



NORTH LITTLEHAMPTON DEVELOPMENT FRAMEWORK DOCUMENT



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Job No.	CB_60_012
Rev	REV G
Date	MAY 2015
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PERSIMMON

Together, we make a home

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I. INTRODUCTION

ABOUT THIS DOCUMENT

1.1 The purpose of this document is to provide further design guidance, building on the overarching principles set by the Outline Planning Application (Planning Number LU/47/11) guidance and approved Design and Access Statement Notes 1 and 2.

1.2 This document reviews the approved plans in more detail, supported by a range of new technical information and surveys to provide some subtle variations of the future proposals with justification.

1.3 Fig. 1.1 shows how the document will sit within the overall planning structure. Phase 1a has been submitted prior to completion of this document and in accordance with the Approved Outline Application.

1.4 This document is intended to form the basis and check-list to guide future Reserved Matters in terms of residential, commercial and community uses.

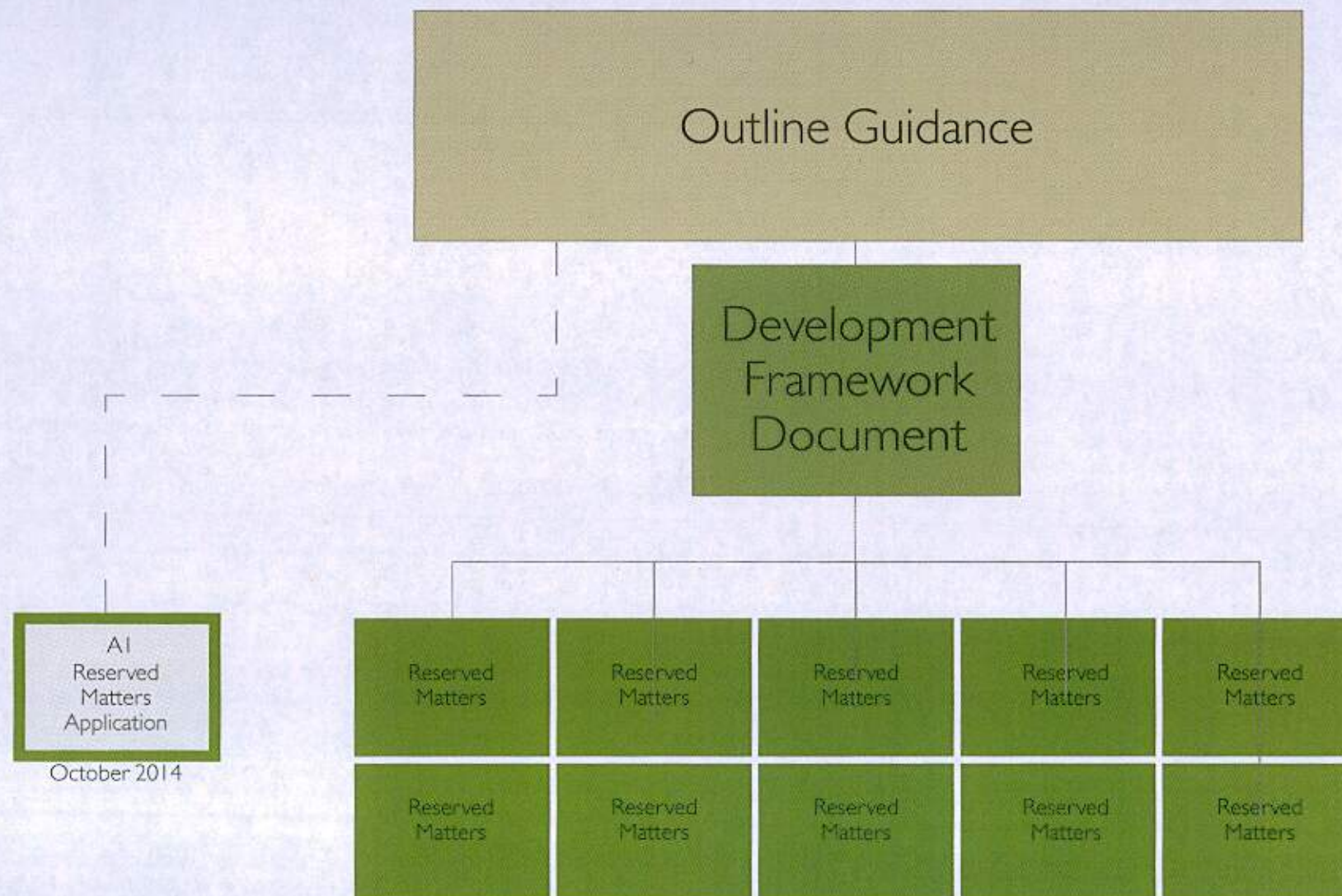
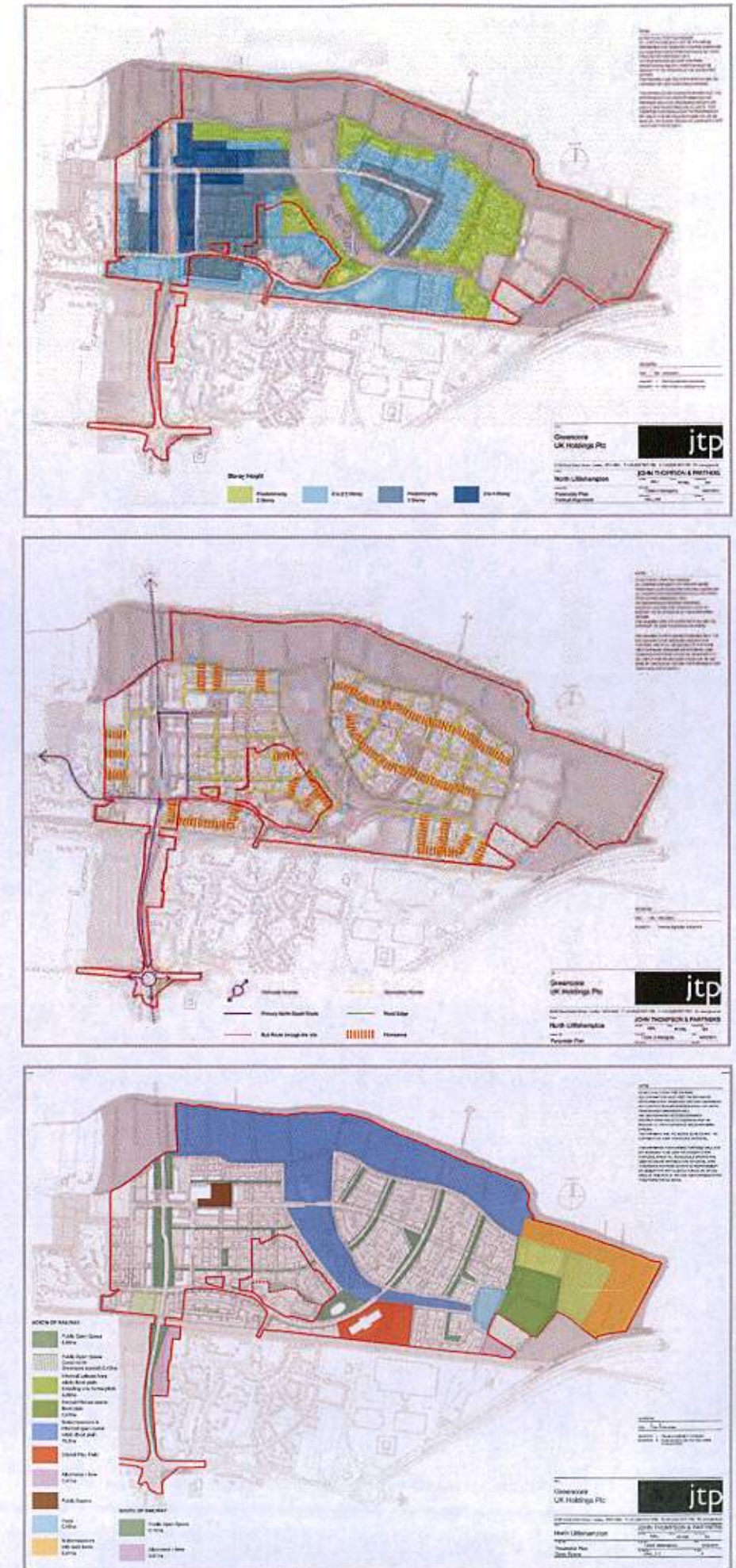
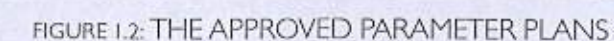


FIGURE 1.1: PLANNING FRAMEWORK
ARUN DISTRICT COUNCIL LU/182/15/PL



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SITE LOCATION

1.5 The majority of the site lies immediately to the north of the main South Coast railway line at Toddington. It also includes land for the bridging of the railway line as part of the Lyminster Bypass southern section extending southwards to the A259 Worthing Road.

1.6 The site extends to an area of about 85 hectares. The existing site subdivides into two general areas, being the developed area to the immediate north of the railway line, mainly to the north of Toddington Lane; and the undeveloped area being the low lying grazing marshes to the north and east of the developed area extending up to the Black Ditch watercourse. The undeveloped area serves as part of the functional flood plain, whereas the developed area stands on a raised plateau 2-3m above the flood plain. The site's redevelopment will address the existing developed area of the site, whilst the low lying undeveloped area will be left for a range of open space uses which are appropriate in a flood plain.

1.7 The developed area of the site was previously occupied by a variety of uses dominated by former intensive horticulture, but also including packaging and distribution, office uses and residential properties. A substantial proportion of this part of the site is covered in buildings (mainly glasshouses) and hard surfacing.

1.8 The developed part of the site extends a little further north than existing housing development to the west around Mill Lane and Lyminster Road, including Hearnfield Road, Fullers Walk and Granary Way. The latter two roads are culs-de-sac which immediately adjoin the western boundary of the site.



FIGURE 1.3: STRATEGIC LOCATION PLAN

To the north of Fullers Walk is a household recycling facility, to the west of which are allotments and a residential caravan park.

1.9 To the south of the railway line is the Watersmead Business Park, accommodating the Body Shop headquarters among its occupiers. The majority of the land between the railway line and the A259 Worthing Road is the residential area of Toddington Park, including the recent Eden Park development of about 400 dwellings. To the west of the Toddington Park area is open land in a number of uses, including allotments, the Wick Town Football Club's site, and a recreation ground. The proposals include part of this open area for the alignment of the Lyminster Bypass southern

section. To the west of this existing, largely open area, is further housing.

1.10 As previously described, to the north of the developed area of the site is a change in levels between 2 and 3m down to the grazing marshes extending to the Black Ditch watercourse. The Black Ditch lies within the low lying coastal plain landscape although, to the north of the Black Ditch, the topography starts to gradually rise towards the South Downs.

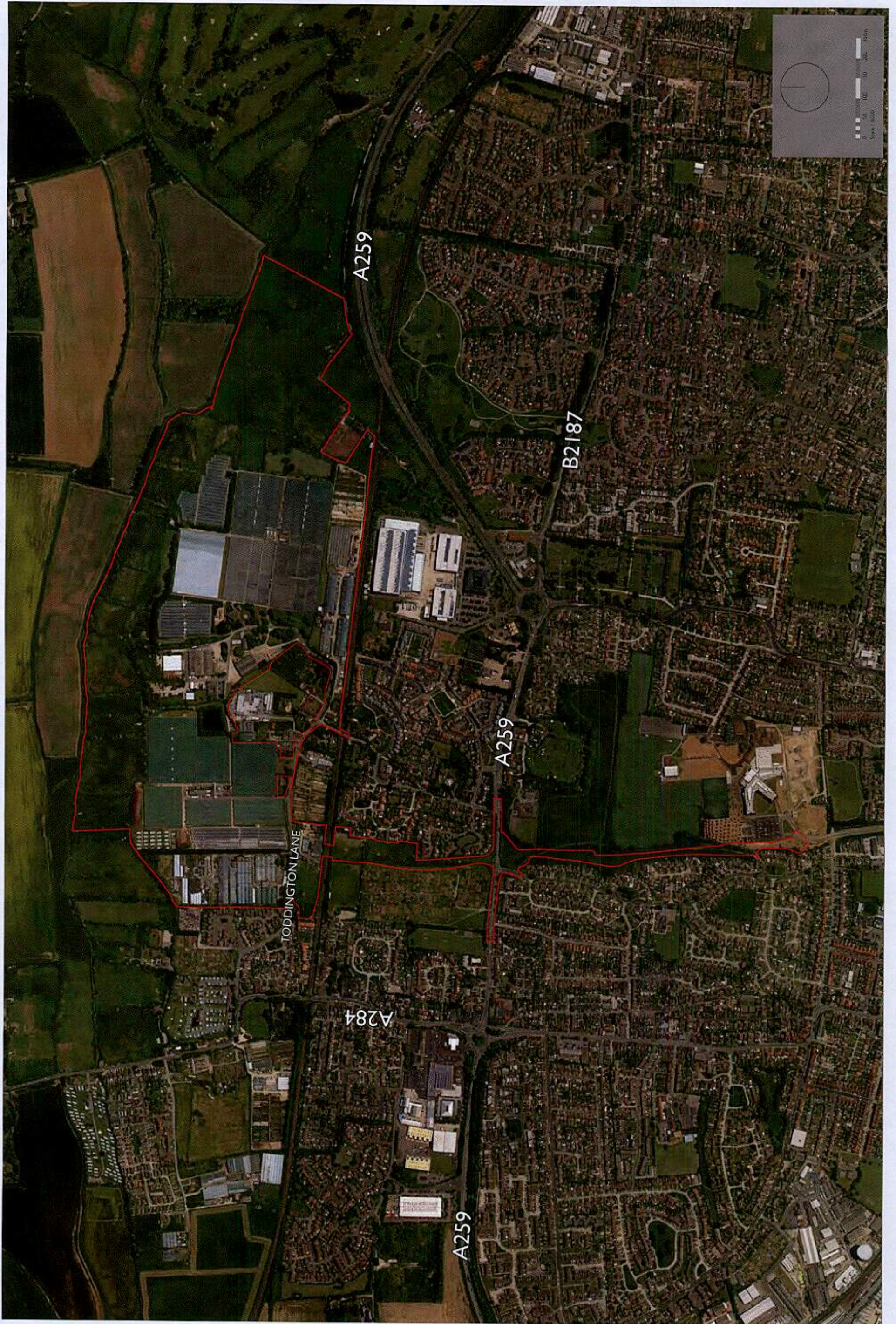


FIGURE 1.4: THE SITE LOCATION PLAN

2. UNDERSTANDING THE SITE CONTEXT

PLANNING HISTORY

1.11 The North Littlehampton site was previously owned by a consortium of landowners, headed by Greencore Group PLC.

1.12 Historically, a similar site area was promoted for housing development through the Arun District Local Plan process in the late 1990s. The Inspector concluded that although the site should not be allocated for development at that time (because the allocation of land at Bersted and Felpham was preferred), it should be reconsidered for development when the need to allocate land for housing next arose. However, the Inspector added that the site's severance from the town by the railway line must then be addressed.

1.13 Accordingly, the development potential of the site was again promoted to Arun District Council from 2006, ahead of and throughout the ongoing Local Development Framework (LDF) process. This process encountered several delays. In 2009, the Council published its 'LDF Core Strategy Options for Growth' document identifying three alternative strategic development options which were the subject of public consultation. Two of these options included the North Littlehampton site as the location for a sustainable urban extension to Littlehampton.

1.14 The emerging LDF suffered further delays due to the revocation of the South East Plan, and discussions took place between Greencore's advisors and Arun District Council about the possibility of a planning application being submitted for the site's redevelopment, given the Council's worsening housing land supply position. Consequently, an outline planning application was submitted in February 2011. This

application included an Illustrative Master Plan which described the extent and location of the land uses together comprising the proposed urban extension to the town. Those land uses comprised:

- A total of 1,460 dwellings, of which 1,260 dwellings were on land controlled by Greencore's consortium;
- A local centre which would provide local convenience shopping together with other retail and food and drink uses and a health club;
- Commercial uses comprising 10,000 sq m of employment floor space (including an Enterprise Centre and an hotel);
- Community facilities including a primary school, a community centre, a youth facility, sports pitches, a fitness trail, allotments and land for an extension to the household waste recycling centre;
- The southern section of the Lyminster Bypass which must bridge both Toddington Lane and the railway line;
- A biodiversity area in the northern and eastern parts of the site

1.15 The Council unanimously resolved to grant outline planning permission for the scheme in December 2011, under reference number LU/47/11. The Decision Notice was subsequently issued in January 2013, once the Section 106 Agreement had been finalised. The site was then marketed with the benefit of planning permission.

1.16 Persimmon Homes successfully acquired the residential parts of the site earlier in 2014. The Illustrative Master Plan has been reviewed and this has identified the need for some minor changes to the extent and location of some of the land parcels / uses. These minor changes to the master plan do not affect the overarching principles and design parameters

established at the outline application stage, including the overall number of dwellings and the mix of non-residential land uses proposed. Details of the proposed changes are set out in more detail in this document.

1.17 The evolution of the proposals has been influenced by an extensive and ongoing local consultation process, including with Arun District Council, West Sussex County Council, Littlehampton Town Council, the North Littlehampton Steering Group and local residents. The feedback received from these parties has been reviewed by the project team and has guided the formulation of the updated North Littlehampton Master Plan as well as the more detailed design principles and guidelines for the site as set out in this Development Framework Document.

NOTES

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REVISIONS

Date Rev Description

16/02/2011 - Planning Application Submission

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Scale: 1:1000 Date: 16/02/2011

NORTH LITTLEHAMPTON
ILLUSTRATIVE MASTERPLAN

FIGURE 2.1: THE APPROVED ILLUSTRATIVE MASTER PLAN

PLANNING CONDITIONS

1.18 The outline planning consent for the site is subject to a number of conditions. Some of these conditions establish triggers for the provision of various elements of the overall master plan for the site to ensure that the key infrastructure is delivered in line with particular phases of the residential development. For example, no more than 350 dwellings are permitted to be occupied until the completion and opening to the public of the southern section of the Lyminster Bypass. This document sets out below the proposed phasing of the various elements of the overall master plan.

1.19 Planning conditions require that the development should be carried out "in substantial accordance with" the Illustrative Master Plan approved at outline permission stage (which was supported by a Design Guidance document which comprised Volume 2 of the approved Design & Access Statement); and that a Design Statement should be submitted with each subsequent Reserved Matters application for each phase or sub-phase of the development. Persimmon Homes and their consultant team have reviewed both the Illustrative Master Plan and the accompanying Design Guidance, and it has been decided that a more detailed source of reference is required than the Design Guidance document in order to properly steer the coordinated implementation of the master plan – hence the preparation of this Development Framework document.

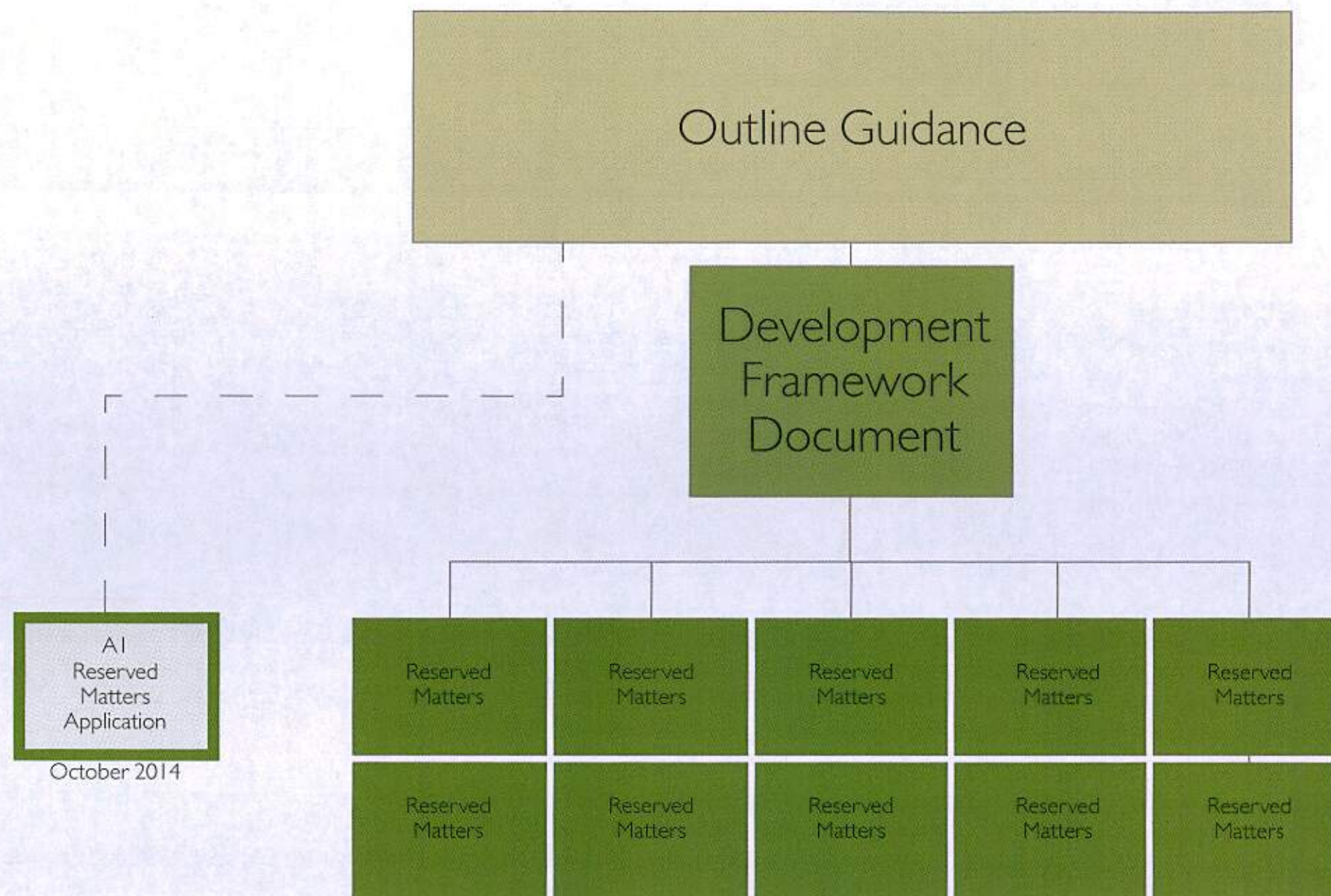


FIGURE 2.2: WHERE THIS DOCUMENT SITS WITHIN THE PLANNING CONTEXT OF THE MASTER PLAN

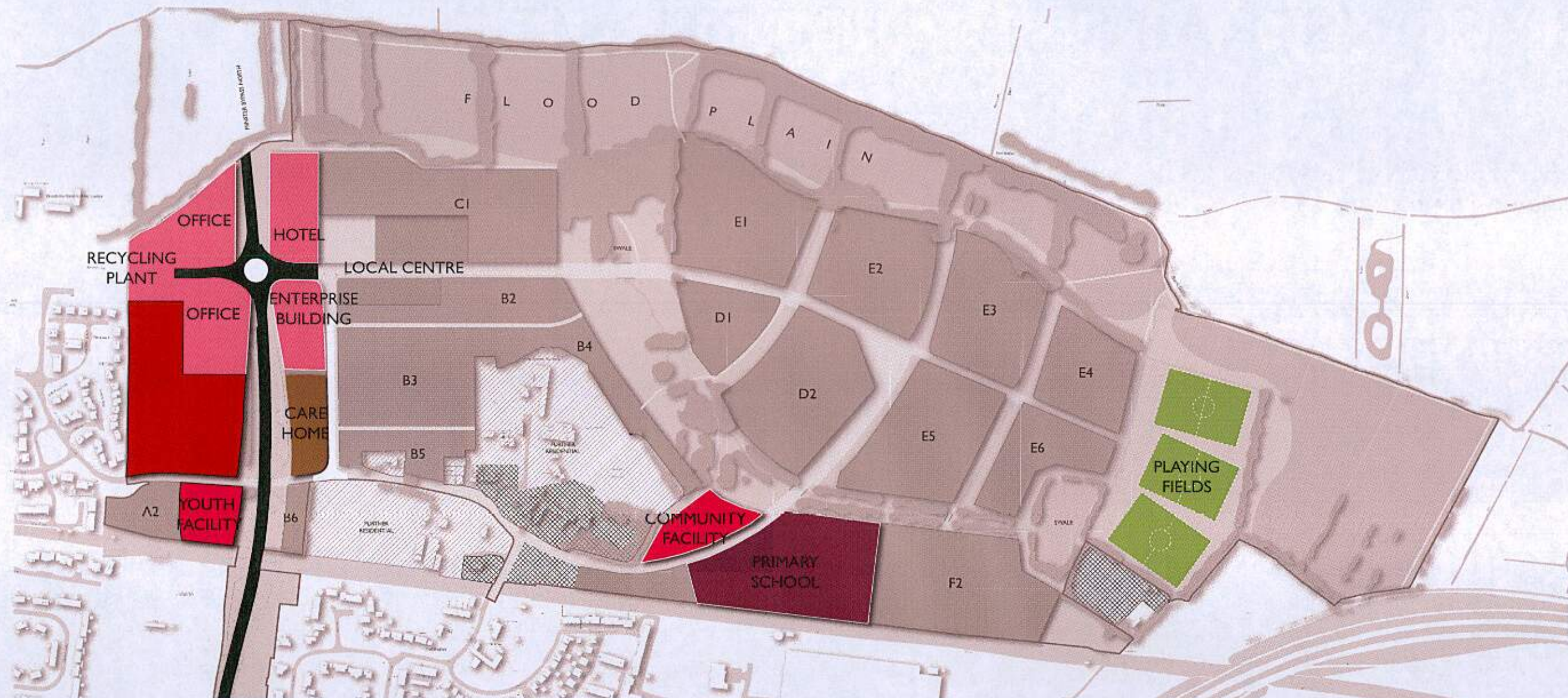


FIGURE 2.3: PLAN SHOWING AREAS OF KEY INFRASTRUCTURE TO BE DELIVERED

KEY INFRASTRUCTURE TO BE DELIVERED

- Highway improvements – most importantly, delivery of the southern section of the Lyminster Bypass from the site southwards to the A259 Worthing Road together with all other elements of the site access strategy including closure of the Toddington Lane level crossing to vehicular traffic;
- Transport – a new bus route to serve the site, linking it with the Wick shopping centre, Littlehampton town centre and the Academy;
- Employment floorspace including an Enterprise Centre;
- A Primary School;
- A Community Centre;
- A Youth facility with associated all-weather multi-use games area;
- An extensive network of open space, providing for both formal sports and informal recreation;
- Land for a potential extension to the adjoining household recycling centre.

3. CONSTRAINTS + OPPORTUNITIES

UPDATED CONSTRAINTS AND OPPORTUNITIES

3.1 A series of constraints and opportunities are presented on the site, which have been subject to a series of surveys and other technical and non-technical assessments as part of the assessment of Outline Planning Application for the purposes of more detailed design with some surveys updated. These include:

- Topographical survey (updated)
- Noise Assessment (updated in limited areas)
- Landscape Visual Impact Assessment
- Transport assessment
- Utilities assessment (updated)
- Ground investigation (updated)
- Ecological survey (updated)
- Arboricultural survey
- Planning policy appraisal
- Assessment of character
- Archaeological Assessment

SUMMARY OF CONSTRAINTS

3.2 Flood risk on the lower lying areas of grazing marshes around the northern and eastern edges and extending into the centre of the site;

3.3 An update to the walkover survey has been completed at the North Littlehampton site which has confirmed that habitats remain largely the same as during previous surveys. Biodiversity interest is found, particularly along the course of the Black Ditch and drainage ditches which feed into it;

3.4 The safeguarded corridor for the Lyminster bypass which passes through the western part of the site on a north-south alignment;

3.5 The local road network which is constrained by the level crossings on Lyminster Road and Toddington Lane;

3.6 Severance of the site and adjoining areas from the town by the main railway line;

3.7 Outline planning permission which requires any development to "be in substantial accordance with" the approved Illustrative Master Plan.

3.8 A range of Category A and B trees are located across the site and have been assessed in accordance with the British Standards. Wherever possible these trees should sought to be retained. Justification for their removal will have to be made on a case by case basis where engineering works are required to support the development.

3.9 Noise consideration will need to be given to development adjacent to the proposed Bypass and the existing Railway Line to the south of the master plan with acoustic fencing or other required measures as appropriate.

SUMMARY OF OPPORTUNITIES

3.10 Delivery of a range of market and affordable housing to meet local needs;

3.11 Much of the site is previously developed, mainly for former horticultural uses, so its redevelopment does not cause the loss of greenfield land;

3.12 The majority of the site lies on a raised plateau, above the areas at risk of flooding;

3.13 The delivery of part of the Lyminster bypass to improve access between Littlehampton town centre and seafront and the A27 corridor; thereby addressing the site's severance from the town;

3.14 The creation a new "gateway" into the town through the site's location on the alignment of the bypass;

3.15 The provision of a range of new and improved community facilities as well as wider strategic infrastructure;

3.16 The ecological management and enhancement of areas of the site of biodiversity interest;

3.17 Use of a Sustainable urban Drainage (SuDS) system, similar to the existing site drainage system. A SuDS system will utilise the existing pattern of attenuation ponds within the site and discharge outflow into the Black Ditch to the north, incorporating the creation of a new central wetland, over which there will also be attractive views for adjacent residents as well as a recreational amenity for the surrounding existing residents.



FIGURE 3.1: IDENTIFIED CONSTRAINTS AND OPPORTUNITIES

VALIDATING THE MASTER PLAN

3.18 The Outline Planning Application has been reviewed in light of the updated opportunities and constraints. Our analysis revealed that the net residential area shown on the parameter plans were inclusive of some significant areas of landscape and open space, as well as areas of drainage. Our calculations lead to a 10 acre loss of residential developable area. Some of the other non-residential area are also judged to be over or undersized for their respective designations in some cases, when considering elements such as parking levels, as one example.

3.19 In reviewing the master plan and as part of on-going dialogue with various stakeholders we are looking to make subtle variations to the overall master plan, but in "substantial accordance" with the Approved Outline Planning Concept.

3.20 The master plan will still deliver 1260 dwellings in accordance the Outline Planning Application.

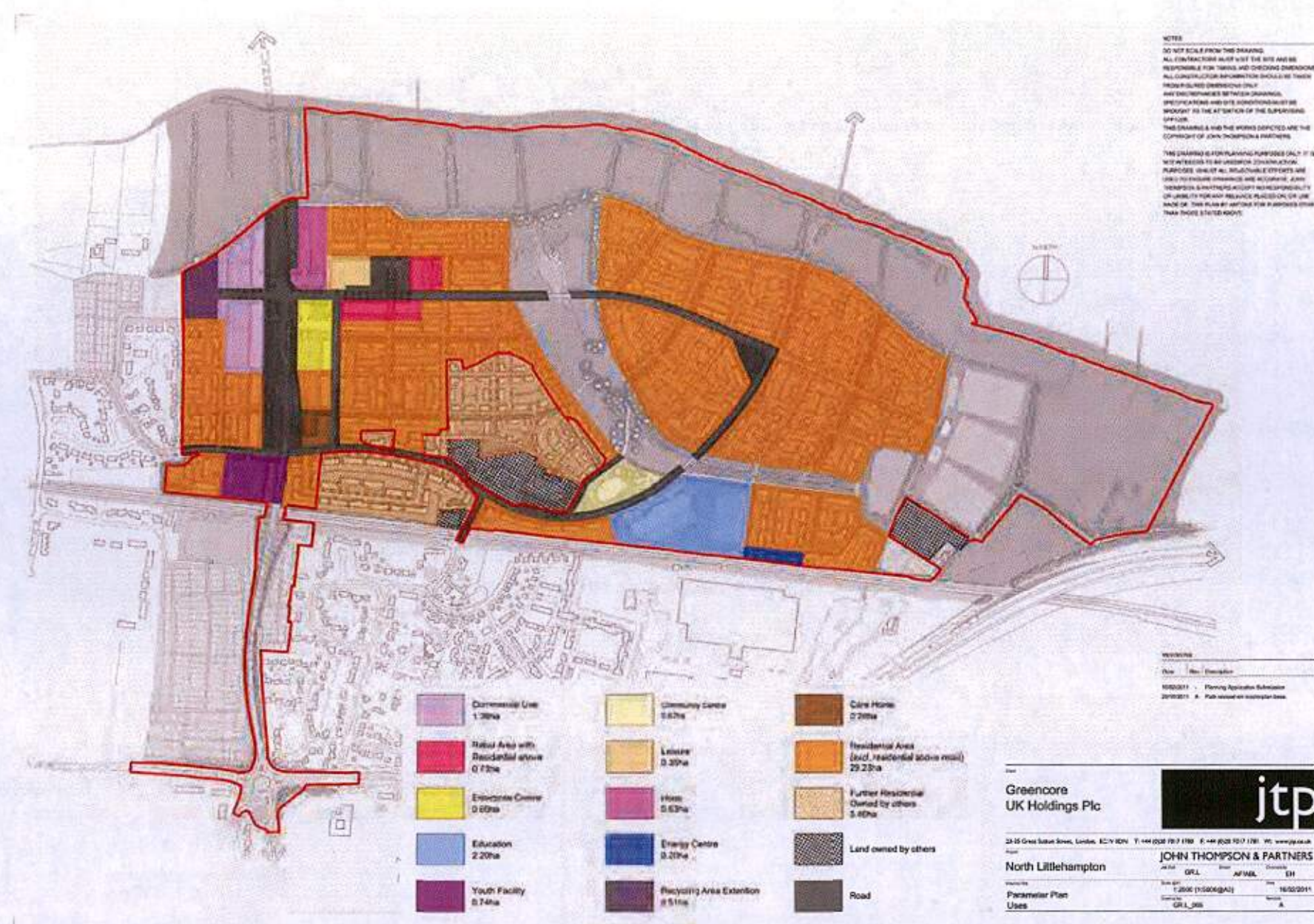


FIGURE 3.2: THE APPROVED LAND USE MASTER PLAN

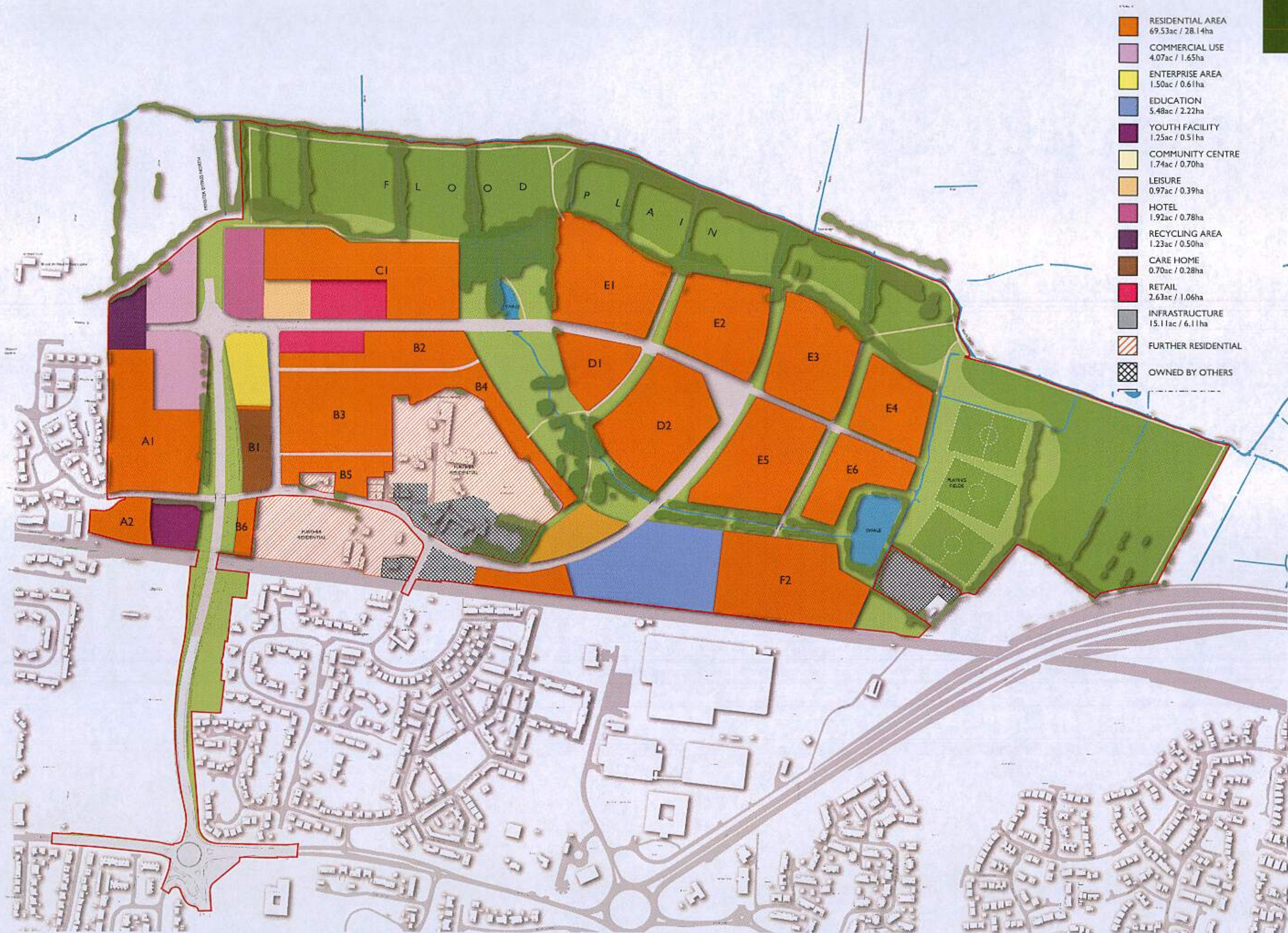


FIGURE 3.3: THE UPDATED NORTH LITTLEHAMPTON MASTER PLAN

4. PRODUCING A FRAMEWORK UPDATE

MOVING FORWARD

4.1 The proposals moving forward work within the overarching principles of the consented master plan and adapt the design to be more technically robust as is commonly associated with more detailed planning processes.

4.2 As you can see from Figure 4.2 the overarching principles of the master plan are generally unchanged with regard to:

- Block structure
- General land use
- Landscape location
- Street hierarchy and alignment

4.3 The remaining elements of this Development Framework Document set out the principles that will establish the future character and evolving design philosophy that are to be delivered as part of the wider master plan proposals, with regard to urban form, architectural style, and landscape design.



FIGURE 4.1: THE ILLUSTRATIVE MASTER PLAN AT THE OUTLINE PLANNING STAGE



FIGURE 4.2: THE UPDATED MASTER PLAN FOR THE NORTH LITTLEHAMPTON SCHEME

PROPOSED DEVELOPMENT PHASING

4.4 Figure 4.3 illustrates the proposed phasing of the residential parcels for the North Littlehampton Master Plan. The table on the right lists the key milestone for community facilities to be completed. This is the current time scales for the delivery of the master plan.

4.5 The master plan will deliver substantial local and strategic infrastructure that will improve traffic movement through and around the local area. Elements such as the Community Centre, Youth Facility and play areas are seen as key elements to be delivered to enhance the social integration of the new and existing communities, while the early delivery of the bridge will provide enhanced access to the master plan area and Littlehampton as a whole.

4.6 The residential development will begin from west to east. There is no set date for the delivery of the local centre, enterprise building, potential recycling plant, hotel, leisure or office space, as these elements will need to be partly market driven in terms of their final delivery, but will need to adhere to the design principles that are established in this document.

4.7 The proposed Primary School can also be implemented anytime within a 10 year span from when construction work begins on site.

KEY MILESTONES

1. BRIDGE OPEN – JAN 18
2. COMMUNITY CENTRE – FEB 18
3. YOUTH FACILITY – FEB 18
4. LEAP 1 – JUNE 18
5. LEAP 2 – JUNE 18
6. LEAP 3 – SEPT 21
7. PLAYING FIELDS – SEPT 21
8. FITNESS TRAIL – JUNE 22
9. ALLOTMENTS – JUNE 22
10. PRIMARY SCHOOL – NO SPECIFIC DATE: WEST SUSSEX COUNTY COUNCIL CAN UTILISE THE DESIGNATED SITE AT ANY POINT WITH 10 YEARS FROM A START ON SITE.

5. CONSULTATION AND EVOLUTION

CONSULTATION

A WIDE RANGE OF CONSULTATION HAS TAKEN PLACE AS PART OF THE DESIGN PROCESS. THE FOLLOWING SECTION SETS OUT HOW THIS HAS INFORMED AND EVOLVED THE DESIGN OF THE MASTER PLAN.

STEERING GROUP MEETING 07.07.2014 & 20.08.2014

5.1 Meetings with the Steering group responsible for the overall strategic delivery of development infrastructure across the local area were held. Persimmon and their team explained the emerging principles of the development design and phasing in the context of the wider master plan. Comments raised that concerned the site were in relation to the Littlehampton Master Plan and the Lyminster Bypass route. There was an emphasis on the comprehensive delivery of the bypass, thereby making it imperative that Persimmon who are delivering the southern and central elements of the road should dovetail with the northern element to be delivered by West Sussex County Council. Other key comments raised were the design of sufficient car parking, adoptability of the road and drainage.

PRE-APPLICATION MEETINGS WITH ARUN DISTRICT COUNCIL 05/08/2014 & 20/08/2014

5.2 A series of meetings were held with the Planning Officer of Arun District Council to discuss the first and evolving thoughts of the A1 site in more detail and to gain reaction to the proposed development and its rationale. The evolution of the layout is explained on Page 15.

DESIGN REVIEW

5.3 The design for the site was also presented to the South East Design Review Panel. Overall the panel were positive on the proposals presented. Their comments are set out overleaf.

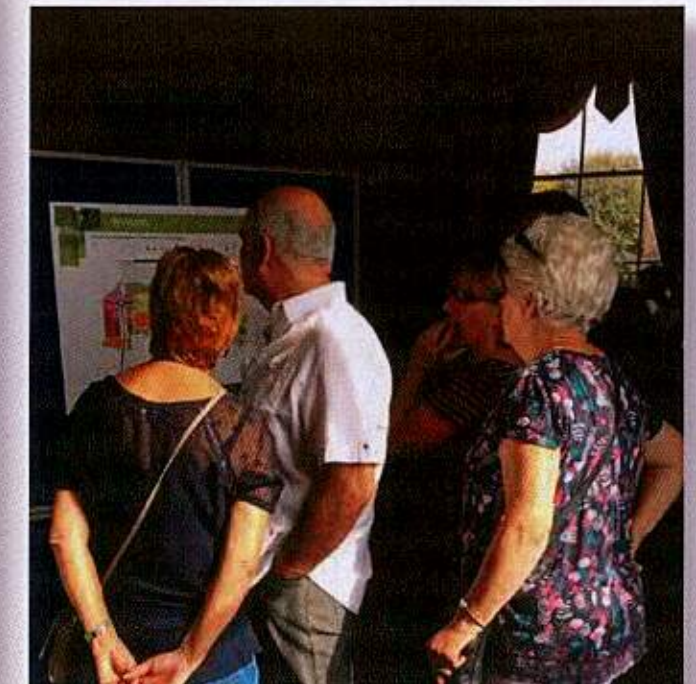


FIGURE 5.1: MEMBERS OF THE PUBLIC AT THE BUSY PUBLIC EXHIBITION

PUBLIC EXHIBITION

5.4 A public exhibition was held on the 16/17th September 2014 at the Littlehampton Town Hall and was held jointly with West Sussex County Council to show current designs for the northern element of the bypass for which they are responsible, with Persimmon showcasing updates to the overall North Littlehampton Master Plan. There were no specific design issues for the master plan itself and people understood the importance of the scheme in terms of delivering wider benefits through the implementation of the bypass and the wider master plan as a whole.

DESIGN REVIEW COMMENTS

5.8 The design review panel were presented with the consultation master plan proposal. Key comments included:

- Re-look at play provision within and across the site
- Further consideration of retained landscape in relation to drainage needs and engineering work;
- Further consideration of secondary space within blocks to reinforce development character
- Seek retention of triangular building in the centre of the site
- Further consideration of the inter-relationship between the development and the northern landscape edge
- The Panel understood the rationale for the variation and approach to architectural character with further articulation need to enable the Arun to assess future Reserved Matters Against.



AMENDMENTS TO THE SCHEME

Following consideration of the feedback received from the exhibition.

1. It was seen that the relocation of the youth facility was not a feasible proposition at this moment in time;
2. The Care Home as been enlarged to 1.3 acres and has been designed to respond to the latest design of the Bypass.
3. Further refinement of the master plan has been done to take account of the most recent survey and technical working in terms of the Drainage Strategy for the whole site and detailed arboricultural assessments for that identify the higher grade vegetation which has sought to be retained where ever possible.

FIGURE 5.5: FINAL ILLUSTRATIVE LAYOUT

6. DEVELOPMENT CHARACTER

LAND USE

6.1 The distribution of the land use remains unchanged to the set at the Outline Planning Stage.

RESIDENTIAL

6.2 The master plan is to deliver 1260 homes of mixed type and tenure across the residential areas shown.

6.3 An indicative mix is set out below that will allow flexibility to the market demand, but which still responds to the location and the current housing need in the area.

5/4 Bedroom Dwellings	x 20%
3 Bedroom Dwellings	x 30%
1/2 Bedroom Dwellings	x 50%

AFFORDABLE HOUSING

6.4 Affordable housing provision is to be provided at 20% within in each development parcel or groups of development parcels that are to be brought forward at any one time.

6.5 The tenure mix is to be meet the policy requirements of the time and will be subject to consultation with Arun District Council's Housing Officer.

RETAIL

6.6 The retail element of the master plan will remain the same as that set at the Outline Planning Stage with up to 3,500

sq.m of retail, comprising for a small supermarket element, with the ability to provide a range of units that will cater for the new communities needs and which will benefit residents in the wider area.

OFFICE

6.7 A figure of up to 10,000 sq.m of office space is still considered appropriate with a 3,000 sq.m Innovation Centre located as a gateway feature into the master plan area. However it is suggested that some of the office space be provided within the local centre to generate a greater variety of uses within the Local Centre. Current parking standards for the office space means the upper limit of office space could not be accommodated solely to the east and west of the bypass, therefore additional office space may be provided within the Local Centre.

HOTEL

6.8 A 100 bed hotel is also still proposed as part of the master plan of up to 3,000 sq.m and will provide strong feature along the Bypass Route and gateway into the master plan.

CARE HOME

6.9 The care home area has been

increased to 1.3 acres/ 0.53 ha to provide an area that will enable a care home operator to provide up to a 60 bed scheme with ancillary open space, servicing and landscape requirements

PRIMARY SCHOOL

6.10 2.1 ha of land is still maintained in the design to allow for a 2 form entry primary school, on-site parking (for staff) and playing fields.

COMMUNITY CENTRE

6.11 This is to remain the same size as before 0.70 ha

COUNTY WASTE FACILITY

6.12 The proposed extension to the county waste facility is still maintained at 0.49 ha.

LANDSCAPE OPEN SPACE AND QUANTUM

6.13 There is a substantial increase in open space from the recalculation of the residential areas which are developable and will include the SuDS as these will be designed to provide a positive visual amenity and ecological enhancement.

YOUTH FACILITY

6.14 This is to be 0.74 ha

KEY

	RESIDENTIAL AREA 69.53ac / 28.14ha
	COMMERCIAL USE 4.07ac / 1.65ha
	ENTERPRISE AREA 1.50ac / 0.61ha
	EDUCATION 5.48ac / 2.22ha
	YOUTH FACILITY 1.25ac / 0.51ha
	COMMUNITY CENTRE 1.74ac / 0.70ha
	LEISURE 0.97ac / 0.39ha
	HOTEL 1.92ac / 0.78ha
	RECYCLING AREA 1.23ac / 0.50ha
	CARE HOME 0.70ac / 0.28ha
	RETAIL 2.63ac / 1.06ha
	INFRASTRUCTURE 15.11ac / 6.11ha
	FURTHER RESIDENTIAL
	OWNED BY OTHERS
	INDICATIVE SUDS CORRIDORS



FIGURE 6.1: PROPOSED LAND USE

DEVELOPMENT FRAMEWORK

6.15 The overall framework for the master plan follows that of the Outline Planning Application. The proposed Bypass to the west continues to provide a new strategic access point for the site which leads to the Avenue, the main route that threads the development, providing a spine of movement.

6.16 The overall block structure is explained in further detail within 6.27. This ultimately provides the foundation for the variation in character across the development.

FRONTAGE

6.17 Frontage across the master plan is an important aspect. It will provide the activity to the street and will assist in defining the streets and spaces that are to be created.

6.18 Three types of Frontage are proposed:

MAIN AVENUE

6.19 Ensuring that the Avenue is not simply an homogeneous route through the master plan. Variation in housing forms landscaping and composition of the development will provide variety and ultimately will be the first impression of the changes in character across the proposed master plan.

GREEN SPACE FRONTAGE

6.20 Frontage onto the open space is an important aspect. Overlooking of the large green space is important to create a sense of place and definition. The parkland will effectively be a man-made environment with works required for the delivery of the Sustainable urban Drainage Strategy, although this will be landscaped to create a green open space amenity. Therefore the frontage will be key to creating the formal parkland feel and enabling the Central Open Space to operate as an interface between the western and eastern areas of the master plan.

NATURALISTIC EDGE FRONTAGE

6.21 This frontage will provide an interface between the development and the countryside beyond and will vary from west to east.

6.22 To the west the development will provide an abrupt edge as this has a more urban character. To the east there will be variation in the frontage with variety in set back an orientation of buildings.

GENERAL FRONTAGE POINTS

6.23 Frontage to Streets is an important element of the design, streets should be overlooked with development providing activity to the streets and spaces. Corner buildings should provide fenestration to the two outward looking edges to provide natural surveillance and avoid blank façades within the street scene.

LEGIBILITY

6.24 Legibility within the master plan is an important consideration. How residents and visitors interpret and understand the development is an important consideration. The overall hierarchy of areas, spaces, streets and character will all assist with understanding the area and provide ease of movement.

6.25 In addition, focal buildings will also act as markers within the development. There are two levels of focal buildings, Strategic focal buildings and Local focal buildings.

STRATEGIC FOCAL BUILDINGS

6.26 These buildings operate as gateway features for the overall master plan area. These are located along the new Bypass link and will effectively be the 'front door' to the development, supported by the focal area of the local centre and commercial area to the west of the proposed bypass.

6.27 In addition, the Community Centre Building and Primary School will anchor the Central Open Space. The design of the buildings will need to be visible from afar to enable pedestrians, cyclist and vehicles to make a visual connection in order to orientate themselves and ultimately get to these key social/

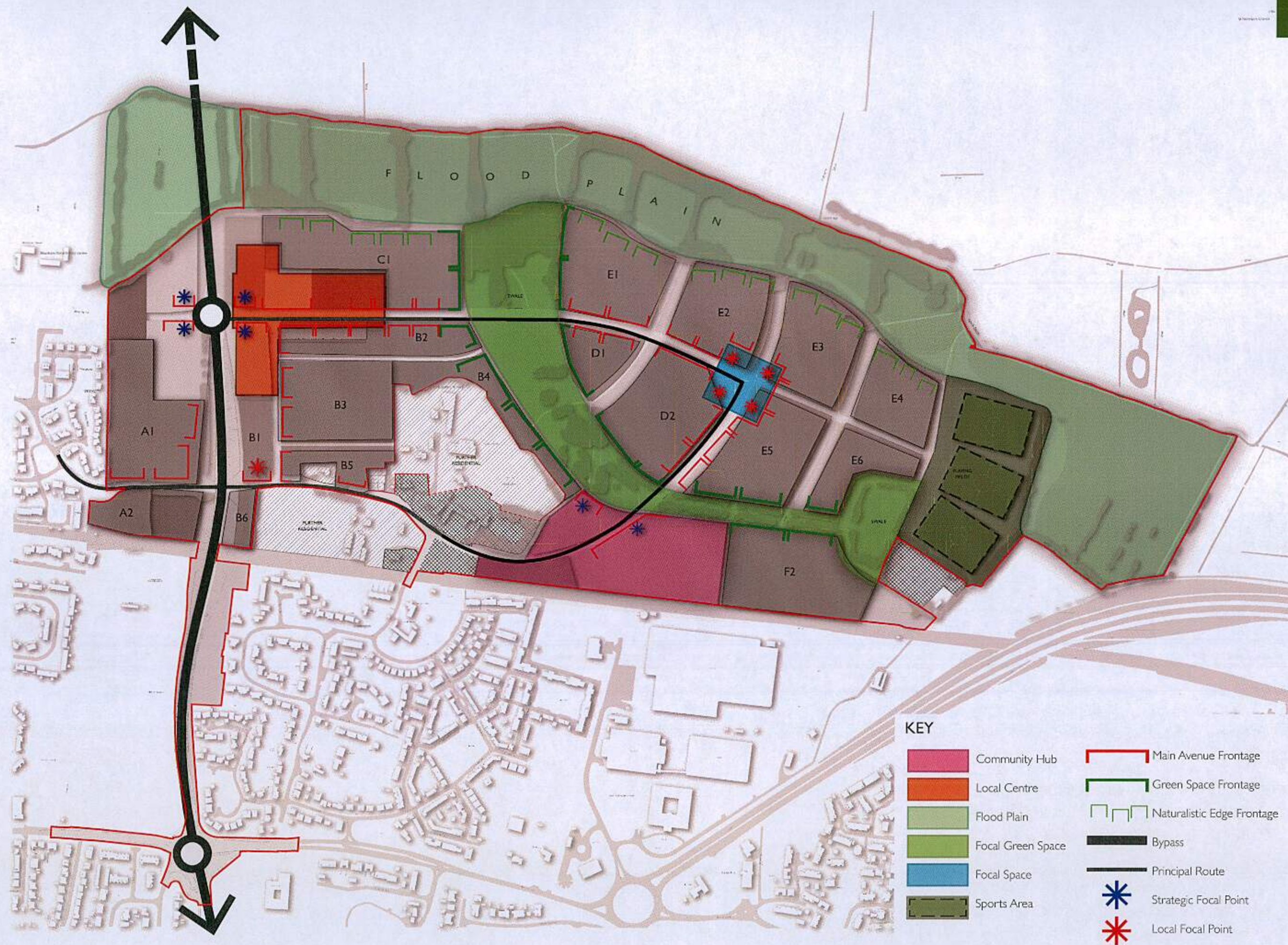


FIGURE 6.2: THE DEVELOPMENT FRAMEWORK

community facilities that will be the Community Hub of the new development and provide facilities for future and existing residents within the area.

LOCALISED FOCAL BUILDINGS

6.28 These will operate as local points of interest such as spaces and corner buildings within the various character areas.

6.29 Each type of focal building can be defined by a combination of the following:

- Change in material,
- Boundary treatment,
- Setback
- Colour,
- Height and/ or
- Detailed building design.

SCALE

6.30 The overall rationale for the building heights across the master plan stems from a desire to create variation in development character that responds to the proposed uses and the existing and proposed landscape features, development density, hierarchy of places and ultimately the legibility of the master plan.

6.31 Taller elements are located within and around the Local Centre to reinforce and support its strategic status within the master plan as the centre of economic activity.

6.32 Building height step down from the Local Centre to the edges of the development responding to the naturalistic edge of the master plan and the wider countryside, as well as the existing 2-storey development.

6.33 Where focal points, key node or areas of heightened activity are proposed, buildings will be notably taller to accentuate this status and support the legibility of users of the site.



FIGURE 6.3: THE APPROVED OUTLINE BUILDING HEIGHTS PARAMETER

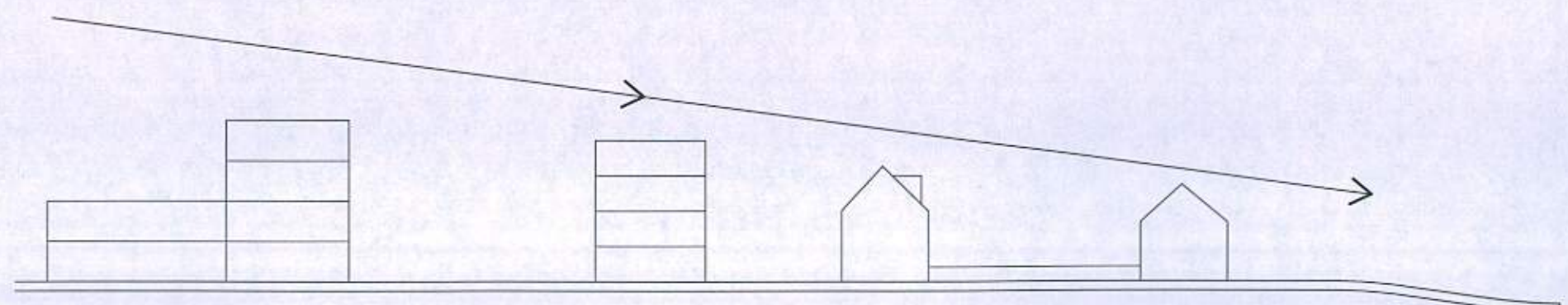


FIGURE 6.4: CONCEPT SECTION THROUGH LOCAL CENTRE OUT TO THE NORTHERN BOUNDARY A-A



FIGURE 6.5: THE STOREY HEIGHTS STRATEGY

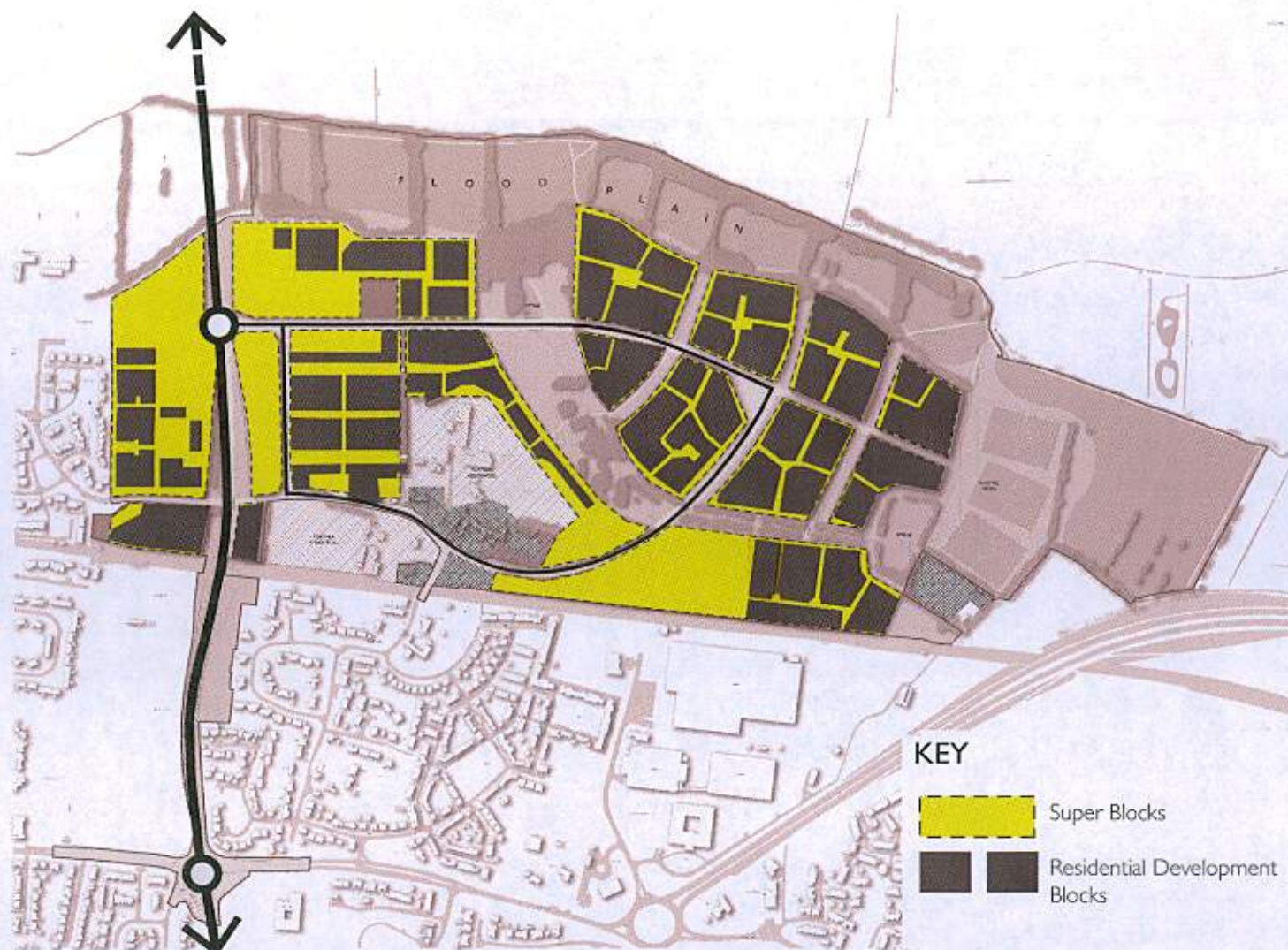
BLOCK FORMS

6.34 The overall super block structure creates a variety of forms from West to East. Within the area west of the Central Open Space the block forms mimics the historic glass house orientation, with a regularised grid form. The Central Open Space operates as an interface between the West and East, resulting in the eastern area having a more irregular grid form that responds to the landscape and supports an overall change in development character:

6.35 Within the overarching block forms comes the localised residential block variations with the development parcels that enable the opportunity to provide subtle variations in urban form and create distinctive pockets of development that will add a richness and variety to the master plan.

6.36 Three forms of perimeter block forms are proposed to provide inherent activity and security and to development plots:

- Back-to-back
- Courtyard, and
- Mews



Road Hierarchy reinforced by the directness of main routes and green links, whilst the internal roads meander

SuDS Streets provide up to 40m wide green streets.

Parking is distributed across the parcels using a range of parking types.



FIGURE 6.6: PERIMETER BLOCK FORM: BACK TO BACK



FIGURE 6.7: PERIMETER BLOCK FORM: COURTYARD BLOCK



Perimeter block form provides frontage to public areas

Focal Buildings terminate key corners and key views at the end of streets

Please note: Early discussions with WSCC is promoted

KEY SPACES

6.37 The development Framework (Figure 6.2) comprises a hierarchy of spaces that can assist with the creation of character for differing areas of the development.

6.38 Higher order spaces provide a strategic and site wide function, with additional detail set out in the respective character areas and Section 8 where green landscaped open space is concerned. These include:

- The Local Centre
- Central Open Space
- The Black Ditch
- Eastern Hub
- Community Hub (Community Centre and Primary School).

SECONDARY SPACES

6.39 Within each specifically defined character areas (Table 6.1), secondary spaces exist that within specific character area and the defined block structure. These spaces can reflect and embody the overall urban form of the areas supported by a wide range of frontage and specific housing forms and typologies.

6.40 The four examples herewith show how the spaces respond to the character are set out below.

6.41 The formal square nature of the development that surrounds the rectilinear space embodies the rigid grid formation of the Western development edge and would be considered appropriate for the area termed the contemporary area south of the local centre. Both character areas take their urban form from the rigid grid form of the former glasshouses. Regular set back of the buildings in these spaces will support the overall characteristic of the area.

6.42 Within the eastern parcel of the master plan, a more organic grid form is prevalent that deliberately contrasts with the more urban and formal western side of the development. As such, the spaces within these areas will need to assist with the definition of a particular parcel. Various forms are achieved but they must also support the urban design principles established at the Outline Planning Stage.

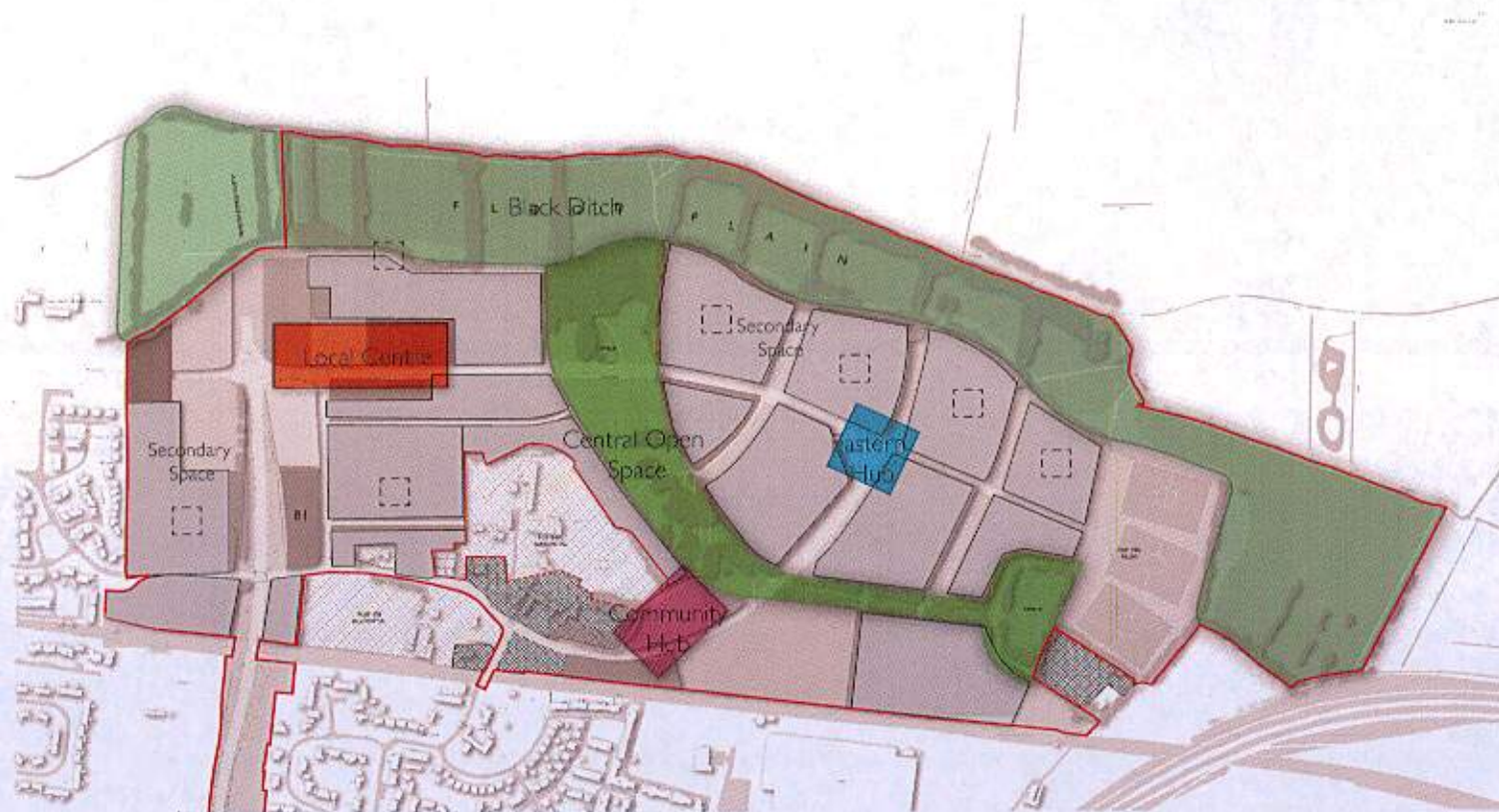


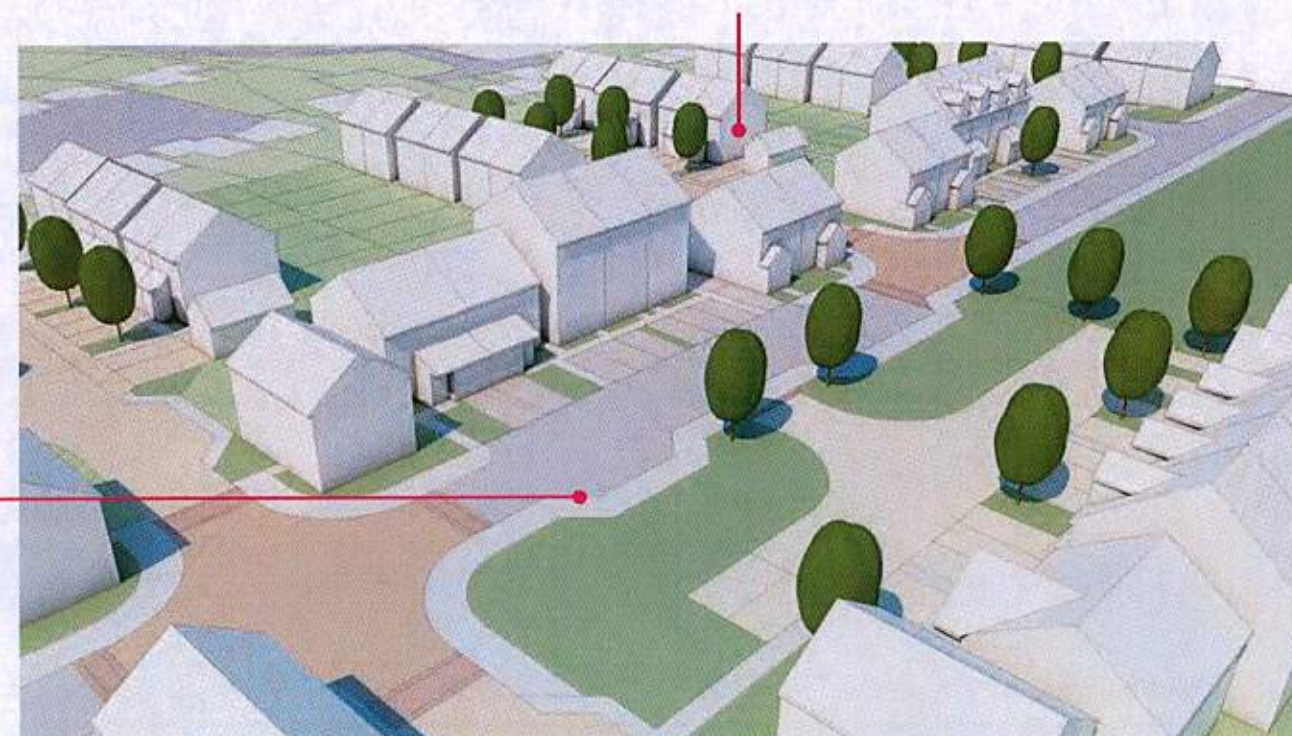
FIGURE 6.8: KEY SPACES

SECONDARY SPACE PRINCIPLES

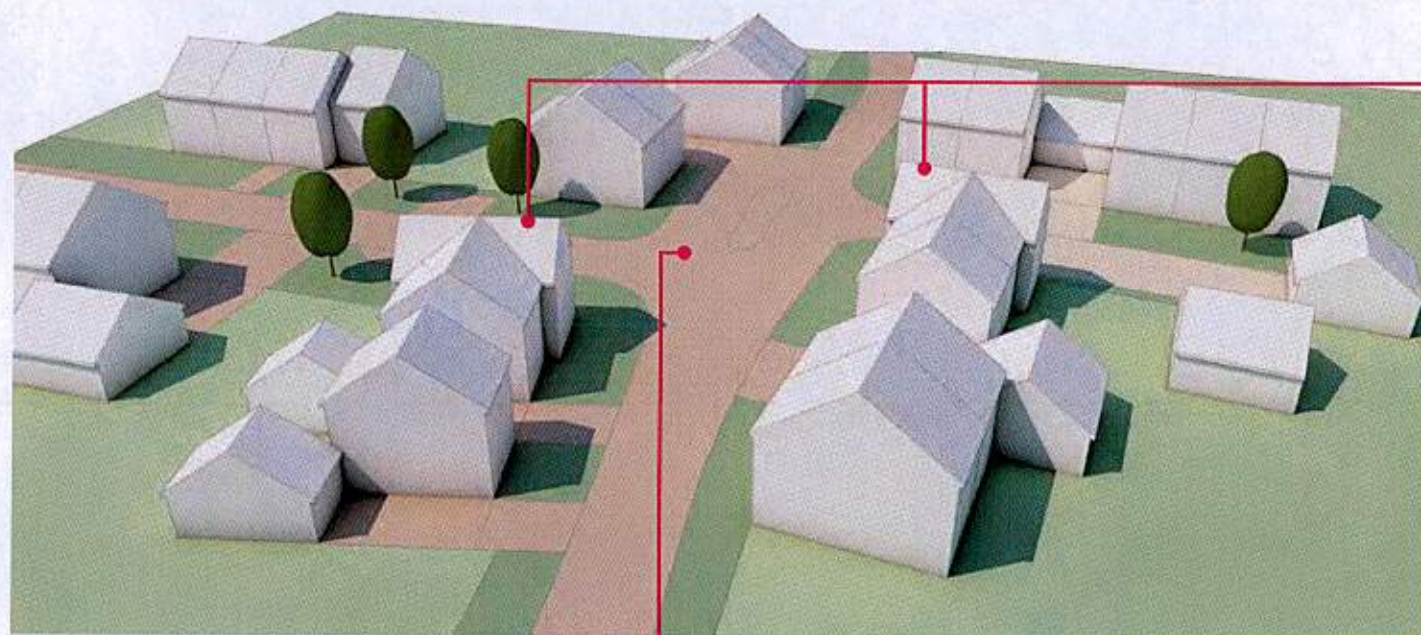
FORMAL SPACES

The square is regular in its form echoing the intended grid-form of the overall parcel

The symmetry of the square and how the buildings are spaced also embodies a regimented, organised character to be achieved within the western part of the master plan.

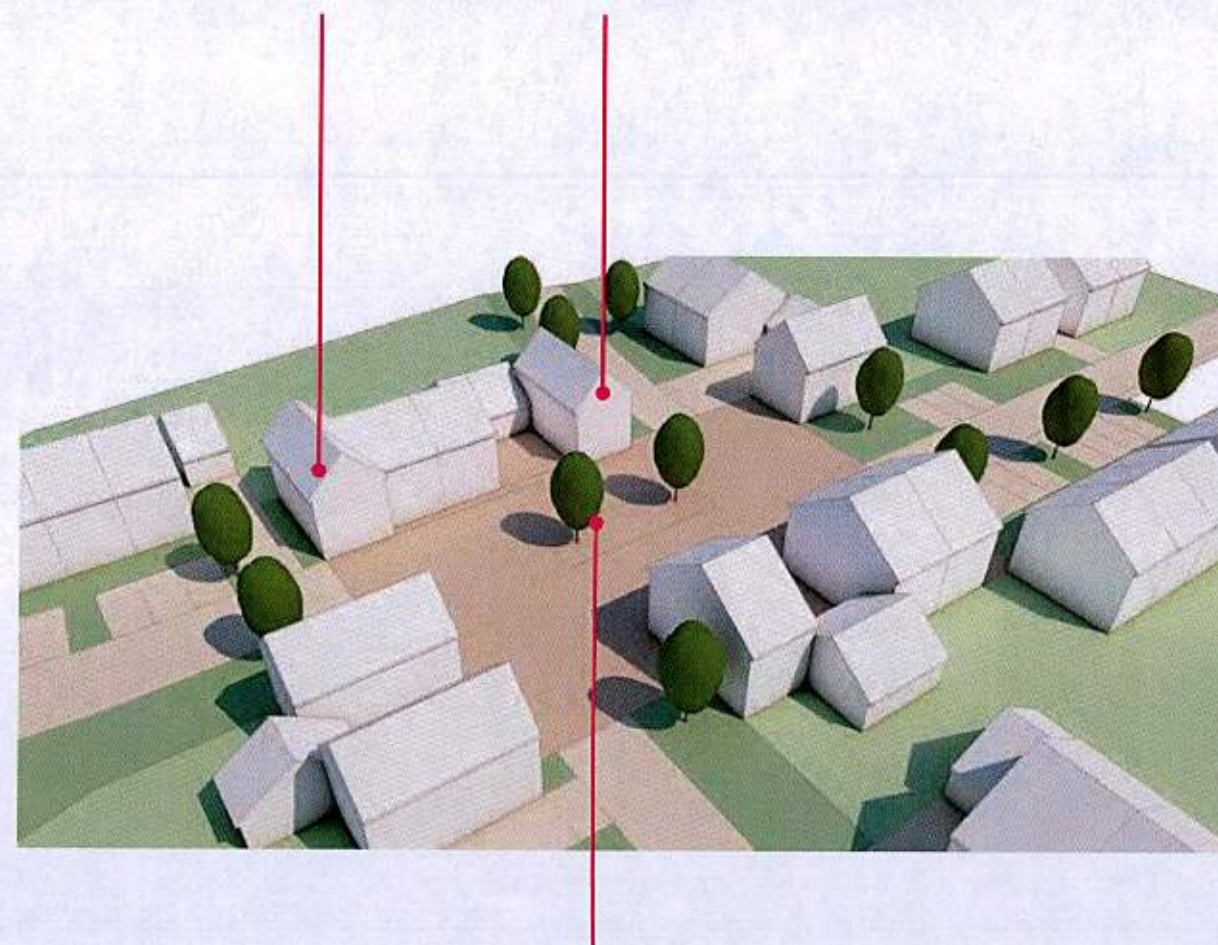


IRREGULAR FOCAL SPACES

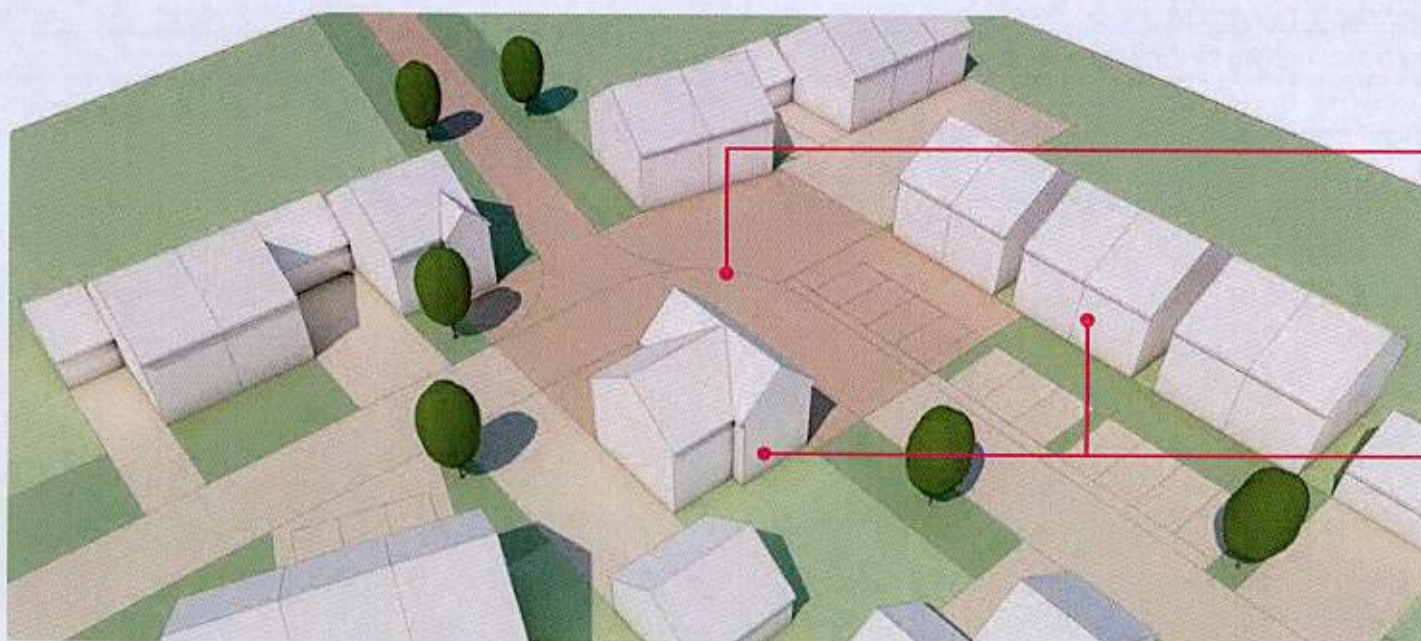


Organically shaped spaces embody the rural characteristics of the area, and is supported by the variation in set back from the road.

The use of gable fronted buildings to terminate views will a) assist with legibility with localised focal buildings and b) the variation in roof form creates adhoc variation to the roof scape as is the case within more rural locations.



Building orientation and irregular spacing between the buildings also will assist with providing a more organic character.



The variation and location of planting can also support the development character. The four example here show some or no structured planting to varying degrees can support the intended urban form.

Small spaces can also provide focal nodal spaces within development blocks. The tighter example shows how to the right a regular line of semi-detached dwellings combined with variation of house types and roof style can also be effective.

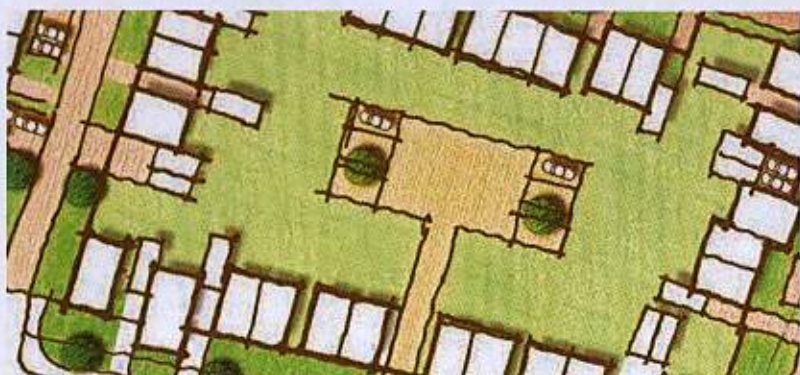
PUBLIC, PRIVATE AND SEMI-PRIVATE DESIGNATIONS

6.46 Clear designation between public and private spaces have been created and are demarcated in various ways.



PUBLIC

6.43 Public areas are open space with designated areas of movement defined by footpaths. All of these areas are overlooked by surrounding development and will be managed by a management company or other management process to be agreed with the Local Authority.



SEMI-PRIVATE

6.44 Semi-private spaces are the areas which are shared, but which are principally for the new residents of the development, such as parking areas. These areas are accessible to residents and are demarcated with a change of material and often a strong sense of enclosure, defined by the building forms that also provide natural surveillance to the space.



PRIVATE

6.45 Private spaces are defined by the use of landscaping and built form. Private residences will have privacy strips or front gardens which are defined by walls, fencing, hedging and /or planting. Back-to-back development adds to the sense of security and ensures that the backs of dwellings are not exposed, meaning access into the private areas is restricted to either through the house or via a side gate / garage.

OVERLOOKING

6.55 As with all new proposed development set back and separation distances will be generally adhered to with 20m back to back distances and 11m side on distances.

COMMUNITY SAFETY

6.47 The design and layout for the development parcels will need to create a safe and well overlooked streets and spaces. The following section sets out some of the key elements to be considered to deliver a safe community and reducing opportunities for crime.

ACCESS AND MOVEMENT

6.48 Site access points are to be overlooked and fronted by development. Pedestrian and vehicular movement should be generally separated across the site to ensure safety. This can be achieved through the use of designated footpaths in open space and raised pavements along the streets. Where shared surfaces are proposed low speed movement is promoted and should be designed into the street.

STRUCTURE

6.49 The design and layout of development should provide permeable and legible forms as set out in accordance with the principles established within this chapter, offering users with multiple ways through the site that are safe and overlooked.

SURVEILLANCE

6.50 All open spaces, parking areas and streets are to be overlooked by development with activity promoted onto the streets and spaces. Where walls / fences face onto the street adjacent development or surrounding development will need to provide natural surveillance of these areas

OWNERSHIP

6.51 Clear demarcation of boundaries across the site will need to be established and will be defined by a combination of built form and landscape treatment as set out in Section 8.41

PHYSICAL PROTECTION

6.52 Defensible measures to private property derive from the overall proposed block structure and placement of building form. Further protection is to be provided through physical measures that include walls, fenced areas, landscape treatment, gates and doors.

ACTIVITY

6.53 Activity on the site is to occur within the open space and public areas that are overlooked by surrounding development. All principal access points into housing is from front doors that address the streets and open spaces.

MAINTENANCE AND MANAGEMENT

6.54 The high quality open space proposed is an integral component element of the development character and will need to be maintained to a high standard. It is proposed that these areas will be placed within a management company to ensure regular maintenance.

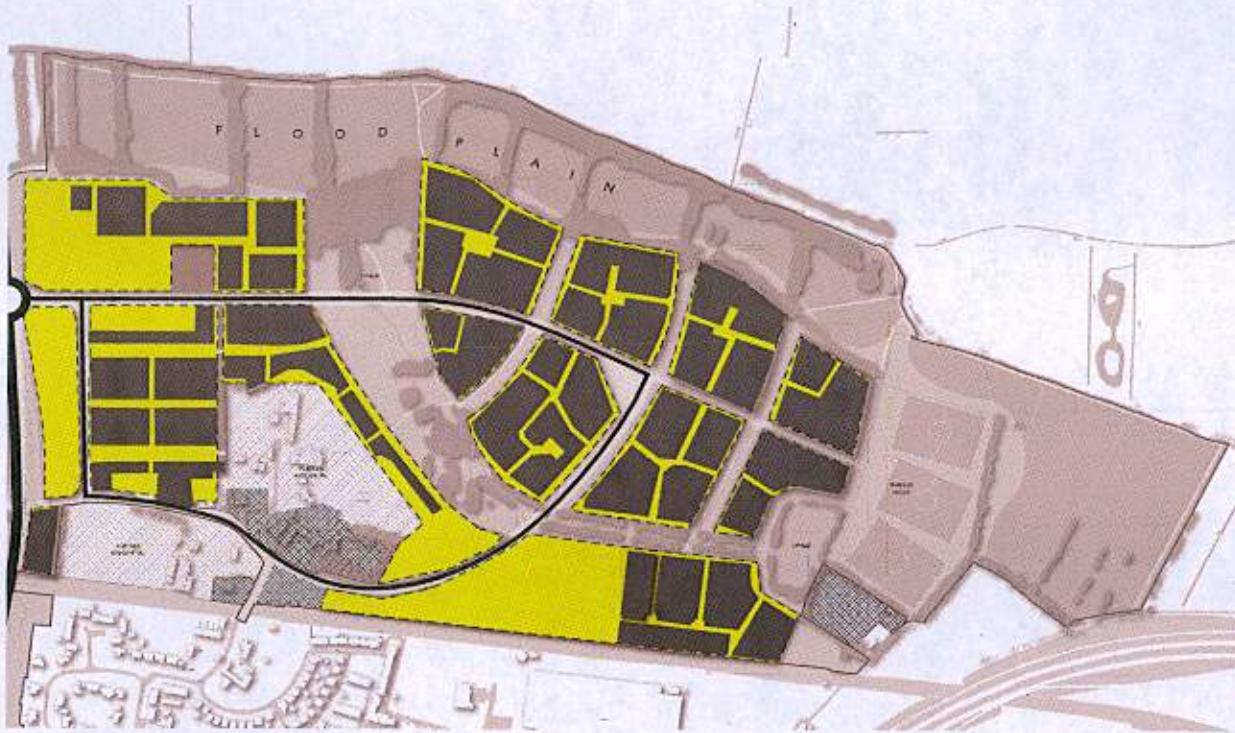


FIGURE 6.9: PROPOSED PERMEABLE STRUCTURE

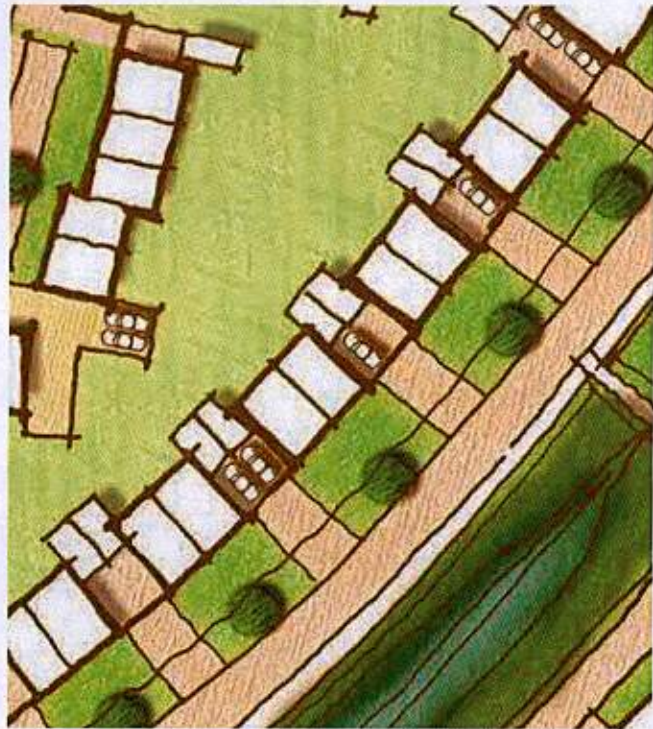


FIGURE 6.11: PROPERTY BOUNDARIES WILL PROVIDE DEFENSIBLE SPACES

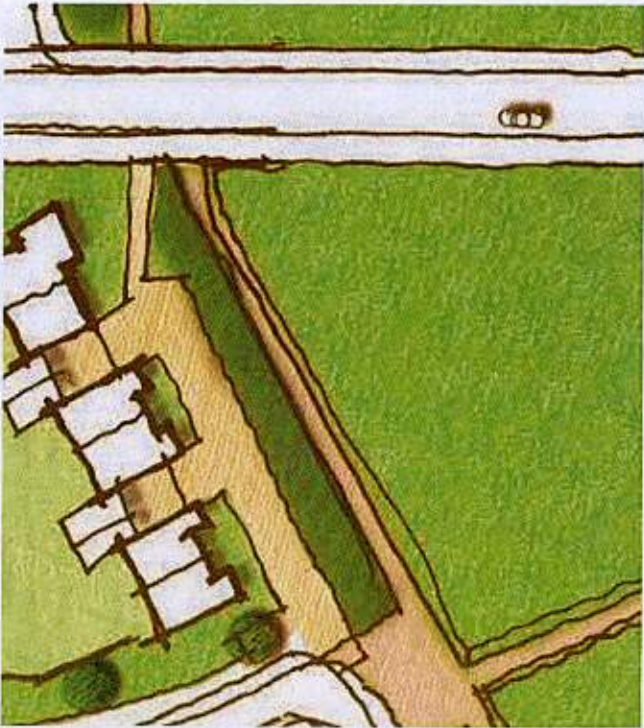


FIGURE 6.10: ALL PUBLIC AND SEMI-PRIVATE SPACES ARE OVERLOOKED BY DEVELOPMENT



FIGURE 6.12: ALL ACCESS TO PROPERTIES ARE ONTO THE STREETS OR OPEN SPACES.

PROPOSED CHARACTER AREAS

6.56 The character and architectural principles for the master plan are set out over the following pages. These principles have been informed at the strategic level with three distinct overarching zones proposed.

WEST OF THE BYPASS

6.57 Residential areas are influenced by the existing development to the west of the master plan and enabling the integration of the master plan with its existing context.

CENTRAL AREA

6.58 The design of the buildings will ultimately create a new modern vernacular that takes a steer from the existing urban areas of the Littlehampton, but also the former arrangement of the glass house buildings.

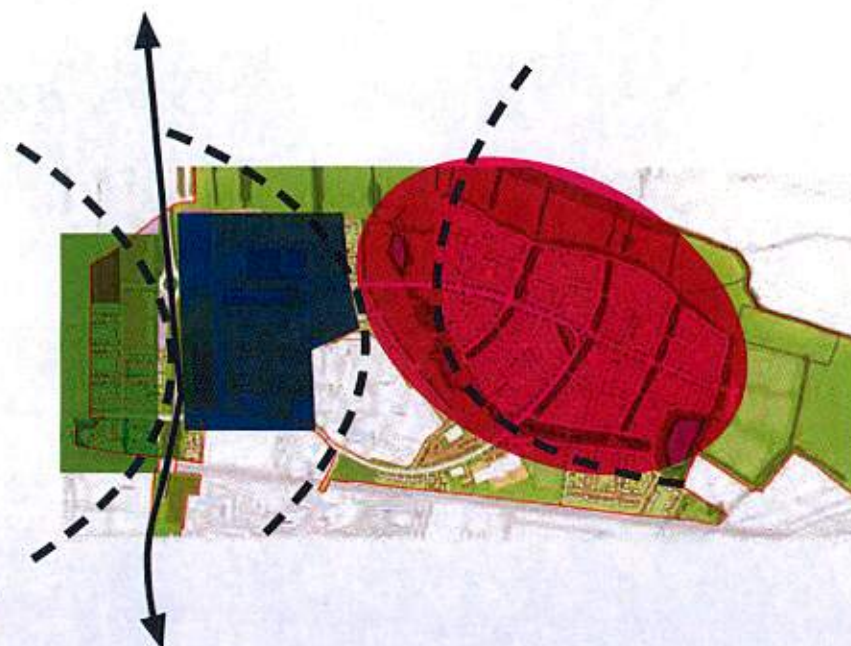


FIGURE 6.13: THE THREE OVERARCHING ZONES

EASTERN EDGE

6.59 This area will provide a more rural character to elsewhere on the master plan and integrate the development with irregular forms leading to the interface with the wider countryside.

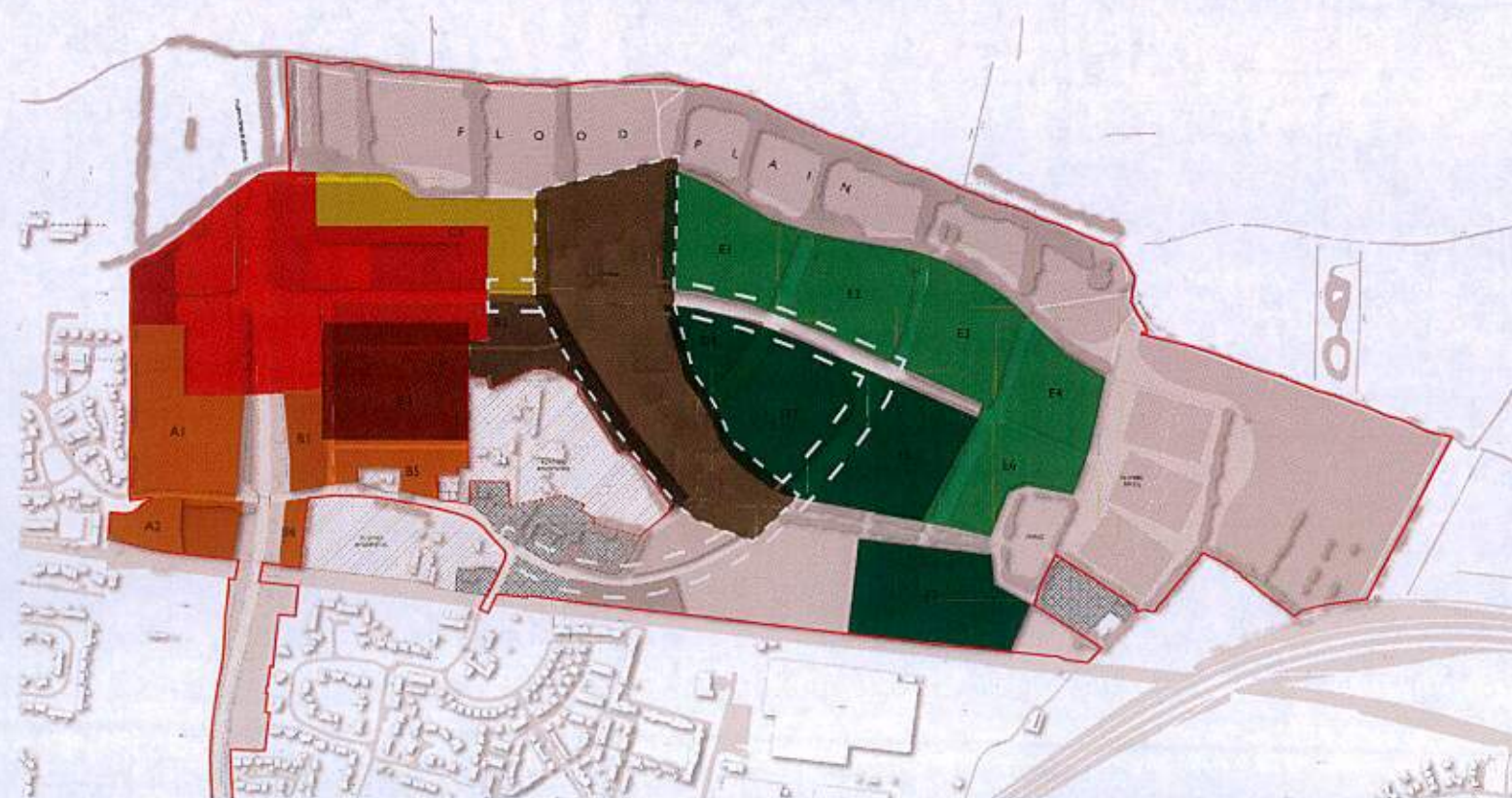


FIGURE 6.14: THE PROPOSED CHARACTER AREAS

LOCAL CENTRE CHARACTER AREA

LC SOUTHERN QUARTER

URBAN + BUILDING FORM

FRONTAGE TYPE	Building lines are to have a strong and contiguous form, with subtle variation in set back 0.5m to 2m	Strong frontage with predominantly regular building lines to give a sense of formality and urbanised character. Predominantly 2-4m occasional 6m where parking is located adjacent to properties.
BUILDING TYPES	Predominantly apartments in the mixed use area. Occasional terraced and semi-detached housing forms to the edge.	A mix of terrace, semi-detached and occasional detached. Apartments may also be appropriate.
BUILDING HEIGHTS	Predominantly 3 and 4 storey mixed use blocks. 3/2.5 storey for housing.	2- 3 Storey development. 3 storey development located close to the local centre and along higher order roads, in particular.
CORNERS	Strong definition, active building faces	Strong definition, active building faces that address public and semi-public space.
FRONT BOUNDARY TREATMENT	Thin privacy strips of predominantly hard landscape. Structured planting (hedging) maybe used within areas of housing.	A range of low walls and fences (600mm) boundary treatment and hedging. The use of railings can also be considered.

DETAILS

ROOF	Variation in ridge height to the create a hierarchy of built forms. Gable fronted development is appropriate but mono-pitch and A- symmetrical pitched roofs are welcomed. Not a feature of this area	Variation in ridge height. Gable fronted development to key streets, corners and spaces.
DORMERS/ ROOFLIGHT	Not a feature of this area	Rectilinear and square forms in order to give modern interpretation
WINDOW OPENINGS	Simple contemporary design	Simple contemporary design
MATERIALS		
ROOF	A slate effect and/or flat profile inter-locking tiles	Predominantly grey/ slate effect and interlocking profile tiles with variation on focal buildings
WALLS	Tonal brick variation, render. Use of flint panels as a feature	Tonal brick variation, render. Use of flint panels as a feature
WINDOW/ DOORS/ PORCHES	Grey uPVC windows with glazed/ coloured panelling. Porches to consist of flat/ integral forms (offices)	Grey/ white uPVC Windows. Flat porch forms promoted. Flat canopy porches

	OUTER CENTRAL CORE AREA	CENTRAL OPEN SPACE	EAST-CENTRAL AREA	OUTER AREA	WESTERN DEVELOPMENT EDGE
URBAN + BUILDING FORM					
FRONTAGE TYPE	Strong frontage with intermittent spacing, with more regular spacing the closer (2m) to the Local Centre. Frontage adjacent to the Black Ditch will have larger frontage gardens.	Strong frontage with regular spacing and sense of symmetry to building frontages to western side and A-symmetry to east.	Development will have an irregular spacing and building lines (2- 4m)	Development will have an irregular spacing and building lines with larger spacing and varied orientation to the green edge.	Regular frontage with variation in set back to define key spaces and areas of interest.
BUILDING TYPES	A mix of terrace, semi-detached and occasional detached	A mix of terrace, semi-detached and detached	A mix of terrace, semi-detached and detached. Occasional apartments in key locations.	Semi-detached and detached housing prevalent. Occasional terraces and apartments in key locations.	Semi-detached, detached, terraced and occasional apartments
BUILDING HEIGHTS	2-2.5 Storey, 3 Storey in key locations	Predominantly 2 Storey development with some 2.5 Storey development. 3 storey development located close to the local centre and along higher order roads.	Predominantly 2 Storey. 2.5 and 3 storey located around the primary street, focal spaces and focal corners.	Predominantly 2 Storey. 2.5 and 3 storey located around the primary street, focal spaces and focal corners.	Predominantly 2 Storey. 2.5 and 3 storey located around the primary street, focal spaces and focal corners.
CORNERS	Strong definition, active building faces that address public and semi-public space.	Strong definition, active building faces that address public and semi-public space. Use of bold colours on key corners.	Strong definition, active building faces that address public and semi-public space. Use of pastel colours on focal corners.	Strong definition, active building faces that address public and semi-public space. Use of pastel colours on focal corners.	Strong definition, active building faces that address public and semi-public space.
FRONT BOUNDARY TREATMENT DETAILS	Open grass and hedging. Low walls and/or estate railings (600mm) on focal spaces.	A range of low wall and fences(600mm) boundary treatment and hedging.	Timber knee rails, railings, grass verges and hedgerows.	Timber knee rails, railings, grass verges, hedgerows to stone walls to key buildings	Railings and grass/planted verges
DETAILS					
ROOF	Pitched roof forms with subtle variations in ridge height.	Variation in ridge height Gable fronted housing to be a feature adjacent to the central open space.	Variation in ridge height Gable fronted housing to be a feature on focal corners.	Subtle variations in ridge height Gable fronted housing to be a feature on focal corners.	Variation in ridge height Gable fronted housing to be a feature on focal corners.
DORMERS/ ROOFLIGHT	Rectilinear and square forms in order to give contemporary interpretation or pitched for traditional look.	Rectilinear and square forms in order to give contemporary interpretation.	Pitched forms to be used where appropriate.	To be used on focal buildings only and are to consist of pitched forms.	Pitched forms to be used where appropriate.
WINDOW OPENINGS	Simple contemporary design. More bars, details if traditional look selected	Variation west to east. Simple window forms to the west with more intricate detailing to the east.	Simple window forms with more ornate forms on focal buildings.	Occasional brick ends/ Flint detailing.	Brick ends above windows
MATERIALS					
ROOF	Predominantly slate effect with variation on focal buildings.	Predominantly slate/ slate effect/ flat profile tiles with variation on focal buildings	Mix of tiles and profile with variation on focal buildings	Mix of tiles and profile with variation on focal buildings	Mix of tiles and profile with variation on focal buildings
WALLS	Tonal brick variation. Render. Use of flint panels as a feature	Tonal brick variation, flint panels as a feature, lighter tones to boarding and render are also appropriate.	Tonal brick variation/ dark boarding and render	Flint panelling to façades of buildings to be a feature of the area. Occasional render and brick work.	Red brick and render
WINDOW/ DOORS/ PORCHES	White/ Grey uPVC Windows. Flat porch forms promoted.	White uPVC windows. To the west flat roofs/ east pitched.	Predominantly white uPVC windows.	Predominantly white/ uPVC windows.	Predominantly white uPVC windows.
	A mix of flat and pitched canopy porches	A mix of flat and pitched canopy porches	A mix pitched of canopy porches	A mix of pitched canopy porches	A mix mono-pitched and pitched canopy porches

TABLE 6.1: PROPOSED CHARACTER AREAS

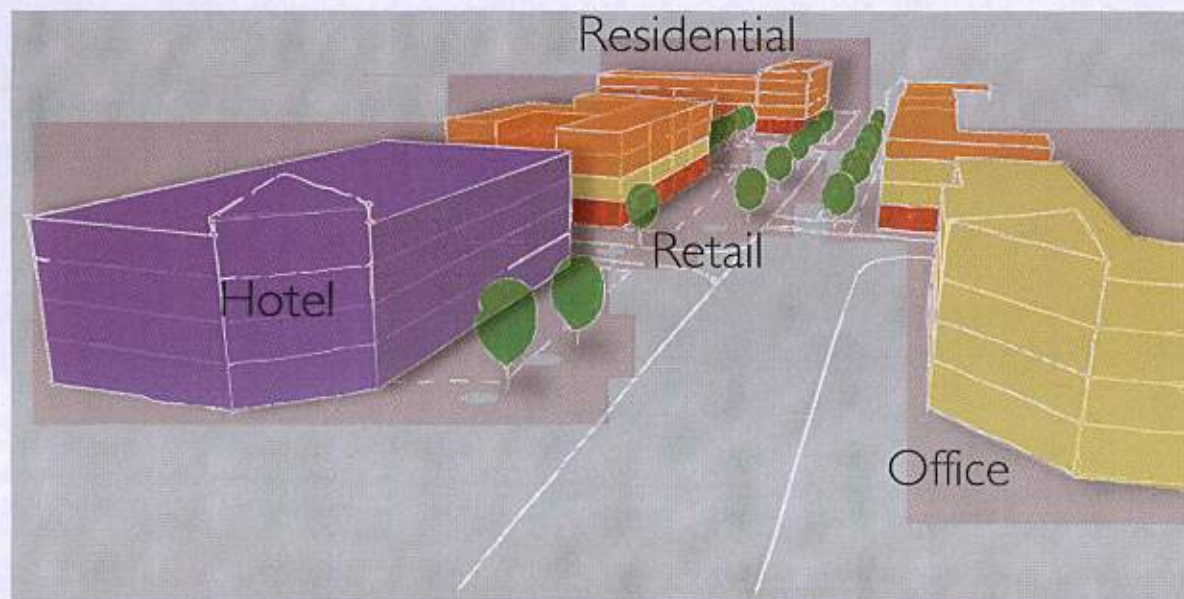
Local Centre Urban Form Characteristics

The urban form of the local centre needs to deliver a strong sense of place that is attractive, safe and functional for various uses within the local centre.

The design and layout of the local centre must facilitate a thriving mixed use hub and be designed to fully serve the needs of the retailers/ business and future residents.

A MIX OF USES

A range of uses can be integrated within vertical alignments such as office, residential and retail units to create a vibrant mix of uses



POTENTIAL LAND USE AND ASSOCIATED MASSING

LOCAL CENTRE FRAMEWORK

Buildings will play a key role in terms of legibility from a strategic and local perspective.

Consideration needs to be given to provide a westerly frontage to the new road.

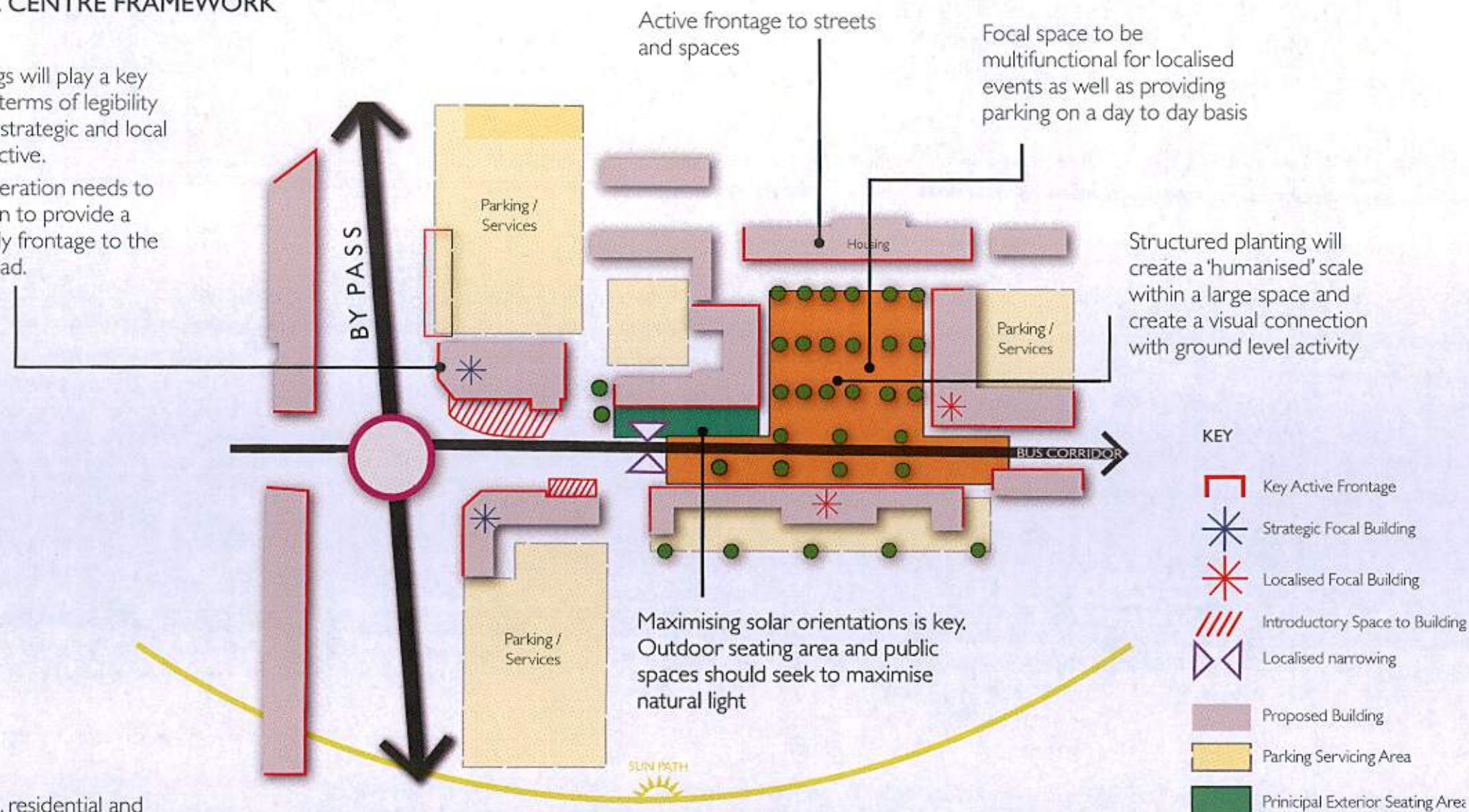


FIGURE 6.15: LOCAL CENTRE FRAMEWORK

Signage will need to be considered as part of the retail design and overall street scene.



Hard landscaping of focal spaces will need consideration with regard to form and function to create a strong sense of place.

Outdoor seating will strengthen the sense of place with people staying in an area for a length of time, rather than it be an area of movement.



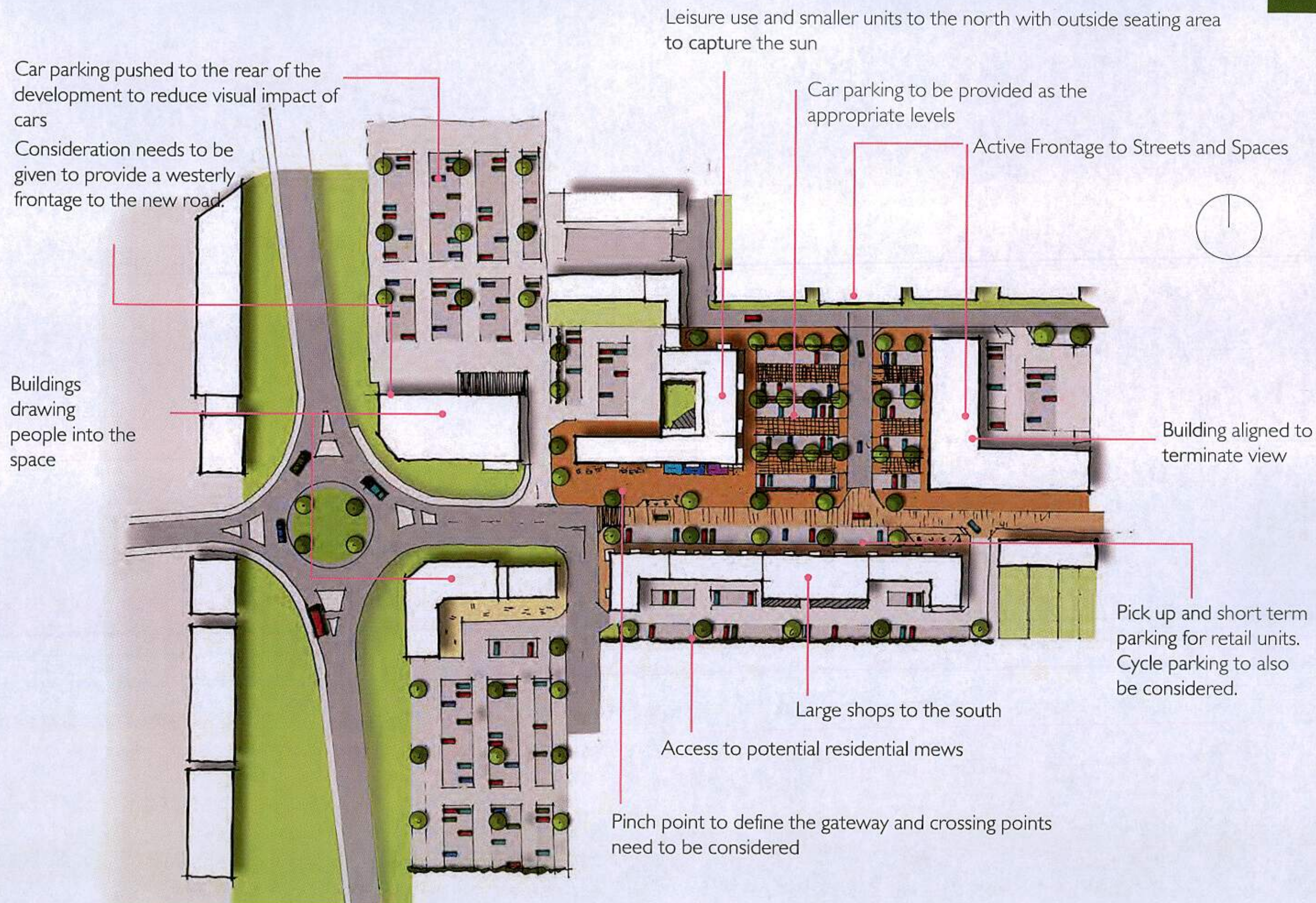


FIGURE 6.16: LOCAL CENTRE ILLUSTRATIVE PLAN

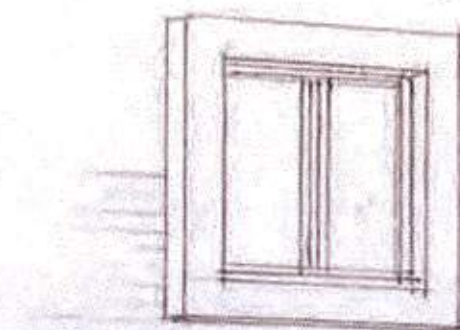
Local Centre Architectural Approach

The Local Centre is the focus for the economic activity within the master plan and will be the interface between the development and the Bypass link, so will play a strategic role, as well as local function. The overall design is to provide a contemporary response that takes cues from the existing Littlehampton forms yet defines the area as a new urban quarter to Town.

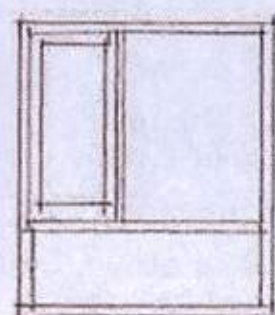
DISTINCTIVE ARCHITECTURAL DETAILS



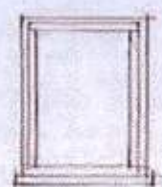
Balconies will provide exterior space as well as break up substantial lengths of frontage.



Simple window surrounds would also be a strong focal feature.



Simple window forms will provide contemporary simple style.



Residential above retail/commercial, residential to have discrete access to maintain strong active frontage

PRINCIPLES DERIVED FROM LOCAL CHARACTER



1 - Long continuous frontage can be broken up with a vertical emphasis achieved through change of colour, material, design and/or height.



2 - Strong horizontal features within the façade can also break-up a long contiguous street scene.

URBAN + BUILDING FORM

FRONTAGE TYPE	Building lines are to have a strong and contiguous form, with subtle variation in set back 0.5m to 2m
BUILDING TYPES	Predominantly apartments in the mixed use area. Occasional terraced and semi-detached housing forms to the edge.

BUILDING HEIGHTS	Predominantly 3 and 4 storey mixed use blocks. 3/2.5 storey for housing.
------------------	--

CORNERS	Strong definition, active building faces
---------	--

FRONT BOUNDARY TREATMENT	Thin privacy strips of predominantly hard landscape. Structured planting (hedging) maybe used within areas of housing.
--------------------------	--

DETAILS

ROOF	Variation in ridge height to create a hierarchy of built forms.
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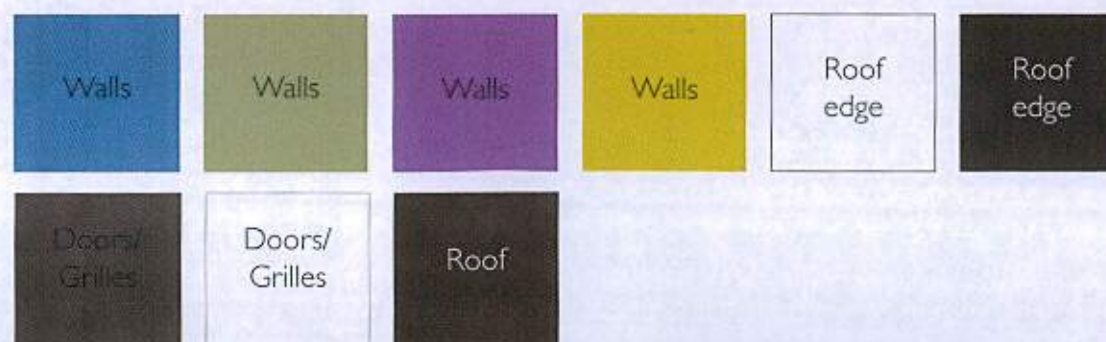
Gable fronted development is appropriate but mono-pitch and A-symmetrical pitched roofs are welcomed.

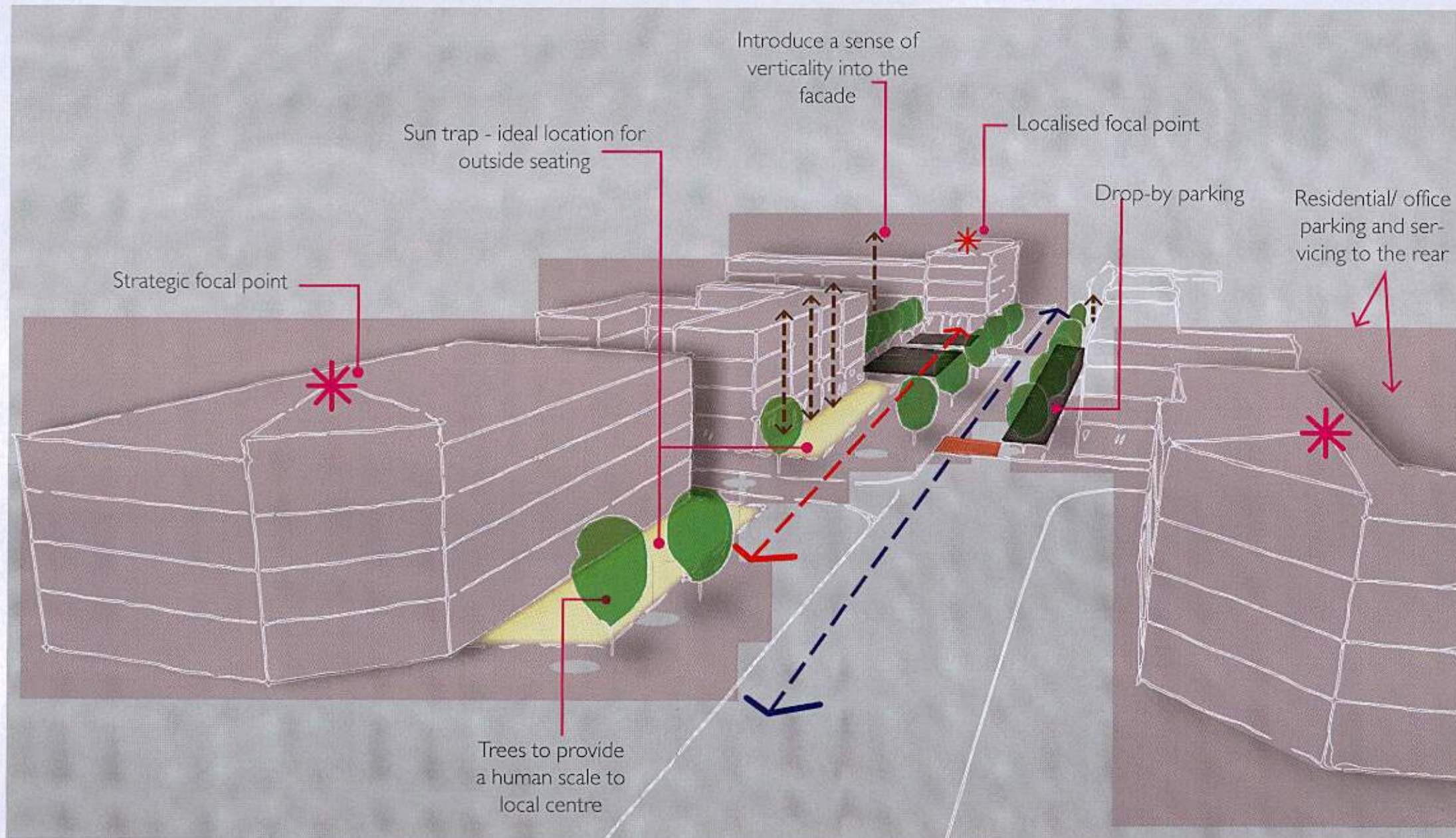
DORMERS/ ROOFLIGHT	Not a feature of this area
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WINDOW OPENINGS	Simple contemporary design
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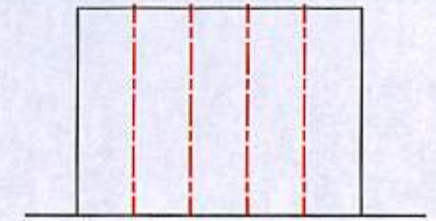
MATERIALS

ROOF	A slate effect and/or flat profile inter-locking tiles
WALLS	Tonal brick variation, render. Use of flint panels as a feature
WINDOW/ DOORS/ PORCHES	Grey uPVC windows with glazed/ coloured panelling
	Porches to consist of flat/ integral forms (offices)

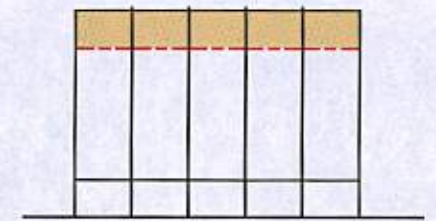




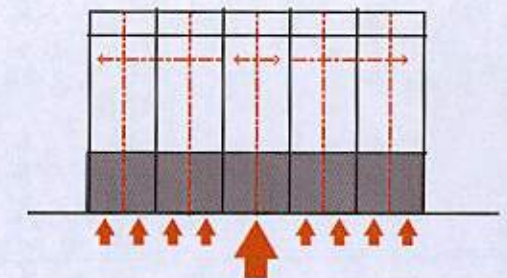
DESIGN PRINCIPLES



Facade design to have a vertical emphasis to provide variation and rhythm to the overall street scene.



Recessed upper levels could provide outdoor space and reduce the sense of scale.



Retail/ commercial uses at the ground floor to provide active frontage. Access points to the residential above to take minimal frontage.



Variation within the building facade achieved through fenestration, colour and/ or materials.



EXAMPLES

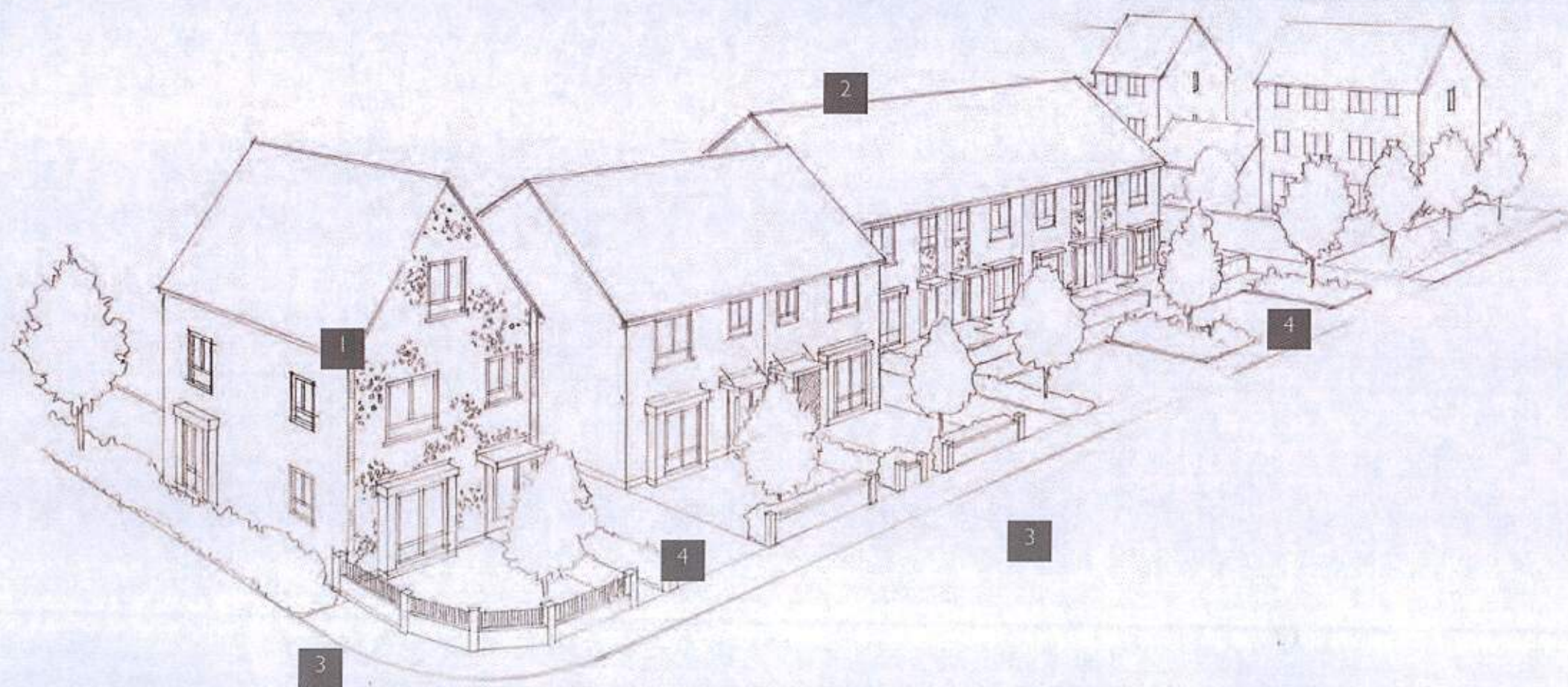
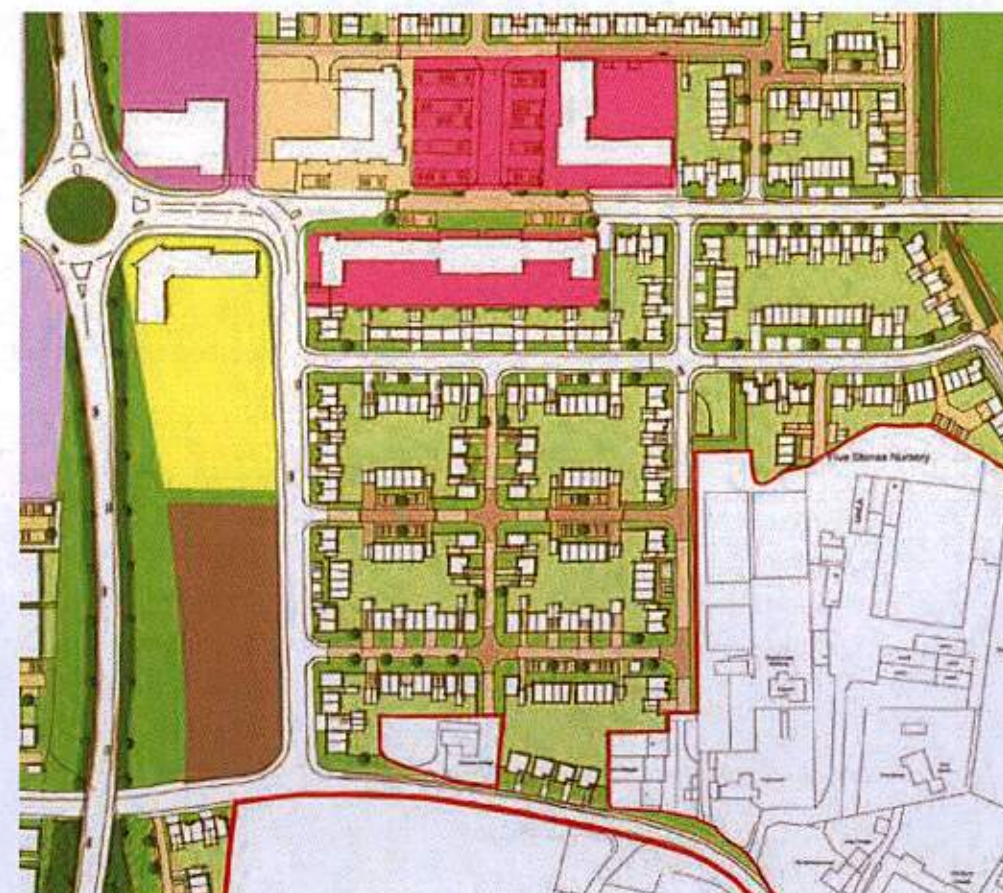
- The local centre should have an emphasis on contemporary design grounded within the local vernacular of Littlehampton. Contemporary design across the town has been mixed, so some coherent styles are required to be avoid stark contrast from building to building.
- Variation in window forms (size and design) across the building design to create variety and interest within the street scene.
- Modern and traditional materials are suggested for the local centre.

LC Southern Quarter

This character area is to provide a more modern residential architectural design philosophy with modern interpretations of the local vernacular that creates a synergous relationship to the proposed Local Centre, whilst tapering south to blend with existing development

DEFINING PRINCIPLES

- Streets to be well fronted by regularised pattern of development
- Streets should comprise of consistent materials within each street scene, with variation across the area permitted to create variety.
- Planting may also vary from street to street with some roads having regularised planting in the public realm and others with none at all.
- 600mm walls to plots. Walls with hedging and or walls with railings will achieve a more urban feel. Flint walls to key corners are advised to accentuate local character.



URBAN FORM PRINCIPLES

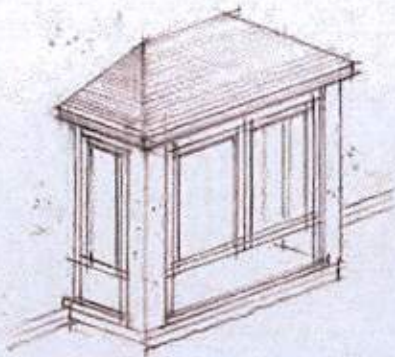
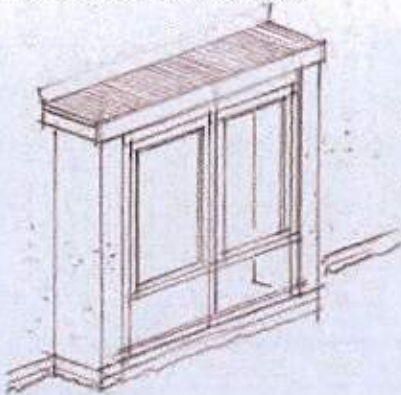
- 1 Buildings on corners to operate as a focal feature through height and design. Fenestration should address both sides of the buildings to provide natural surveillance to the respective streets.
- 2 A consistency of design approach to individual streets should be created to give identity and assist with legibility.
- 3 Boundary treatments to remain consistent across the street, with corner plots well defined.
- 4 Parking can range from on plot tandem parking to perpendicular. Please note parallel parking is for unallocated and visitor parking.

ARCHITECTURAL PRINCIPLES

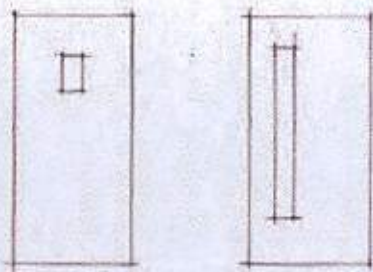
PRINCIPLES DERIVED FROM LOCAL CHARACTER



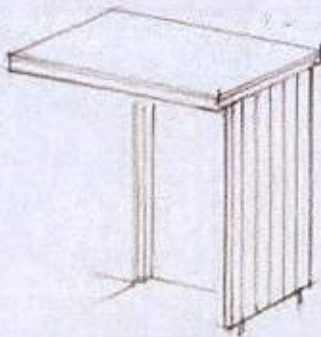
Flat roof projected bays



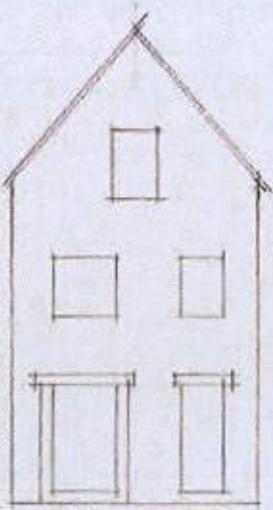
Projected bay with hipped roof to give a traditional twist



Contemporary door patterns



Thin cantilever flat roof supporting panel on one side or painted vertical boarding



Form of elevation to have simple alignments

URBAN + BUILDING FORM

FRONTAGE TYPE	Strong frontage with predominantly regular building lines to give a sense of formality and urbanised character. Predominantly 2-4m occasional 6m where parking is located adjacent to properties.
---------------	---

BUILDING TYPES	A mix of terrace, semi-detached and occasional detached. Apartments may also be appropriate.
----------------	--

BUILDING HEIGHTS	2- 3 Storey development. 3 storey development located close to the local centre and along higher order roads, in particular.
------------------	--

CORNERS	Strong definition, active building faces that address public and semi-public space.
---------	---

FRONT BOUNDARY TREATMENT	A range of low walls and fences (600mm) boundary treatment and hedging. The use of railings can also be considered.
--------------------------	---

DETAILS

ROOF	Variation in ridge height
	Gable fronted development to key streets, corners and spaces.

DORMERS/ ROOFLIGHT	Rectilinear and square forms in order to give modern interpretation
--------------------	---

WINDOW OPENINGS	Simple contemporary design
-----------------	----------------------------

MATERIALS

ROOF	Predominantly grey/ slate effect and interlocking profile tiles with variation on focal buildings
------	---

WALLS	Tonal brick variation, render. Use of flint panels as a feature
-------	---

WINDOW/ DOORS/ PORCHES	Grey/ white uPVC Windows. Flat porch forms promoted.
	Flat canopy porches

Walls	Walls	Walls	Walls	Roof edge
Doors/ Grilles	Doors/ Grilles	Roof edge	Roof	

Outer Central Core Area

This is to be a transitional area from the local centre to the northern boundary of the master plan and the western edge of the central open space. The urban form and the design of the buildings needs to create a transition from urban to rural, whilst supporting the setting of the Central Open Space.

DEFINING PRINCIPLES

- Development is to provide a range of housing types with strong regular patterns. The edge of this area will also provide a strong edge to define the overall urban area in this part of the master plan.
- Consistency of materials, roof forms and buildings within individual street scenes to reinforce regularity of the historic glass houses.
- A range of materials and styles can exist within this character area with less rigorous contemporary features the further away from the local centre to begin the sense of transition from urban to rural.



URBAN FORM PRINCIPLES

- 1 Consistency of building lines to provide a strong edge of development interface with Black Ditch area and signify the edge of the urban area.
- 2 Building design to be simplistic with subtle variation in design. Focal space to be contrasting style/ material to accentuate status as a focal space
- 3 Boundary treatments to blend with country edge. Focal space to be enclosed by boundary edge treatment such as estate railings, walls and/ or fences.



ARCHITECTURAL PRINCIPLES



URBAN + BUILDING FORM

FRONTAGE TYPE	Strong frontage with intermittent spacing, with more regular spacing the closer (2m) to the Local Centre. Frontage adjacent to the Black Ditch will have larger frontage gardens.
BUILDING TYPES	A mix of terrace, semi-detached and occasional detached

BUILDING HEIGHTS	2-2.5 Storey, 3 Storey in key locations
------------------	---

CORNERS	Strong definition, active building faces that address public and semi-public space.
---------	---

FRONT BOUNDARY TREATMENT	Open grass and hedging. Low walls and/or estate railings (600mm) on focal spaces.
--------------------------	---

DETAILS

ROOF	Pitched roof forms with subtle variations in ridge height.
------	--

DORMERS/ ROOFLIGHT	Rectilinear and square forms in order to give contemporary interpretation or pitched for traditional look.
--------------------	--

WINDOW OPENINGS	Simple contemporary design. More bars, details if traditional look selected
-----------------	---

MATERIALS

ROOF	Predominantly slate effect with variation on focal buildings.
------	---

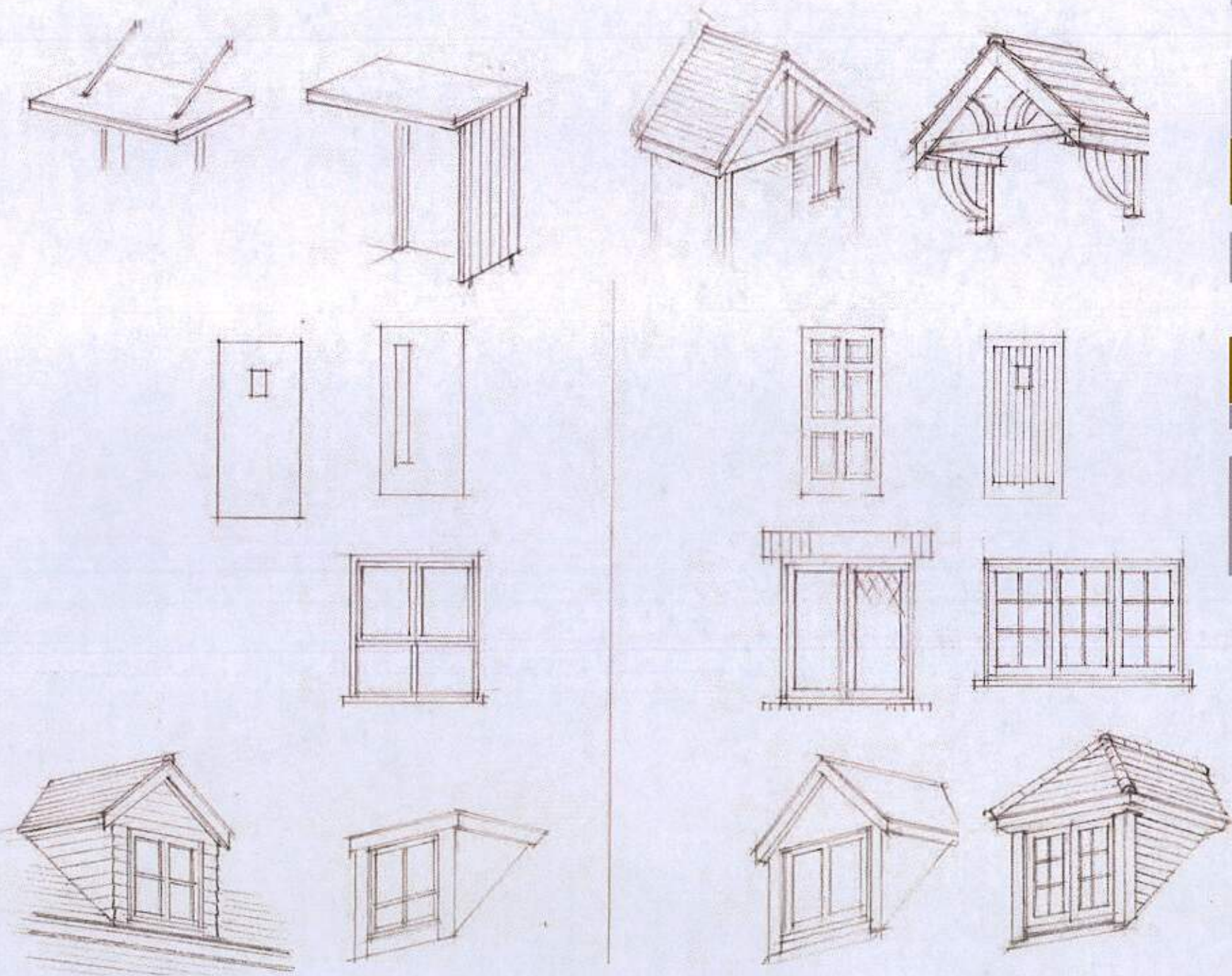
WALLS	Tonal brick variation. Render. Use of flint panels as a feature
-------	---

WINDOW/ DOORS/ PORCHES	White/ Grey uPVC Windows. Flat porch forms promoted. A mix of flat and pitched canopy porches
------------------------	---

Walls	Walls	Walls	Walls	Walls
Roof edge	Roof edge	Doors/ Grilles	Doors/ Grilles	Roof

Contemporary design

Traditional



Central Open Space

This area not only provides a significant open space amenity for the area but also provides an interface between the Central Area and Eastern Edge. This new, largely man-made parkland will comprise of varying building forms but with a consistent architectural style. The proposed development form and landscape design (see section 8.13) will create a cohesive sense of place.

DEFINING PRINCIPLES

- The overall urban form should reflect the man-made nature of the Central Open Space. Building forms will line the Park edge and provide frontage. The overarching principle is one of symmetry within the building form as is found in other areas of the Littlehampton.
- The Primary School and the Community Centre will play an important role in anchoring the Central Open Space to the south and create a Community Hub. The design of the buildings will need to be distinguished, but also work within the landscape.
- The Main Avenue will also cross the Central Open Space to the north and south. In both cases the road will need to blend in with the landscape. Boulevard planting along this stretch will not be appropriate.

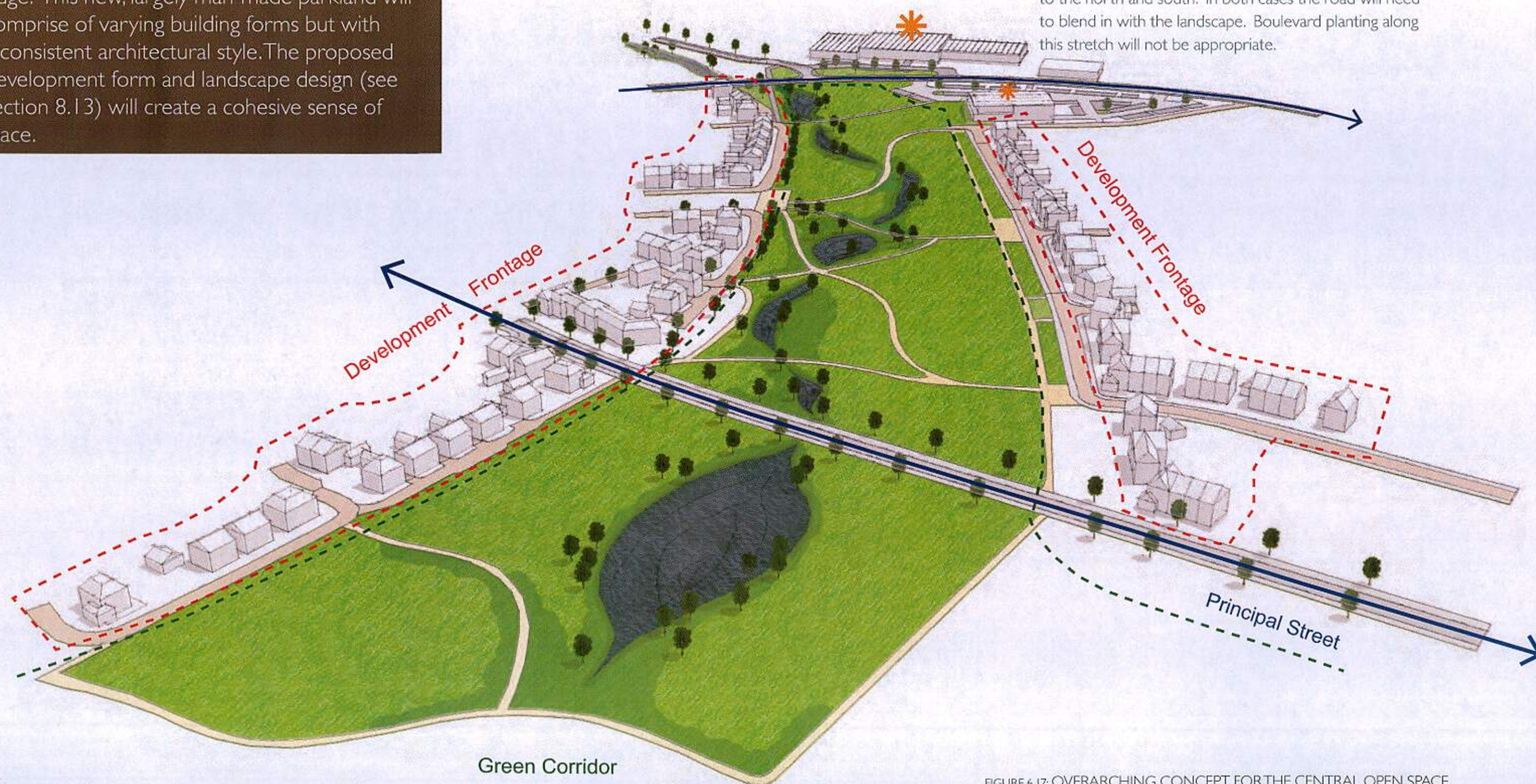


FIGURE 6.17: OVERARCHING CONCEPT FOR THE CENTRAL OPEN SPACE

COMMUNITY HUB PRINCIPLES

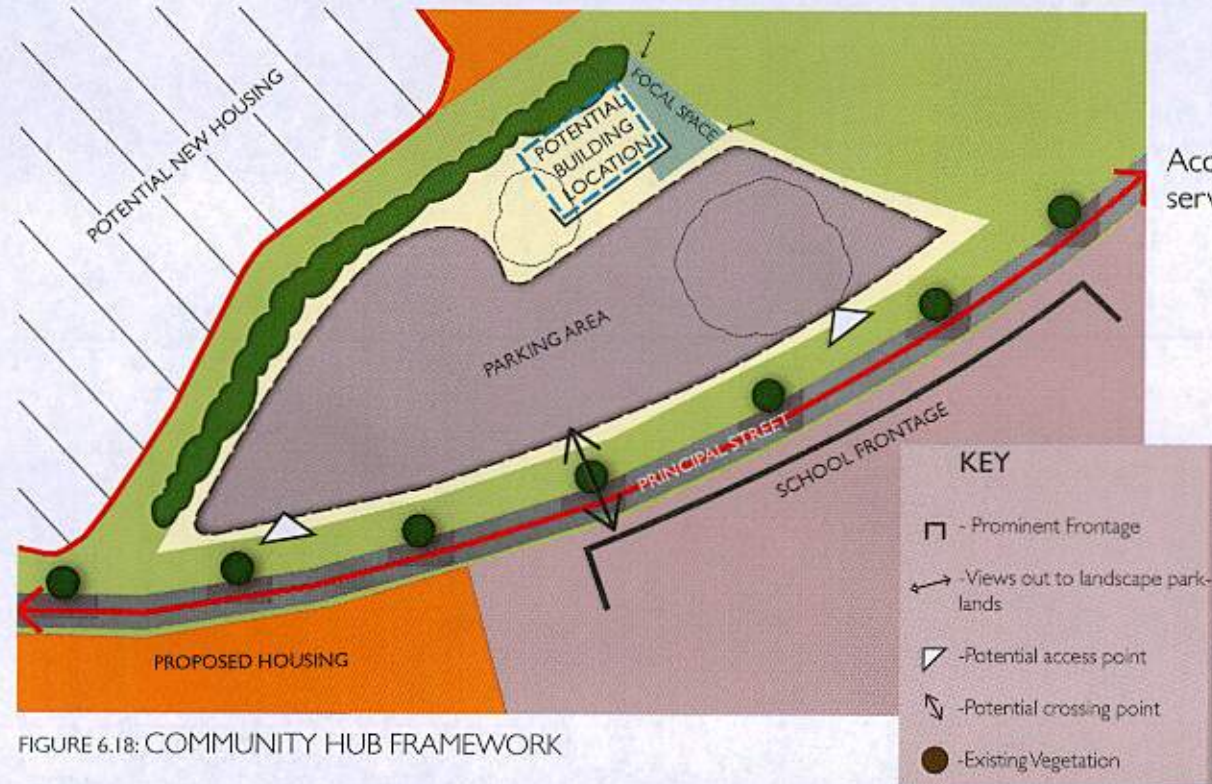


FIGURE 6.18: COMMUNITY HUB FRAMEWORK

Building to work as a focal building within the landscape

Access to hall for servicing and equipment

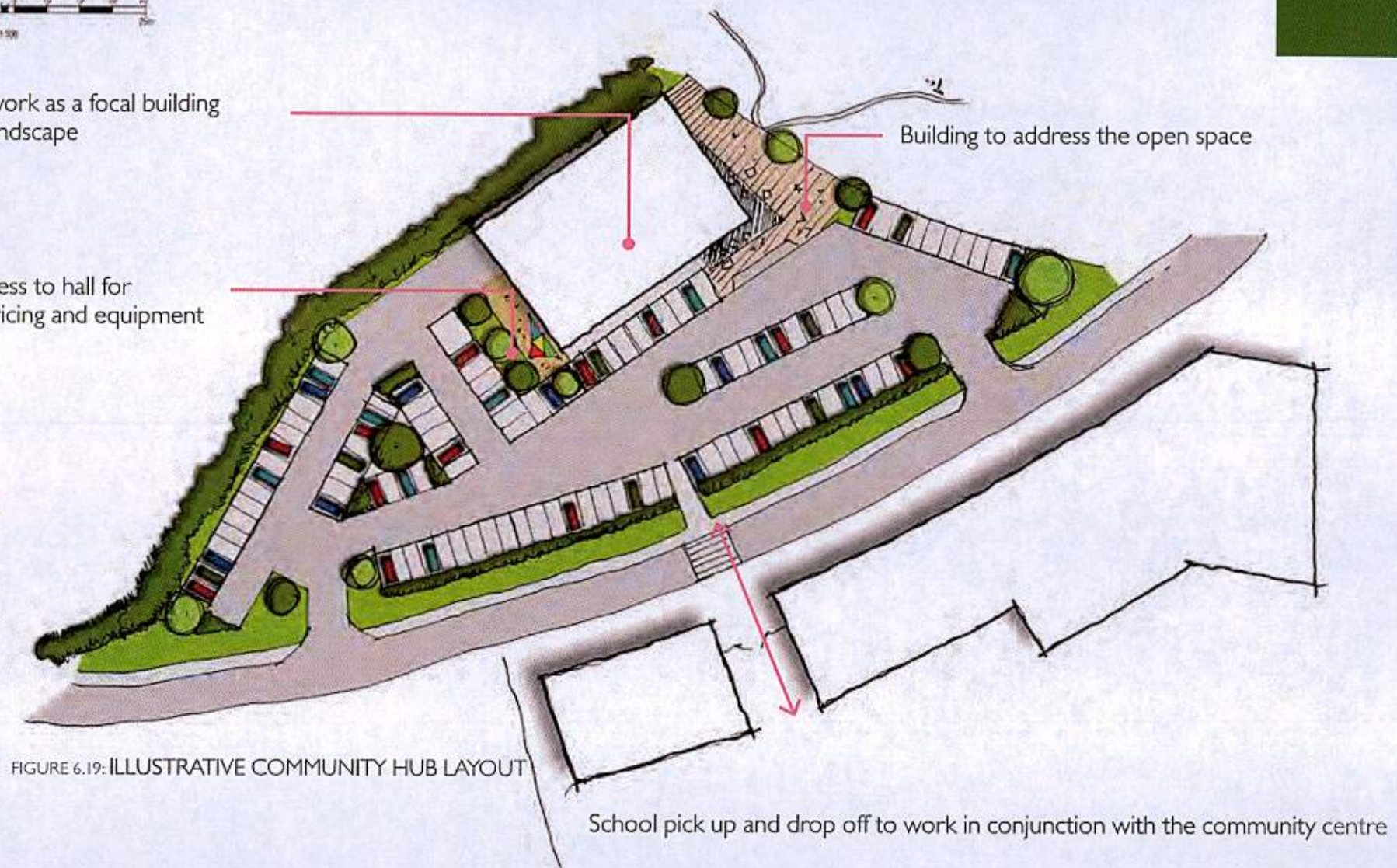


FIGURE 6.19: ILLUSTRATIVE COMMUNITY HUB LAYOUT

CONCEPT FLOOR PLAN FOR COMMUNITY HALL

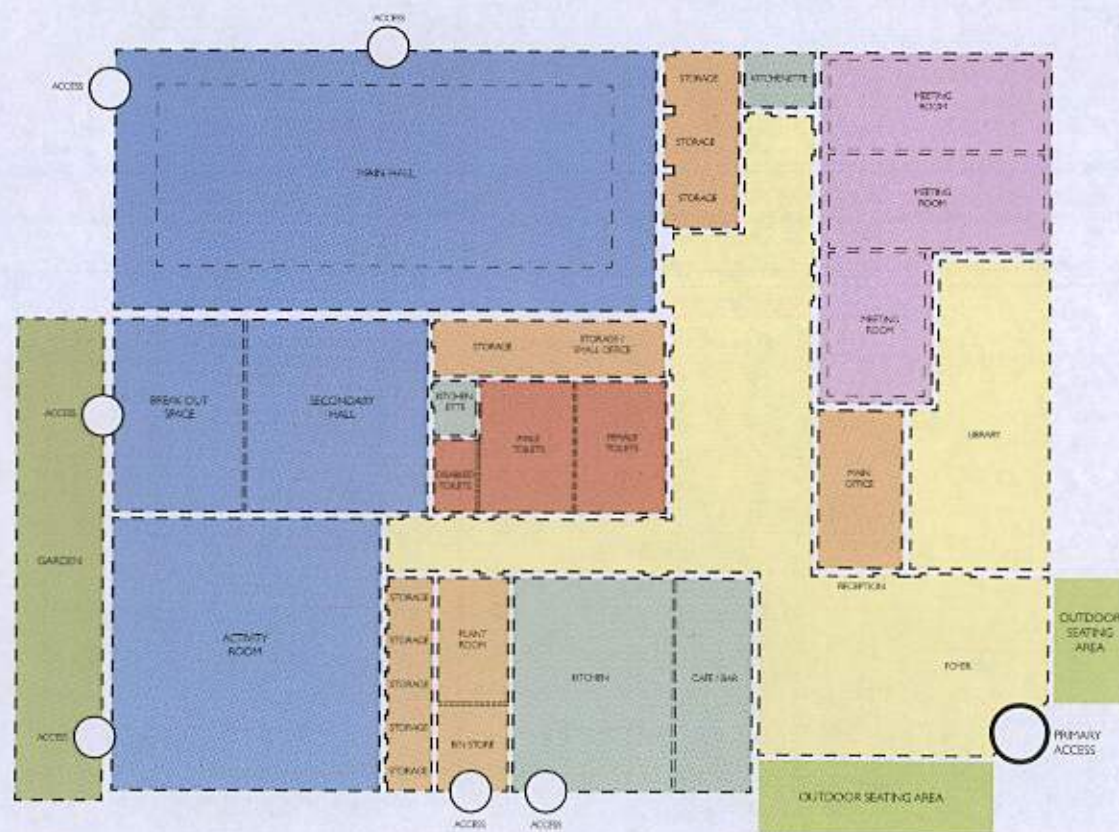


FIGURE 6.20: CONCEPT FLOOR PLAN

THE COMMUNITY CENTRE

6.60 The plans above set out the design principles and framework for the Community Centre and the potential inter-relationship with the Primary School.

6.61 Figure 6.21 shows a potential floor plan of the Community Hall. All future applications for the Community will need collaborative working with the Littlehampton Town Council to ensure their needs are met and that the building can be adapted to evolve with community needs.

SCHOOL DESIGN

6.62 The design of the school building will need to give strong consideration to its focal location at the base for the Central Open Space.

6.63 The design and layout of the school will need to be subject to consultation with West Sussex and meet the required educational building standards.

Central Open Space

The architectural style of this area will be varied as this provides the interface between the east and west character areas. The overall architectural concept should be one of symmetry within the building design, although variety of house forms is appropriate and this is a common aspect within Littlehampton. Detached dwellings can and should have a sense of individuality within the street scene.

DEFINING PRINCIPLES

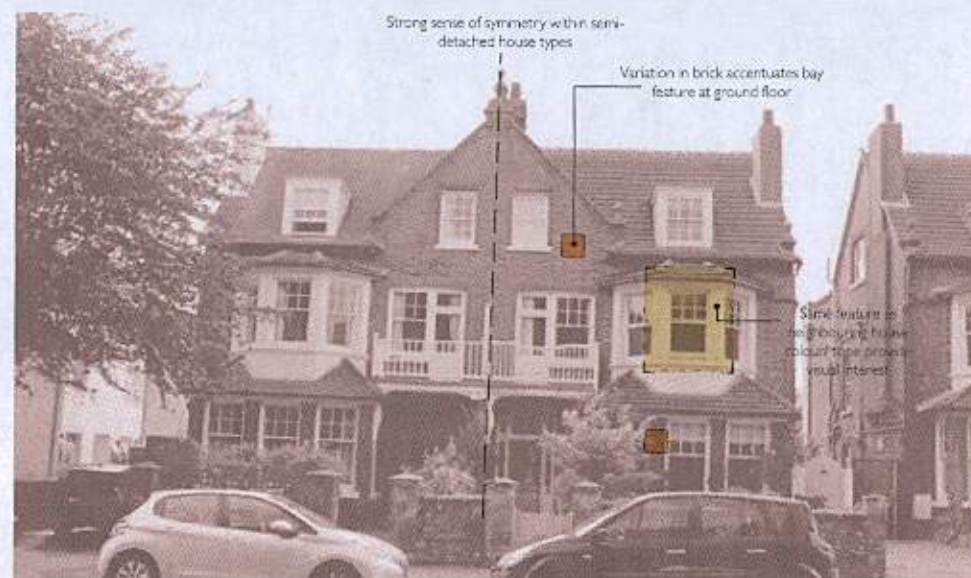
- The overall street scene can comprise a more formal nature to this man made park.
- Consistency of frontage to both edges. It is important to embody the more urban-grid-like nature of this area of the master plan, whilst the east will need to provide strong frontage with varying degrees of formality to embody the more rural nature and contrasting materials
- Existing vegetation of high quality should be retained to integrate the urban form and add a sense of maturity to this landscaped space.



URBAN FORM PRINCIPLES

- 1 Focal buildings should display a sense of individuality to the rest of the street, which can be achieved through materials, and façade design
- 2 Building frontage should display a sense of symmetry. This does not mean repetition of the same housing types per-se, although this may be appropriate to the west of the Central Open Space to embody the sense of repetition, synonymous with the previous Glass Houses
- 3 In some cases semi-detached dwellings may be designed to appear as one large detached unit to give a sense of grandeur to this significant park facility.
- 4 Boundary edge to street corners should be defined to give them prominence within the street scene as well as be support by focal building(s). The remaining frontage should be loosely defined with the landscape to visually integrate the public realm with the open private front gardens.

PRINCIPLES DERIVED FROM LOCAL CHARACTER

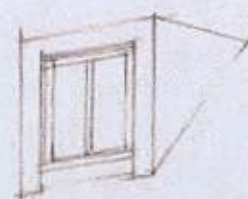
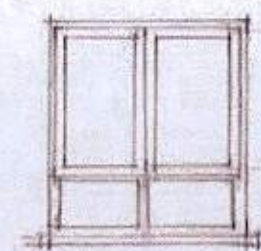


Formal areas within Littlehampton adjacent to open space have a strong sense of symmetry within semi-detached units, which may have variations in materials, colours and detailing to neighbouring semi's this under lying symmetry is a strong characteristics

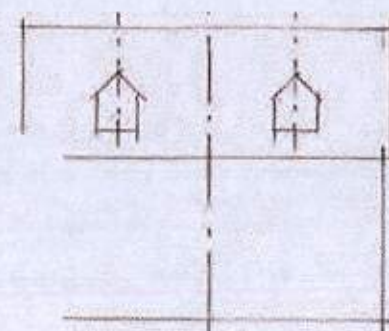
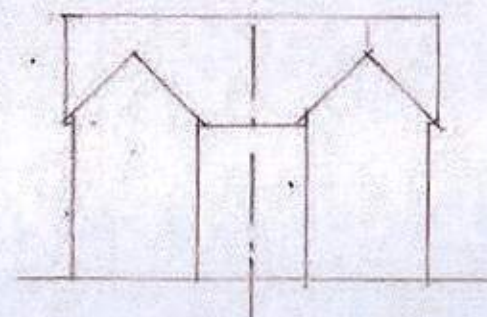
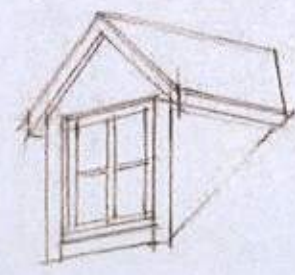
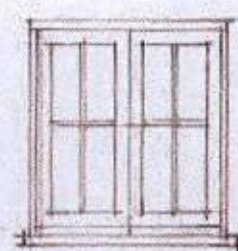


ARCHITECTURAL PRINCIPLES

Contemporary (West)



Traditional (east)



Sense of symmetry with building façades

URBAN + BUILDING FORM

FRONTAGE TYPE Strong frontage with regular spacing and sense of symmetry to building frontages to western side and A-symmetry to east.

BUILDING TYPES A mix of terrace, semi-detached and detached

BUILDING HEIGHTS Predominantly 2 Storey development with some 2.5 Storey development. 3 storey development located close to the local centre and along higher order roads.

CORNERS Strong definition, active building faces that address public and semi-public space. Use of bold colours on key corners.

FRONT BOUNDARY TREATMENT A range of low wall and fences(600mm) boundary treatment and hedging.

DETAILS

ROOF Variation in ridge height

Gable fronted housing to be a feature adjacent to the central open space.

DORMERS/ ROOFLIGHT Rectilinear and square forms in order to give contemporary interpretation.

WINDOW OPENINGS Variation west to east. Simple window forms to the west with more intricate detailing to the east.

MATERIALS

ROOF Predominantly slate/ slate effect/ flat profile tiles with variation on focal buildings

WALLS Tonal brick variation, flint panels as a feature, boarding and render are also appropriate.

WINDOW/ DOORS/ PORCHES White uPVC windows. To the west flat roofs/ east pitched.

A mix of flat and pitched canopy porches



East Central Area

The Central Eastern will have a contrasting character to that found to the west of the Central Open Space. The block form in this area provides a more fluid and varied form of development which will change the overall character of streets. This will be supported by a change of architectural character with more naturalistic materials such as timber cladding.

DEFINING PRINCIPLES

- The overall street scene can comprise a more informal nature, although some regularity along SuDS Corridors such as building set back and composition of the street scene to reflect this man-made intervention within the landscape
- There should be variation within each street in terms of house design, and/or materials and/ or boundary treatment to give a sense of the irregularity, synonymous with 'rural-esk' development.
- Existing vegetation of high quality should be retained to integrate the development form and will heighten the sense of irregularity with the built form responding to the landscape more stringently in this area.

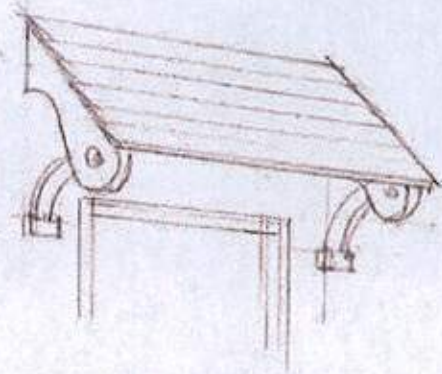


URBAN FORM PRINCIPLES

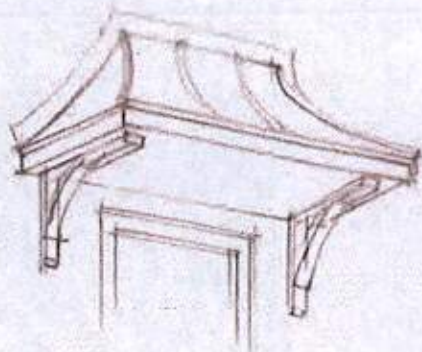
- 1 SuDS Corridors will integrate a sense of regularity in the area within much greater variation elsewhere.
- 2 Corner buildings should be accentuated to assist with legibility through design, materials and/ or variation in boundary treatment.
- 3 Landscape planting within private plots may have a degree of regularity, whilst the public areas surround the swales will be irregular and informal to create interest and legibility within the street scene.
- 4 The use of the same material configured differently will also create coherence of the street scene whilst providing variation.
- 5 Access for refuse and emergency vehicles must be demonstrated at the Reserved Matters stage.



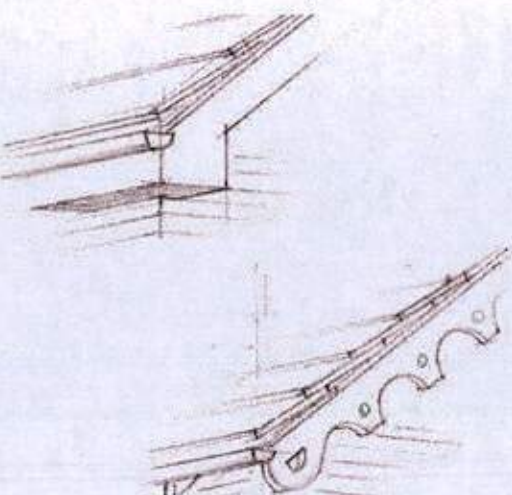
ARCHITECTURAL PRINCIPLES



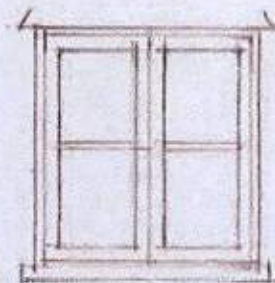
One Piece GRP porch



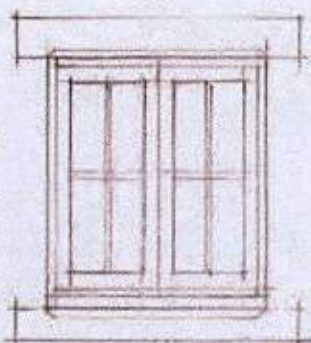
Lean-to porches



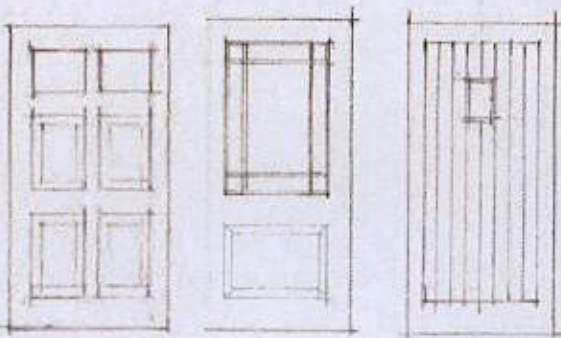
Barge board will have soffits and some decorative detailing to the focal buildings



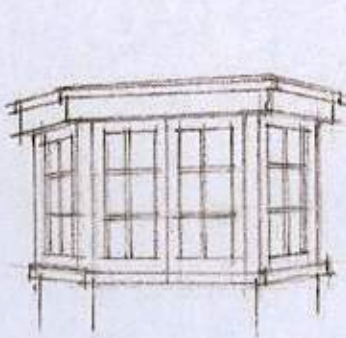
Window in render



Recon. stone head and sill



Variation in door styles



Bays to focal buildings and key corners



URBAN + BUILDING FORM

FRONTAGE TYPE	Development will have an irregular spacing and building lines (2- 4m).
BUILDING TYPES	A mix of terrace, semi-detached and detached. Occasional apartments in key locations.

BUILDING HEIGHTS	Predominantly 2 Storey. 2.5 and 3 storey located around the primary street, focal spaces and focal corners.
------------------	---

CORNERS	Strong definition, active building faces that address public and semi-public space. Use of pastel colours on focal corners.
---------	---

FRONT BOUNDARY TREATMENT	Timber knee rails, railings, grass verges and hedgerows.
--------------------------	--

DETAILS

ROOF	Variation in ridge height. Gable fronted housing to be a feature on focal corners.
------	---

DORMERS/ ROOFLIGHT	Pitched forms to be used where appropriate.
--------------------	---

WINDOW OPENINGS	Simple window forms with more ornate forms on focal buildings.
-----------------	--

MATERIALS

ROOF	Mix of tiles and profile with variation on focal buildings.
------	---

WALLS	Tonal brick variation/ Timber boarding and render.
-------	--

WINDOW/ DOORS/ PORCHES	Predominantly white uPVC windows. A mix of pitched canopy porches.
------------------------	---

Walls

Walls

Walls

Walls

Walls

Doors/ Grilles

Roof

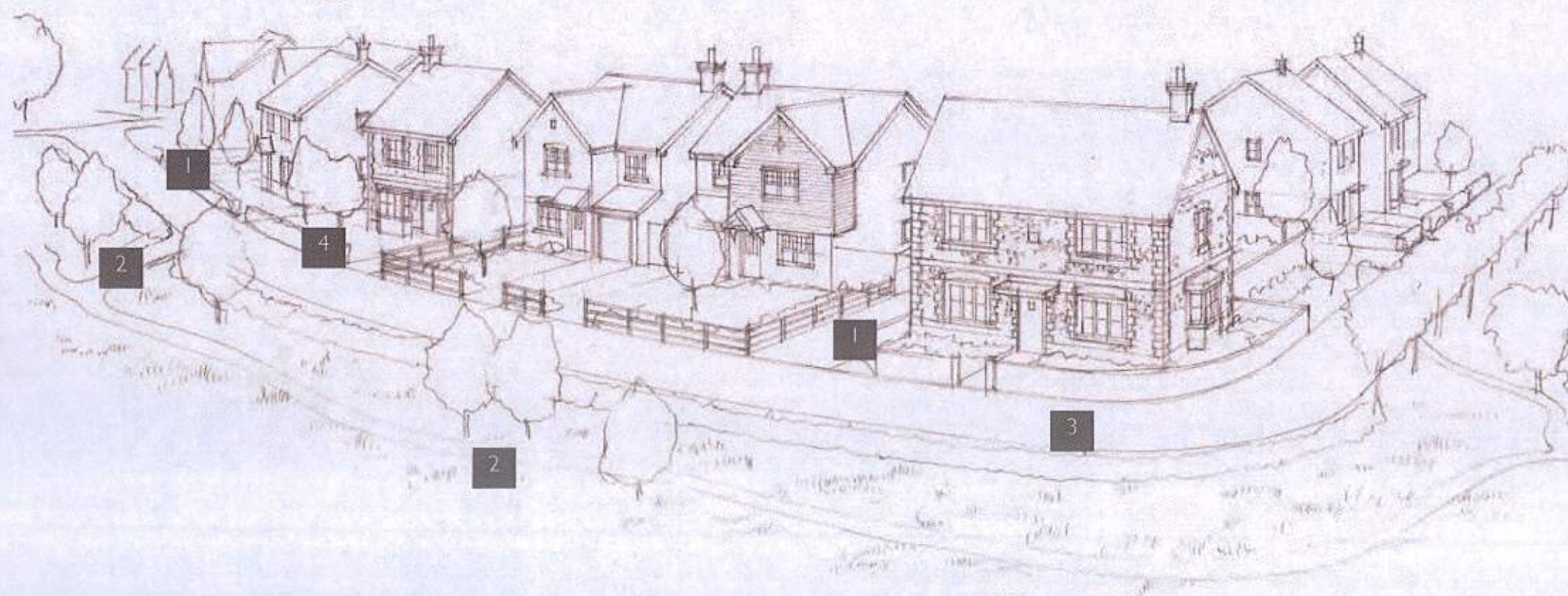
Roof edge

Outer Area

The outer area is where the master plan seeks to integrate with a more naturalistic edge than anywhere else. The building form here is founded on a more irregular pattern, although set within structured blocks, and it will be here where buildings forms will have the heightened sense of irregularity compared to the East Central Area.

DEFINING PRINCIPLES

- Irregular alignments of streets due to configuration of the block structure and desire to retain mature vegetation in this area.
- The northern edge of the character area will be the interface for the development and the wider countryside setting and will need to respond accordingly in terms of building design.
- Greater presence of vegetation within the street scene as well as natural materials used for boundary treatments.
- Greater variety of buildings and materials within the street scene to provide a stark contrast with the more regular forms on the western edge of the master plan.

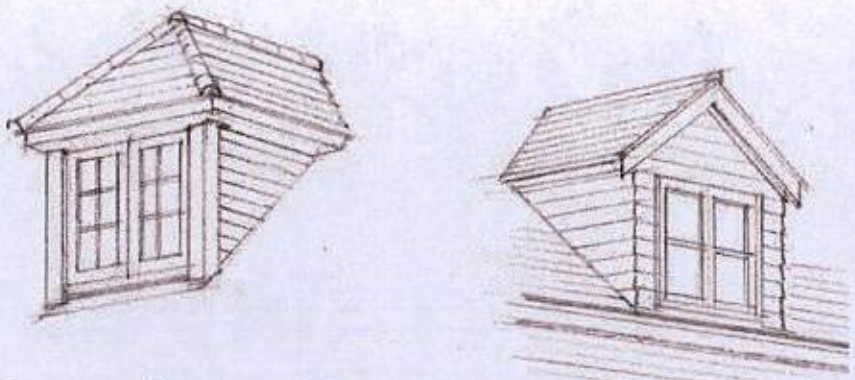
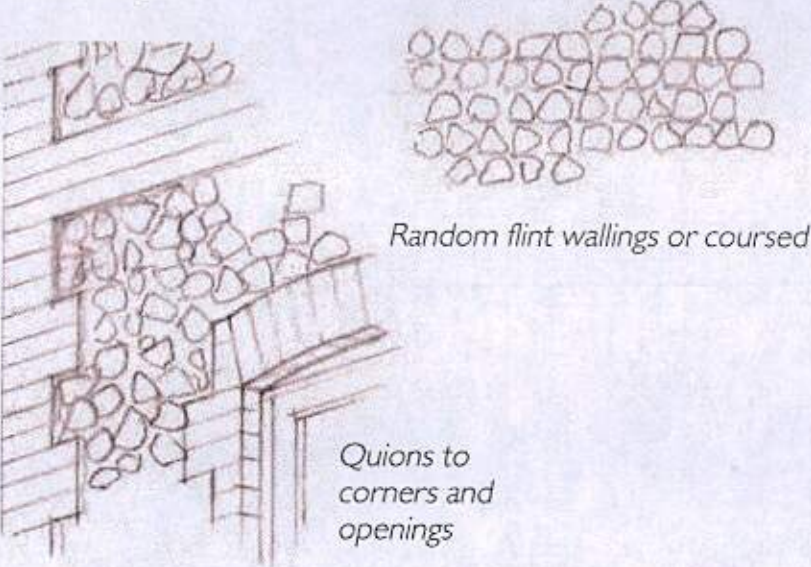


URBAN FORM PRINCIPLES

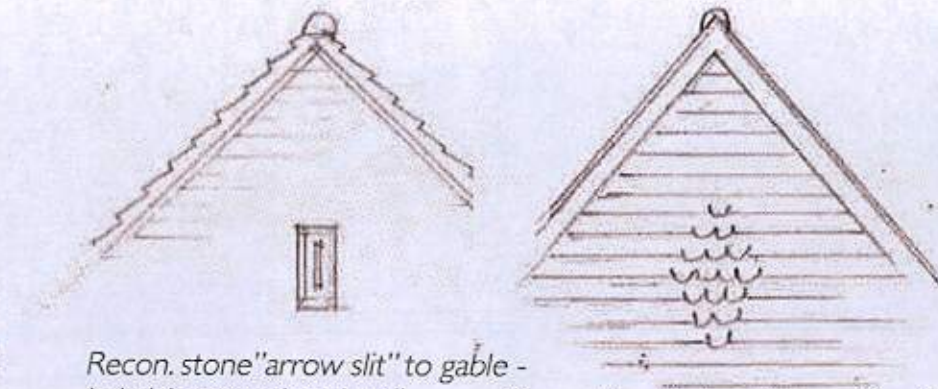
- 1 Northern frontage of the master plan to have a highly irregular street scene with variation of house design, use of material and irregular plots and set back. Larger front gardens and
- 2 Whilst the northern boundary will need to provide vehicular access this should be subservient within the street scene and supported by irregular planting.
- 3 Pedestrians and vehicles will share the public road ways, and it may be that the road network is truncated, with only pedestrians to have a contiguous route along the northern edge.
- 4 Street scenes will have a more verdant feel through landscaping and boundary treatments to plots.
- 5 Access for refuse and emergency vehicles must be demonstrated at the Reserved Matters Stage

ARCHITECTURAL PRINCIPLES

Flint walling

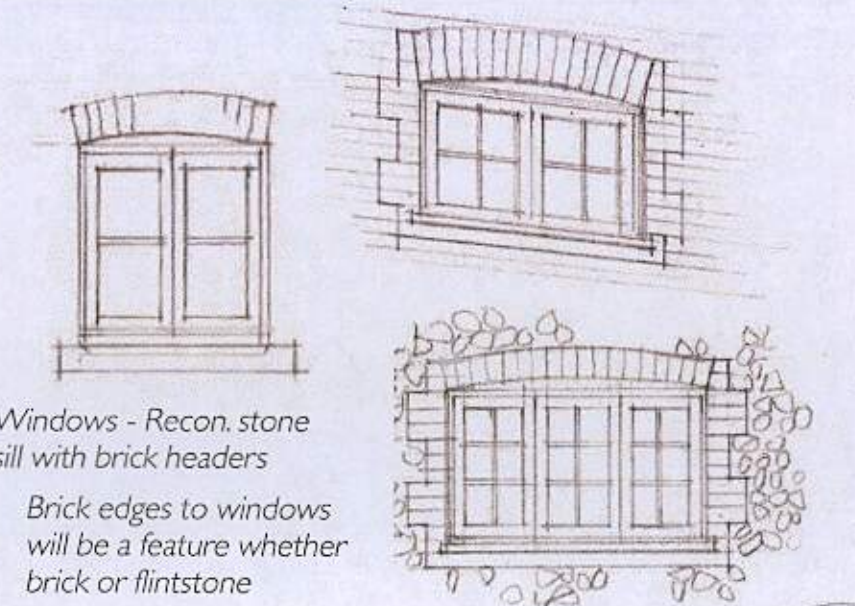


Dormers - hipped or pitched



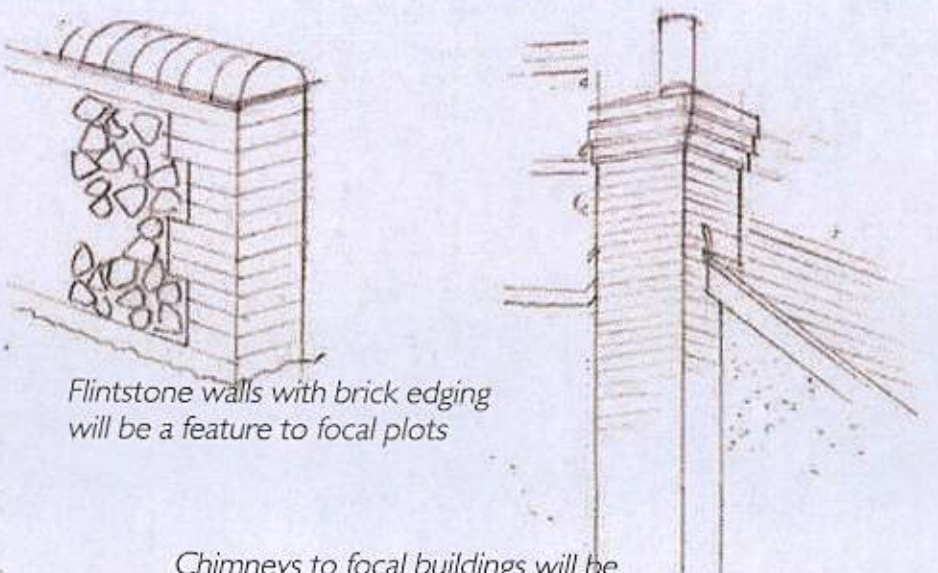
Recon. stone "arrow slit" to gable - in brick or rendered wall

Decorative tile hanging motifs will also be a feature



Windows - Recon. stone sill with brick headers

Brick edges to windows will be a feature whether brick or flintstone

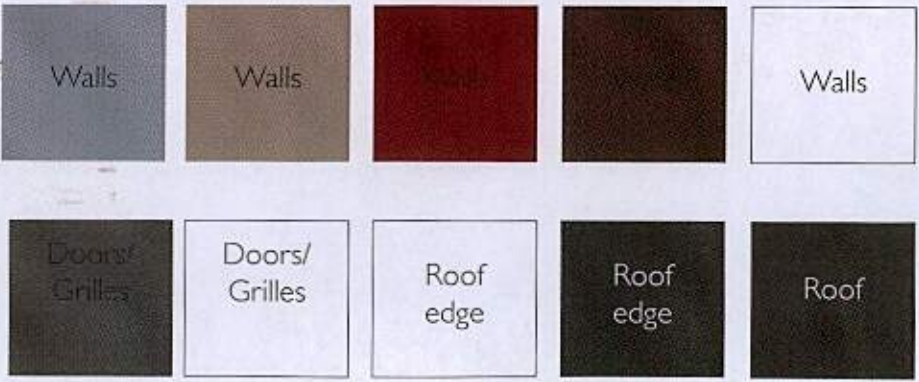


Flintstone walls with brick edging will be a feature to focal plots

Chimneys to focal buildings will be a feature

URBAN + BUILDING FORM

FRONTAGE TYPE	Development will have an irregular spacing and building lines with larger spacing and varied orientation to the green edge
BUILDING TYPES	Semi-detached and detached housing prevalent. Bungalows would also be appropriate in this area. Occasional terraces and apartments in key locations.
BUILDING HEIGHTS	Predominantly 2 Storey. 2.5 and 3 storey located around the primary street, focal spaces and focal corners.
CORNERS	Strong definition, active building faces that address public and semi-public space. Use of pastel colours on focal corners.
FRONT BOUNDARY TREATMENT	Timber knee rails, railings, grass verges, hedgerows to stone walls to key buildings
DETAILS	
ROOF	Subtle variations in ridge height
	Gable fronted housing to be a feature on focal corners.
DORMERS/ ROOFLIGHT	To be used on focal buildings only and are to consist of pitched forms.
WINDOW OPENINGS	Occasional brick ends/ Flint detailing.
MATERIALS	
ROOF	Mix of tiles and profile with variation on focal buildings
WALLS	Flint panelling to façades of buildings to be a feature of the area. Occasional render and brick work.
WINDOW/ DOORS/ PORCHES	Predominantly white/ uPVC windows. A mix of pitched canopy porches

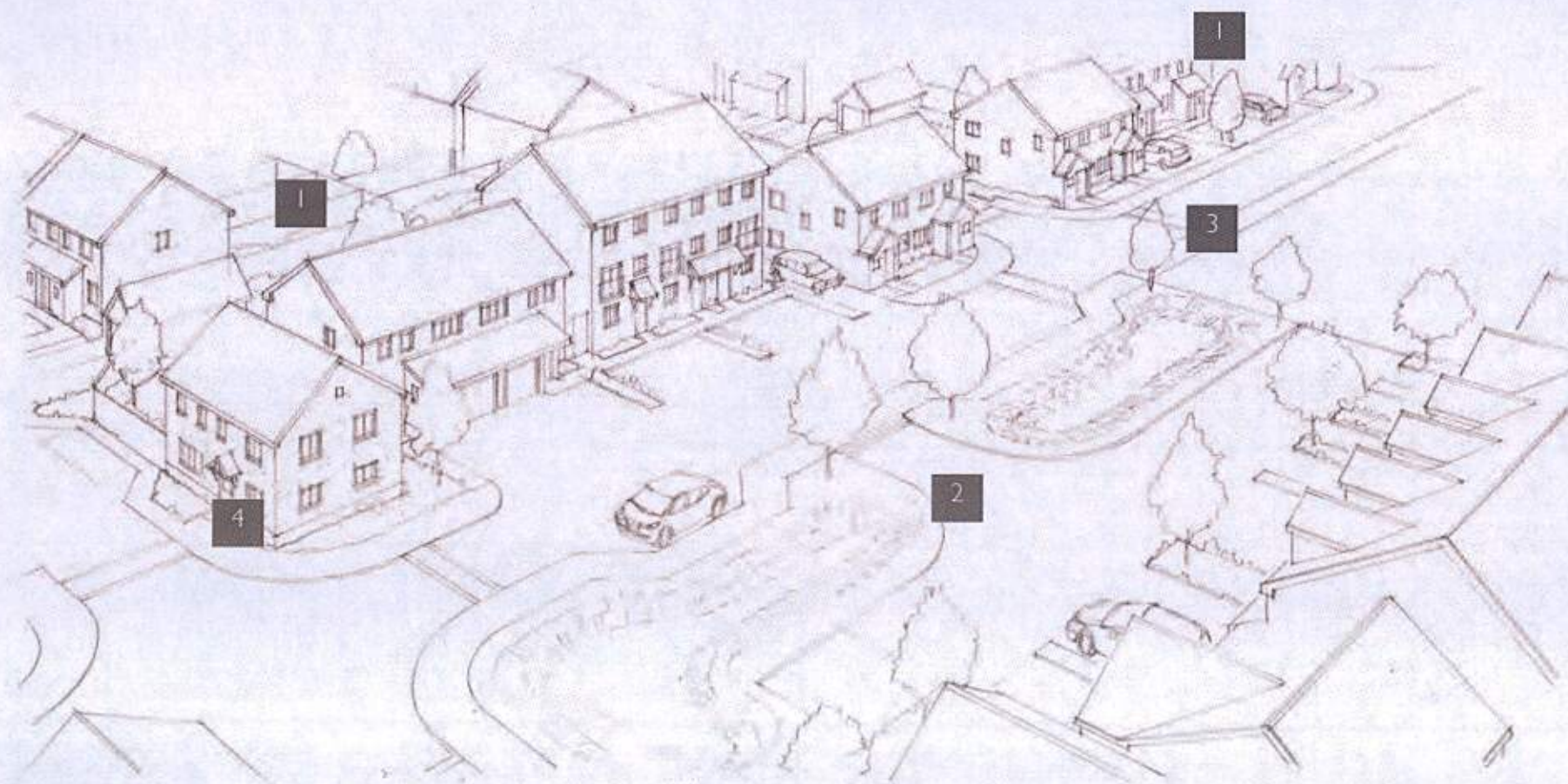


Western Development Area

The western area is the point in which the master plan interfaces with existing development. Whilst the urban form is designed on a grid-like form to respond to the former glass house history, the architecture is to be designed to make a visual connection with the existing context.

DEFINING PRINCIPLES

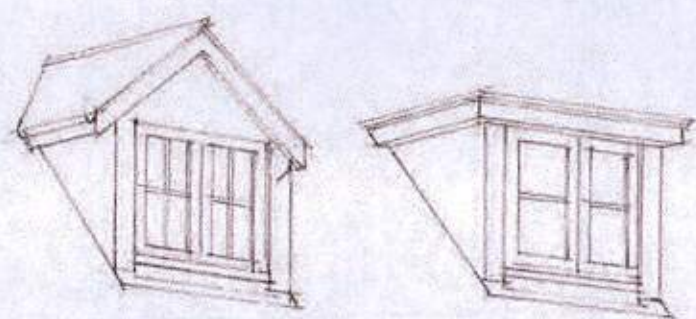
- Streets to be well fronted by regularised pattern of development.
- Regularised building forms and consistency of set back.
- Streets should comprise of consistent materials within each street scene
- Central focal space to provide localised character and landscape amenity to this parcel of development.



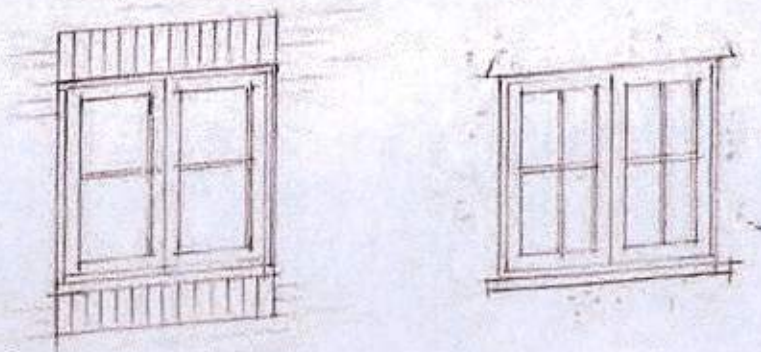
URBAN FORM PRINCIPLES

- 1 Regularity and consistency of street and block forms
- 2 Creation of a central open space to create a focal space for the development and provide variety and interest to a highly otherwise grid-form.
- 3 Notable levels of regularised planting to embody the grid forms to break-up large open spaces as well to create a visual softening of the grid a street level.
- 4 Focal buildings defined by change of material (render) and orientation to the street to assist with legibility.

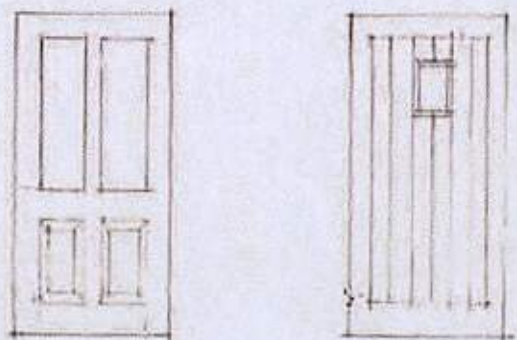
ARCHITECTURAL PRINCIPLES



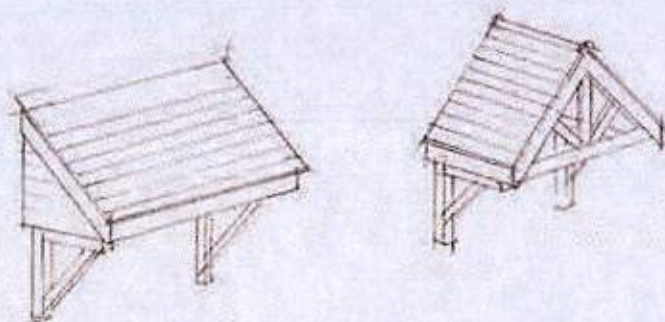
Dormers - pitch or flat roof



Brick Headers



Doors - range of doors



Porches - mono-pitch or pitched roofs



URBAN + BUILDING FORM

FRONTAGE TYPE	Regular frontage with variation in set back to define key spaces and areas of interest.
BUILDING TYPES	Semi-detached, detached, terraced and occasional apartments
BUILDING HEIGHTS	Predominantly 2 Storey, 2.5 and 3 storey located around the primary street, focal spaces and focal corners.
CORNERS	Strong definition, active building faces that address public and semi-public space.
FRONT BOUNDARY TREATMENT	Railings and grass/planted verges

DETAILS

ROOF	Variation in ridge height Gable fronted housing to be a feature on focal corners.
DORMERS/ ROOFLIGHT	Pitched forms to be used where appropriate.
WINDOW OPENINGS	Brick ends above windows

MATERIALS

ROOF	Mix of tiles and profile with variation on focal buildings
WALLS	Red brick and render
WINDOW/ DOORS/ PORCHES	Predominantly white uPVC windows. A mix mono-pitched and pitched canopy porches



7. ACCESS AND MOVEMENT

THE ACCESS AND MOVEMENT STRATEGY

6.64 The overall access and movement strategy is predominantly in accordance with the Outline Planning Application and is based on the following key principles:

- Creating a robust and legible network of streets and spaces founded on a clear hierarchy of streets that support the variation in character across the master plan
- Promoting alternative methods of transport other than the car to move within the master plan area with a comprehensive range of route to key amenities and spaces within the master plan. This provision of a new bus service will also provide access to wider amenities in the area of Littlehampton and beyond.
- The Avenue will provide a connection to the master plan area and the proposed bypass, as well as tying in existing area of development such as those on and those, which spur off Toddington Lane.
- Ensuring links to the wider community so that they can access the new proposed facilities and amenities
- Accommodating sufficient parking for all the proposed uses on the master plan, whilst ensuring that car do not dominate the street scene
- Controlling speed within the road network to ensure the safety of residents and visitors to the site.
- Compliance with current standards, such a Manual for Streets, What Works Were and other localised specific policy

STRATEGIC INFRASTRUCTURE

6.65 The master plan will deliver a range of strategic transport infrastructure that will benefit the Town of Littlehampton and the existing development in the wider area. Figure 7.1 highlights the key areas that are to be delivered as part of the master plan proposals that will see the implementation of new junctions and roads across the wider area. The detail of these plans are to be worked up in more detail and in consultation with various stakeholders and authorities as appropriate.

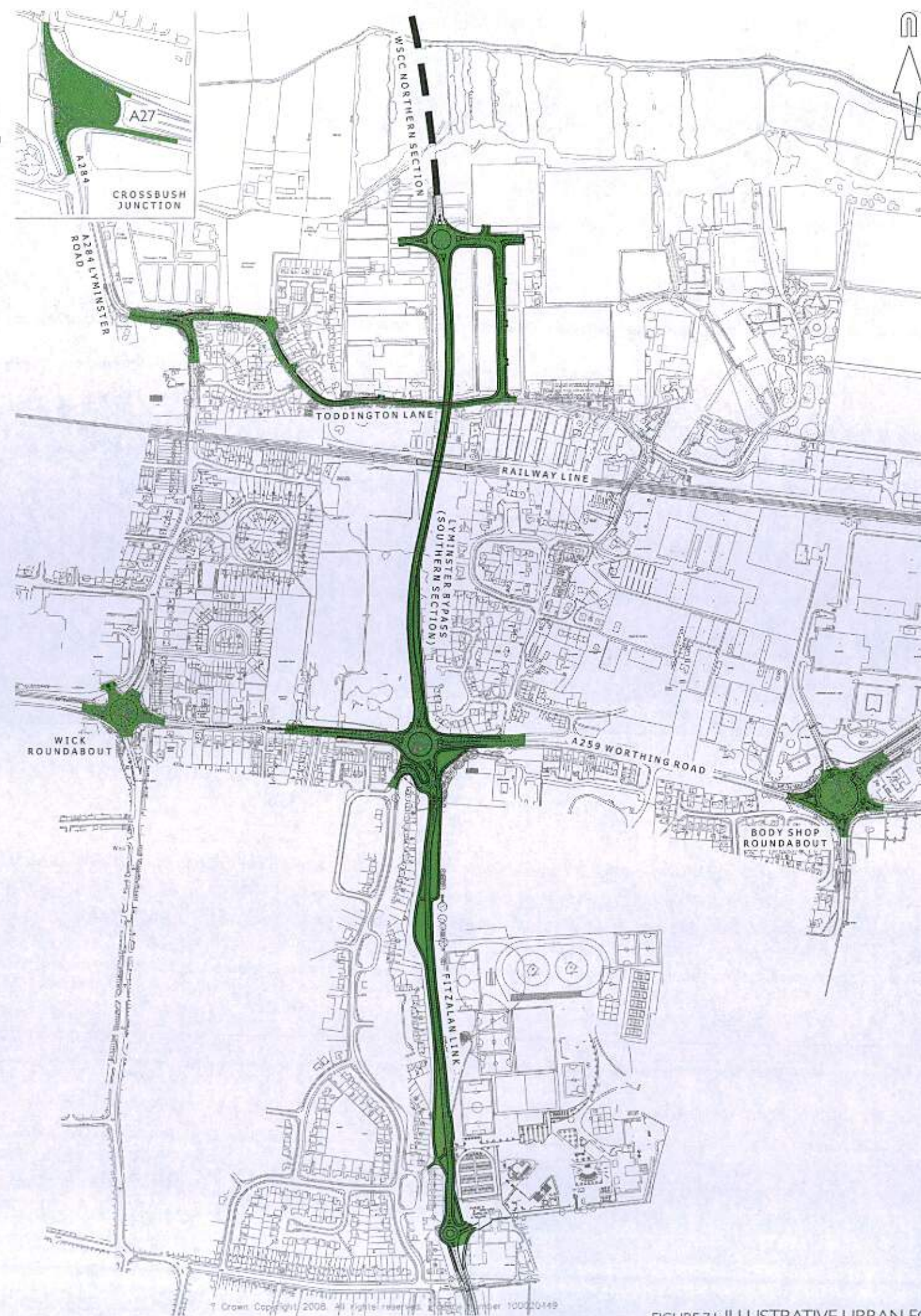


FIGURE 7.1: ILLUSTRATIVE URBAN FORM



FIGURE 7.2: SITE ACCESS AND MOVEMENT PLAN

7.1 Access to the site will be achieved in a variety of ways. Vehicular movement will primarily come from the newly constructed Bypass, whilst access will also be achievable from Toddington Lane.

7.2 The existing link across the Railway Line will be closed to vehicles, but will enable some form of Disability Discrimination Act (DDA) standard crossing point for pedestrians and cyclists. The crossing point to the existing house

The Nursery to the far east of the master plan will also be shut, with access to this property provided from within the master plan, subject to Statutory Consultation and acceptance by the relevant organisation an public consultation.

7.3 Pedestrian links to the wider countryside are possible with connections to the wider Public Rights of Way proposed from proposed footpaths and existing footbridges within the Black Ditch area to the north of the master plan.

INTERNAL LAYOUT

7.4 The overall internal layout of the road is dictated by the proposed block structure set at the Outline Planning Stage. To the west of the master plan, the road pattern has a strong grid-alignment is regularised, embodying the urban form of this area of the master plan. To the east the internal layout of road is still based on a grid-like pattern but much more organic in its form with roads more irregular and less direct in their nature.

ROAD HIERARCHY

7.5 The road hierarchy for the development does follow the general principles of the Outline Master Plan with some localised variation that have incurred due to technical requirements for ease of movement round the site; for cars and in particular refuse collection services, as well as the need of drainage strategy. Figure 7.4 sets out the proposed hierarchy for the master plan. Variation from this will need justification and consultation with the local authority at the time of such a Planning application.

7.6 8 types of road are proposed in accordance with JTP master plan. These include:

- Lyminster Bypass
- Toddington Lane
- Main Avenue
- SuDS Streets
- Neighbourhood Street
- Mews/ Home zones
- Green Lane
- Private

7.7 The overarching rationale for the road hierarchy is that larger road are used to carry more intense levels of movements, often clear and structured segregation of pedestrians/ cyclists and vehicles. Whilst roads become lower order and less engineered as they extend to the edge of the development. These detailed of the road hierarchy is explained in more detail in the following pages.



FIGURE 7.3: THE ROAD HIERARCHY OF THE OUTLINE PLANNING APPLICATION

CAR PARKING

7.8 Car parking will need to be designed to meet the West Sussex Car Parking Standards, whilst ensuring cars do not dominate the street scene. On-plot parking is promoted with visitor and unallocated spaces located within the streets and public areas. Parking courts are acceptable, but must be overlooked by development to ensure the safety of users and property.

7.9 A range of parking types will be used across the development. These include:

- | | |
|--------------------|-------------------|
| • Parallel | • Housing Square |
| • Perpendicular | • Mews Courtyard |
| • Angled (30/60°) | • Integral Garage |
| • Frontage Parking | • Attached Garage |
| • Front Court | • Detached Garage |

7.10 Parking spaces should be a minimum of 2.4 x 4.8m

7.11 Garages to be in accordance with Local Authority Standards (3x6m internal dimension) to allow for a car to fit inside. Where parking is located in front of the garage a 1m setback from the door is required to enable users into the garage when the car is parked.

REFUSE COLLECTIONS

7.12 Reserved matter proposals should show tracking capabilities for the design of a refuse vehicle.

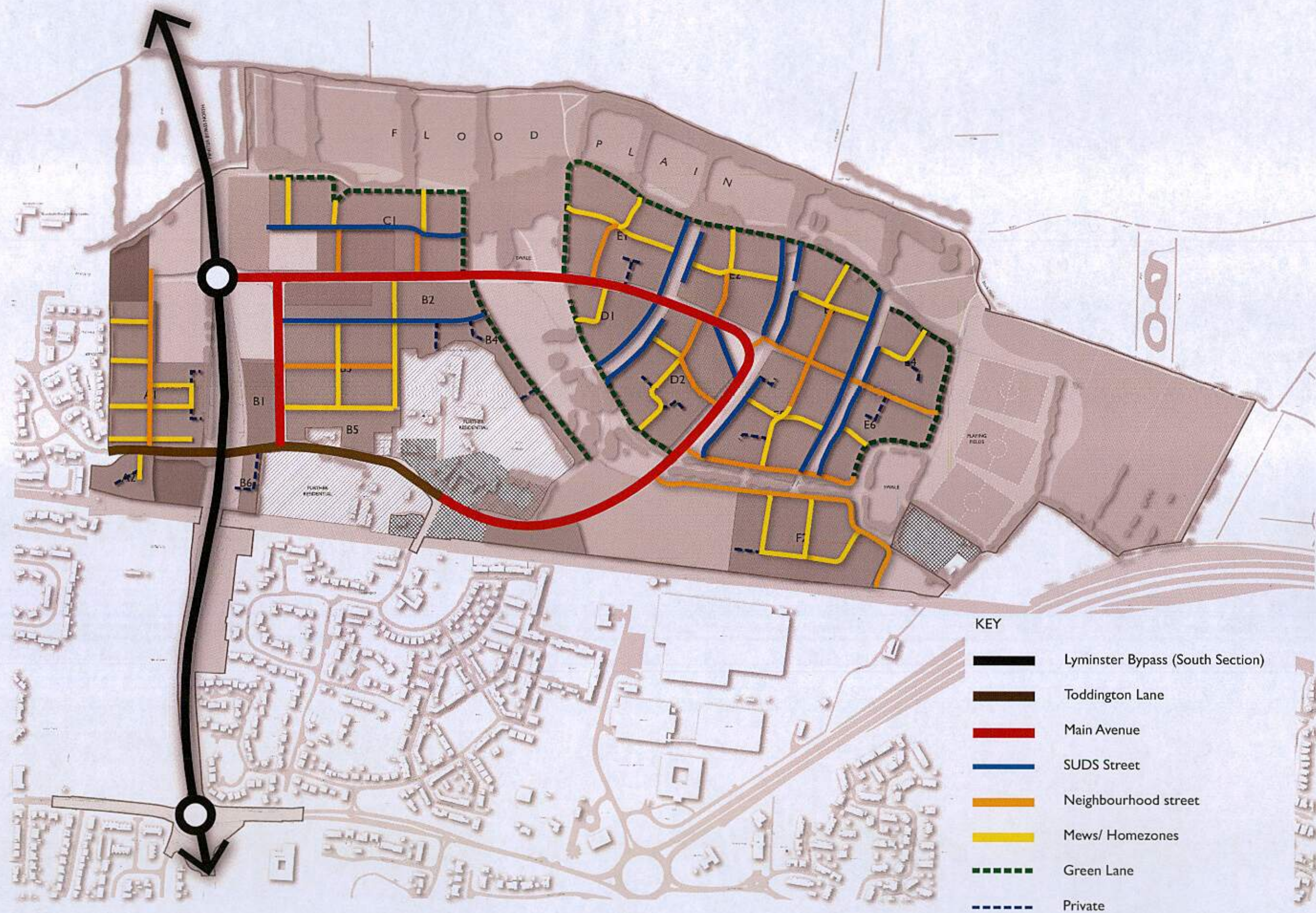


FIGURE 7.4: PROPOSED STREET HIERARCHY

Street Types

Lyminster Bypass (South Section)

The Lyminster Bypass (South Section) is a new two-way carriageway running north-south within the site and located towards the western boundary. It provides primary access into the development, and connects into the Retail Square.

The current application proposes to deliver the road to the northern boundary, and at a later date, land assembly permitting, this may be extended by other parties northwards, linking to the A284 north of Lyminster.

To the south of the site, the bypass bridges over the existing railway line and connects to the proposed Fitzalan Link (see linked planning application) which connects through into Littlehampton town centre.

KEY PRINCIPLES:

- The bypass is a two way carriageway with separate cycle/ pedestrian footpath on the eastern side.
- Landscaped embankments are to be provided on both sides of road with slopes rolled over at top and bottom, and highway safety fences provided at the top;
- Shrub and tree planting are required to the embankment slope to screen traffic and integrate the earthworks into the landscape;
- Climber plants should be provided on the bridge abutment wall, to reduce visual impact;
- A ramped cycle/footpath connection is required on the embankment to provide a link with Toddington Lane which runs below the bridge close to the railway line.
- Three storey buildings should be used adjacent to the bypass to provide an appropriate scale and enclose landscaped areas either side of road.
- Acoustic fencing to be provided where required to reduce noise impacts on properties in Toddington Park.

SPECIFICATION STREET

CRITERIA	DESIGN CRITERIA SPECIFICATION & TREATMENT
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DESIGN SPEED

SPEED LIMIT	40mph
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STREET DIMENSION

MINIMUM CARRIAGEWAY WIDTH	7.3m + 1m margins Surface – Blacktop tarmacadam Kerb - HB2/BN Kerb
FOOTWAY	3m unsegregated shared facility on east side No footway on west side Surface - Blacktop tarmacadam Rear edge - Type EF Edging
CYCLEWAY	3m unsegregated shared facility on east side Surface - Blacktop tarmacadam Rear edge - Type EF Edging
VERGE	Yes – species rich grassland
DIRECT VEHICULAR ACCESS TO DWELLINGS	No
BOUNDARY TREATMENT	Native hedgerows, scrub and specimen tree planting, where space allows and on embankment slopes.

CROSSING FACILITIES

CONTROLLED CROSSING	Yes – incorporated within junction with Mill Lane Link Road
UNCONTROLLED CROSSING	Yes – junction with Worthing Road
CROSSING POINT WITH PEDESTRIAN ISLAND	Yes – junction with Worthing Road

PUBLIC TRANSPORT

BUS ACCESS	No bus route proposed (access possible)
BUS LANES	No
BUS STOPS	No

STREET DESIGN DETAILS

TRAFFIC CALMING	None
ON STREET PARKING	No traffic regulation orders
MINIMUM STOPPING SIGHT DISTANCE	120m
JUNCTION RADII	N/A
JUNCTION VISIBILITY SPLAYS	N/A



Street Types Toddington Lane

Toddington Lane will remain largely the same. Enhancement of pedestrian and cycle provision will be sought, whilst minor alterations to the road may be required for servicing and drainage needs.

Street Types

Main Avenue

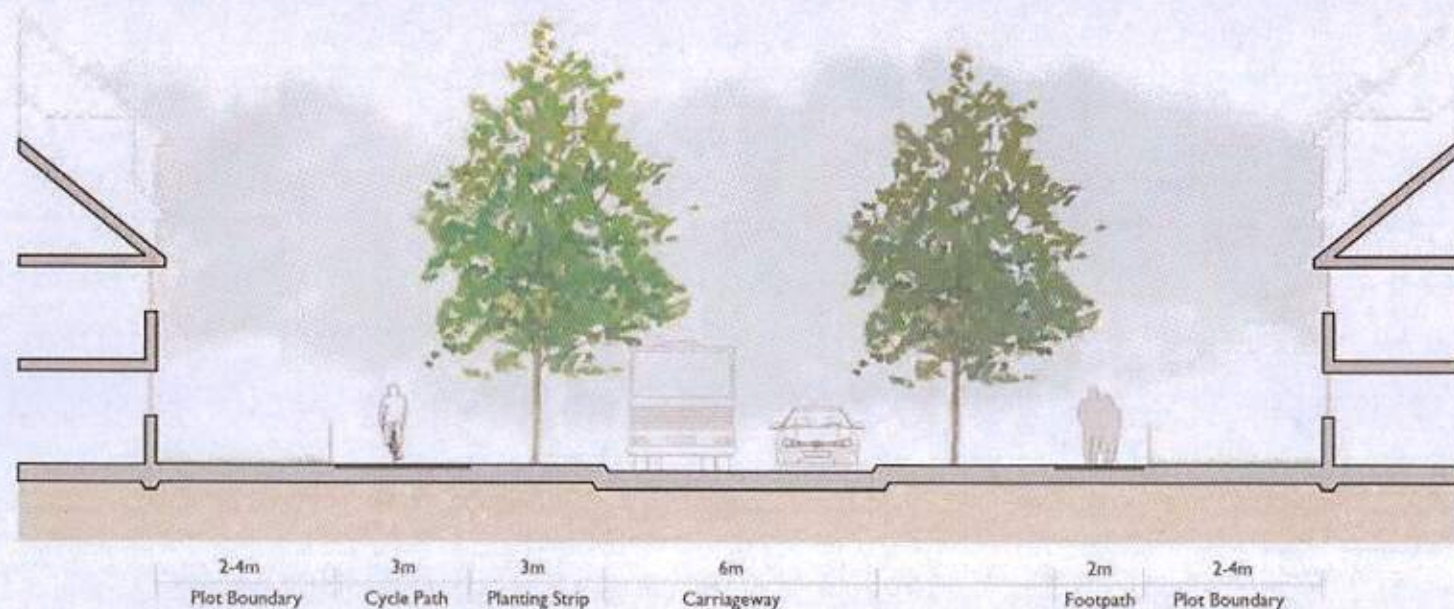
Main Avenue provides the primary link between the western and eastern halves of the scheme, and runs from the Lyminster Bypass, around the Retail Square, and then across the site to the eastern boundary, via the Community Hub.

While being a major distributor of residential traffic within the master plan, this typology marks the point that the 7.3m wide access roads (Mill Lane and Lyminster Bypass) step down to 6m, and traffic speeds are reduced using calming features such as road narrowing and changes in materials.

This street typology is also designed to support the proposed bus route through the site as well as associated infrastructure such as bus stops/shelters.

KEY PRINCIPLES:

- Main Avenue is a two way carriageway with footpaths either side separated from road by landscaped verges;
- Parallel parking separated with street trees may replace verges where appropriate;
- Street typology to allow for bus access and associated infrastructure (stops/shelters);
- Front gardens to dwellings to abut footpaths using a mixture of garden railings and mixed native/ornamental hedgerow, shrub and specimen tree planting;
- Traffic calming features to be provided to achieve 20mph design speed, such as road narrowing and changes in materials.



STREET SPECIFICATION

CRITERIA

DESIGN CRITERIA SPECIFICATION & TREATMENT

DESIGN SPEED

SPEED LIMIT	20mph
-------------	-------

STREET DIMENSION

MINIMUM CARRIAGEWAY WIDTH	6m Surface – Blacktop tarmacadam and block paving. Tegular paving or similar material within the Local Centre Kerb - HB2/BN Kerb
FOOTWAY	2m Surface - Concrete block paving/ Tarmacadam Rear edge – Type EF Edging
CYCLEWAY	3m Overall Corridor- Except within the Local Centre Area (Surface - Concrete block or Tarmacadam) Rear edge - Type EF Edging
VERGE	To very according to character area
DIRECT VEHICULAR ACCESS TO DWELLINGS	Yes

CROSSING FACILITIES

CONTROLLED CROSSING	No - except for adjacent to Primary School (Zebra Crossing)
UNCONTROLLED CROSSING	Yes
CROSSING POINT WITH PEDESTRIAN ISLAND	Generally no but subject to assessment

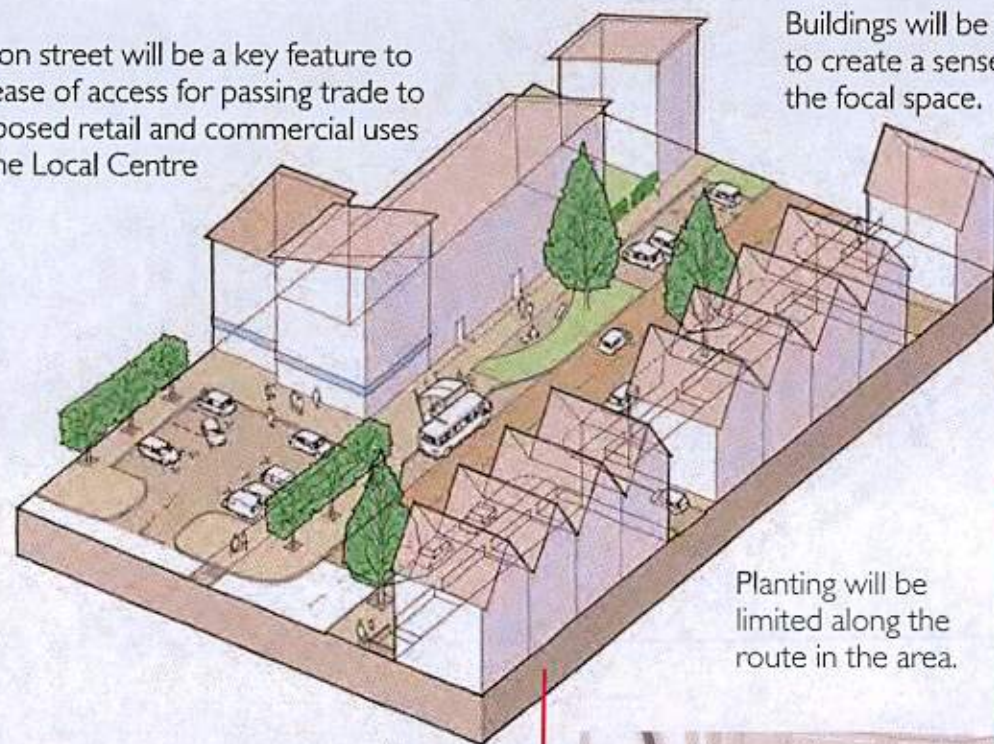
PUBLIC TRANSPORT

BUS ACCESS	Yes
BUS LANES	No
BUS STOPS	Yes

STREET DESIGN DETAILS

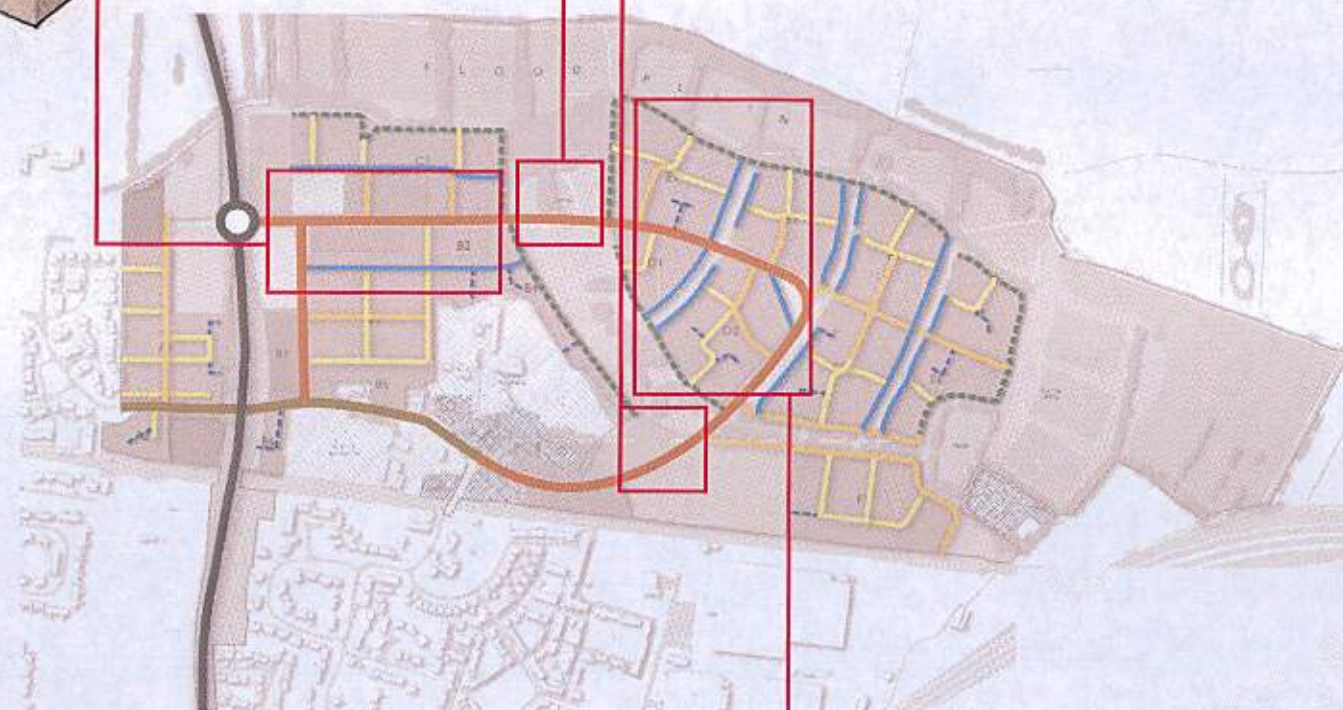
TRAFFIC CALMING	Yes
ON-STREET PARKING	No traffic regulation orders
MINIMUM STOPPING SIGHT DISTANCE	25m
JUNCTION VISIBILITY SPLAYS	2.4m/25m
JUNCTION RADII	7.5m

Parking on street will be a key feature to enable ease of access for passing trade to the proposed retail and commercial uses within the Local Centre

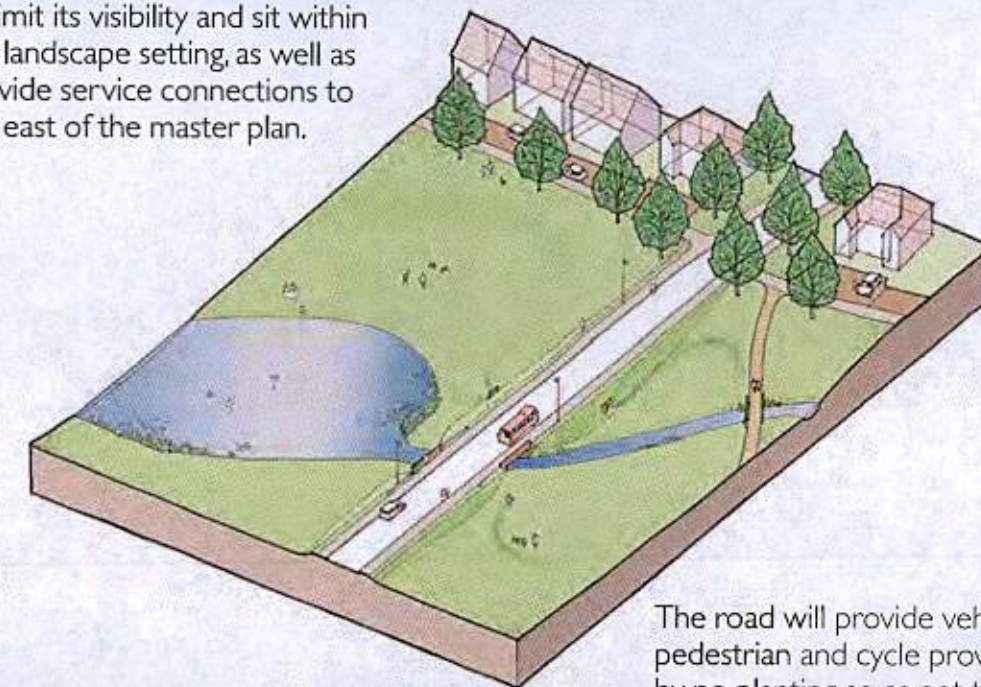


Buildings will be tighter to the road to create a sense of enclosure to the focal space.

Planting will be limited along the route in the area.

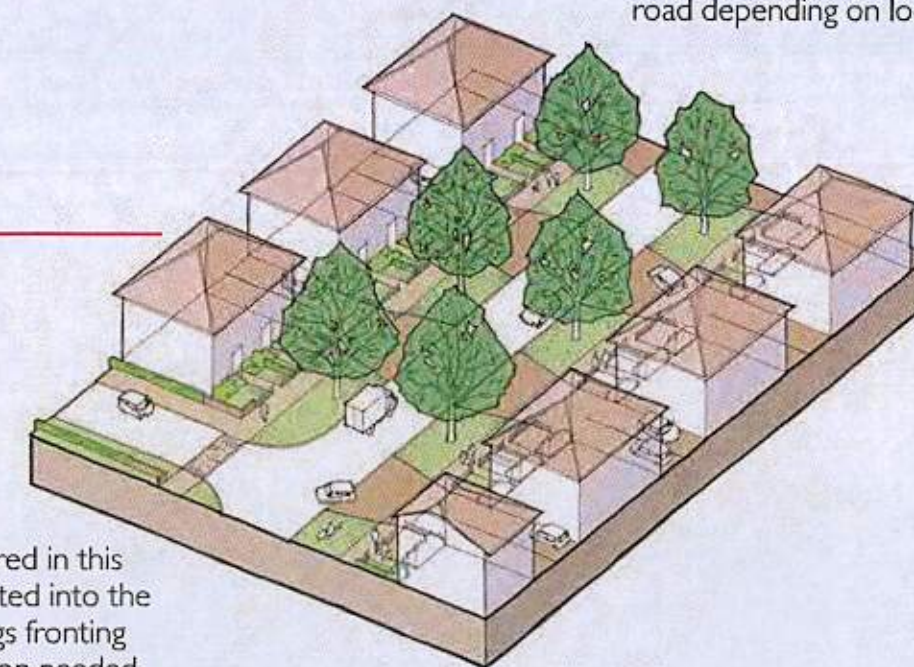


The main avenue across the Central Open Space will need to limit its visibility and sit within the landscape setting, as well as provide service connections to the east of the master plan.



The road will provide vehicular, pedestrian and cycle provision, by no planting so as not to draw attention to it in the landscape.

To the west of the master plan the road will take the form of a tree lined boulevard with planting one or both sides of the road depending on localised parking requirements



VARIATION IN THE MAIN AVENUE CHARACTER

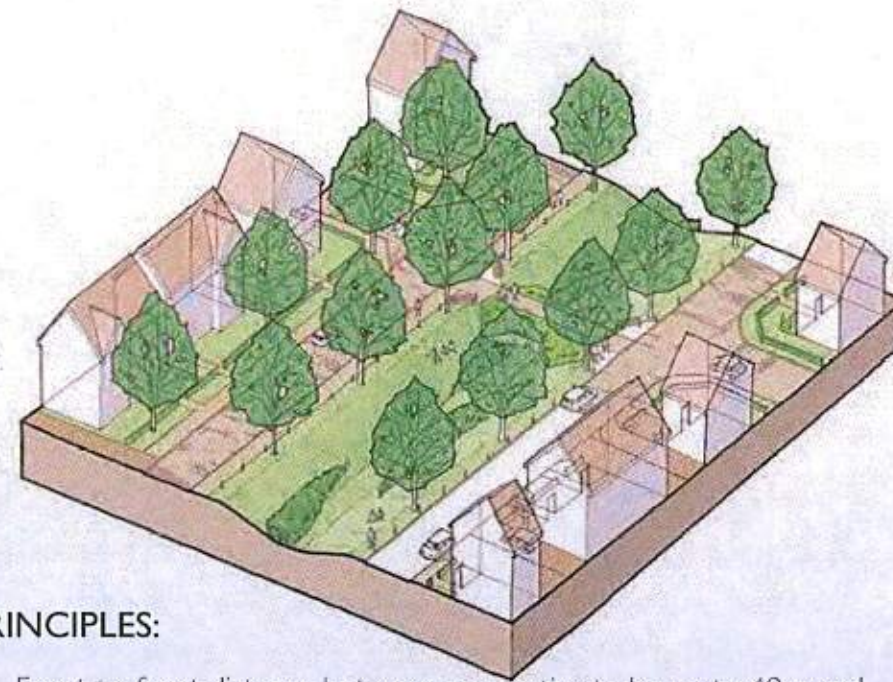
7.13 The treatment of the Main Avenue will vary as it runs through the various character areas set out in Table 6.1. The form of the Main Avenue will vary depending on its location to respond to the character of the master plan with regard to planting, building forms and set back, but will maintain a 6.0m road width and segregated provision for cycle and pedestrians except with the Local Centre focal space.

Bus stop provision will be required in this area and will need to be incorporated into the access arrangement for dwellings fronting The Main Avenue. Early discussion needed with Highways Authority and Local Bus company to identify full requirements.

Street Types SuDS Streets

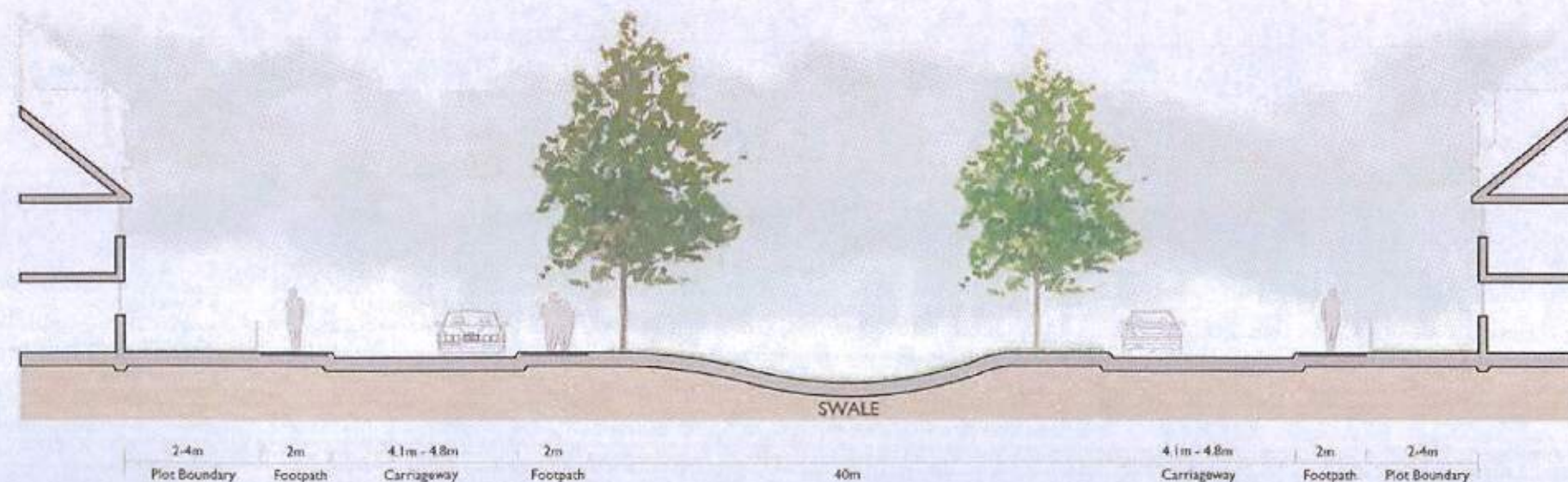
The SuDS Street typology is located towards the eastern boundary of the scheme, beginning where Main Avenue meets Toddington Lane, and ending at the existing pond.

The carriageway itself lies to the south of this informal, linear space, which also contains a meandering SuDS swale and detention basins that contribute to the flood storage requirements of the scheme. Small bridge features are used to provide access to the adjacent residential neighbourhood to the north in two locations.



KEY PRINCIPLES:

- Front-to-front distance between properties to be up to 40m and include informal road, footways and SuDS swale.
- Swale to be designed to create a wetland area with marginal planting to create an attractive landscape feature and ecological corridor.
- Informal tree and shrub planting is to be used along the northern edge of the wetland adjacent to the footway, and a mown grass margin with kneerail (to discourage access) to the south;
- A series of small flood detention basins to be provided adjacent to the swale/wetland to provide additional flood storage run-off, but designed to keep flood level below shrub planted areas;
- Hedgerows to be used as front garden boundaries on the north side of the wetland; and adjacent to the carriageway/footway to the south;
- Traffic calming features to be provided to achieve 20mph design speed, such as road narrowing and changes in level.



STREET SPECIFICATION

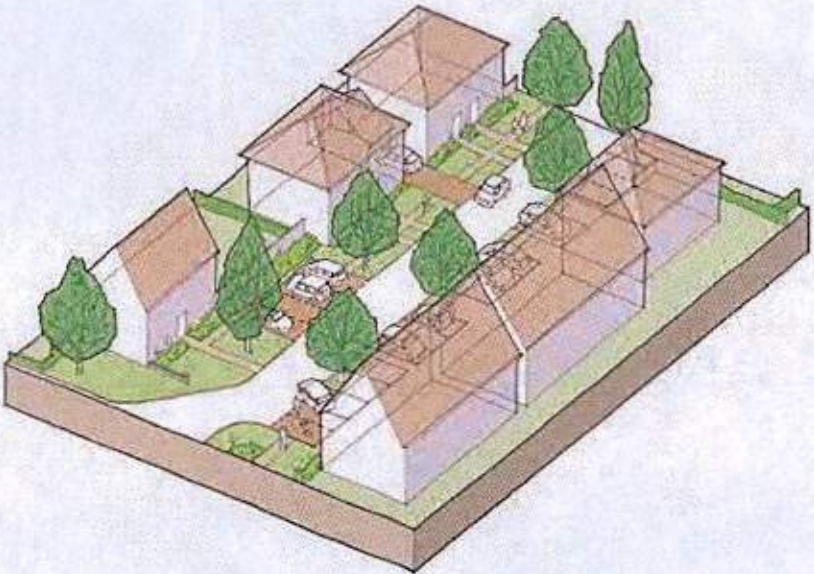
CRITERIA	DESIGN CRITERIA SPECIFICATION & TREATMENT
DESIGN SPEED	
SPEED LIMIT	20mph
STREET DIMENSION	
MINIMUM CARRIAGEWAY WIDTH	4.8-5.5m (4.1m for a private drive)
	Surface – Blacktop tarmacadam and block paving
	Kerb - HB2/BN Kerb
FOOTWAY	2m
	Surface - Concrete block paving/ Tarmacadam
	Rear edge – Type EF Edging
CYCLEWAY	Integrated into the road
VERGE	Species rich grassland, shrub and specimen tree planting within swale areas
DIRECT VEHICULAR ACCESS TO DWELLINGS	Yes
CROSSING FACILITIES	
CONTROLLED CROSSING	No
UNCONTROLLED CROSSING	Yes
CROSSING POINT WITH PEDESTRIAN ISLAND	No
PUBLIC TRANSPORT	
BUS ACCESS	No
BUS LANES	No
BUS STOPS	No
STREET DESIGN DETAILS	
TRAFFIC CALMING	Yes
ON-STREET PARKING	No traffic regulation orders
MINIMUM STOPPING SIGHT DISTANCE	25m
JUNCTION VISIBILITY SPLAYS	2.4m/25m
JUNCTION RADII	Vis- splays to be determined by speed with a range of 4-6m (7.5m radii where the street meets the Main Avenue.

Street Types Neighbourhood Street

Neighbourhood Streets generally connect into the Main Avenue and provide a further step down in the road hierarchy, with carriageway widths reducing from 6.0m to 4.8 or 5.5m as appropriate.

They are archetypal residential roads, being two way carriageways with footways either side, and predominantly hard landscaped, with street trees used to create a landscape structure, and break up parallel parking bays.

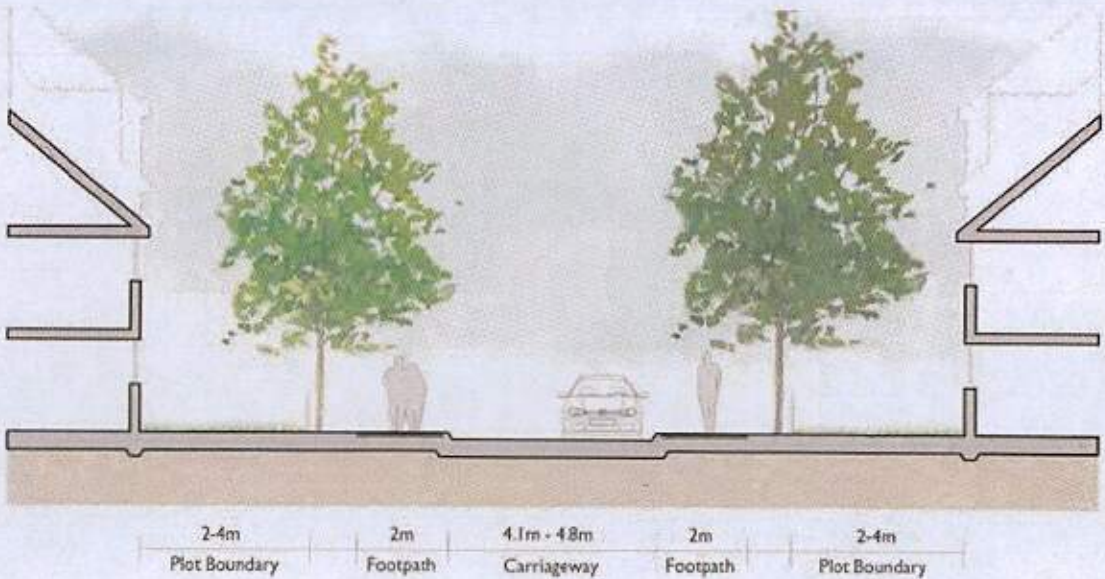
Horizontal traffic calming features used to meet the target speed of 20mph.



- Neighbourhood Street to be two-way carriageway with footpaths either side, road to fall within range 4.8-5.5m with lower figure the preferred option to reduce the impact of highway and make streets more intimate.
- Typology to be predominantly hard streetscape with trees providing landscape structure, between parallel parking bays;
- Front or side gardens of properties to abut footpaths with a variety of boundary treatments to be used to add interest to the streetscape, and create opportunity for personalisation of property frontage;
- Target speed of 20mph to be met with horizontal traffic calming features.

STREET SPECIFICATION

CRITERIA	DESIGN CRITERIA SPECIFICATION & TREATMENT
DESIGN SPEED	
SPEED LIMIT	20mph
STREET DIMENSION	
MINIMUM CARRIAGEWAY WIDTH	4.8m-5.5m
	Surface – Blacktop tarmacadam and block paving
	Kerb -HB2/BN Kerb
FOOTWAY	2m
	Surface - Concrete block paving/ Tarmacadam
	Rear edge – Type EF Edging
CYCLEWAY	On road
VERGE	N/A
DIRECT VEHICULAR ACCESS TO DWELLINGS	Yes
CROSSING FACILITIES	
CONTROLLED CROSSING	No
UNCONTROLLED CROSSING	Yes
CROSSING POINT WITH PEDESTRIAN ISLAND	No
PUBLIC TRANSPORT	
BUS ACCESS	No
BUS LANES	No
BUS STOPS	No
STREET DESIGN DETAILS	
TRAFFIC CALMING	Horizontal and vertical
ON-STREET PARKING	No traffic regulation orders
MINIMUM STOPPING SIGHT DISTANCE	25
JUNCTION VISIBILITY SPLAYS	2.4m/25m
JUNCTION RADII	4-6m



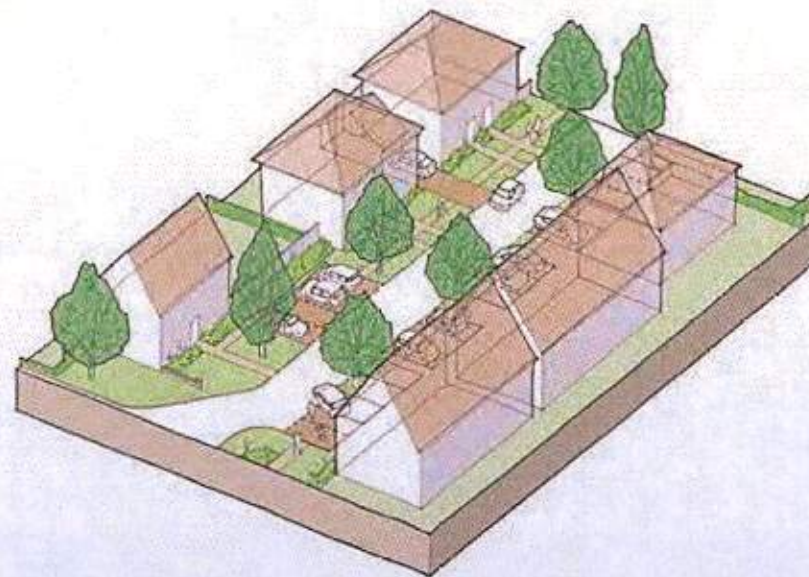
Street Types

Mews/ Homezones

The Mews/Homezone Street Typology is designed to create a residential environment in which the car is a 'guest' and heavy traffic calming is used to reduce vehicle speeds to 10mph, allowing children to play safely.

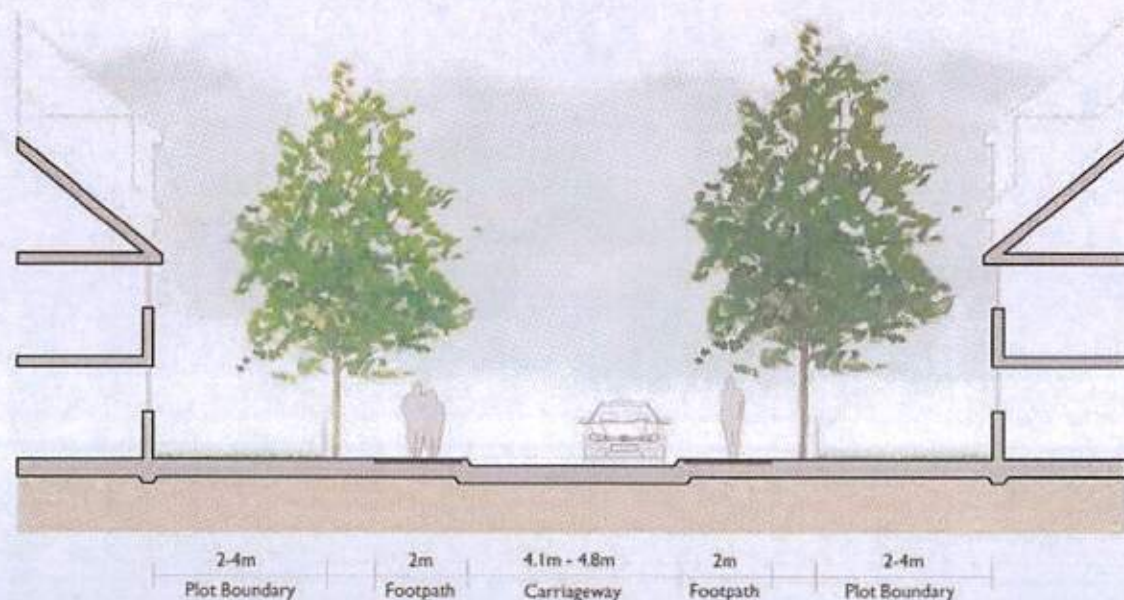
In places this street typology may consist of a single shared surface, with no footways, and block paving used to delineate a narrow carriageway and on-street parking bays.

The 10mph speed limit is achieved through frequent changes in carriageway direction, landscape features and other calming strategies.



KEY PRINCIPLES:

- Mews/Homezone to be designed as informal residential environment that encourages children to play;
- Frequent changes in carriageway direction, narrow road widths (3.7m), landscape features, parking bays and other obstacles to be used to reduce vehicular speeds;
- Tree planting to be used to order the space and break up parking bays;
- Front garden boundaries to abut footway or share surface and be defined with railings and mixed native/ornamental hedging, shrub and specimen tree planting.



STREET SPECIFICATION

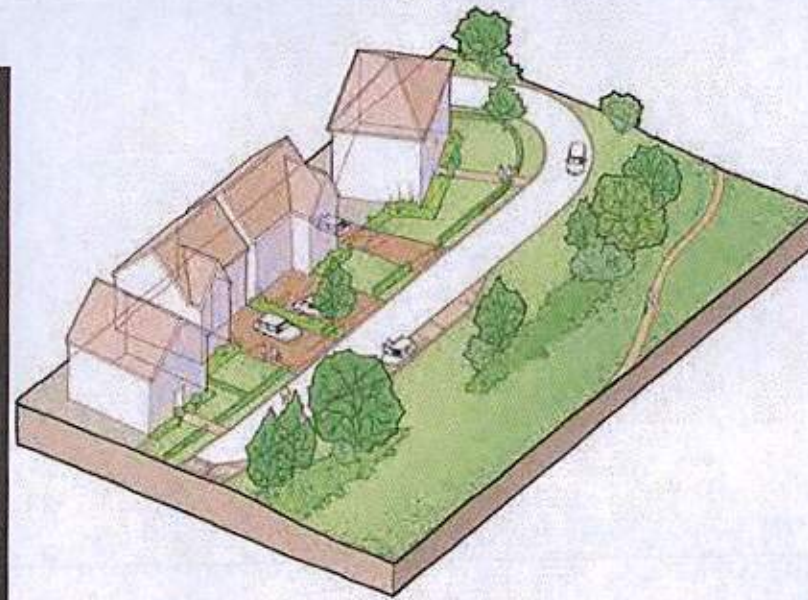
CRITERIA	DESIGN CRITERIA SPECIFICATION & TREATMENT
DESIGN SPEED	
SPEED LIMIT	10 mph
STREET DIMENSION	
MINIMUM CARRIAGEWAY WIDTH	4.5-4.8m with some localised narrowing Surface – Blacktop tarmacadam/ block paving/ tegular paving and/ or cobbles Kerb - HB2/BN Kerb
FOOTWAY	2m where used. Shared surface areas are also appropriate Surface - Concrete block paving or a carriageway Rear edge – Type EF Edging
CYCLEWAY	On road
VERGE	N/A
DIRECT VEHICULAR ACCESS TO DWELLINGS	Yes
BOUNDARY TREATMENT	Front garden railings / hedgerow boundaries. Mixed native/ornamental hedgerows, shrub and specimen tree planting.
CROSSING FACILITIES	
CONTROLLED CROSSING	No
UNCONTROLLED CROSSING	Yes
CROSSING POINT WITH PEDESTRIAN ISLAND	No
PUBLIC TRANSPORT	
BUS ACCESS	No
BUS LANES	No
BUS STOPS	No
STREET DESIGN DETAILS	
TRAFFIC CALMING	Intrinsic to design
ON-STREET PARKING	No traffic regulation orders
MINIMUM STOPPING SIGHT DISTANCE	11m
JUNCTION VISIBILITY SPLAYS	2.4m/11m
JUNCTION RADII	Radii 4-6m or larger in specific cases to meet visibility and safety requirements.

Street Types Green Lane

The Green Lane Street Typology is located around the northern and eastern boundary of the master plan, adjacent to the flood plain/Black Ditch, and this landscape context demands a sensitive, informal approach to vehicular infrastructure.

Although providing vehicular access to residential properties (and also emergency/refuse vehicles) this road is also designed to function as a route around the edge of the scheme for cyclists, hiker and dog walkers, and provides links across into the adjacent countryside.

From a vehicular perspective the road may therefore be designed to allow intermittent access, and only be continuous for cyclists and pedestrians. To create the required informality it should generally be narrow, meander along its route, vary in width, feature informal planting, and if possible use surface materials associated with country roads.

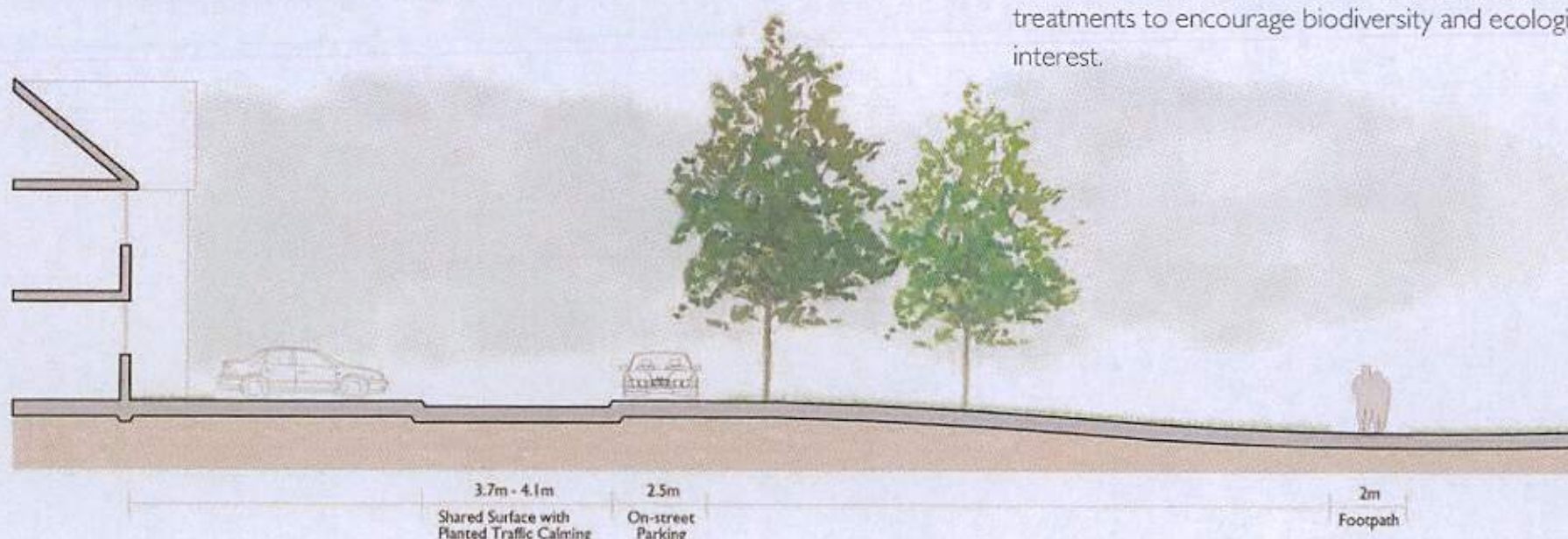


KEY PRINCIPLES:

- Create an informal street typology that provides a sensitive transition between the housing area and the open aspect to the north;
- Restrict vehicular movements along the northern edge and where possible limit movement to pedestrians and cyclists only;
- Design road to meander along the boundary, and be of varying width between 3.0 and 3.7m, taking into account the need for emergency access;
- Provide constant shifts in horizontal and vertical alignment between footway and road, and use the area between for informal tree and shrub planting, allowing for filtered north views through trees towards the Black Ditch;
- Include native plant species and wildlife mitigation treatments to encourage biodiversity and ecological interest.

STREET SPECIFICATION

CRITERIA	Design Criteria Specification & Treatment
DESIGN SPEED	
SPEED LIMIT	10mph
STREET DIMENSION	
MINIMUM CARRIAGEWAY WIDTH	3.7m to 4.8m with localised narrowing, subject to tracking and consultation with the fire and refuse services. Surface - Blacktop tarmacadam/ block paving and/ or tar/ spray and gravel Kerb - HB2/BN kerb
FOOTWAY	2m shared surface Surface - concrete block paving Rear edge - Type EF Edging
CYCLEWAY	2m shared surface
VERGE	Species rich grassland, potentially incorporating swales.
DIRECT VEHICULAR ACCESS TO DWELLINGS	No
BOUNDARY TREATMENT	Native hedgerows, shrub and specimen tree planting.
CROSSING FACILITIES	
CONTROLLED CROSSING	No
UNCONTROLLED CROSSING	Yes
CROSSING POINT WITH PEDESTRIAN ISLAND	No
PUBLIC TRANSPORT	
BUS ACCESS	No
BUS LANES	No
BUS STOPS	No
STREET DESIGN DETAILS	
TRAFFIC CALMING	Horizontal and Vertical
ON-STREET PARKING	Yes
MINIMUM STOPPING SIGHT DISTANCE	11
JUNCTION VISIBILITY SPLAYS	2.4 x 11
JUNCTION RADII	Radii 4-6m or larger in specific cases to meet visibility and safety requirements.



8. LANDSCAPE PRINCIPLES

LANDSCAPE STRATEGY

8.1 The landscape strategy is an integral part of the masterplan for the proposed development. There will be an interconnected series of green spaces where amenity needs are balanced with biodiversity enhancement, ecological connectivity and runoff attenuation. The water meadows along the northern boundary of the site are retained to provide a green edge to the development.

8.2 The character of the meadows has inspired the design of the central wetland where landform manipulation will allow a diverse range of habitat and landscape types to form. Sustainable drainage is a key competent of the landscape strategy where the retention of runoff on site improves the amenity value of the landscape whilst enhancing biodiversity.

8.3 Swale corridors aligned along residential street link the central wetland into the development in a series of direct routes for pedestrians and cyclists. The landscape strategy facilitates and encourages active recreation and movement through the site by its future residents and by existing residents of Littlehampton. The green corridors will facilitate movement through the development and provide a visual connection to the rural landscape.

8.4 Existing vegetation will be retained in key locations where landform manipulation is not necessary. These existing features are landscape 'assets' which are a positive addition to the green infrastructure of the proposed development.

8.5 A large area of amenity green space is proposed in the eastern part of the site, extending to just over 14 hectares. Existing hedgerows, drainage ditches and their marginal habitat would be retained, providing an additional area of semi-natural urban green space. The remainder of the area would be mown grass and outdoor sports pitches.

8.6 A number of small parks and gardens will be located across the masterplan which are village greens and neighbourhood parks which are located near to the swale corridors and linkages to local amenities and the central wetland.

8.7 Accessible countryside is a key component of the open space provision and the objective to create a better link between town and country. A variety of footpath and cycleway routes are proposed which would improve access between Littlehampton, the countryside to the north and onwards to the South Downs National Park.

Open countryside



FIGURE 8.1: LANDSCAPE STRATEGY

PUBLIC REALM STRATEGY

8.8 The public realm strategy will be consistent with the proposed character areas for the site which are:

- West of the Bypass;
- Central Area; and
- Eastern Edge.

8.9 The public realm at the west of the development site will be influenced by the existing housing and will include materials more suited to an urban environment. Geometric lines and formality will also be achieved in this area and street furniture will largely be metal. To the east of the development site materials will be more suited to a rural environment. Street furniture will be mostly timber and informal seating areas will be created within the green spaces. The central area of the development site will include materials a transition between the adjacent character areas including both metal and timber street furniture.

8.10 A network of footpaths and cycle routes are proposed to encourage the public to use designated routes and green spaces within the development and discourages access to more sensitive wetland and stream-side habitats of the meadows.

8.11 Provision for children and teenagers will include equipped play areas and natural features for informal play. Sports pitches will be provided at the east; a multi-use games area will be provided at the west.

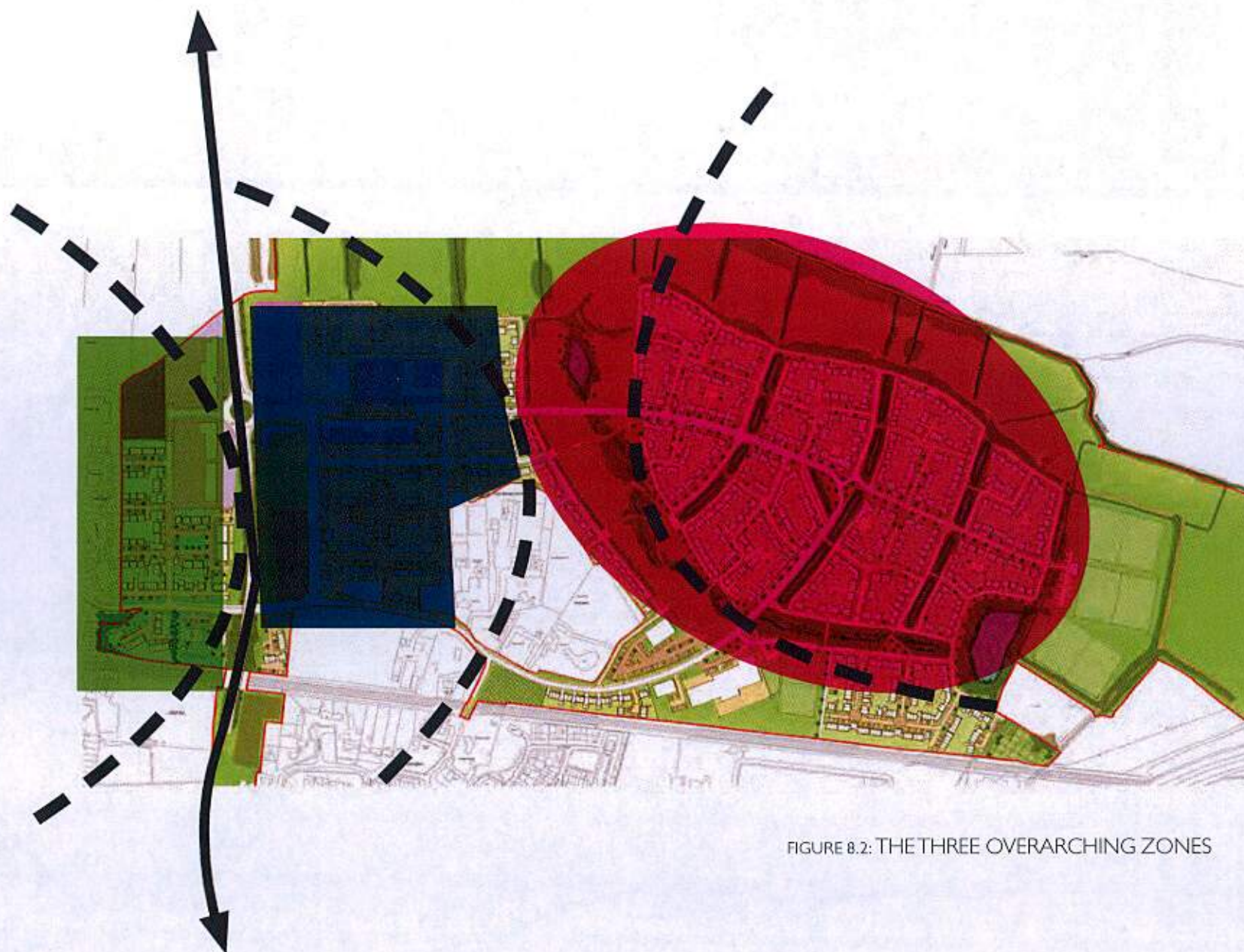


FIGURE 8.2: THE THREE OVERARCHING ZONES

	LOCAL CENTRE	SOUTHERN QUARTER	OUTER CENTRAL CORE	CENTRAL OPEN SPACE	EAST-CENTRAL AREA	OUTER AREA	WESTERN DEVELOPMENT EDGE
PUBLIC REALM: HARD LANDSCAPE							
SURFACING	Paving for main routes.	Macadam surfacing for main routes with paving at key locations.	Macadam surfacing for main routes with paving at key locations.	Macadam surfacing for main routes with paving at key locations. Hoggin and wood chip used for less intensively used routes.	Macadam surfacing for main routes with paving at key locations.	Macadam surfacing for main routes with paving at key locations. Hoggin and wood chip used for less intensively used routes.	Macadam surfacing for main routes with paving at key locations.
PATH SPECIFICATION	Combined cycle routes 3m metres, pedestrian routes 2 metres	Combined cycle routes 3m metres, pedestrian routes 2 metres	Combined cycle routes 3m metres, pedestrian routes 2 metres	Combined cycle routes 3m metres, pedestrian routes 2 metres	Combined cycle routes 3m metres, pedestrian routes 2 metres	Combined cycle routes 3m metres, pedestrian routes 2 metres	Combined cycle routes 3m metres, pedestrian routes 2 metres
STREET FURNITURE	Predominantly timber and metal used to reinforce urban character.	Predominantly timber and metal used to reinforce urban character.	Predominantly timber and metal used to reinforce urban character.	Timber furniture of a rural character used to bring the character of the watermeadows into the central wetland area.	Mix of timber and metal used to reinforce character area.	Timber furniture of a rural character used along edge of development.	Predominantly timber and metal.
BOUNDARY TREATMENT	Planting, hedging and low walls used to define private.	Planting, hedging, low walls and railings used to define private.	Open grass, hedging, planting and estate railings used to define private.	Boundary treatments more typical of rural locations including hedging, timber fencing and low walls.	Boundary treatments including hedging, timber knee high railings and grass verges to define private/semi-private spaces.	Boundary treatments more typical of rural locations including hedging and timber fencing and stone walling to keydefine private buildings. Notable variation to the northern boundary.	Planting and railings used to define private.
LIGHTING	Lighting level to create safe and usable routes.	Lighting level to create safe and usable routes.	Lighting to achieve safe environment along main routes.	Lighting to achieve safe environment along main routes.	Lighting level to create safe and usable routes.	Lighting to achieve safe environment along main routes.	Lighting level to create safe and usable routes.
SIGNAGE	Predominantly timber to include information on history of Littlehampton and habitats.	Predominantly timber to include information on history of Littlehampton and habitats.	Predominantly timber to include information on history of Littlehampton and habitats.	Predominantly timber to include information on history of Littlehampton and habitats.	Predominantly timber to include information on history of Littlehampton and habitats.	Predominantly timber to include information on history of Littlehampton and habitats.	Predominantly timber to include information on history of Littlehampton and habitats.
PUBLIC REALM: SOFT LANDSCAPE							
PLANTING SPECIFICATIONS	Ornamental species with sensory focus to complement play provision.	Ornamental species with sensory focus to complement play provision.	Ornamental species with sensory focus to complement play provision.	Native species to increase habitat diversity, sensory species to complement play provision.	Native species to increase habitat diversity, sensory species to complement play provision.	Native species to increase habitat diversity, sensory species to complement play provision.	Ornamental species with sensory focus to complement play provision.

TABLE 8.1: PUBLIC REALM TABLE

FORMAL AND INFORMAL PLAY AREAS

8.12 Local Area of Play (LAP), Local Equipped Area of Play (LEAP) zones and Neighbourhood Equipped Area for Play (NEAP) will be located strategically throughout the development. A LAP is an unequipped area of play within a 60m catchment. A LEAP is an area of open space with equipment for children to go out and play close to where they live, usually within 5 minutes of walking time; A NEAP is an area of open space laid out and equipped mainly for older children but with play opportunities for younger children as well.

8.13 LAPs are designed to provide localised areas of informal play within 60m catchment and are no smaller than 100 sq.m

8.14 LEAPs are designed to provide a stimulating and challenging play experience that may include equipment providing opportunities for balancing, rocking, climbing, overhead activity, sliding, swinging, jumping, crawling, rotating, imaginative play, social play, and play with natural materials such as sand and water, or other activities. The number and nature of equipment and structures is a matter for local consultation and decision though provision for a minimum number of six play experiences is recommended.

8.15 NEAPs area also designated to provide a stimulating and challenging play experience although a minimum number of nine play experiences is recommended.

8.16 Play areas located within the eastern part of the site will contain timber structures for informal / natural play opportunities; in the west play areas will be formal, suitable for an urban environment.

8.17 Natural play spaces will include landform and timber structures / boulders. The landform will be a maximum of 1.2m high; timber structures will be features such as balance beam logs or stepping logs. Balance beam logs could be suspended between two landform features with the upper surface flattened and scored to help prevent children from slipping. Stepping logs will be set into the ground within bark mulch zones and arranged to provide a stepping path. Urban play spaces will include traditional play equipment such as a slide, swings and play towers.

Spinning



Play tower



Swinging



Climbing / swinging



Sliding



Timber balance beam



Landform and balance beam



Climbing / jumping



Landform



Boulders



Swinging / informal play



Timber stepping logs



Ropes



Upright logs



Balancing



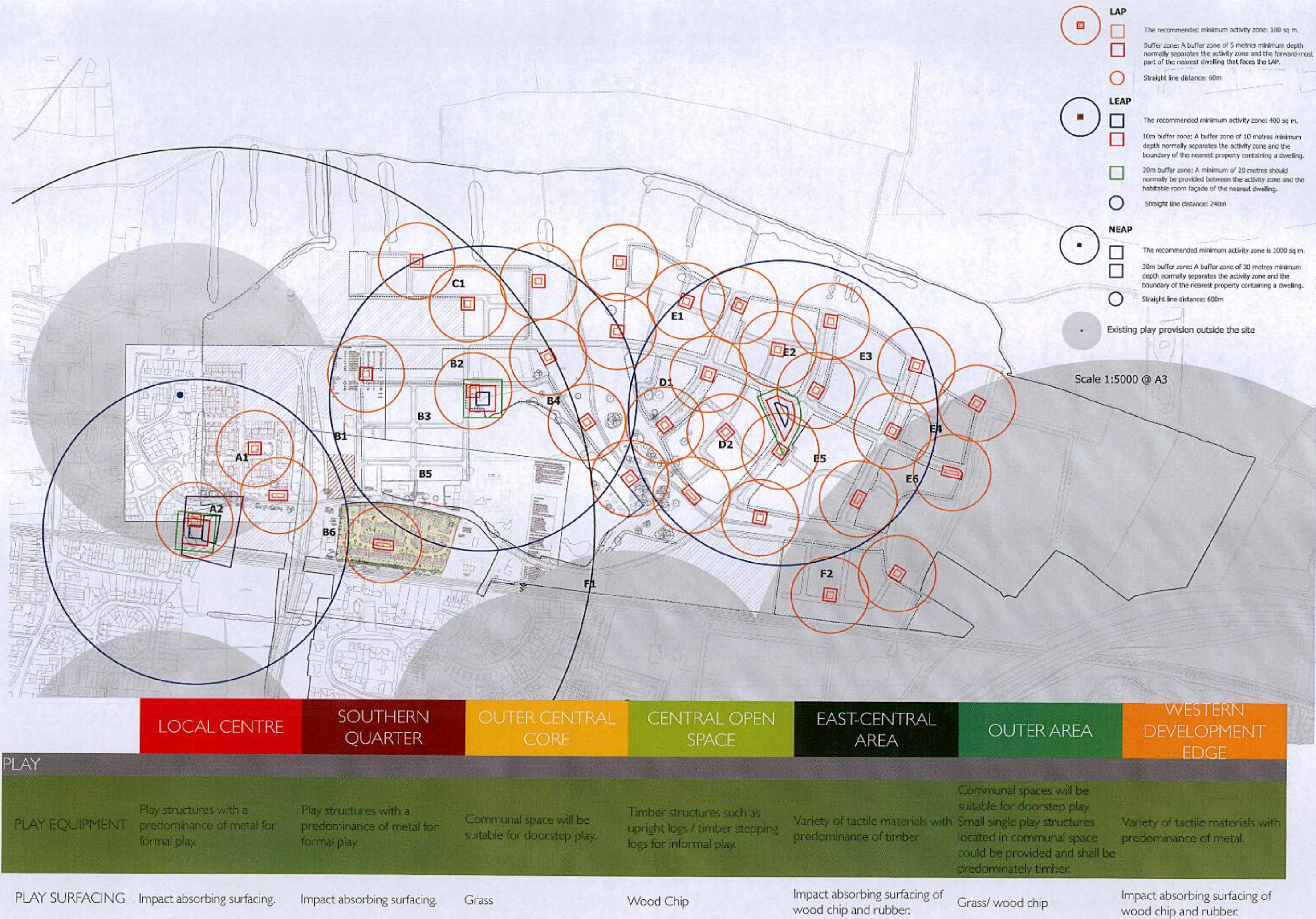


FIGURE 8.3: PLAY STRATEGY

CENTRAL WETLAND / OPEN SPACE

8.18 The central wetland is a key element of the green infrastructure within the master plan. The space acts as a 'Gateway' to the Black Ditch land, forming a starting point for trails into this part of the site and the countryside beyond. Access through the ecologically sensitive wetlands habitats created would be managed.

8.19 The central wetland is a large sunken area positioned within the centre of the overall development area. A swale will be created through the entire length of this space to direct runoff from the development towards the Black Ditch. The collected water will be held within a permanent pond and released gradually into the 'Black Ditch' located along the northern site boundary. The widest point of this space is some 135 metres.

8.20 There will be continuous footpaths and cycle north-south as well as linkages across the wetland; clearly defined routes to keep pedestrians away from ecologically sensitive habitats; and proposed tree and shrub planting to add interest. There will also be amenity and species rich grassland areas. The permanent pond, located towards the north of this space will be planted with suitable marginal aquatics which will add interest and increase biodiversity. Along the swales, there will be the creation of runoff attenuation wetlands.

8.21 Towards the southern section of this space where the width of the space decreases, existing trees will be retained to provide a mature parkland setting. Earthworks will be minimised in this area, allowing the retention of the trees, some of which are 'Category A' within the tree condition survey. The creation of the central swale through this space will also avoid existing trees. There will be informal play opportunities in this area relying on nature elements such as landform, timber upright logs, timber stepping logs, and balance beams. The northern section of this space will descend into the central wetland.

8.22 Housing fronting onto this space will have a formal park edge sense of place which will include planting to frame views, visitor parking, and seating etc.

ECOLOGY

8.23 The central wetland area will be created to form a riparian corridor to provide connectivity between the Black Ditch/ grazing marsh and a pond that will be retained towards the eastern extent of the site which connects to grazing marsh beyond. The vegetation within this area will mimic the grazing marsh habitat and will follow a similar sensitive management regime. By creating this area, a continuous green corridor is incorporated into the proposed development providing connectivity for a wide range of species including reptiles, foraging and commuting bats, water voles and otters.



Pond and wetland habitats



Pond and wetland habitats



Black Ditch and wetland habitats



Orchard and species rich grassland



Avenue defining routes



Swale and mown grass margin



Swale and detention basin



Species rich grassland



Walkway within wetland



Directional signage



Detention basin and recreation



Low level timber lighting bollard



Swale



Annual meadow



Information panel



CENTRAL WETLAND / OPEN SPACE

PLANTING SPECIFICATIONS:

Native species to increase habitat diversity

LIGHTING:

Low level lighting around edges

STREET FURNITURE:

Predominantly timber

SIGNAGE:

Predominantly timber to include information on habitats

PATH SPECIFICATIONS:

Macadam surfacing for main routes with soft binding gravel/paving at key locations.

PATH WIDTH:

Combines cycle routes 3 metres, pedestrian routes 2 metres

Nature trail routes to be hoggin / wood chip / compacted gravel.



BLACK DITCH AND FLOOD PLAIN

8.24 The water meadow habitat along Black Ditch is to be retained with appropriate long term maintenance and management. It forms the interface between the development site and the rural landscape to the north. Public access is encouraged to those areas where access provision is compatible with the habitats sensitivities.

8.25 The strategy for the Black Ditch land is focused on enhancing biodiversity value. A network of mown footpaths would be provided to control public access whilst providing a variety of experience. The routes will be mown paths / hoggin / woodchip / compacted gravel. Recreation activities and access would be focussed on designated routes along the periphery of the area, adjacent to the residential areas, to limit disturbance of ecologically sensitive habitats.

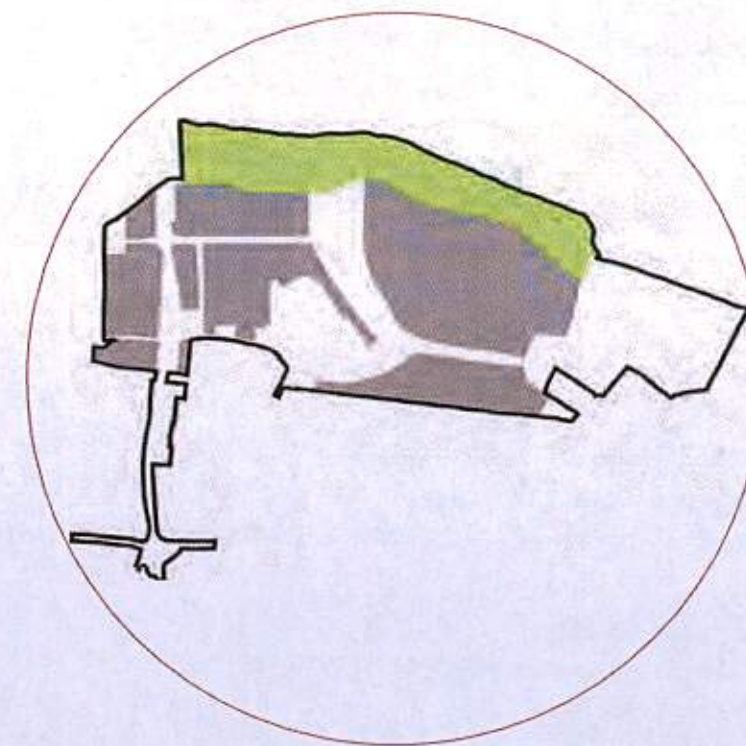
8.26 Potential livestock grazing or cutting for a hay crop will be considered as a means of long term management to conserve and enhance the ecological interest of the floodplain habitats. Maintenance would avoid encroachment of scrub/hedgerows into water meadows due to potential loss of grassland habitat.

ECOLOGY

8.27 The floodplain grazing marsh runs the length of the development site from west to east. This will be managed sensitively to enhance the floral diversity of the hay meadows that currently exist. Enhancements will be put in place to create suitable habitat for species such as reptiles and birds. The grazing marsh is dissected by drainage ditches many of which are currently dry. Where practical these will be enhanced and re-instated to create new aquatic habitat for water voles and aquatic invertebrates. These ditches will be managed sympathetically in the

future in line with an Ecological Management Plan.

8.28 The Black Ditch runs along the northern boundary of the site, and is fringed with marshy grassland habitat. The Norway Ditch is located within the eastern area of the site and the Toddington Ditch in the central section. The hydrological regime of these watercourses will be protected within the final development, and through sympathetic management of the water courses, where appropriate these habitats will be enhanced for water voles, otters, aquatic plants and foraging and commuting bats.





OUTDOOR SPACE / BLACK DITCH AND FLOOD PLAIN

PLANTING SPECIFICATIONS:

Habitat Management to focus on increasing habitat diversity. Minimal planting may be necessary to reinforce existing hedgerows/field pattern, using locally sourced native planting stock.

STREET FURNITURE:

8.29 Predominantly timber – but no furniture envisaged in this area

PATH SPECIFICATIONS:

8.30 Informal routes to be hoggin / wood chip / compacted gravel / mown paths

LIGHTING:

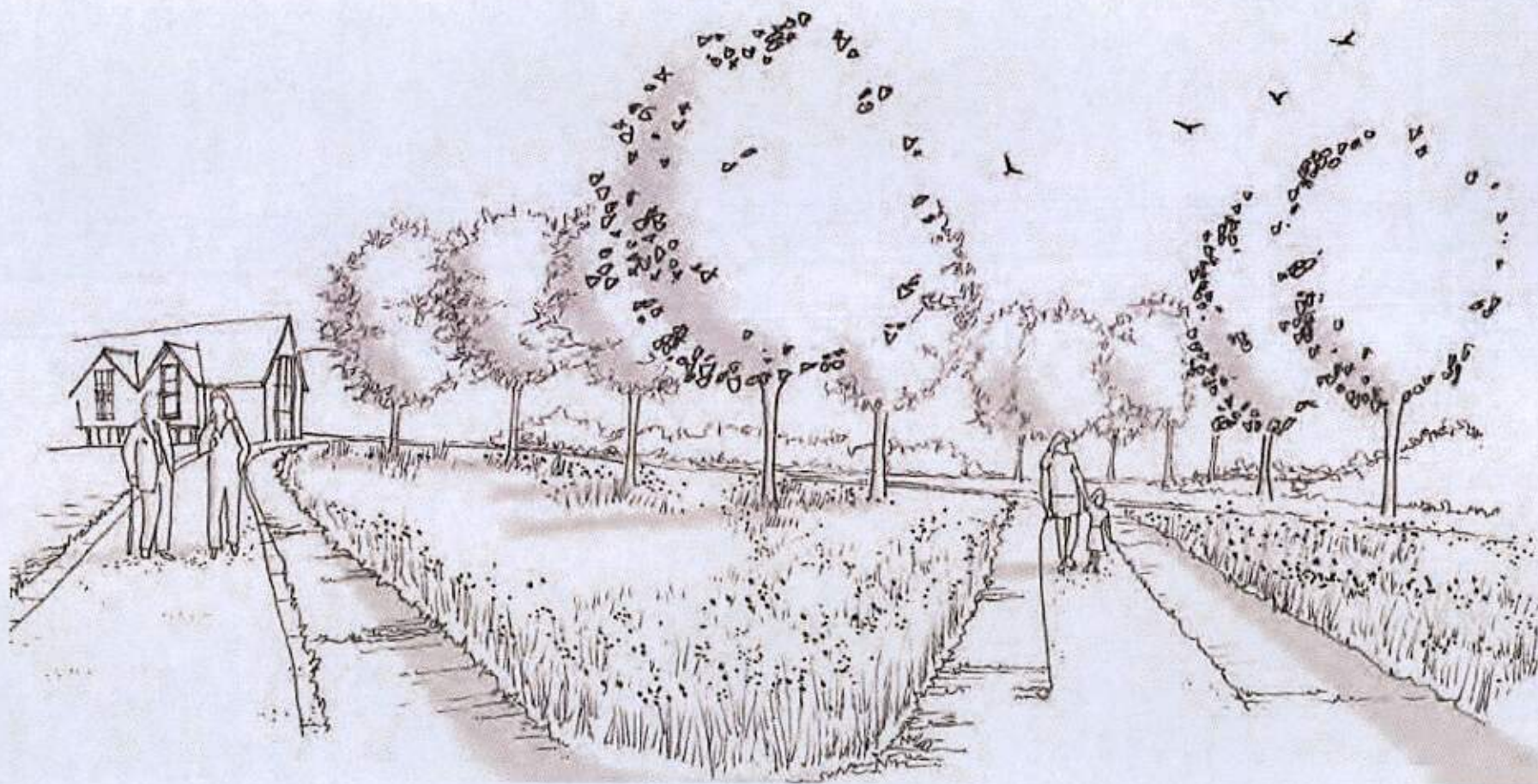
Lighting to be avoided – dark corridors at development edges

SIGNAGE:

Predominantly timber to include information on habitats

PATH WIDTH:

Pedestrian routes 2 metres



SPORTS PITCHES

8.31 The key design objective for the sports pitches is to retain existing features where possible, such as mature trees and field boundary hedgerows. This has been possible where this aim is consistent with the earthworks required to create the football pitches. These features are supplemented with a variety of planting, habitats, green spaces and drainage features to enhance amenity and biodiversity.

8.32 There are a number of secondary design objectives which have guided the landscape design for the Sports Pitches

8.33 Enhance bio-diversity through the creation of species diverse grassland and wetland areas;

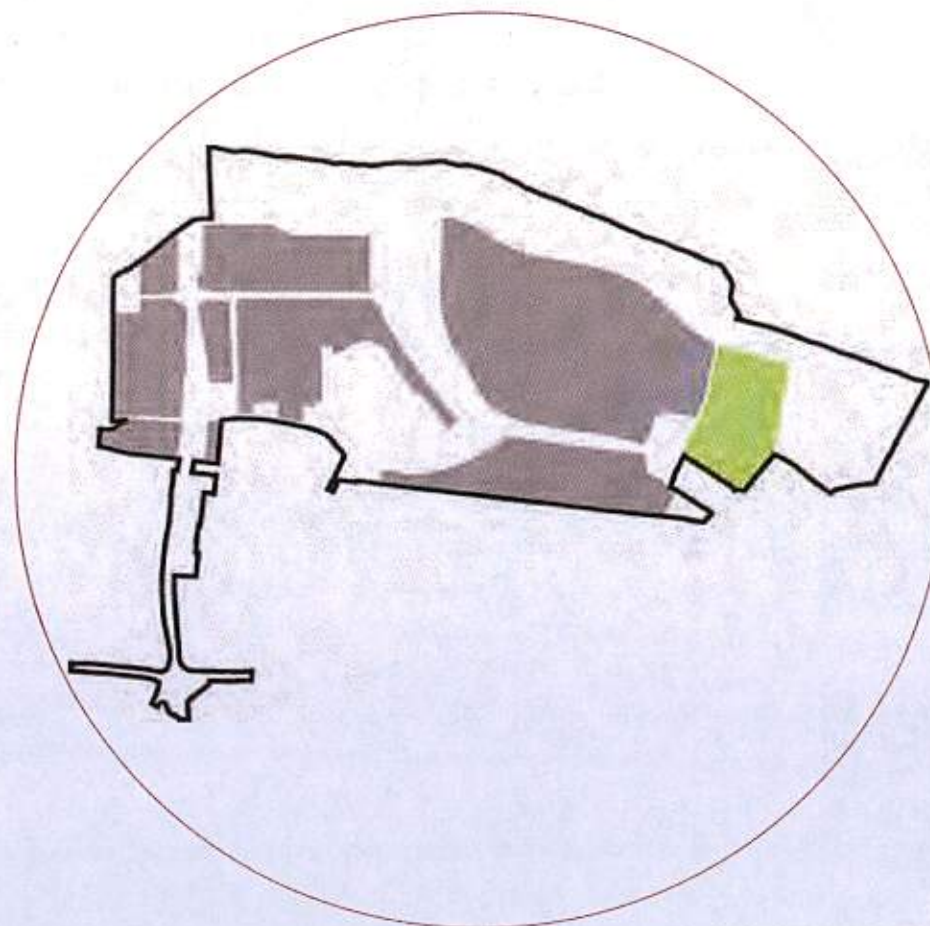
8.34 Improve the overall recreation provision for future residents of the development and existing communities near the site;

8.35 Create a 'green' framework for the site, within which the development would sit; and

8.36 Assist in achieving sustainability objectives, for example increasing biodiversity and incorporating Sustainable Drainage Systems (SuDS).

8.37 Existing trees have been retained where possible. An understory of native shrubs will be planted at the eastern and western boundaries using species consistent with the recommendations with the Phase I habitat survey; this area will include *Crataegus monogyna*, *Acer campestre* and *Corylus avellana*. It will form a landscape buffer between the park and adjacent housing.

8.38 A new pavilion building will also be constructed to provide changing facilities for the sports pitches.





OUTDOOR SPORTS

PLANTING SPECIFICATIONS:

Native species to increase habitat diversity

STREET FURNITURE:

Predominantly timber and metal

PATH SPECIFICATIONS:

Macadam/ self binding gravel surfacing for main routes

LIGHTING:

Limited lighting in that area

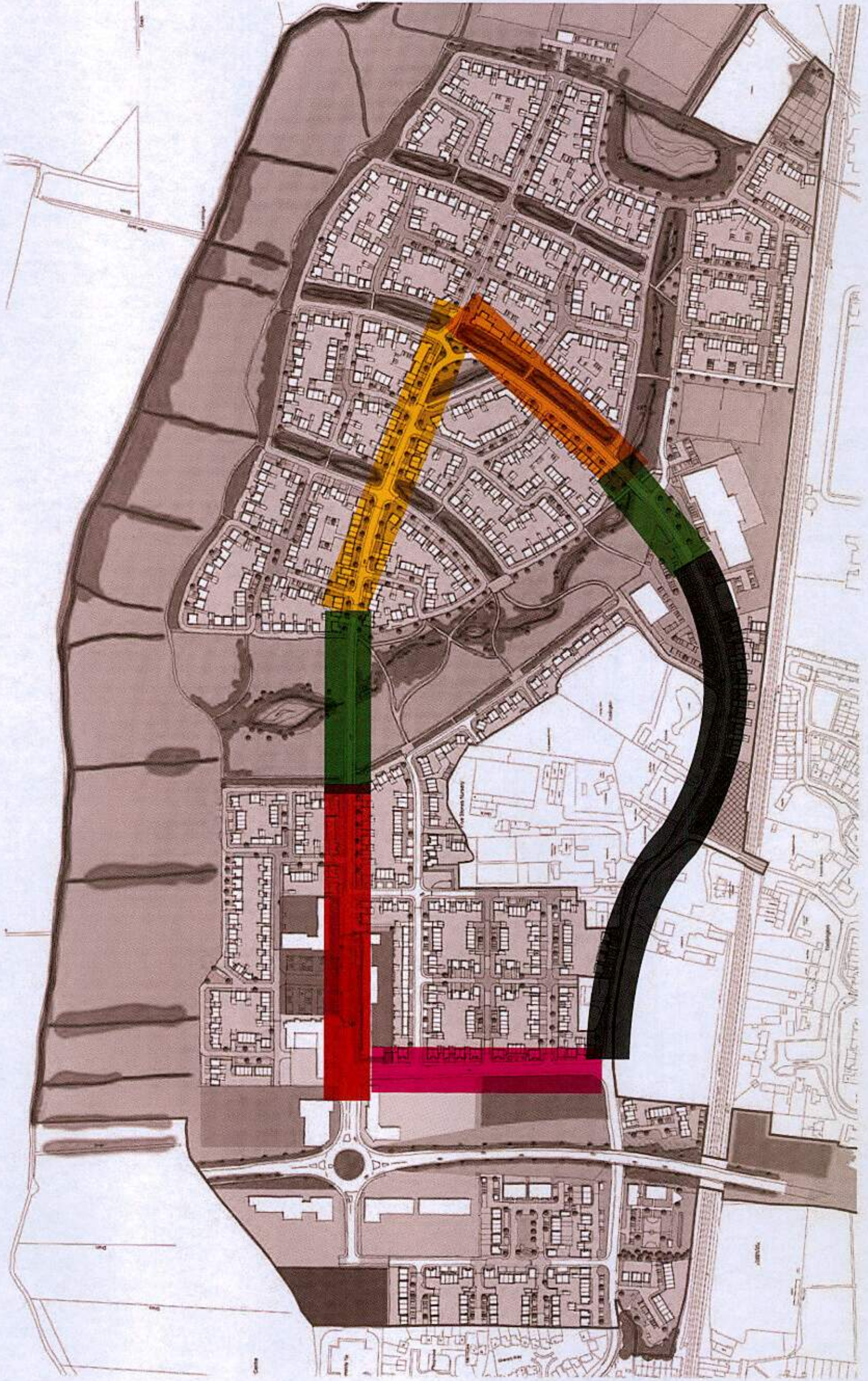
PATH WIDTH:

Combines cycle routes 2.5 metres, pedestrian routes 2 metres

THE AVENUE

8.39 The Spine is a dominant feature within the master plan. Its character will vary to ensure that road does not become a homogeneous circuit through the site. This will be achieved in a number of ways as set out below:

	1	2	3	4	5	6
URBAN + BUILDING FORM						
FRONTAGE TYPE	Building lines are to have a strong and contiguous form, with subtle variation in set back.	Limited	Strong frontage with predominantly regular building lines	Strong frontage with predominantly regular building lines	Strong frontage with predominantly regular building lines	Buildings to address the street with irregular set back and orientation
BUILDING TYPES	Predominantly apartments/ Retail units	Detached Residential to either side of the Central Open Space	A mix of terrace, semi-detached and occasional detached. Apartments within Focal Space	A mix of semi-detached, detached and occasional terraced. Apartments within Focal Space	A mix of semi-detached, detached and occasional terraced.	Detached and Semi-detached
BUILDING HEIGHTS	Predominantly 3 and 4 storey mixed use blocks.	2 Storey.	Predominantly 2- 3 Storey development. 3 storey development located close to the focal space.	Predominantly 2- 3 Storey development. 3 storey development located close to the focal space.	Predominately two storey	Predominately two storey
CORNERS	Strong definition, active building faces	Strong definition, active building faces	Strong definition, active building faces that address public and semi-public space..	Strong definition, active building faces that address public and semi-public space..	Strong definition, active building faces	Strong definition, active building faces
FRONT BOUNDARY TREATMENT	Thin privacy strips of predominantly hard landscape. Structured planting (hedging) maybe used within areas of housing.	Low walls 600mm, Estate railings, hedging	A range boundary treatment such as hedging, open grassed verges. Low walls in focal areas (600mm)	A range boundary treatment such open grassed verges, fencing and low walls in focal areas (600mm)	Grassed verges, walls and hedging	Walled boundary edges
LANDSCAPE						
VERGES	Minimal - planting within tree grilles. Possible single verge to the southern side of the road where it interfaces with the Central Open Space	Minimal - No Planting	Double sided tree lined verges where parking and drainage requirements permit.	Single sided verges and planting with SuDs feature to the eastern side of the road.	No verges to reflect more urban character.	Tree planting by proposed school and community centre.
GARDENS	0-2m	2-4m	2-4m	2-6m	2-6m	2-6m
LANDSCAPING	Tilia tomentosa 'Brabant' (Silver lime).	No trees along the spine road in this area – we would like to retain open views through this space	Corylus colurna (Turkish hazel)	Tilia tomentosa 'Brabant' (Silver lime)	Sorbus aucuparia 'Sheerwater Seedling' (Upright rowan)	Retain existing trees and plant Quercus robur (English Oak) into large spaces where appropriate.



THE AVENUE FOCAL SPACES

8.40 Focal spaces in the landscape are main areas of interest and amenity activity. Spaces will be landmark features or points of arrival into the different part of the development area. The use of materials, buildings orientation, and soft landscape will be manipulated to create distinct identity. The materials used will vary within an area to create a sense of place and define arrival points. Throughout the development, focal spaces will primarily be created along the main spine road. The theme of the spaces will relate back to the overall character of the site, identified as **Eastern Edge; Central Area; and West of the Bypass**. The main spine road will be lined with an avenue of trees and will be planted with different tree species through each character space. The spine road through the central wetland area will not be lined with trees to retain views through the space. Focal spaces along the spine road will be located at junctions and at areas with a change of use, for example at the local centre.

8.41 Within the **Eastern Edge** character area, focal spaces will be created through the use of planting and building orientation / landmark buildings. Where possible buildings will front onto junctions diagonally to enhance the space, creating 'nodes' along the spine road, and building materials will be kept to a limited palette. Large buildings will be placed strategically to create a focal point in the view as the user approaches the focal space. Planting will be strengthened at the junctions and will include evergreen shrubs to provide interest through the winter months. A number of feature trees will be planted to strengthen the space and to provide additional interest. The focal spaces /

nodes will also help to naturally reduce the speed of vehicles travelling along the spine road. A change in paving materials will be contained to the footways, where appropriate, and will include block paving; the colour of the paving reflecting materials used for the adjacent buildings.

8.42 The **Central Area** includes the Local Centre, the Outer Central Core, and the Western Development Edge. The main focal space within this area will be at the entrance to the Local Centre. There will be a change of materials and character along the spine road in this location which will be continued within the Local Centre area. This change in materials will create a sense of place upon arrival and will also naturally slow down the speed of traffic within the vicinity. Trees will be arranged in a grid within the Local Centre which will be replicated along the adjacent section of spine road.

8.43 The focal spaces along the spine road to the **West of the Bypass** will create entrance features to the commercial buildings. Planting will be bold and trees will be clustered to filter views towards the commercial buildings and reduce the apparent extent of car parking areas. Landform features will also be created and supplemented with planting where appropriate.

8.44 The **Central Open Space** is a significant amenity space within the site and will be the primary focal space of the development. Buildings will front onto this space and views will be created from the spine road which passes through the wetland area. Planting will be strategically positioned to define view corridors.

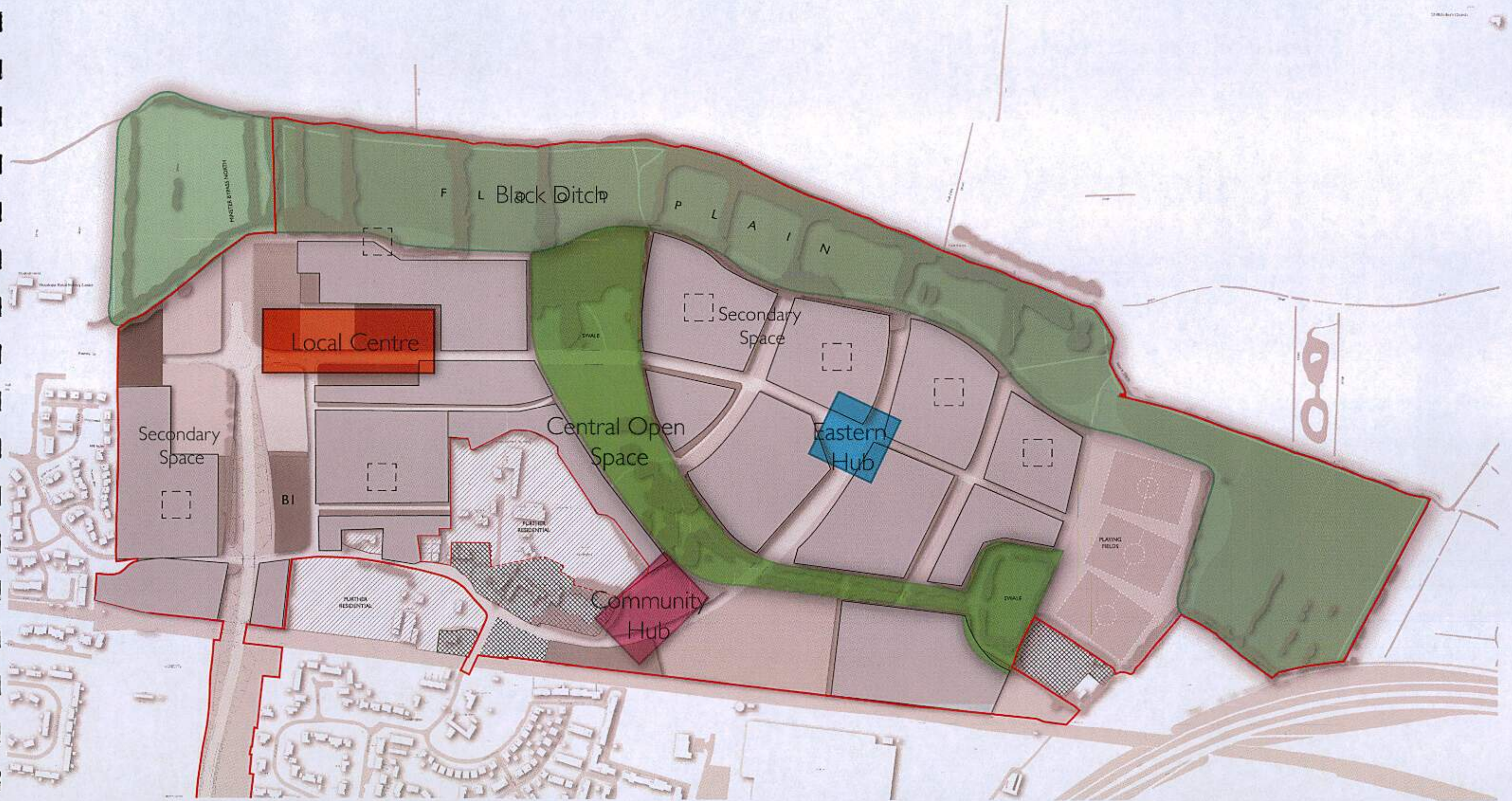
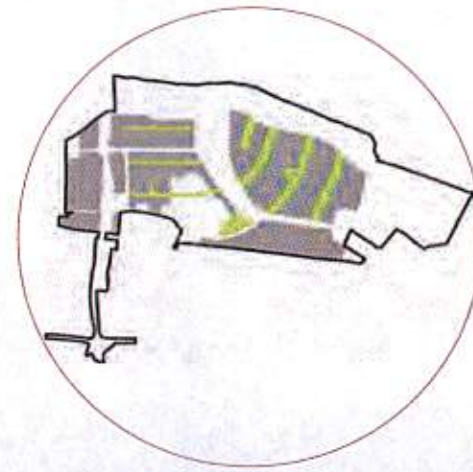


FIGURE 8.4: KEY SPACES

COMMUNAL SPACE

8.45 Communal spaces are neighbourhood parks, green corridors with sustainable drainage systems, and other green areas located within the residential parcels. Green areas will be suitable for community events and door step play opportunities. Properties will be facing onto the communal space areas for natural surveillance. Ground cover will primarily be amenity grass, although the outer edges of these spaces and green corridors will be long grass or seeded with wildflowers. Native trees will be planted into groups; native planting will add structure to the spaces and increase potential biodiversity. Flowering bulbs will be planted to add spring interest.



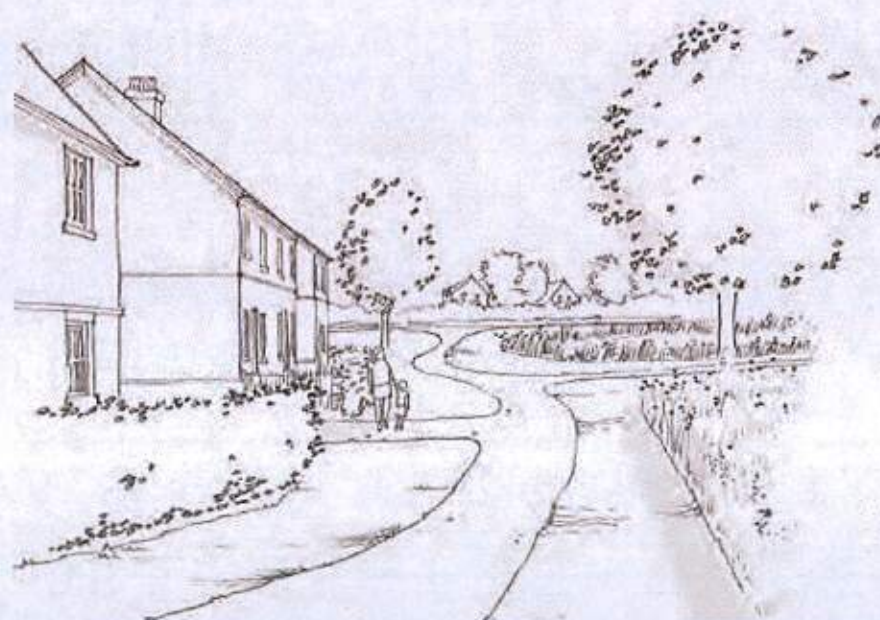
8.46 Amenity and native tree planting will help provide shade and cooling during the summer. Tree species will include *Prunus avium* (wild cherry); *Acer campestre* (field maple). Where appropriate, larger non-native trees, such as *Acer platanoides* (Norway Maple), will be planted. Native structure planting to provide visual interest within the space will include *Corylus avellana* (hazel); *Cornus sanguinea* (dogwood); *Acer campestre* (field maple); *Rosa canina* (dog rose); and *Sambucus nigra* (elder).

8.47 Where space is available fruit trees will be planted. Individual benches or picnic tables will also be provided in the communal space areas and where necessary, informal footpaths will be constructed.

8.48 An allotment area has been provided at the south-eastern corner of the site.

ECOLOGY

8.49 A number of Linear SuDS areas 'green fingers' have been incorporated into the master plan which will connect the floodplain grazing marsh with central wetland area. These green fingers will comprise an avenue of wildflower grassland with standard trees and hedgerows. These will be managed sensitively to maximise the biodiversity gain across the site.



Timber planters



Planting opportunities



Allotments



Orchard



Ecological corridors



Shrub planting



Spring flowering bulbs



Green corridor



Wildflower grass



Bench



Picnic table



Long grass



Picnic



Community events



Native planting



	LOCAL CENTRE	SOUTHERN QUARTER	OUTER CENTRAL CORE	CENTRAL OPEN SPACE	EAST-CENTRAL AREA	OUTER AREA	WESTERN DEVELOPMENT EDGE
PUBLIC REALM: HARD LANDSCAPE							
SURFACING	Paving for main routes.	Macadam surfacing for main routes with paving at key locations.	Macadam surfacing for main routes with paving at key locations.	Macadam surfacing for main routes with paving at key locations. Hoggins and wood chip used for less intensively used routes	Macadam surfacing for main routes with paving at key locations	Hoggins and wood chip used along rural edge of the site	Macadam surfacing for main routes with paving at key locations
PATH SPECIFICATION	Combines cycle routes 3 metres, pedestrian routes 2 metres	Combines cycle routes 3 metres, pedestrian routes 2 metres	Combines cycle routes 3 metres, pedestrian routes 2 metres	Combines cycle routes 2.5 metres, pedestrian routes 2 metres	Combines cycle routes 2.5 metres, pedestrian routes 2 metres	Combines cycle routes 2.5 metres, pedestrian routes 2 metres	Combines cycle routes 2.5 metres, pedestrian routes 2 metres
STREET FURNITURE	Predominantly timber and metal used to reinforce urban character	Predominantly timber and metal used to reinforce urban character	Predominantly timber and metal used to reinforce urban character	Timber furniture of a rural character used to bring the character of the watermeadows to reinforce character area into the central wetland area	Mix of timber and metal used to reinforce character area	Timber furniture of a rural character used along edge of development	Predominantly timber and metal
BOUNDARY TREATMENTS	Thin privacy strips of predominantly hard landscape. Structured planting (hedging) may be used within areas of housing.	A range of low walls and fences (600mm) boundary treatment and hedging	Open grass and hedging. Low walls and/or estate railings (600mm) on local spaces	A range of low wall and fences (600mm) boundary treatment and hedging.	Timber knee rails, railings, grass verges and hedgerows.	Timber knee rails, railings, grass verges, hedgerows to stone walls to key buildings	Railings and grass/planted verges
LIGHTING	Lighting level to create safe and usable routes	Lighting level to create safe and usable routes	Lighting to achieve safe environment along main routes	Lighting to achieve safe environment along main routes	Lighting level to create safe and usable routes	Lighting to achieve safe environment along main routes	Lighting level to create safe and usable routes
SIGNAGE	Legible and robust signage in a style consistent with Littlehampton	Legible and robust signage in a style consistent with Littlehampton	Legible and robust signage in a style consistent with Littlehampton	Legible and robust signage in a style consistent with the rural edge	Legible and robust signage in a style consistent with Littlehampton	Legible and robust signage in a style consistent with the rural edge	Legible and robust signage in a style consistent with Littlehampton
PUBLIC REALM: SOFT LANDSCAPE							
LANDSCAPE PLANTING	Ornamental species to increase amenity value	Ornamental species to increase amenity value	Mix of Native and ornamental species to increase habitat diversity and amenity value	Native species to increase habitat diversity	Mix of Native and ornamental species to increase habitat diversity and amenity value	Native species to increase habitat diversity	Mix of Native and ornamental species to increase habitat diversity and amenity value
ECOLOGY	Green fingers will comprise wildflower grassland with standard trees and hedgerows. These will be managed sensitively to maximise the biodiversity gain across the site.	Green fingers will comprise wildflower grassland with standard trees and hedgerows. These will be managed sensitively to maximise the biodiversity gain across the site.	Green fingers will comprise wildflower grassland with standard trees and hedgerows. These will be managed sensitively to maximise the biodiversity gain across the site.	Green fingers will comprise wildflower grassland with standard trees and hedgerows. These will be managed sensitively to maximise the biodiversity gain across the site.	Green fingers will comprise wildflower grassland with standard trees and hedgerows. These will be managed sensitively to maximise the biodiversity gain across the site.	Green fingers will comprise wildflower grassland with standard trees and hedgerows. These will be managed sensitively to maximise the biodiversity gain across the site.	Green fingers will comprise wildflower grassland with standard trees and hedgerows. These will be managed sensitively to maximise the biodiversity gain across the site.

PRIVATE OUTDOOR SPACE

8.50 Private outdoor space areas include the front and rear of properties. They will be designed to provide privacy to residents and to define private and public space. Front gardens will include a combination of ornamental and mixed herbaceous plants, amenity grass and shrubs, and / or low hedging, low walling to provide a green boundary. At street junctions, ornamental shrubs will be planted to create a bold statement with medium to large sized shrubs.

Ornamental shrub species will include:

- *Elaeagnus ebbingei*
- *Euonymus fortunei* 'Dart's Blanket'
- *Hebe pinguifolia* 'Pagei'
- *Hypericum* 'Hidcote'
- *Lonicera nitida* 'May Green'
- *Phormium* 'Sundowner'
- *Prunus laurocerasus* 'Otto Luyken'
- *Spiraea nipponica* 'Snowmound'
- *Stephanandra incisa* 'Crispa'
- *Viburnum opulus* 'Compactum'
- *Viburnum tinus* 'Eve Price'

Herbaceous plants will include:

- *Achillea* 'Moonshine'
- *Aster novi-belgii*
- *Calamagrostis acutiflora* 'Karl Foerster'
- *Geranium* 'Johnson's Blue'
- *Sedum spectabile* 'Brilliant'
- *Iris pseudacorus*

8.51 Garden boundaries located within the eastern area of the site will contain timber boundaries such as a low palisade fence; within the west, boundaries will be railings / low walls. At residential 'squares', front garden boundaries will include low walls with railing to define the space. Rear boundaries adjacent to public spaces will be a brick walls or brick walls with timber infill.

8.52 Rear gardens will include a small paving area; paving colours will complement the proposed building materials. Small trees will also be planted where suitable space is available, including fruit trees.



	LOCAL CENTRE	SOUTHERN QUARTER	OUTER CENTRAL CORE	CENTRAL OPEN SPACE	EAST-CENTRAL AREA	OUTER AREA	WESTERN DEVELOPMENT EDGE
PUBLIC REALM: HARD LANDSCAPE							
SURFACING	Paving	Macadam surfacing for private paths	Macadam surfacing for private paths	Self-binding gravel, hoggins and wood chip used for private footpaths	Macadam for private paths	Macadam, hoggins and wood chip used for private footpaths	Macadam surfacing for private paths
PATH SPECIFICATION	Pedestrian routes 2 metres wide, private paths 1.2m wide	Pedestrian routes 2 metres wide, private paths 1.2m wide	Combined cycle routes 2.5 metres, pedestrian routes 1.5 metres and 2 metres	Combined cycle routes 2.5 metres, pedestrian routes 1.5 metres and private paths 1.2 metres	Pedestrian routes 2 metres wide, private paths 1.2m wide	Combined cycle routes 2.5 metres, pedestrian routes 1.5 metres and private paths 1.2 metres	Pedestrian routes 2 metres wide, private paths 1.2m wide
BOUNDARY TREATMENT	Thin privacy strips of predominantly hard landscape. Structured planting (hedging) may be used within areas of housing.	A range of low walls and fences (600mm) boundary treatment and hedging	Open grass and hedging. Low walls and/or estate railings (600mm) on focal spaces.	A range of low wall and fences (600mm) boundary treatment and hedging.	Timber knee rails, railings, grass verges and hedgerows.	Timber knee rails, railings, grass verges, hedgerows to stone walls to key buildings	Railings and grass/planted verges
LIGHTING	Lighting level to create safe and usable routes	Lighting level to create safe and usable routes	Lighting to achieve safe environment along main routes	Lighting to minimise impact on 'dark corridors'	Lighting level to create safe and usable routes	Lighting to minimise impact on 'dark corridors'	Lighting level to create safe and usable routes
PUBLIC REALM: SOFT LANDSCAPE							
PLANTING SPECIFICATIONS	Limited use of native species to increase habitat diversity, use of ornamental species where space / function dictates	Limited use of native species to increase habitat diversity, use of ornamental species where space / function dictates	Limited use of native species to increase habitat diversity, use of ornamental species where space / function dictates	Limited use of native species to increase habitat diversity, use of ornamental species where space / function dictates	Limited use of native species to increase habitat diversity, use of ornamental species where space / function dictates	Limited use of native species to increase habitat diversity, use of ornamental species where space / function dictates	Limited use of native species to increase habitat diversity, use of ornamental species where space / function dictates



DRAINAGE STRATEGY

The following section sets out the principles for the strategy but the detail of which will need to part of detailed Flood Risk Assessment (FRA) with each Reserved Matters Application to demonstrate its technical delivery of the principles.

SURFACE WATER DRAINAGE

8.53 All developments present opportunities to incorporate Sustainable urban Drainage Systems (SuDS), which might include infiltration drainage or attenuation of flows to protect watercourses. The choice of system is dependent upon the ground conditions and site specific characteristics. The use of SuDS attempts to mimic the flow regime of the existing site, thus reducing the impact of the proposed development on the hydrology of the receiving catchment.

8.54 Intrusive ground investigations and soakage testing undertaken have confirmed that infiltration methods for the disposal of surface water runoff are unlikely to be practical across the majority of the site as the underlying material generally found to comprise Clay.

8.55 The surface water drainage systems from the proposed development will therefore discharge to the local watercourses. Rates of discharge will be lower than those from the existing site which will help reduce the risk of flooding downstream.

8.56 All SuDS will be designed in accordance with CIRIA Report C697 'The SuDS Manual' (2007) and to the emerging National Standards produced in support of The Flood and Water Management Act 2010. In accordance with the SuDS Manual, a "SuDS Management Train" approach will be followed and source control techniques will be incorporated into the drainage strategy to ensure that surface water runoff is managed as close to source as possible.

8.57 SuDS techniques proposed include pervious pavements, geocellular storage, and swales. All SuDS will be designed to accommodate surface water runoff from all rainfall events up

to including the 1 in 100 year including an additional 30% allowance in rainfall for the possible effects of climate change so as not to increase flood risk at the site or downstream in accordance with the requirements of national and local planning policy.

8.58 SuDS systems are shown to be effective in removing general urban runoff pollutants and will treat and attenuate surface water runoff prior to discharge to the local watercourse.

FLOOD COMPENSATION

8.59 Finished floor levels will be set no lower than 500mm above the flood levels within the approved FRA in order to minimise any risk of flooding to the proposed development from fluvial sources associated with Black Ditch.

8.60 Compensatory flood storage will be provided for any potential loss of floodplain on a level for level basis to the design flood levels specified within the approved FRA. The provision of compensation aims to ensure that floodplain storage, which could otherwise result in an increase in flooding downstream, is not lost as a result of development proposals.

FOUL WATER

8.61 Wastewater effluent from the proposed development will be discharged to Southern Water's network. Southern Water have been consulted to ensure that any solution does not exacerbate existing problems within the downstream network.



FIGURE 8.5: THE OVERALL DRAINAGE STRATEGY

9. SUSTAINABILITY

This section of the Development Framework Document sets out the measures proposed to mitigate against the impacts of climate change and provide overarching sustainable principles that are to be integrated within the future Reserved Matters Applications.

The master plan has been designed to provide an holistic, appropriate and effective response to climate change in terms of technology and design measures.

The measures seek to reduce CO² emissions through permeable and legible development that reduces the need for car journeys to local amenities, as well as through a combination of efficiency, recycling and use of renewable sources.

The creation of a sustainable development has been fundamental to the design process. The following headings set out the key aspects of the design:

LAYOUT AND URBAN FORM

8.62 The structure and orientation of development will be designed to take account of:

- Provision of shading through the significant retention of on-site vegetation in conjunction with new tree and hedgerow planting;
- The substantial areas of green space will provide green amenities and ecological enhancement across the master plan area.
- Provide a network of streets and spaces that enable and encourages residents to walk and cycle to local amenities and facilities; and
- Optimise solar exposure through block orientation and architecture to promote good levels of natural daylight.

TRANSPORT

8.63 An integrated transport strategy has been developed to provide permeable, legible, attractive and safe routes that prioritise the pedestrian, cycle and bus movement within and across the master plan to ensure they tie in with local amenities and facilities.

8.64 The master plan will deliver a range of Strategic Transport Provision.

SITE WIDE ENERGY SAVINGS

8.65 The Outline Planning consent requires at least 10% of the energy supply of the development shall be secured from decentralised and renewable or low carbon energy sources.

8.66 Within this aspect five methods have been considered that include: Solar Thermal, PV panels, CHP, Wood Burning Stoves and Fabric First for reducing regulated energy use on site, and is proposing to proceed with the following:

FABRIC FIRST

The developer's proposed specification shows that in excess of a 10% reduction of carbon emissions over the Part L baseline assessment before low carbon / renewable options are considered can be achieved.

This will include a building fabric which exceeds Part L limiting U-Values, plus higher efficiency boiler, lighting and ventilation systems. This meets the policy requirements of carbon reduction goals of the National Planning Policy Framework, and follows the principles set down by the Zero Carbon Hub.

The adoption of the Fabric First method ensures that the enhanced performance is embedded within the properties for duration their design life with little or no maintenance required as opposed to bolt-on options which can reduce in performance over time and require regular maintenance and therefore attract additional cost for the home owner.

COMMUNITY CHP

As part of the Outline planning strategy consideration was given to the possibility of reducing enough energy on site to offset 10% of the development's expected regulated energy use by installing a community heating system with integrated CHP (Combined Heat and Power) as an alternative to mains gas combi boilers to all plots.

This is based on a series of community CHP with a seasonal efficiency no worse than 79%, and a CHP heat-to-power ratio of 2.27 or lower. It has been assumed that commercial gas boilers with an efficiency no worse than 90% will meet the 40% of the heating demand across the site. It has been assumed that these boilers would feed heating and hot water to all plots. Whilst, this option is feasible on paper, and is a way of meeting the required reduction by generating electricity through the use of turbines which are built into the main heating system, there are a number of significant disadvantages. Technically this would be a challenging and expensive option to carry forward. Community heating is more economical when installed into blocks of flats or terraces of houses. Additional pipework and additional substations will be required in the case of a development of this nature.

Community heating systems also require regular maintenance; so long term funding would need to be secured if this option was considered further putting financial burden on the development occupants. Failure of CHP systems can also lead to long term site wide loss of both heat and power as has been the case recently on a number of large city centre schemes causing wider reaching issues.

It is on this basis that the use of this form of system has been discounted.

BUILDING SPECIFICATION

8.67 The developer's preferred specification for achieving a site wide 10% reduction in energy use (compared to the 2010 Target Emission Rate) the a Fabric First approach contains the following key ingredients:

GROUND FLOORS:

All ground floors will be constructed to achieve a U-Value of 0.20 or lower. This value varies depending on the shape and size of a building, however it can typically be achieved by installing 70mm insulation under screed.

EXTERNAL WALLS:

Persimmon South Coast intend to use the Space 4 timber framed system to all external walls which will achieve a U-Value of 0.29, and record a much lower thermal mass when compared to standard masonry construction dwellings.

ROOF SPACES:

Where insulation is installed in the loft space, a U-Value of 0.14 will be achieved. This is achievable by using 300mm mineral wool quilt.

OPENINGS:

Persimmon Homes has committed to installing windows to all plots with a typical U-Value of 1.40 (including frames). External doors will be fully insulated and achieve a U-Value result of 1.00.

THERMAL BRIDGING:

Instead of using standard sets of thermal bridging details (such as Accredited Construction Details), this development will adopt a bespoke set of psi-value calculations which have been created in conjunction with Persimmon Homes and Space 4. The results of this means less energy is lost through the junctions of the buildings.

AIR PERMEABILITY:

All plots will be tested for air leakage to achieve a value of 5.5 or lower

VENTILATION:

System 1 ventilation will be used – intermittent extraction fans.

HEATING / HOT WATER:

This assessment has been based on the Ideal Combi ES boiler range. The developer should ensure the actual boilers used meet the same efficiencies as these models for both heating and hot water.

HEATING CONTROLS:

All plots should be fitted with delayed start thermostats, weather compensators and time and temperature zone controls.

LIGHTING:

All fixed lighting outlets should be fitted with low energy bulbs. This includes LEDs.

WATER USAGE

The properties will have low flow sanitary fittings to restrict average water consumption to 105L/p/d. This will be achieved through low flow taps and showers, dual flush WCs and water butts.

WATER RUN-OFF

8.68 The development takes account of extreme weather incidents including heavy prolonged rainfall. The measures include:

- A Sustainable urban Drainage System to include a range of features across the master plan; Once implemented, these will ensure that the proposed development will not have any adverse impact on flood risk, water quality or foul/potable infrastructure.
- Retention of existing vegetation, green space and creation of additional green space and gardens permeable surfaces is proposed to ensure level of hard standing are reduced across the master plan.
- New planting as part of the landscaping scheme as that are cope with the current climatic conditions of the local area.

WASTE/ MANAGEMENT

8.69 Recycling arrangements including storage and collection for houses will be carefully integrated in to the design of properties, servicing areas and private and/or communal spaces; and

8.70 The development will address local waste management strategies.

HEALTH AND WELL-BEING

8.71 A range of open space provision is provided across the site to enable a variety of activities for all age-groups and interests.

ECOLOGY

8.72 The development will have a positive effect upon biodiversity as a result of proposed habitat creation with the wide range of green spaces across the development such as natural and amenity green space, series of attenuation features that will contain a range of vegetation to be encourage biodiversity.



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