4.2.1 Strategic Landscape and Open Space

OPEN SPACE STRATEGY AND ALLOCATION

A mix of natural and amenity green spaces form a pattern throughout the whole site with the existing hedgerows providing a natural framework. The various open spaces are described in more detail below:

WOODLAND EDGES

The proposed and existing woodlands located at the eastern and western edges of the development will create a peaceful setting for walking, cycling and horse riding with clear path and bridleways for movement. Seating along bigger areas with information boards and distance markers will provide picnic and resting areas.

NEWT CORRIDOR

The newt corridor will form a natural area with long grass and mown paths creating informal movement patterns whilst dedicated path and cycleways with seating, timber decking and information boards create a clear movement hierarchy.

ENHANCED HEDGEROW CORRIDORS

The existing hedgerows will be enhanced with a 10m wide buffer to each side thereby creating semi natural areas for food growing, orchards and meadow grass. Pathways will create clear movement patterns with seating, tool sheds for growing areas and informal paths cutting across the long meadow grass.

NEIGHBOURHOOD/ POCKET PARK

The neighbourhood parks will have areas of long meadow grass and orchards creating small intimate areas for the various neighbourhoods.

RESIDENTIAL PARKLAND

These parklands will be of a more formal character with short amenity grass with areas of longer meadow grassland providing picnic and relaxing areas. Cycle and pathways will provide a clear circulation pattern with social seating areas placed at about every 100m intervals.

VILLAGE GREEN

The village green will have areas of short amenity grass with a village pond in the centre. Long meadow grass and wild flower meadows and an orchard will frame the green with tree planting blurring the boundaries to the adjacent area.

ALLOTMENTS

A network of private and public allotments will be distributed throughout the site allowing residents to grow food at their doorstep for personal use while bigger areas could be managed both by residents but also by the HFLT. Bigger growing areas located along the existing hedgerows and movement corridors will form part of daily journeys making looking after each allotment easy, convenient and accessible to all.











4.2.1 Strategic Landscape and Open Space

PLAY STRATEGY AND ALLOCATION

The play strategy and allocation of the various forms of play is listed below; location of the spaces is shown opposite. The exact location and type of play elements will be subject to detailed landscape design development developed in accordance with he DCMS Guidance 'Design for Play'.

Woodland edges

The proposed and existing woodland located at the eastern and western edges of the development will allow for a series of informal and natural play areas. Wooden logs, climbing frames, zip lines and timber tree houses create a rich playable setting within the existing and proposed woodland whilst scattered along the pathways trim trail and fitness pieces form part of the overall recreational loop (recommended 10K as per Cherwell local plan). Social areas with seating, information boards and sculptured seating elements provide educational and play intervention. The woodlands form an informal, active and playable part of the overall play strategy.

Newt corridor

The newt corridor is an ecological park linking the two newt ponds that will create an educational resource to the site with boardwalks, information boards and natural play elements scattered within areas of long grass. Rocks and tree trunks that can be used for balancing, climbing and jumping while timber platforms allow for seating. Informal mown pathways through the long grass provide for wilder areas to run around and explore. Stepping stones and safe access to water will provide a play facility

Enhanced hedgerow corridors

The existing hedgerows create a natural movement pattern throughout the site lending themselves to enhancement for play. The play elements would be simple interventions such as play rocks, stepping stones, fitness points, balancing beams and willow tunnels creating an enjoyable and playable journey for all ages along the hedgerows.

Neighbourhood/ pocket park

The neighbourhood parks vary in character compared to the residential parklands in that they provide localised doorstep play opportunities overlooked by the surrounding dwellings. These areas are primarily for younger children providing play and seating opportunities for parents and carers.

Residential parkland

Two main parks running west to east across the site provide the largest opportunity for formal and informal play. The parkland linking the Newt corridor with the Village Green will incorporate a primary swale that provides informal play spaces such as rocks, check dams and gently sloping banks for rolling and running. Along the paths, play elements such as swings and mounds with slides provide formal play elements whilst informal and natural play elements create a fun and diverse play environment for all ages and abilities.

The parkland linking the western woodland edge with the eastern areas would be similar in character but with more emphasis on orchard and allotments whilst play will be distributed throughout the parkland. There will be a mix of formal and informal play spaces with tree lines/ hedgerows delineating a MUGA or informal ball games areas. Location and type of various play elements and the total play offer will be determined as part of the final building layouts and the detailed landscape design.

Village green

This area is predominantly grass incorporating big areas of long grass and wildflower meadow with mown paths and a village pond. The grass area is big enough to accommodate a MUGA (18.3 x 37m) while the other grassed areas can be used for informal ball games and play.



Incidental play along movement corridors



Natural play

4.2.1 Strategic Landscape and Open Space

PLAY STRATEGY AND ALLOCATION





Multifunctional play space as part of the neighbourhood parks



Informal/ natural play as part of the overall playable setting



Formal play area; MUGA as part of Village Green



Formal play areas as part of the residential parklands

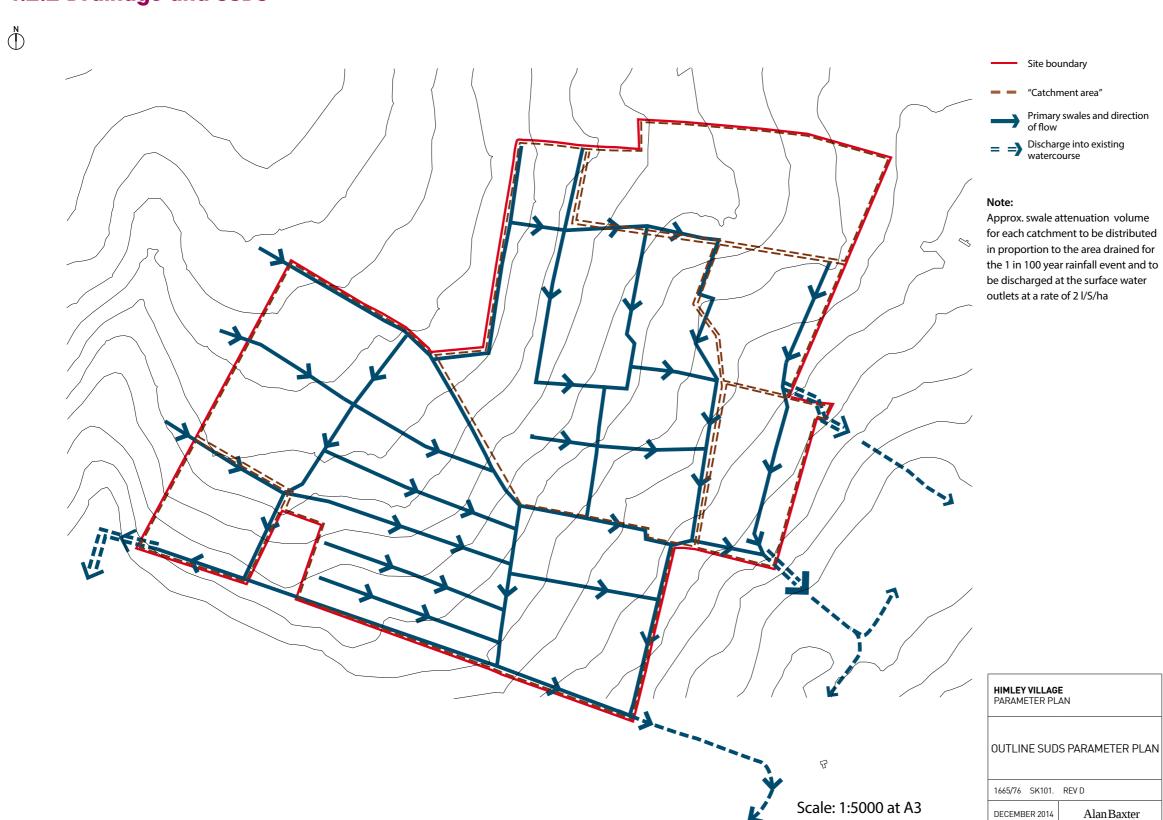






04.2 Description and Parameter Plans

4.2.2 Drainage and SuDS



Parameter Plan - Drainage and SuDS

4.2.2 Drainage and SuDS

DRAINAGE NETWORK

The proposed drainage network is indicatively illustrated by the following diagrams, which represent the different stages of the water management.

At the macro scale the drainage network is divided into Primary, Secondary and Tertiary swales. Within each of these typologies there will be a variety of water management techniques to ensure appropriate re-use, treatment, flow, infiltration and storage of water.









4.2.2 Drainage and SuDS

PRIMARY SWALES

The primary swales are the dominant water and wildlife corridors of Site, all other swales will drain to them.

In form and function the primary swales will vary, they will convey water through the Site, attenuate and infiltrate water into the ground.

A network of footpaths and cycle lanes will also line the primary swales. Attenuation zones will be designed into the landscape discretely, in the form of a sacrificial path or area of planting in the event of a 1000 year storm.



4.2.2 Drainage and SuDS

PRIMARY SWALES



A - Primary swale (min. 5.0m wide)



A - Primary swale (min. 5.0m wide)



Primary swale (min. 5.0m wide)



Indicative multifunctional corridor with swale (min. 5.0m wide)







4.2.2 Drainage and SuDS

SECONDARY SWALES

Secondary Swales will receive runoff water from roofs, car parks, roads and other hard surfaces. Their function will be to collect water from the conveyance channels and slow, clean and infiltrate water, whilst directing it towards the primary swales.



Secondary swale (next to road/ flush kerbs))



4.2.2 Drainage and SuDS

SECONDARY SWALES

Typical Secondary Swales may include

1 - Tree Pit Trenches 'Stockholm Planters'

A trench filled with granite aggregate and soil, acts as a structural soil that performs as an ideal growing medium for street trees. The trench also acts as a retention basin and conveyance channel.

2 - Infiltration Bed

Trenches filled with an engineered aggregate become vegetated and can provide habitat for wildlife, allow for infiltration and bioremidiation.

3- Vegetated Swale

Vegetated trench provides habitat for wildlife, retains moisture to irrigate planting, creates soil and holds moisture in the landscape.



Secondary swale (Tree pit)



Stockholm planter



Infiltration bed



Vegetated swale







4.2.2 Drainage and SuDS

WATER TREATMENT

Treating water on site is a key principle of the masterplan. This can be broken down into:

- Stormwater treatment
- Greywater treatment
- Blackwater treatment

Each treatment is achievable through natural and ecological methods, in addition to the option of a technological solution. The preferred treatment method is the ecological option, the key principle is that water is retained on site, separate to the drainage network and utilised for either irrigation, amenity water bodies or wet habitat.

Treatment swale typology is also represented by stormwater planters and Stockholm tree pits which hold stormwater runoff and prevent the release of hydrocarbons into the watercourse by breaking them down in the growing medium.

TREATMENT TYPOLOGIES

Typical Treatment methods may include:

- 1 Tree Pit Trenches 'Stockholm Planters' / Stormwater planters. Have the effect of treating stormwater through removing hydrocarbons and pollutants. Treated water to join swale network.
- 2 Neighbourhood scale reed bed/balancing ponds A series of reed beds to filter the grey water, outflow of treated water to feed amenity ponds, irrigation and habitat.
- 3- Living machine greenhouse Large centralised treatment of black and grey water, via vegetated systems, high tech high cost. Outflow to feed amenity ponds, irrigation and habitat.



Reed bed & balancing pond



Living greenhouse - Grey/black water treatment

4.2.2 Drainage and SuDS

CONVEYANCE CHANNELS

Water will be brought into the public realm using channels and gullies, the landscape will become 'activated' during and after periods of rainfall.

Channels can also be used for play elements, directing water to a cascade or level change provides opportunity for play. Water can also be stored and then utilised through a pumped mechanism in an interactive and playable way.

Channels are utilised to direct water to swales and treatment elements.









4.2.2 Drainage and SuDS

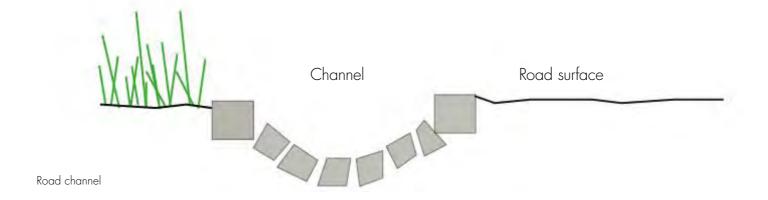
CONVEYANCE CHANNELS

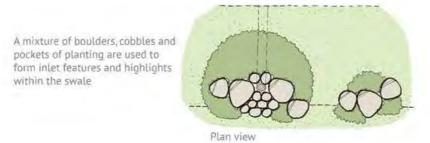


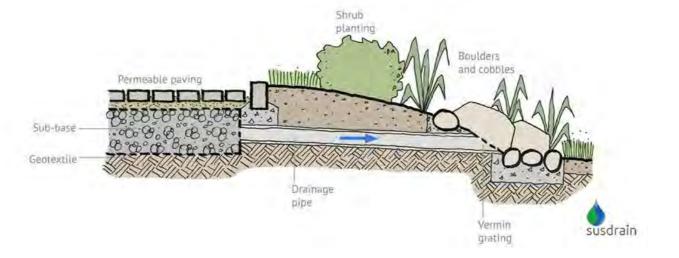
Channel bringing surface water into the landscape



Downpipe directed to permeable paving and into public realm







Sub-surface channel with disguised outflow

4.2.2 Drainage and SuDS

PONDS

The site has been divided into sub-catchements, with swale 'pinch points' (a convergence of swales and drainage points) identified as areas of attenuation. These areas will be integrated into the public realm via a network of footpaths and recreational areas.

Amenity lakes, not part of the drainage strategy, will form central features within the communal landscape. Grassy lake banks will stretch into parkland and reeds will provide refuge for nesting birds.

Any treated water on site can be reused to create water bodies.

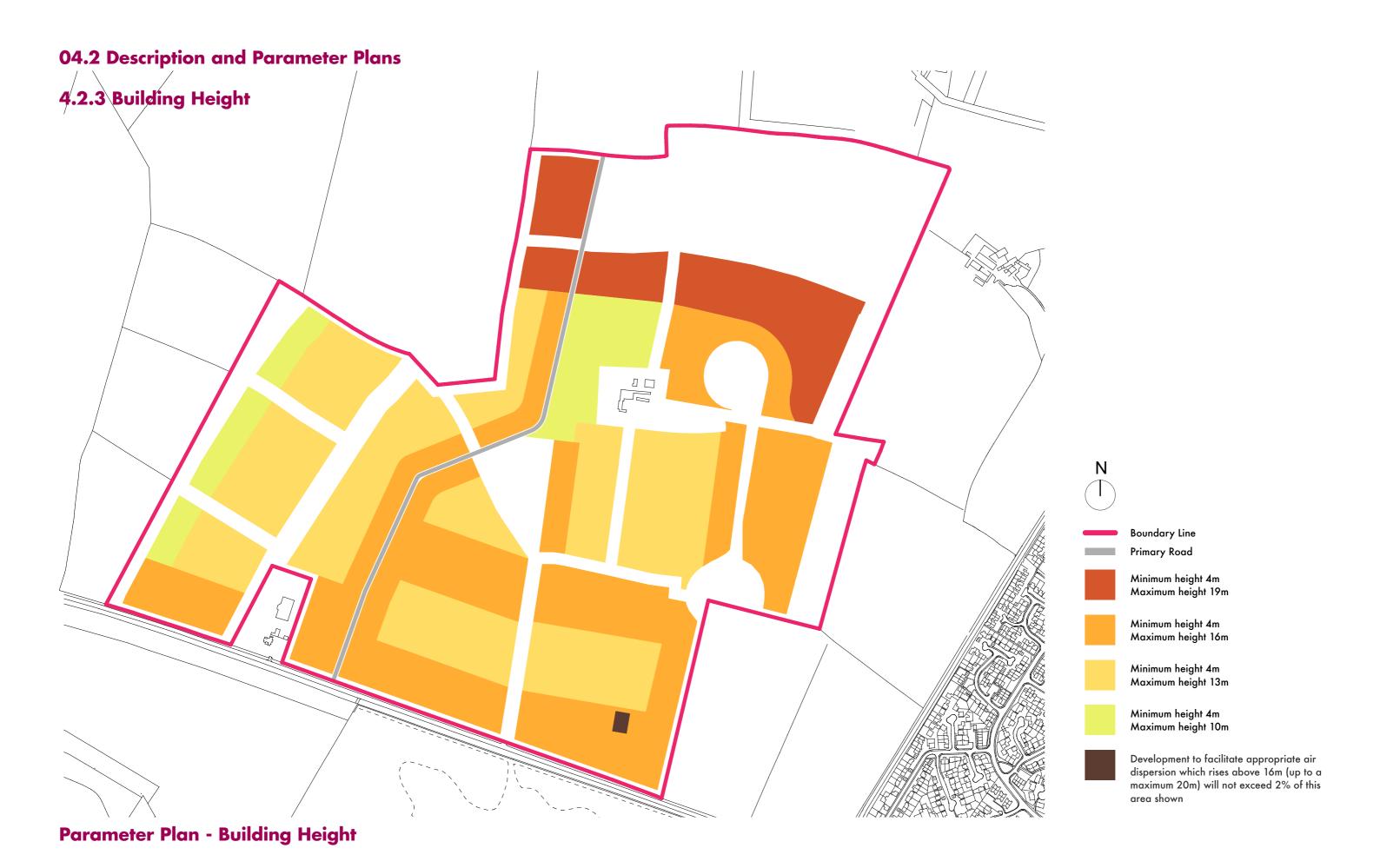












04.2 Description and Parameter Plans

4.2.3 Building Height

A number of factors have been considered in determining building height, including proximity to open space, views afforded, and the relationship to primary roads and destinations.

- The large expanse of open space here affords the opportunity for distinct individual taller buildings, allowing views across the playing fields to the north, whilst minimising any overshadowing.
- Individual taller buildings, with large areas of open space around them, allows for views between to the woodland beyond.
- Taller buildings are used here to define the edge of the village green and the main north-south vehicle route.
- Within the defined urban blocks, the scale of the buildings can increase locally to better reflect the larger scale of the adjacent areas of landscaped open spaces.
- There is an opportunity for larger scale buildings along Middleton Stoney Road, reflecting their prominence as a gateway to the development. Greater height here also allows us to benefit fully from views south across the woodland of Bignell Park.
- Along the wooded rural edge of the Site the individual houses should be lower allowing this edge to characterised by houses dominated by landscape, rather that landscape dominated by houses.





Maximum height 16m

Maximum height 10m





