

three

development framework

development framework

3.1 Introduction

3.1.1 The WEA should be a high quality urban extension with strong links to CMK and the rest of Milton Keynes. The aim is to create a development for the 21st Century, which will demonstrate the influence of North Buckinghamshire's traditional urban form, typified by towns such as Stony Stratford, and the best of the Milton Keynes' 20th century planning principles.

3.1.2 The Development Framework provides the design strategy and guidance essential to achieving a high quality development with a

strong 'sense of place'. This strong sense of place will be generated by responding to the inherent site characteristics and sensitivities, a key objective of the Development Framework. It also outlines how the Local Plan's requirements for the WEA will be met and the disposition of land uses and facilities.

3.1.3 The starting point for describing the Development Framework is a generalised 'Concept Plan', which seeks to establish the broad development principles for the WEA. The main land uses, such as housing

and employment, and the supporting infrastructure and landscape requirements, are then individually described. Finally, all the elements are brought together in the comprehensive Development Framework Plan and land use budget, presented at the end of the chapter.



Town Houses



Apartments



Quality Public Space



Secondary and Primary Schools



State of the Art Public Transport



Active Commercial Developments

concept plan

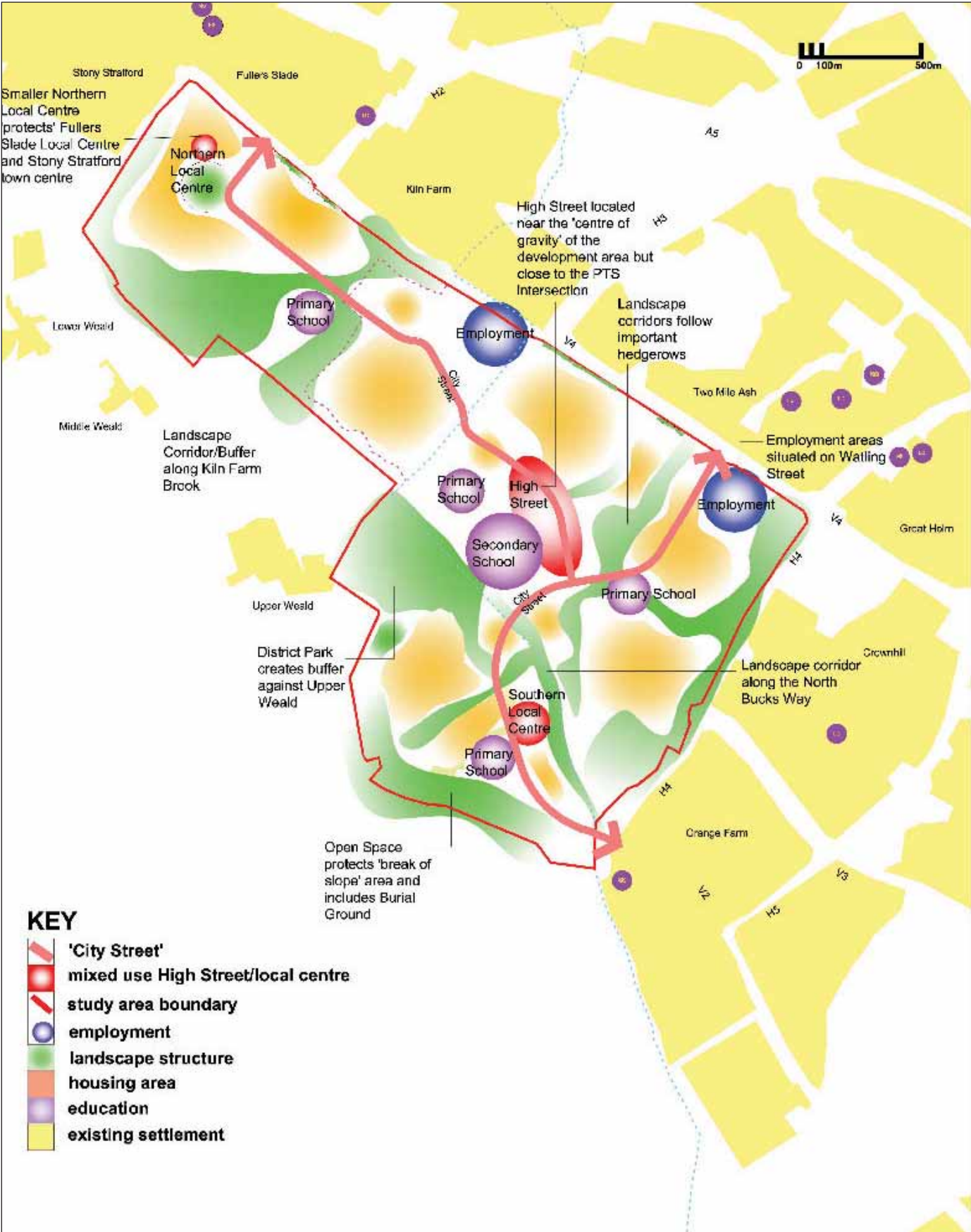


Figure 3.1 Concept Plan

3.2 Concept Plan

3.2.1 The Concept Plan (see Figure 3.1) seeks to generate a distinctive 'sense of place' which responds to the different sites and the character of local urban form. It is focused on five key principles:

- Integrating significant existing natural features with proposed open spaces and linear parks
- Minimising walking distances to public transport routes
- Locating key public facilities along public transport routes
- Focussing higher density housing along public transport routes
- Protecting sensitive rural 'edges' with lower density development and set backs to minimise skylining.

3.2.2 The new development must be carefully designed to fit into the local landscape and to be sensitive to development on the existing city edge. Its boundaries are designed so that the development interfaces with the surrounding countryside and avoids any coalescence with surrounding settlements.

3.2.3 The development strategy seeks to 'work with' key landscape features such as the North Buckinghamshire Way, Hazeley Wood and Lady Margery's Gorse and creates features along Kiln Farm Brook. A range of linear landscape corridors, providing informal amenity space for new and existing residents, are provided in conjunction with these areas.

3.2.4 'City Streets', comprising a dedicated public transport route and a highway, link the housing areas, local centres, primary and secondary schools. They provide the main spines of the development and points of access to the grid road network.

3.2.5 At the heart of the development, the 'High Street' spine (mixed use area) provides a comprehensive range of local services and facilities. It is complemented by smaller local centres located in the northern and southern parts of the WEA. These are the key local focal points with a 'corner shop' level of retail provision and a meeting hall. The 'High Street' and local centres create focal points for a series of interlinked urban villages

3.2.6 The Concept Plan shows a mix of uses. The schools and main facilities, are focussed on two 'City Streets' of roughly similar length. The first runs south west from V4 Watling Street to rejoin the grid road network at the V2/H4 roundabout. The second 'City Street' runs parallel with V4 Watling Street, along the length of the development and intersects with the first at the bottom of the 'High Street'. There are also two employment areas, close to V4 Watling Street.

3.3 Housing

3.3.1 The WEA should make efficient use of land in accommodating approximately 6,000 new dwellings. The overall average density should be at least 35 dwellings per hectare, as required by the Local Plan (Policy H8). In line with Policy H8 outline planning applications with an overall net density of less than 30 dph will not be permitted, although some parts of the application may contain areas of housing at slightly lower densities. Within this there will be three distinct housing densities;

- High Density
average net density 50 dwellings per hectare
- Medium Density
average net density 40 dwellings per hectare
- Low Density
average net density 30 dwellings per hectare

3.3.2 For each planning application, housing within each density zone (ie all the parcels within one of the above zones) must comply with the relevant average density. This will allow a range of densities at a smaller scale, both above and below the average.

3.3.3 The housing areas should respond to the inherent site opportunities and constraints with suitable densities to provide distinctive 'character areas'. A wide range of dwelling type, size and tenure should be provided, creating choice, a varied building form and meeting community needs. 30% of housing should be affordable housing and distributed through 'pepper potting' as per Affordable Housing SPG July 2004. Consideration should be given to ways in which new and emerging forms of housing could be provided. A site of about 4ha for a Retirement Village for frail elderly people similar to that provided by 'Extra Care' elsewhere in the City, should be identified.

3.3.4 High Density development with a range of attractive squares, spaces and set backs should be located along the 'City Streets' and within the High Street and Local Centres.

3.3.5 The Medium Density housing should be located close to the higher density areas and within 400m of the public transport spine. This housing should form the core of the new urban areas and would be characterised by a connected network of streets and squares, punctuated by local play areas, neighbourhood play areas and local parks.

3.3.6 The Lower Density housing should be principally located along the outer edge of the development area along the proposed urban/rural boundary. This location would assist in softening the impact of the development on the open countryside to the west and south.

3.4 Employment

3.4.1 The landscape, locational and commercial characteristics of the WEA make it most suited to attracting smaller scale, sub-regional and regional commercial companies. It is not well suited to large footprint developments, which are better located in the EEA. Two employment areas, amounting to about 17ha, should be located along V4 Watling Street. These should accommodate a range of medium scale buildings, mainly for B1 and B2 uses.

3.4.2 Residents of the WEA will be able to find jobs in both these employment areas, in CMK which is the main employment location in the City and well connected by the public transport system, and in the High Street and local centres/schools. Opportunities for locating smaller scale office uses above the ground floor, with retail facilities below should be taken. In some locations limited office uses could be at ground floor level.

3.4.3 New telecommunications technologies and pricing mechanisms are also creating opportunities for employment to be increasingly home based. In the WEA these trends should be reflected in the telecommunications infrastructure provided and the form of accommodation provided (eg live/work units).

landscape strategy

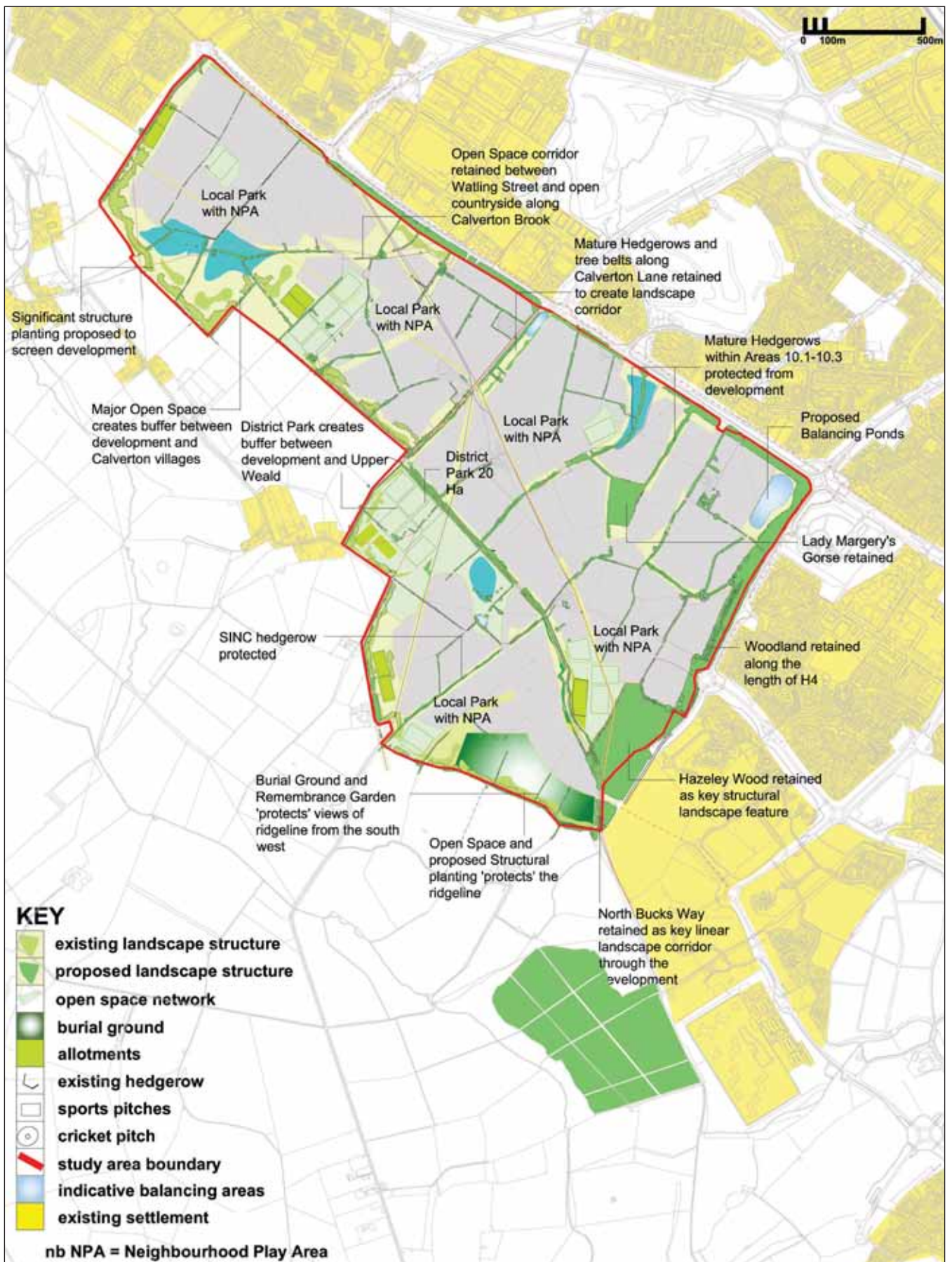


Figure 3.2 Open Space and Landscape Strategy

3.5 Landscape & Open Space Strategy

3.5.1 The WEA's significant landscape and natural opportunities were identified in Section 2.3 and the Development Framework is designed to respond and respect them (see Figure 3.2).

3.5.2 A central objective of the development framework is to minimise the impact of the development on the open countryside to the south and west. This is done by creating a sculpted outer edge to the development where structural landscaping is used to soften the urban form.

3.5.3 To minimise 'skylining' along all edges of the development and to ensure that there are only 'glimpsed' views of the new development from the open countryside, significant structure planting should be provided along the western and southern edges of the development early on.

Wildlife

3.5.4 An integrated network of wildlife corridors should be provided through the development. These corridors should provide ecological and pedestrian links between the key natural features such as Hazeley Wood, Lady Margery's Gorse and Kiln Farm Brook. Where possible, these corridors should be aligned with important hedgerows.

Lady Margery's Gorse and hedgerows

3.5.5 Lady Margery's Gorse, and the network of hedgerows permeating this central part of the WEA, particularly one hedgerow identified as a SINC, should wherever possible be protected and enhanced. The hedgerows should define the alignment of minor access roads and the edges of local open spaces. Key important hedgerows are identified on the Development Framework plans.

Break of Slope

3.5.8 The 'Break of Slope' between Shenley Dens Farm and the North Buckinghamshire Way is a distinctive feature on the skyline when looking north east from Whaddon Road. The focus of the development strategy for this part of the WEA is to protect the break of slope, and a distance behind it of approximately 140m, from development. Within this 140m band a significant proportion of structural planting should be included to soften the visual impact when viewed from the west.

North Buckinghamshire Way

3.5.1 North Buckinghamshire Way is an existing pedestrian route, bridleway and wildlife corridor. Its function as a wildlife corridor should be enhanced by using it to link areas of open space in the new areas. The opportunity exists to extend it along the edge of development north of Calverton Lane, through to the Ouse Valley at Lower Weald, and to re-route it along Kiln Farm Brook rather than Calverton Lane and Watling Street. This would enable it to perform both as a wildlife corridor and an attractive edge to development.

Kiln Farm Brook

3.5.11 Kiln Farm Brook should define the axis of an open space, footpath and wildlife corridor which could be used to accommodate balancing ponds, a Local Park and allotments. This open space should also allow a clear vista from V4 Watling Street to the church tower at Lower Weald. This break in the urban area would also create a significant separation between Lower Weald and the development area.

Edge of Development

3.5.12 Residential development along the outer portions of the WEA should be designed to interface with the open countryside in a traditional manner. Dwellings should face outwards over the adjacent space and be clustered in small groups interspersed with structure planting to create a soft, feathered edge to the urban development.

Open Space

3.5.13 Open space should be provided in accordance with guidance set out in the Milton Keynes Local Plan (Policy L3 and Appendix L1) This guidance is summarised in Table 3.1.

3.5.14 It should be noted that Local Play Areas are not shown on the Development Framework, but should be provided in accordance with policy and should be identified on more detailed masterplans.



The North Bucks Way will be a key 'green corridor' linking a number of open spaces



Playing fields are located throughout the site



Local Parks will be important 'oases' within the prevailing higher density urban form

	Minimum Size	Catchment Area
Local Play Area	0.2ha	300m
Neighbourhood Play Area	0.6ha	600m
Local Park	1 - 2ha	600m
District Park	20ha	1200m
Playing Fields	1.5ha(gross)per 1,000 population	
Allotments	0.25ha per 1,000 population	

NB. Where an LPA is surrounded by housing the minimum size should be increased to 0.35ha to create a buffer zone

Table 3.1 MKC Open Space Hierarchy

landscape strategy



Structural landscaping will provide informal recreation facilities throughout the site



Childrens Play areas will be the focus of NPA's and Local Parks



Open Spaces can be attractively designed using hard landscaping materials

3.5.15 The disposition of Local Parks and Neighbourhood Play Areas (NPA) should ensure that the vast majority of homes are within 600m of such a facility and that it forms a key focal point within its immediate locality.

3.5.16 A District Park should be provided. This should include open space facilities such as playing fields, which could be located towards the edge of the site, and a cricket green and ornamental balancing ponds which could be integrated with the High Street area. The character and design of these areas would be distinct from each other and respond to the different contexts.

3.5.17 Playing Fields should be provided. They could be incorporated in the District Park and shared use could be made of secondary school facilities. They should be directly associated with changing facilities and in close proximity to other local centre, High Street and community facilities. Detached or stand alone facilities should be avoided.

3.5.18 Allotments should be provided throughout the development. They should be sited mainly within the large structural landscape buffers on the outer edge of the development. The allotments would need to be accessed by minor roads and have services such as water.

3.5.19 There is no specific requirement for a leisure centre in the WEA but contributions would be sought to enhancing the dual use 'sports centre' planned for Hazeley school.

3.5.20 A Burial Ground and Remembrance Garden, of about 10ha, is required to be located in the WEA to serve city wide needs (Local Plan Policy EA5). This could capitalise on attractive views over the slope area to the open countryside to the west, or be developed in conjunction with Hazeley Wood. It could also provide a landscape buffer between the developed area and the open countryside. A suitable location is shown on the framework plan in the southern part of the WEA.



Figure 3.3 Watling Street landscape buffer detail

3.5.21 The proposed landscape buffer east of M16 would consist of a solid 30 m tree belt (see Figure 3.3). The buffer east of the proposed balancing lake and north of site M16 would have an approximate width of 30 m from the Watling Street frontage. This would consist of a more varied mix of trees, shrubs and open areas allowing views between the open space/ lake and Watling Street

3.5.22 Built development on site M16 would be sited approximately 30 m back from Watling Street. The existing tree belts adjacent to the proposed high density housing (H13) and employment area (E1), would be retained and so will help soften the impact of taller buildings in this location.

3.5.23 There will be a 10 m landscape buffer along those stretches of the Watling Street frontage where there is no / limited landscaping at present; on the west side of the lake north of sites M13 and M14, and also opposite Fullers Slade in Area 11. This takes into account the presence of the existing landscape buffer on the Two Mile Ash / Fullers Slade side of V4.

movement

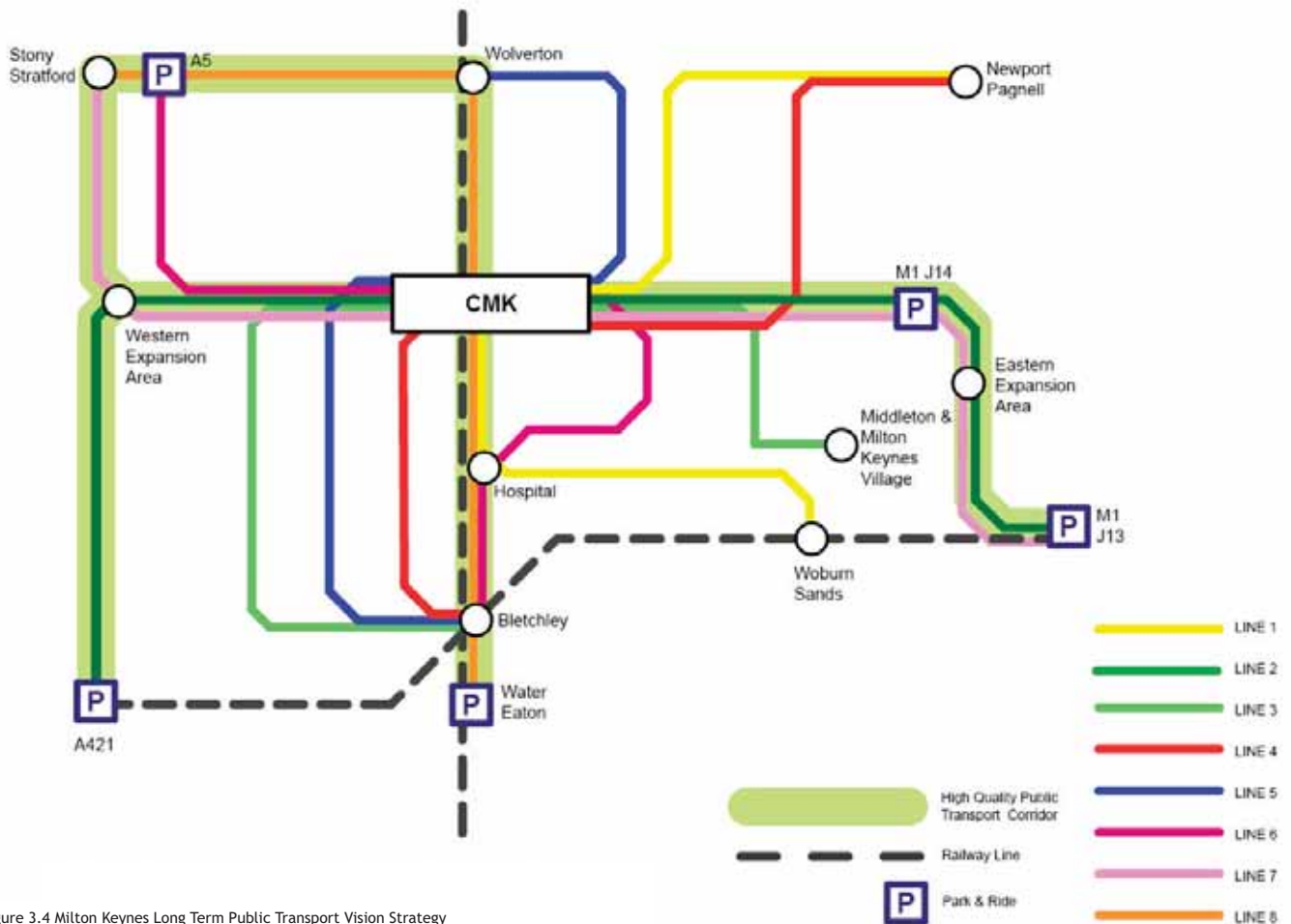


Figure 3.4 Milton Keynes Long Term Public Transport Vision Strategy

3.6 Movement

Background

3.6.1 The development of an enhanced public transport system for Milton Keynes is a key requirement of the Sub-Regional Strategy. Ways of achieving this have been examined in the Public Transport Long Term Vision prepared by Faber Maunsell and approved by MKC in January 2004 (see Figure 3.4).

3.6.2 The vision for the long term in Milton Keynes is that public transport will play a much greater role in the overall transport mix than at present. The mode share of public transport should be 3 to 4 times higher than its present share of around 4%. By 2031 this would equate to the number of public transport trips rising from about 7 million to about 35 to 40 million. This cannot be achieved without both a great expansion and improvement of public transport services and strong measures to contain the growth of car use. It will also involve changes both to the structure of the City and its culture, neither of which are currently conducive to public transport use.

3.6.3 The development of the expansion areas, including the WEA, offers the opportunity not only to increase the number of potential public transport passengers but also to re-structure parts of the City so that this potential is easier to realise. The long term public transport vision envisages that the infrastructure in the expansion areas should provide public transport routes associated with higher development densities, regardless of whether they form part of the two proposed east- west and north-south upgraded routes. This has led to the concept of the City Street outlined below. In addition, it is essential that physical measures on the grid roads to improve the public transport routes from the WEA to CMK are implemented at the same time.

movement

City Streets



European example of similar City Street hi tech stop



Existing bus services will be routed along the City Streets until the mass transit vehicles are up and running



Example of Mass transit vehicle



Calverton Lane will be downgraded and connected to a redesigned junction at V4/H3

3.6.4 The main transportation access to the WEA will involve the construction of two 'City Streets'. They will comprise a dedicated public transport route, a vehicular route, together with a cycleway and pedestrian route in a corridor of about 30 metres width. To ensure that the development is 'future proofed' a reserve for a City Street will be identified in the southern portion of the scheme to allow for development to the south of the 'break of slope'. The transition from a grid road to a 'City Street' will generally take place at a signalised junction, or a roundabout, and will be 'signposted' through good design and appropriate urban form. Detailed designs for these junctions should accompany the planning applications.

3.6.5 The main highway crossings of the public transport route should be signalised.

3.6.6 Public transport services would run along the 'City Streets' enabling high quality links to Stony Stratford, CMK and Westcroft District Centre. They would also link the main facilities such as the 'High Street' and the primary and secondary schools. It is envisaged that the services would run at least at a 15 minute frequency. Provision should be made in advance of each phase of development to establish public transport 'habits' at an early stage. Bus stops should be no more than 400 metres from the vast majority of houses. (Local Plan Policy T5).

3.6.7 There would be two 'City Streets' of about equal length. The first would run south west from V4 Watling Street parallel to H4 Danstead Way before curving round to rejoin the grid road network at the H4/V2 roundabout. The second would run from midway between H1 Ridgeway and H2 Millers Way, and run parallel with V4 to meet the first 'City Street' at the new 'High Street' centre (see Figure 3.1).

Other Highways

3.6.8 A series of 'main streets' will also connect the WEA with the surrounding grid road network, but are not intended to act as routes for through traffic. There would be additional distributor road junctions on V4 Watling Street at H2, Kiln Farm/ North Bucks Way, to give access to the employment area, and the junction at H3 would be of distributor road, rather than City Street, status.

3.6.9 Many of these junctions should be signalised with associated pedestrian/ cycle provision. This would permit good quality, at grade, connections with the existing Redway system. Detailed designs should be prepared

for all the grid road junctions to demonstrate particularly how the public transport route would be integrated with the grid road at the junction. Traffic signals can be linked together (eg. by computerised traffic control systems) to minimise delays and to manage traffic flows efficiently.

3.6.10 The City Streets, and the main distributor roads, in the WEA would have a 30 mph speed restriction. In other areas 20mph zones would be designated. Highway access to the employment areas should be separated from those to residential areas. The employment areas should be served by public transport routes. With the exception of the City Streets, all highways should conform to the usual road hierarchy standards applicable elsewhere in Milton Keynes.

3.6.11 Traffic management measures will initially be required along Calverton Lane to discourage through traffic but allow local traffic direct access. Indirect access, through the WEA, would also be possible to Whaddon and the Calverton villages.

3.6.12 Only one highway connection from the WEA to the Stratford Road would be made, at Upper Weald Farm. This would further minimise any traffic from the WEA using the rural roads to access the wider area. Pedestrian and cycle connections would however be made.

Off Site Highway and Transport Improvements

3.6.13 Milton Keynes Council, in conjunction with the Highways Agency and Milton Keynes Partnership Committee, is preparing a coordinated strategy for the highway and public transport improvements that are likely to be required, both due to the development of the WEA and the general growth of Milton Keynes. This will be prioritised, and a programme of improvements identified, to match traffic growth and development phasing.

3.6.14 A range of possible measures will be considered including increased use of sustainable transport modes, traffic management measures, junction and highway improvements and public transport investment. Access to the trunk road network is of particular concern and ways of managing this will be investigated.

3.6.15 Various studies and transport modelling, have already been undertaken to consider the implications of the development of the WEA on the wider transport network in Milton Keynes, both in terms of the highway

movement

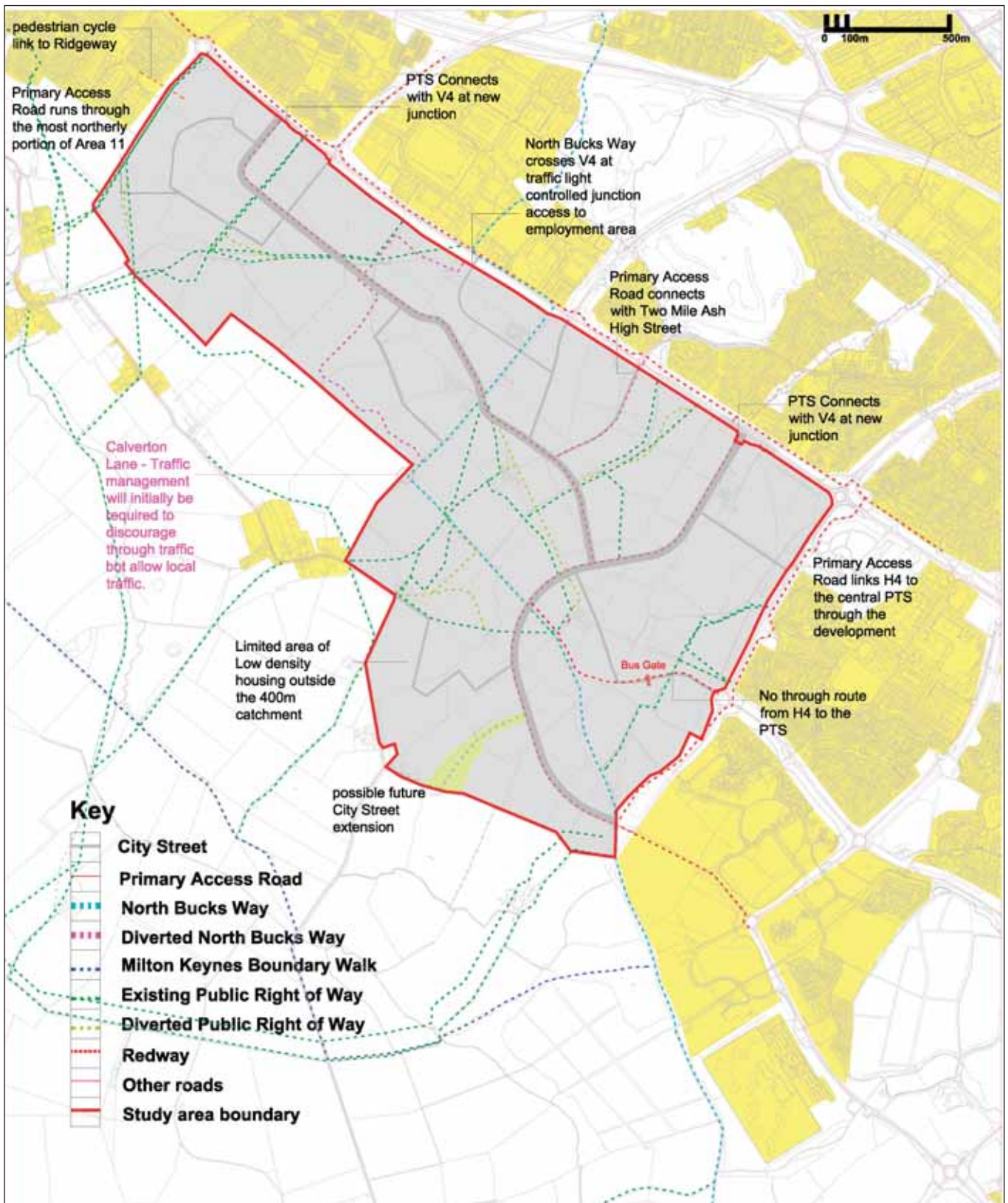
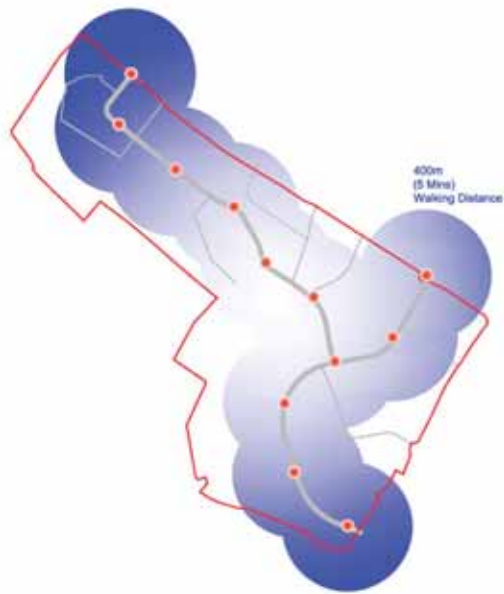


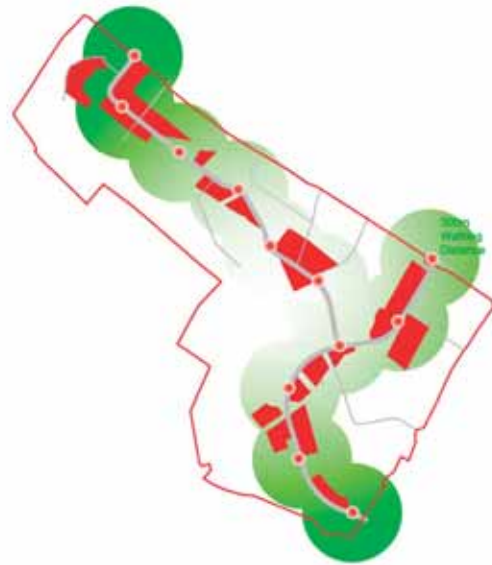
Figure 3.5 Existing and Proposed Footpath and Highway Network

movement



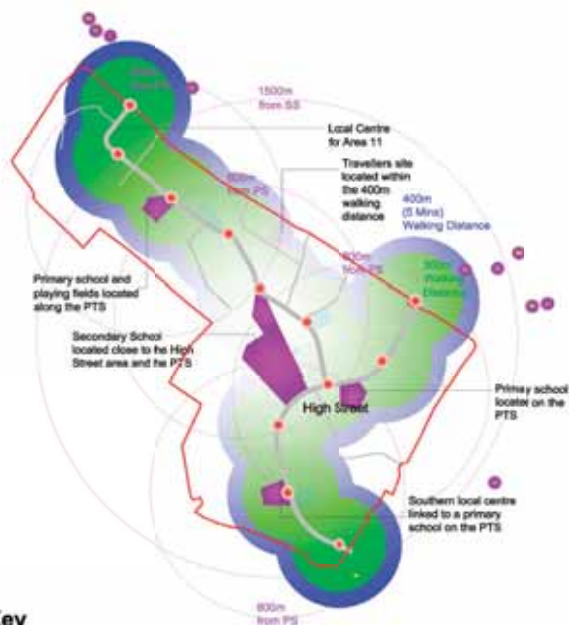
Key

- PT Route
- 400m catchment
- Indicative PTS stop (400m intervals)



Key

- High density housing
- PT Route
- 300m catchment
- Indicative PTS stop (400m intervals)



Key

- PT Route
- Proposed community facility
- Proposed school
- 300m catchment
- 400m catchment
- PTS stop (400m intervals)



Key

- Strategic landscape
- Proposed district park
- Burial ground
- Allotments
- Proposed local park
- Proposed playing pitches

Figure 3.6 Accessibility Diagrams

movement

network and public transport services. This work is still ongoing. However, preliminary results indicate that unless the H4/V4 roundabout is significantly improved then the queues, and particularly the delays, at this junction would exacerbate the extent of grid road to grid road rat running through the WEA. Appropriate improvements to the junction, and measures to deter rat running, (eg. bus gates) will need more detailed consideration.

3.6.16 The development of the WEA will also increase peak hour queues and delays at a number of off-site junctions, such as on the routes into CMK and along V4 Watling Street.

3.6.17 More detailed analysis of these junctions, in the detailed transport assessments accompanying the outline planning applications, will be required to determine the effect on junction capacity of developing the various phases of the WEA and what improvements are necessary and possible to achieve. The Highways Agency will need to be consulted on the effect of the WEA on the A5 slip roads at H3, Abbey Hill and H5, Portway intersections.

3.6.18 The development of the WEA will also require off site improvements to the existing highway/ grid road network to enable quicker, higher quality public transport services to be operated to CMK. These should be concentrated along the V4 Watling Street and H5 Portway corridors and more detailed work is needed to identify the nature of these.

3.6.19 Financial Contributions are therefore likely to be required to fund:

- Public transport improvements between the WEA and CMK.
- Other public transport improvements elsewhere in the City (eg on routes that link to the WEA)
- Off site highway and transport improvements.

The means of achieving this are considered in more detail in Chapter 7.

3.6.20 In accordance with the guidance contained in PPG's 23 & 24 and Policy D1 of the Local Plan there will be a requirement for an assessment of air quality and noise. A Strategic air quality assessment will need to be undertaken, using the transport model, to demonstrate the cumulative effect of the development and related traffic on the City.

Walking and Cycling

3.6.21 Sustainable modes of transport should be promoted by creating safe, direct, and attractive routes for pedestrians and cyclists (see Figure 3.5). One of the key development principles is to maximise the accessibility of key facilities for residents. Figure 3.6 shows how the majority of housing could be

located within easy walking distance of public transport routes, schools, open space and other community facilities.

3.6.22 The overall objective should be to encourage people to walk or cycle within the neighbourhood by the provision of a segregated primary footpath/cycleway network, integrated into the urban form, which is direct, pleasant and safe to use with highway crossings at grade. Built form and landscaping should be designed to give maximum surveillance along all footpath/ cycle routes.

3.6.23 The 'Redway' system, surrounding the WEA, should be extended into the development, primarily following the 'City Streets'. Crossings of the grid road network would be facilitated by signalised, at grade, crossings and the routes would be more integrated into the development and associated with the highways and 'City Streets', than elsewhere in Milton Keynes. New Redways will be integrated into the City Street and would be an integral part of the street scene. Their form would be a 'hybrid Redway' which complemented the higher density urban form. A new pedestrian and cycle route will connect to H1 Ridgeway from the northern part of the WEA.

3.6.24 Within housing areas, where there would be 20mph restrictions and traffic calming, cyclists could share road space with other users.

Footpath & Bridleway Network

3.6.25 Beyond the Redways, the pedestrian movement network would connect with the existing Public Rights of Way within the open countryside to the south and west.

3.6.26 The North Buckinghamshire Way should be retained as a recreational and bridleway route. It could be extended along the southern side of Area 11 to link into the Ouse Valley at Lower Weald or through to Calverton Road. Part of the route along Calverton Lane could be re-routed along the Kiln Farm Brook valley. A new signalised crossing of V4 could be provided to link with the existing section of the North Buckinghamshire Way at Kiln Farm. Public footpaths should be retained where they follow hedges or retained landscape features, some diversion of routes may be necessary.

3.6.27 The existing bridleways within the north west of the site should be realigned along the Kiln Brook linear park or along the proposed open space gap at Calverton End. In the east the existing bridleway around Hazeley Wood. can be maintained.



The development will be integrated into the existing primary highway network



The North Bucks Way will be a central footpath route linking the eastern and western edges of the site



The existing Redway network will be complemented by new Redways throughout the site - however to enhance public safety they will be integrated into the urban form rather than segregated as in this example

community facilities

3.7 Community Facilities

Education Requirements

3.7.1 Schools should be provided so that the WEA meets its own educational needs. Provision should be based upon the two tier system of primary and secondary schools.

3.7.2 A secondary school, ideally for 1500 pupils, would serve a catchment of some 6,000 dwellings and requires a site of up to 10.5 ha of useable land. 8 ha of this would be for playing fields and some 2.5 ha would accommodate the school buildings.

3.7.3 A 'two-form' primary school serves a catchment of 1,500 dwellings and requires a site of up to 2ha of useable land.

3.7.4 In addition to the provision of secondary and primary schools, there is also a statutory requirement to cater for pre-school education. These facilities should ideally be provided with primary schools, in which case the land requirement will increase from 2 ha to 2.2 ha.

Secondary School

3.7.5 The Secondary School should be located directly adjacent to the intersection of the two 'City Street', public transport routes (see Figure 3.7). This is near the centre of the site and within 1500m of the majority of the new housing areas. The Secondary School would form an integral part of the High Street mixed use area to ensure that a wide range of facilities are close to the School. Opportunities for wider community use under the 'Extended Schools' initiative should be recognised. Opportunities should also be created for including health services within the Secondary School.

Primary Schools

3.7.6 All four primary schools should be within 400m (5minutes) walking distance of most of the houses. Broadly evenly distributed throughout the WEA, the primary schools should all be located on the 'City Street'.

Health

3.7.7 The principles of primary care provision within the new community are for the facilities to be as local as possible, at the heart of the community. To achieve this some of the facilities will be co-located with primary schools and the facilities should be located along the City Street, in prominent locations, which reflect the importance of such uses.

3.7.8 The Development Framework proposes a 'hub and spoke' approach with local units ('spokes') supported by a bigger "hub". The

"hub" will provide a more extensive range of services, possibly including such services as minor surgery, outpatient care. It also presents opportunities for co-location of other services eg pharmacies, coffee shops/ retail/ libraries.

3.7.9 The Primary Care Trust require a "hub" which will, in the long term provide some 2000sqm of floorspace to be located within the High Street. There is potential for most of the parking to be provided in the form of shared spaces. An initial "spoke" should be located with the centrally located Primary School (PS2) requiring floorspace of up to 500sqm, subject to further detailed work. Further "spokes" may be needed in the future at two of the remaining primary schools.

3.7.10 New health facilities should be provided early on, as there is no capacity to take on any new patients in practices in adjacent grid squares.

Library and Adult Continuing Education Facilities

3.7.11 The Council's draft Social Infrastructure SPG identified a need for the provision of up to 500 sq metres for library and ACE facilities to serve the parts of the west flank that are not currently served by the libraries at Westcroft and Stony Stratford. Consideration should be given to the provision of these facilities in the High Street area.

Community Centres

3.7.12 Community Centres which will also double as sports facilities are an important focus for local community activities and should be provided on the basis of one hall per 3600 people. (Local Plan Policy C3). For the WEA this means four separate sites should be identified. Suitable sites would be located along the public transport route close to key facilities such as the High Street, local centres and schools.

Reserve Sites

3.7.13 The Milton Keynes Local Plan (Policy C9) requires that 0.75ha of 'Reserve' sites should be provided for every 1000 people for future local commercial or community uses (eg. places of worship). This would translate to about 11.0 ha of 'Reserve' sites to be identified.

3.7.14 About 50% of this provision is likely to come forward as some form of affordable/ specialist housing, and has been taken into account as such. A further 25% would be used for planned community facilities. The remaining 25% should be provided as



Community Facilities should be landmark buildings located close to the High Street and Local Centres



The Secondary School should be located at the heart of the new community close to the High Street



Community facilities such as medical centres should be welcoming and friendly buildings

small sites throughout the WEA, suitable for commercial or community uses, or as part of buildings in the 'High Street' area.

3.7.15 The exact location of reserve sites will be negotiated with the Milton Keynes Partnership Committee as individual development areas are brought forward as planning applications. A section 106 agreement to ensure the transfer of ownership of reserve sites to MKC, or a neutral party, may be required so that they remain as 'reserve' until such a time as they are needed or a specified period time has expired.

community facilities

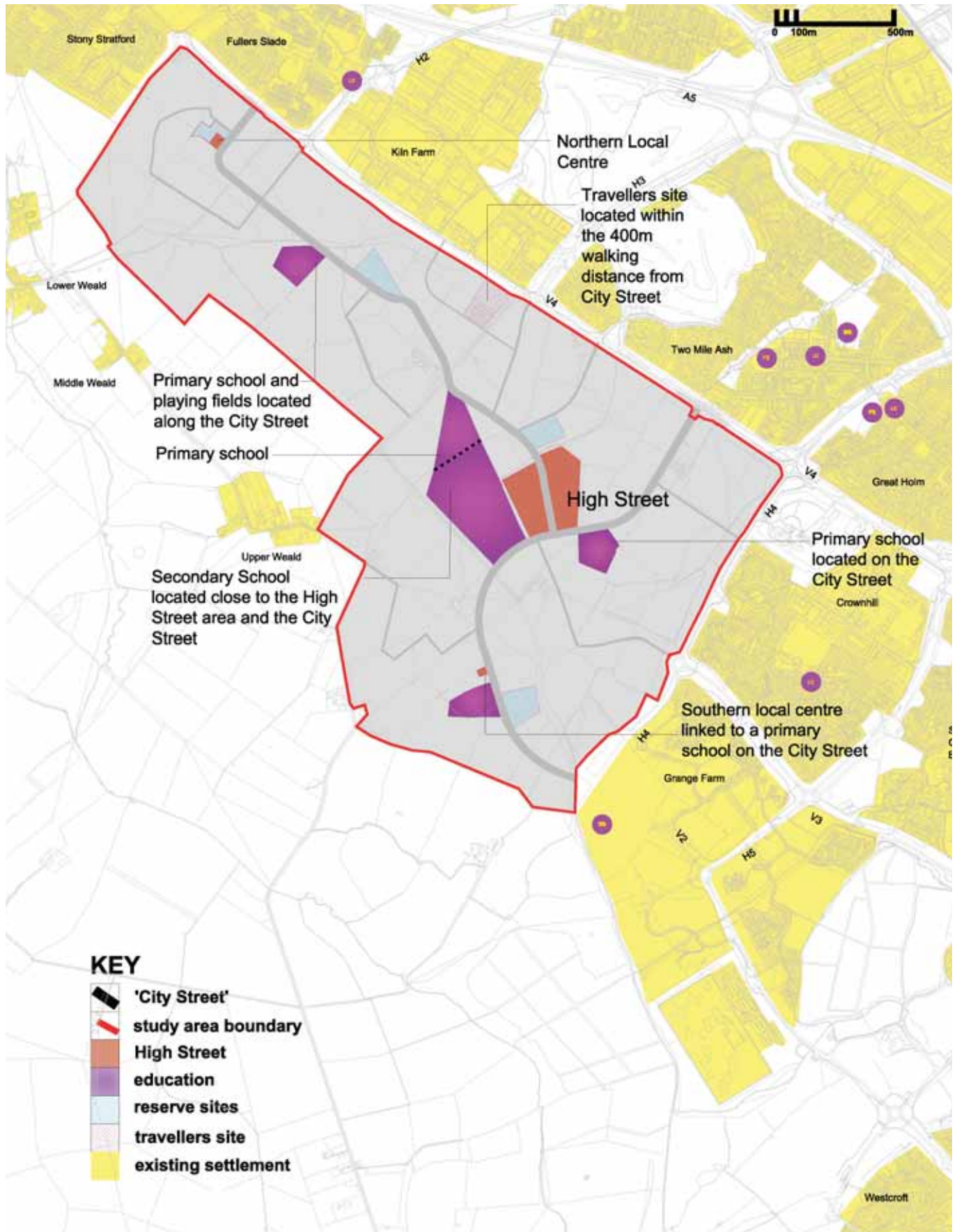


Figure 3.7 Community Provision

infrastructure

3.8 Services Infrastructure

3.8.1 The provision of services to the WEA will require close cooperation with the service providers and further discussions with them should be undertaken.

3.8.2 The local existing foul drainage network is not adequate for the WEA development, although the Loughton Brook Trunk Sewer, located about 1.2km north east of the WEA, does have adequate capacity. Due to the varied nature of the WEA's topography, much of the foul network will have to be pumped.

3.8.3 Anglian Water has indicated, however, that there is sufficient land available at Cotton Valley STW for any expansion required. The works may possibly not have adequate capacity for the whole development, depending upon its size and timing.

3.8.4 Two water mains reinforcements are planned for the WEA, one of which is under construction, which would supply all needs for the area. Confirmation of provision will be required from Anglian Water.

3.8.5 There is an existing medium pressure gas main in V4 Watling Street, which Transco have indicated would have adequate capacity for the development.

3.8.6 East Midlands Electricity (EME) have developed a strategy for the WEA which would involve the construction of a new 33kV primary substation fed from the Bradwell Abbey substation by two new 33kV cables. An 11kv distribution network will be required throughout the WEA and many of the existing 11kv/33kv overhead lines will need to be replaced by underground cables.

3.8.7 BT will provide a network at their own cost for the new development. Off-site costs would be borne by BT. Confirmation of this will be required from BT. Guidance in PPG8 requires the need to plan / facilitate the growth of new and existing telecommunication systems. (see Appendix A) Reference should also be made to MKC's Telecommunications Systems SPG. Broadband or similar high quality telecommunications should be provided to the developments in the WEA.

3.8.8 Twin oil pipelines cross the WEA, broadly following the North Buckinghamshire Way, and will be a significant constraint on development as no buildings or trees are permitted within 3 metres and no change to ground levels within 30m. This is reflected on the Development Framework Plan.

3.8.9 Two existing water mains cross the western part of the WEA and no building is permitted within 10m. A 400 kv overhead electricity transmission line crosses the WEA north of Calverton Lane. These are reflected on the Development Framework Plan.

3.9 Geotechnical

3.9.1 An Envirocheck search has been carried out for the whole of the Framework Area. This reveals a number of minor geotechnical issues, but no over-riding constraints to the development of the WEA. More detailed ground investigations will be required as detailed plans are prepared.

3.10 Surface Water Drainage and Flooding

3.10.1 Milton Keynes Council employs a policy of strategic flood mitigation. This approach has been adopted within the catchments draining the existing Milton Keynes built up area and it is the Council's policy to apply the same approach to catchment areas serving allocated expansion areas. It requires proposals to have regard to the implications of development for the catchment areas as a whole, for example considering the risk of flooding further downstream as a consequence of development. Supplementary planning guidance has been adopted by the Council in May 2004, which formally establishes this approach.

3.10.2 Developers should consult with the Internal Drainage Board, Anglian Water and the Environment Agency when preparing development proposals. Consultation with the IDB will be required for the adoption of infrastructure and drainage facilities and the need to plan in advance for adoption and future maintenance. The IDB also need a 9 m maintenance strip reserved alongside waterways subject to Environment Agency or IDB bylaws. Also there is a requirement for prior written consent for some works such as culverts.

3.10.3 The WEA comprises two different catchment areas, together with a number of watercourses. These are shown in Figure 3.8. The central area drains to the Loughton Brook and the northern area to Kiln Farm Brook/ Calverton Brook. For the WEA development to accord with policy, it should provide flood storage and drainage that accommodates all the development which is planned in the WEA. The objective would be to both mitigate the flows from the development areas as well as reduce the existing flood risk to Lower Weald.

3.10.4 The development of the central area should incorporate balancing ponds to attenuate the peak discharge to 3l/s/ha for a storm of return period 100 years. This drainage would be conveyed to Loughton Brook through the existing drainage system. Strategic mitigation along the Loughton Brook has the capacity to accommodate this part of the WEA within its catchment. The on-site balancing ponds should be located in the lower part of the catchments, close to V4 Watling Street.

3.10.5 On-site balancing ponds on the Kiln Farm Brook will be required to attenuate flows in the northern area of the WEA, to control runoff to the required 'greenfield' rates and again they could be incorporated as a landscape feature. Additional off site attenuation will be required to significantly improve flood protection to Lower Weald. On the advice of the Internal Drainage Board (IDB), flood storage is adopted in preference to the alternative of increasing the conveyance of the Calverton Brook to its confluence with the River Great Ouse.

3.10.6 Opportunities should be taken to implement SUDS in the WEA, but infiltration methods are likely to be ineffective and balancing ponds should be designed to deal with the entire volume of surface water run off.

3.10.7 Experience in Milton Keynes has shown that 'dry' lakes create both visual and functional disadvantages whereas 'wet' lakes provide a clear identity together with aesthetic, recreational, ecological and economic benefits. Reed beds offer considerable ecological benefits but do require stable, year-round water levels. The proposed lakes in highly visible locations such as those along Kiln Farm Brook and the lake proposed in the District Park should therefore be 'wet' features which create a visual focal point and contribute significantly to the ecological and amenity benefits of the development.

infrastructure

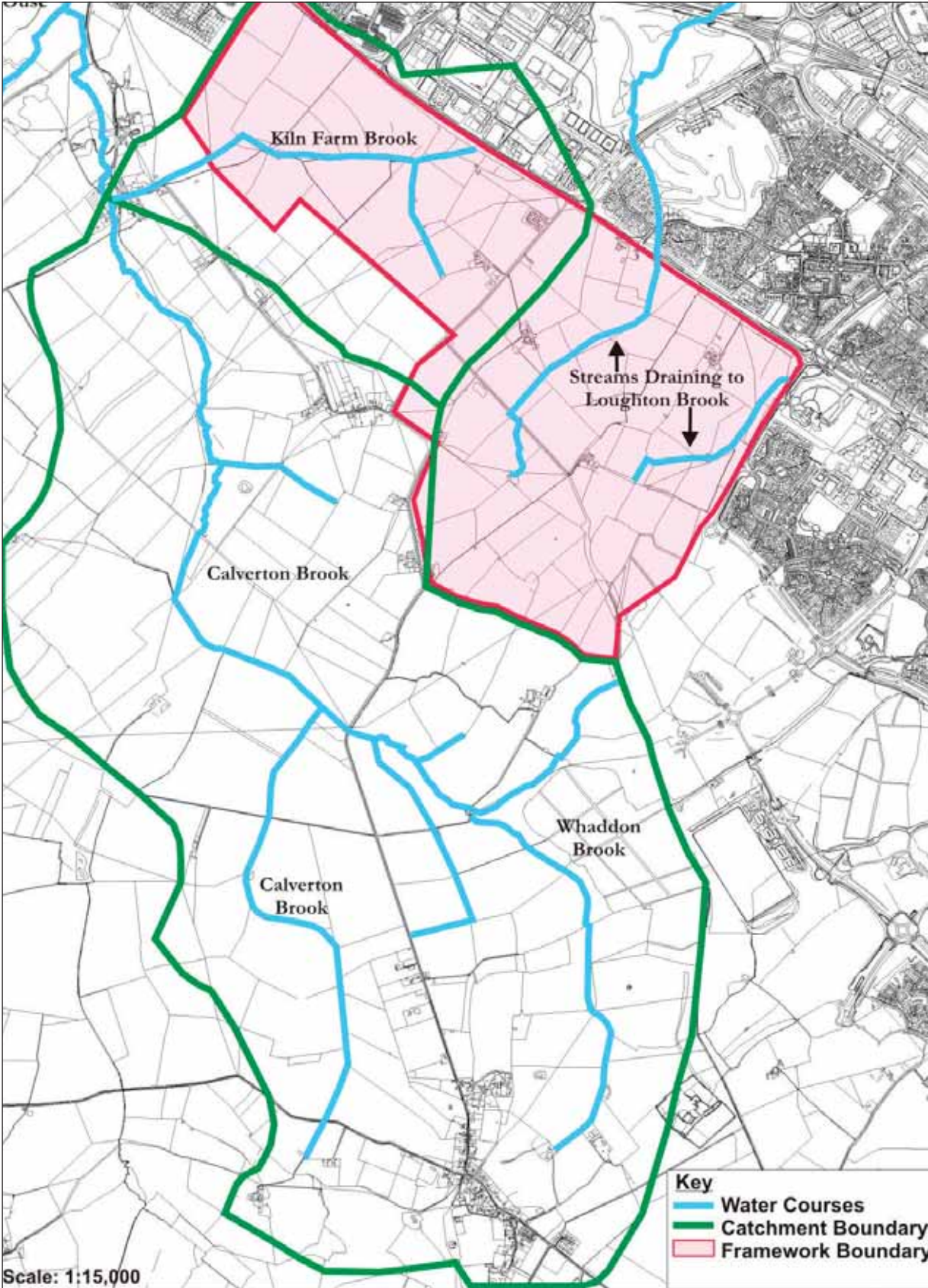


Figure 3.8 WEA Drainage Catchments

land use budget

3.11 Land Use Budget

3.11.1 The predominant land use within the Development Framework will be residential with a range of supporting uses including schools and open spaces. The Development Framework plan illustrates the distribution of housing densities. The pattern of densities responds to design objectives, in particular the use of traditional urban form principles. In addition, the location of the schools and the pattern of movement is also reflected in the pattern of densities. The densities decrease from the centre to the periphery of the development which follows the traditional pattern of settlement density and urban form.

3.11.2 Table 3.2 provides a summary of the principal land uses and their areas as shown in the plan in Figure 3.9.

3.11.3 Table 3.3 provides a summary of the number of houses generated at the densities set out above across the net development area. Also included is a net density figure calculated using the guidance set out in Annex C of PPG3 Housing (2000). It can be seen that at the densities identified the minimum average net density is above the PPG3 threshold of 30 dwellings per hectare and above the MKC Local Plan objective of 35dph.

Land Use Budget	Ha
Residential	148
Employment	17
Mixed Use (High Street)	8
Parks, Play Areas and Playing Fields	36
Schools	20
Community Reserve	5
City Streets	14
Other Major Roads	5
Burial Ground	11
Hazeley Wood	10
Travellers Site	2
Allotments	4
Structural Landscape	75
Balancing Ponds	11
Retained Uses	1
Total	367

Table 3.2 Land Use Budget

Housing Summary		
	Area	Dwellings
PPG3 Net Area <small>(inc. Local Parks)</small>	157ha	5800
PPG3 Net Density <small>(dph)</small>	36.9	

Table 3.3 Housing Summary

3.12 Development Framework Bringing it all together

3.12.1 The Development Framework Plan (Figure 3.9) illustrates how the individual framework 'layers' can be applied to the development area to achieve the vision for the WEA. The plan illustrates how townscape and landscape strategies have been brought together to create a new 'place'.

3.12.2 It is envisaged that the Development Framework Plan will be a coordinating plan which takes a strategic view over the development area and provides a framework for the detailed design of individual elements. The following chapter identifies a series of 'character areas' and details a number of key features of the development framework that require more detailed description through text, illustration and photographs.

bringing it all together

