Sandymoor Supplementary Planning Document

Adopted : 24th July 2008

Operational Director
Environmental and Regulatory Services,
Halton Borough Council,
Environment Directorate,
Rutland House,
Halton Lea,
Runcorn,
WA7 2GW

This Supplementary Planning Document should be read in conjunction with the relevant policies of the Halton Development Plan.

Prepared for Halton Borough Council by:

English Partnerships
GVA Grimley
Jon Rowland Urban Design
RSK ENSR
ATKINS
Urban Graphics

Adopted: 17th July 2008

Contents

Chapter 1.0

Purpose

1.1 The Halton Unitary Development Plan (UDP) was adopted in April 2005. It contained allocations and policies to guide the development of land across the borough. Under transitional arrangements following the Planning and Compulsory Purchase Act 2004, the Plan's policies were saved for an initial period of 3 years. The Council has submitted a formal appraisal of these saved policies to, and has received direction from, the Secretary of State that certain policies (the majority) can be saved for a further period pending deletion or replacement by subsequent Development Plan Documents (DPDs) to be produced as per the timetable set out and agreed in the Local Development Scheme (LDS).

1.2 The purpose of this Supplementary Planning Document (SPD) is to complement the saved UDP policies and other those contained in other Local Development Framework (LDF) documents, to provide practical guidance and support for those involved in planning future development at Sandymoor, in east Runcorn.

1.3 The effectiveness of this SPD, together with it's compliance, or otherwise, with subsequently adopted DPD's will be monitored and reported on in the Annual Monitoring Report (AMR). Where necessary, this document will be reviewed or replaced.

1.4 This SPD has been produced in accordance with Government's Planning Regulations and the Council's consultation procedures as detailed in the Statement of Community Involvement (SCI). The SCI also sets out details of recommended consultation for the subsequent pre-application and formal planning application stages.

The key aims of development of Sandymoor are to:

- Contribute to the delivery of strategic housing numbers through development at Sandymoor;
- Create a mixed and inclusive community that offers a choice of housing and lifestyle through comprehensive development;
- Promote high-quality design to create an attractive built environment set within woodland and open spaces, with a sense of place and community;
- Give priority, where possible, to pedestrians and cyclists rather than vehicles to promote sustainable travel;
- Maximise the opportunities for access to public transport services;
- Make the most appropriate and effective use of land available by applying best practice sustainable principles;
- Work in partnership to achieve a lasting quality and form of development, working collaboratively with public, private, voluntary and community groups and organisations to deliver quality development on Sandymoor, consistent with the aims of this SPD.

1.5 By stating the Purpose and Key Aims of this SPD, the Council as the Local Planning Authority will seek to improve any development proposal that does not provide for, or meet the principles encouraged and required within this SPD and the Halton LFD.

1.6 This SPD includes:

- An overview of the Sandymoor development, its context and history (Chapters 2 & 3);
- The key design influences, constraints and opportunities (Chapter 4);
- The Masterplan and key policies which supplement policies in the Halton Local Development Framework, to which development proposals will be expected to conform (Chapters 5 to 9);
- Generic Street Design Guide Principles including additional detail guidance and advice on minimum standards for different levels in the road hierarchy, acceptable materials and suggested layout proposals (Appendix 1).

1.7 The SPD is also accompanied by the statutorily required supporting documents prepared to be read in conjunction with the policy guidance. These are the Sustainability Appraisal and the Statement of Consultation.

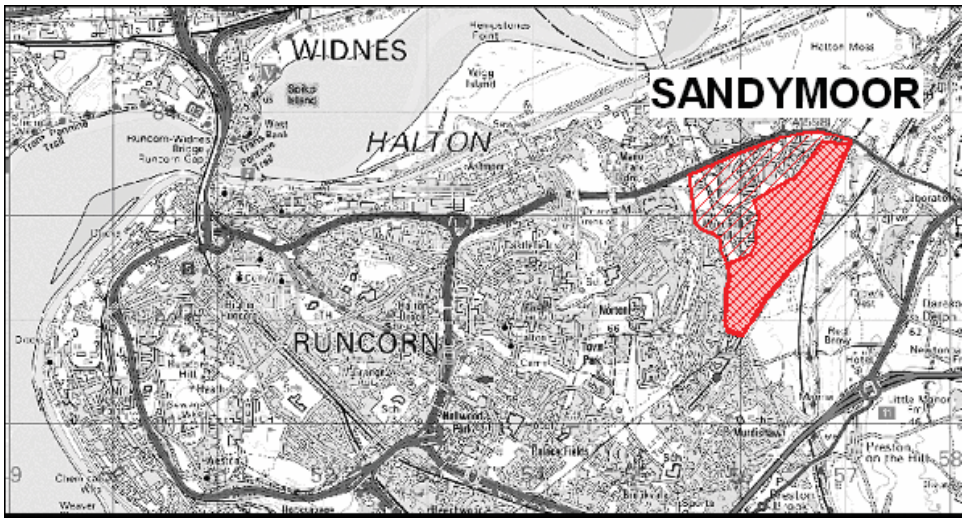
Chapter 2.0

Site Content

SITE LOCATION

2.1 Sandymoor is situated on the eastern edge of Runcorn (See Figure 2.3). The area is bound to the north by the Daresbury Expressway (A558), which provides the primary access points to the existing residential development at Sandymoor. The West Coast Main Line (WCML) and Manchester-Chester railway lines lie immediately to the east, whilst the Bridgewater Canal runs along the western and southern edges of the site.

2.2 In regional terms, Sandymoor is well connected via the M56, A56 and A558 road network, connecting the site directly with Runcorn, Manchester and Chester, in addition to the M6 corridor. Runcorn East train station lies approximately 1.5km to the south of the site, providing a link with rail services to Warrington, Manchester, Chester, The Wirral and North Wales.



Reproduced from the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationery Office Crown copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings.

Figure 2.1 Sandymoor location plan

SITE DESCRIPTION

2.3 The Sandymoor neighbourhood comprises approximately 147 hectares of land, of which some 46 hectares have already been developed. The remaining undeveloped Masterplan area primarily comprises open land, paddocks and woodland. The sites' topography is relatively flat, but slopes gradually, falling to the north, rising more steeply alongside the Bridgewater Canal towards the western boundary of the site.

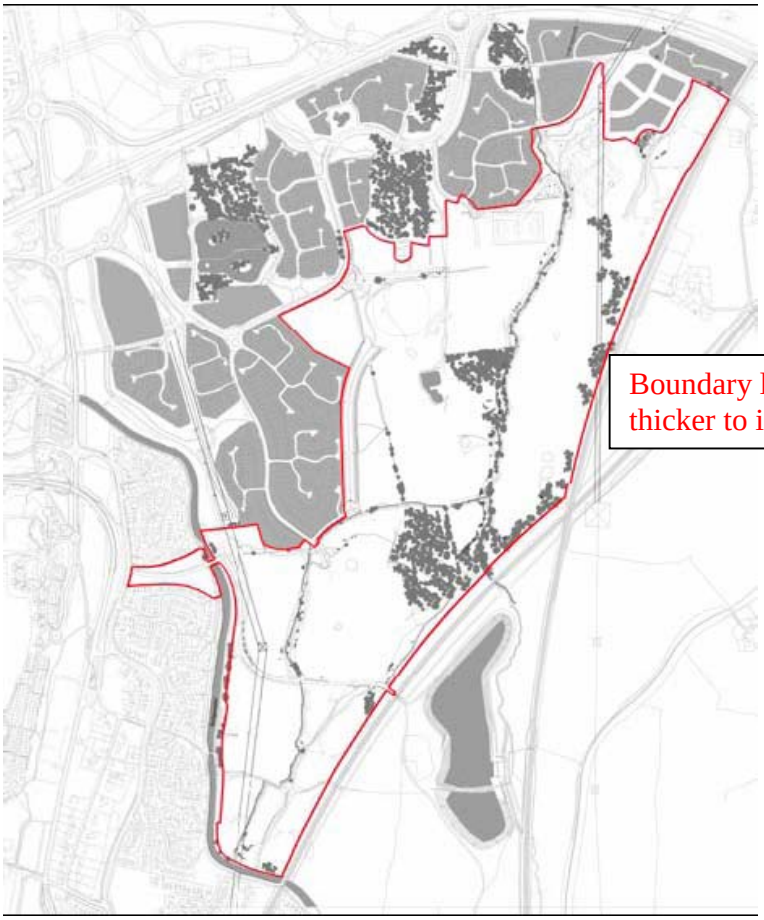


Figure 2.2 Sandymoor masterplan boundary

2.4 Two main watercourses traverse the site which together with a number of ponds and wooded areas provide a range of habitats and an attractive backdrop for future development. At 2008 the neighbourhood contained approximately 35 Ha. of land for residential development.

PLANNING HISTORY & DEVELOPMENT TO DATE

2.5 In 1964 Runcorn was designated as a New Town. The Development Corporation prepared a Masterplan for and oversaw the development of Runcorn New Town encompassing residential neighbourhoods and associated commercial and industrial areas arranged around an expressway road network and a segregated busway

2.6 In 1971 the Sandymoor area was identified for residential development as an addition to the urban area. Subsequently, on the 21st June 1988, Section 7.1 Approval under the New Towns Act 1981, was granted by the Secretary of State for the Environment for residential development covering an overall gross area of circa 147 hectares.

2.7 Phase 1 of development at Sandymoor was undertaken during the late 1980's and early 1990's, whereby 890 residential units were built across 46 hectares of land. This initial phase of development comprised of speculative suburban house styles, predominately two storey detached dwellings with private gardens giving Sandymoor a distinctly different character to the original New Town residential areas of Windmill Hill and Castlefields to the east.

2.8 In 1999, the Commission for New Towns (now English Partnerships) and Halton Borough Council jointly prepared a Masterplan that considered the development potential for the remainder of the site.

2.9 This Masterplan informed the allocation of sites within the 2005 Halton Unitary Development Plan (UDP), which allocated some 40.66 hectares for residential development. About 36 hectares remained available for residential development (at 2008), with the capacity to deliver up to 1,423 new dwellings during Phase 2 of the UDP housing release. Phase 2 housing sites being programmed for release from May 2007, subject to progress on Phase 1 allocations and completions on windfall sites.

2.10 A number of outline planning permissions covering portions of the site have been granted, including 07/00111/OUT which makes provision for the transposition of certain uses (from that shown on the UDP) and the new access onto Windmill Hill Avenue.

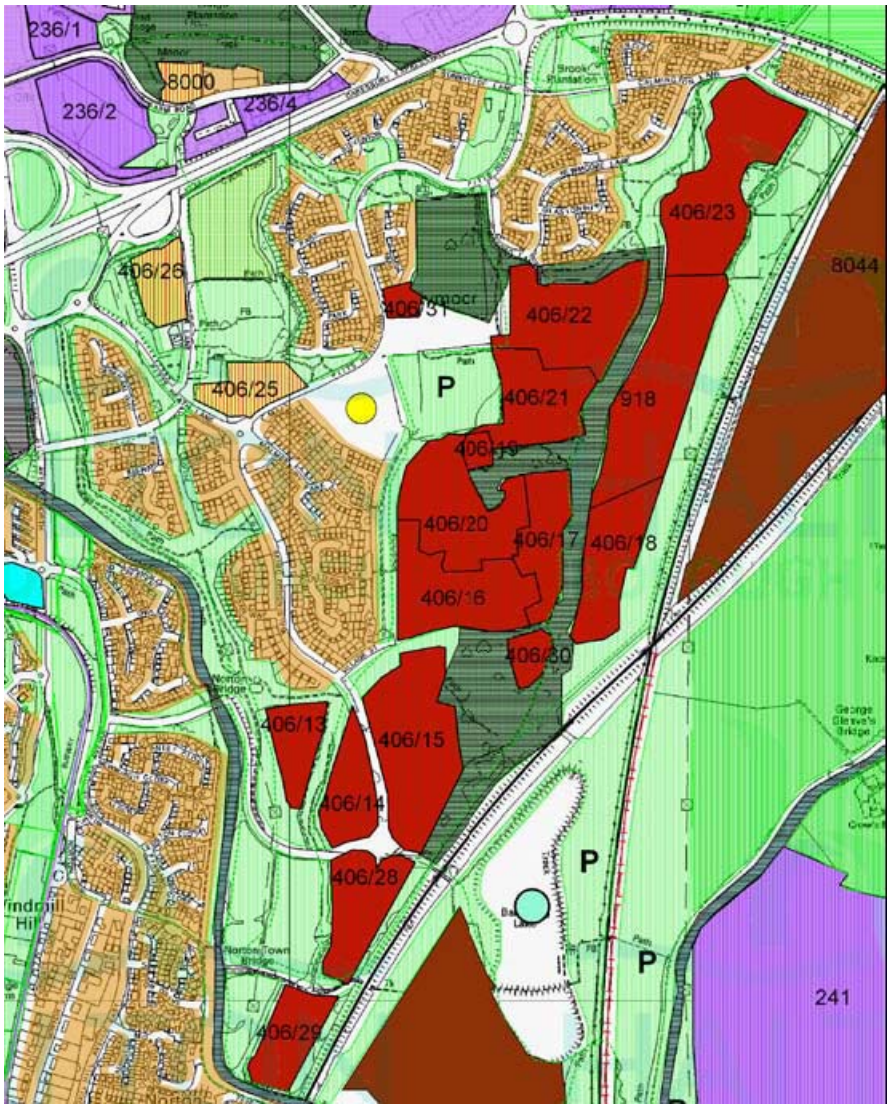


Figure 2.3 Sandymoor UDP plan

2.11 After the approval of the original Sandymoor Masterplan in 1999 and its subsequent incorporation into the Halton UDP, the Environment Agency identified a revised area at potential risk of flooding within the northern part of the site, directly affecting land identified for residential development. The implications of the identification of the potential flood risk area are considered in further detail in Chapter 3 of this SPD.

2.12 The original 1999 Sandymoor Masterplan has since been revised to take account of the Environment Agency's latest findings, and to ensure that no new development is proposed within the identified area of potential flood-risk. The revisions to the Sandymoor Masterplan have also sought to reflect key principles promoted through recent national planning policy, primarily in relation to sustainable development – 'making the most efficient use of land;' and 'high-quality design.' The revised Masterplan forms a key element of this SPD.

Chapter 3.0 - Design Influences - Constraints and Opportunities

Chapter 3.0

Design Influences, Constraints and Opportunities

3.1 This SPD is subject to a number of development constraints that need to be considered during the preparation of new development proposals, and in the subsequent determination of planning applications by the Borough Council. Details of these constraints and potential development opportunities are set out below:

a) INFRASTRUCTURE

Noise Attenuation (Railway Line)

3.2 One of the planning conditions attached to the original 1988 Sandymoor Section 7.1 Approval was the requirement to maintain a buffer zone of circa 100m along the eastern boundary of the site adjacent to the West Coast Main Line and Manchester to Chester railways. This separation distance has been reviewed during the preparation of this SPD and Masterplan based on latest noise assessments.

3.3 PPG24 'Planning and Noise' (1994) provides explicit advice to Local Planning Authorities when considering residential development proposals near to sources of noise (road, rail or air traffic and mixed sources). Surveys should assign whole sites or parts of sites to one of four Noise Exposure Categories (NEC's). In Category A areas noise need not be a factor in granting planning permission. However within Category D areas, planning permission should normally be refused.

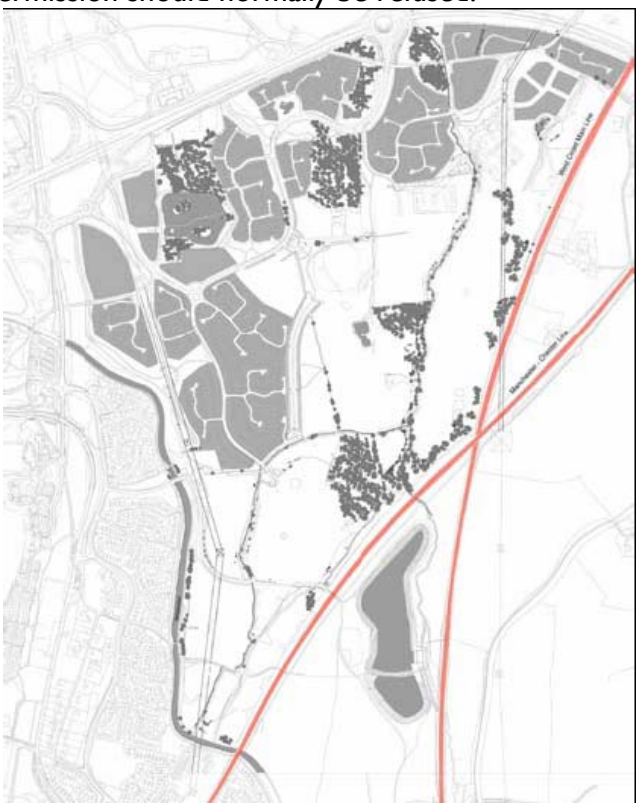


Figure 3.1 Existing railway lines

3.4 The latest noise model indicates that the majority of the development plots at Sandymoor fall within NEC B, with a stand-off distance to the NEC B/C boundary from the West Coast Main Line of approximately 50m. This reduces to circa 30m for the Manchester to Chester railway line due to fewer vehicle movements along this route. It should be noted that sections along the eastern boundary of the site are located close to the NEC B/C boundary (see Figure 3.2 below).

3.5 PPG24 advises that for NEC B areas noise issues should be taken into account during the determination of planning applications and, where appropriate, conditions be imposed to ensure an adequate level of mitigation against noise. The model results do not include the screening effect from proposed residential buildings, however it is anticipated that the acoustic shadows behind houses fronting onto the track may fall within NEC A.

3.6 The above findings are based on a comprehensive record of actual rolling stock and operations along the West Coast Main Line and Manchester to Chester railway line adjacent to the Sandymoor development site.

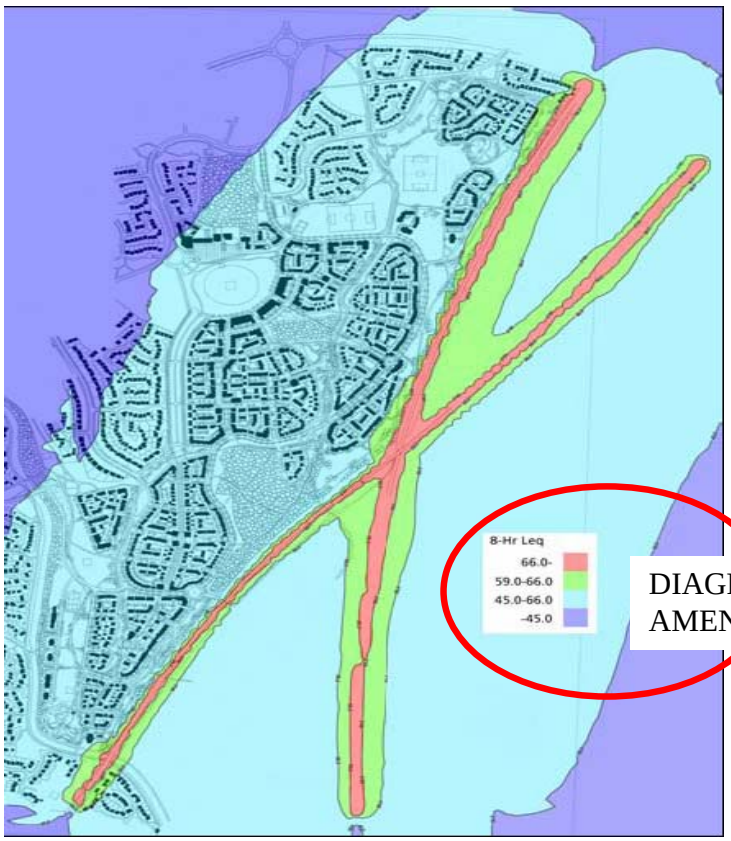


Figure 3.2 Noise levels from railway

3.7 Road and air traffic currently noise fall within NEC A and need not be a factor in determining planning applications on Sandymoor.

Existing Road Network

3.8 The future wider development of the site presents an opportunity to enhance and extend the existing Sandymoor highway network, in accordance with this SPD and Masterplan, and promote a higher level of sustainable travel amongst local residents through the provision of new public transport, walking and cycling routes and linkages.

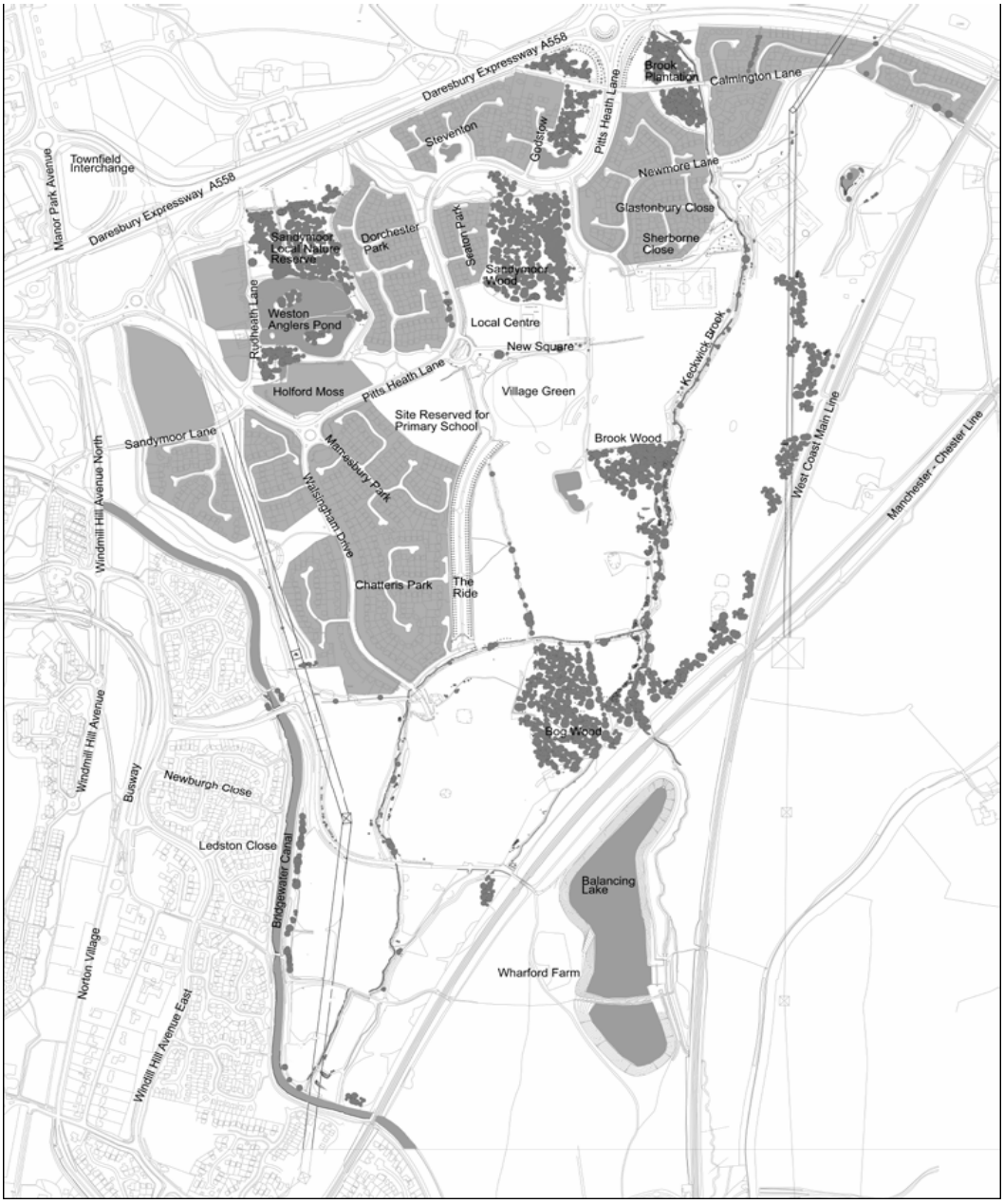


Figure 3.3 Existing road network plan

3.9 As part of the revision to the Masterplan the hierarchy of the highways has been established to provide quality links to the existing network and beyond. The revised Masterplan includes a new vehicular access from Windmill Hill Avenue on the western side of the site, traversing the Bridgewater Canal. This is a significant change to the previous 1999 Masterplan, which sought access only from the Daresbury Expressway onto Pitts Heath Lane. Roundabout layouts have been re-configured to accommodate the revised highways orientation and access points into each individual land parcel. These modifications take into account aspects including road type, junction spacing, frontage access, and visibility. Traffic management on the existing main roads has also been addressed as part of the Masterplanning process. This will involve enhancing pedestrian crossings, and incorporating additional traffic calming measures where necessary.

3.10 The street hierarchy takes into account public opinion voiced during the consultation event held at Sandymoor Hall in April 2005, to provide a main local distributor road primarily for vehicular access and public transport linking the existing network to rest of the development via a grid of pedestrian-friendly and shared surface access routes. Examples that could be included within development proposals, together with minimum specifications are included in the 'Street Design Guide Principles' in Appendix 1. In addition, the outline planning application for Sandymoor South (granted in May 2007), was subject to formal public consultation during November 2006, at which the proposals for a new vehicular access from Windmill Hill were presented to local residents.

b) WATERCOURSES

Brooks and Tributaries

3.11 Within the Sandymoor development site lie two brooks which form the main watercourses, both running north towards the Manchester Ship Canal. They comprise:-

1. Keckwick Brook

3.12 Designated as a 'Main River' by the Environment Agency, this brook forms the main natural drainage component to the Sandymoor site. It enters the site from the Wharford Farm area, under the railway line to the south east of Bog Wood and leaves via a culvert under the Daresbury Expressway at Sandymoor Junction. The brook is well colonised by waterside trees that links both Bog and Brook Wood and constitutes an important wildlife corridor. Water vole field signs have been identified all along this brook within the Sandymoor site (2006 Survey).

2. Sandymoor Main Ditch (referred to in this document as Sandymoor Brook)

3.13 This brook enters the area at the southern tip of the site, emerging from a culvert under the Bridgewater Canal, and joins into the Keckwick Brook just north of Bog Wood. Surveys have indicated that suitable water vole habitat occurs at various points along this brook.

3. The Bridgewater Canal

3.14 The Council is a partner in the Bridgewater Way regeneration project, which seeks to create a 65km/39 mile leisure route for walkers and cyclists along the length of the historic Bridgewater Canal. The Bridgewater Canal runs along parts of the western and southern boundaries of Sandymoor. This will continue to serve as a major leisure route with accessible towpaths. Footpaths from within the site should connect with these where possible. There is the opportunity for development adjoining the canal to make arrangements for necessary improvements to the canal towpath in accordance with the guidance contained within the Provision of Open Space SPD.

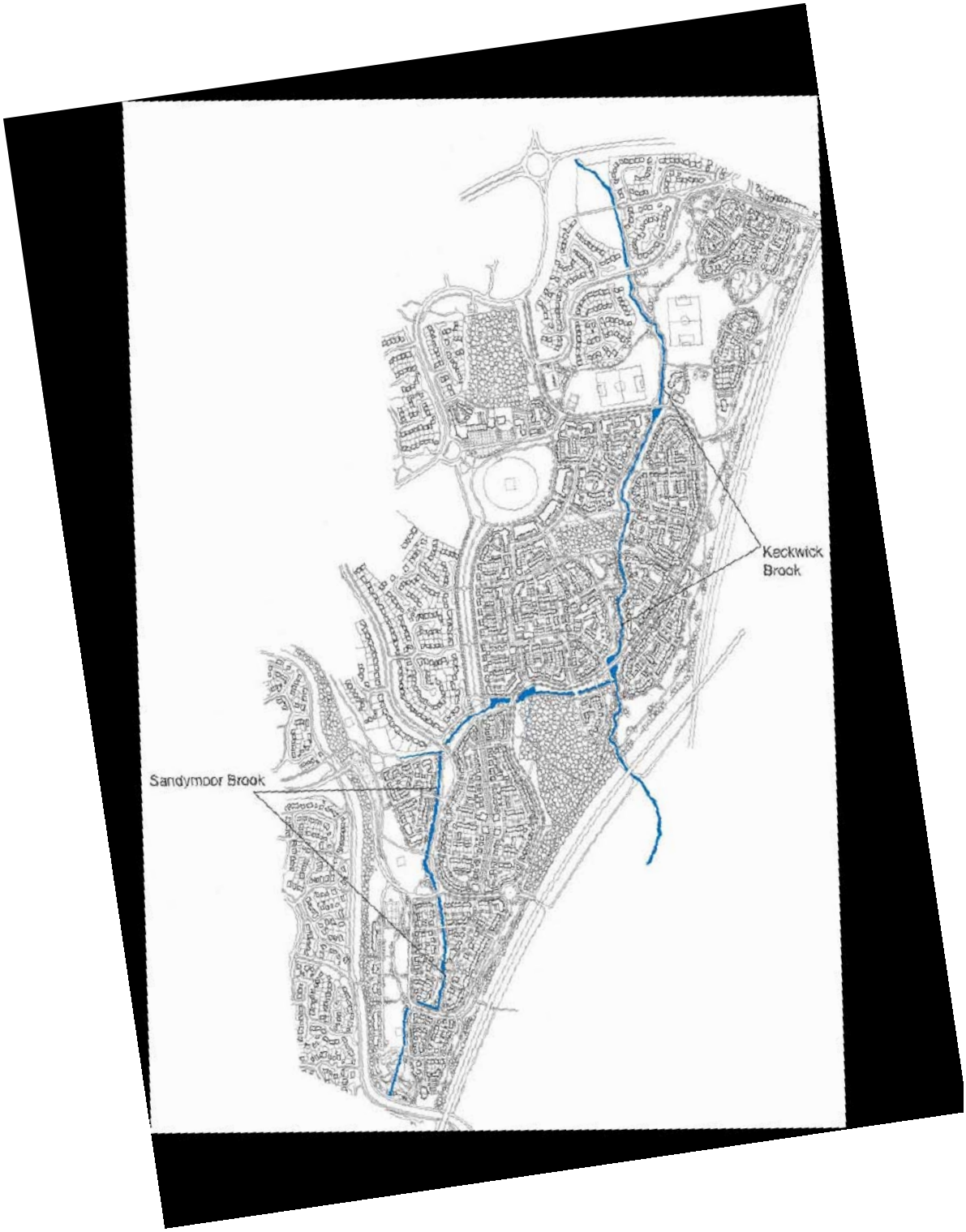


Figure 3.4 Existing watercourse plan

c) UTILITIES

Overhead Cables / Pylons

3.15 The two overhead electric cable routes that run along both the eastern and western edges of the site represent significant development constraints at Sandymoor. The western cables are 275kV (with a maximum of 400kV) high voltage power lines maintained by National Grid Transco. The eastern overhead power lines are a double circuit 132kV high voltage steel tower route maintained by Scottish Power over which the operator has secured certain easement rights.

3.16 Development proposals (including planting) must ensure that statutory horizontal and vertical safety clearances are maintained from the overhead power lines. These requirements are set out in ENA Technical Specification 43-8 Issue 3, 2004 Overhead Line Clearances (or as amended).

3.17 Clearance requirements are affected by numerous factors including the sag and swing of the line, design and voltage of the transmission route and the topography traversed. As such it is essential that developers seek the early detailed advice of the appropriate line operator when proposing any development in the vicinity of the transmission routes. (See Appendix 3 for advice and contact details)

3.18 A number of studies have been undertaken internationally by a range of organisations to assess the potential impact of electro-magnetic fields (EMFs) as produced by power transmission lines and other electrical installations and equipment on human health. None of these studies have established a direct link between EMFs and ill health, though some have recommended the adoption of the precautionary principle recommending non-statutory stand-off distances for residential development. Appendix 3 gives details for sources of further information.

Future Utility Services

3.19 The supply of utility services to new development, including electricity, gas, water and telecommunication, has been identified as a potential constraint due to the significant increase in load as a result of increased unit numbers. The relevant service providers are and will continue to be kept fully informed of development proposals to establish any future network upgrading or reinforcement requirements. The Masterplan includes the location for a proposed sub-station adjacent to the new access road from Windmill Hill Avenue.

Figure 3.5 Existing overhead electricity transmission lines

d) NATURE CONSERVATION

3.20 Scattered within the development area lie several natural and man-made (WWII bomb craters) ponds. The Halton Biodiversity Action Plan (BAP) lists details of surveys that indicate that these ponds, despite some drying out during the summer months, support a variety of amphibians including a small population of protected great crested newts.

3.21 Where proposed development is likely to impact directly upon these ponds, the Masterplan has identified the opportunity to accommodate provision elsewhere within the development area to not only compensate for the loss of any existing ponds, but also provide new ponds and to increase 'connectivity' of the habitats within Sandymoor, thereby enhancing the local environment for the amphibian populations.

3.22 In addition, the BAP indicates the presence of Bluebells, Purple Hairstreak (Butterfly), Skylark, Song Thrush and Reed Bunting in woodlands in and around Sandymoor, most notably in Sandymoor Wood (north of the proposed Local Centre) with certain species also present in Dorchester Park. Together these features not only provide natural habitats for a range of species, but make a significant and valuable contribution to the areas Green Infrastructure to the benefit of the local community

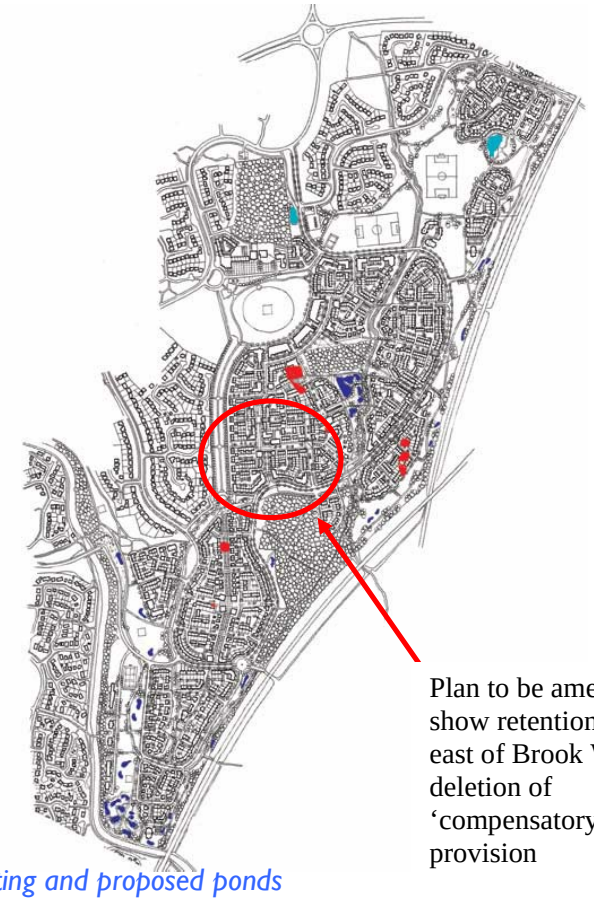
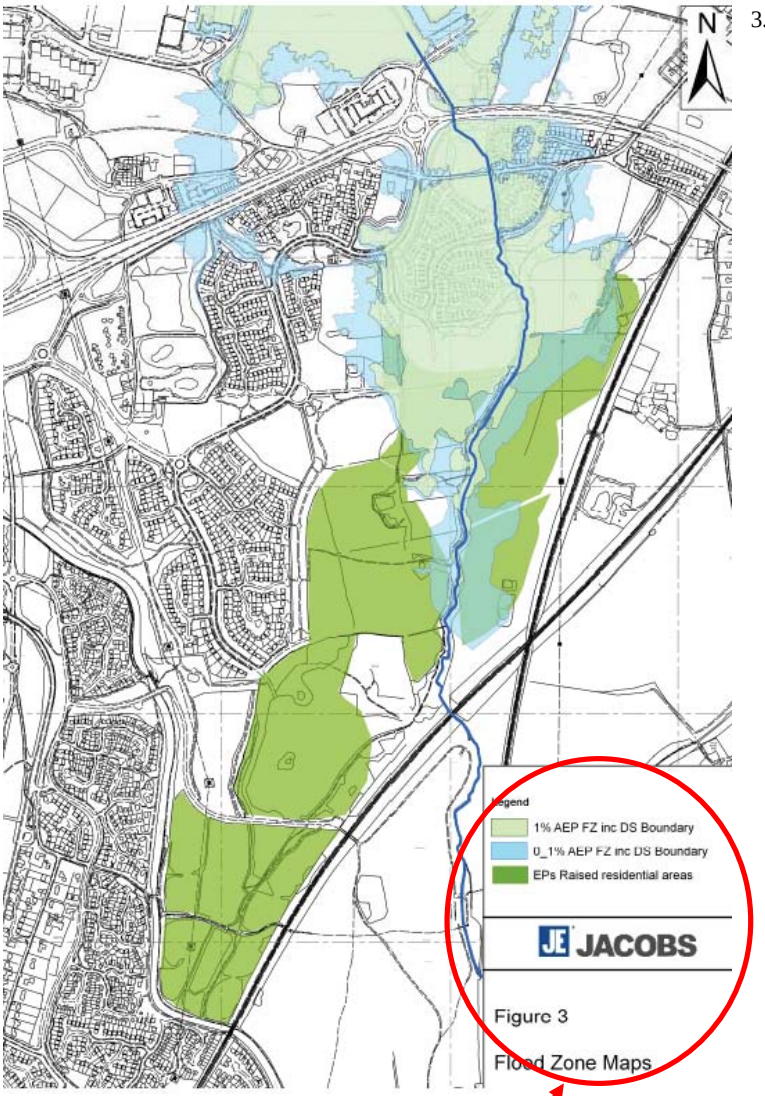


Figure 3.6 Location of existing and proposed ponds

e) FLOODPLAIN MITIGATION



KEY TO BE AMENDED

3.23 As previously discussed within this SPD, an area of potential flood risk is located within northern Sandymoor. The extent of the floodplain has been identified through a study commissioned in late 2005/early 2006. The findings determined that areas of the proposed development do fall within the revised Zone 2 (0.1%, 1000 year) and Zone 3 (1%, 100 year) Flood Outlines. Flood mitigation measures have therefore been developed for the Masterplan to reduce this risk of flooding to an acceptable level. This will be done through providing compensatory flood storage, reprofiling sections of the site to physically raise ground levels above the 1% flood level and ensuring that all commercial and residential development takes place within the lower risk zones (i.e. Zone 1 Low Probability and Zone 2 Medium Probability). Detailed hydraulic modelling has been undertaken to demonstrate the effectiveness of these flood mitigation measures and ensure that there is no net loss of floodplain storage or exacerbation of flood risk downstream. Initially, the location of playing field provision was changed to ensure that no built development would be located within a high risk flood area. This undevelopable area of land has also been identified for playing field provision in the revised Masterplan, forming part of a 'land-swap' with land in southern Sandymoor in order to prevent any new development within the unmitigated floodplain. To reflect this change, planning permission was granted in May 2007 which allowed for this 'land-swap' as part of the overall Masterplanning process.

Figure 3.8 Proposed open space and playing fields plan

f) OPEN SPACE PROVISION

3.24 The total quantity of public open space provision located within Sandymoor has been established through conforming to the guidance of the National Playing Fields Association. This specifically identifies a '6 acre standard' (2.4ha) per 1000 population of playing pitch and passive recreation provision within new residential developments. The provision of natural green space follows Natural England's Natural Green Space standards amended to meet Halton Borough Councils standard (2.75 Ha per 1,000 population). The total provision of 49 hectares of open space at Sandymoor exceeds the combined minimum requirement of 25.75 hectares (based on an estimated population figure of 5,000) by 23.25 hectares. Halton Borough Council has previously prepared an 'Audit of Recreational Provision', which identified a shortage of playing fields within East Runcorn. To satisfy the needs of the local community, the Masterplan provides for 2 new junior (or 1 senior) playing fields within northern Sandymoor.

g) GROUND CONDITIONS

3.25 A geological review of Sandymoor has indicated that the entire site is underlain by glacial till, comprising marine and estuarine alluvium, blown sand and localised clay, and rocks of the Triassic Mercia Mudstone and Sherwood Sandstone groups. At present, further investigation of a geotechnical nature comprising shell and auger boreholes, and trial pits including associated geotechnical testing is considered necessary for certain areas within Sandymoor.

3.26 There is no evidence on review of previous site history to suggest that the site is contaminated as a result of previous use(s). The majority of Sandymoor has essentially remained as agricultural land, with extensive residential development within the immediate surrounding areas.

h) DRAINAGE

3.27 There is adequate capacity within the existing foul and surface water trunk sewers to accommodate the additional flows from the housing numbers proposed, with surface water to be drained separately (i.e not into a combined sewerage system). The existing foul and surface water trunk sewers have been constructed at depths deep enough to allow all the remaining undeveloped sites to discharge via gravity sewer connections.

3.28 Each parcel of land must be drained to specific outfall manholes that have been designed to accept the relevant discharge from the catchment areas based on the Masterplan. Any further additions or alterations made to the Masterplan must be considered against the revised sub-catchments now proposed. All sewers offered for adoption must comply with nationally agree (United Utilities) easement requirements.

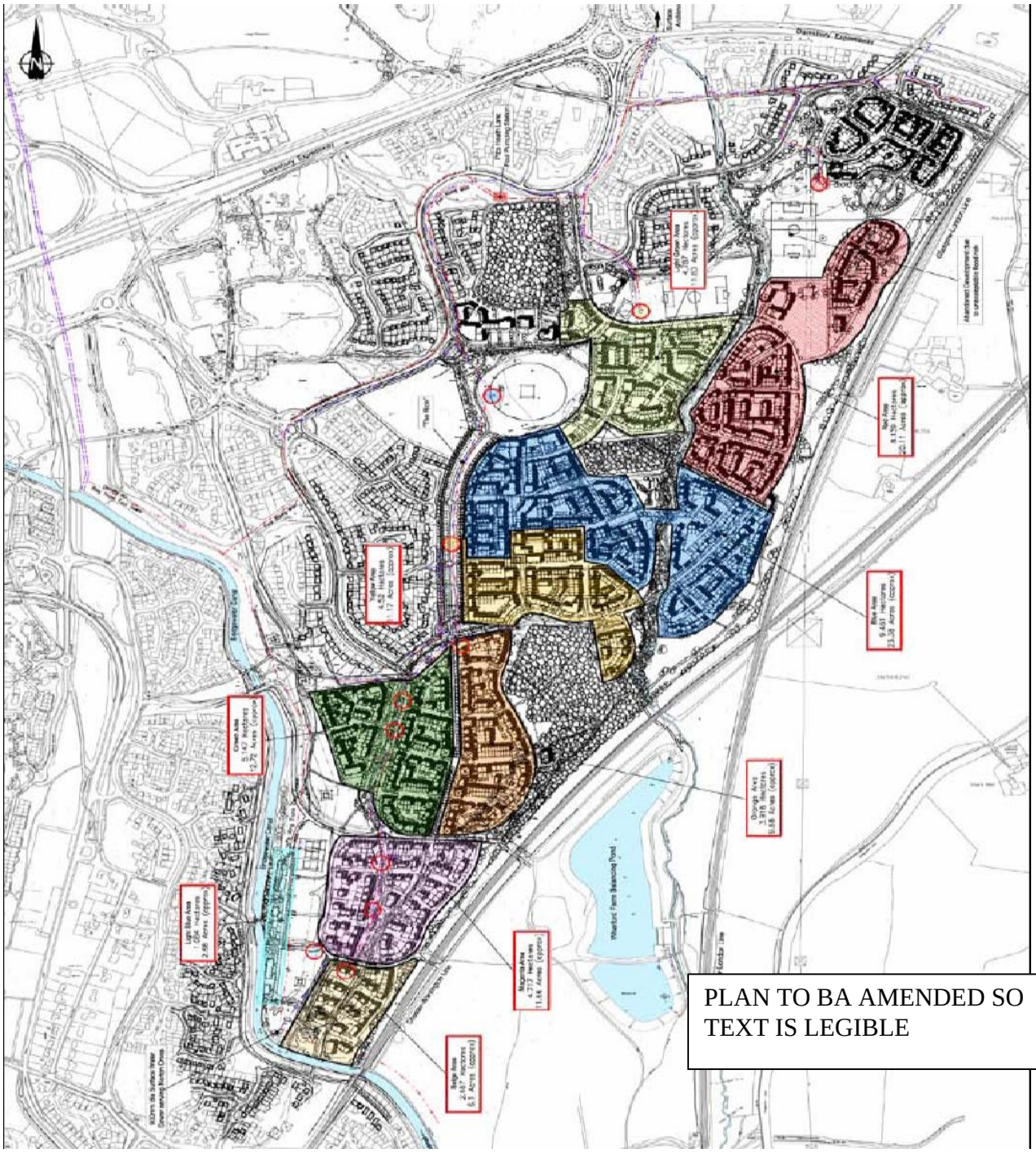


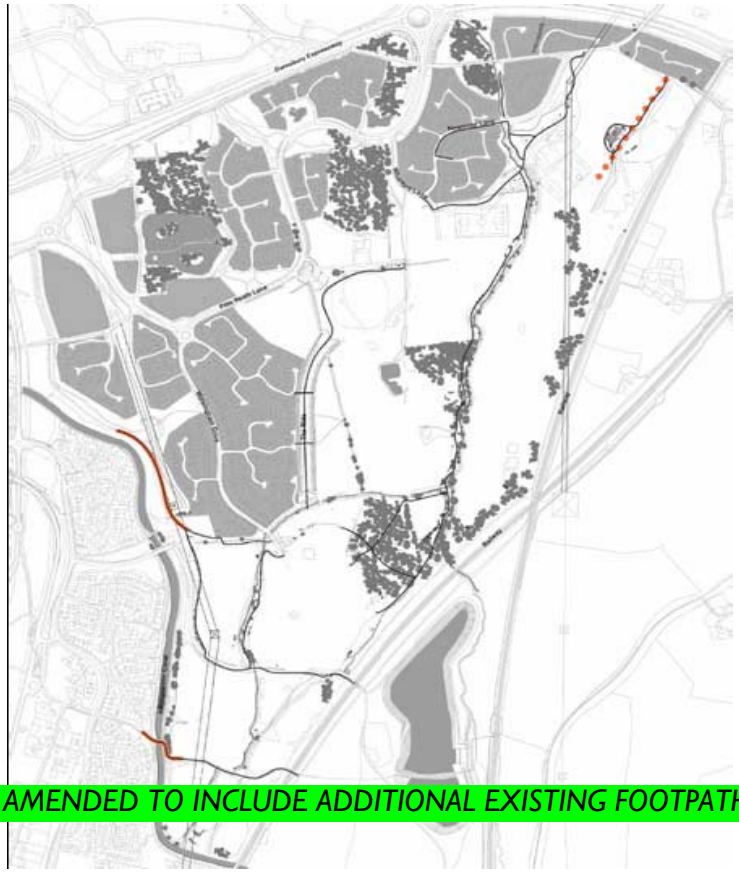
Figure 3.9 Drainage plan

i) FOOTPATHS

3.29 The existing Sandymoor development has established a series of footpath routes, mainly associated with the highway network. Footpaths within existing open space in the northern parts of Sandymoor have also been established, and link not only with road footpaths but also pedestrian routes towards Moore Village and across the Bridgewater Canal to Windmill Hill. A formal central tree-lined avenue 'The Ride' has been developed leading from the Village Green and proposed Local Centre towards the south of the development site. New proposed footpaths will need to link with the existing network and extend accessibility not only into the new open spaces but also to the wider countryside.

j) PUBLIC RIGHTS OF WAY

3.30 Designated public rights of way currently exist across the south of Sandymoor (Gooseberry Lane) forming a link between sections of The Bridgewater Canal and the adjacent surrounding countryside. They also run along the canal towpath. The opportunity exists for the strategic footpaths through and beyond the site to be linked and extended into the development to provide a continuity of existing 'leisure' routes.



PLAN TO BE AMENDED TO INCLUDE ADDITIONAL EXISTING FOOTPATHS

Figure 3.10 Existing footpaths and public rights of way

k) BRIDLEWAYS / CYCLE PATH NETWORK

3.31 Within eastern Runcorn is an existing bridleway and cycle path network, and the Halton UDP identifies a commitment to extend this type of provision within the Borough. Proposals at Sandymoor for these modes of travel should not only provide for the continuity of the system into the wider area, but also create a peripheral circular route through the open spaces, in particular linking the cycle paths into the core of each development parcel.

L) NON VEHICULAR ACCCESS ROUTES

3.32 The development of footpaths, public rights of way and the bridleways and cycle network should consider the HBC Rights of Way Improvement Plan and the Greenway Network Plan.

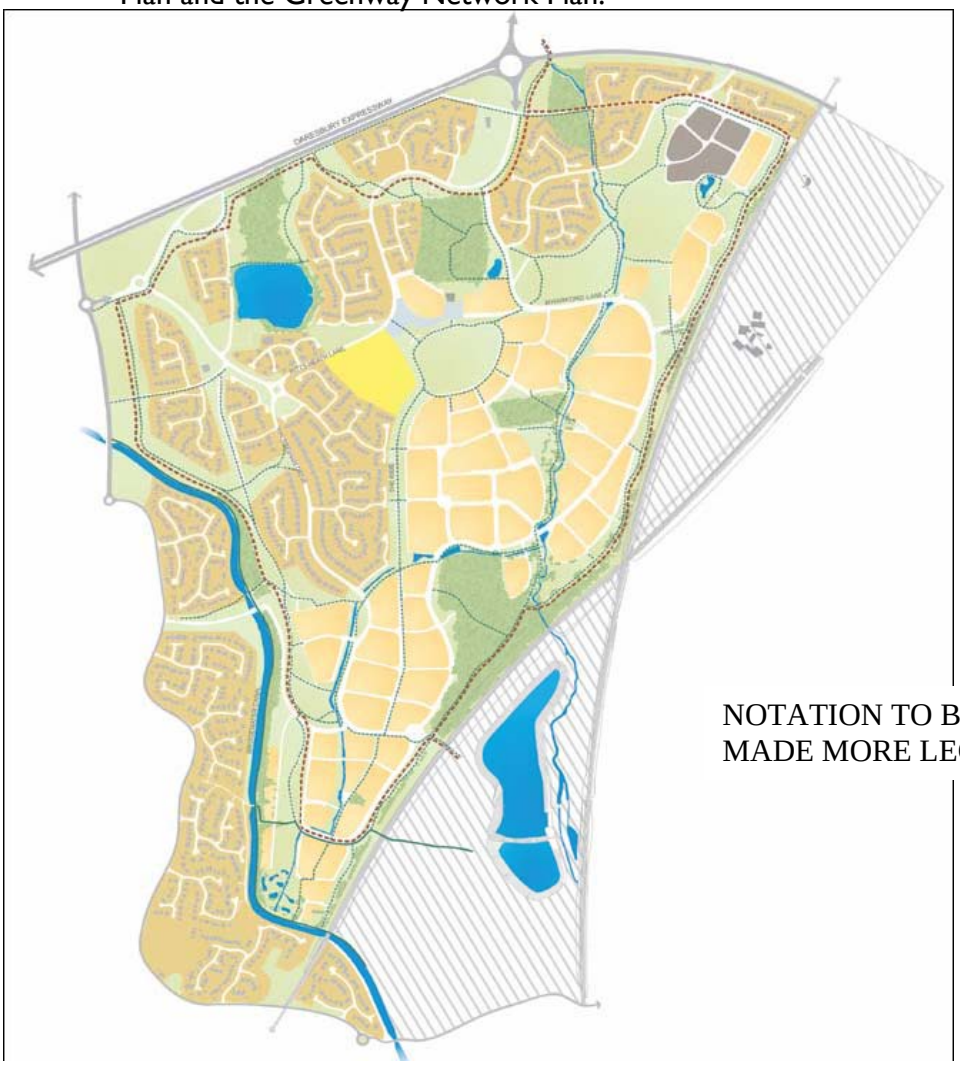


Figure 3.11 Proposed footpaths and public rights of way

Chapter 4.0

Sandymoor Design Principles

4.1 The following section outlines the broad design principles at Sandymoor which have influenced the preparation of the Masterplan, and to which new development proposals must conform. These principles form the basis of detailed Design Codes which are not part of the SPD but will be applicable at detailed / reserved matters application stage.

4.2 The Design Codes provide an agreed level of detailed design guidance to provide assurance to the Council with regards to the quality of new housing, and certainty to the developer as to what is required to obtain planning permission for new development at Sandymoor, whilst allowing developers a degree of flexibility to accommodate and reflect changing demands on the housing market over the development period.

4.3 This SPD sets out below the overarching design principles for Sandymoor.

MASTERPLAN – DEVELOPMENT PRINCIPLES

1. Strengthening the Community

- Development will be arranged to focus on the Local Centre and its facilities of shops, the Community Centre, school, Village Green, leisure and sports activities.
- The plan will direct pedestrian and cycle access to the Centre, making it easy and safe to get to and from all parts of Sandymoor.

2. Movement

- A hierarchy of routes will provide choice of different kinds of movement across Sandymoor.
  - 'The Avenue', a traffic-managed bus route to accommodate speeds of up to 30mph
  - The 'Village Street' that reflects many of the principles of traditional streets with speeds up to 20mph
  - The 'Farm Lane' that reflects many of the principles of rural routes with speeds up to 20mph
  - Access streets that act as a transition between 'The Avenue' and community residential streets
  - Pedestrian-friendly community residential streets that are heavily traffic-calmed and designed to 'Home-Zone' principles with very low speeds.

- Streets are laid out to maximise the opportunities for people to use public transport, ensuring most people are within about 400 metres or 5 minutes walk from the bus route.

- A key principle of the plan is managing and calming traffic throughout the area. A network of pedestrian-friendly community residential streets and footpaths that are designed using 'Home-Zone' principles will be provided. 'Home-Zones' are an initiative to design local streets to drastically reduce car speeds and promote a local sense of neighbourhood and community. The street combines areas for walking, sitting, recreation and car parking and, through its landscape design, can help provide a unique identity.

- The plan recognises the emerging Masterplan for adjacent land to the east of Sandymoor encompassing the Daresbury Science and Innovation Campus (SIC) and Daresbury Park. The potential for linkages and connections between the two will be explored as the Daresbury SIC Masterplanning Study progresses. Similarly, the potential for linkages and connections to the Wharford Farm site to the south will be protected and explored as detailed proposals for that site advance.

• Figure 4.1 Proposed movement plan
(Layout of Home-zone, Mews Courts & Access roads shown for illustration only)

3. Landscape and Ecology

- The Masterplan has been designed to maximise Green Infrastructure, maintaining high levels of woodland and public open space with an extensive network of footpaths, cycleways and bridle paths that provide links between all parts of the site and connections to areas adjacent to Sandymoor and form and link areas of ecological value.
- Existing woodland and important landscape features (c.f. Saved UDP Policy GE24) are maintained and enhanced. Existing groups of trees and individual trees of high quality will be retained wherever possible. New trees of suitable species will be planted in appropriate locations to ensure that the overall tree cover of the area is sustained for the future..

- Green routes will link the different types of open space together.
- Wildlife corridors will be created along the western and eastern edges of the site and along the Keckwick Brook watercourse. Certain ponds will be relocated as part of a wildlife conservation programme to create a better interconnected network of ponds to maintain and enhance bio-diversity and deliver the aims of the Halton Bio-diversity Action Plan.
- Amenity spaces like the Village Green, The Ride and its extension, playing fields and play areas will be located to take account of accessibility and efficient use of land. The main sports and multi-use games area will be located adjacent to the village centre but in the flood plain.

4. Development Layout

- Sandymoor will have its own overall identity. A series of character areas will provide more local identity. These are influenced by local attributes to be found in neighbouring Cheshire villages, adjacent neighbourhoods, and the demands of sustainable development.
- A mix of house types will be provided to build a balanced community. A Local Centre will provide a mix of uses including commercial, retail and
- Current national planning policy seeks to ensure efficient and sustainable development. Higher densities in key locations across the site will add to the vitality of the area and help ensure the viability of many community facilities including the school.
- New dwellings will be built outside the flood plain and set back from the power lines. There are opportunities to build closer to the railway with dwellings specifically designed to minimise the impact of noise.
- New dwellings will face the public realm, overlook and front all streets, footpaths and ‘greens’ to provide natural surveillance. The Masterplan has been designed to conform to advice from the Police contained in their publication ‘Safe Places: The Planning System and Crime Prevention’.

MASTERPLAN – URBAN DESIGN PRINCIPLES

1. Establishing Character

- watercourses will be incorporated into the Masterplan.
- Wildlife habitat will be enhanced and a nature conservation area established.
- Connections between development and the sites retained natural features will allow residents to enjoy them.
- New development will be integrated into the landscape using existing and new structure planting, reinforcing local species.
- *Wherever practical and feasible n*ew development will ensure that buildings front the public realm, that streets and spaces are connected.
- The detailed layout and design of the development will reinforce a sense of place.
- The design will incorporate three character areas based on proximity to the Local Centre, transport, density, and phasing and within each of these character areas there will be a range of densities depending on location.
- The use of local materials, decorations and details will also enhance local distinctiveness. This will include texture and colour of materials including signage, street furniture, lighting, and public art/craft work.
- The scale, heights and massing of development will generally reflect that of adjacent neighbourhoods and take account of the views, vistas and landmark buildings.

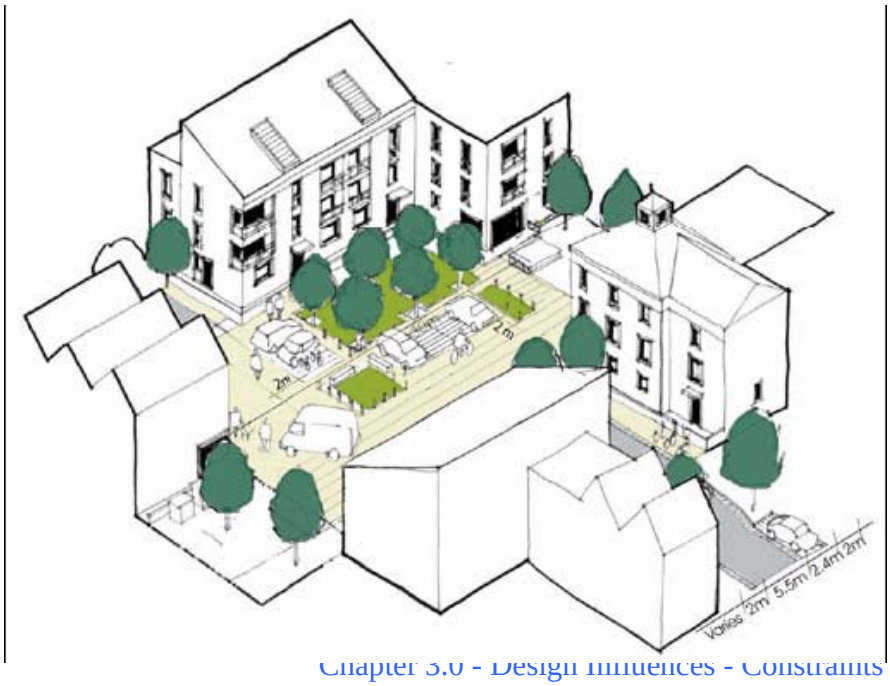
2. Providing Enclosure

- Development will follow building lines that will reflect, reinforce and help define public space, whether a street, The Ride, the 'Village Green' or local open space.
- Where practical continuous development will ensure a clear distinction between public and private space – and create simple boundaries to the street block.
- Houses will look onto the public realm. There will be no blank gable walls. Corner buildings will be encouraged. Development will meet 'Secure by Design' standards.
- Balconies, projections, bay windows will all help add visual delight.
- Private and communal space at the rear of buildings will be designed to provide adequate privacy and security.
- The development will be appropriately scaled to create a sense of enclosure in streets and other public spaces.
- Dwellings will have a threshold to ensure a separation between public and private space. That threshold/boundary will vary in width depending on location, and comprise a range of materials, landscape or form.

Figure 4.2 Important frontages

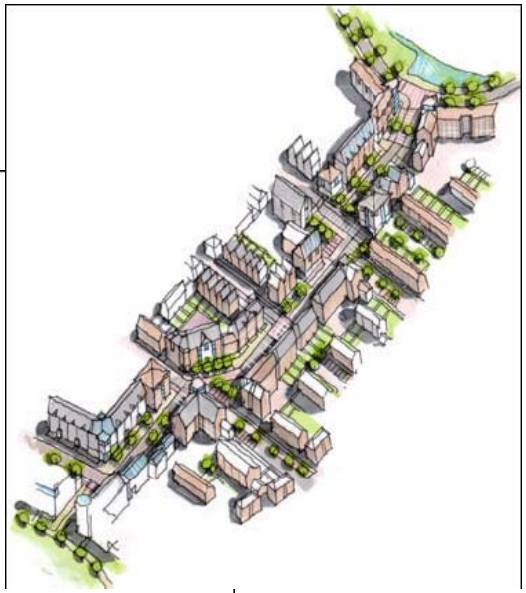
3. The Public Realm

- A series of different public spaces will be designed such as 'The Village Green', 'The Ride' extension, the 'Village Square', other small squares and incidental spaces including more natural areas such as the banks of Keckwick Brook.
- These will function as part of a network of spaces linked by pedestrian and cycle routes.
- Street junctions will be designed as 'places'.
- Streets will be tree-lined to reflect the green character of the area.
- The Local Centre will be built around a new shared surface 'Village Square'. Ground floor uses will be retail and commercial with residential above. Facades will be largely glazed and other active frontages will augment this. The design of the Local Centre and the square will be integrated.
- The potential for limited ground floor uses such as small office or community space will be acceptable within housing areas, where appropriate and indicated.
- All public spaces will have a function.
- All public realm, including streets, footpaths, squares and parks, will, where possible, be the subject of natural surveillance from surrounding dwellings.
- All parking courts will be similarly overlooked.
- Public spaces will take account of orientation and microclimate.
- Public art/craft work and well-designed street furniture/signage will generate local identity.
- A hierarchy of play spaces will be integrated into the development.



4. Movement Network

- Sandymoor will be designed to put people before traffic, to create a clear permeable network of streets and public spaces, but also have a good movement system for cars and buses.
- A network of streets and public spaces will connect Sandymoor – both existing and proposed – together, linking also with adjacent neighbourhoods.
- Public transport will be accommodated along 'The Avenue'. Bus stops will be arranged to minimise walking distances where possible.
- Streets will be designed as public spaces with good surveillance and no blank frontages. Dwellings on some streets such as 'The Avenue' will be serviced from the rear. All streets will be designed to be pedestrian and cycle friendly.
- Smaller streets such as the community residential streets/ 'home-zones' will act as pedestrian connections and managed vehicular links.
- Streets will be designed to accommodate a variety of traffic management and calming mechanisms, such as changes in horizontal and vertical alignments, build outs, changes of materials/surface textures, colours, reduced radii and lighting; subject to visibility and tracking requirements.



5. The Image of Sandymoor

- Development will be sited to create new views and vistas throughout the site, and to enhance existing views. This will provide people with landmarks and references that will define key routes and spaces.
- The use of public art/craft will reinforce this.
- The grouping of dwellings will reinforce the different identities and character areas within Sandymoor.
- Corner buildings, architectural 'set-pieces', changes in landscape, materials, colour, design treatment will enhance public spaces and ensure legibility of the character areas.

6. Flexibility and change

- Dwellings will be designed to allow for change to be accommodated. Adaptable ground floors in certain locations will allow other uses to take place. Roof space, the potential for extensions and flexible floor space will be built into the design of dwellings.
- Dwellings and residential areas will accommodate change to cater for residents' changing circumstances. Building Lifetime Homes and accessibility will be required.
- Public spaces, such as the 'Village Square' and 'The Village Green' will be suitable for use for a range of activities including spill-out public events, parking and amenity.
- Layout of infrastructure shall be easily accessible and take account of change.

7. Variety and choice

- A mix of house types, ranging from apartments to detached houses will be provided in order to create a balanced community.
- Diversity of layout, built form will contribute to the local sense of identity within the different character areas.

8. Sustainable development

- All new homes will be required to achieve Code for Sustainable Homes Level 3 up to 2010, potentially rising to further levels in later phases. Housing will be designed to lessen the impact on the environment by meeting new environmental and best practice standards, reducing the carbon footprint, and exceeding the regulatory standards.
- Housing will be designed in a more compact way to create higher densities than the earlier phases of Sandymoor in line with government advice on sustainable development.
- Dwellings will be energy efficient though layout orientation of development blocks and adjacent open space to take advantage of solar and wind direction. Best practice energy efficient design consistent with economic demands will inform the design of dwellings including facades, service/utility areas.

Chapter 5.0

Masterplan

Masterplan

All development proposals at Sandymoor must comply with the adopted Masterplan which identifies the key design elements and layout.

Justification

The principles included within the Masterplan will deliver a comprehensive development across Sandymoor that takes account of the many physical constraints in the area. *The Masterplan has been designed in consultation with local stakeholders and residents, in order to enhance the development area whilst ensuring the efficient use of land in a well-planned and cohesive manner.* Consideration will be given to variations from the overall Masterplan where it can be demonstrated that the change(s) proposed will fulfil the key aims set out in the Introduction to the SPD.

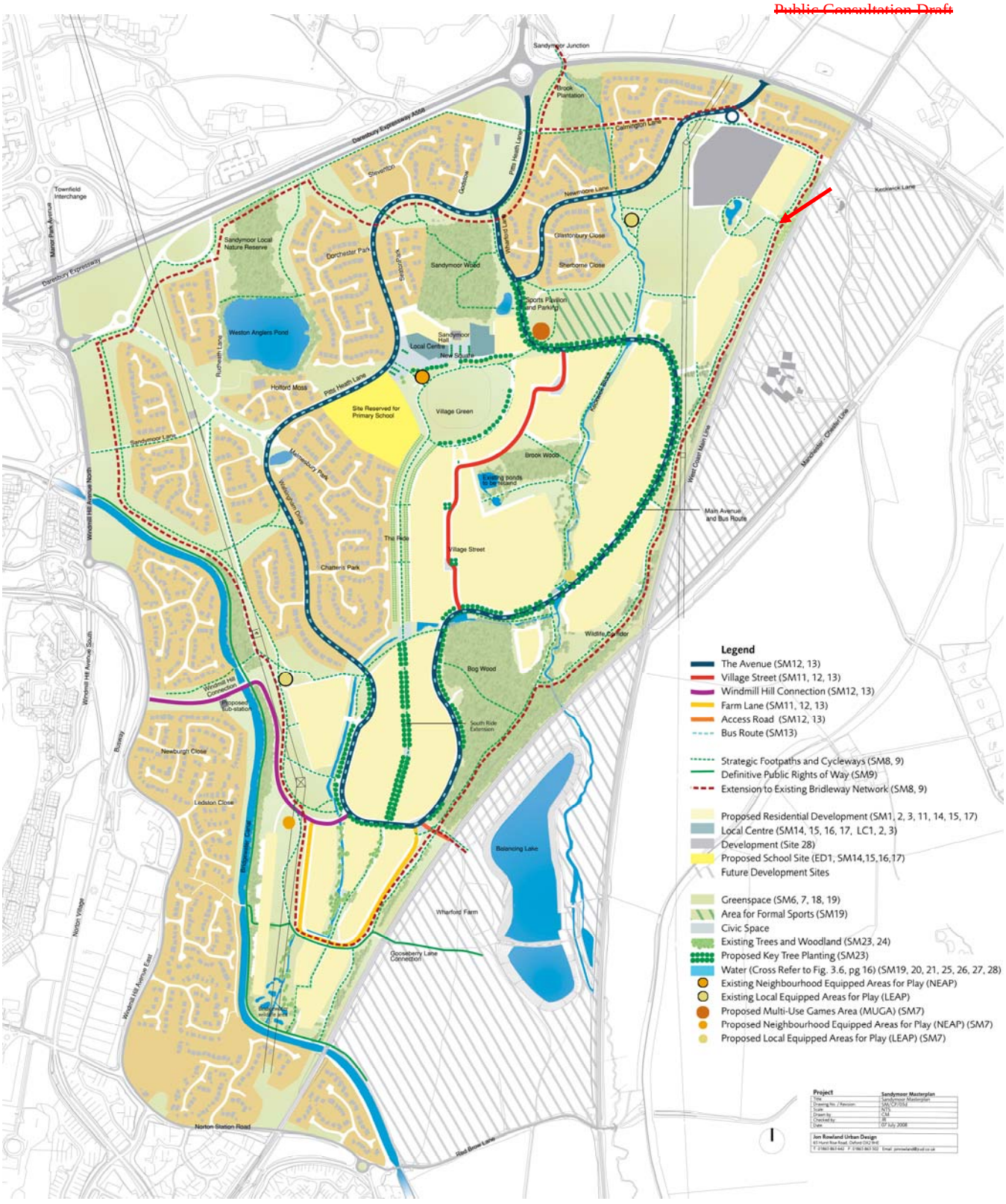


Figure 5.1 Masterplan

Chapter 6.0

Development Framework

6.1 The following section provides supplementary guidance to the policies contained in the adopted Halton UDP, to which all development proposals at Sandymoor must conform. This guidance takes the form of general Sandymoor-wide policies and, where applicable, specific Sandymoor Character Area policies.

HOUSING

SM1 Phasing of Development

The release of individual sites for development will be in accordance with a scheme of works intended to ensure that development does not proceed ahead of the infrastructure works necessary to support it.

Justification

The remaining developable land at Sandymoor is allocated in the Halton UDP for release for development during housing Phase 2 (2007 – 2011). It is anticipated that 120 units will be constructed per annum, hence development of the whole site is estimated to take circa 10 – 12 years. The current infrastructure, particularly road access, is inadequate to safely allow unconstrained development across the site and as such the phased release of sites is proposed to manage development and the provision of the infrastructure improvements required to service it.

SM2 Density of New Development

The density of development should be consistent with Figure 6.1, the Masterplan and the Development Principles set out in Chapter 4. Average density across the site is expected to be in the region of 30-32 units per hectare.

Justification

Planning Policy Statement 3: Housing (2006) encourages residential development that makes more efficient use of land, and seeks greater intensity of development at locations with good public transport links. Saved Policy H2 of the Halton UDP states that development below an average of 30 dwellings per hectare should be avoided. The development intensity plan (Fig 6.1) shows a pattern of varying densities intended to address the needs of the site, including providing acoustic screening from railway noise, creating a sense of place and providing sensitive buffers to existing natural habitats.

SM3 Design of New Development

The design of all new development at Sandymoor should conform to the relevant Sandymoor Character Area Policies, associated design saved policies from the Halton UDP and reflect the Street Design Guide Principles (Appendix 1).

Justification

The Character Area Policies and the Street Design Guide Principles provide more detailed guidance to which all future development proposals at Sandymoor must conform. These reflect the design policies outlined in the adopted Halton UDP, and associated SPD's.

In addition, Sense of Place (National Grid) provides practical guidance on minimising the visual impact of overhead power lines on development and on the design of development (including open space) under power line routes. (See Appendix 3)

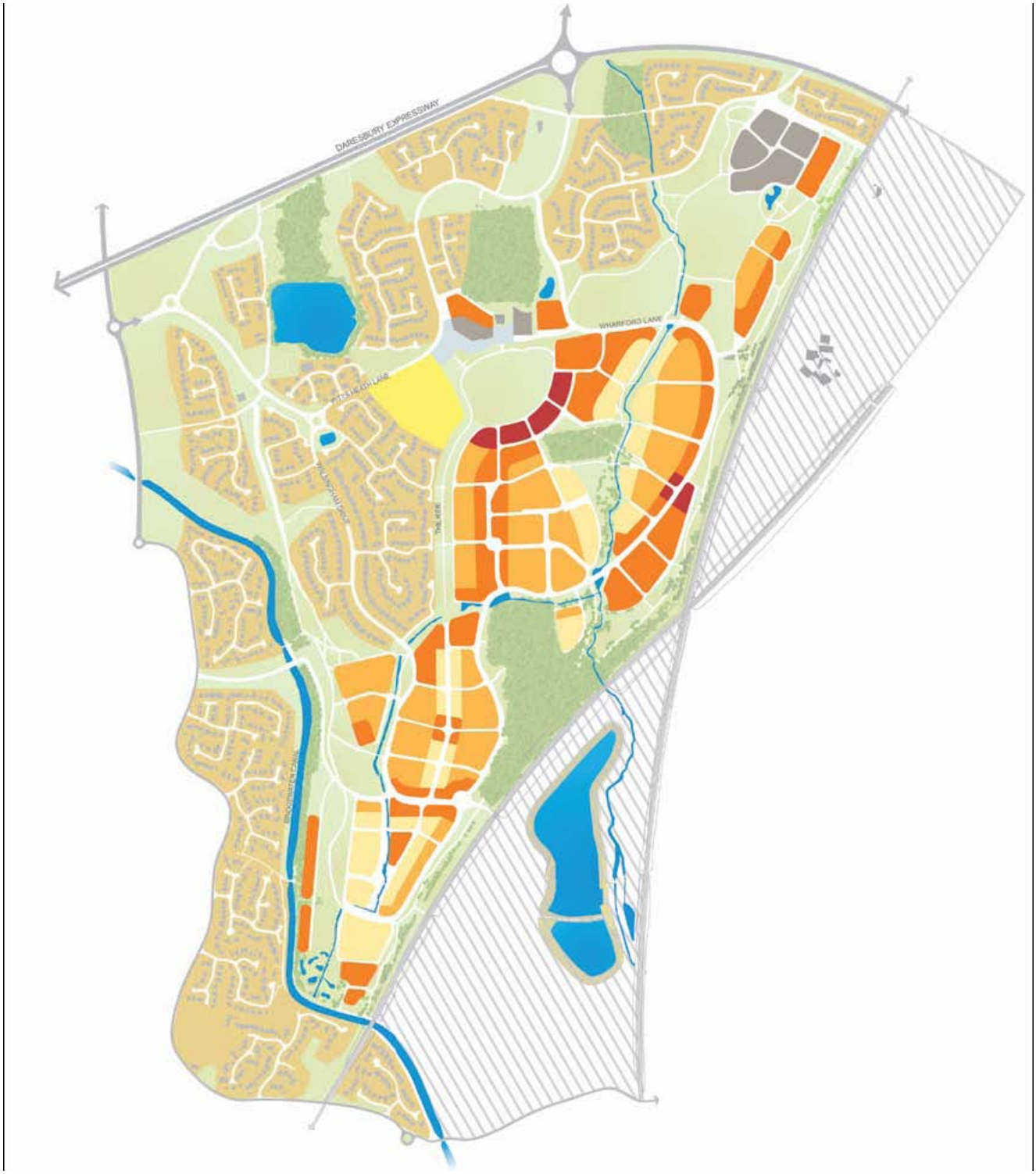


Figure 6.1 Proposed development intensity plan

SM4 Lifetime Homes

All new homes will be required to achieve Lifetime Homes Standard.

Justification

Dwellings should be able to accommodate, or be easily adapted to accommodate the changing circumstances and needs of their residents throughout their lifetime. Flexible and adaptable accommodation that is suitable and attractive to all ages will aid the creation of mixed and sustainable communities.

SM5 Code for Sustainable Homes

All new homes will be required to achieve Code for Sustainable Homes Level 3 up to 2010, potentially rising to further levels in later phases.

Justification

Housing should be designed to lessen the impact on the environment by meeting new environmental and best practice standards, reducing the carbon footprint, and exceeding the regulatory standards. Housing should be designed in a more compact way to create higher densities than the earlier phases of Sandymoor in line with government advice on sustainable development. Dwellings should be energy efficient though layout orientation of development blocks and adjacent open space to take advantage of solar and wind direction. Best practice energy efficient design consistent with economic demands will inform the design of dwellings including facades, service/utility areas.

SM6 Provision of Recreational Open Space

Developments must make adequate provision to meet their own open space requirements in accordance with the Council's adopted standards. In addition, developers will be required to provide a contribution towards, or deliver directly, the development of new structural landscaping, and greenways for both passive recreation and wildlife conservation within Sandymoor in accordance with the saved policies from the Halton UDP, the Council's Provision of Open Space SPD, Biodiversity Action Plan and the extant Section 106 legal agreement covering the site. It is recognised that the existing Section 106 already makes provision for the funding of off-site recreational open space facilities.

Justification

Recreational and sport pitch open space is a requirement of all new residential development proposals at Sandymoor. Developers will be required to make adequate provision for new open space both as part of development and with regard to sport pitches, and financial contributions, as per the agreed Sandymoor Section 106 Agreement.

Plan to be amended to use consistent colours

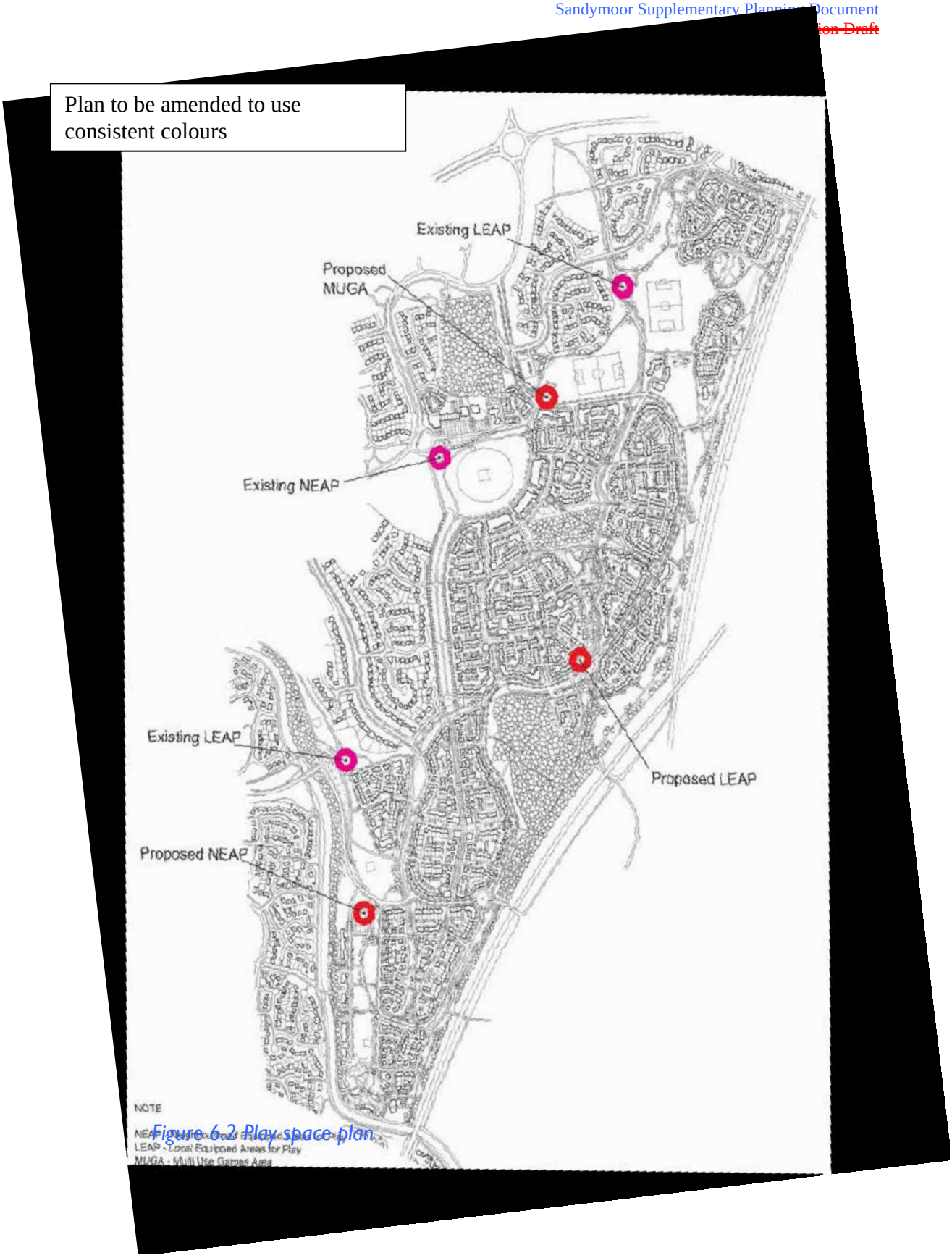


Figure 6.2 Play space plan

SM7 Recreational Play Open Space Requirements

Proposals for recreational play space at Sandymoor should include provision for sport pitches, LEAP's (Local Equipped Areas for Play), NEAP's (Neighbourhood Equipped Areas for Play) and MUGA's (Multi~Use Games Areas) to address identified local needs, in accordance with National Playing Fields Association recommendations, saved policies from the Halton UDP, and the Council's Provision of Open Space SPD.

Justification

The requirement for recreational play space provision at Sandymoor is based on the standards of the National Playing Fields Association. The play areas should be of a suitable configuration and topography to accommodate the aforementioned facilities.

TRANSPORT

SM8 Cycle Provision

All development proposals will be required to enable for safe and convenient cycle access and movements through Sandymoor, linking new routes with existing cycle routes in Sandymoor. The proposed Ride extension will form the main dedicated shared footpath/cycle route linking the new development to the key areas of Sandymoor. As well as providing connections to the existing routes on the site new and upgraded links will be provided to the adjacent communities. This will include providing links to Windmill Hill Avenue, and improve links to Runcorn East Station to the south of Sandymoor. All new cycle routes will be designed to be well lit secure links with the appropriate landscaping to encourage alternative methods of transport than the car.

Justification

The encouragement of cycling should help reduce the need to use private cars, as outlined in the Sustrans: National Cycle Network Guidelines and Practical Details, PPG13: Transport, and the Halton Local Transport Plan 2. It is essential that new roads and junctions are designed to take into account the safety of cyclists. Additional facilities including cycle parking should be provided as part of new development at Sandymoor.

SM9 Pedestrian Provision

All development proposals at Sandymoor will be required to enable for safe and convenient pedestrian permeability through Sandymoor by way of their design and layout, and ensuring that all new routes form sustainable and safe connections to existing pedestrian routes in Sandymoor. As well as the new links mentioned above for the shared footway/cycleway routes the new development promotes informal pedestrian priority throughout the development by establishing a 'homezone' approach to the design of certain streets. The design of the street is an integrated exercise that encompasses the dwellings fronting that street and the treatment of the public realm. Shared surfaces, changes in construction materials, horizontal alignment, landscaping and lighting will all help encourage walking and cycling to school, community hall and shops in preference of the car.

Justification

The provision of a safe and convenient network of pedestrian routes is important in providing a choice of transport modes for people, with particular emphasis on child safety. The encouragement of residents to walk will assist in reducing the need to use private cars. Consideration should be given to design, landscaping, street furniture, signing and lighting to encourage Sandymoor residents to use the pedestrian routes both within and outside of the development area. All pedestrian routes should, be subject to natural surveillance. Detailed design, particularly of shared surface areas, should have regard to the needs of the disabled, including the visually impaired and comply with the provisions of policy SM16, the Street Design Guides and Manual for Streets.

SM10 The Greenway Network

All development proposals at Sandymoor must incorporate the existing and proposed Greenway Network as identified on the Halton UDP Proposals Map.

The network comprises of:-

- 'Railway Green' Corridor;
- 'Canalside Green' Corridor;
- 'Keckwick Brook' Corridor;
- 'Sandymoor Brook' Corridor;
- Bridgewater Canal Towpath;
- Public footpath and bridleway to Windmill Hill;
- Public footpath and bridleway to Wharford Farm and Daresbury (Gooseberry Lane);
- Public footpath and bridleway between Townfield Interchange and Moore Village.

Justification

The proposed "Green Corridors" as identified on the Proposals Map are made up of proposed off-road links for walking, cycling, and horseriding together with wildlife connectivity routes. They connect to facilities and other green spaces within Sandymoor and the wider countryside.
Development proposals for Sandymoor will be expected to satisfy all of the following criteria: -

a) The appearance of pedestrian and vehicle routes through development linking into the green corridors should be enhanced, with increased soft landscape elements such as additional street trees and shrub beds;

b) Routes into the green corridors should be identifiable by the use of specific hard/soft landscape details and signage, and give priority to pedestrians and cyclists;

c) Consideration should be given to identifying and implementing clear and safe road crossings or junctions for pedestrians, cyclists, and horseriders. Streets will be managed and calmed at appropriate locations.

SM11 Car Parking

All development proposals at Sandymoor should provide for appropriate levels of car parking at suitable locations in accordance with the Street Design Guide Principles. The number of parking spaces provided should be in line with Regional Spatial Strategy and Halton BC's adopted parking standards. A variety of car parking will be required as part of new developments, as outlined in the Street Design Guide Principles (Appendix 1). Where appropriate, the use of permeable surfaces should be considered.

Justification

The availability of car parking has a major influence on the means of transport people choose for their journeys. Car parking provision at Sandymoor should contribute to the promotion of sustainable transport choices, including the promotion of non-car modes of transport in accordance with PPG13: Transport (March 2001) and saved policies from theHalton UDP.

SM12 Transport Statements

Where there is a requirement for an outline planning application to be supported by a Transport Statement, this should be prepared in accordance with the Street Design Guide Principles.

Justification

A Transport Statement should be submitted with future outline planning applications at Sandymoor where required. A full TIA will only not be required provided that overall dwelling numbers do not significantly exceed those tested in the East Runcorn Study (2003), commissioned by Halton Borough Council and subsequent network capacity analysis..

SM13 Traffic Management and Road Safety

Where identified as a requirement through an accompanying Transport Statement, development proposals at Sandymoor should where necessary incorporate traffic management and traffic calming measures to enhance the safety of local residents, pedestrians, cyclists, public transport users and motorists.

Justification

Where new development is identified to have a likely impact upon the local highway network, additional traffic management measures may be deemed appropriate. This will be particularly relevant for development proposals adjacent to existing residential areas, and for integrating the new Local Centre with both existing and proposed residential development. The Masterplan integrates new roads, junctions, pedestrian and cycle routes with existing links on Sandymoor. The proposals must ensure that safety measures and traffic calming to assist in the reduction of accidents as per the Halton Local Transport Plan 2006/7 to 2010/11. Measures implemented to enhance safety will include lighting, landscaping, street furniture and natural surveillance, as well as traffic calming measures comprising adjustments to horizontal and vertical alignments, material change, 'build-outs' and other mechanisms to be agreed with Halton Borough Council, prior to the commencement of development. The Halton Local Transport Plan 2006/7 to 2010/11 places a high priority on Local Safety Schemes. It is considered essential that these schemes are supported by measures to ensure that new development helps to improve transport safety, in accordance with the targets of the Halton LTP and the emerging Regional Spatial Strategy.

BUILT ENVIRONMENT

SM14 General Requirements for Development

Development proposals at Sandymoor will only be permitted where policies and guidance within this SPD, the adopted Halton UDP, and the Council's emerging Local Development Documents are fully satisfied, having particular regard for the following:

- Layout
- Density
- Scale
- Massing
- Height
- Public Realm

Justification

To satisfy the design policies of the Halton UDP, all development proposals will have to fulfil criteria in relation to Environmental Quality, Accessibility, Conservation of the Natural Environment, Infrastructure and Management of Resources.

SM15 Construction Impacts

The loss of amenity to existing Sandymoor residents by virtue of noise disturbance and construction works traffic should be minimised at all times. Construction works should be programmed to respect the residential amenity of existing residents and seek to minimise any impacts. Developers will be required to set out their mitigation proposals to Halton Borough Council prior to the commencement of development.

Justification

Throughout the construction of all new development at Sandymoor, the impact upon existing residents in terms of amenity and noise disturbance should be minimised to respect quality of life, and in particular ensure that adequate measures are implemented to maintain the safety of residents.

SM16 Access to Buildings and Public Spaces

Proposals for public buildings and spaces will be required to comply with Government Access regulations. An Access Statement (forming part of a wider Design and Access Statement) will be required to ensure the development responds to the needs of people with disabilities and/or restricted abilities.

Justification

Public places within Sandymoor should be accessible to all members of the community, whether able bodied or disabled, and as safe as possible. Ensuring adequate access to new buildings is an important means of achieving this. Proposals for public areas, open space, pedestrianisation, car parking and street furniture should all take account of these requirements.

SM17 Boundary Walls and Fences

All boundary treatments will be required to be visually attractive, constructed of high-quality and durable materials, appropriate to their setting. A range of boundary thresholds on to the public realm will be acceptable, including railings, hedges and walls. No timber fences designed or sited on boundaries within the public realm will be permitted.

Justification

Halton Borough Council is committed to enhancing the quality of the built environment. In determining proposals for residential development at Sandymoor, the Council will have regard to the amenity and visual impact of all proposed boundary treatments in addition to security considerations.

GREEN ENVIRONMENT

SM18 Loss of Designated Greenspace

No proposals shall result in the loss of greenspace as identified on the Masterplan and be designed for recreation use other than that proposed. Designated site include the following:

a) Railway Green Corridor
b) Canal Green Corridor
c) Keckwick Brook Corridor
d) Sandymoor Brook Corridor
e) Bridgewater Wildlife Area
f) Village Green
g) The Ride Extension
h) Playing Pitches

Justification

The SPD seeks to ensure the retention and protection of existing greenspace at Sandymoor in accordance with the Halton UDP. The impact on views of residents and users will be of fundamental importance where development proposals affect informal or casual greenspace.

SM19 Development within Proposed Greenspace

Development within the proposed greenspace, as defined on the Masterplan, will not be permitted except for:

1. Leisure related facilities including pavilions and changing rooms;
2. Interpretation Centre as part of Nature Conservation;
3. Informal shelters at key locations;
4. Public Art.

Justification

No proposals shall result in the loss of green space as identified on the Masterplan, or be designed for a recreational use other than designated on the Masterplan, to ensure provision of adequate wildlife connectivity and important links within the Greenway Network.

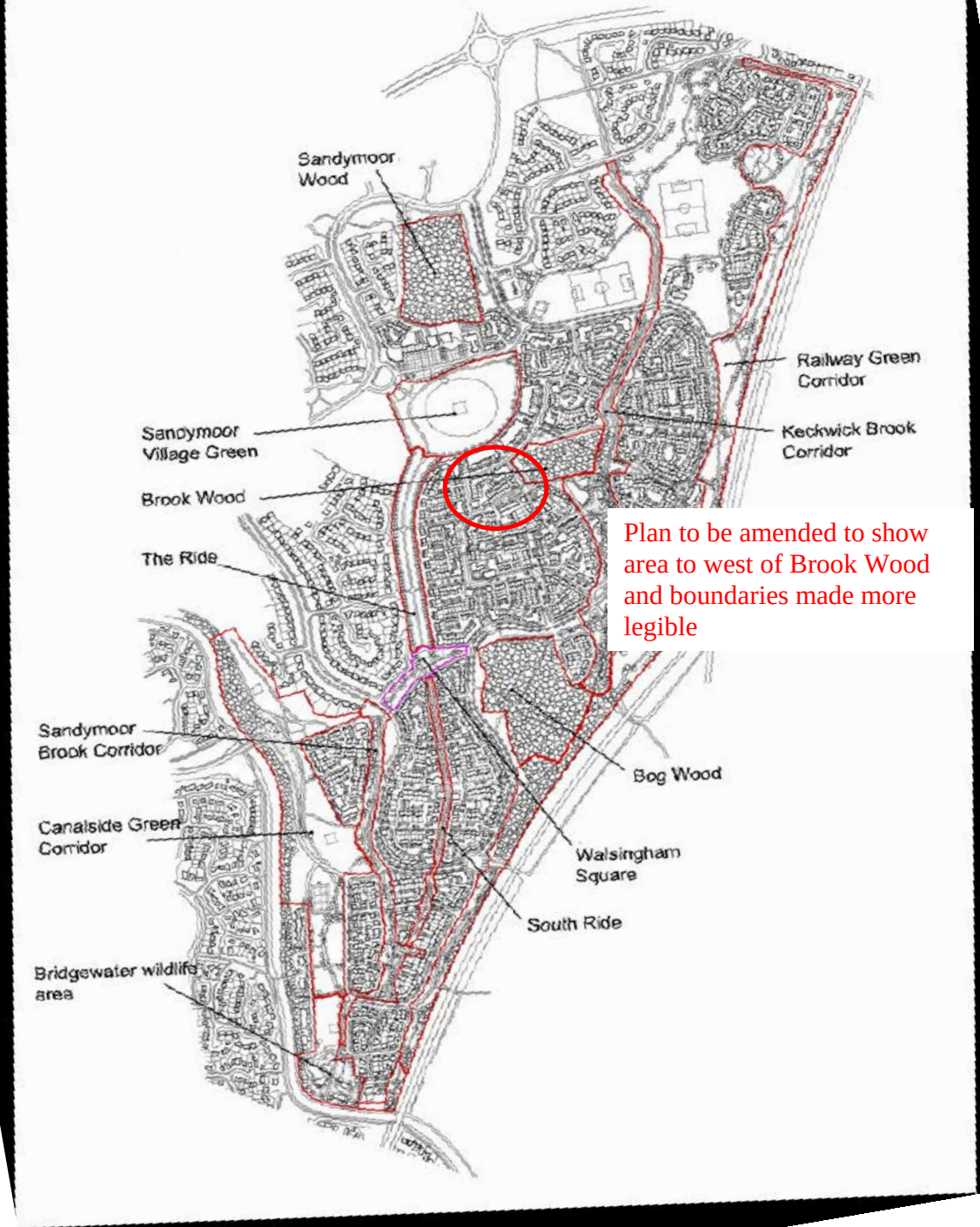


Figure 6.3 Designated Green Space

SM20 Important Nature Conservation Areas

Development will not be permitted on a Site of Importance for Nature Conservation. Designated sites include:

a) Bridgewater Wildlife Area
b) Keckwick Brook Corridor
c) Sandymoor Brook Corridor

Justification

Nature conservation will be enhanced through improvements to Keckwick Brook and Sandymoor Brook environments, the establishment of an area of nature conservation at the southern boundary with Bridgewater Canal, and the integration and protection of Bog Wood and Brook Wood.

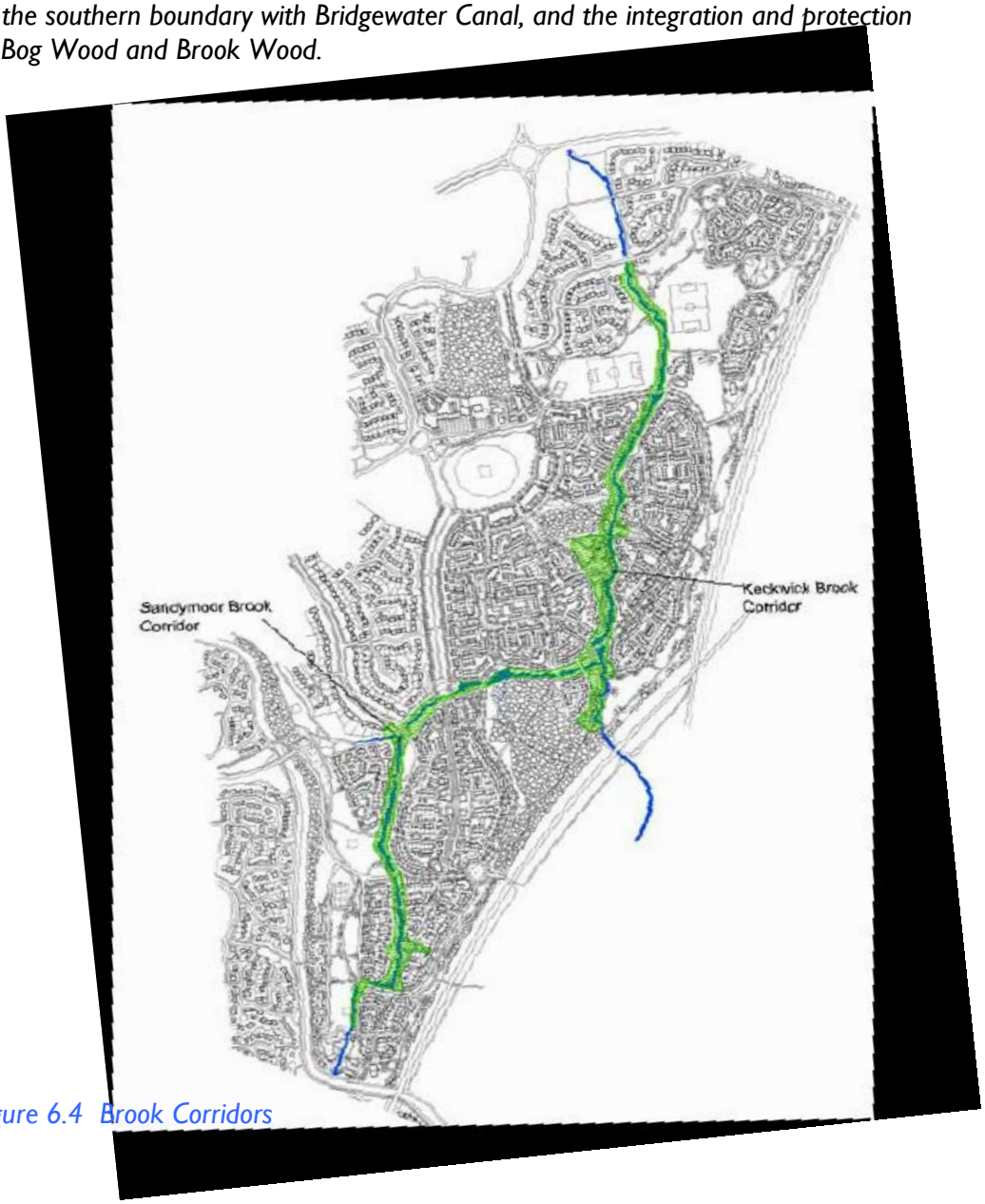


Figure 6.4 Brook Corridors

SM21 Local Wildlife Area

Development, other than approved ecological enhancement works, will not be permitted within the Bridgewater Local Wildlife Area.

Justification

The Bridgewater Wildlife Area is intended to protect and expand habitats suitable for wildlife, including protected species such as the Great Crested Newt. Development is prohibited to safeguard these habitats (and feeding areas) for wildlife and limit undue disturbance from adjacent development.

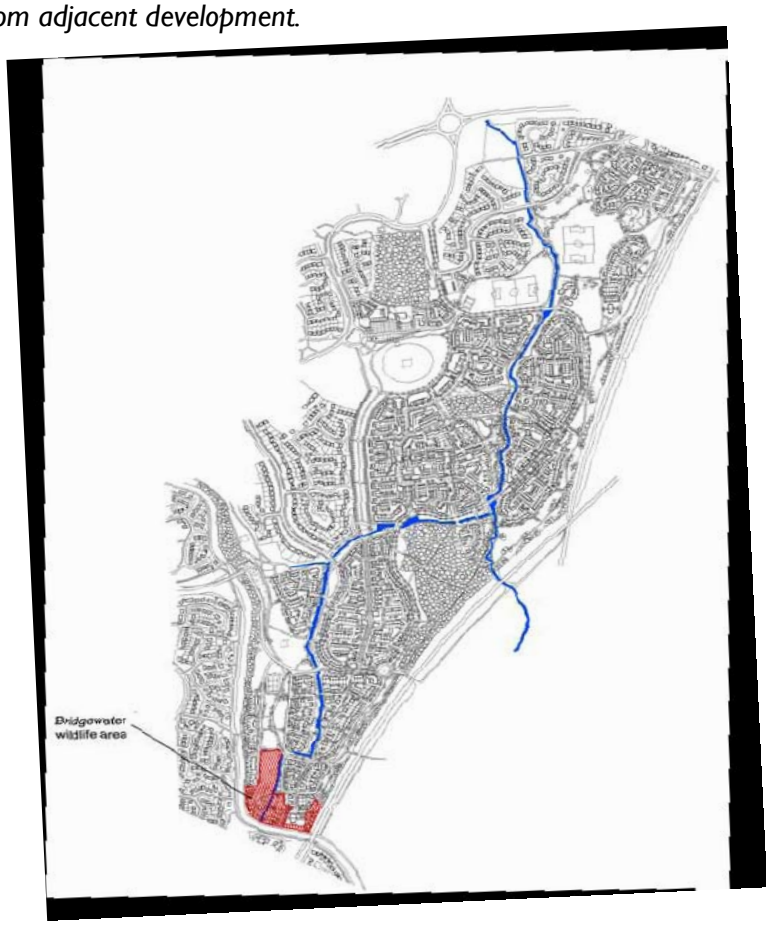


Figure 6.5 Bridgewater local wildlife area

SM22 Flora and Fauna

Sandymoor contains a number of sites supporting species of flora or fauna protected under national legislation or highlighted for action in the Halton Bio-diversity Action Plan. Before any development on or affecting such sites, an expert on the relevant protected species should carry out a detailed site survey together with recommended mitigation to avoid disruption to that species as a result of new development.

Justification

The presence of a protected species will be a material consideration when determining development proposals which would likely result in harm to a species and/or its habitat.

SM23 Ancient and Semi-Natural Woodlands

Existing ancient and semi-natural woodlands within the Sandymoor development site will be protected. No development will be permitted within a protected building line stand-off distance of 15-20m from existing trees. New housing units should only front woodland, and no back gardens will be permitted along woodland boundaries in compliance with Woodland Trust requirements. Designated Woodlands at Sandymoor are:

a) Brook Plantation (Windy Willows Wood)
b) Brook Wood
c) Bog Wood
d) Sandymoor Wood

Justification

The Sandymoor Masterplan and SPD retain and protect existing ancient and semi-natural woodlands at Sandymoor. Development proposals should not cause damage, directly or indirectly, to ancient and semi-natural woodland at Sandymoor and all must conform to the requirements of the Woodland Trust.

Figure 6.6 Ancient & Semi-Natural Woodland

SM24 Existing Mature Trees

No development will be permitted unless it can be demonstrated that trees or hedgerows of high value will be incorporated into the layout as far as possible, in accordance with the principles of British Standard 5837, the saved policies GE26 and GE27 of the Halton UDP and the Council's Natural Assets Strategy.

Justification

Comprehensive tree surveys have been carried out by specialist consultants TEP which have identified a number of individual specimens and groupings of mature trees that are worthy of retention. Development proposals should seek, wherever possible, to retain and incorporate these trees into the detailed layouts by allocating sufficient space for their protection from site works. In exceptional cases, where the removal of some trees may be considered unavoidable to meet other scheme objectives, a full justification statement for felling and a compensatory replacement planting scheme (additional to any other proposed landscaping) will be required before planning permission is granted.

SM25 Important Sandymoor Landscape Features

Development will not be permitted on land designated as being an Important Sandymoor Landscape Feature in accordance with saved policy GE24 of the Halton UDP and the Sandymoor Masterplan. Adjacent development should seek to respect the existing visual and physical characteristics of each Important Sandymoor Landscape Feature. Important Sandymoor Landscape Features are as follows:

a) Brook Wood
b) Bog Wood
c) Sandymoor Wood
d) Bridgewater Nature Reserve
e) Keckwick Brook Corridor
f) Sandymoor Brook Corridor
g) Railway Green Corridor
h) Canal Green Corridor
i) The Ride
j) Proposed South Ride and Square
k) Sandymoor Village Green

Justification

There are a number of Important Landscape Features at Sandymoor, all of which have an important role in defining and enhancing the character of the area. All development proposals should protect and retain these existing features.

SM26 Bridgewater Canal

Development will only be permitted adjacent to the Bridgewater Canal where it is in accordance with the Masterplan and the Development Plan, provided it will not have a structural impact upon the canal, provides for natural surveillance on to the canal, and minimises the impact on the following:

a) Recreation and tourism;
b) Amenity of the canal;
c) Landscape and wildlife;
d) Views;
e) Access to towpath;
f) The Greenway Network; and
g) The cleanliness of the Canal.

Justification

New residential development adjacent to the Bridgewater Canal will promote and enhance the area as an accessible amenity. New development should also enable connections to create a permeable movement network, the design of which should take into account the protection of existing wildlife and habitats.

SM27 Brooks and Tributaries

All proposed works to the brooks and their tributaries should enhance the landscape and ecological characteristics as identified on the Masterplan. Diversions or alterations of channels will be permitted provided they enhance the overall public amenity, flood mitigation, landscape and ecological characteristics. In addition, an appropriate stand-off distance from the watercourse to maintain wildlife connectivity should be agreed between developers, Halton Borough Council and other statutory bodies.

Justification

The in-channel mitigation works have been designed to avoid adverse impacts on existing environmental features and habitats, whilst providing the opportunity to create habitat and enhance the ecological potential of the nature corridor elsewhere.

FLOOD RISK

SM28 Flood Risk Assessment

A Flood Risk Assessment (FRA) will be required for submission with all planning applications on development sites in excess of 1 hectare, and those situated within and directly adjacent to the identified area of flood-risk in northern Sandymoor (See Figure 3.7). The FRA will require formal approval from the Environment Agency prior to the determination of any planning applications to which this applies.

Justification

The FRA demonstrates that the development will be safe, without increasing flood risk elsewhere as there is no net loss of existing floodplain storage within the system. This is in accordance with the guidelines of PPS25 'Development and Flood Risk.'

UTILITIES

SM29 Development in Overhead Electricity Line Corridors

Residential development should maintain a non-statutory horizontal stand-off of 25m either side of the centre line of the western 400kV powerline corridor in accordance with the Masterplan and facilitate the creation of a suitably designed Canalside Green Corridor. Residential development within 25m of the eastern 132kV powerline corridor should be minimised wherever practicable.

Justification

Overhead electric cable routes run along both the eastern and western edges of Sandymoor. There is a statutory requirement for development proposals (including planting) to ensure that specific safety clearances from the overhead power lines are maintained (See appendix 3 for sources of advice). In addition, Operators' wayleave and easement rights should be respected.

The non-statutory minimum horizontal stand-off distance of 25m either side of the centre line of the western 400kV powerline corridor reflects existing development and is in compliance with the National Radiological Protection Board (now part of the Health Protection Agency) current recommendations.

No specific recommendation is included for the eastern 132kV route as maintaining an uninterrupted corridor is impracticable, however development should wherever possible seek to limit the number of residential properties within 25m proximity of this route.

Green corridors and open

Chapter 7.0

Character Area Principles

7.1 Following the completion of the masterplanning process, the Sandymoor development site has been divided into three distinct Character Areas; Brookwood; Southride; and Bridgewater as shown below.

7.2 The following section sets out a series of Character Area specific policies which build upon the broad Sandymoor generic policies, and to which future development proposals should conform.

7.3 The character of the three areas will be defined by differences in layout, building typologies, building materials and details. Detailed Design Codes will be produced that will set out the configuration of these elements for each character area as well as special conditions located within them.

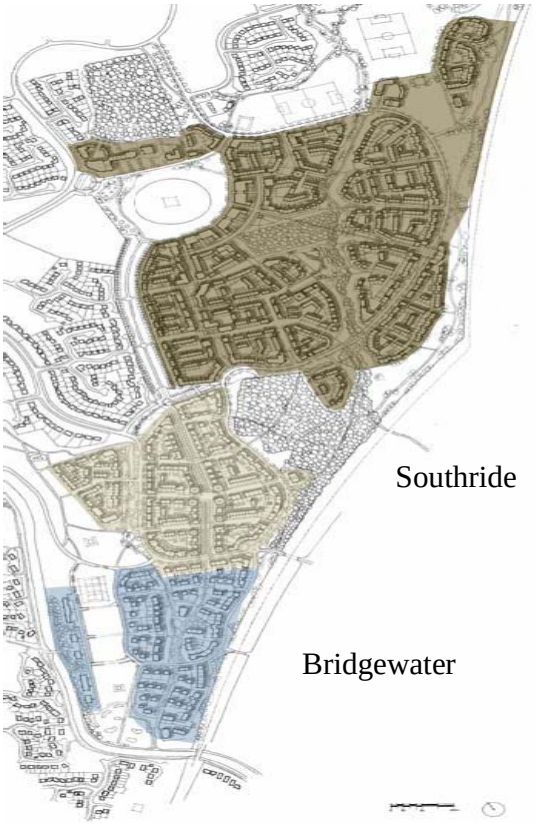


Figure 7.1 Character area plan

Overall Land Area:
- 20.33 hectares

Land Classification:
Greenfield

Current Land-Use(s):
- Grazing Land
- Arable Land
- Managed Landscape

Allocated Land-Use(s):
- Residential
- Local Centre
- Reserved School Site Open Space

Development Constraints:
- Railway Green Corridor
- Keckwick Brook Corridor
- Floodplain Area
- 15m-20m stand-off distance between new buildings and Brook Wood
- Proximity to Existing Residential Development

BROOKWOOD

7.4 Brookwood predominantly incorporates the northern part of the Sandymoor development site, encompassing an area of circa 20.33 hectares, and will effectively form the heart of the Sandymoor development containing the Local Centre, the Village Green, the reserve school site, a formal sports area and providing key linkages along the Ride (pedestrian & cycle) and the Avenue (buses and cars).

7.5 Residential development will comprise a slightly higher density than the rest of Sandymoor, including in places the development of 2-3 storey townhouses and apartments.

7.6 Higher density development is proposed overlooking the Village Green to provide a degree of enclosure and provide natural surveillance. This is highlighted as being as an important frontage where building form will make a major contribution to the character of the area.

7.7 Medium High densities are proposed along the Village Street and The Avenue. The former is intended to provide a character and feel reminiscent of a Cheshire Village, (see Appendix A1.5) whilst the latter is intended to provide a formal setting for the development (see A1.4). The Avenue faces the railway lines bounding the east of the site and a built form is envisaged that will use the scale and orientation of buildings to act as an acoustic barrier to reduce the impact of railway noise on the remaining development area. Primary important frontages are identified at key locations along The Avenue where the use of landmark buildings will be appropriate to create a sense of place. For highway safety, there will be no direct vehicular access to individual properties from The Avenue.

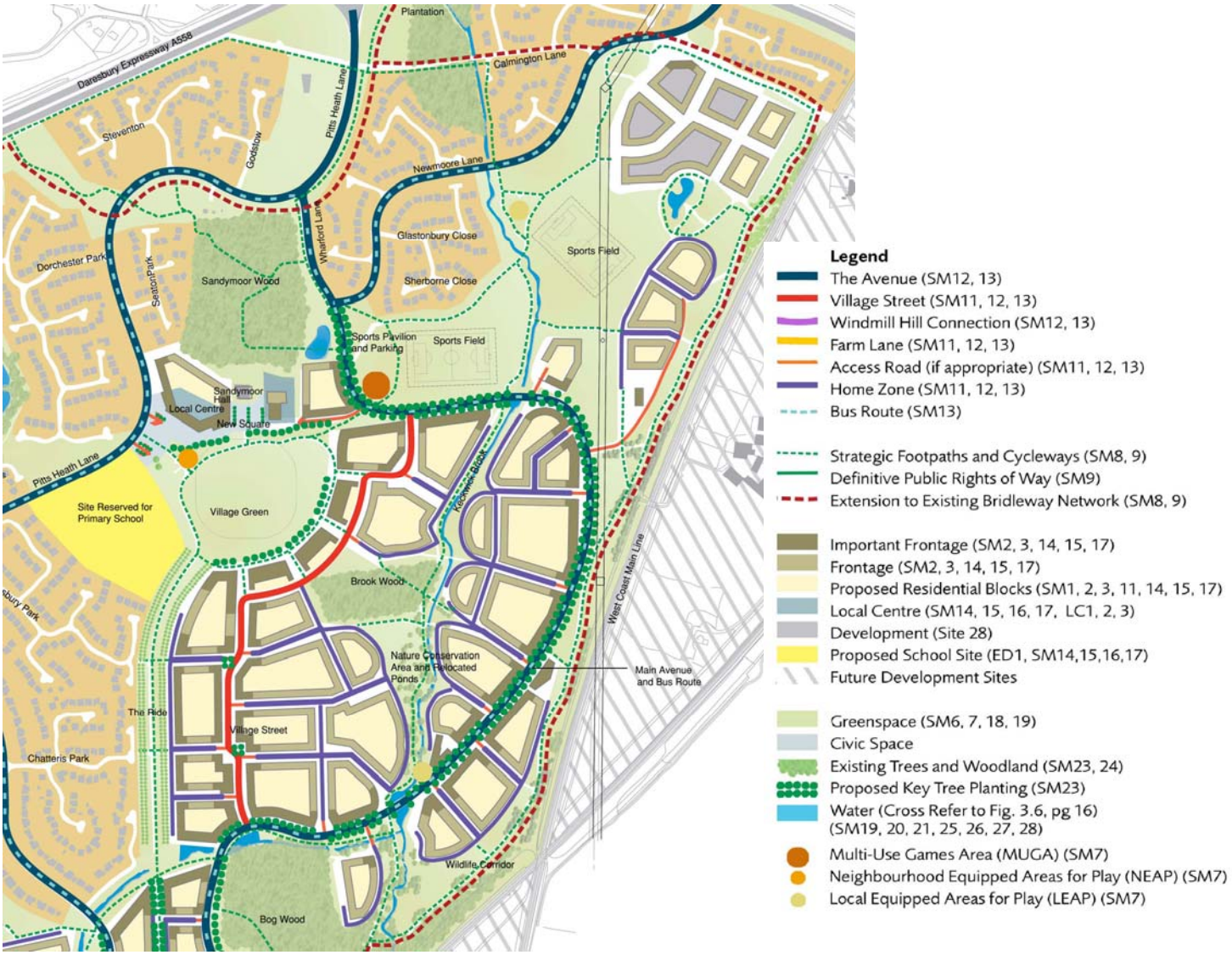


Figure Illustrative plan of Brookwood showing potential internal development pattern.

7.8 To be deleted following objection from Scottish Power

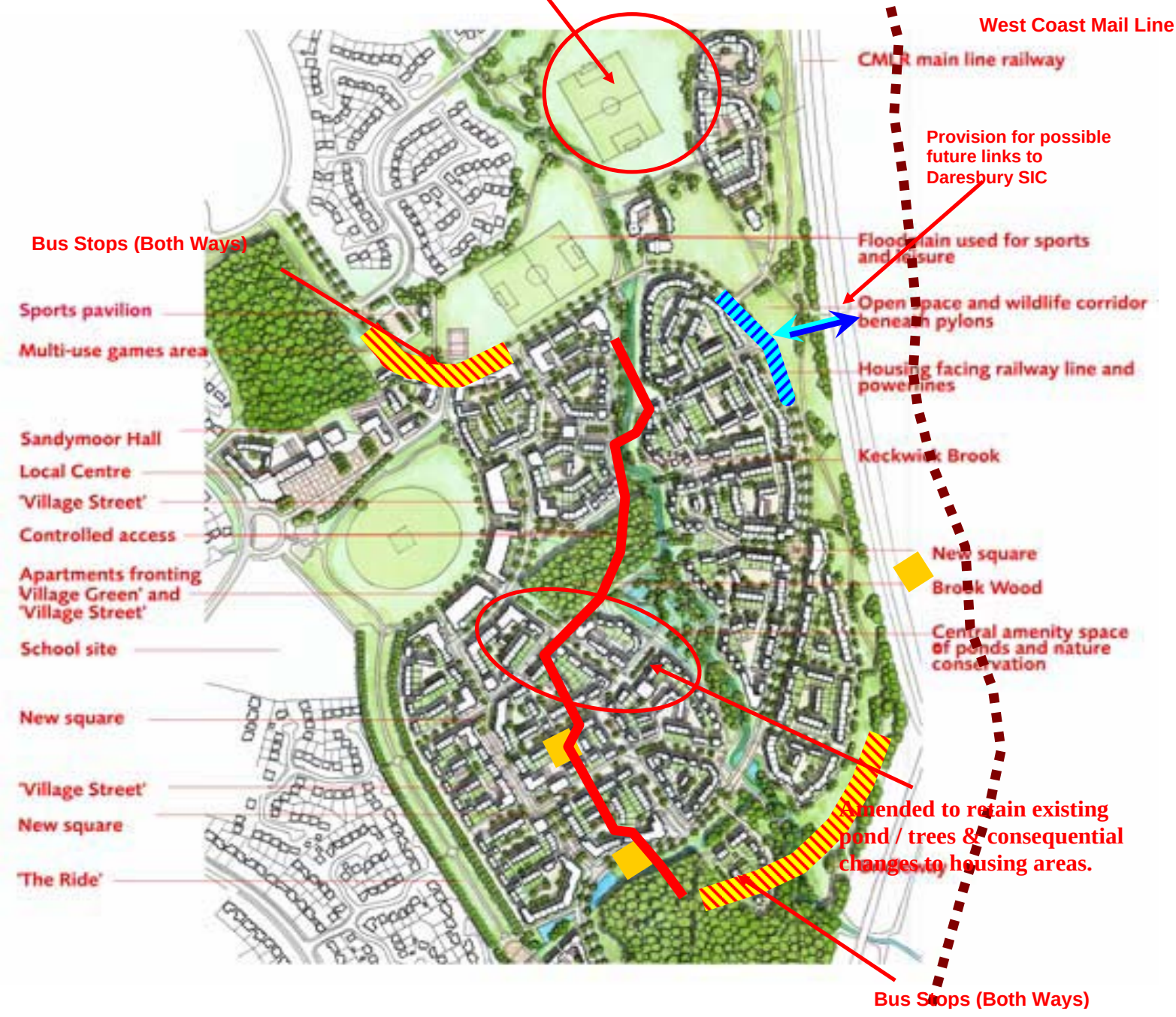


Figure 7.2 Illustrative plan of Brookwood including key design requirements

7.9 Low density development is intended to provide a 'soft buffer' adjacent to Kekwick Brook Corridor which will be retained and protected to provide valuable wildlife habitats.

7.10 In recognition of the emerging Masterplan for the Daresbury Science and Innovation Campus (SIC) and Daresbury Park across the railway lines to the east of Sandymoor, the design of The Avenue will need to ensure that it does not prejudice the potential for future linkages and connections to the SIC utilising the existing link under the West Coast Main Line. Initially, pedestrian and cycle connections are envisaged, however the Daresbury SIC are investigating the feasibility of a future vehicle connection for which the development of Brookwood must have regard.

7.11 A formal playing field area is to be provide to the north east of the Local Centre. This area will be set out to Local Authority requirements and incorporate changing facilities and appropriate parking provision. This area is intended to act as a flood water storage area in extreme events. The changing facilities should be set at a level to avoid damage in such events. In addition, an area of reedbed or semi-wetland habitat will be created to the east of Kekwick Brook under the overhead electricity transmission lines. Detailed design and planting of this area will be carried out in consultation with HBC's Nature Conservation Officer.

CHARACTER AREA SPECIFIC POLICIES:

TRANSPORT

BK1 Cycle and Pedestrian Provision

Development proposals should form direct links to the existing cycleway/footpaths to the north of Brookwood, and The Ride. Proposals should provide for new routes along the eastern section of 'The Avenue' and the 'Village Street' to reflect the Street Design Guide Principles.

Justification

In line with the key aims of the SPD and saved UPD Policies GE6, GE7, TP6, TP7and TP9 development proposals at Sandymoor should promote the use of sustainable transport modes amongst the local community, and provide safe links to additional urban areas, the Local Centre and the wider countryside.

BK2 Bus Stop Provision

Bus stops should be provided at convenient locations along the length of The Avenue. In Brookwood, provision should include, as a minimum, bus stops (possibly including lay-bys) serving both directions close to the Local Centre (including suitable crossing facilities) and to the south in the area between the junction with the Village Street and the Keckwick Brook corridor area.

Justification

UDP Policy TP1 requires that no building should be more than a 400 meter walk of a bus stop or railway station and it is a key aim of this SPD that opportunities for access to public transport are maximised. To this end it is important that the Local Centre has suitable access to public transport. To ensure suitable coverage, at least a second set of stops in Brookwood will be required. Precise locations and specifications to be agreed by the Local Highway Authority in consultation with the local bus companies.

BK3 Future Linkages with Daresbury Science and Innovation Centre

The Avenue should be designed so as not to prejudice possible future vehicle connections from the adjacent Daresbury Park Science and Innovation Centre (SIC).

Justification

The Daresbury SIC is subject of a separate Master planning exercise. Proposals include possible provision of a new public transport interchange within the site including a possible link utilising the existing access beneath the West Coast Main Line into Sandymoor. The area of the Avenue opposite this link should not prejudice creation of vehicle route at this point (should engineering assessment work for the SIC prove this to be feasible).

BK4 Greenways

Development proposals must ensure that suitable links are formed to the adjoining Greenways, The Ride to the west, and the eastern route within the railway green corridor. The establishment and enhancement of a Greenway through this area along the Keckwick Brook Corridor should be incorporated into any design proposal(s).

Justification

In support of saved UDP Policies GE6, GE7 and TP9, the development of the Greenway network in Brookwood will provide for appropriately segregated pedestrian priority routes within the designated Keckwick Brook Wildlife Corridor.

GREEN ENVIRONMENT

BK5 Railway Green Corridor (Separation Distance)

Development proposals comprising roads and associated pavements, gardens and dwellings should maintain a minimum width of 35m from the base of the West Coast Main Line railway embankment to accommodate the development of the proposed Railway Green Corridor.

Justification

The Sandymoor Masterplan provides for the creation of a green wildlife corridor and safety zone along the eastern boundary of the site adjacent to the existing high-speed railway lines.

BK6 Nature Railway Green Corridor

Development proposals comprising roads and associated pavements, gardens and dwellings should maintain a minimum width of 35m from the base of the West Coast Main Line railway embankment to accommodate the development of the proposed Railway Green Corridor.

Justification

The Sandymoor Masterplan provides for the creation of a green wildlife corridor and safety zone along the eastern boundary of the site adjacent to the existing high-speed railway lines.

SOUTHRIDE

7.12 The principal feature of Southride Character Area is the extension of The Ride, providing a pedestrianised spine through the site.

7.13 Housing on Southride will provide a transition between slightly higher density in Brookwood (to the north) and lower density residential development further south in Bridgewater. Much of the development will be at medium low densities with slightly higher (medium high) densities proposed along primary important frontages at the northern and southern ends of the site.

7.14 Development along the Ride extension is envisaged to incorporate larger villas, punctuated with higher density 'feature' blocks at strategic points, including the Central Square.

7.15 The Avenue loops around the main housing area and will provide the bus route serving southern Sandymoor. In order to ensure dwellings in the adjacent Bridgewater Character Area to the south are within 400m of a bus stop, as a minimum, Southride must include stops (both ways) on the southern edge with Bridgewater.

7.16 No dwellings are to be located to the eastern side of The Avenue along the boundary with the Woodland Trust's Bog Wood. This is to maintain an open 'semi-rural' aspect to the proposed development, maintain a 15-20m development stand-off from the woodland and to avoid problems of access and maintenance associated with development 'backing onto' woodland areas. Where necessary, suitable controlled access points will be provided to Bog Wood.

Overall Land Area:
- 7.61 hectares

Land Classification:
- Greenfield

Current Land-Use(s):
- Grazing Land
- Managed Landscape

Allocated Land-Use(s):
- Residential
- Open Space

Development Constraints:
- Sandymoor Main Ditch
- 15m-20m stand-off distance between new buildings and Bog Wood
- 25m stand-off distance either side of western power lines
- Railway Green Corridor

7.17 The Avenue should be designed to incorporate provision for enhanced vehicular access to the adjacent Wharford Farm development site, utilising the current route under the Chester / Warrington railway line.

Figure Illustrative plan of Southride showing potential internal development pattern

Check this is to be provided

Figure 7.3 Illustrative plan of Southride including key design requirements

CHARACTER AREA SPECIFIC POLICIES:

TRANSPORT

SR1 Cycle and Pedestrian Provision

The existing cycleway/footpaths from Brookwood should be developed further along The Ride extension, and through Southride linking to the Bridgewater Character Area. Links to the eastern canal crossing should be created from the existing routes, including further enhancement works.

Justification

In line with the key aims of the SPD and saved UPD Policies GE6, GE7, TP6, TP7and TP9 the extension of the existing cycleway and footpaths through Southride should further assist in the development of segregated pedestrian priority routes throughout the Sandymoor development site, and contribute towards a reduction in private car use.

SR2 Greenways

The Greenways identified in the Brookwood Character Area must be extended into Southride along the proposed routes identified on the UDP Proposals Map and Sandymoor Masterplan, and ensure appropriate integration with Bog Wood.

Justification

In line with the key aims of the SPD and saved UPD Policies GE6, GE7, TP6, TP7and TP9 the extension of the Greenway network from Brookwood into Southride will contribute towards the development of appropriately segregated pedestrian priority routes whilst simultaneously providing for a degree of wildlife connectivity.

SR3 Bus Stop Provision

Bus stops should be provided at convenient locations along the length of The Avenue. In Southride, provision should include, as a minimum, bus stops serving both directions along the southern section of the Avenue adjoining Bridgewater Character Area.

Justification

UDP Policy TP1 requires that no building should be more than a 400 meter walk of a bus stop or railway station and it is a key aim of this SPD that opportunities for access to public transport are maximised. In order that properties on Bridgwater comply with this requirement, bus stops will need to be located on The Avenue in Southride. The precise locations and specifications to be agreed by the Local Highway Authority in consultation with the local bus companies.

Overall Land Area:
- 7.09 hectares

Land Classification:
- Greenfield

Current Land-Use(s):
- Grazing Land
- Managed Landscape

Allocated Land-Use(s):
- Residential
- Open Space

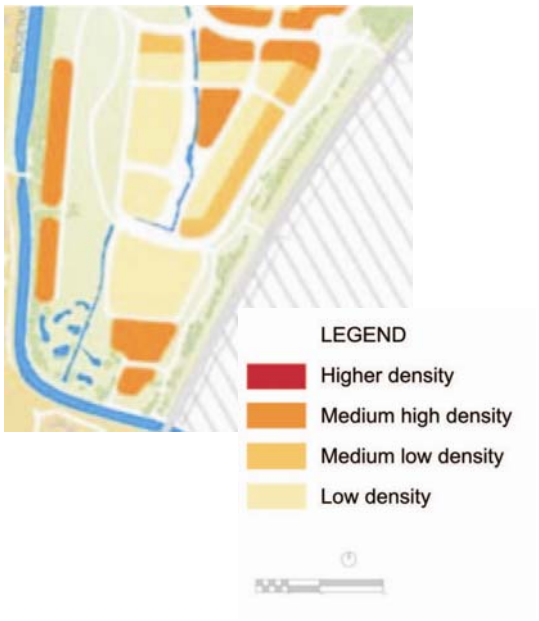
Development Constraints:
- Bridgewater Nature Reserve
- Bridgewater Canal Green Corridor
- 25m stand-off distance either side of western powerlines
- Sandymoor Main Ditch
- Site Topography
- Railway Green Corridor

BRIDGEWATER

7.18 Development within the Bridgewater Character Area will generally be less intense than elsewhere at Sandymoor, focusing alternatively upon maximising the benefit for flora and fauna, and enhancing the area's rural quality.

7.19 The highest density of development will be along the western edge of the site adjacent to the Bridgewater Canal, where apartments or 3 storey dwellings may be appropriate to capitalise on the waterside location. Similarly, potential exists at the southernmost tip of the site for slightly higher densities including a landmark development.

7.20 The eastern section of Farm Lane faces the Chester to Warrington railway lines and a built form is envisaged that will use the scale and orientation of buildings to act as an acoustic barrier to reduce the impact of railway noise on the remaining development area.



7.21 A stand-off of 20 / 30m from the base of the Railway Embankment will allow the creation of the Railway Corridor wildlife area. Additional tree cover will be provided in this area as mitigation to losses further north on the southern edge of Bog Wood (as per planning permission 07/00111/OUT).

7.22 The development of the Bridgewater area must recognize the potential for important linkages and connections to the Wharford Farm site to the east across the Chester to Warrington Railway. Existing and potential linkages will be protected and explored as detailed proposals for that site advance.

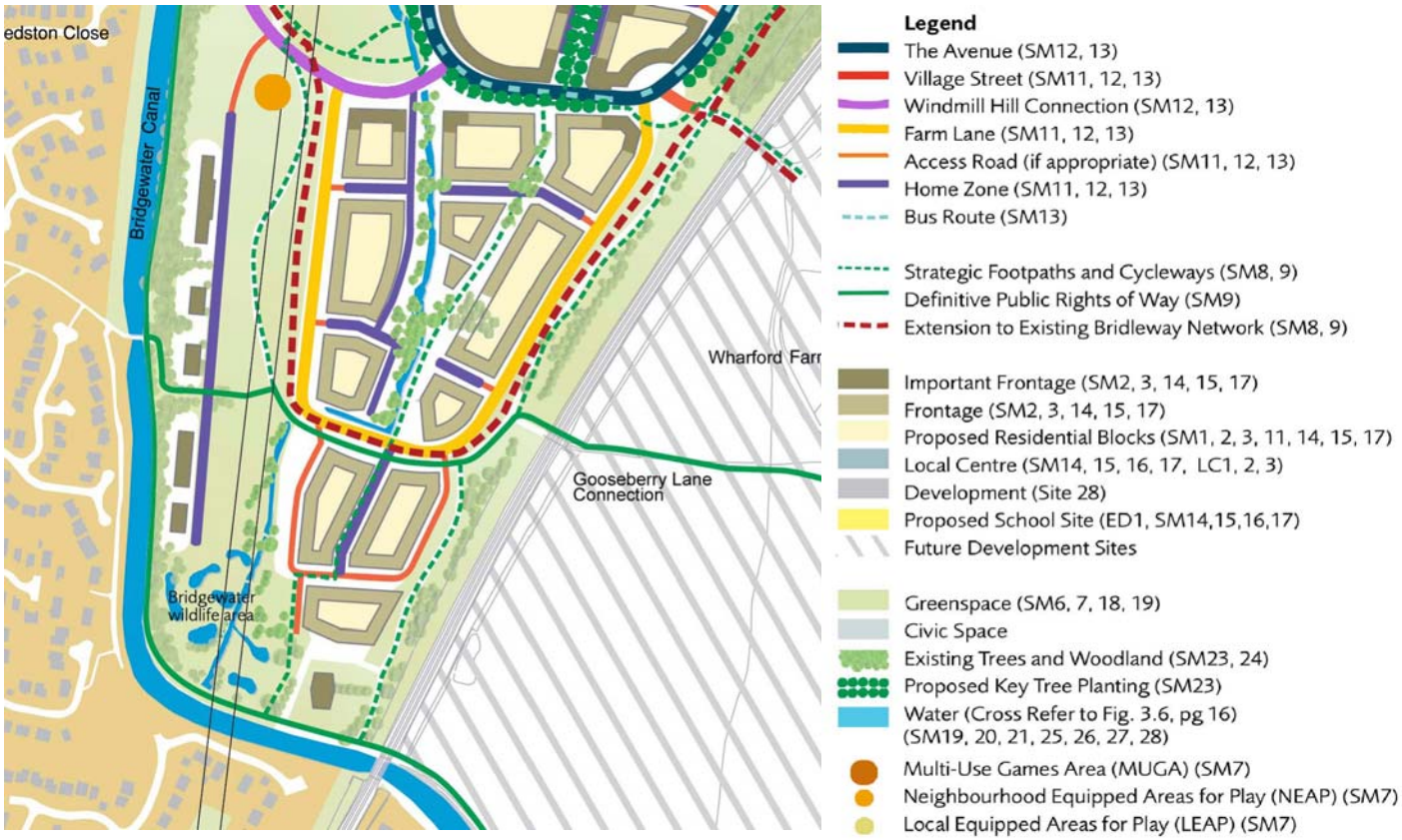


Figure Illustrative plan of Bridgewater showing potential internal development pattern

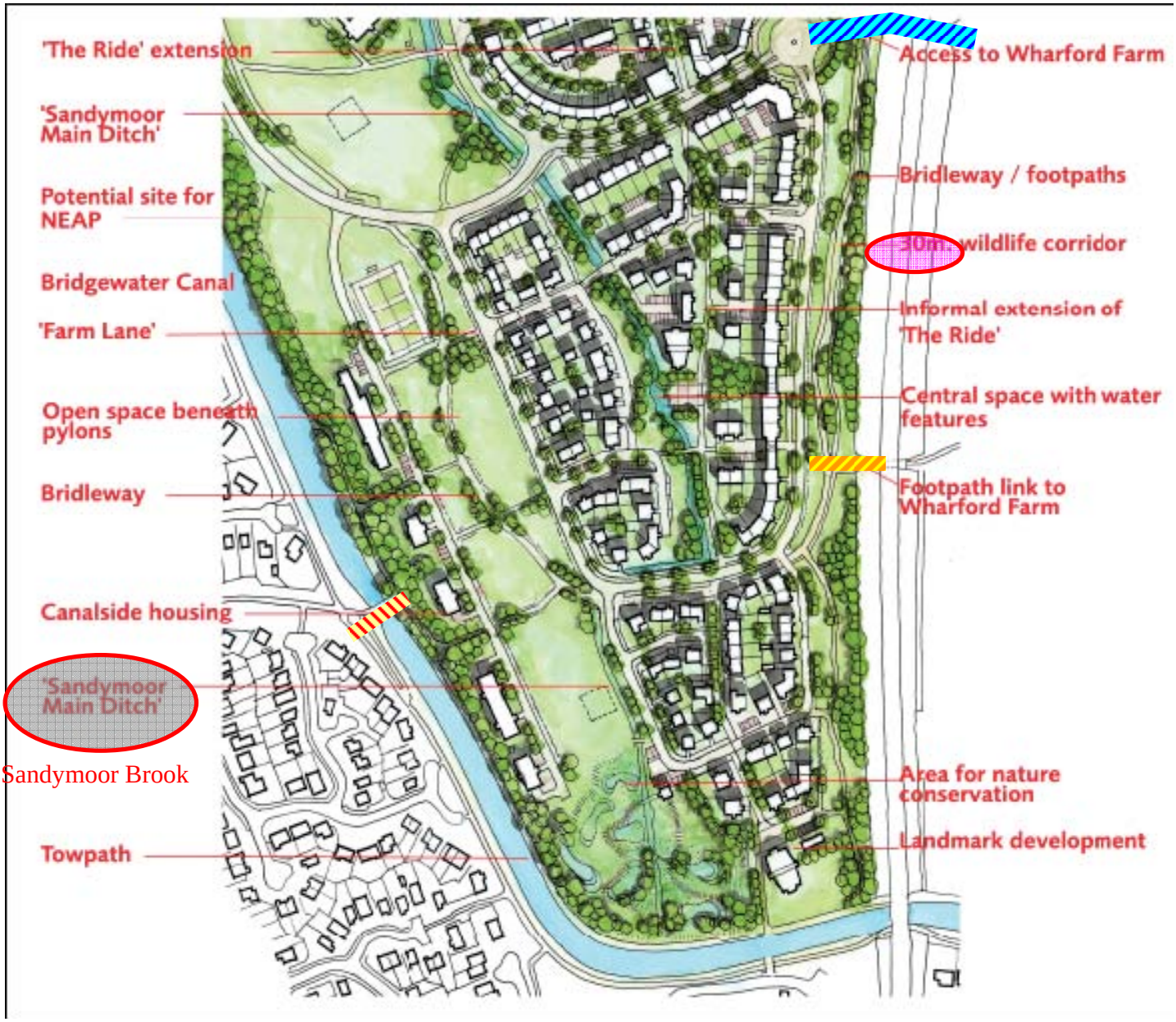


Figure 7.4 Illustrative plan of Bridgewater including key design requirements

CHARACTER AREA SPECIFIC POLICIES:

TRANSPORT

BR1 Cycle and Pedestrian Provision

The extension of the cycleway/footpath from Southride must link into the existing canal crossing to the east ensuring good connections to all proposed development within the Character Area.

Justification

In light of the overall area of the Sandymoor development site, it is important to provide pedestrian priority routes throughout each of the Character Areas in accordance with the UDP and sustainable transport objectives set out in the Council's Local Transport Plan.

BR2 Greenways

The Greenways in the Bridgewater Character Area should provide for good links through from Southride, and ensure connectivity through to the existing canal towpaths.

Justification

The extension of the Greenway from northern Sandymoor through to the south of the site will ensure that a sustainable pedestrian priority route is created throughout Sandymoor, and thus seek to encourage a reduction in private car use amongst local residents.

GREEN ENVIRONMENT

BR3 Separation Distances

Development proposals including roads and associated pavement, gardens and dwellings should maintain a minimum width of 20m / 30m (tbc) from the base of the rail embankment to create a Railway Greenway Corridor.

Justification

To provide an adequate wildlife corridor and safety zone adjacent to the low-speed railway line.

Chapter 8.0

Local Centre

8.1 In addition to new residential development at Sandymoor, the Masterplan also provides for the development of a new Local Centre to supply essential social infrastructure to serve the existing and future residents of Sandymoor.

8.2 Saved Policy TC1 from the Halton UDP allocates land at Sandymoor for the development of local shops and community facilities to serve residents, and concurrently seeks to discourage private car use. The Local Centre is located to the north of the 'Village Green' on the southern boundary of Sandymoor Wood. Outline planning permission was originally granted in August 2004 (App. Ref 04/00431/ OUT) with a revised outline consent (App. Ref. 07/00681/OUT) incorporating a revised indicative layout granted in December 2007. This included the development of up to 34 residential units (comprising dwellings and apartments) and up to 3,000 square metres of commercial floorspace providing for:

- Public House/Restaurant with ancillary accommodation;
- Convenience Store;
- Other retail, commercial and leisure uses.

8.3 Development proposals for the Local Centre must be in accordance with the criteria as set out above, and that detailed in the Sandymoor Local Centre Development Brief.

8.4 Further to the generic Sandymoor policy requirements, the following policies are specific to the development of the new Local Centre, to which development proposals must conform.

TRANSPORT

LC1 Accessibility and Permeability

The proposed Local Centre vehicular access through route should be closely formed in conjunction with the Village Square. Proposals should provide a shared surface through route that provides for pedestrian priority. This can be implemented by the provision of an informal vehicular access that is evident through the implementation of street furniture and planting to encourage low traffic speeds. The entrances to this route must be clearly identified, and traffic calmed measures should be implemented to provide a clear warning to vehicles upon entering this access. This access route will not be offered up for adoption to the Local Highways Authority, and thus must be maintained by a management company to standards agreed with Halton Borough Council.

Justification

The Local Centre should seek to encourage the public to walk and cycle through the provision of a safer space upon arrival, and by ensuring that key footpaths and cycleways at Sandymoor link the Local Centre to both existing and proposed residential neighbourhoods. Public transport access will also be encouraged. Access must be maintained for disabled vehicle users and to service the commercial units.

GREEN ENVIRONMENT

LC2 Woodland Protection

The proposed Local Centre site lies adjacent to Sandymoor Wood. To protect this woodland, a minimum stand-off distance of 15m between the tree canopy and any buildings must be implemented and maintained. Where in consultation with the Woodland Trust, it is considered a physical barrier is the most appropriate boundary treatment between the development and adjacent woodland a wall should be constructed that meets the Woodland Trusts requirements.

Justification

This SPD seeks to protect and retain all existing woodlands at Sandymoor in accordance with the requirements of the Woodland Trust, and as previously set out in generic policy SMGE6 of this SPD.

BUILT ENVIRONMENT

LC3 Design of Local Centre

All development proposals for the Local Centre will be required to conform to the policy requirements of this SPD and the Halton UDP, and the Local Centre Development Brief.

Justification

The Local Centre Development Brief will outline the criteria to be satisfied in relation to the uses, design and materials of the Local Centre at Sandymoor. All development proposals must therefore accord with the Development Brief to ensure a consistently high-quality design and development approach throughout Sandymoor.

Chapter 9.0

Reserve School Site

9.1 The Halton UDP allocates land within northern Sandymoor for the development of a new local educational facility. Policy S24 'Sustainable Urban Locations' of the UDP pays particular regard to the safeguarding of this land for a new school. To date the Local Educational Authority has yet to establish the need for a new school at Sandymoor.

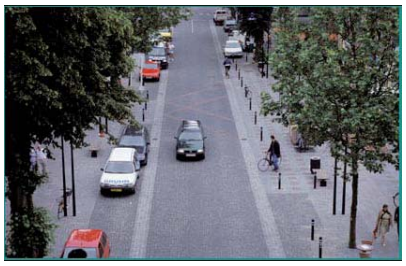
9.2 In accordance with the Halton UDP allocation, development proposals for the reserved school site must conform to the following:

ED1 Development of Reserved School Site

No form of built development will be permitted on the reserved school site at Sandymoor, as identified on the Masterplan, other than for an Educational Facility unless the Local Education Authority determine that it is not required.

Justification

The Halton UDP allocates land for the future development of a local educational facility at Sandymoor. The release of the site for the development of an educational facility will be dependant upon the Local Education Authority establishing the requirement for a new school within the area.



Appendix

Contents

Appendix 01

A 1.1 Introduction

This Street Design Guide has been put together to outline the key principles and design detail of the movement network within the new Sandymoor development. The format of this guide is based upon the design codes principle advocated by Manual for Streets.... The guide should be read in conjunction with the Masterplan and the supporting Sandymoor Design Codes. .However, design guidance quoted in the hierarchy tables such as sightlines etc, will take precedence over Manual for Streets.

1.1 Access and Linkages

The Masterplan is based around 'The Avenue'. This links the site, and together with a grid of pedestrian-friendly routes, some of shared surface, provides access to the rest of the development. A flexible approach to highway design and requirements is a fundamental assumption. The principles for street design encourage the design of a street to be 'fit for purpose'.

The key principles promote:

- **Permeability**

To create a grid of routes that provides easy access throughout the site. This will help connect the site together to create a walkable neighbourhood. To do this, streets will be designed to 20 - 30mph along the main routes and 10mph for the home-zone areas. This reflects the community concerns about traffic speeds

- **Pedestrian Priority**

To promote informal pedestrian priority throughout the development by establishing a 'home-zone' approach to the design of the streets. The design of the street is an integrated exercise that encompasses the dwellings fronting the street and the treatment of the public realm. Shared surfaces, changes in construction materials, horizontal alignment, landscaping and lighting will all help encourage people to walk and cycle to school, community hall and shops rather than travel by car

- **Pedestrian links and safe routes**

Existing pedestrian/cycle routes and bridleways will be incorporated or re-provided and new routes added to create a pedestrian network that will link the development together and with adjacent communities. 'Safe routes' will link key areas and be designed to be secure, well lit with appropriate planting and street furniture as well as interest to engage school children. Cycle routes will be integrated into the design of the streets throughout the development

- **Taming existing streets**

Managing traffic on the streets that surround the site, such as Walsingham Drive, will be improved through the provision of better crossings and other traffic calming measures. This would respond to a major concern about traffic speeds and road safety that emerged during consultation with the community

- **'A sense of place'**

To create a series of 'places' at junctions of key routes, celebrating these new areas and providing some variety and visual diversity

Appendix 01

A 1.2 Street Hierarchy & Movement Strategy

A simple hierarchy is proposed:

- **'The Avenue'** Provides the principle route through the site along which much of the vehicular traffic will be concentrated. The bus service will run along this route. The character changes as it traverses the site

- **'Farm Lane**' A low-key residential route, that provides access to the southern part of the site. Due to its proximity to open space and the nature conservation area, this takes on a rural quality

- **The 'Village Street'** This route provides an indirect link from the centre of the site to the Local Centre to the north. The character of this street will take on qualities of a traditional Cheshire Village Street. The street will be traffic-calmed, giving priority to pedestrian and cyclists

- **Access Streets** These act as transition routes between 'The Avenue', 'Farm Lane' and the home-zone streets

- **Home-Zones** These will allow the remainder of the public realm to be designed as shared surface routes. The detailed design will depend on local conditions. For instance, through more ecologically sensitive areas to the south, care to retain existing features would be taken. In other locations a more robust approach could be appropriate which would reflect the demand for shared parking spaces and higher densities. The home-zones provide a network of safe routes for school children and would be developed to meet the Safe-Routes-to-School criteria of the Council. The home-zone approach would also include:

    - *Drives – a series of shared surface drives, designed to have a softer more informal quality, will link small groups of houses, especially those facing key areas such as The Ride.*

    - *Mews – routes that link the home-zone with internal parking courtyards. These shared surface routes will help establish intimate spaces for pedestrians and slow moving traffic, and be overlooked by flats or workspaces.*

    - *Parking courts and squares – these spaces are an important element of both the movement network and the public realm. The parking squares would be designed as public squares where cars can be accommodated. They will contain other uses such as, places to sit and occasional events. Squares will be located in formal areas of the site, such as the Local Centre. Parking courts will be within development blocks.*

    - *Private drives or parking courts will be expected to serve no more than around 6 parking spaces (or 3 dwellings) except where there is a comprehensive and sustainable private management arrangement in place for semi-public or public spaces.*

Figure A.2.1 Street hierarchy showing principal routes and illustrative arrangement of lower order residential streets.

Appendix 01

A 1.3 Parking Strategy

The Masterplan accommodates the level of parking required to make the project viable without compromising the urban form. Parking provision will meet Regional Spatial Strategy and current Council maximum standards.

A range of provision is proposed:

- *on-plot parking – either through integral garages or parking spaces to the side or rear of dwellings*
- *parking squares and courtyards – secure locations overseen by development*
- *on-street parking – allocated and unallocated parking, in designated areas or where specifically designed in as part of a street.*

Parking provision for cycles will also be made within home-zone areas and within the curtilage of individual dwellings in line with adopted standards. Additional provision will be made adjacent to facilities such as the Local Centre.

Figure A 3.1 Telford Millennium Community – Avenue and home-zones

Appendix 01

A 1.4 The Avenue

The Masterplan indicates a range of conditions for 'The Avenue' as it traverses the site. 'The Avenue' will be the main bus route. It is a loop route and will link the two main vehicular entrances into the site. 'The Avenue' will be designed to a maximum of 30mph in areas of little development, in more dense areas it will be designed to further reduce speeds to 20mph through calming measures along its length and at junctions. Detailed layout and alignment, especially through areas where lower speeds are required will be subject to swept path analysis and coordination with the local bus companies.

- Centre line markings will be omitted from 'The Avenue', as recent research has shown that this approach tends to reduce speed by a significant degree, as well as improving the appearance of the road and reducing maintenance costs. In addition other measures, such as different materials or colour, will be used at specific locations such as pedestrian crossings. Where entering public spaces the carriageway will reflect the local character and take on a shared-surface quality. The Masterplan proposes that 'The Avenue' and 'Farm Lane' are the two routes where the surface of the carriageway would be tarmac

- 'The Avenue' provides a formal setting for the development though a more informal design will be encouraged adjacent to the woodland. The formal proposals include:

  - street tree planting at regular intervals in green verges along the length of the route
  - punctuation of the street by squares and civic spaces
  - formal architectural form in strategic locations

- 'The Avenue' incorporates the concept of a flexible area of verge that can change in character. This would accommodate either:
  - ground cover or grass
  - hard surface – either an extended pavement or similar materials
  - parking spaces
  - bus stop

- Trees will break up the visual dominance of parked cars and will be planted in the verge or as part of the pavement, except where parking is provided. Planting will ensure the maintenance of forward visibility

- Tree species will be local species and columnar in type. Where early impact is required semi-mature varieties will be used. Different species will be used in different areas. Root barriers will be used adjacent to utilities

- Lighting will be of an appropriate height to be pedestrian friendly and alternate with trees Service trenches will run within pavements and be demarcated

- Thresholds/boundaries will vary depending on location and orientation but will reflect the broad design principle of bringing buildings close to the pavement

- Street furniture and bus stops should be located near apartment buildings where possible. Proposals to de-clutter the street and public realm are promoted, so that a clearly co-ordinated design, installation, management and maintenance strategy can be established. This would provide consistency in style and colour where required, and create a pedestrian-friendly environment

- The housing along 'The Avenue' will be predominantly town houses and apartments. There will be no direct vehicular access to individual plots

- Newmoor Lane & Walsingham Drive will be considered as extensions of 'The Avenue'. The design speed of these routes will match that of 'The Avenue'

- The Pitts Heath Lane / Waltham Lane junction will be monitored and the junction priority changed, if required in the future.

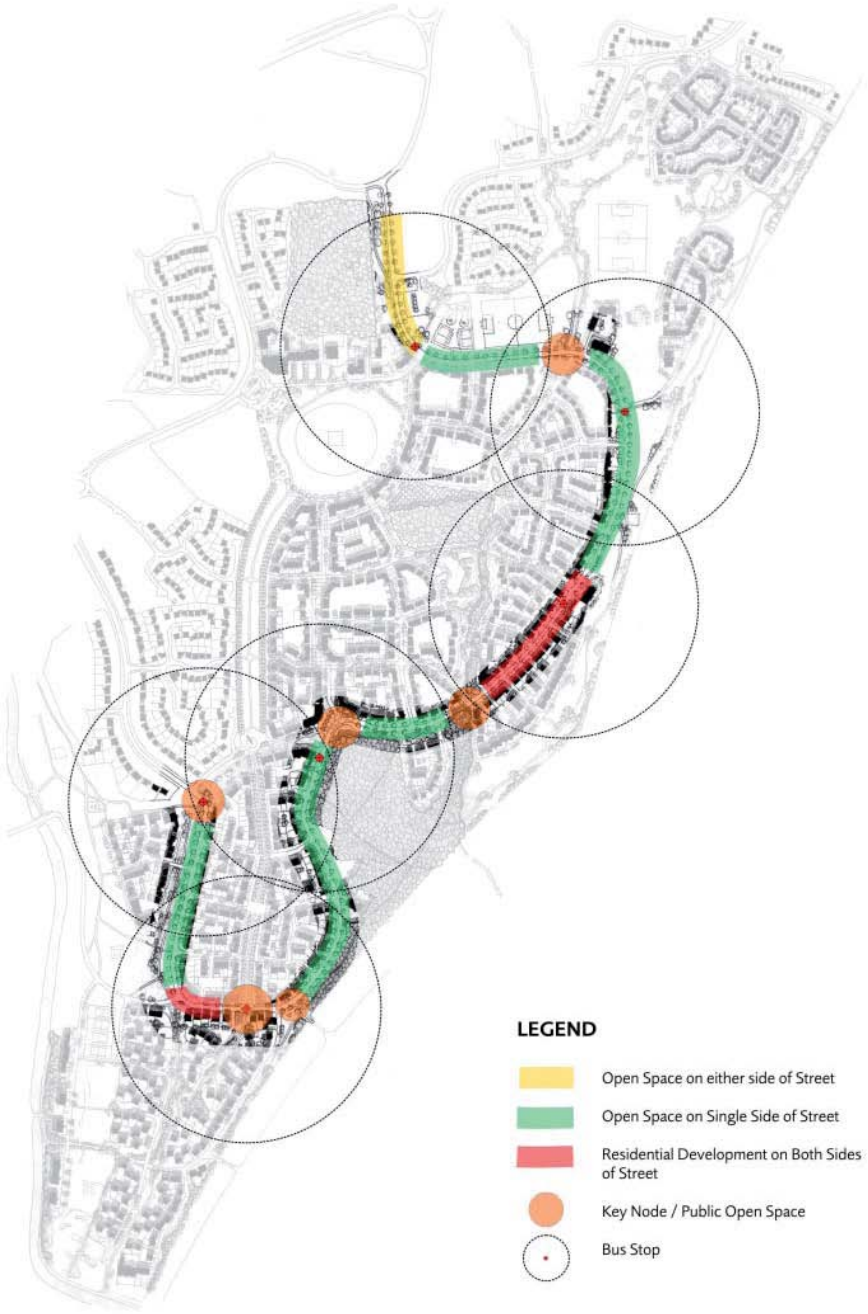
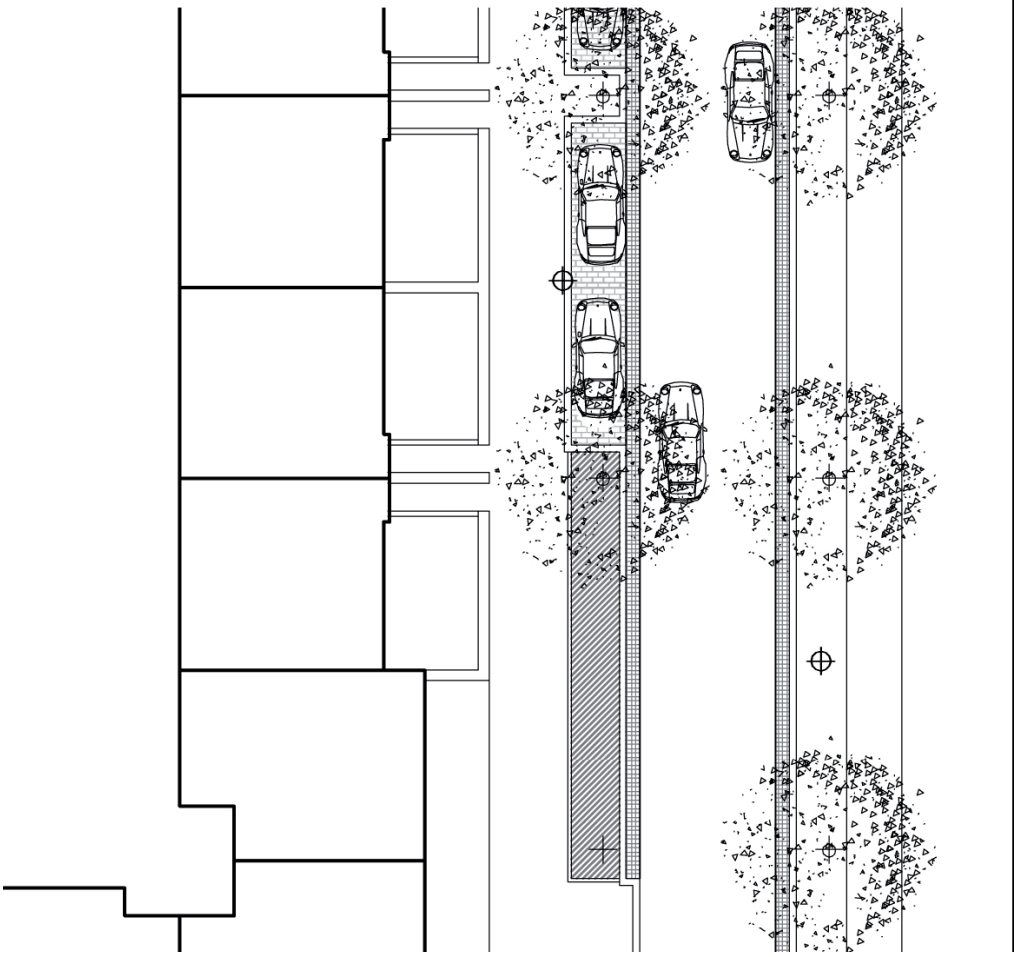


Figure A 4.1 'The Avenue' - Street character

Key Information	
Road Type	**Local Residential Distributor Road**
Design Speed	20 - 30 mph – managed through road alignment and horizontal traffic calming
Adoptable Width	14 – 18 m
Footpath	2 – 3.2 m on both sides of the carriageway
Carriageway	
Bus Access	Yes
Cycle Access	Integrated within carriageway or shared footway / cycleway on one side of carriageway
Carriageway Width	6m – 6.75m depending on the location of on-street parking, bus stops & traffic calming measures
Drainage Channel	500mm aquablock rumble strip, offset between carriageway and verge included in carriageway width
Parking	Unallocated parallel visitor parking
Kerb Face	125 mm
Traffic Calming	Every 80m or as appropriate, i.e. crossing points/junctions
Vehicular Access to Properties	None
Verge	Alternatively with parking and planting strip or extended paving
Geometry	
Junction Radii	6m
Forward Visibility	90m max – Can vary according to the speed of junction
Junction Sight Lines	90m / 4.5m – Can be reduced according to the speed of street – subject to forward visibility and tracking
Junction Spacing	80m min to adjacent, 40m to opposite
Materials	
Carriageway Surfacing	Textured Flexible Surface
Footpath Surfacing	Concrete Block
Shared Surfacing	NA
Vehicle Crossovers	NA
Kerb Types	125 deep, concrete
Drainage	500mm aqua block strip
Details	
Seating	Appropriately positioned at Bus Stops and open space
Litter Bins	Appropriately positioned by shops and seating areas
Street Lighting	Column mounted set back from kerb and spaced at intervals to provide appropriate levels of lighting (to be co-ordinated with HBC)
Other Street Furniture	Bus Stops / Reflective Bollards / Pedestrian Signing
Landscape	
Street Trees	Clear stemmed for min 2m (to be approved by HBC)
Planting Pattern	Formally spaced every 15m as forward visibility allows
Threshold	**Threshold**
Wall / Railing / Planting	Varies
Surface Detail	Where hard surfaces are use there should be a change in detail between the pavement and the threshold
Planting	Planting Varies

'The Avenue' - Typical axonometric

Abode Harlow



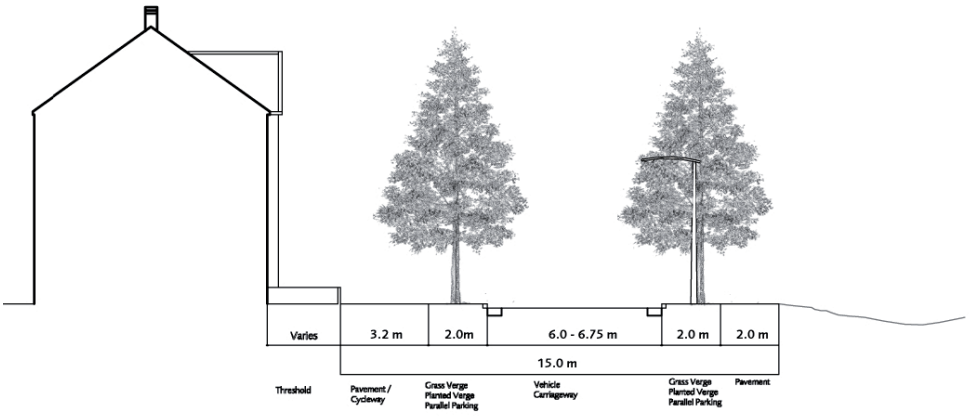


Figure A 4.1 'The Avenue' - Typical section

0 5m 10m 15m

The Avenue' - Axonometric of traffic calming measures

Telford Millenium Community – Avenue

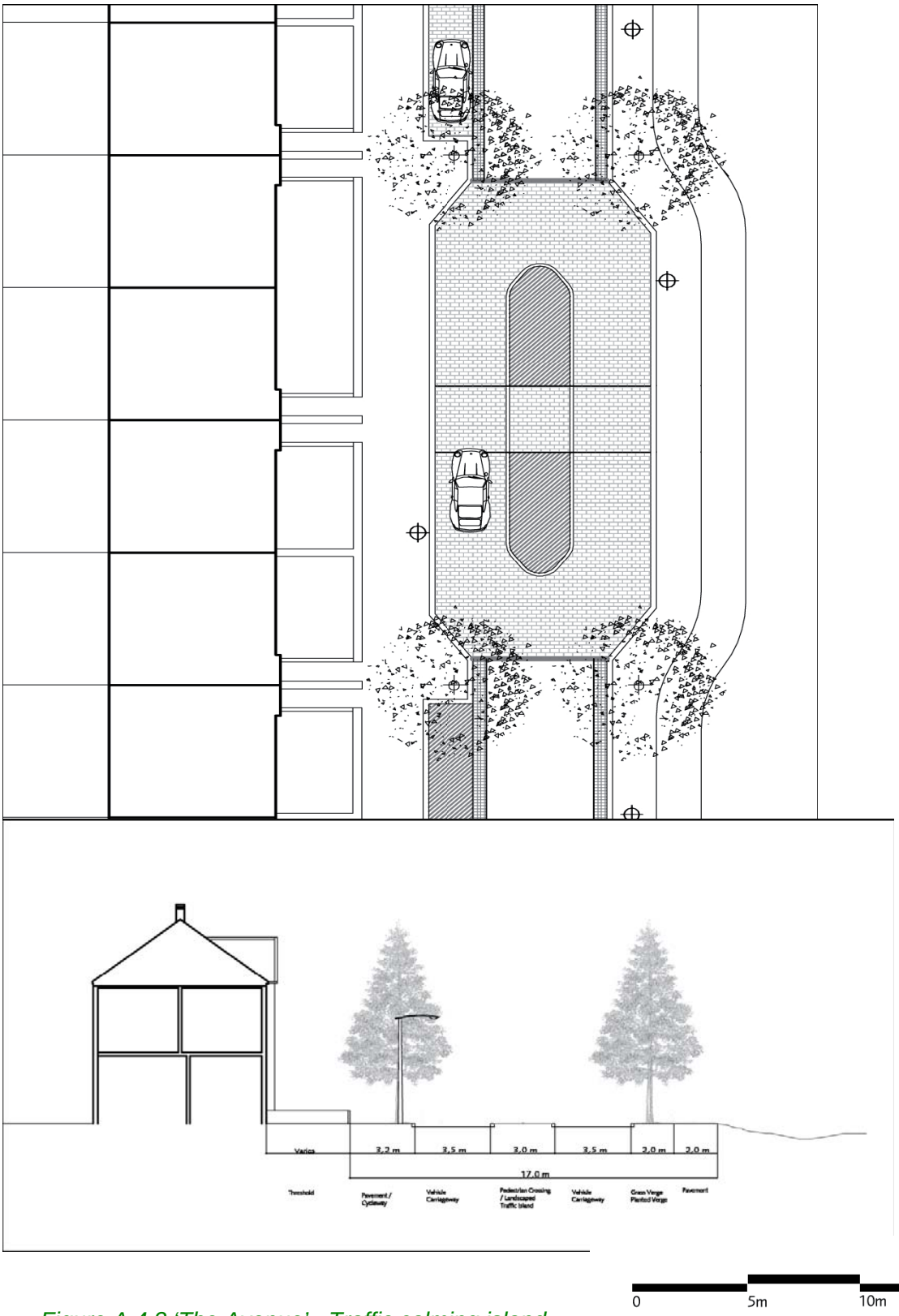
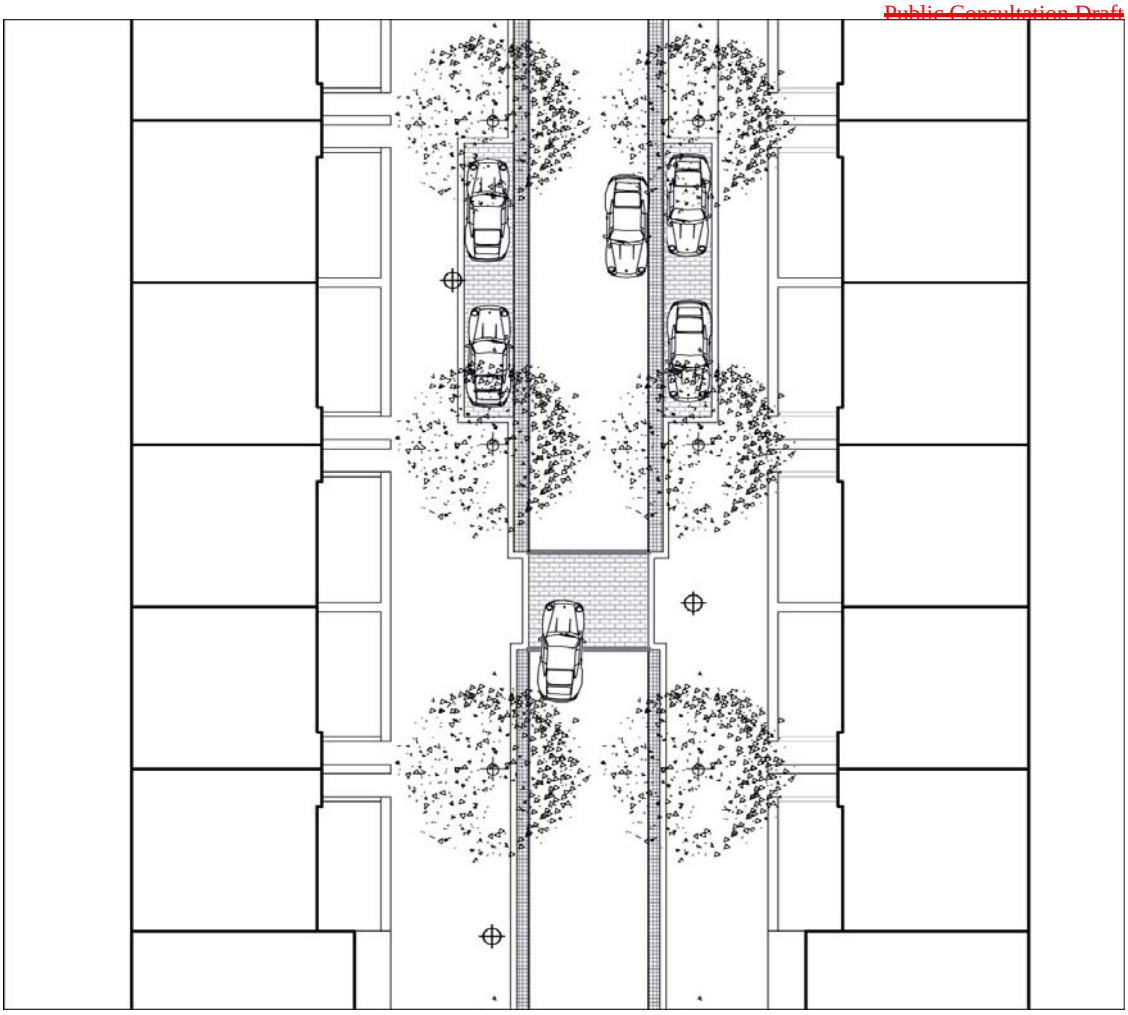


Figure A 4.3 'The Avenue' - Traffic calming island



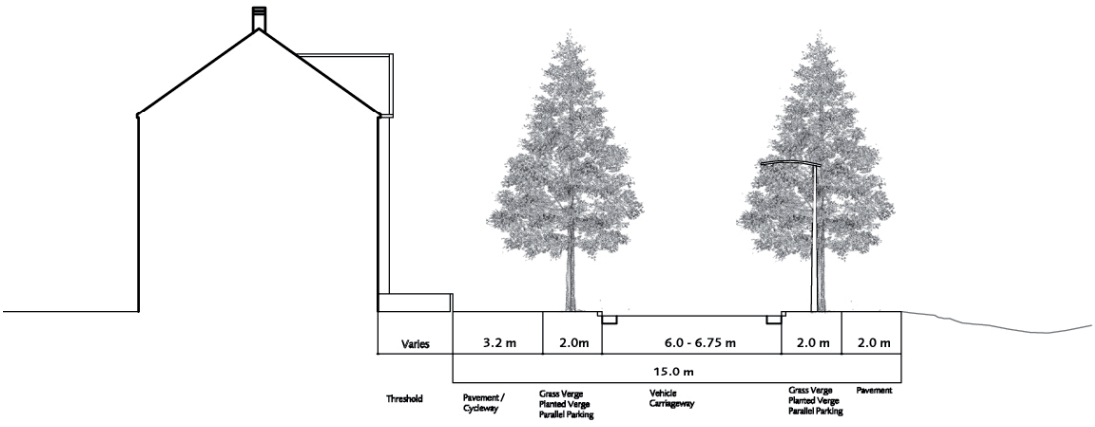


Figure A 4.4 'The Avenue' - Traffic calming feature

0 5m 10m 15m

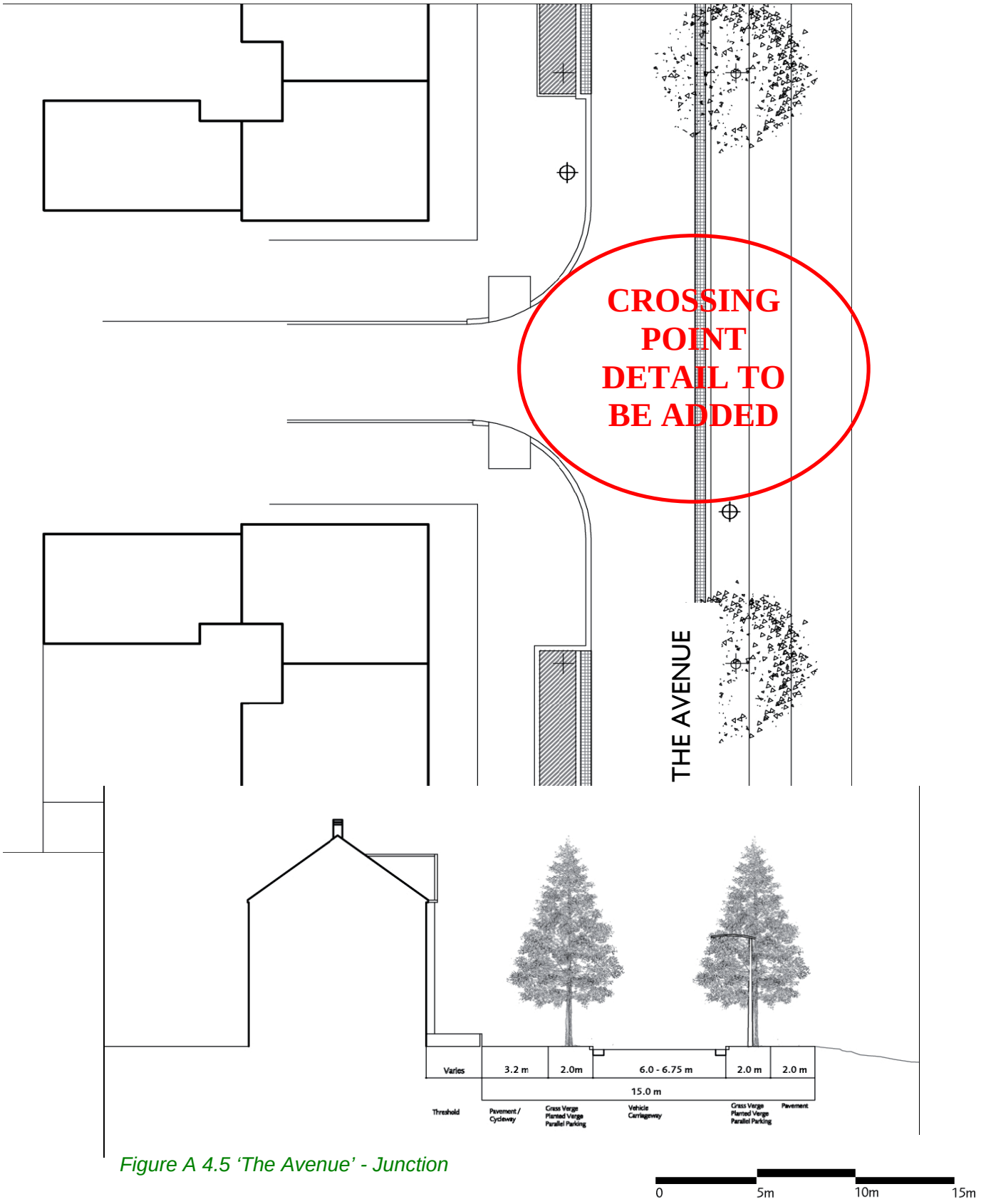


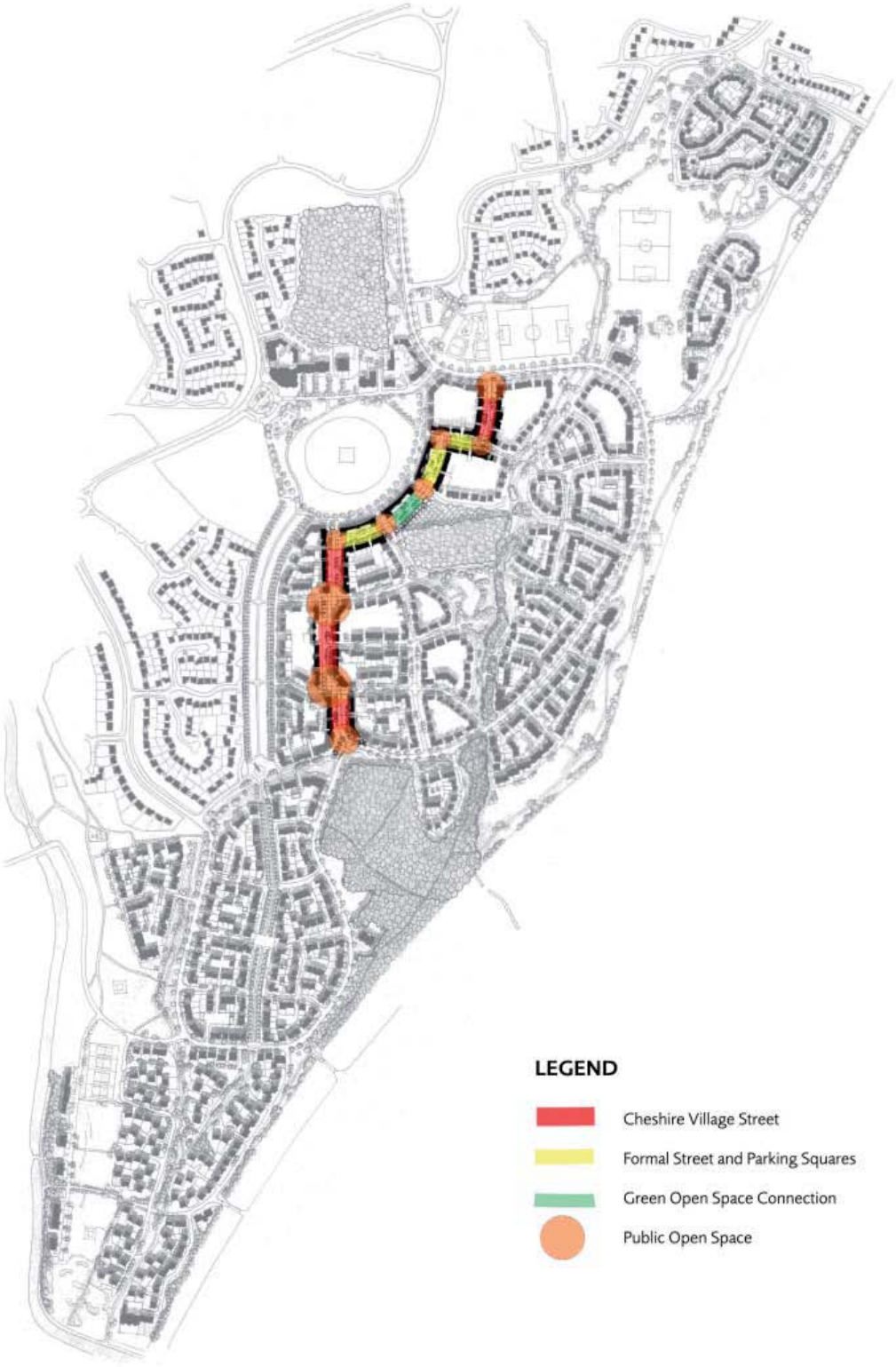
Figure A 4.5 'The Avenue' - Junction

Appendix 01

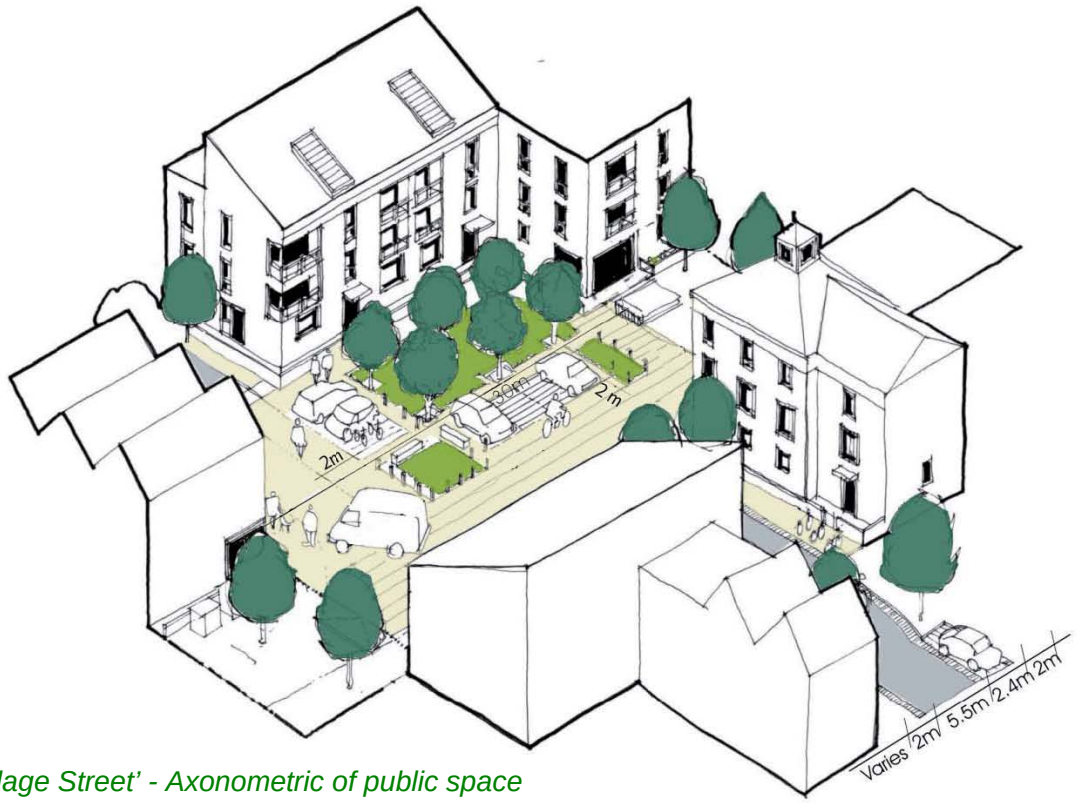
A 1.5 Village Street

The 'Village Street' is designed to 20mph and will be heavily calmed and managed. It will have different attributes as it wends its way through Brookwood character area. The 'Village Street' increases pedestrian priority though the use of low kerb lines with nominal 40-50mm upstands to define the edge of the carriageway. Local squares with speed tables, shared surfaces, and architectural focal points are proposed. The street and pedestrian areas will be constructed in blocks / paviours of different colours to create a high quality finish. Design of shared surfaces should pay particular regard to Manual for Streets section 7.2.10~14.

Along this route, junction distances and building alignments will be reduced to create a tightly enclosed environment. Some variation in building spacing and road widths will be appropriate to add visual interest. Most dwellings will be built with a small landscaped threshold (0.5 – 2.5 m) at the back end of the pavement. Where these occur they should visibly belong to the dwellings. A consistent treatment to front boundaries will be required. Street trees, bollards, and other landscape features will be used to ensure traffic and parking becomes a natural part of the townscape.


LEGEND
Cheshire Village Street
Formal Street and Parking Squares
Green Open Space Connection
Public Open Space

Key Information	
Road Type	Minor Residential Access Street – Shared Surface Hybrid
Design Speed	20 mph
Carriageway	
Adoptable Width	10 – 15m
Bus Access	No
Cycle Access	Integrated
Footpath	2m min on either side of carriageway
Carriageway Width	Typically 5.5m with some pinch points
Drainage Channel	500mm aquablock rumble strip,offset between carriageway and verge included in carriageway width
Parking	Visitor's parking on-street. Some allocated residents parking will be in perpendicular on-street parking spaces (theseswill not be adoptable)
Kerb Face	Conservation Kerb
Traffic Calming	Varying street alignment
Vehicular Access to Properties	No driveways, but courtyard parking and garages at the back of blocks
Verge	Parking and extended Paving
Geometry	
Junction Radii	6m
Forward Visibility	25m min
Junction Sight Lines	33m / 2.4m
Junction Spacing	30min to adjacent, 15m opposite
Materials	
Carriageway Surfacing	Textured Flexible Surface
Footpath Surfacing	Concrete Block
Shared Surfacing	Concrete Block
Vehicle Crossovers / Public Squares	To match footpath
Kerb Types	Concrete Conservation kerb
Details	
Seating	Appropriately positioned in public squares and in areas of extended paving
Litter Bins	Appropriately positioned by seating areas
Street Lighting	Column mounted set back from kerb and spaced at intervals to provide appropriate levels of lighting to be co-ordinated with HBC
Landscape	
Street Trees	Clear stemmed for min 2m (to be co-ordinated with HBC)
Planting Pattern	Informally arranged along street and concentrated in the small civic squares and in areas where the road gives to open space
Threshold	
Wall / Railings / Planting	The' Village Street' will have an urban character using changes in surface material alongside raised boundaries such as walls & fences to clearly define the edges of public space
Surface Detail	A mixture of hard paving and planting will be used
Planting	Varies



The 'Village Street' - Axonometric of public space

Poundbury Dorset

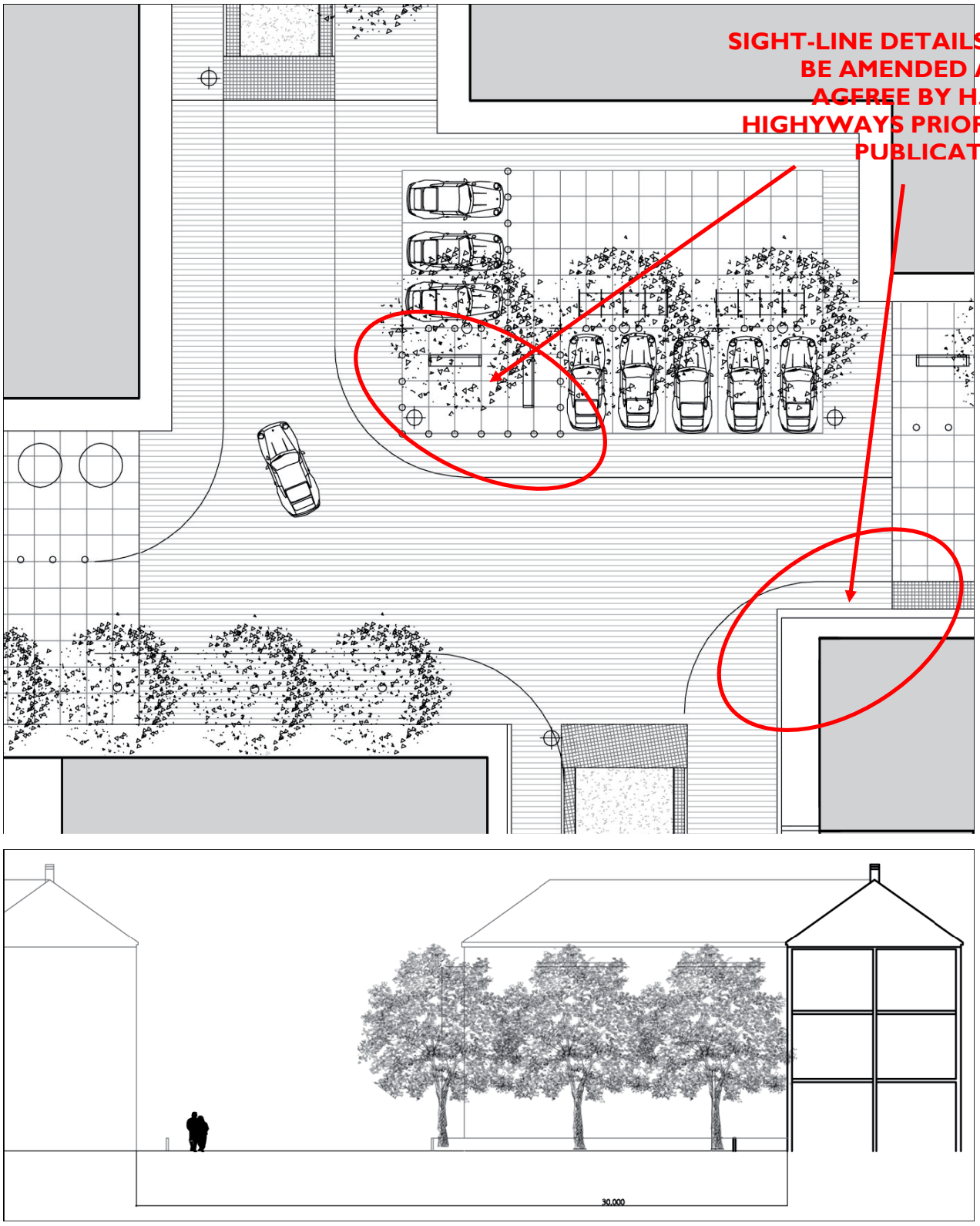


Figure A 5.2 The 'Village Street' - Shared surface square

The 'Village Street' - Typical axonometric

Fairford Leas Aylesbury

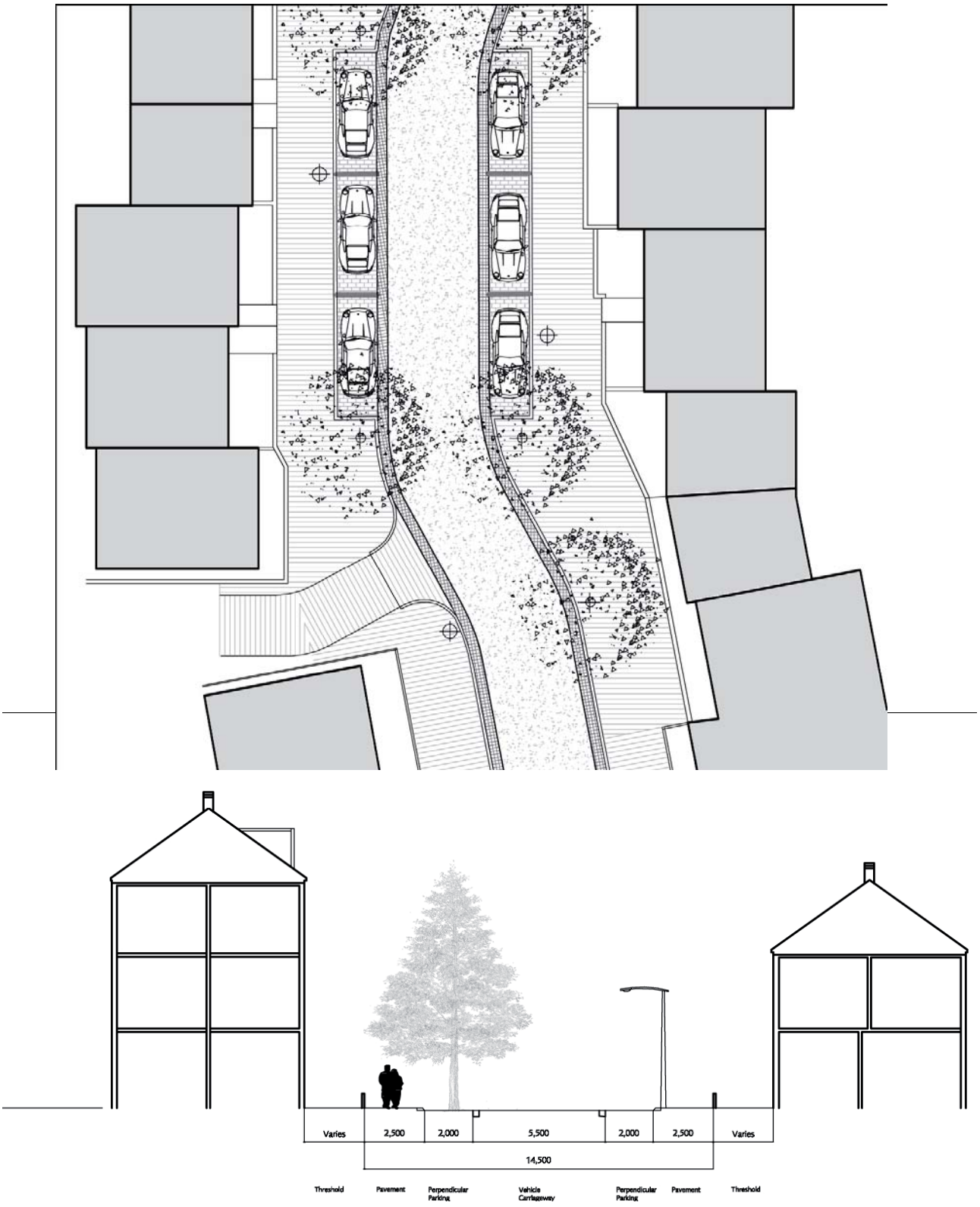


Figure A 5.3 The 'Village Street' - Perpendicular parking

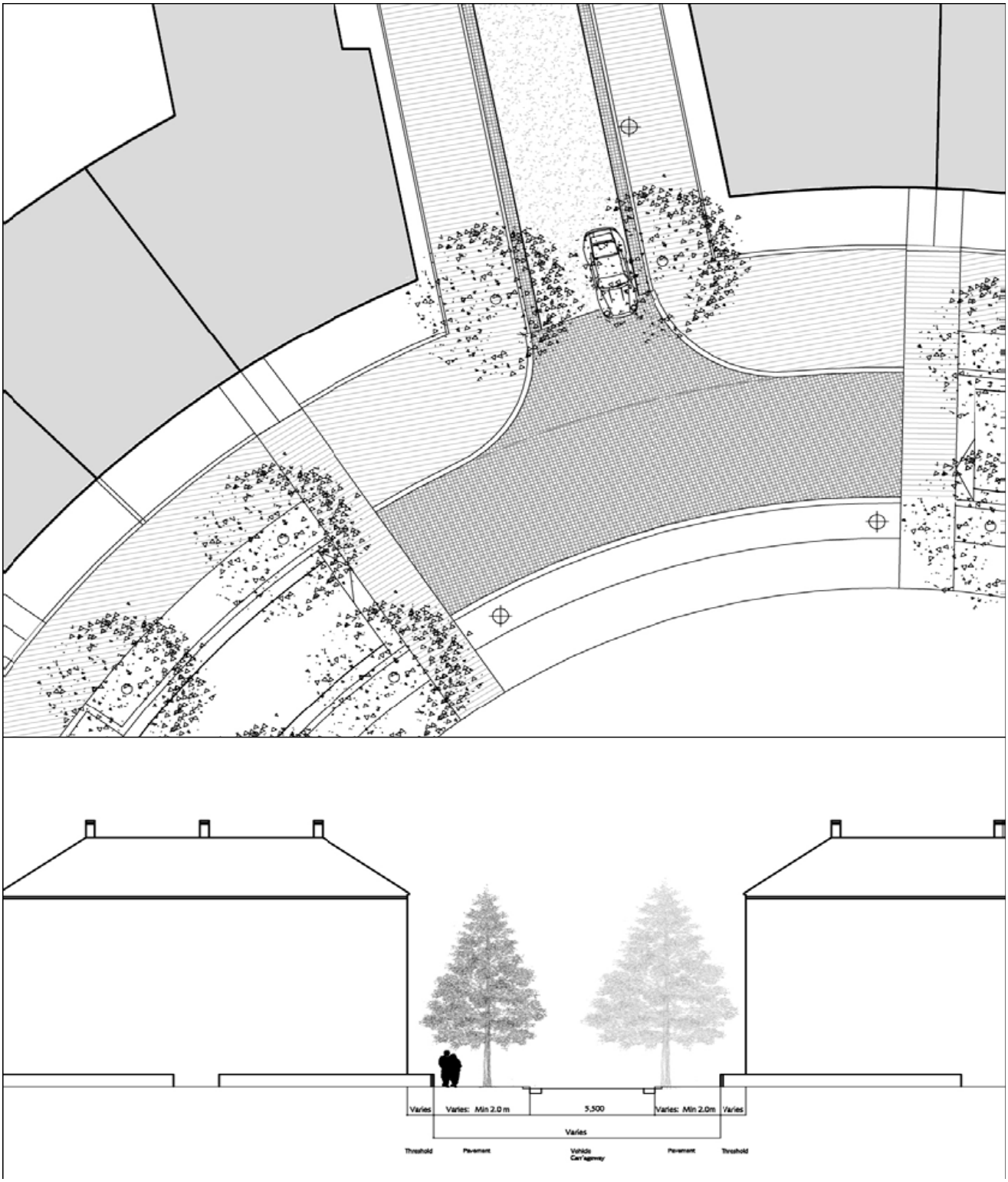


Figure A 5.4 The 'Village Street' - Entrance

Appendix 01

A 1.6 'Farm Lane'

This street is a more informal version of 'The Avenue'. The Masterplan proposes only one side of the route as a footpath or verge. The other side would have a more rural character with hedgerows, open grassland, woodland and field ditches/drains.

Figure A 6.1 'Farm Lane' - Street character

Key Information	
Road Type	**Minor Residential Access Street**
Design Speed	20 mph
Carriageway	
Adoptable Width	10 – 12m
Bus Access	No
Cycle Access	Integrated
Footpath	Min 2.4m on one or both sides of the carriageway
Carriageway Width	Typically 5.5m with some pinch points
Drainage Channel	500mm aquablock rumble strip, offset between carriageway and verge (included in carriageway width)
Parking	Parallel visitors parking
Kerb Face	Full 125mm kerb on residential side of street, conservation kerb combined with Cheshire railing or hedgerow on green side of the street
Traffic Calming	Incidental traffic calming using the development form to structure buildouts and horizontal alignment
Vehicular Access	Private garages at the rear of properties
Verge	Parking / Planting / Extended Paving
Geometry	
Junction Radii	5.5m
Forward Visibility	25m min
Junction Sight	33m / 2.4m
Junction Spacing	Minimum of 30m to adjacent, 15m opposite
Materials	
Carriageway Surfacing	Textured flexible surface
Footpath Surfacing	Concrete Block or Tegular Paving
Shared Surfacing	NA
Vehicle Crossovers	To match footpath
Kerb Types	Concrete – sandblasted to expose aggregate
Details	
Seating	Appropriately positioned where road opens out to open space
Litter Bins	Appropriately positioned by seating areas
Street Lighting	Column mounted set back from kerb and spaced at intervals to provide appropriate levels of lighting (to be co-ordinated with HBC)
Landscape	
Street Trees	Clear stemmed for min 2m (to be co-ordinated with HBC)
Planting Pattern	Informally arranged along lane and in areas where the road gives to open space
Threshold	
Privacy Strip	Buildings have generous set backs from the street
Wall / Railing	The threshold is larger than in other areas of the site to allow a softer suburban character to be developed. The overall depth will be less than 3m to prevent car parking in front of dwellings
Surface Detail	Small garden paths should make connections between the footpath and the building entrance
Planting	Varies

'Farm Lane' - Axonometric

Fairford Leas Aylesbury

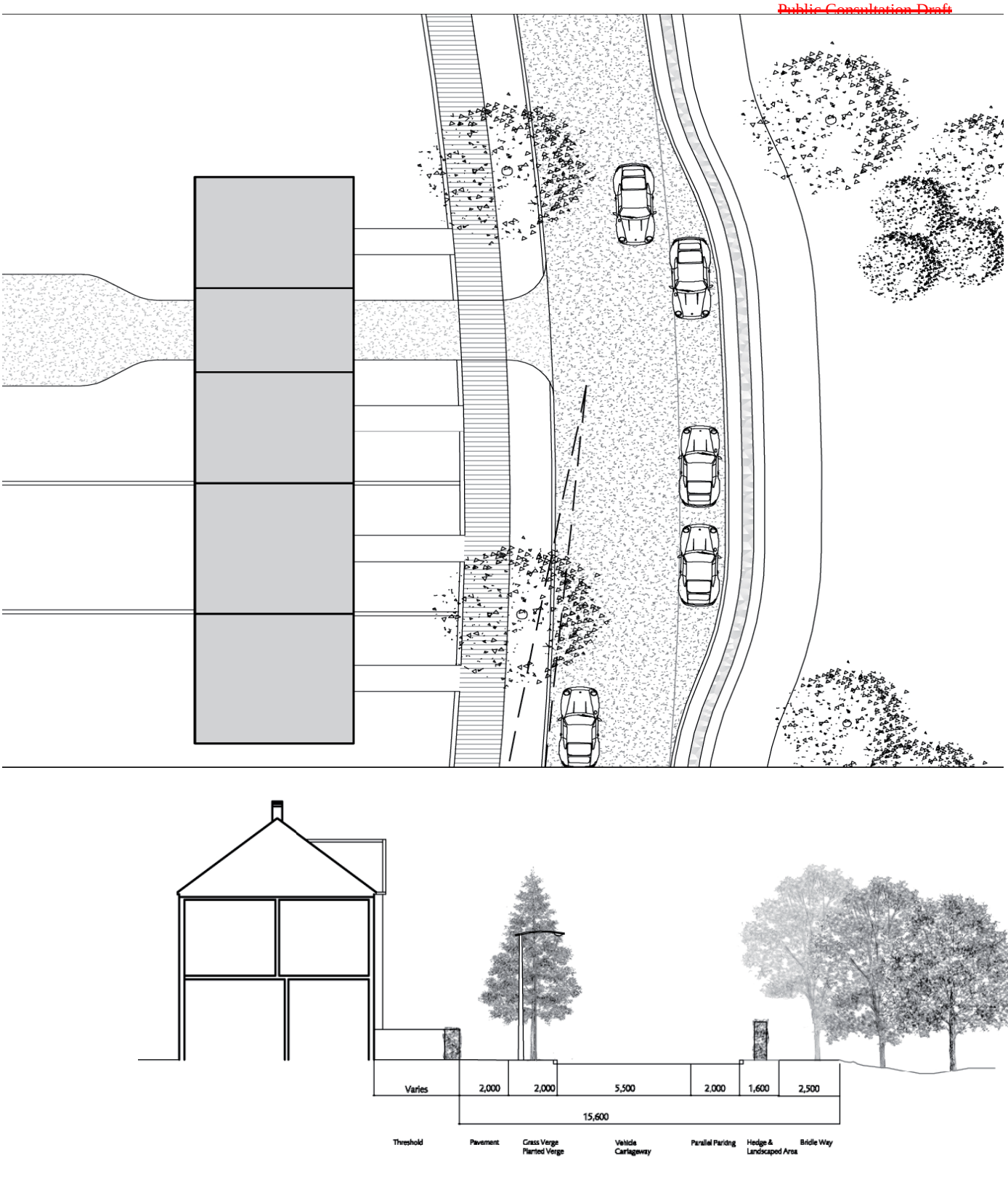
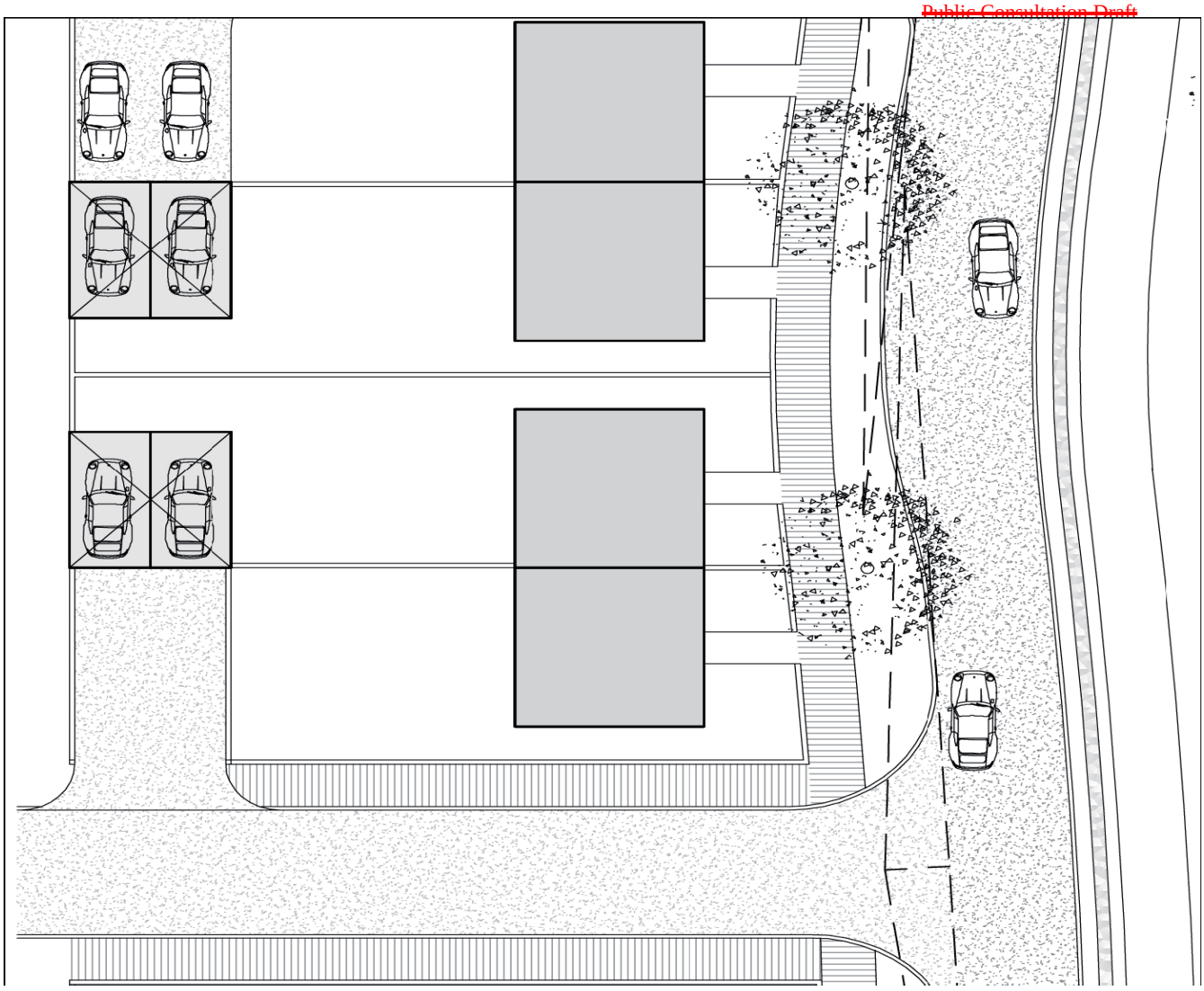


Figure A 6.2 'Farm Lane' - Typical section



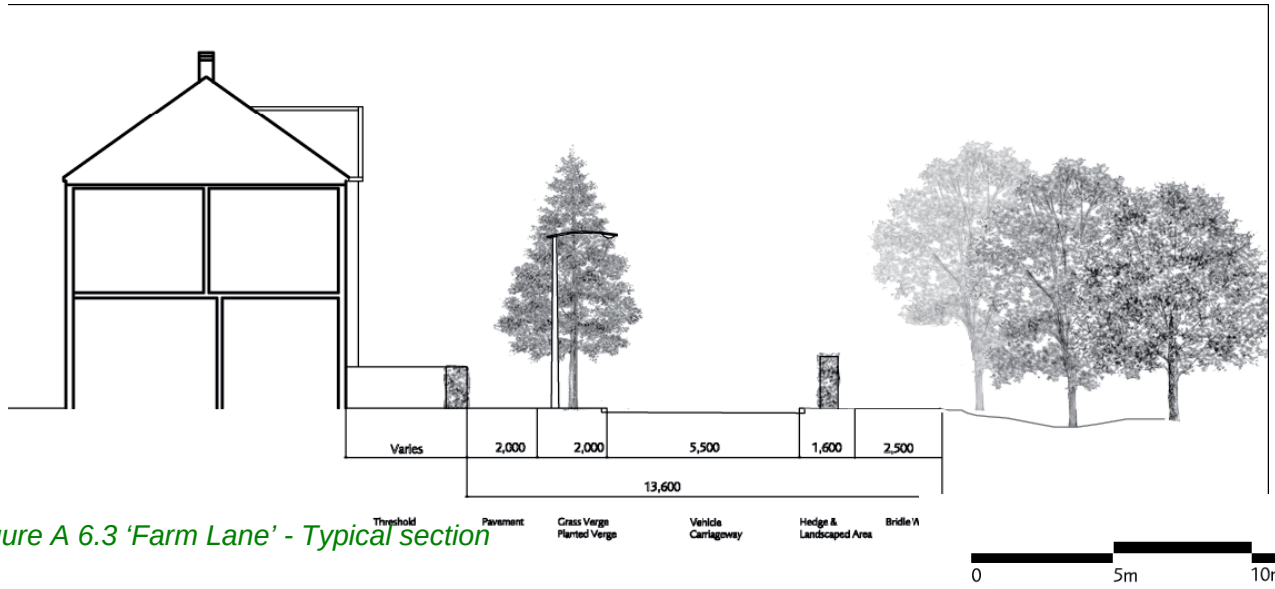


Figure A 6.3 'Farm Lane' - Typical section

Appendix 01

A 1.7 Access Roads

Figure A 7.1 Access Road - Street character

These form short transitional routes that connect 'The Avenue' and 'Farm Lane' distributor streets to the home-zone streets. The character of these routes is defined by the adjacent streets. Along sections of 'The Avenue', where speed reduction measures are present, transitional Access Streets will not be required at the junction with Home Zones

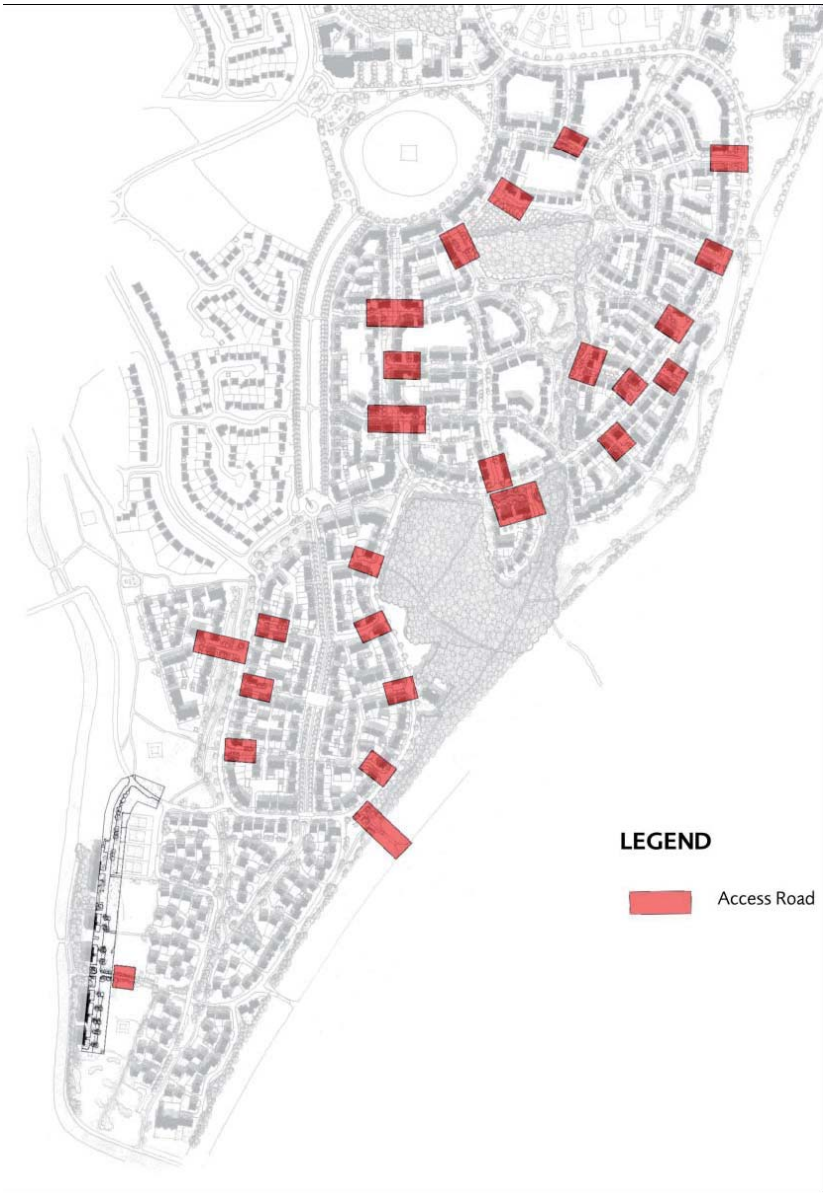


Figure A 7.1 Access Road - Street character

Key Information	
Road	**Local Residential 'Transitional' Streets**
Design Speed	20 mph
Carriageway	
Adoptable Width	12 – 15m
Bus Access	None
Cycle Access	Integrated or shared footway / cycleway
Footpath	Min 2.4m on both sides of carriageway
Carriageway Width	Typically 5.5m
Drainage Channel	500mm aquablock rumble strip, offset between carriageway and verge included in carriageway width
Parking	NA as most routes are a maximum of 25m in length
Kerb Face	125mm
Traffic Calming	Access roads are typically very short, connecting development sites to distributor roads or providing a transition space to home-zone streets
Vehicular Access to Properties	Private garages at the rear of properties, no driveways within the threshold area
Verge	Parking / Hedging / Extended Paving
Geometry	
Junction Radii 6m	6m
Forward Visibility	25m min
Junction Sight Lines	33m min
Junction Spacing	No Junctions
Materials	
Carriageway Surfacing	Determined by relationship to adjacent streets
Footpath Surfacing	Determined by relationship to adjacent streets
Shared Surfacing	NA
Vehicle Crossovers / Public Squares	To match footpath
Kerb Types	125 deep, concrete
Details	
Seating	Appropriately positioned adjacent to civic spaces
Litter Bins	Appropriately positioned by seating areas
Street Lighting	Column mounted set back from kerb and spaced at intervals to provide appropriate levels of lighting to be co-ordinated with HBC
Landscape	
Street Trees	Clear stemmed for min 2m (to be co-ordinated with HBC)
Planting Pattern	Informally or formally arranged according to the character of adjacent areas and streets
Threshold	
Wall / Fence / Planting	The threshold will be defined by a low wall, railings or hedge planting depending on local context
Surface Detail	There will be a transition in paving material as the threshold area meets the street
Planting	Varies

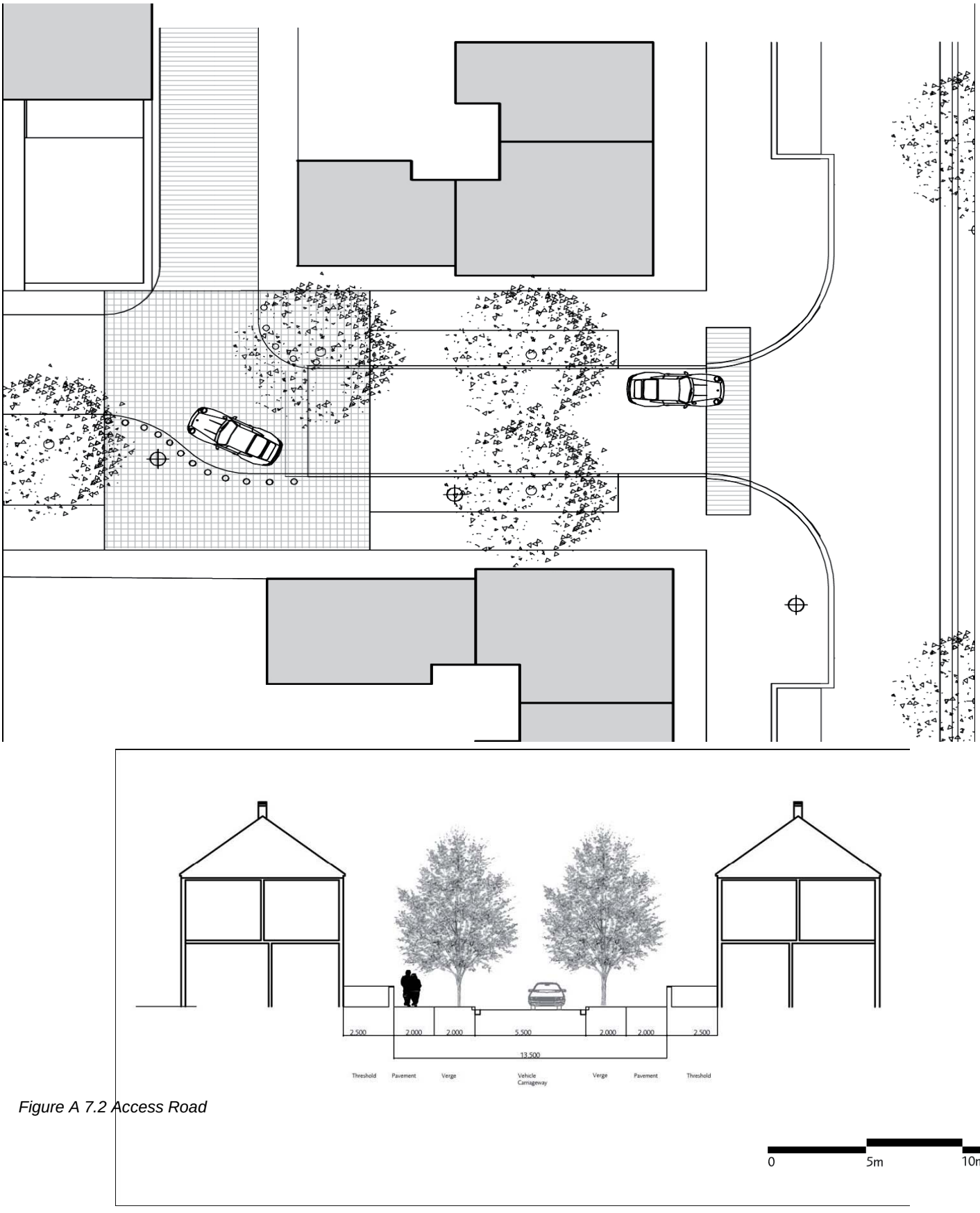


Figure A 7.2 Access Road

Appendix 01

A 1.8 Home-zones

The existing street pattern in Sandymoor gives priority of movement to drivers. This Masterplan seeks to redress this and create more pedestrian-friendly streets throughout Sandymoor.

Home-zones are residential streets where space is shared between all users. Home-zones can:

- Increase social activity for those people living there
- Provide for a range of activities including children's play
- Make more efficient use of roadway
- Add to visual variety
- Reduce driving speed
- Provide greater levels of safety.

The main design principles include the following:

- Materials will include surfacing with a natural finish that will differ in each character area
- There will be no kerbs within any home-zone Detailed design of shared surface areas should pay particular regard to Manual for Streets section 7.2.10~14.
- Trees and plants will combine local species, natural annual wildflower seed mixes, flowering herbaceous layers and exotic species to produce more colourful displays, throughout the year. Consideration will be given to the use of trees with different colours/types/blossoms highlighting the differing character areas
- Street furniture should be contemporary and could provide clear identity through the use of colour
- All home-zones will be checked for swept paths for all vehicles up to removal van
- Home- zone streets will serve no more than approximately 100 dwellings.
- Housing in home-zones may have front gardens, using materials and planting to reflect the character of each area.
- Permeable surfaces should be considered for use in parking areas and in parking courts to reduce surface water run-off

- All cycle and car parking areas will have high levels of natural surveillance.

Figure A 8.2 Possible Home-zones - Street character

Key Information	
Road Type	**Shared Surface Community Street**
Design Speed	10 mph
Carriageway	
Adoptable Width	12 – 18m
Bus Access	None
Cycle Access	Integrated
Footpath	Shared Surface Area (1.8m pedestrian only zone adjacent to threshold
Carriageway Width	Shared surface Area - Min 4.5 area for vehicular movement
Drainage Channel	Located in centre of shared surface
Parking	Perpendicular parking located on alternative sides of area (not included in the adoptable width) There will be in a 2m setback to allow for manoeuvring/visibility Allocated parking should be clearly defined and will not be adopted by the Local Highways Authority..
Kerbs	none
Traffic Calming	Integral part of design and layout
Vehicular Access to Properties	Parking and private garages (including potential flats over garages) in courtyards in the centre of blocks
Verge	none
Geometry	
Junction Radii	4m
Forward Visibility	20m
Junction Sight	25m / 2m (20m / 2m at driveways)
Junction Spacing	NA
Materials	
Carriageway Surfacing	Shared Surface – Textured Flexible Surface
Footpath Surfacing	Shared Surface - Pedestrian only area concrete Block or Tegular Paving
Shared Surfacing	As above
Vehicle Crossovers / Public Squares	Concrete Block or Tegular Paving
Kerb Types	none
Details	
Seating	Positioned within pocket parks along the street
Litter Bins	Appropriately positioned by seating areas
Street Lighting	Column mounted and spaced at intervals to provide appropriate levels of lighting (to be co-ordinated with HBC)
Bollards	300 /300 mm hardwood timber posts to prevent parking in open spaces
Signage	Emerging standards and procedures on signage in home zone areas to follow
Landscape	
Street Trees	Street Trees Clear stemmed for min 2m (to be co-ordinated with HBC)
Planting Pattern	Planting Pattern Informally arranged in hard and green open spaces
Threshold	
Wall / Fence / Planting	The threshold provides a point of transition between the public space of the street and the private space of the dwelling. On east - west streets the threshold will give more privacy of the open space on south facing properties
Surface Detail	There will be a transition in paving material as the threshold area meets the street
Planting	Varies

Figure A 8.1 Telford Millennium Community

Telford Millennium Community - Home-zone

Telford Millennium Community - Home-zone

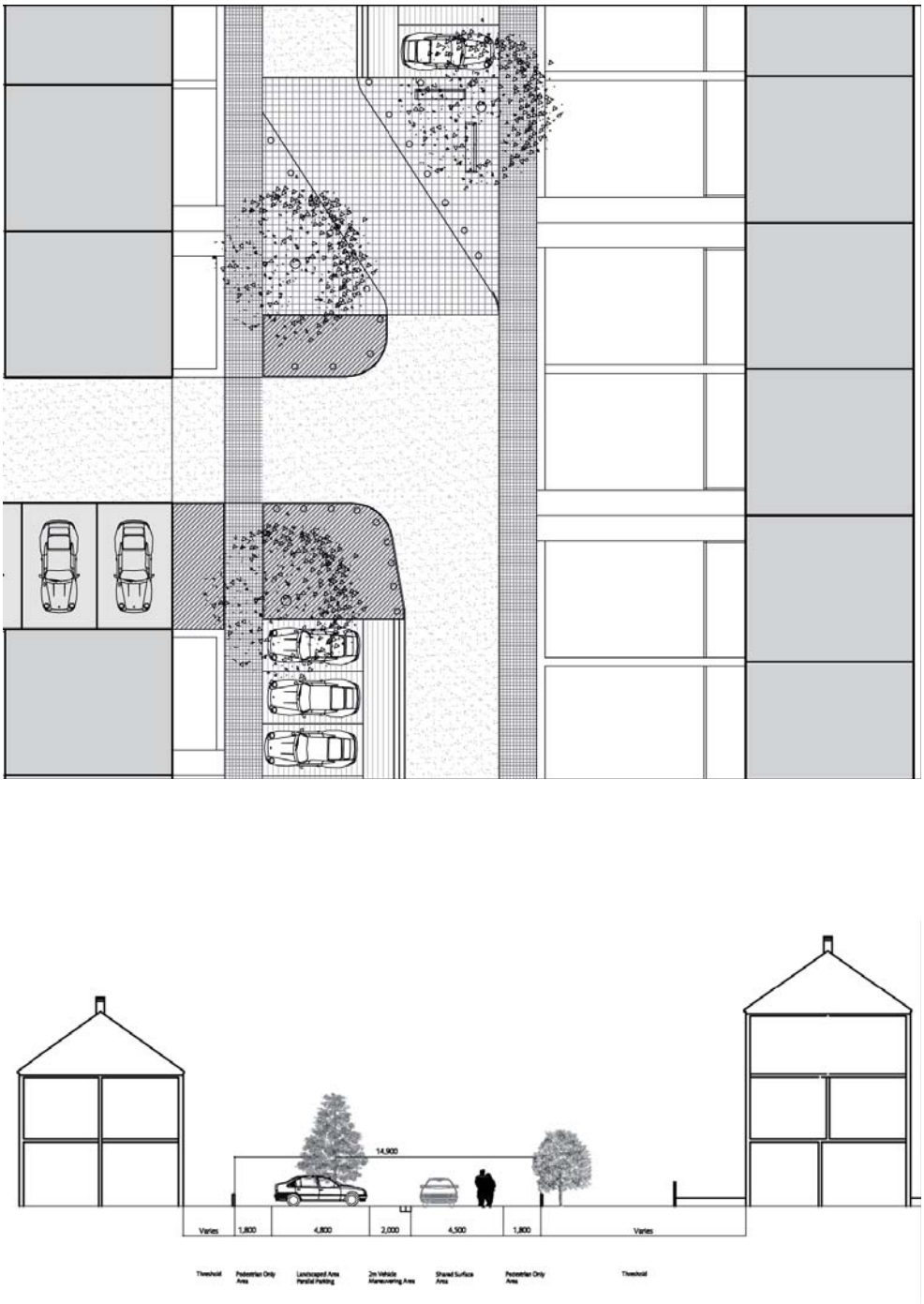


Figure A 8.3 Home-zone - Typical east-west Street

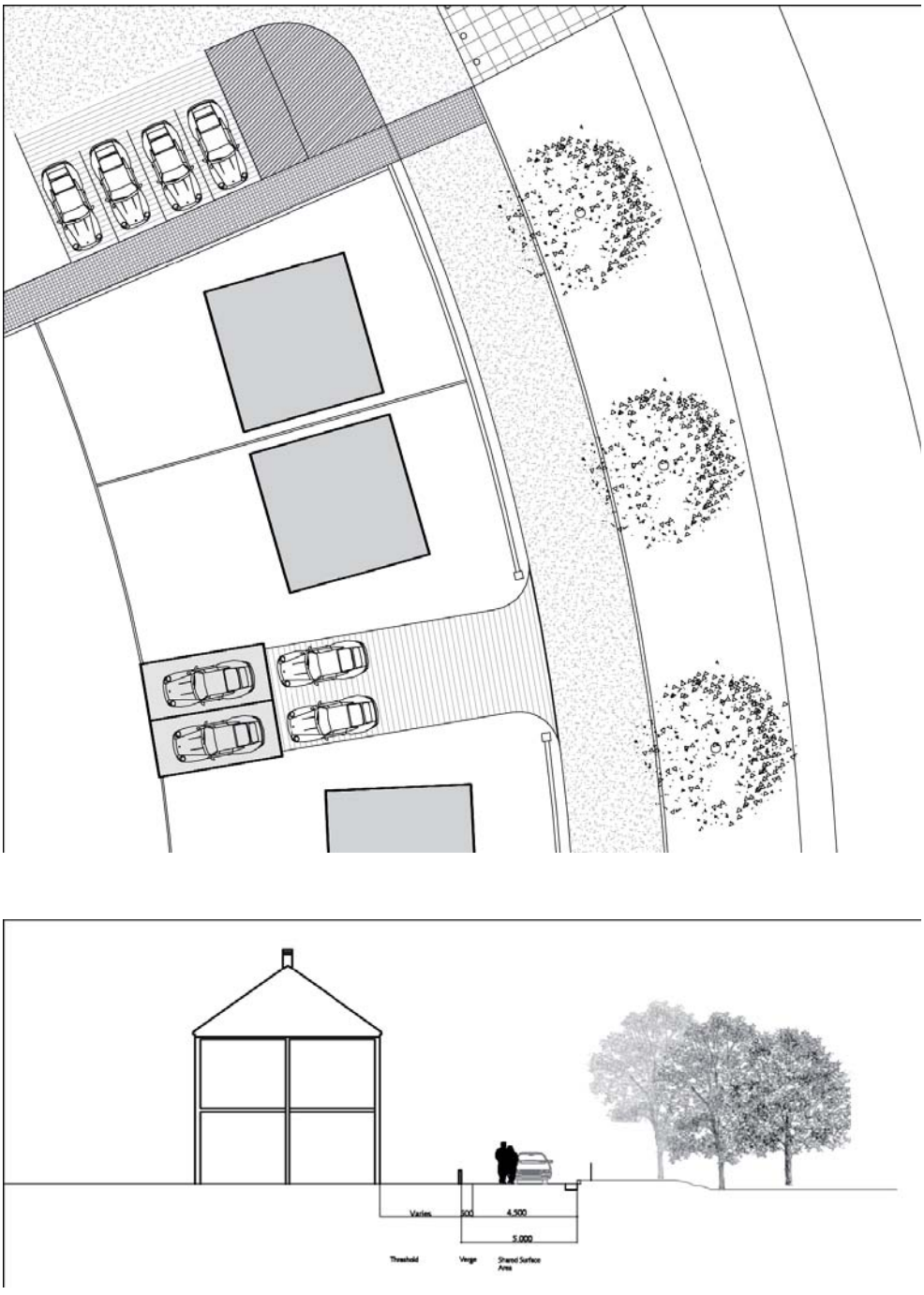
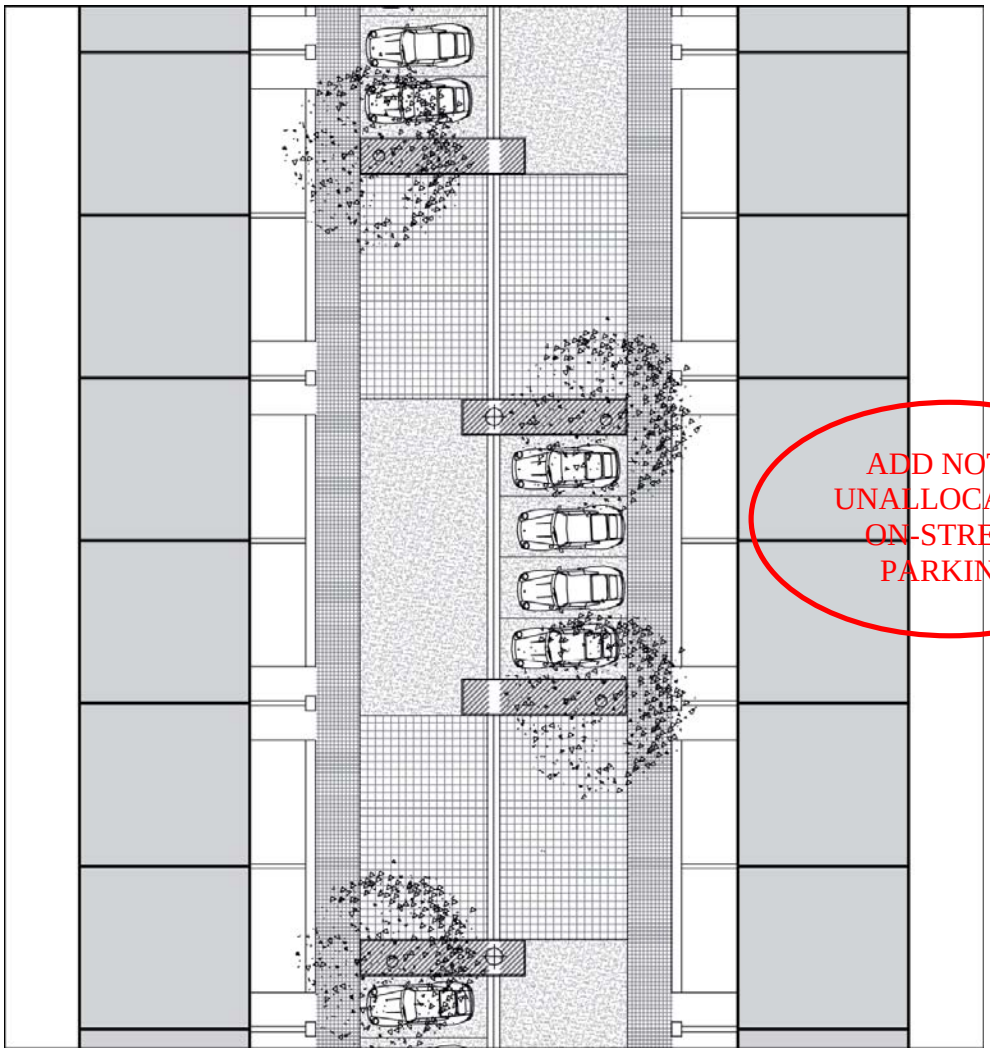


Figure A 8.4 Home-zone - Shared surface (private) driveway onto The Ride extension.



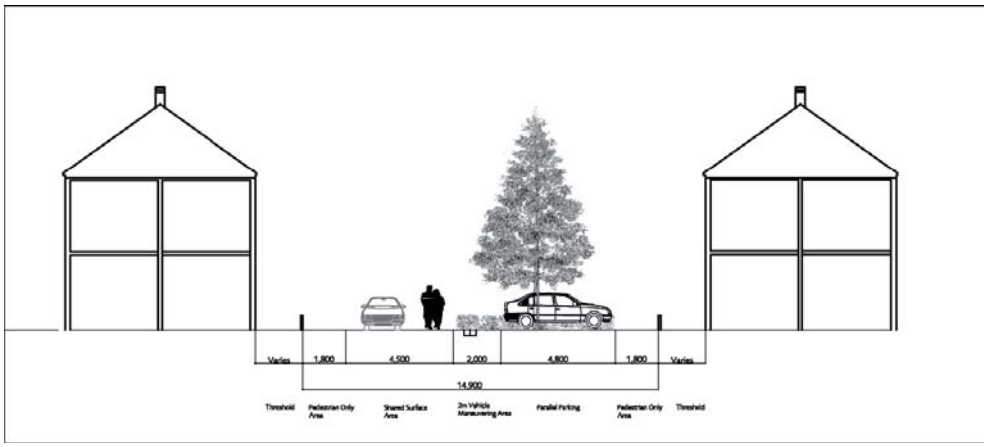


Figure A 8.5 Home-zone - Typical mews court

Parking Courtyards

Parking within the Masterplan area will be managed in several ways depending on the density and character of the area. Where parking courtyards are used, surveillance must be provided by adjacent properties.

Individual parking courtyards should normally serve no more than around 12 dwellings. Materials should add interest to the space.

Permeable surfaces should be incorporated at appropriate locations to allow surface water to soak away and reduce the rapid run-off to sewers and watercourses which can heighten the risk of downstream flooding.

Parking courtyards will not be adopted by the Local Highways Authority and details of the arrangements for their ongoing maintenance should be provided by the developers.

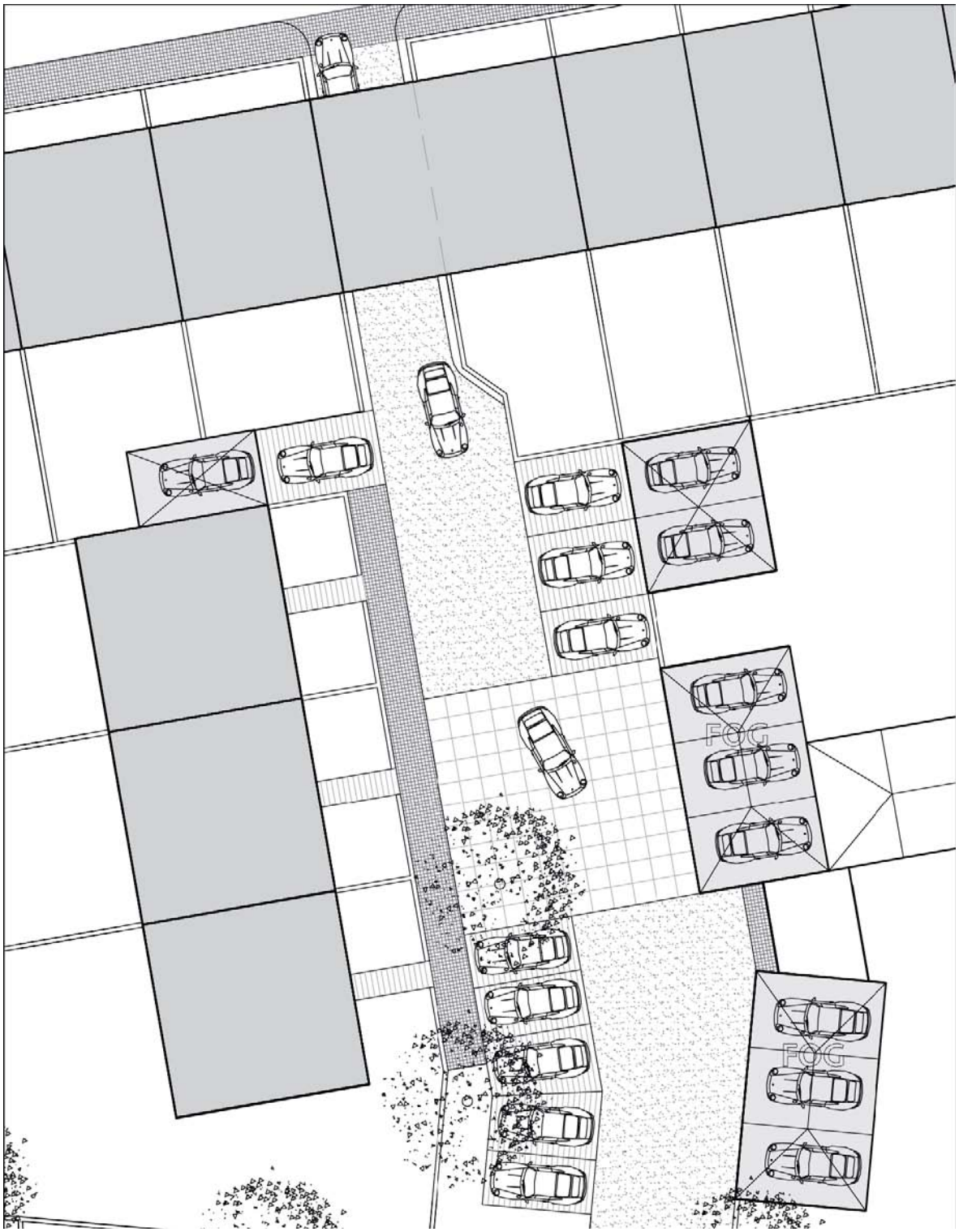


Figure A 9.1 Typical Parking Courtyard

Appendix 02

Planning Policy Context

This SPD is supplementary to the policies in the adopted Halton UDP, and will be a material consideration in the determination of all planning applications at Sandymoor constituting new development.

The following section of the SPD outlines the key planning policy context at national, regional and local levels to which future development proposals at Sandymoor should conform;

NATIONAL PLANNING POLICY

Planning Policy Statement 1: Delivering Sustainable Development (2005)

All new development at Sandymoor should meet the key objectives of PPS1, which sets out the national planning context for delivering the Government's Sustainable Communities agenda. The guidance encourages urban and rural regeneration schemes that enhance the well being of communities, improve facilities, and promote high-quality and safe new development. It promotes the more efficient use of land through higher densities, and the re-use of suitably located brownfield sites. Furthermore, PPS1 emphasises the importance of good design, which in turn creates high-quality, well-mixed and integrated development.

Planning Policy Statement 1: Delivering Sustainable Development – Climate Change Supplement

Text to be added

Planning Policy Statement 3: Housing (2005)

The Government issued PPS3 in November 2006. This replaced existing PPG3. Much of PPS3 largely reiterates the previous guidance of PPG3, albeit placing a significant emphasis on achieving sustainability based on the principle set out in PPS1 'Delivering Sustainable Development.' The Government is committed to providing high quality housing, and to create sustainable, attractive, and secure mixed communities in all areas, both urban and rural.

PPS3 promotes a mix of housing in terms of tenure and price, situated in suitable locations which offer a good range of community facilities and with good access to jobs, key services, community and green amenity space, and infrastructure. PPS3 continues to encourage a minimum density of 30 dwellings per hectare net, albeit where Local Planning Authorities wish to plan for or agree to densities below this minimum, justification of such an approach will be required. New developments above a specified size should

make provision for affordable housing where possible, often to a level set by the Local Authority.

New housing development should also seek to minimise environmental impacts, and take account of potential climate change and flood risk. PPS3 outlines the Government's objective to ensure that the planning system delivers a flexible, responsive supply of land. Reflecting the principles of 'Plan, Monitor, Manage', Local Planning Authorities and Regional Planning Bodies should develop policies and implementation strategies to ensure that sufficient, suitable land is available to achieve their housing and previously-developed land delivery objectives. At the local level, Local Planning Authorities should set out in Local Development Documents their policies and strategies for delivering the level of housing provision, including identifying broad locations and specific sites that will enable continuous delivery of housing for at least 15 years from the date of adoption, taking account of the level of housing provision set out in the Regional Spatial Strategy. Local Planning Authorities should identify sufficient specific deliverable sites to deliver housing in the first five years, and identify a further supply of specific, developable sites for years 6-10 and, where possible, for years 11-15. Where it is not possible to identify specific sites for years 11-15, broad locations for future growth should be indicated. PPS3 also promotes the use of Design Codes and Masterplans to enhance the quality and value of new residential development, and to accelerate the development control process. New housing should be of a high standard of design and layout, having respect to its wider
context, not just in terms of building character but also townscape and landscape within the wider locality. At the same time this does not mean that new development should simply replicate its surroundings.

Planning Policy Statement 12 – Development Plans (Draft Revision)

Text to be added

Planning Policy Guidance 24: Planning and Noise (2001)

PPG24 advises that new noise–sensitive land uses such as houses and schools should be separated from noise-generating land uses such as roads and railways. Where it is not possible to achieve a separation of land-uses, the Local Planning Authority should consider whether it is practicable to control or reduce noise levels, or to mitigate the impact of noise, through either the use of conditions or planning obligations. Noise Exposure Categories are introduced in PPG24 to assist Local Planning Authorities in their consideration of applications for residential development near transport-related noise sources, ranging from Category A – D.

Planning Policy Statement 25: Development and Flood Risk (2005)

The aims of planning policy on development and flood risk are to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas at highest risk. Where new development is, exceptionally, necessary in such areas,
policy aims to make it safe without increasing flood risk elsewhere and where possible, reducing flood risk overall. Flood risk assessments should be carried out to the appropriate degree at all levels of the planning process, to assess the risks of all forms of flooding to and from development and taking into account the possible effects of climate change. PPS25 recognises that road and rail embankments and other existing transport infrastructure can affect water flows during floods. It is important that this is recognised, and where use of such infrastructure is proposed for flood management purposes, this should be discussed with the infrastructure owners. Where new transport infrastructure is proposed, the possibility of building-in flood management measures at the design stage should be considered.

REGIONAL PLANNING POLICY

Regional Planning Guidance 13: North West (2003)

RPG13: North West, published in March 2003, automatically became the Regional Spatial Strategy (RSS) when the provisions of the 2004 Planning and Compulsory Purchase Act were enacted in September 2004. A full review of RSS commenced in July 2004. A Submission Draft is currently with the Secretary of State and out to public consultation until 12th June 2006. RSS has as its main aim the promotion of sustainable patterns of spatial development, advancing and supporting the region's economic, social and environmental interests. With specific regard to new housing provision, RSS identifies the requirement for a net gain of 330 new dwellings per annum within Halton.

The North West Plan ~ Draft Regional Spatial Strategy (2006)

A full review of RSS13 commenced in July 2004, with a submitted draft document published by the North West Regional Assembly (NWRA) in January 2006. This was later subject to public consultation between 20th March 2006 and 12th June 2006. An Examination in Public (EiP) into the RSS was held between October 2006 and January 2007. On 8th May 2007 the EiP Panel published its report. It is expected that the RSS will be formally adopted in early 2008.

At present, the adopted Halton UDP stipulates the requirement for a net gain of 330 dwellings per annum. Draft RSS published in January 2006 proposed that this figure be increased to 500 dwellings per year during the plan period, an overall net total increase of circa 9,000 homes between 2003-2021. An indicative target of 80% of new dwellings on previously developed land was also established. It is expected that new residential development within Halton will support the potential for economic growth within the area, whilst providing a wider range of general and high-quality market housing. At the same time, new housing provision should continue to meet local needs including affordable housing.

The EiP Panel Report published in May 2007 recommended that the proposed maximum net housing increase in Halton between 2003- 2021 of 9,000 dwellings, at a mean annual increase of 500 dwellings, be maintained. However, the Panel recommended that the indicative target for the development of new dwellings on previously developed land within Halton should remain at 65%.

LOCAL PLANNING POLICY

Halton Unitary Development Plan (2005)

The Halton Unitary Development Plan was formally adopted on 7th April 2005. The UDP sets out the framework for the development of land within the Borough from the present up to 2016. The UDP states that sufficient provision will be made to meet the requirement for a net gain of 330 dwellings per year between 2002 and 2016 in accordance with the Regional Spatial Strategy. The principle of development at Sandymoor has long been established through an extant planning permission granted under the New Towns Act 1981, in addition to the allocation of land at Sandymoor for residential development within the adopted Halton UDP. All future development at Sandymoor must be in accordance with the policies of the Halton UDP, in particular those specific to the Sandymoor development area as listed in Appendix 4. These policies can also be identified through reference to the Halton UDP Proposals Map. The policies contained within this SPD are supplementary to those in the UDP.

Appendix 03

References and Useful Contacts

Electro-Magnetic Fields (National Power)

National Grid, on behalf of the UK Electricity Industry, operates an EMF Unit as a single point of contact for all EMF enquiries.

Web: www.emfs.info/sage.
Tel.: 0845 7023270
E-mail: EMFHelpLine@uk.ngrid.com

Overhead Electricity Line Safety Clearances

Informal information can be viewed on the National Grid website at: http://www.nationalgrid.com/uk/LandandDevelopment/DDC/devnearohl_final/appendixIII/

For detailed advice, contact;

Land & Development Policy Manager (National Grid)
National Grid House
Warwick Technology Park
Gallows Hill
Warwick CV34 6DA

Scottish Power (to be confirmed)

Development Near Powert Lines Guidance (National Grid)

National Grid has produced guidelines to give advice on development near power lines (1) and on minimising the visual intrusion from lines and creating high quality development near overhead lines offering practical solutions to designers and developers (2).

(1) Web: http://www.nationalgrid.com/uk/LandandDevelopment/DDC/devnearohl_final/
(2) Web: www.nationalgrid.com/uk/senseofplace

Operational Director
Environmental and Regulatory Services,
Halton Borough Council,
Environment Directorate,
Rutland House,
Halton Lea,
Runcorn,
WA7 2GW