25m spacing	• Tar Macadam or block paving	• 6mm to 50mm	• Tar Macadam and/or block paving
• Generally 1 in 20	• 1 in 125 absolute minimum	• Determined by tracking	• Car and Refuse	• 4–6m	• 2.4m x 17m	• 17m	• 5m columns/25m spacing	• Tar Macadam or block paving	• 6mm to 50mm	• Tar Macadam and/or block paving
• Generally 1 in 20	• 1 in 125 absolute minimum	• Determined by tracking	• Car	• 2–4m	• 2.4m x 17m	• 17m	• 5m columns/25m spacing	• Tar Macadam or block paving	• None	

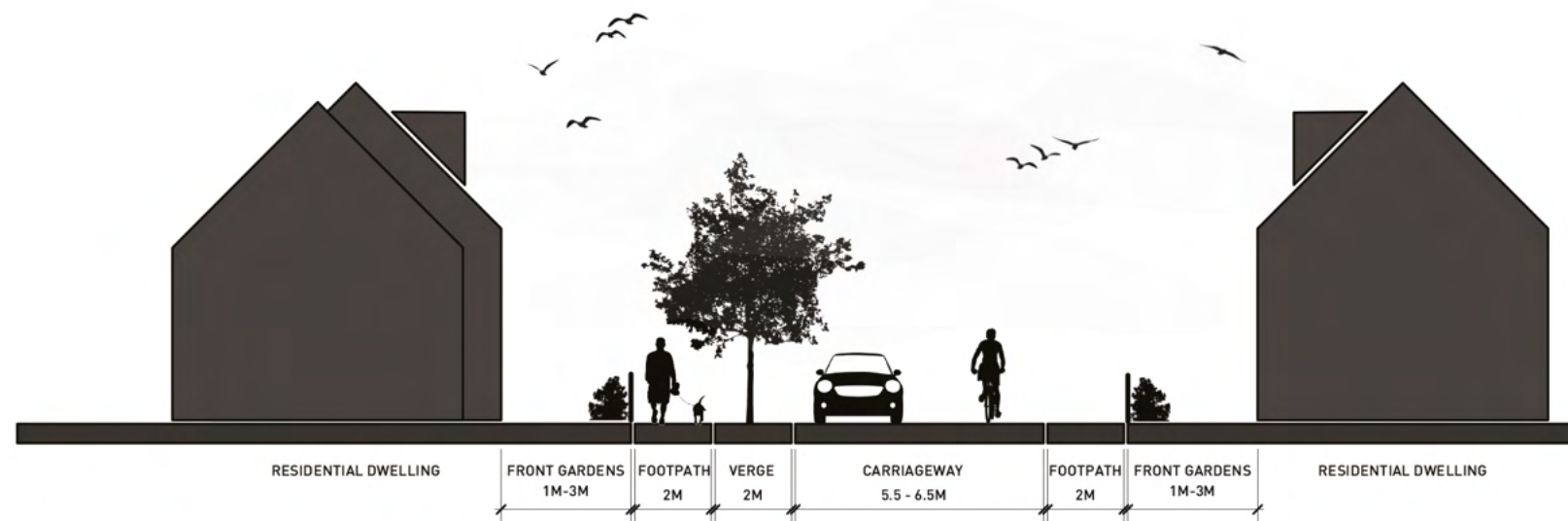
** ‘Secondary Street with Bus’ will have the following variations to the Street Hierarchy Table criteria: Carriageway Width: At least 6.5m. Verge: 3m adjacent to the carriageway on one side. Footway Width: 3m shared footway/cycleway on one side, with 2m footpath on other. Bus Access: Yes.

Street Hierarchy Table

Street Character

Secondary Street

2.29 The Secondary Street is the most significant street within the hierarchy (beyond those streets being delivered by Wokingham Borough within the SDL). Secondary Streets feature within parcels R11 and R14 due to the number of dwellings within the former, and the latter provides a connection between the new Eastern Gateway roundabout and Waterloo Road south of the SDL. In both instances, the Secondary Street connects back to the South Wokingham Distributor Road. As such, Secondary Streets will serve an important movement and place-making function within the parcels. The adjacent built form will make a key contribution to the character of these streets, but the technical criteria governing street widths, verges, parking, materials and detailing will also have a considerable influence on the character of these streets, differentiating them from others in the hierarchy.



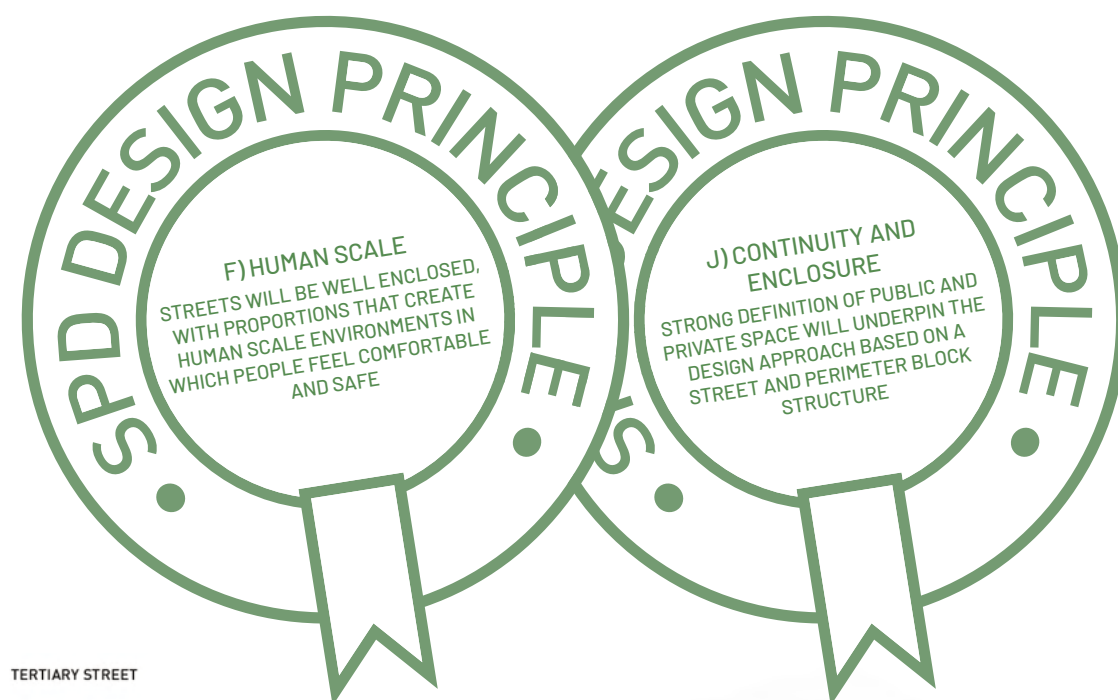
Secondary Street Cross Section



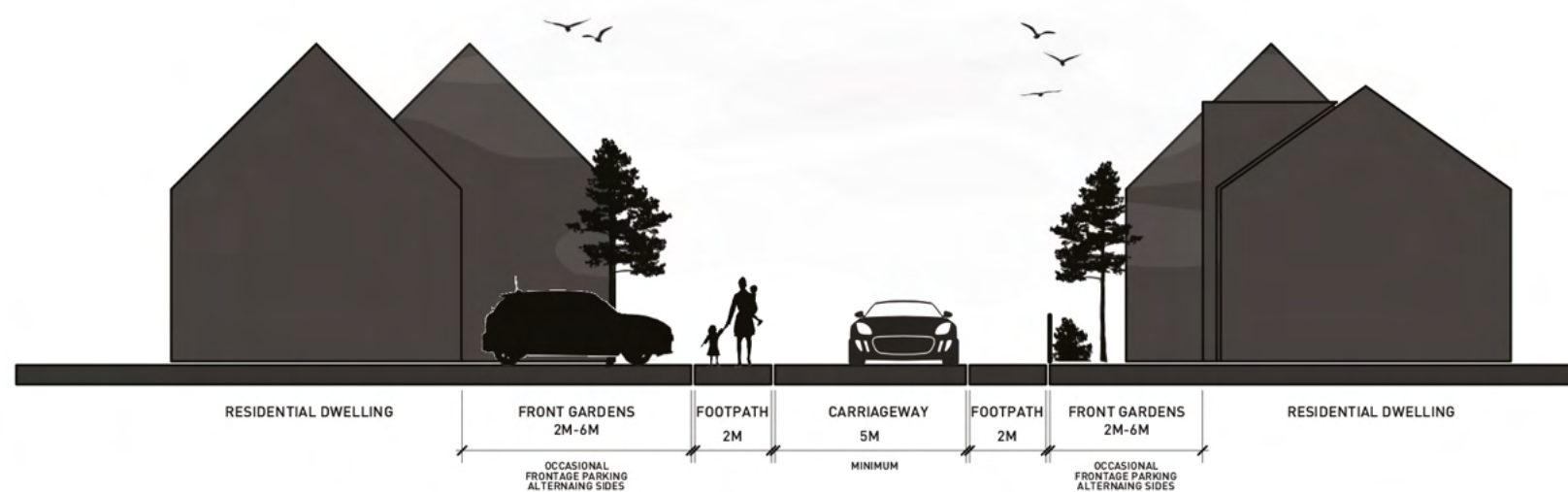
Secondary Street Plan Vignette

Tertiary Street

2.30 Similar in many ways to the Secondary Streets, the Tertiary Streets are distinct by reduced road widths and an absence of verges. Tertiary Streets will be commonplace within the heart of the development parcels and provide a transition to the lower order streets in the hierarchy.



TERTIARY STREET



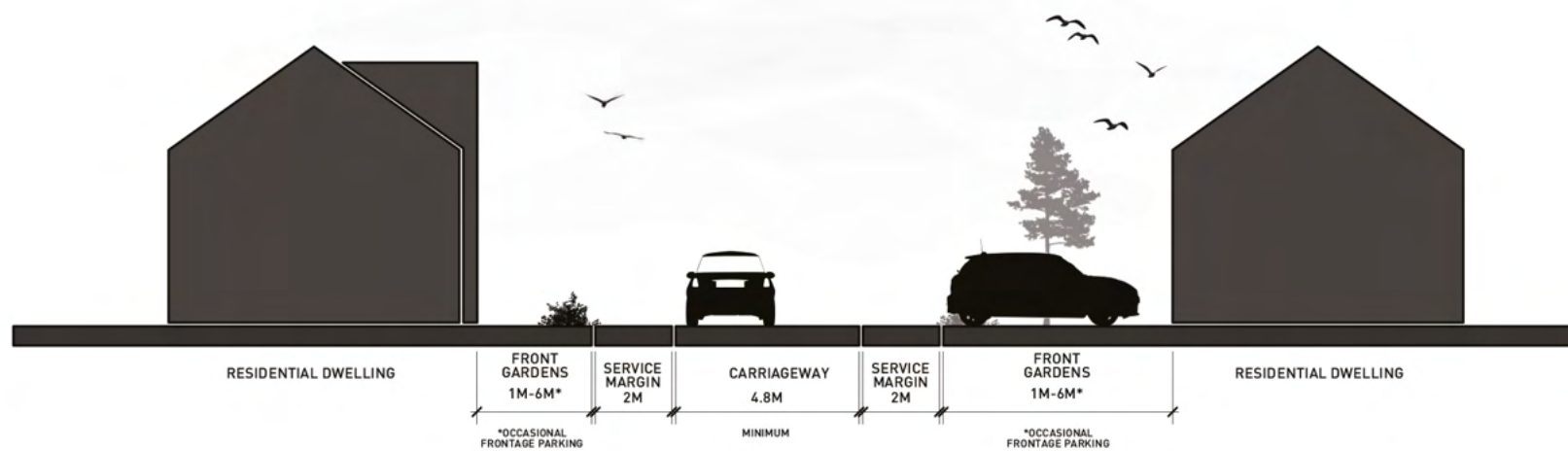
Tertiary Street Cross Section



Tertiary Street Plan Vignette

Shared Surface Street

- 2.31 Shared Surface Streets will be notably different in the hierarchy and clearly distinguishable from the higher order streets by the shared surface finish with minimal kerb upstands. Reduced design speeds, reduced carriage widths, and perpendicular and parallel parking will also aid this differentiation.



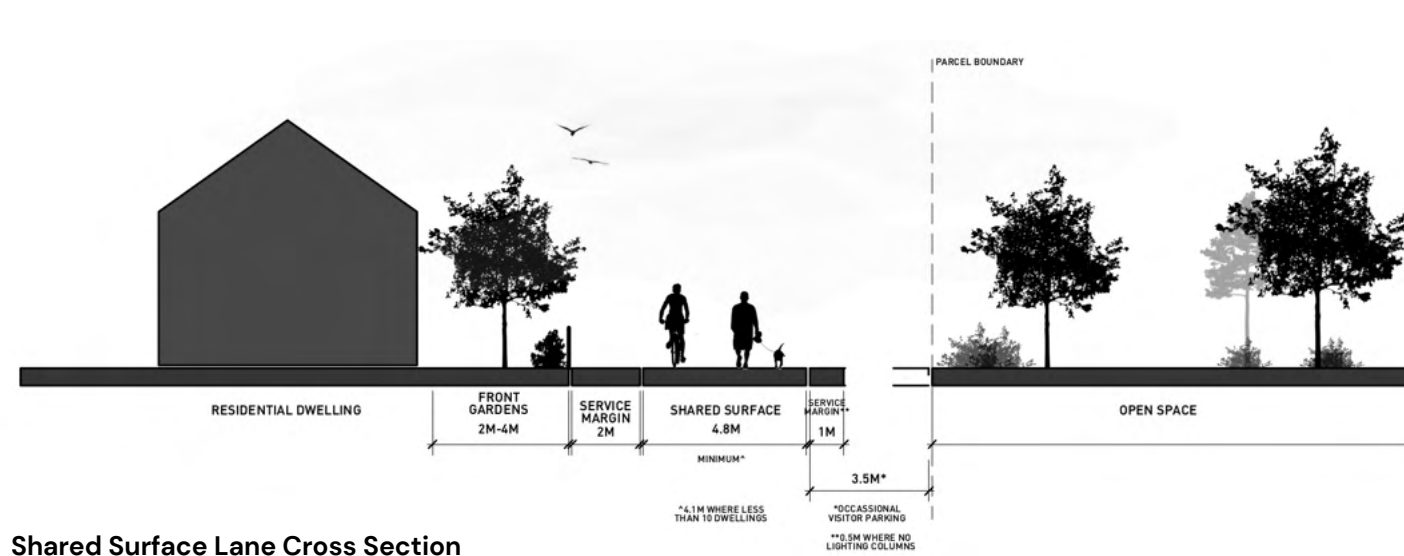
Shared Surface Street Cross Section



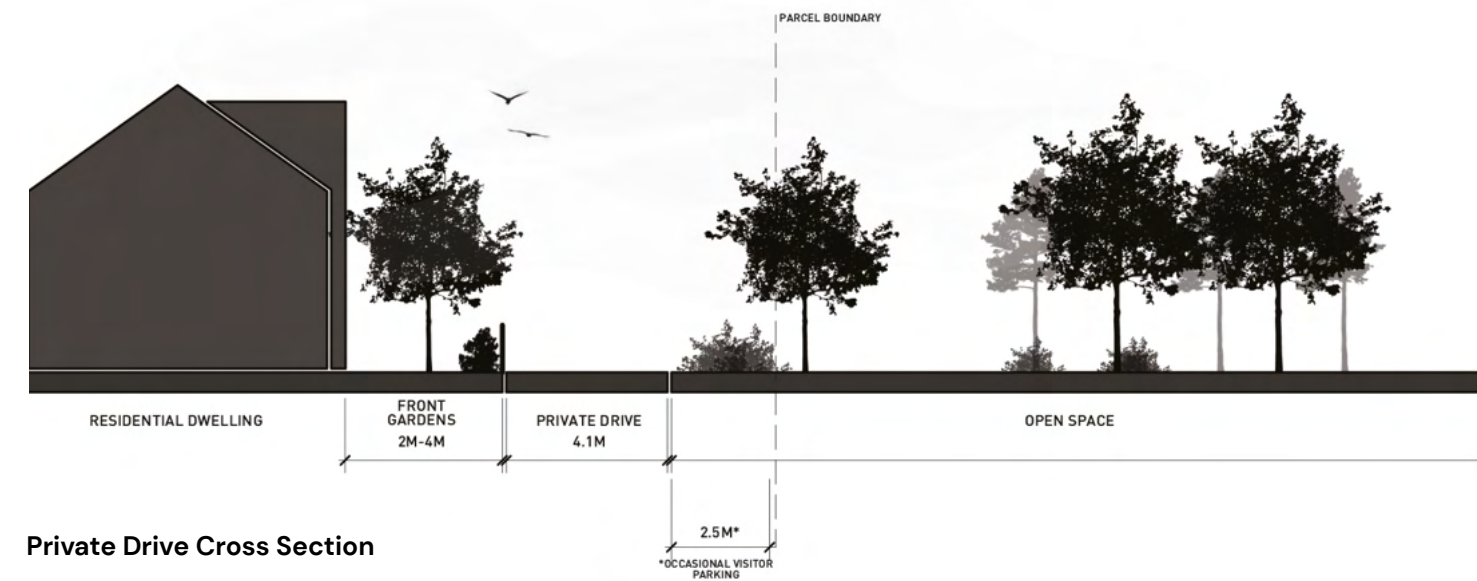
Shared Surface Street Vignette

Shared Surface Lane & Private Drives

2.32 Shared Surface Lanes and Private Drives locations are not specified in the coding instructions. However, by their nature these will form the streets that are either on the edge of the parcels or provide a short connecting street to the edge of the development parcels. Shared Surface Lanes and Private Drives will be obviously distinct where development is on one side only, and in the case of Private Drives, street widths are likely to be the narrowest in the hierarchy and often forming discontinuous routes for vehicular traffic.



Shared Surface Lane Cross Section



Private Drive Cross Section

BLUE/ GREEN INTERVENTIONS MATRIX

							Within strategic open space
							
	Avenue	Rain Garden	Trees in Rain Garden	Feature Tree Planting	Trees between parking	Swale	Focal Tree
Secondary Street						Adjacent to streets within strategic open space.	Within strategic open space. Positioned to terminate vista from street.
Tertiary Street			 			Adjacent to streets within strategic open space.	Within strategic open space. Positioned to terminate vista from street.
Shared Surface						Adjacent to streets within strategic open space.	Within strategic open space. Positioned to terminate vista from street.

Notes

1. This Blue/ Green Interventions Matrix should be read in conjunction with the Street Hierarchy Table in the Design Code; and the Landscape Design Statement Section 7 – Streetscape pages 48–51.
2. Within each street type, one of the highlighted interventions will be delivered as a minimum but the suite represents the typical interventions that can be expected subject to local circumstances.
3. Focal Trees provided at key locations.

BLUE/ GREEN INTERVENTIONS

- 2.33 Blue and green infrastructure will be integrated within the different street typologies through the development and contribute to managing water run-off, water quality and enhancing the visual amenity of the streets. The blue and green infrastructure will comprise features such as rain gardens, rain gardens with tree planting, focal tree planting and permeable paving.
- 2.34 The Site-wide Landscape Design Statement focuses on the blue and green interventions and should be read in conjunction with this section of the Code covering street typologies. Notwithstanding, to provide clarity on those interventions that may be expected in each street, the matrix opposite provides an overview.



PARKING STRATEGIES

- 2.35 Parking provision will accord with the standards set out in Appendix 2 of the Managing Development Delivery Local Plan February 2014. The parking strategy for the site is an integral part of the design approach for each character area. However, irrespective of the character area, parking to the side or behind the building line will be the most common approach to allocated parking, reducing the prominence of cars within the street and providing opportunities for visitor and unallocated parking within the public realm.
- 2.36 Parking courts may be positioned to either the front or rear of dwellings and are most appropriate in places where they serve apartments according to the Borough Design Guide. The Guide identifies that rear parking courts 'potentially reduce security at the rear of dwellings and should be avoided where possible'. As a consequence, other parking typologies should be considered first in preference to rear courts.
- 2.37 Notwithstanding, there may be instances for good placemaking or other reasons where rear parking courts are appropriate as part of a balanced and varied approach to accommodating the parked car. The potential disadvantages of parking courts will be mitigated through the application of the following principles:
- Typically serve no more than 6 dwellings;
 - Allocated parking spaces should be close to and easily accessible to the dwellings they serve;
 - Courts will be well overlooked and designed clearly to be semiprivate;
 - Designed as spaces in their own right to create a 'sense of place', with high quality hard and soft landscape (including tree planting), and lighting;
 - Flats over Garages, or chauffeur units may be included to improve security.

Chauffeur Units (FoGs)

- 2.38 Chauffeur units, either within parking courts or as part of the main street composition facing the public realm, should be designed with care. These dwellings should contribute to the quality of the public realm rather than just a conduit to accommodate more parking.
- 2.39 Where facing the public realm, chauffeur units should have an active elevation to the ground floor beyond a single front door to the accommodation above.

Visitor Parking

- 2.40 Visitor parking will typically be provided on street, integrated into the overall street design, as part of creating attractive, convenient provision that will deter parking in inappropriate locations.
- 2.41 Parallel and perpendicular visitor parking spaces are acceptable.
- 2.42 These can comprise clearly delineated bays, or integrated with the carriageway design. In the former, delineated bays should also be integrated with the adjacent footways and street trees, and comprise no more than 6 spaces without a break.
- 2.43 Visitor parking within front or rear courts will be acceptable, but should comprise a small proportion of the overall visitor provision and should not be used in preference to on street provision.

Cycle Parking

- 2.44 The following key principles are proposed to ensure that cycle parking is provided in accordance with Wokingham Borough Council Standards for all dwellings within the development:
- The provision of 1 cycle space per 1-bed dwelling, 2 cycle spaces per 2-bed dwelling and 3 cycle spaces for dwellings with 3 or more bedrooms.
 - Where cycle parking is accommodated within garages then they will be provided with dimensions of 7m x 3m to accommodate both a vehicle and bike storage.
 - Alternatively, cycle parking will be provided via an appropriate cycle store in gardens with a minimum dimension of 2m x 0.9m to accommodate one cycle. Furthermore, gardens will benefit from rear or side access meaning that residents will not need to bring their bicycles through the house.
 - Cycle parking for apartments will be located within a dedicated, secure and covered cycle store. These will be supplemented by Sheffield Stands or similar located in close proximity to the apartment block for the use of short term visitors.
- 2.45 Where FOGs are provided, cycle storage could be promoted within their own amenity space, if available, with a store size of 2m x 0.9m.



Traffic Calming

- 2.46 In accordance with Manual for Streets principles and the Living Streets Highways Design Guide, the design of development should: ‘create an environment that naturally encourages appropriate speeds. Where traffic flows are low, and the primary purpose of an area is a place to live, speed limitation should form and integral part of the overall design’.
- 2.47 Details of appropriate speed restraint measures for South Wokingham are set out below, with an emphasis on horizontal measures. Vertical features will rarely be accepted.
- Junctions at Frequent Spacing
 - Lay-bys for parking
 - Tighter corner radii
 - Visual cues.
- 2.48 The Street Hierarchy Table earlier in this section of the Code identifies which of the above measures are potentially appropriate to each street in the hierarchy. Visual cues can comprise:
- Surface material changes
 - Carriageway narrowing and crossings
 - Street trees
 - On street parking
 - Variation in building lines and closure of vistas

ELECTRIC VEHICLE CHARGING

- 2.49 Electric Vehicle Charging (EVC) requirements for Wokingham are included at Appendix E of their Living Streets Highways Design Guide and advocates the introduction of passive and active charging points within new residential developments on a phased basis between 2019 and 2030. Active points are those that are provided ready for use whereas passive points comprise a wired-in system that can be readily converted later.
- 2.50 The guidance also distinguishes between ‘on-plot’ and ‘off-plot’ parking spaces. The ‘on-plot’ provision applies where the space is within the residential curtilage and may also include a garage or car port. The ‘off-plot’ spaces are those located outside the dwelling’s curtilage and can be an allocated or unallocated space within a parking court or near to (or adjacent to) a dwelling.
- 2.51 The table opposite identifies the level of charging points advocated by the Wokingham Borough Council guidance based on 2019, 2026 and 2030 timescales.
- 2.52 Part S (June 2022) of the Building Regulations covers EV Charging for new builds and essentially requires 1 active charging point per dwelling and new development at South Wokingham will be expected to comply with this requirement, exceeding the WBC standards on EVC.
- 2.53 EVC positions will be governed by the following principles::
- On plot side parking – fixed to the side of the dwelling;
 - On plot front parking – fixed to the front of the dwelling or freestanding within the curtilage, integrated with the boundary treatments/ planting strategy to ensure these do not detract from the streetscene.
 - Off-plot courtyard parking – freestanding. Where front courts are used, charging positions will be integrated with the boundary treatments/ planting strategy to ensure these do not detract from the streetscene.

Minimum Electric Vehicle Charging Requirements

Year	On-Plot Spaces		Off Plot Spaces	
	Passive	Active	Passive	Active
2019	35%	5%	24%	5%
2026	50%	20%	40%	10%
2030	70%	30%	60%	20%

BIN AND CYCLE STORAGE

Refuse Vehicles

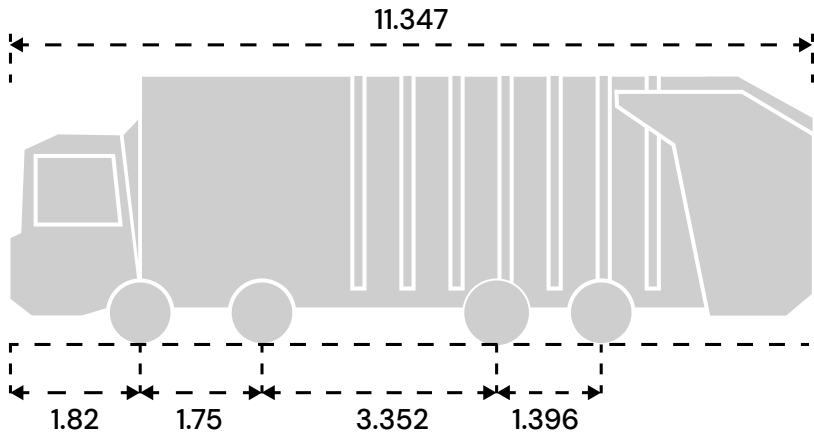
2.54 The design of the internal street network and adopted roads will be suitable for a large refuse vehicle with sufficient allowance for turning manoeuvres. Wokingham use a 11.4m long refuse vehicle as identified below.

Waste and Recycling Collection

- 2.55 The Living Streets: Highways Design Guide requires the collection of refuse bins from the edge of the highway. Refuse vehicles will not normally access private roads, and suitable bin storage facilities should be provided ideally within 10 metres of the adopted highway.
- 2.56 Collection points should only be provided for apartments rather than individual self-contained dwellings.
- 2.57 The maximum walk distances between a refuse vehicle and the refuse collection point are:
- 25m for standard collections
 - 10m for bin stores at communal buildings and/ or ‘Euro bins’
- 2.58 The maximum walk distance for residents to the roadside or collection point is 30m.

Dwelling Refuse

2.59 The design of layouts should allow residents to store waste and recycling receptacles away from dwelling frontages and within the dwelling curtilage. Bin stores should service apartments only in accordance with the Waste & Recycling Guidance for Developers and Management Agents (Updated August 2023). Bin store design and layout will accord with the specifications in the Waste & Recycling Guidance for Developers and Management Agents (Updated August 2023) and Wokingham’s visual ‘Do’s and Don’ts for Communal Properties’ guidance.



Large Refuse Vehicle (4 axle)

Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.330m

Wokingham Refuse Vehicle Specifications

BUILT FORM

Density

- 2.60 The density strategy for Phase 2b perpetuates the approach envisaged in the Hybrid application. Three distinct density bands cover the residential parcels and are intrinsically linked with the Character Areas and approach to place-making.
- 2.61 The highest density band (35–45dph) relates to CA1(A) Parkside Contemporary; and CA1(B) Ludgrove Contemporary Urban character areas (previously Urban Residential in the Hybrid Application) and typically follows the line of the SWDR and associated open spaces. Higher densities in this area will help provide definition to these large streets and open spaces and provide more dwellings within close proximity to the proposed public transport routes, contributing towards creating a sustainable place for the future.
- 2.62 At the other end of the spectrum, the lowest density areas (25–35dph) coincide with the CA3 Rural Edge Character Area and feathers out to a more rural landscape. Facing the wide open countryside or areas of important established woodland, lower densities in these areas will help to facilitate a softer transition between the development and the rural surrounding, providing more opportunities for soft landscaping within and between development plots.
- 2.63 Within the centre of most parcels, and making up a substantial proportion of Phase 2b, the mid range density band (30– 40dph) provides an opportunity to create the varied townscape qualities associated with the CA2(A) Waterloo Edge; and CA2(B) Neighbourhood Residential (previously General Residential in the Hybrid Application), accommodating a variety of forms and heights. This mid density band is also designed to make efficient use of land, and provide a transition between the higher and lower densities as part of a considered transition towards the edges of development parcels.

South Wokingham



Density Plan

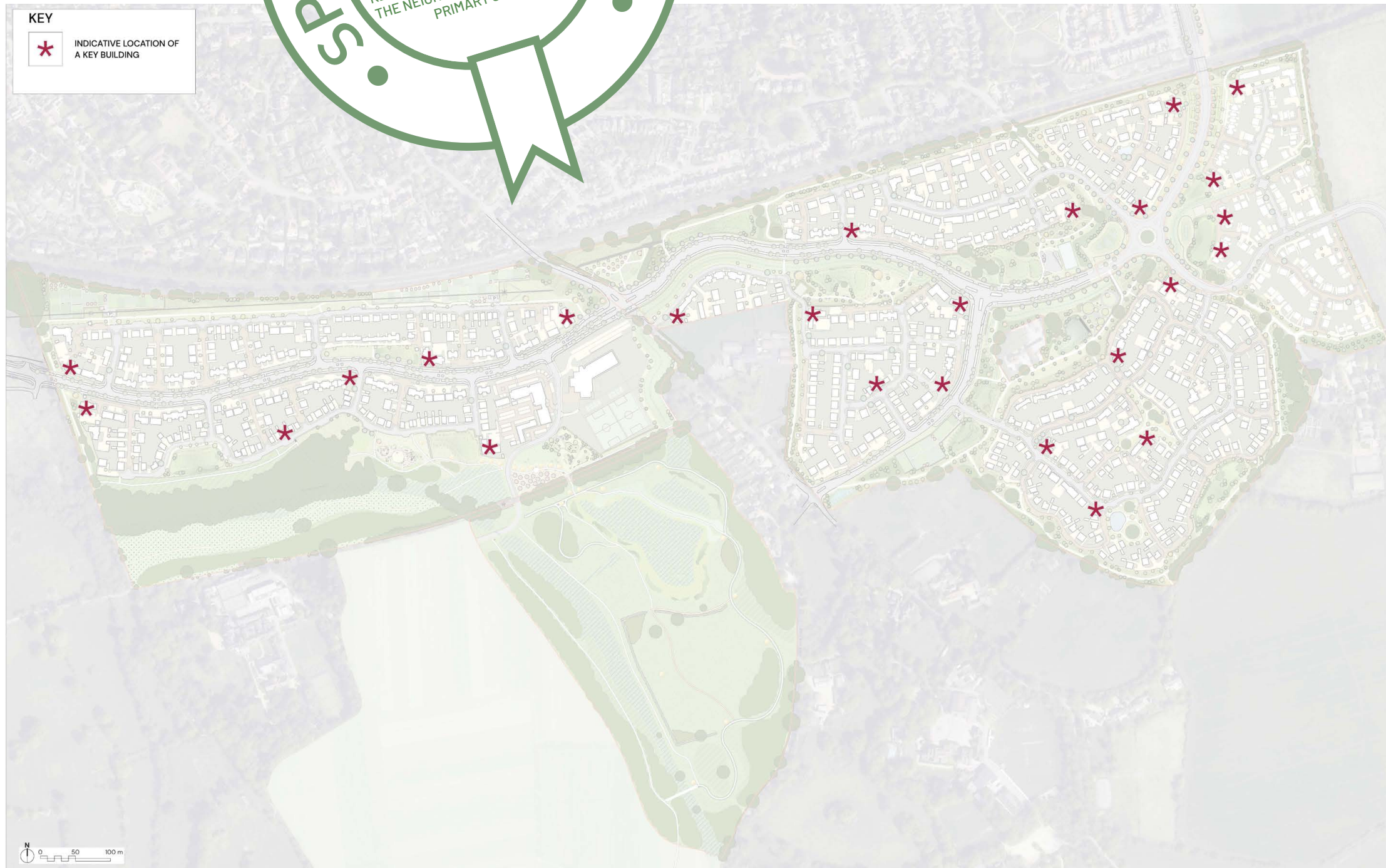
Phase 2b Design Code

Building Heights

- 2.64 The broad disposition of building heights within Phase 2b have been fixed as part of the Hybrid application. The Building Heights Plan (opposite) respects this framework and has refined the boundaries to accord with the Detailed Site-Wide Masterplan on which the plan is based.
- 2.65 The building heights strategy works in tandem with the Character Areas and Density Plans to provide opportunities for increased heights along the SWDR (within the CA1(A) Parkside Contemporary; and CA1(B) Ludgrove Contemporary Urban character areas), typically up to 3 storeys. Heights will generally reduce towards the southern edges of Phase 2b, with a maximum of 2 storeys to the Rural Edge Character Area.
- 2.66 At key gateways to Phase 2b along Easthampstead Road opposite the Local Centre and at the crossing of the railway line, localised increases in heights to 4 storeys are permitted as part of creating a focus for the development and responding to changes in topography.
- 2.67 Building the heights will be measured from ground floor DPC to ensure a consistent approach across the site.



Building Heights Plan



Key Buildings Plan

KEY BUILDINGS

- 2.68 Key buildings will be situated within the development in prominent locations to aid legibility, wayfinding and contribute to placemaking.
- 2.69 These buildings will be significant in the development due to either their location, height, detailing, materials or combination thereof.
- 2.70 Taller buildings will require special consideration, having regard to their siting, relationship to context, impact on views/ sightlines and composition, including how they meet the ground. These shall have regard to the immediate context and wider local character to create a coherent form of development.

Corner Turner Buildings

- 2.71 Corner turner buildings will be located throughout South Wokingham to provide an active frontage and surveillance at junctions. The key principles applying to corner turner building are:
- One side of the junction to incorporate dwelling entrance, with the entrance relating to the higher order street;
 - Corner turner buildings will provide windows to both elevations;
 - Corner turner buildings shall respect the characteristics and parameters of the character area to which it relates;
 - Buildings to provide active frontage to street;
 - Set back from adoptable highway by a minimum of 1.2m to allow for landscaping and/ or suitable boundary treatment.

DESIGN CRITERIA

Perimeter Blocks

2.72 Perimeter blocks for residential development will be created through a series of connected streets within the site. Built development should define the edge of the perimeter blocks and should face outwards onto the surrounding streets, creating a clear distinction between public fronts of buildings and private backs. This naturally enhances the safety and security of the site. Built development within perimeter blocks should also minimise the number of private rear gardens adjoining publicly accessible areas (including parking courts). Where these do occur walls to the public boundary should be provided rather than fences.

Separation Distances

2.73 The Wokingham Borough Residential Design Guide SPD requires new housing to provide easy access to some form of amenity space. The size of the amenity space should relate to the house type and the proposed number of occupants. Central to this approach is providing sufficient space that allows a variety of activities to take place within the private space and achieving privacy to the rear of the dwelling.

2.74 One way in which this approach is safeguarded is through minimum separation distances. A minimum garden length of 11m is typically required, with variations set out in the table opposite, reproduced from the SPD.

Separation distances to maintain privacy and limit sense of enclosure		
No. Storeys	Type of separation	Min. distance (metres)
1 to 2 storeys (height measured to eaves)	flank to boundary	1
	front to front elevation	10
	back to back elevation*	22
	back to flank	12
Over 2 storeys (height measured to eaves)	flank to boundary	2
	front to front elevation	15
	back to back elevation (houses to houses)*	26
	back to back elevation (flats to houses)*	30
	back to back elevation (upper floor living room on a house above gd. fl.)*	30
	back to back elevation (flats to flats)*	30
	back to flank	15

Source: Design SPD, February 2012, Appendix 13, Page 46

Separation Distances Table from WBC Residential Design Guide

Design principle	New housing	Minimum distance
R15	Front to front across street	10m
R15	Rear to rear of dwellings	22m
R16	Flank wall to boundary	1m
R16	Flank wall to rear of dwelling	12m

*Note: This back to back dimension shall also be applied for backland infill developments for a front to rear relationship.

Caution: Standards and measurements should only be applied once the overall character and nature of the scheme is agreed. Schemes in more urban settings or with a more intimate character will often require a tighter, more compact layout, for instance. In areas where overall distances are generally greater than those shown, these dimensions should be regarded as minimum standards.





APARTMENT DESIGN

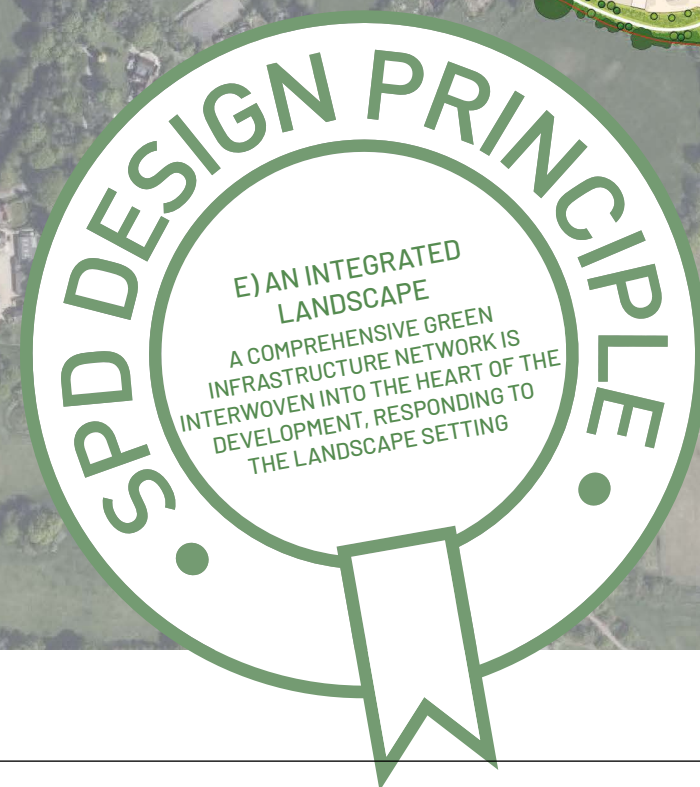
2.75 Apartments provide an opportunity to help create a distinctive, successful, high quality place in accordance with national and local policy objectives. Apartments should form a coherent part of the street and perimeter block structure and help define the street in accordance with the Borough Residential Design Guide. Often higher or more prominent than the adjacent residential uses, apartments are particularly noticeable in the streetscape, and require particular care to be given to the design approach in order for these structures to positively contribute to the quality of the street and wider development.

2.76 Apartments should be designed to embrace the following principles:

- Considered as three dimensional whole, so that elements such as bay windows and balconies are designed in from the start;
- Flat, mono-pitched, or pitched roof forms will be acceptable and should respond to the traditional or contemporary approach of the Character Area of which they will form part. Where pitched roof forms are used, these should be carefully articulated to break down the massing of the roof, without slackening the pitch. Deep plan or square apartments blocks will often be more challenging to assimilate with appropriate roof forms and will typically be discouraged;
- Apartments shall have an entrance onto the street at the ground floor. Where allocated parking is incorporated within a rear court, a secondary entrance should be provided from the court to discourage unintended parking close to the street entrance;
- Apartments will have access to some form of amenity space – including usable balconies.
- Balconies should be usable, with adequate space for a table and chairs, and contribute to the activity and surveillance of streets by being situated on public facing elevations where possible.
- Where taller than the surrounding dwellings or uses, apartments should be sited to perform a townscape function, including reinforcing the significance of particular (often higher order) streets, aiding legibility to serve a landmark or key building function, and providing enclosure of spaces.

Key

	Existing trees and vegetation to be retained		Native shrub planting		Estate railings		Overhead cables
	Feature tree planting		Ornamental shrub and herbaceous planting		Post and rail fencing		132kv cable route
	Public open space tree planting		Wetland shrub planting (upper slopes)		Knee rail		
	Fruit tree planting		Wetland shrub planting (lower slopes)		Footpath		
	Street tree planting		Wetland planting (aquatic and marginal)		Feature area of hard landscaping		
	Infrastructure trees		Amenity grassland		Seating		
	Woodland edge planting		Bulb planting		Picnic bench		
	Structural tree and shrub planting		Meadow grassland		Play space		
	Native hedgerow planting		Wildflower meadow		Allotment/Community garden		
	Semi-ornamental planting		Wetland grassland		Parking associated with allotment		



Nature & Public Areas

LANDSCAPE STRATEGY

- 2.77 Condition 4, in addition to a detailed Site-Wide Masterplan and Design Code, requires a Landscape Design Statement to be submitted. The Landscape Design Statement has been prepared as a sister document to this Design Code and addresses two key elements: Public Open Space Strategy; and On-plot Landscape Strategy. The latter of these (relating to on plot landscaping covering: tree planting, shrub and herbaceous species in relation to each of the Character Areas identified in this Design Code) is particularly relevant to designers working up reserved matters applications for individual parcels.
- 2.78 The Open Space Strategy Plan (left) is reproduced from the Landscape Design Statement and is the overarching plan governing the strategic landscape framework, distinct from the on-plot design.
- 2.79 This Design Code should be read in conjunction with the Landscape Design Statement to fully understand the instructions and principles covering Land at Phase 2b.

Street Trees

- 2.80 Street trees are an important component within the streetscape contributing towards water and carbon management as well as promoting health and wellbeing. Street trees will be provided within green verges along Secondary Streets and within appropriate areas of green space within all other street typologies. Trees will be chosen for their scale, form and ability to thrive within the streetscape environment. Appropriate rooting and growing space will be provided for all trees. More guidance on street trees can be found within the Landscape Design Statement.

ECOLOGY

- 2.81 The following on-plot principles will be expected to be integrated as part of reserved matters applications:
- 2.82 Build-in Woodstone bat boxes (or similar) should be incorporated into 20% of all new buildings. Bat boxes should be installed at a minimum of 3 metres on the southern or easternmost aspects of the buildings. Two swift nest boxes should also be incorporated into 20% of all new buildings. As swifts are a colonial species the boxes must be installed in pairs, as close as possible on the same elevation. Swift boxes are preferred over more general bird boxes, as other generalist bird species will use swift boxes as well as swifts. Swift boxes should be installed as high as possible on the northern or western aspects of the buildings.
- 2.83 New external lighting will comprise hooded luminaires mounted horizontally with no light output above 90° and directed away from vegetation, particularly the boundary woodland and waterbody habitats. Ideally the bulbs should be LED and be a warm light source (2700 Kelvin or lower). LED lights emit much lower levels of UV and therefore have a lower impact on wildlife. The new lighting should be task related and lux level should be as low as possible to allow the task to be carried out safely and effectively. Guidance on task related lighting levels and mitigation options as described within the Bats and Artificial Lighting in the UK report will be followed (Institution of Lighting Professionals, Bat Conservation Trust, 2023).
- 2.84 13 x13 centimetre gaps should be created in closed board fencing to allow European hedgehogs and other small mammals to cross across the site.

