5.0 MASTERPLAN DESIGN

5.3 The Masterplan

The key elements of the masterplan are as follows:

- A masterplan design that is well integrated with Warnham and the surrounding area;
- A layout that takes account of best practice principles of Urban Design and respects the local vernacular architecture and landscape character;
- A layout that reflects the Site's position as a transition from urban to rural with appropriate edge and boundary treatment;
- A masterplan creates a comprehensive proposal for the development of the Site utilising the two accesses, where only pedestrians and cyclists can connect across the Site;
- The creation of a distinctive place with good placemaking at its core;
- Proposals that make effective use of the Site through appropriate densities, in terms of scale, massing and height and its relationship to the adjoining built and landscape environment;
- A new built form that creates a distinctive sense of place informed by the local character of Warnham;
- The provision of 59 new homes providing a range of housing types and tenures that meet local housing needs and support a diverse, inclusive and sustainable community;
- The provision of 35% affordable housing for local people;
- A layout that reduces the need for car use by encouraging sustainable modes of transport linking to off-site networks;
- A network of streets and footpaths, informed by the landform that are safe and easy to use for pedestrians and cyclists with links to local services and facilities.
- The retention and enhancement of existing trees, hedgerows as part of the site wide landscape strategy to maintain the green character of public realm;
- Ecologically responsible development improving habitat connectivity and enhanced biodiversity; and
- Provide an integrated SuDS network to mitigate flood risk and ensure that the development is resilient to the potential impacts of climate change.

Illustrative Masterplan

5.0 MASTERPLAN DESIGN

5.4 Land Use

The Applicant seeks to develop the Site for residential use, complementing the character of both the Site and the neighbouring settlement.

The Proposed Development will provide 59 new homes which will make a meaningful contribution towards meeting the housing needs of the area. A variety of dwelling types and sizes will be produced to deliver a balanced and mixed community. This will enable people to remain in the neighbourhood through the changing circumstances of their lives.

The proposed mix is as set out in the table below:

House Type	Affordable Rented	Shared Ownership	Open Market Housing
1 bed 2 person apartments	4	1	6
2 bed 3 person apartment	1	0	0
2 bed 4 person house	3	2	17
3 bed 5 person house	5	3	11
4 bed 6 person house	2	0	4
TOTAL	15	6	38

The Lifetime Home standard has now been replaced by the optional building regulations M4(2). All dwellings will be delivered as M4(2) and Nationally Described Space Standard (NDSS) compliant.

Land Use Plan

5.0 MASTERPLAN

5.4 Land Use (Continued)

Affordable Housing

Affordable housing is to be provided on Site, including affordable rent and shared ownership, responding to the Council's requirements.

House Type	No. Affordable Rent	No. Shared Ownership	Total
1 bed 2 person apartments	4	1	5
2 bed 3 person apartments	1	0	1
2 bed 4 person house	3	2	6
3 bed 5 person house	5	3	7
4 bed 6 person house	2	0	2
TOTAL	15	6	21

In the interests of providing socially integrated communities, the design provides affordable housing that is interspersed with private market housing throughout the site. The affordable housing will be designed to the same external specification and will be visually indistinguishable from the private market housing.

5.5 Public Open space

The development makes provision for a network of areas of public open spaces. These spaces enhance opportunities for walking, cycling and playing. Further detail is shown in section 5.8.

Tenure Plan

Land to the East of Tilletts Lane, Warnham DESIGN & ACCESS STATEMENT

5.0 MASTERPLAN DESIGN

5.6 Scale, Density and Appearance of Development

5.6.1 Building Heights

The scale and massing of new buildings is designed to ensure that there will be minimal impact on the character and visual appearance of the area.

The development is predominantly 2 storeys buildings with garages and carports being 1-1.5 storey.

The Building Heights plan illustrates the distribution of building height and how this has been utilised to enhance the placemaking of key areas.

5.6.2 Building Density

The Site is developed at an average density of 16 dwellings per hectare, reflecting the character of more recent developments in Warnham and its location adjacent to open countryside. Variations to the average density across the Site correlate with higher density areas along the primary street, and lower density is adjacent to the Conservation Area and open spaces.

The range of densities not only permits a range of different dwelling types but will also create visual variety and distinguish the various character areas.

Storey Heights Plan

5.0 MASTERPLAN DESIGN

5.6.3 Built Form

Appearance

In order to create an authentic local identity to the development, the dwellings reference local vernacular and use of high quality traditionawl building materials to bring a locally familiar character to the development.

The design is informed by Warnham and the surrounding small towns and villages, illustrated in the Pattern Book, with their varied mix of buildings of different types and sizes grouped together around streets and spaces and built of traditional materials with a variety of porches, bay windows and other details. The layout of the buildings and streets are designed to fit seamlessly into its context and create a strong sense of place.

Open spaces are linked to each other. There is a legible street pattern with a hierarchy of streets types making it easy to navigate.

Scale of Development

The scale and massing of new buildings is designed to respond the character of Warnham. The form of the houses varies in response to their location within the street hierarchy. Buildings are designed as 'houses' and 'cottages' with different ceiling heights and therefore different eaves heights. They are differentiated according to the type of street they face onto, so grander buildings face onto primary streets, whereas cottages tend to face onto minor streets. In some cases, houses and cottages are juxtaposed, to emulate the variety and variation in eaves height observed in Warnham.

Different roof pitches, materials, eaves heights and steps in level due to topography give variety and interest to the skyline, typical of Warnham. Ridges generally run parallel to the street frontage with the occasional gable facing onto the street, while others are hipped or half hipped. Chimneys are also included to provide further visual interest to the skyline.

Complexity and Variety

The wider variety of individual buildings, open spaces and streets will create a vibrant and successful place with monotonous repetition, meaning each building group and street has its own identity, with a slightly different character.

The layout, scale and massing and enclosure employed in the design, along with the inherent variety and complexity is all consistent with Warnham and he local character which has informed the design philosophy.

Architectural Detail

The architectural language of Warnham is a broad range between formal/ classical and vernacular. More modest buildings tend to be vernacular Arts and Crafts, using locally sourced materials and simple detailing, whereas grander houses use more formulaic composition and proportions, with a set of typical Georgian and classical elements, such as door casings, still using simple refined detail and the local materials palette.

The design of houses and apartment buildings seeks to emulate this historic character. A basic vocabulary of simple traditional doors, windows, roof and chimneys, etc. is extended with variations such as bays, dormers, door casings and canopies, to recreate the mixture of consistency and variety, the interplay of organic and regular composition found in the Warnham streetscape.

Examples of Street Elevations

Frontage and Enclosure

The layout orientates buildings to address the street and open spaces they front onto and create a strong sense of enclosure. This philosophy means that buildings overlook the streets and open spaces, creating natural surveillance, helping to foster a safer, more secure development.

Front doors and windows animate the street façade creating 'active frontages. End of buildings where they face the public realm generally include windows and bays ensuring natural surveillance and reducing the opportunity for crime.

Small front gardens, enclosed with low walls, timber knee rail, split timber railing, estate railing or native hedges provide defensible space in front of homes allowing individual personalisation by owners. Larger private gardens are located behind buildings within the core of the blocks. Where houses occupy corner plots, they generally have two frontages (primary and secondary) with 1.8m high walls to the rear garden boundary on the secondary frontage, creating enclosure to the side street.

Key corners and ends of streets or open spaces are reinforced with more prominent buildings that turn the corner or provide a visual stop.

A variety of terraced and semi-detached and detached narrow and wide frontage plots sit within the perimeter blocks.

Private parking is well integrated with a mix of on plot, rear and courtyard parking.

Casual public parking for visitors is identified on street, giving some variety to the street scene. Spaces are also provided for the pitches.

Material Palette and Components

The proposed palette of materials has been selected to reflect those found in Warnham assisting in creating an identifiable local character.

The limited palette of high quality materials include:

- Red handmade or stock facing bricks, painted brick, clay plain tile hanging walls, and timber weatherboard.
- Clay plain tiles and natural slate roofs.

Natural materials have a proven track record of a long life span in local conditions and have low embodied energy and low environmental impact. The use of lie mortars bricks to be reused /recycled at the end of the building life.

The simple rectangular plan form with pitched roofs is easy and efficient to construct. Simple details and components have been designed which are familiar to local builders, easy to construct an consistent with the local architectural vernacular. The preference is for material and components to be sourced and produced locally.

Standard sized components, such as windows and doors, have been designed in wherever possible.

These have been carefully selected to be consistent with the local vernacular in terms of proportions and detail.

Within this context, a high degree of variety is achieved by varying the individual external components and details around the standard house plan.

All spaces within the Site will have high quality hard and soft landscaping, street furniture, signage and materials. More details are provided in Section 5.8.

Examples of Front Elevations

5.0 MASTERPLAN DESIGN

5.7 Drainage, Flood Risk and Water Neutrality

The proposed drainage strategy for the site will utilise permeable paving and three attenuation basins which will discharge via a vortex flow control to the nearby existing ditch system, which replicates the existing hydraulic regime. The surface water discharge from the site will total no more than the pre-development greenfield runoff rate for the site.

The proposed drainage strategy including permeable paving and the attenuation basins can attenuate runoff from the 1 in 100-year + climate change rainfall event, without flooding, and there is sufficient space on site to increase the attenuation on offer to accommodate increased flows that may come as a result of urban creep and exceedance flows.

The permeable paving and the attenuation ponds will provide pollution mitigation benefits that offset the highest pollution hazards on site, which means that the proposed drainage strategy is appropriate for the discharge of site runoff to surface waters. Moreover, the proposed drainage strategy also provides amenity and biodiversity benefits, which completes the attainment of all four pillars of SuDS.

It is proposed to dispose of foul wastewater from the proposed development by gravity to a pumping station located on the site. Effluent will be pumped to the off-site Southern Water sewer network in Warnham.

Further details may be found in Motion's *Flood Risk Assessment* and *Drainage Strategy* submitted with this application.

Water Neutrality

The site lies within the Sussex North Water Supply Zone which requires the development to demonstrate and robustly evidence 'water neutrality'.

The site will look to achieve a water consumption figure of less than 85 litres per person per day. This will be done via water efficient fixtures and fittings and rainwater harvesting to each unit.

The site will look to apply for water credits as part of the Sussex North Offsetting Water Scheme (SNOWS), or through a suitable alternative bespoke offsetting scheme. This strategy will ensure that the new development will have a neutral impact on the Sussex North Water Supply Zone.

Further details may be found in Motion's Water Neutrality Statement submitted with this application.

Drainage Strategy Plan

5.0 MASTERPLAN DESIGN

5.8 Access and Movement

Site Access

The primary Threestile Road access utilises the existing access strip to the east of the site between the properties Robinsgreen and Lowood. The access strip provides appropriate corridor width (10m+) to provide two-way vehicular access and footway.

The proposed access would take the form of a T-junction with a simple priority arrangement. The access would have a width of 6.0m width, plus 6.0m corner radii to enable two-way movement between cars at the access and to facilitate service vehicle access.

The secondary access would be served from Tilletts Lane. The existing gate location on Tilletts Lane provides natural break in boundary vegetation and has an appropriate level difference between the site and road to serve the access. The access is positioned approximately 10.0m to the south of the existing gate to reduce the impacts on adjacent tree root protection areas.

The proposed access would take the form of a T-junction with a simple priority arrangement. The access would have a width of 6.0m plus standard 8.0m corner radii to facilitate large service vehicles. Tilletts Lane's carriageway would be widened to 4.2m in the vicinity of the access to accommodate large service vehicle movements as well as enable vehicle passing in the vicinity of the access.

On Site Street Design

The site's internal carriageways provide a 'panhandle' looped arrangements originating from both the Threestile Road and Tilletts Lane access points. Internal carriageways would not link the Threestile Road and Tilletts Lane accesses but would be permeable to pedestrians and cyclists improving permeability of the local area.

The site's internal carriageways would provide a 6.0m width on primary estate roads, narrowing to 5.5m within the site and 4.8m on shared surface carriageways. The carriageway geometry enables appropriate negotiation of internal roads by all necessary vehicle classes. The internal carriageway geometry is sufficient for refuse freighters and cars to pass one another along the internal carriageways.

All through roads on the east half of the site (40 dwellings) are served by at least a single 2.0m footway provision. The smaller west side of the site (19 dwellings) uses a shared surface arrangement. Shared surfaces are also used on cul-de-sacs within the site.

The carriageways looped internal configuration is such that turning heads are not required within the site, with large service vehicles and emergency vehicles able to appropriately negotiate the internal carriageways without the need to turnaround on site.

The site's car parking would be provided in a mixture of driveways, garages, car ports, parking courts and on-street parking. The on-street parking would take the form of parallel parking bays. All parking bays use HDC standard dimensions providing parking bays of 2.5m x 5.0m for perpendicular spaces with at least at least 6.0m reversing to ensure comfortable manoeuvring. Parallel bays provide dimensions of 2.0m x 6.0m.

The site layout would include a car park facility for the existing football pitch to the southeast of the site in accordance with Warham Neighbourhood Plan policy W6 providing 10 spaces.

Walking and Cycling

It is proposed that the site would be served via four principal routes for walking: -

i. PROW 1430 & 1429– PROW 1430 would have minor alignment changes and be enhanced through widening to 2.0m and the provision of a metaled surface until its connection with PROW 1429. PROW 1429 is already surfaced and of a suitable specification. PROW 1430 provides the most direct route to the village centre.

ii. A new footway connection at the southwest corner of the site serving pedestrians. A short section of footway would provide a connection from the site with existing footways at the southern end of Tilletts Lane.

iii. A pedestrian route flanking the Threestile Road vehicle access bearing south linking to the village green provide additional connectivity to the village centre. This route would tie in with footways and shared surface roads throughout the site.

iv. The shared surface vehicle access on to Tillets Lane. This would principally serve as a connection pedestrians wanting to access PROW 1427 to the east and for cyclists cutting through the site. The light baseline traffic conditions (less then 300 vehicle movements per day) and low speeds means that Tilletts Lane would remain appropriate for cycling and occasional walking.

The site additionally offers crosslinks on foot and by cycle, between Tillets Lane and Three style road. The lightly trafficked street environment within the site is conducive to safe walking and cycling. The cross links offer a wider betterment to the local areas permeability and supports desire lines between Shelly Cycle Path and PROWS 1427 and 1428 to the west.

Public Transport

The Knob Hill corner bus stops (north and southbound) are situated 150m from the site. The stops serve the no.93 service which runs hourly between Horsham and Dorking. Wider services are available from Horsham bus station.

Warnham railway station is situated 1.6km to the east of the site and is accessible by cycle and on foot. The station provides regular services to a range of locations including Horsham, Crawley, Brighton, and London Terminals.

Parking

Horsham District Council require parking to be provided in line with the WSCC's Car Parking Demand Calculator. The car parking provision has accordingly been provided in line with WSCC's parking calculator offering a total 147 spaces comprising 116 on plot allocated spaces and 31 off plot unallocated spaces. Residents car parking would be provided in a mixture of driveways, garages and car ports. The on-street parking would take the form of parallel and perpendicular parking bay arrangements.

The site would additionally offer a car park facility for the existing football pitch providing 10 spaces in line with Policy W6 of the Warnham Neighbourhood Plan.

In line with Part S of the Building Regulations, access to charging of electric vehicles would be provided for all dwellings. Communal parking per flats would also provide a charging facility per dwelling.

Cycle parking would be provided in accordance with WSCC's cycle parking standards as set out in the council's 'Guidance on Parking at New Developments' (September 2020).

Cycle and Refuse Storage

Cycle parking would be provided within garages or secure cycle stores within rear gardens of properties. Cycle parking for flats would be provided with secure communal storage facilities.

The access and movement strategy takes account of the travel needs of all users, with the aim to promote active travel. This approach ensures the integration of the Site with the existing network and maximises the benefits of the existing and future improved access and sustainable modes of travel. The Site layout has been designed to recognise desire lines and to ensure safe movement for all users. There is a clear hierarchy of routes through the Site, with low traffic areas that are safe for cycling on street.

Further detail on the street hierarchy is provided in the transport statement. The movement hierarchy is based upon vehicle, pedestrian, and cycle flow forecasts for each of the roads within the site. The busier roads, referred to as 'secondary' or 'tertiary' streets, have a dedicated footway. The quieter streets, referred to as 'shared surface' streets, have a forecast vehicle flow of one vehicle every 6 – 10 minutes at the busiest times of day. These streets are proposed as low speed 'level surface' streets with careful demarcation of private areas using surfacing materials.

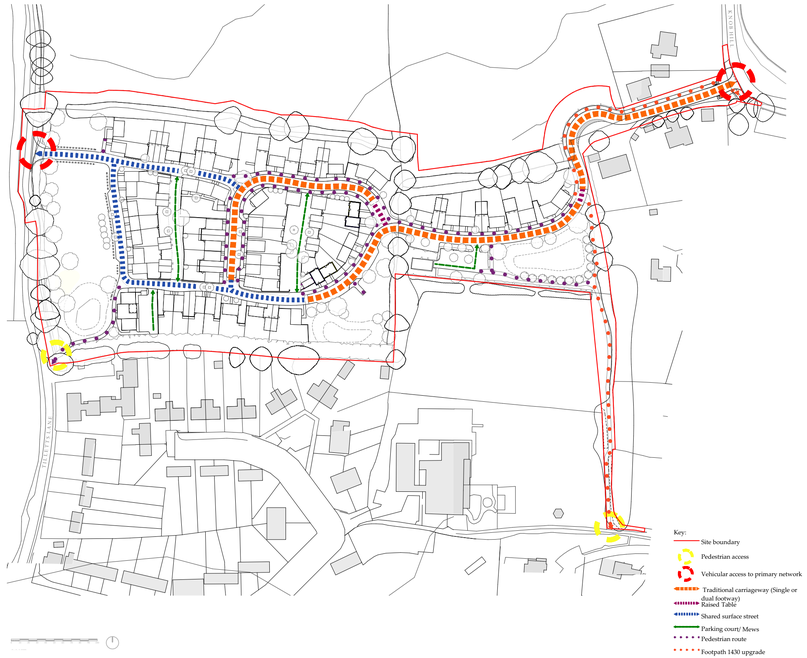
The requirements for dedicated cycle infrastructure have been determined based on the recommendations in LTN 1/20 Cycle Infrastructure Design. Based upon the forecast traffic volumes and speeds, cyclists would be comfortable cycling on-carriageway.

However, as an additional measure, a shared use footway is provided from the western access connecting to the existing PROW to Threestile Lane. This is to be improved and upgraded to provide a new 2m footway. The shared use route is likely to be used by low speed cycle traffic and is considered to be acceptable in this circumstance.

Footways on the secondary and tertiary streets cross side roads using continuous footways. Continuous footways are a form of side road crossing, designed to minimise conflict between pedestrians, cyclists and motor vehicles. The treatments ensure that pedestrians maintain their legal priority over vehicles turning into or out of the minor road.

Street widths vary throughout the design to cater for the access requirements for each street. Care has been taken not to provide excessively wide roads, or excessively long forward visibility. Manual for Streets provides evidence that there is a direct correlation between road width and visibility and vehicle speeds, and so this is used as a feature to reduce traffic speeds.

Refuse vehicle and fire vehicle access are provided in accordance with Building Regulation Requirements. This includes providing emergency access and refuse road loops within parts of the Site to avoid excessive reversing distances.



Movement Hierarchy

5.0 MASTERPLAN DESIGN

5.8.1 Highways

There will be two vehicular accesses into the Site. One from Tilletts Lane, and one from Knob Hill.

Tilletts Lane is largely rural in nature and does not carry any significant volumes of traffic.

Footpaths and Cycleways

Pedestrian desire lines between the Site and local facilities have been set out below as part of this DPP.

Principal destinations from the Site include the following:

- Leisure Facilities;
- Places of education;
- Medical practices; and
- Places of employment.

The above-mentioned pedestrian links will all be fully integrated into the proposed internal road layout and residential scheme. This will significantly increase the permeability of the Site and provide a coherent pedestrian route between the Site and the local area. This will afford pedestrians from both existing communities a more direct route to local facilities.

Pedestrian connections to the Site include:

- Connections from Knob Hill to the east to the existing sports pitches.

Cycle Parking

Residential cycle parking will be provided throughout the development, either within the curtilage of garages, or within a dedicated cycle storage area where garages are not provided.

Public cycle parking will be provided in the form of Sheffield cycle stands located near the LEAP and the new sports pitch parking area.

Car Parking

Residential parking standards are set out in West Sussex County Council (WSCC) Revised Guidance for Parking Provision (2018). The standards dictate that for 1-3 habitable room dwellings, 1.5 spaces should be provided. For 4 habitable room dwellings, 1.7 spaces should be provided. For 5-6 habitable rooms 2.2 spaces should be provided and for 7+ habitable room dwellings 2.7 spaces are to be provided. The unallocated provision has been calculated in accordance with WSCC residential parking calculator.

	Allocated Parking	Unallocated Parking	Total Parking
No of parking spaces	116	31	147

5.0 MASTERPLAN DESIGN

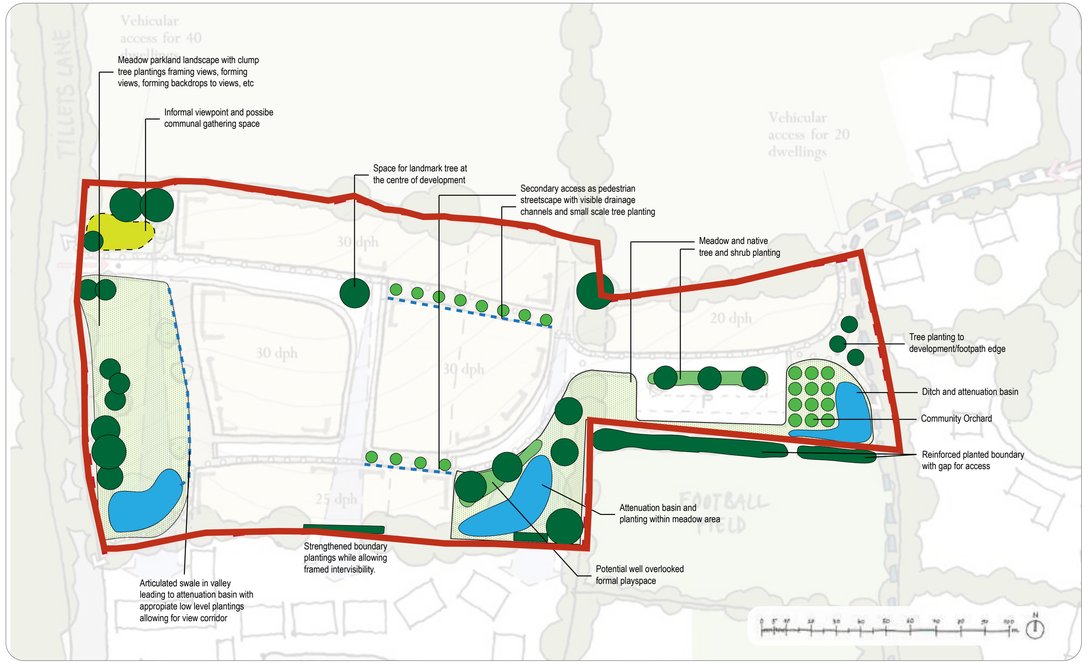
5.9 Landscape Strategy

The proposals have been informed by an understanding of the wider landscape context and the aspirations of the Neighbourhood Plan, and the influence this has on the Site in terms of connectivity of both the natural landscape and its framework and in terms of human access and circulation. Initial opportunities and constraints were set out, respecting retention and enhancement of the natural boundary vegetation, agreeing best points of access and the fundamentals of levels and drainage.

Taking Landscape Character as the major driver, Site and precedent photos were shared with the team to assist the development of the design proposal.. These formed a series of themes that have informed the landscape treatment of different aspects of the development.

5.0 MASTERPLAN DESIGN

NEW LANDSCAPE TEXT TO ADDED??



Landscape Strategy Plan - Public Exhibition

5.0 MASTERPLAN DESIGN

5.9 Landscape Strategy

The site benefits from a natural boundary of existing trees and hedgerows, within which the proposed development is structured. This framework helps define a new, natural edge to Warnham. High-quality vegetation will be retained and enhanced as part of a comprehensive landscape and open space strategy.

A 10m buffer zone with retained trees, hedgerows, and understorey planting will separate the southern boundary from Freeman Road properties, enclosed by a split rail timber fence. The northern boundary will be deepened to strengthen its role as the village edge and a key habitat corridor.

The development delivers a multifunctional landscape that reflects its edge-of-settlement context and softens the built form through:

- A street pattern shaped by site topography
- Improved public access and connectivity for all residents
- SuDS features like attenuation basins, swales, and rain gardens
- Interlinked public open spaces with species-rich planting to boost biodiversity
- A broad green with meadow planting offering elevated views west along Tilletts Lane
- A linear green with sports pitch views and visitor parking
- Framed outward views over the landscape
- A community orchard
- Formal play areas (LAP and LEAP) and informal natural play opportunities

The Landscape Proposals Plan

The Landscape Proposal Plan

5.0 MASTERPLAN DESIGN

5.9 Landscape Strategy

Recreation Space and Play Strategy

A cornerstone of the play strategy on the Site is the exploitation of all viable open space as an opportunity to play and explore imaginative themes and to encourage interaction, socialising and physical activity. The site wide series of linked green spaces will be designed to include embedded play features and objects that offer 'play on the way', these could include stepping stones, hidden timber forms, iconography and interpretation.

Formal opportunities for play are provided with a LAP within the western green and a LEAP in the southern green.

Land to the East of Tilletts Lane, Warnham DESIGN & ACCESS STATEMENT

5.0 MASTERPLAN DESIGN

Hard Landscape - Materials

A simple palette of hard materials has been chosen that respond to the design of the street hierarchy.

Tarmac road surfaces with resin bound gravel footways are used on secondary streets. Raised tables and shared surface tertiary streets are dressed in resin bound gravel. These have been designed to be more pedestrian friendly with flush pedestrian and vehicular surfaces.

Mews streets, parking courts and private drives will be surfaced in block paving laid in a herring bone pattern.

Informal footpaths will be in resin bound gravel.

Soft Landscape - Planting

The planting strategy has been led by local landscape character in the choice of native trees and hedgerows to the Sites boundaries and open spaces, as well as species already found adjacent to the Site. Where space allows, large climax species such as English Oak are proposed. In more confined spaces and street scenes, a variety of species are selected for seasonal interest; spring flowering, autumn colour, winter bark. Pollinating plants are used throughout and an orchard proposed to the eastern boundary.

Wildflower meadows predominate as the understorey with areas of mown amenity grass, and damp grass mixes for the attenuation basins.

Hedges are used to define property boundaries, varying with character areas within the development. Native hedges envelop wattle fences at outer boundaries, connecting to the existing hedgerows.

Walled and fenced boundary treatments include climbers and espalier trees to soften them and successional bulb planting at their base.

Rain gardens front the most southerly line of housing and appropriate plant species are selected to tolerate what can be dry as well as wet conditions.