

Maidencraig Masterplan



Bancon Developments

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ARCHIAL



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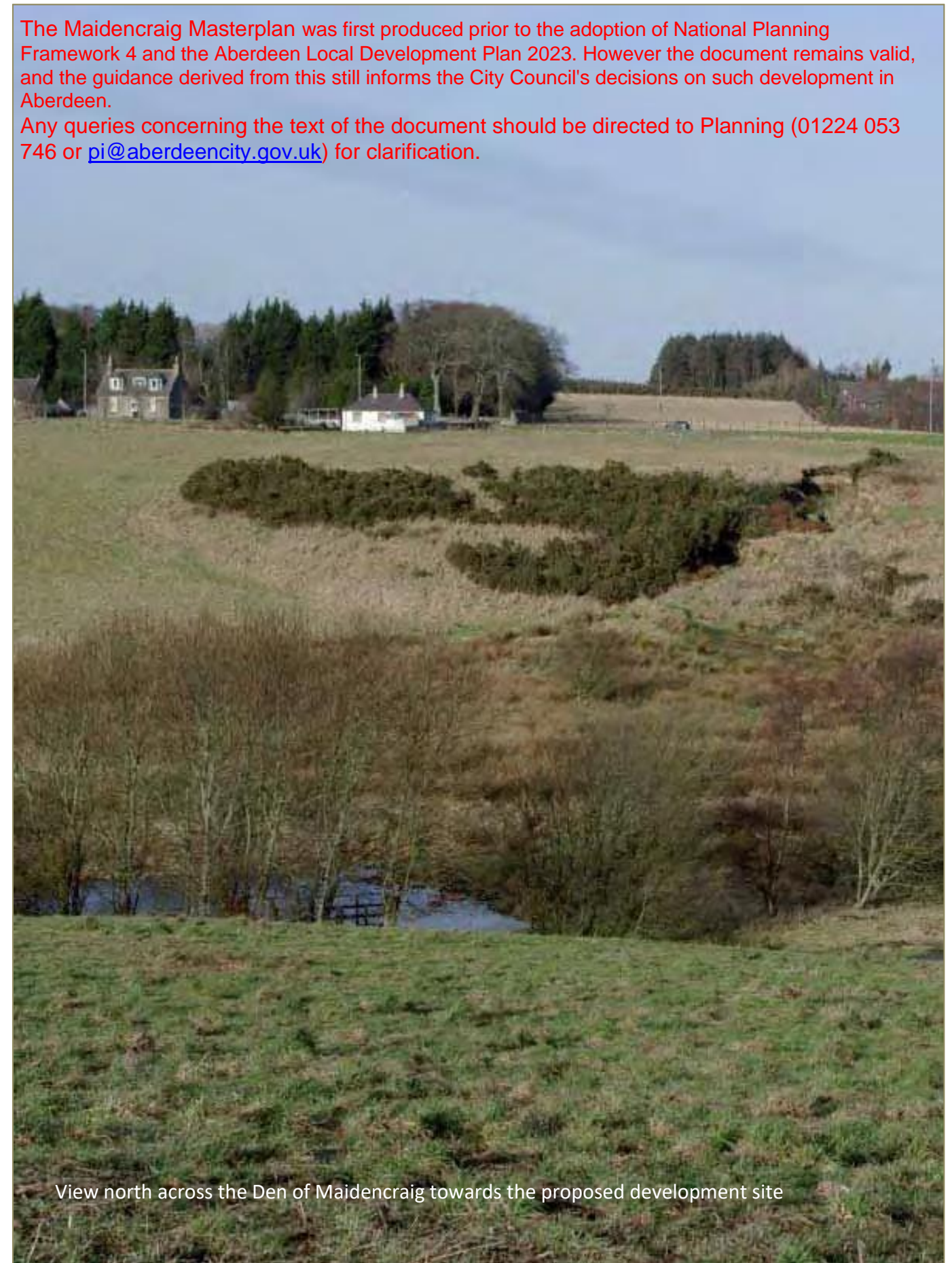
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The Maidencraig Masterplan was first produced prior to the adoption of National Planning Framework 4 and the Aberdeen Local Development Plan 2023. However the document remains valid, and the guidance derived from this still informs the City Council's decisions on such development in Aberdeen.

Any queries concerning the text of the document should be directed to Planning (01224 053 746 or pi@aberdeencity.gov.uk) for clarification.



View north across the Den of Maidencraig towards the proposed development site

KEY

-  Flats
-  Semi-det. / Detached
-  Terrace / Townhouses
-  Commercial
-  Landmark Buildings
-  Potential Primary School locations



The Masterplan



1 Introduction

View south from the site towards the Den of Maidenraig and Hazlehead

1 Introduction

This masterplan provides a template for all development on the zoned housing land at Maidenraig, on the western edge of Aberdeen.

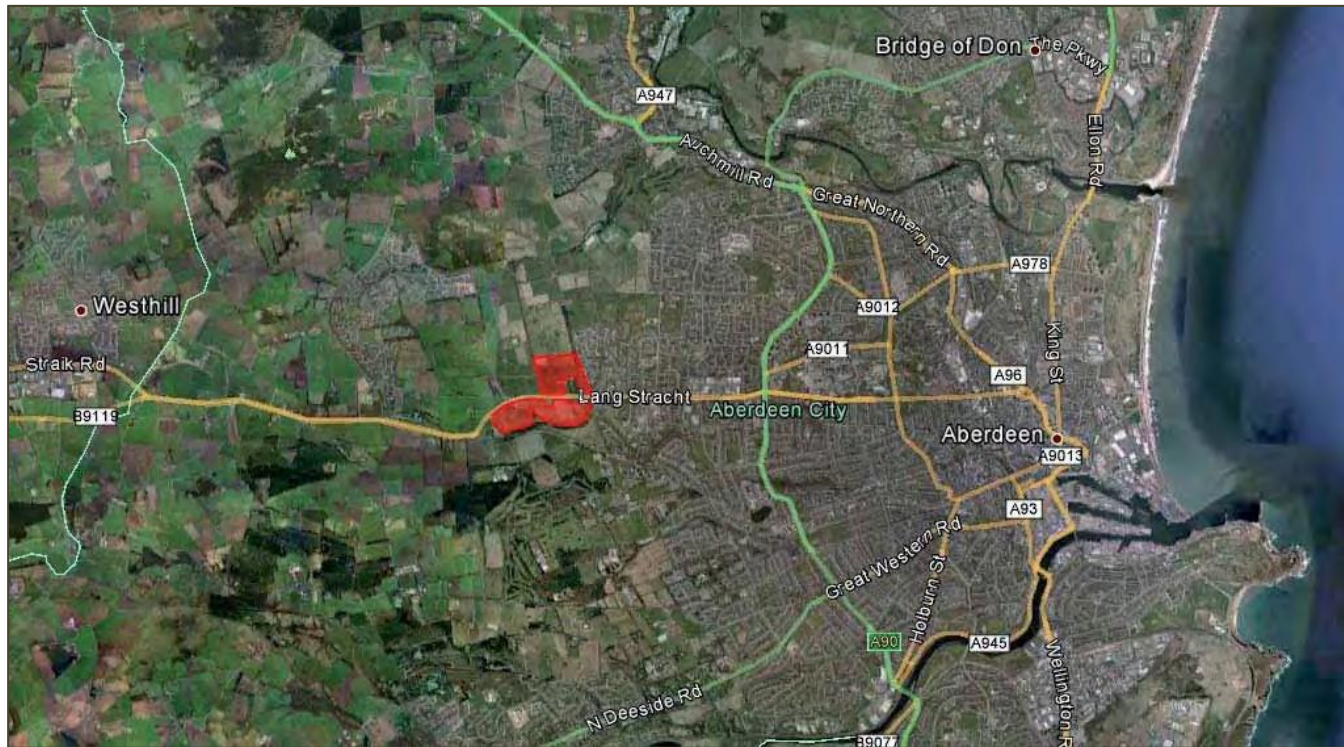


Fig 1 – site location (from Google Earth)

The site is identified in the Aberdeen Local Development Plan 2017 as land for 750 dwellinghouses, split into two areas, north and south of the A944 (Lang Stracht). The masterplan demonstrates how the housing, and associated infrastructure, facilities and services will be developed in a sustainable manner and with respect to the surrounding landscape and population. The masterplanning process is set out in supplementary guidance by Aberdeen City Council, and we have sought to follow it as closely as possible. This involved consultation with various Council and other agencies, as well as the local community. We have sought to engage with the local community as openly as possible throughout the development of this plan, with the aim that the resulting development will be a positive addition to the area for existing residents. This report and associated plans and documents will be adopted by the Council as Supplementary Guidance to the Local Development Plan. It sets out the principles and parameters for the site development, and will subsequently be used to assess planning applications. Applications for phases of development will be brought forward individually, and the masterplan ensures that they all work together to provide a vibrant new community, with its own identity.



Fig 2 – the masterplan site viewed from the Den of Maidenraig Local Nature Reserve to the south.



2 Context

View north west along the Denburn Valley with the Maidenraig south east site on the right, taken from the Den of Maidenraig Local Nature Reserve

2.1. Site Description

The proposed development area is made up of two parcels of land, identified in the Local Development Plan as OP31 – Maaidencraig south east and OP32– Maidenraig north east. The two areas are bisected by the A944 (Lang Stracht) Road.

Maidencraig north east. This area extends to 22.8 hectares, and comprises the fields which surround Whitemyres House and Farmstead and Fernhill Farm. The site is generally on a south facing slope. To the east lies Sheddocksley, The northern section of the boundary with Sheddocksley is defined by a thick (30m+) tree belt, and the southern section by areas of hedgerow and sporadic trees. Along the northern boundary of the masterplan site is further tree planting, and combined with the topography, the site is fairly well screened from the north. The site contains two listed buildings, at Old Whitemyres Farmhouse (C(s)) and Whitemyres House (B).

Maidencraig south east. This area extends to 29.8 hectares, and encompasses the land between the A944 in the north and the Den Burn to the south. The land is on a south facing slope, which steepens as it approaches the Denburn. To the east is the residential area of Summerhill. Beyond the Den Burn Valley to the south of the site is the Den of Maidenraig Local Nature Reserve with Queens Road beyond. There is a TPO to the south of Maidenraig Steadings, and one covering part of Maidenraig Wood. The site contains one listed building, Old Whitemyres N Part of Steading (C(s)).



View 1 – Maidenraig NE – Looking North West across A944 with Whytemyres Farmhouse on the right.



View 2 – Maidenraig SE – Looking South West from A944



View 3 – Looking towards Site from South West across Nature Reserve from Queen's Road



View 4 – View from the North East looking over the whole site.



View 5 – West from the Summerhill area along the Denburn v lley



View 6 – East from Nature Reserve across Denburn towards A erdeen.

Topography

The whole of the site has a southern aspect, and slopes down from North to South, which is ideal for the development of highly sustainable housing. At the highest point the site is at the 145m contour line, and slopes down gradually to the 105m contour in the southeast. Only very close to the Denburn in the south does the land become steeper. This determines that a small portion of the southern edge of the site is undevelopable due to the steep slopes, but this will offer terrific vistas from the site across the Denburn Valley. Land to the east and west of the site varies slightly, but there are no extremes of elevation that offer views of any great distance. Fig 3 overleaf shows the topography with 0.5m contour lines.

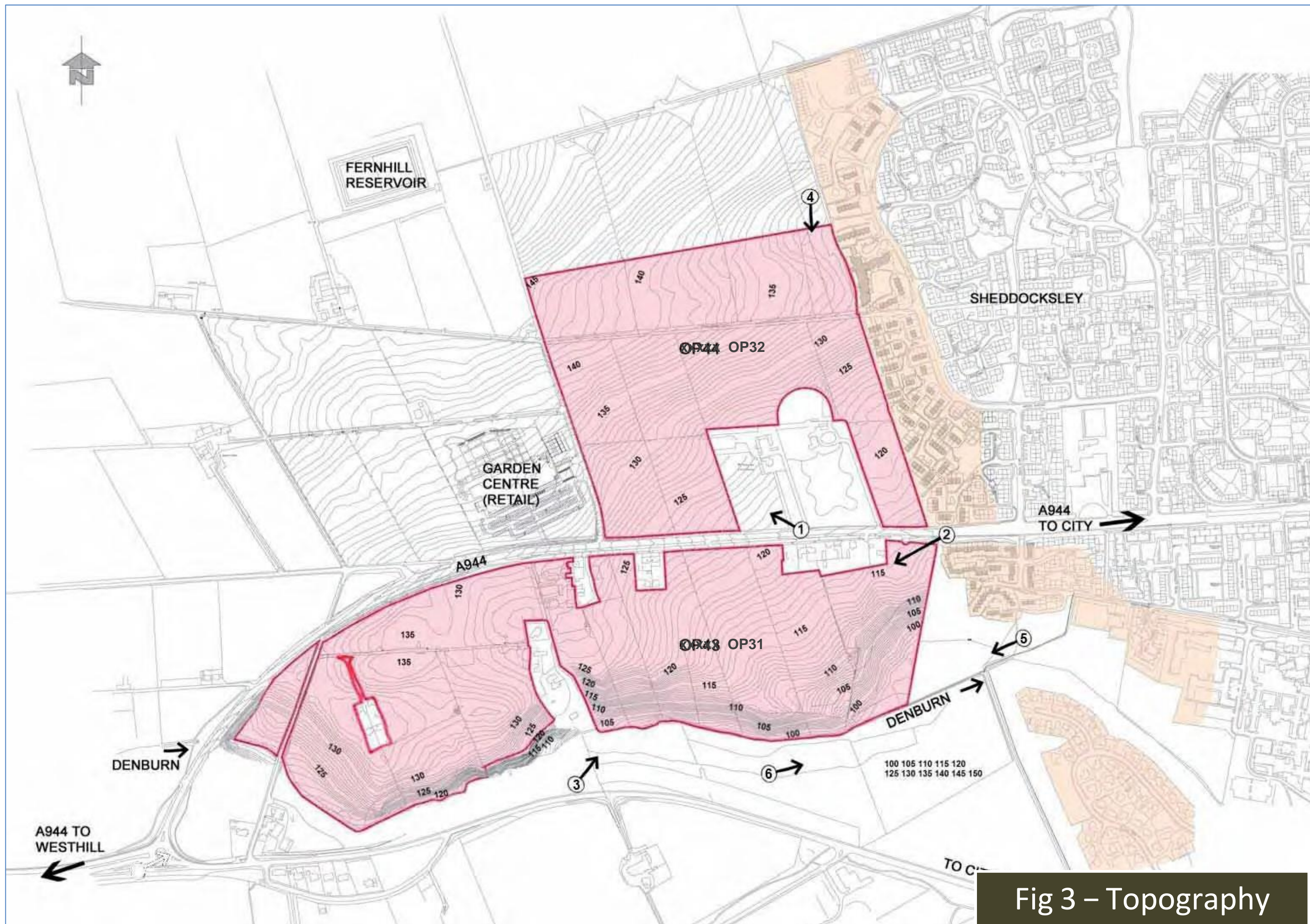


Fig 3 – Topography

Environment/Vegetation

As the site has previously been used on rotation both for rose growing and as pasture land and set out fields, the majority of the area is clear of significant vegetation or trees (see fig 6). These are restricted to the Den of Maidencraig, hedgerows, field boundaries and the grounds of existing houses. Where necessary, full tree surveys will be provided as part of detailed planning applications for individual phases. It is the intention to retain all trees on the site where possible.

The area to the south of the Maidencraig south east is identified as a Local Nature Reserve and is a valuable and popular recreational area. It is important that development of the Maidencraig masterplan area does not detract from or impact on the value of this area. Maidencraig Wood, to the south of the Local Nature Reserve is partly covered by a Tree Preservation Order – see fig 15 on p15.

Built Heritage

There are several buildings on the site, mainly associated with the southern edge of the A944. In addition to this, the buildings of Whitemyres House, Farmstead, and grounds occupy a large area of the Maidencraig north east area. These are set back from the A944 in wooded grounds. Several of these are listed buildings – see fig 5 overleaf.

A number of other private properties exist in the Maidencraig south east area, and these have been carefully considered in the formulation of the masterplan.

Stone walls are common throughout the site, and indeed the wider area. This is an attractive and characteristic asset, and one that can be utilised in designs of developed land. These can clearly be seen on fig 3, particularly in the northern area of the site.

Archaeology

There are not a great many archaeological and historical features recorded within the development area – a couple of farmsteads which may or may not have origins earlier than the first edition Ordnance Survey map. Historical research might determine whether they have medieval origins. However, the lack of recorded sites does not necessarily imply lack of archaeological remains.

Any development in the masterplan area would require a pre-development programme of archaeological work, probably in the form of a desk-based survey, a walkover and a field evaluation, probably in the region of 10%.

Landscape Character

The Landscape Character Analysis, published by Scottish Natural Heritage, classified the Maidencraig East site as Open Farmland and stated that it falls within the Maidencraig Character Area.

The distinctive landscape features are set out as follows:

- *“The small-scale valley landform;*
- *The beech trees that line the main road into the city;*
- *Stone dykes, occasionally consumption dykes;*
- *Frequent, scattered buildings, generally traditional in style;*
- *Views to architectural landmarks.”*

Hydrology

Part of the site has been identified by the Scottish Environmental Protection Agency (SEPA) as at risk from flooding. This is based upon their indicative one in 200 year flood risk maps, and relates solely to the Denburn Valley to the south of the site. Fig 4 shows the details from SEPA’s flood map with the development site shown. View 6 from page 7 gives an indication of the difference in levels along the southern part of the site, with the Denburn flowing along the valley floor.



Fig 4 – flood risk from SEPAs flood risk map.

Ecology/Biodiversity

The surrounding areas, particularly the woodland to the north and the Den of Maidenraig to the South are of high biodiversity and ecological value. At present there are pockets of trees and woodland within the site area, shown in fig 5.

One of the aims of the landscape and open space strategy is to link the main areas of woodland to the north and south of the site, with green corridors. The eastern edge, identified as Green Space Network in the Local Development Plan is of particular value, as it can contribute towards this link. This clearly offers a valuable biodiversity benefit by linking two currently fragmented habitat areas.



Fig 5 – existing woodland around site

The development areas (shown on the masterplan) are also detached from the principle habitat areas of the Den of Maidenraig by the steep slopes. With the exception of foot and cycle paths, and the proposed bridge(s) over the Denburn, the impact on the Den of Maidenraig Local Nature Reserve is anticipated to be negligible. Crossing points and paths – if appropriate – will be designed as part of detailed planning applications in full consultation with SEPA, SNH and Aberdeen City Council, to ensure an appropriate design solution that will not impact upon the nature conservation interests of the area, or the free flow of the Denburn in any way.

An ecological study was carried out in 2005, and clarified that the proposed development areas within the site are largely made up from poor semi-improved grassland, improved grassland and arable land. The study identified that the valuable areas for ecology and biodiversity are primarily in the Den of Maidenraig Local Nature Reserve area. The map from the study is shown in fig 6 below.

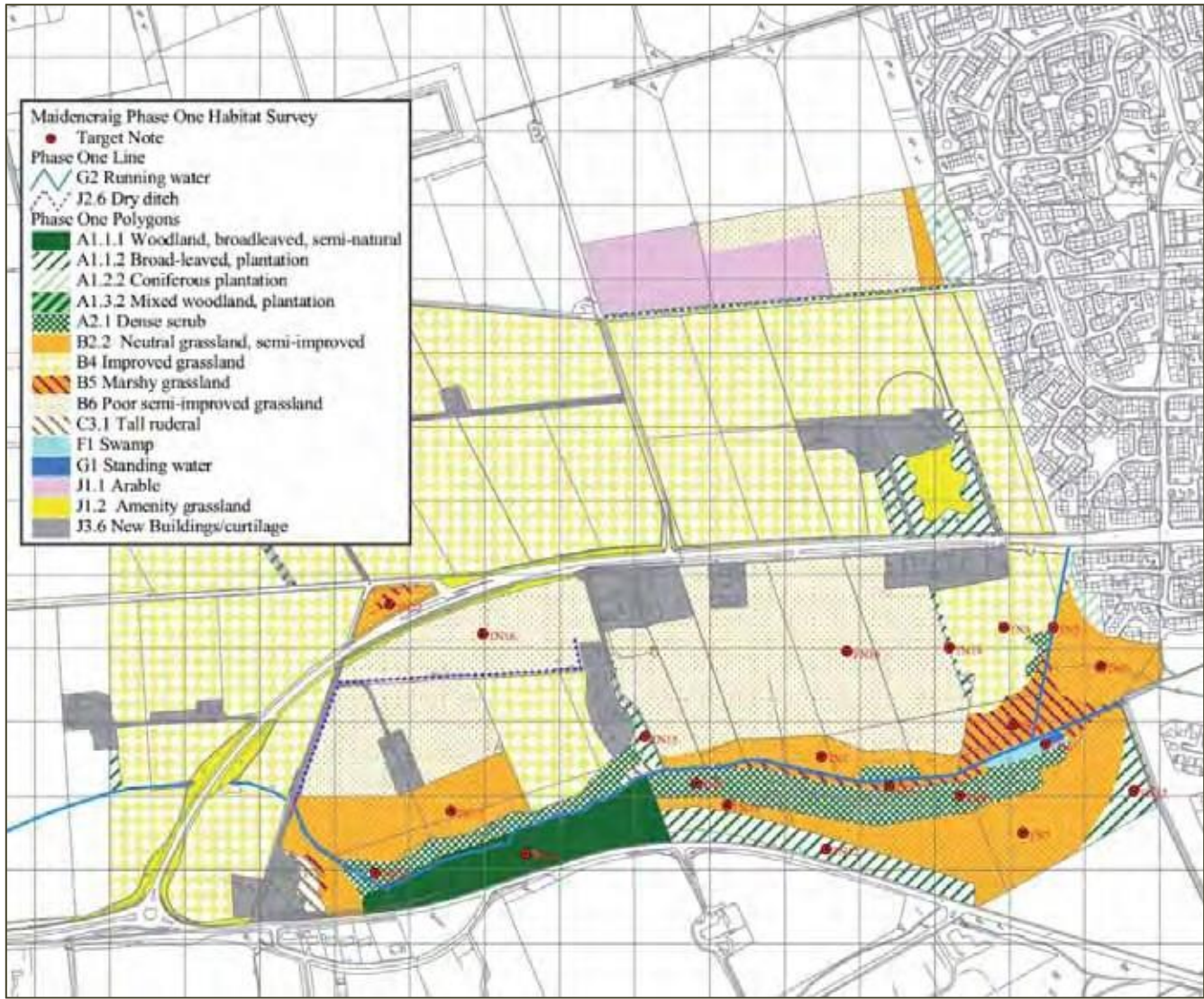


Fig 6 – Ecological Assessment plan.

Note – the full Ecological Assessment is included as Appendix 2

Utilities

The site is already well served by utilities. The Fernhill Reservoir sits immediately to the north west, and a water main runs through the site west of the Dobbies Garden Centre. A public sewer runs from east to west along the line of the Den Burn, immediately to the south. Gas, Phone and Electricity are readily available on the land. Fig 7 shows the utilities available on and adjacent to the site.

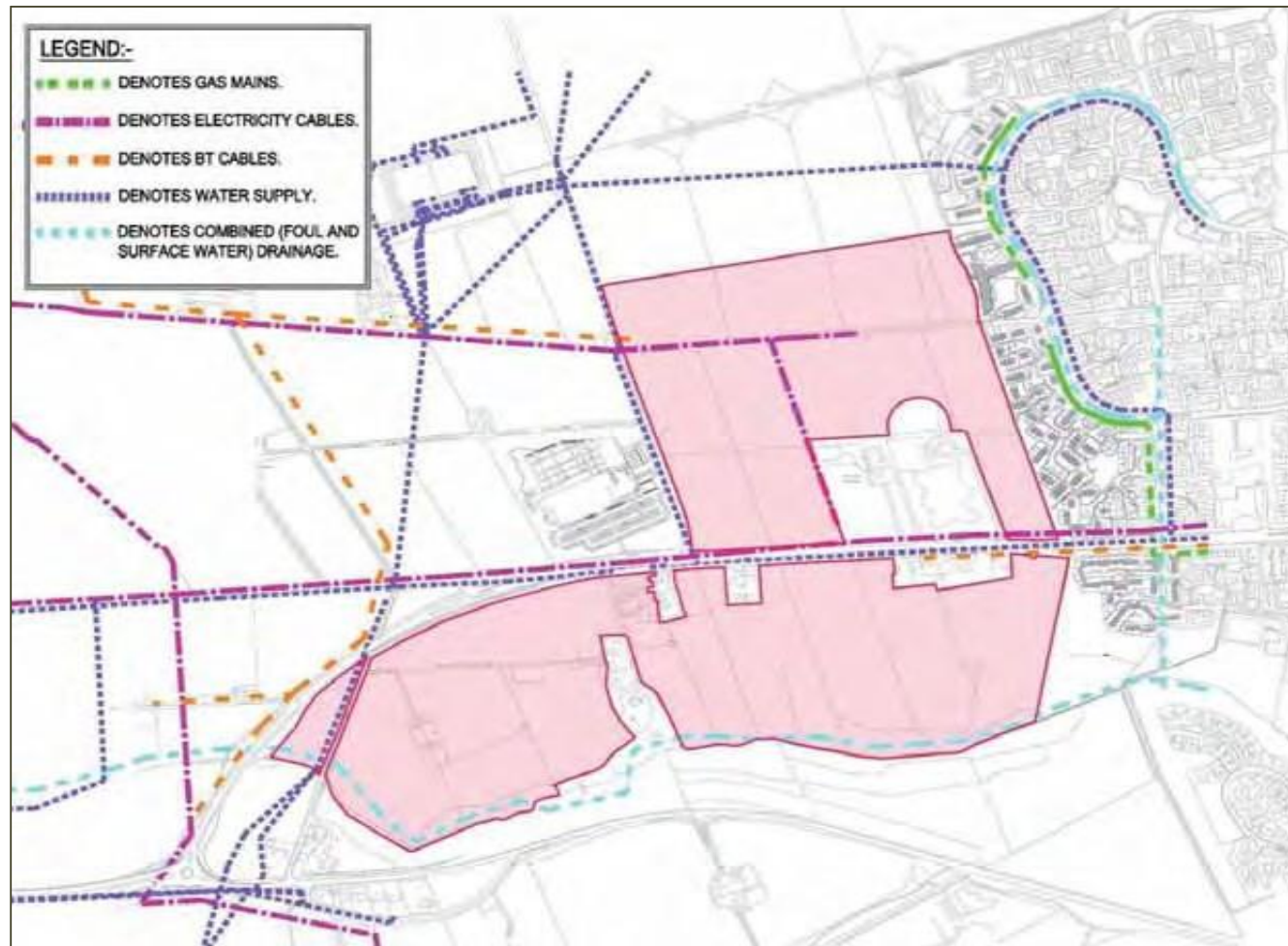


Fig 7 Existing Utilities

Access and Connectivity

Walking

Walking is clearly the most healthy, cost effective and sustainable mode of transport. Aberdeen City Council has developed a core path plan, identifying existing and proposed paths to create a network around the city. Fig 8 shows the core path plan for the area in and around the proposed development site, demonstrating excellent linkages, and great potential for further enhancement through the masterplanning process.

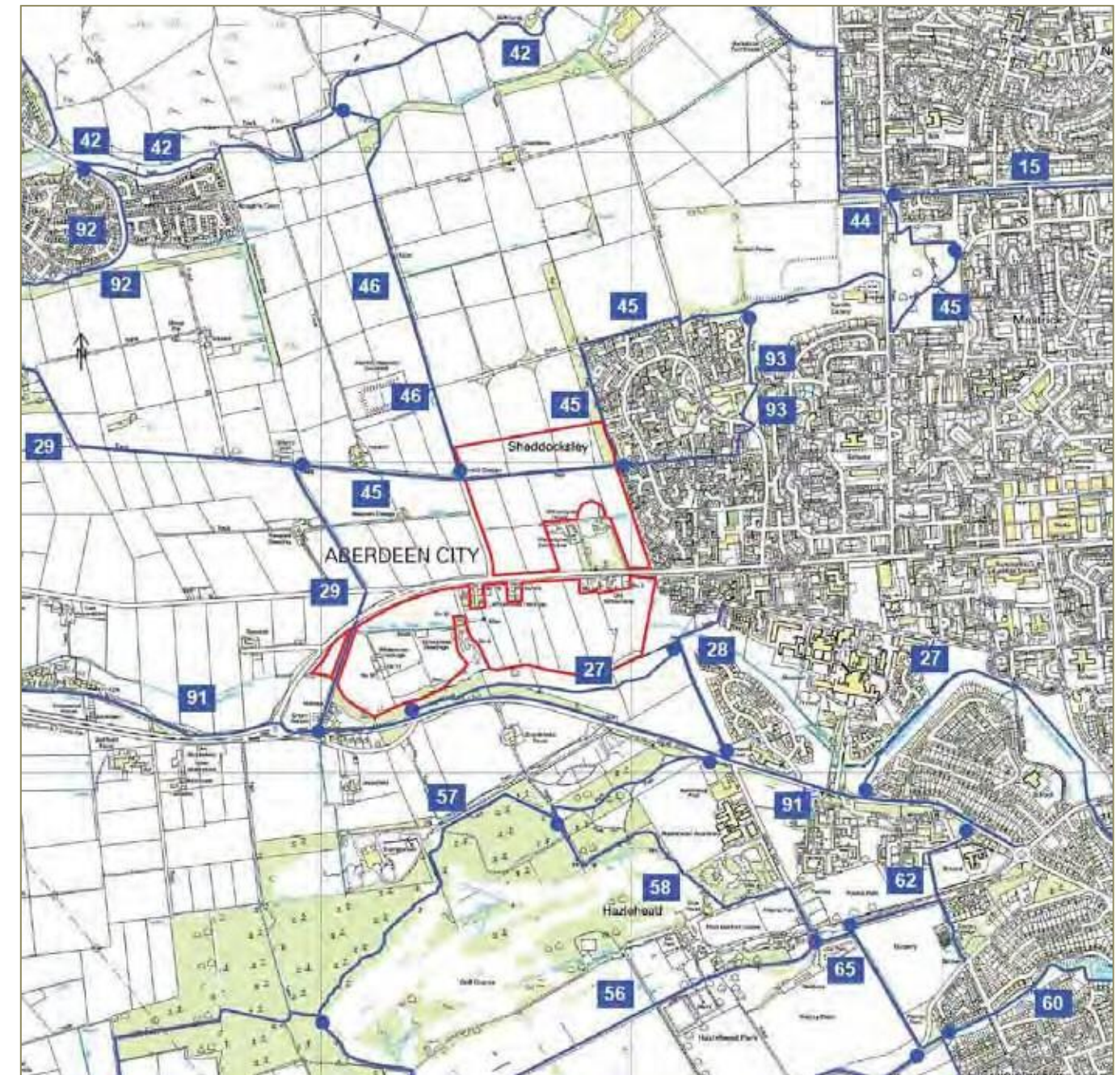


Fig 8 – core paths plan.

Cycling

Cycling is also a healthy and sustainable transport mode, and encouraged through the formation of both dedicated and shared cycle routes with footpaths and bus routes. The Aberdeen Cycle Forum was set up in 2003 to represent cyclists in Aberdeen. The group's aim is to encourage cycling of all types: cycling for pleasure, cycling to work and to school, to the shops, off-road or on-road.



Fig 9 – cycle routes from the Aberdeen Cycle Forum.

Note – Fig 9 has been adjusted to show the site boundary in red, and the cycle path provision along the south side of the A944 (utilising the old Lang Stracht Road) and down the Switchback Road to join the cycle path running alongside the B9119.

Public Transport

In order to ensure the delivery of the best public transport solution, it is important to establish the level of services that operate in the vicinity of the site at present. There are three services operated by the First Bus Group that could potentially serve the site. These are identified in Fig 10 as the 23, the 11 and the 41 (park and ride) routes. The Stagecoach X17/N17 service is also a useful existing service.

First Group 23 Service

The 23 service is the most local to the site, offering a route from the adjacent Sheddocksley area to the City Centre with an excellent 10 minute frequency. The buses currently travel around Lewis Road in an anti-clockwise direction, before heading along the Lang Stracht to the east. An excellent journey time of 24 minutes from Lewis Road to Union Street makes this a well used service. On Sunday, the frequency is every 30 minutes.

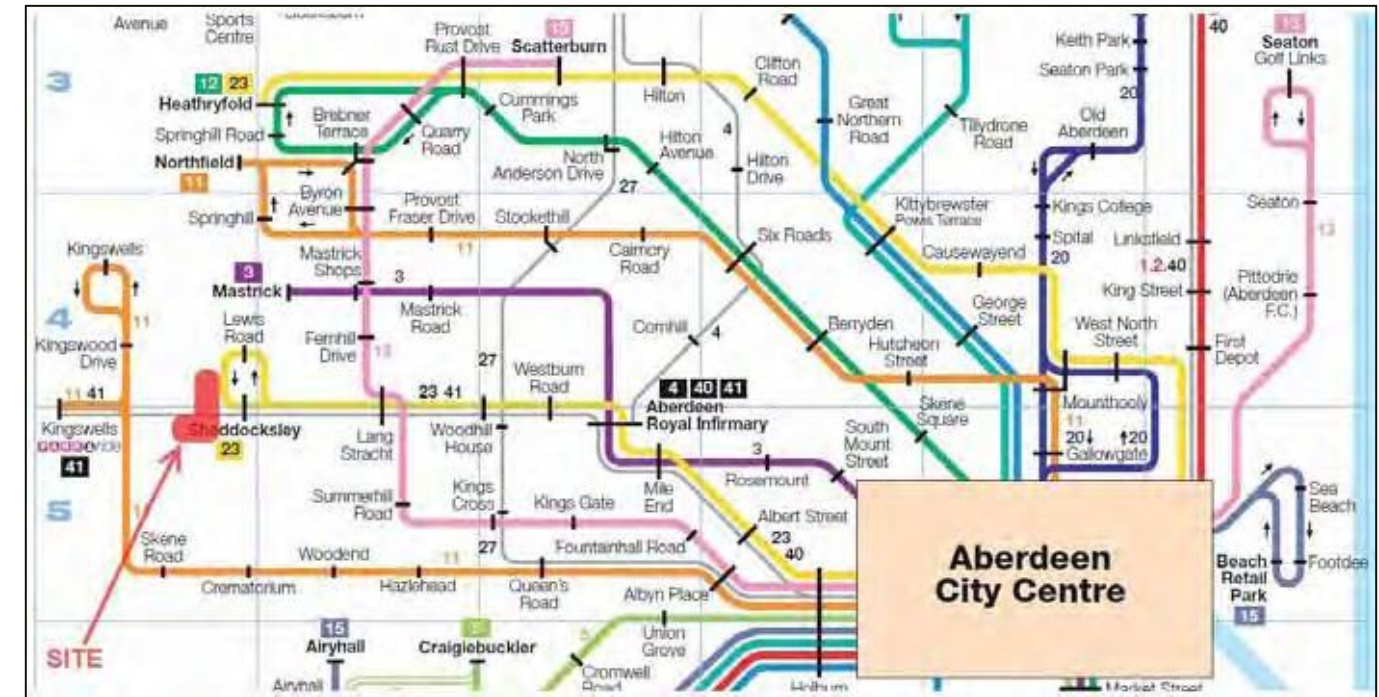


Fig 10 – First Group bus services (from First Bus website) with the masterplan site identified in red.

First Group 11 Service

The 11 service runs from Kingswells to the City Centre, and could potentially offer a service from south of the proposed development site with around a 23 minute journey time to Union Street. The frequency of this service is every 30 minutes.

Stagecoach X17/N17 Service

This service runs from Aberdeen City Centre to Westhill, including the Elrick area to the west of Westhill. During weekday daytime hours the frequency varies between 11 and 15 minutes, and runs along Skene Road/Queen's Road to the south of the development site (following a similar route to the First Group 11 bus).

First Group 41 Service

The 41 service has been included for completeness, although it is less likely that it could be utilised to serve the development. A high customer base would be necessary to justify additional halts on what is intended to be a direct service. However, as it currently uses the Lang Stracht (A944) which runs between the two sites at Maiden Craig, the potential for a new halt in each direction will be explored further. This was formerly the 40 service that ran from Bridge of Don to Kingswells, but has been split into two services, with the 41 running from Kingswells to Aberdeen Royal Infirmary only.

Other Services

In addition to the above services, the Stagecoach 218 service from Alford to Aberdeen via Westhill offers an additional option, and currently stops at the junction of Lewis Road and the A944, approximately 400m east of the masterplan site. This service offers 9 buses per day during the week.

In accordance with local, regional and national policy on transport and land-use planning the combination of walking, cycling and public transport provision is aimed at creating a modal shift away from the reliance on the private car. Discussions are currently ongoing with First Bus Group with regard to an extension of the 23 service to serve the site.

Education and Routes to Schools

The Action programme for the Local Development Plan includes the following information on schools for the masterplan zone: –

OP31 Maidencraig South

Zoned to Fernielea PS which is forecast to have some spare capacity to accommodate pupils generated, but an extension or temporary accommodation may be required, as the forecasts suggest it that the roll will exceed capacity in 2017. Zoned to Hazlehead Academy which is forecast to have some spare capacity to accommodate pupils generated, but an extension or temporary accommodation may be required. Alternatively, any rebuild of Hazlehead Academy could accommodate the pupils generated. Community facilities including Learning & Development facilities may also be required.

OP31 Maidencraig North

Zoned to Kingsford PS which has spare capacity to accommodate development at this scale. Additional capacity is likely to be required at Northfield Academy to accommodate pupils generated by this development. Possible re-build of Northfield Academy could create capacity to accommodate these pupils and those from OP45 Greenferns development.

Considering the location of schools in relation to the proposed development site is also important. Fig 11 shows the site (in yellow), the four relevant schools (red) and the core paths network (in pink).

The accessibility of the Council's preferred schools has been raised by the Mastrick and Sheddocksley Community Council in early discussions, and as a result the table in fig 12 shows the distances for pedestrian/cycle access to each school from the nearest and farthest points in the Maidencraig masterplan site.

Best principles of planning suggest that a 400m distance is a typical 5 minute walk, and an 800m distance is a typical 10 minute walk. The concern with this development is not necessarily school capacity therefore, but the distances to them. However, the City Council are currently undertaking a review of all school catchment areas and Bancon will liaise with the Education Service on this issue.

In addition, the provision of 'safe routes to schools' will be considered in detail.



Fig 11 – Site in relation to schools, and core path network

School	Distance to nearest part of site	Distance to farthest part of site
Kingsford Primary School	0.84km	2.29km
Fernielea Primary School	1.56km	2.41km
Hazelhead Academy	0.68km	1.52km
Northfield Academy	3.01km	4.59km

Fig 12 – Distances from schools

2.2. Planning Policy Review

Aberdeen City and Shire Strategic Development Plan

The Aberdeen City and Shire Strategic Development Plan (SDPA) is an expansive, visionary document which encourages both economic and population expansion in the North East in the period up to 2035. The Spatial Strategy in the Plan highlights that this growth is envisaged to take place in three Strategic Growth Areas – in the transport corridor from Laurencekirk to Huntly, in the Aberdeen to Peterhead transport corridor, and in the City of Aberdeen. The Plan aims to increase the population of the city, specifically promoting the construction of 21,000 homes on Greenfield homes in Aberdeen City up to 2035.



Fig 13 – Strategic Development Plan - Spatial Strategy Extract

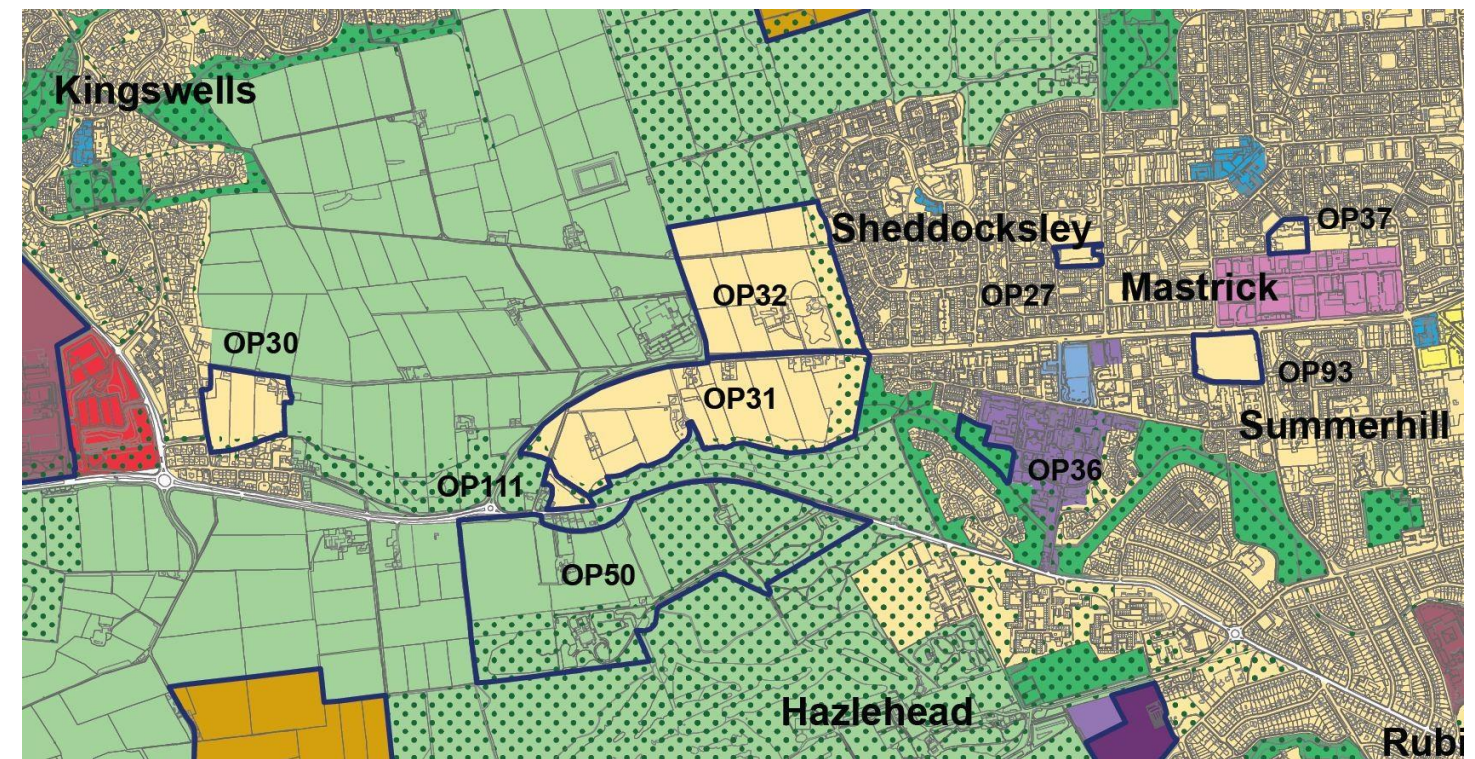


Fig 14 – Aberdeen Local Development Plan zoning map excerpt

2.3. Site Analysis Summary

Fig 15 overleaf shows an aerial photograph of the site, with several features overlaid to show the context of the development site. The site boundary is shown in red, and listed buildings and the Tree Preservation Orders are shown in yellow. The plan also identifies the boundaries of the Den of Maidenraig Local Nature Reserve.

The Aberdeen Local Development Plan (ALDP)

The Aberdeen Local Development Plan aims to implement the growth strategy set out in the Strategic Development Plan.

Site OP31 Maidenraig SE is allocated for 450 homes by 2016, while site OP32 Maidenraig NE is allocated for 300 homes in the same time period. The Plan does not allocate employment land for either site. These allocations are confirmed on the Proposals Map.



Fig 15 – Site Analysis

3 The Vision for the Masterplan

View north from the Den of Maidenraig Local Nature Reserve towards the site, with Summerhill on the right

3 The Vision

Maidencraig has great potential as a residential development site. It is well located, on a south facing slope and has great views, but it is bisected by a main arterial road – the A944 (Lang Stracht).

Our Vision is to harness these advantages to produce a vibrant, welcoming, attractive and sustainable community which is safe and easy to move around, while minimising the segregation which the Lang Stracht tends to impose.

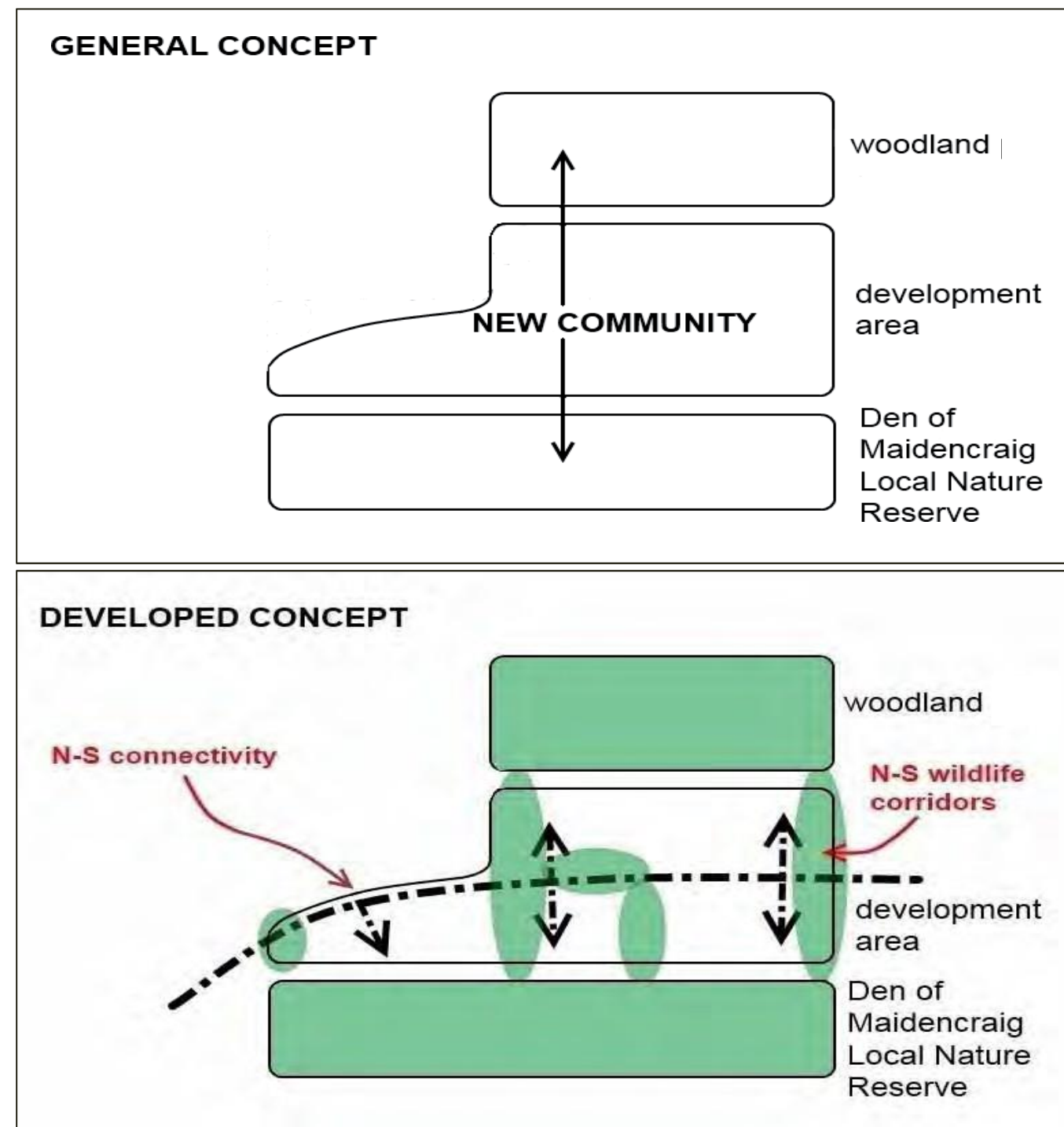


Fig 16 – Diagrammatic concept

The development will be highly landscaped – echoing and absorbing the surrounding landscape (of the Northern woodland, the Green Space Network, and the Den of Maidenraig), and highly sustainable, with a mix of uses and good connections to walking, cycling and public transport routes. Within this over-arching framework we will develop three distinct character areas containing attractive residential neighbourhoods where families can live, work and play.

We are looking to deliver this Vision by adopting the concept shown in Fig 17. This concept diagram suggests linking the new community to the major environmental assets and areas of recreational open space which lie to the north (the woodland) and south (the Den of Maidenraig) of the site, and maintaining ready north – south connectivity by introducing three pedestrian and vehicular connections associated with broad wildlife corridors, so that the connectivity is both visual as well as physical.

Fig 17 (overleaf) develops this concept further and shows how it might form the basis of an attractive plan for the area.

From fig 17 It will be clear that the masterplan for Maidenraig falls naturally into three distinct character areas, area A (OP32) north of the Lang Stracht, and areas B and C (in OP31) to the south of the Lang Stracht.

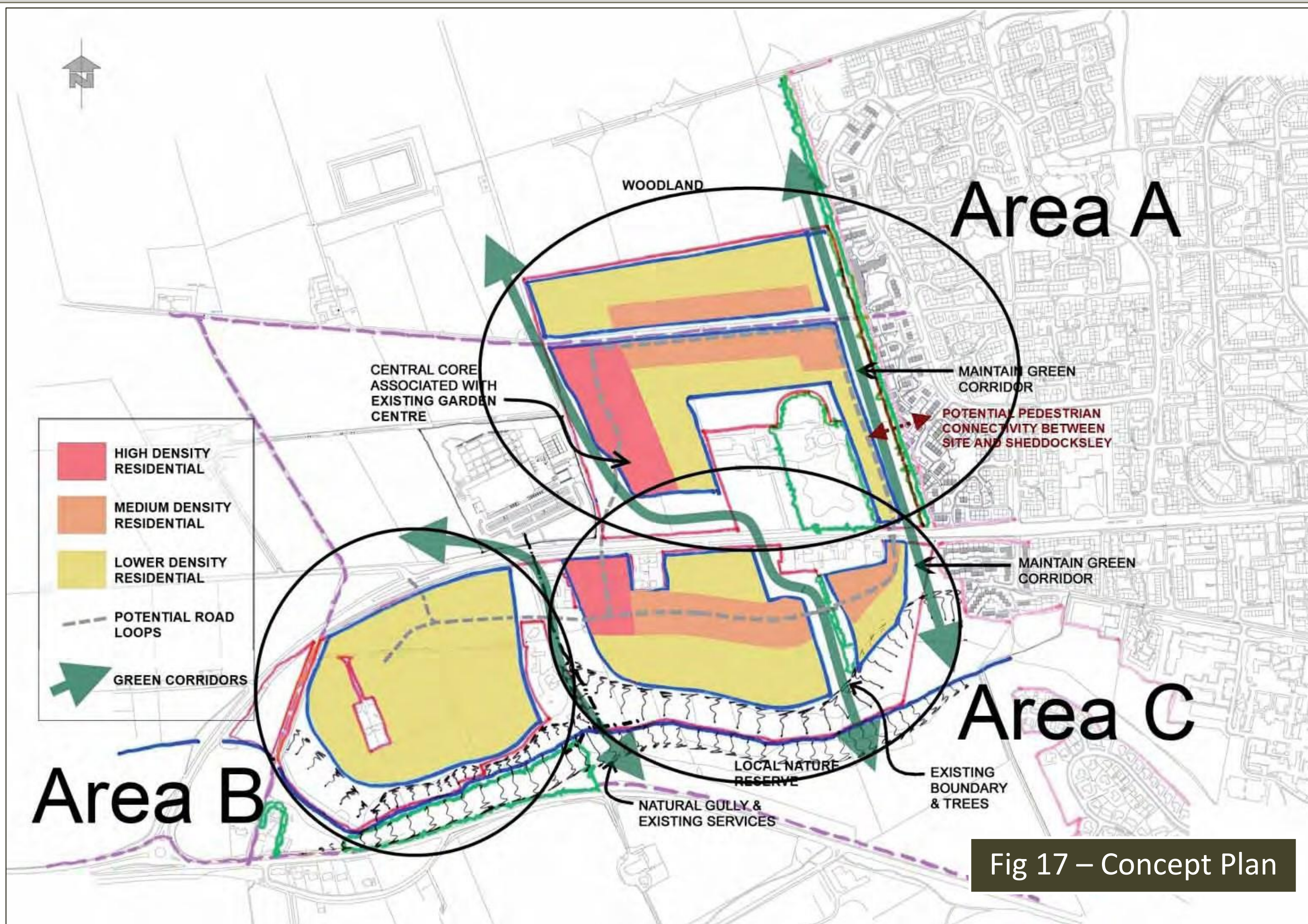
Area A is bounded on the east by Sheddocksley, on the north by a woodland, on the west by Dobbies Garden Centre, (with open countryside beyond) and on the south by the Lang Stracht. Each of these adjoining areas has an influence on the character of the area, and the design of Area A must respond accordingly.

Area B occupies the western section of OP31, and is bounded on the north by the Lang Stracht, on the west by the switch-back road, on the south by the Den of Maidenraig, and on the east by a group of existing buildings, which front on to a stream which runs through a steep gully.

This gully forms the western boundary of Area C. It is flanked on the south by the Den of Maidenraig, on the east by an area of open space (which marks the western edge of Summerhill), and on the north by the Lang Stracht.

Each of these adjoining areas has a distinct landscape character, which will have an influence on the detailed design of Areas A,B and C.

How we have translated this vision into our detailed masterplan is set out in the following section entitled Developing the Masterplan.





4 Developing the Masterplan

View north from Queen's Road, towards Cocker's Roses and Whitemyers House

4 Developing the Masterplan
4.1. Over-arching Principles

4.1.1 Connectivity

This section sets out our proposals to provide a high degree of connectivity to the site to encourage modal shift. It deals with walking, cycling, public transport, and vehicular access. It will refer to the existing position, which is set out in detail in section 2.1, and describe proposed improvements.

Walking

We will retain all the existing footpaths and add additional routes as shown on fig 18. These routes are complimented by the provision of segregated footways alongside the bus loop through the site, and throughout all of the rest of the development via footways or shared surfaces, where roads are designed to ensure traffic speeds are <20mph. The exact routes to the south, across the Denburn, will be considered in detailed planning applications in consultation with the Council’s Environment Planners.

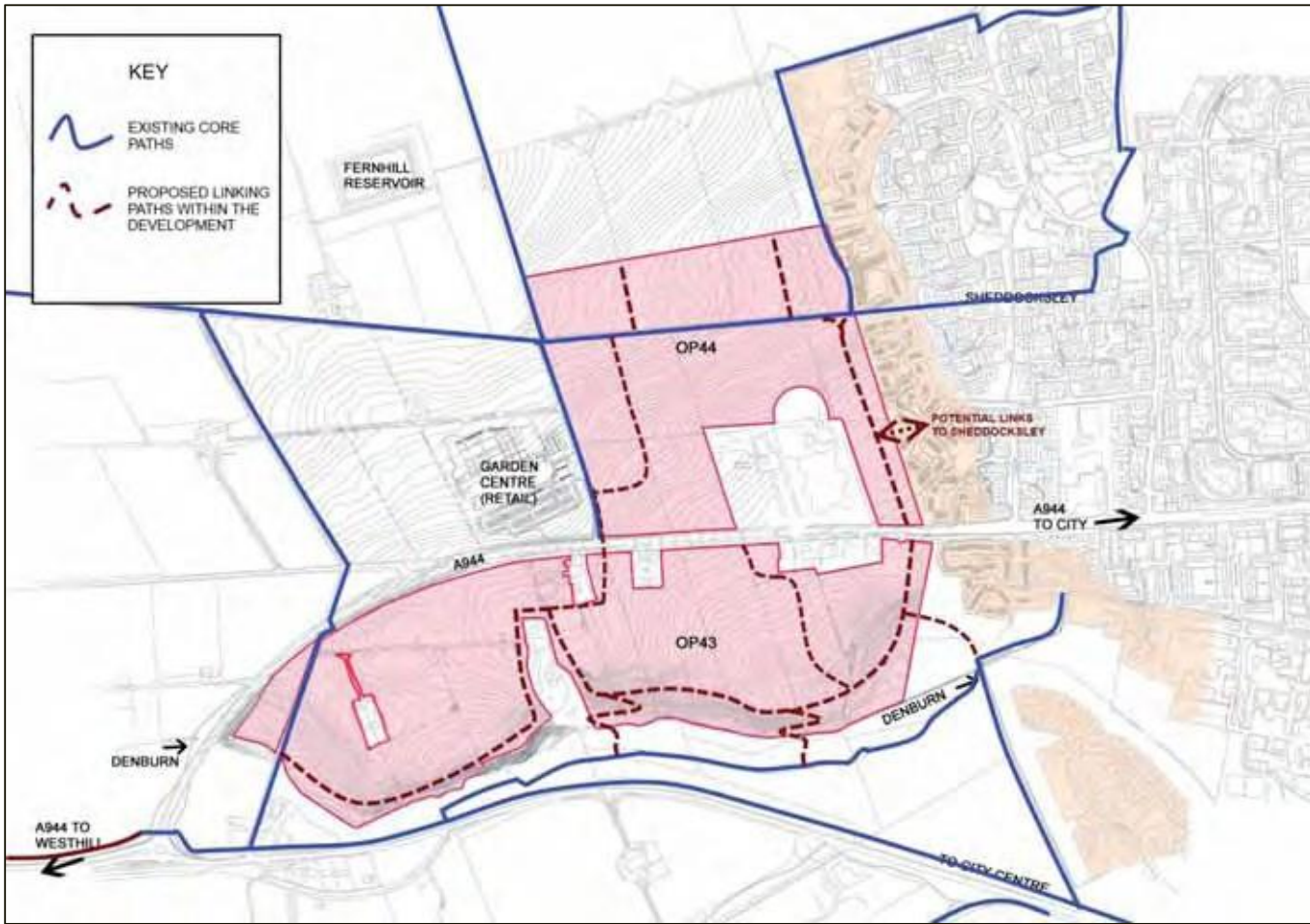


Fig 18 – existing and proposed footpaths

The Lang Stracht creates a physical barrier between the two halves of the development, but we will seek to address this by the careful location of pedestrian crossings. All routes located away from roads should also be designed to accommodate cyclists too.

This will provide a very ‘walkable’ neighbourhood which has excellent connections to the facilities provided in adjoining areas. Fig 20 below shows the commercial areas in each part of the site (marked with black dots) with a 400m radius circle around it, indicating a 5 minute walking zone. This demonstrates that the location of the commercial facilities will provide for the majority of the population of the development, thereby reducing the need to rely on private car use for simple shopping needs. A large proportion of the site falls within 400m of both commercial areas.

Connectivity with the existing residential areas is essential but must not be done at the expense of compromising privacy, security and safety. In addition, the exact route of core path 93 will be determined through the detailed planning application and must not compromise the amenity of existing residents.

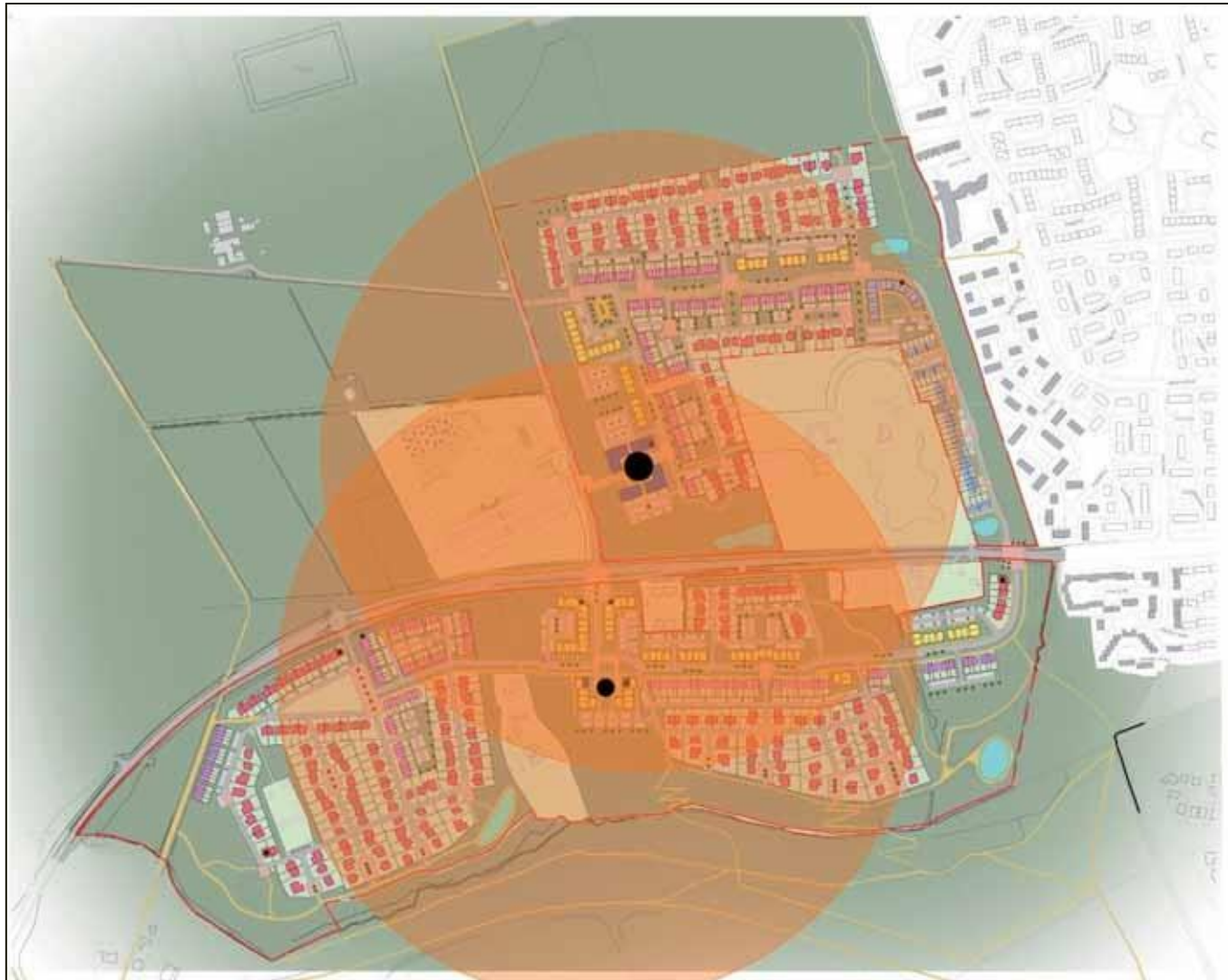


Fig 19 – 400m walking distances from commercial areas.

Cycling

We will retain all the existing cycle routes (enhancing them where necessary) and also provide the additional facilities shown on fig 20. As these follow the bus route around the site, they will be provided as segregated from vehicular traffic, although in places will be combined with the pedestrian routes. The route down the slope to the south east to meet the existing cycle path network will be a separate route from the vehicular network, but shared with pedestrian access.

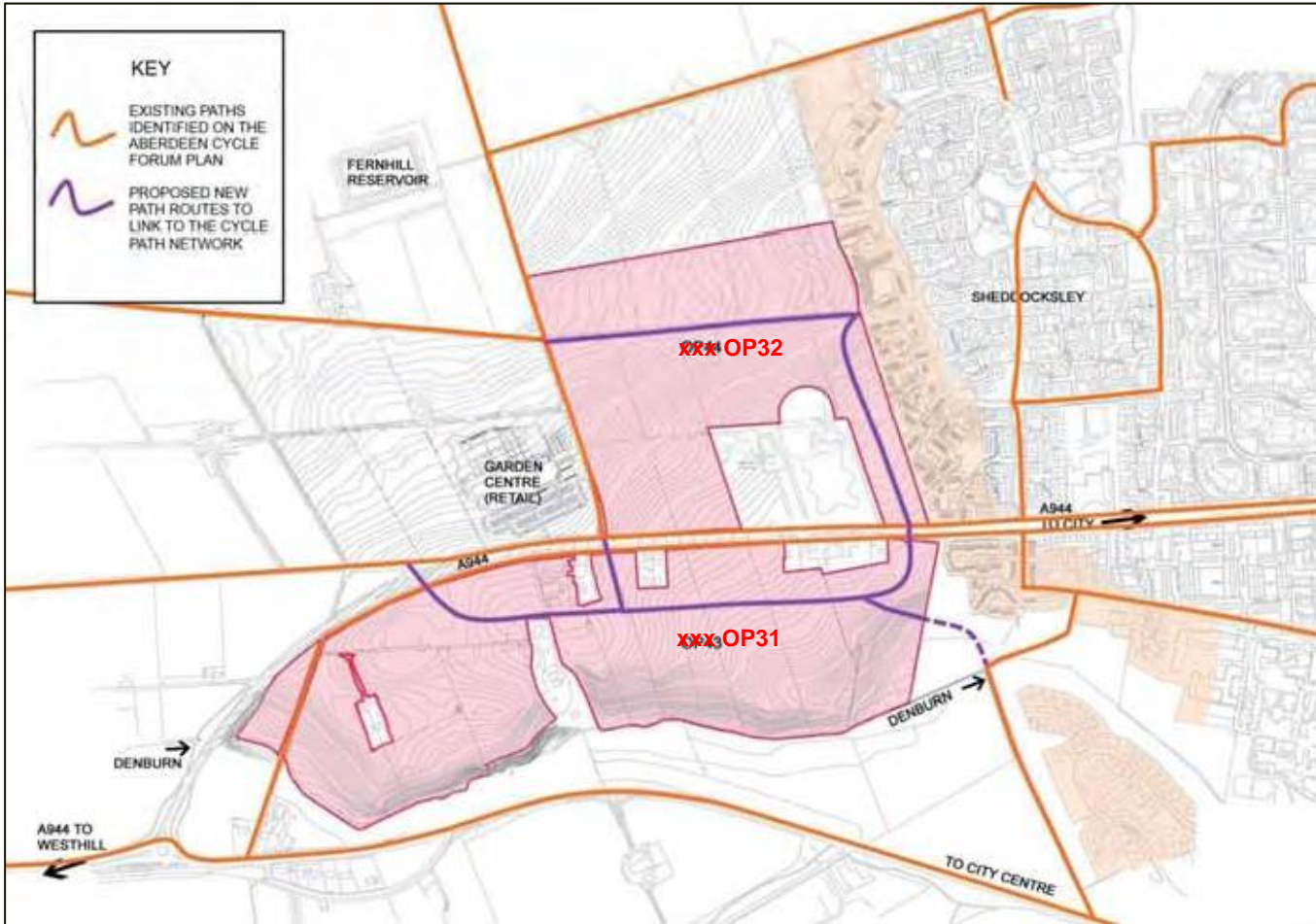


Fig 20 – existing and proposed cycle paths

These additional connections will clearly improve what is already a very accessible site for cyclists. Cyclists will also be able to use the internal road networks, which will be designed to have low traffic speeds.

Public Transport

The existing bus network is detailed in section 2.1. We will supplement this by extending the 23 service westwards through the site as shown on fig 21. We have met with the First Bus Group with a view to progressing this proposal, and they consider the 23 service to be one of their most popular. The frequency has recently been improved from 12 to 10 minute intervals (30 minutes on Sundays). With the proposed increased customer base, the operator was satisfied, in principle, that an extension to loop through the site would be of mutual benefit to them and new residents of the site.

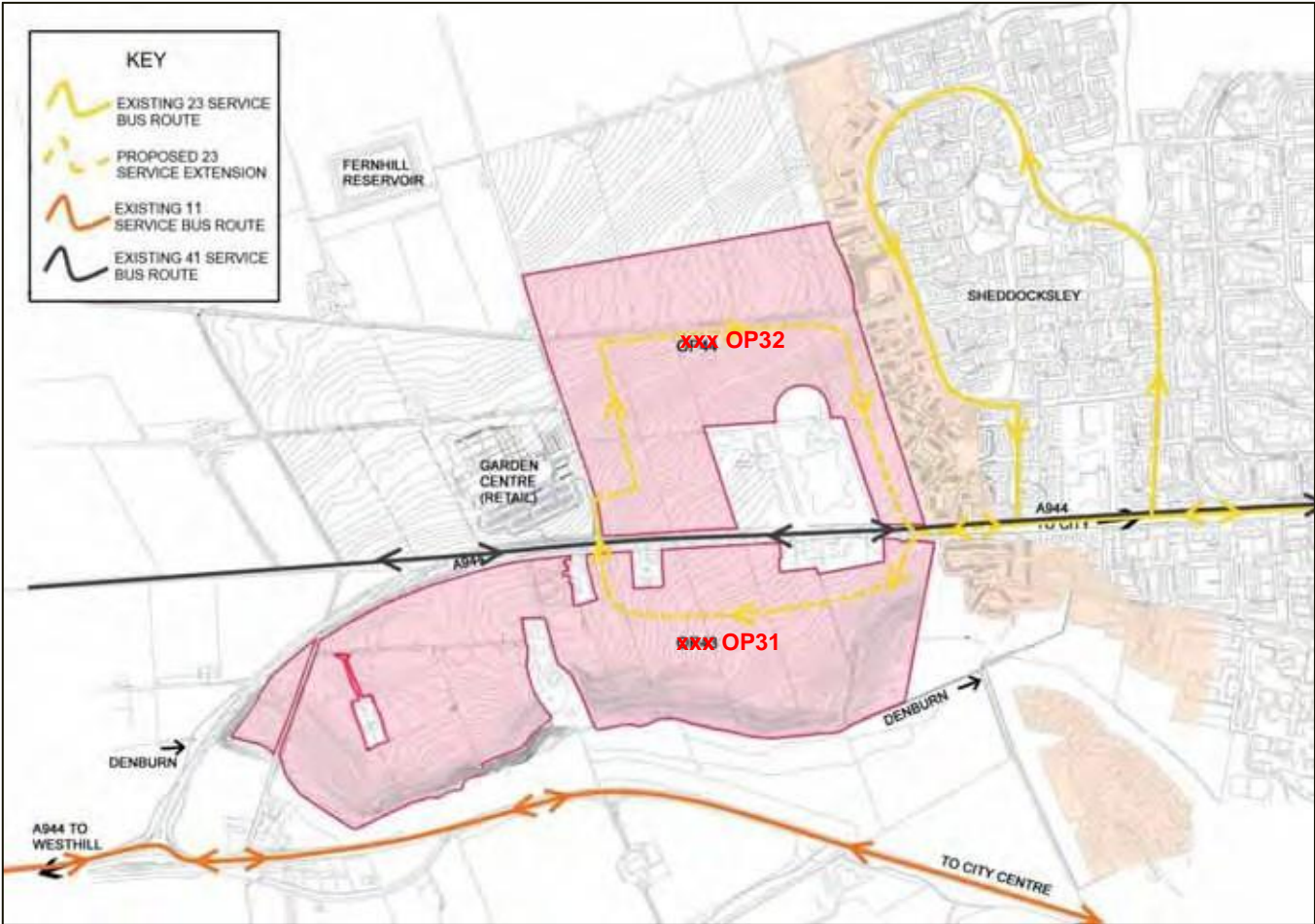


Fig 21 – existing and proposed 23 bus service.

Parking

The parking provision identified on the masterplan are based upon the maximum requirements for each of the residential and commercial areas. Through detailed design, it is expected that the number of spaces will be reduced, with the heights of buildings established and the overall housing mix finalised. In the lower density areas, where housing is predominantly detached and semi-detached, parking will be accommodated off street, with the majority of houses having garages. Terraces properties will have on street parking close to the properties, or organised in rear courtyards. Flats will similarly have parking located in courtyards. Cycle and motorcycle parking will be provided as appropriate. Details of this will be considered as part of detailed planning applications.

The Landscape plan identifies considerable landscape planting proposed to screen car parking areas, which will be increased in the event that the parking requirement is reduced. This is particularly relevant to areas around the commercial centre and the southern square, where there is a high percentage of flatted development proposed. When the number of storeys of development is agreed through a detailed planning application, along with the agreement to the provision of affordable housing, the parking requirements will be reduced accordingly.

4.1.2. Access Strategy

Site Access

The Council have agreed that Site OP32 will be served with 2 points of access, while OP31 will have 3 connections to the Lang Stracht. The existing access from the site to Queens Road will be retained for existing users only. Of the 3 access points agreed, the central one (currently serving Dobbie's Garden Centre) will be controlled by traffic signals. The other two will be left-in, left-out only junctions. However the eastern junction will initially operate as unrestricted junctions until a second means of access (the central junction) is opened up and available.

The preliminary layout of the central junction can be seen in fig 22 below. (please note that the diagrams are indicative, and have not been the subject of detailed discussion with the Council's Roads Officials)



Fig 22 – Central junction – indicative layout

Whilst the eastern and western junctions will be left-in/left-out arrangements, there is the necessity to design a temporary all ways junction for the eastern access point, to be utilised until the central junction is completed, providing an alternative means of access for residents.

The temporary layout of the eastern junction, as well as the final design can be seen below in figs 23 and 24. These all include the provision of pedestrian crossings. The most appropriate location for pedestrian crossings, however, will be established through the detailed planning application process.

Based on the current phasing plan, the central junction will be completed in advance of the western junction, which will therefore be constructed as a left-in/left-out arrangement, with provision for buses

to still access the bus-only gate to Kingswells. The indicative proposals for this junction are shown in fig 25.

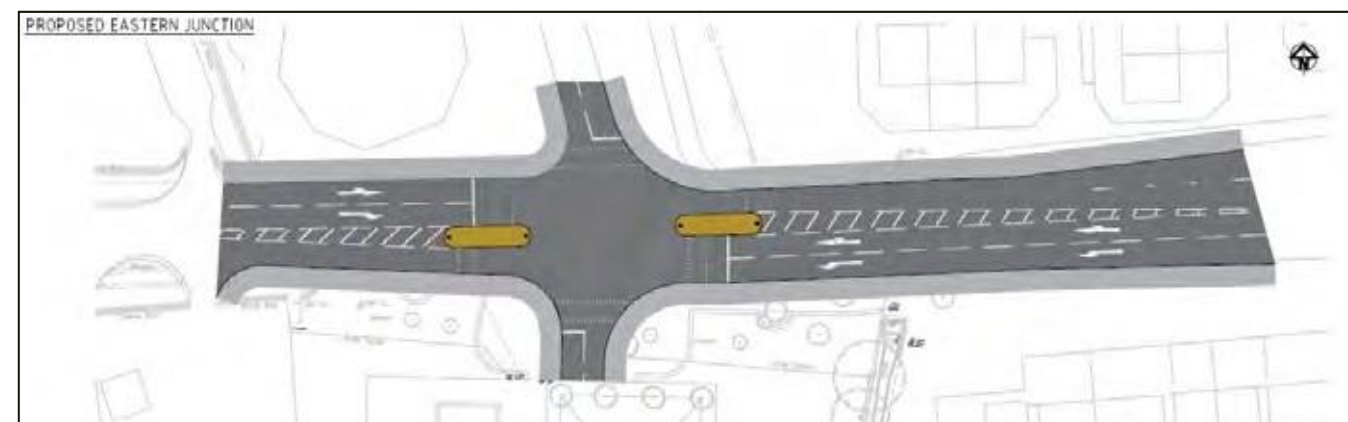


Fig 24 – Eastern junction – indicative layout – temporary all ways solution

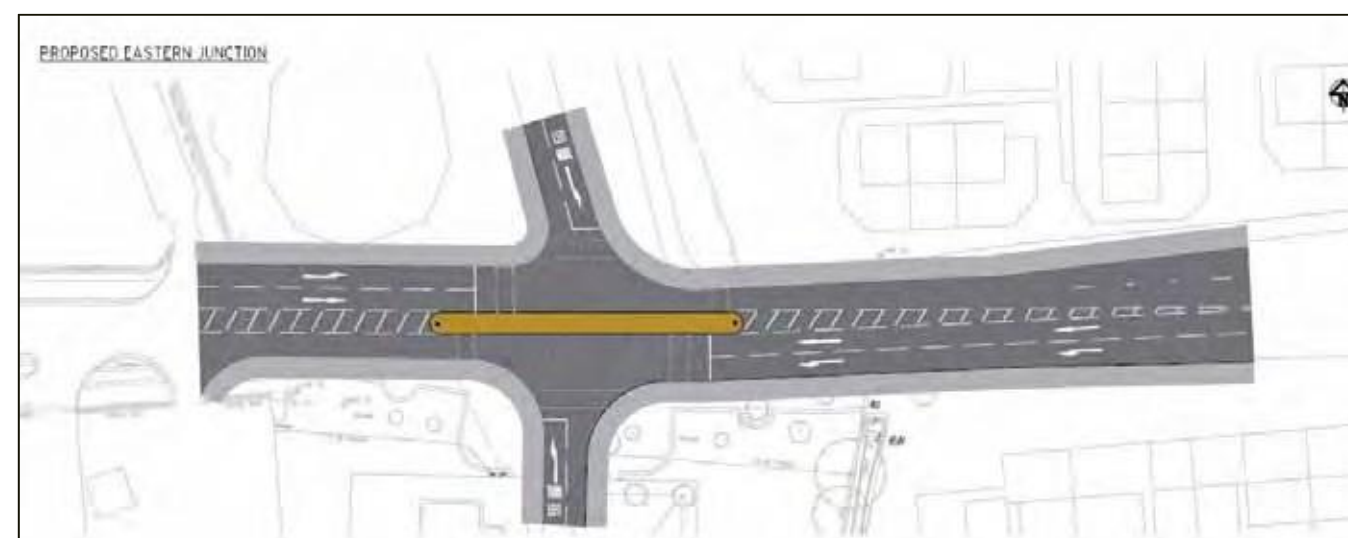


Fig 24 – Eastern Junction – indicative layout – final left-in/left-out solution



Fig 25 – Western junction – indicative left-in/left-out solution

Strategic Transport Fund

In 2011, The Aberdeen City and Shire Strategic Development Planning Authority and Nestrans, along with the two councils commissioned a cumulative transport assessment (CTA) of the sites identified in both LDPs up to 2023. This identified, at a strategic level, the additional infrastructure improvements required to mitigate the cumulative impact of future development proposals. On this basis, a contribution will be sought from developments including the Maiden Craig masterplan area, and this money used by Nestrans as the Regional Transport Partnership to deliver the improvements.

Transport Assessment

A Transport Assessment is progressing. It will identify the necessary mitigation works in the local area to ensure that any impact on the capacity of roads and junctions in the vicinity of the site is minimised. As mentioned above, encouraging people out of private cars, to walk, cycle or use buses is the ideal solution to minimising traffic impact.

The initial Transport Assessment pre-dates the Strategic Transport Fund, and there are other variables that will impact upon its conclusions. The scope for an amended assessment is currently being agreed with officers at Aberdeen City Council, and will be carried out accordingly. The Transport Assessment will inform subsequent planning applications. It would be misleading to include the contents of the initial assessment in this document. However the objectives of the Transport Assessment are to maximise connectivity and integration between sustainable transport modes, and minimise the impact of car based trips, whilst fully embracing the principles of Designing Streets.

4.1.3. Education

Section 2.1 sets out the existing Primary and Secondary education capacity in the area. Appendix 1 (Community Consultation Report) highlights that various members of the local community were concerned about the proposals for meeting the education needs of the development. However, the Council have initiated a catchment area review, and we will engage with the Education Service to help secure the best possible outcome. In order to maintain a flexible approach to this matter, a section of housing in either the north or south of the site could be substituted for a primary school should this be required. In terms of access to schools, the site is well linked to the core path network to provide safe and convenient access for pedestrians and cyclists. Upgrades will be provided to ensure that residents of the Maiden Craig masterplan area have access along appropriately lit and surfaced routes (unless otherwise required by environmental constraints). Fig 26 below shows the principle pedestrian/cycle routes to schools from the site. Core paths are shown in purple, and proposed routes are shown in green. Safe routes to schools will be explored through the planning application process, with any barriers to walking and cycling identified, and mitigation proposed. This will apply equally if a school is ultimately provided on site.



Fig 26 – Routes to schools.

Fig 26 shows that the only route that would involve significant departure from the core path network would be the route to Fernielea primary school, which requires around 800m of walking on the public footpath adjacent to the road. The detailed design of phases 1a and 1b will both ensure an appropriate surfaced and lit link is provided from the site to the adjacent core paths, to ensure there is a complete route available to all the schools. Where this connects to the core path network south of Maiden Craig south east, it is important to ensure that the lighting and routing are both appropriate for the location in the Local Nature Reserve. This will also be considered as part of the detailed planning application for phase 1a. All new paths will be designed in consultation with the Council’s Countryside Officer and Environment Planner.

4.1.4 Landscape Strategy

Section 2.1 contains a review of the existing landscape resources in and around the site. Of particular note are : a) The Northern Woodland, b) The Green Space Network, c) The current setting of The Lang Stracht, and d) The Den of Maidencraig Local Nature Reserve. We set out below (see Landscape Character Areas) how we will respond to, and exploit these assets – opening up access and views to them. A full landscape strategy report is included as Appendix 3, and the landscape and Visual Impact Assessment carried out in 2006 is included as Appendix 4. A level 1 habitat survey will be carried out to supplement the planning application.

Boundary to Summerhill

South of the A944, the site opens out along the line of the Local Nature Reserve and follows the steep contours along the banks of the Denburn. The design adds the SUDS area and further related open space to the existing provision adjacent to Summerhill to create a larger green area which contributes both visually and ecologically to this important edge. The access to the development, at this point, is also emphasised with a new entrance including a mixture of hard and soft treatment. This will make a major statement at this part of the Lang Stracht and will be further emphasised by a similar treatment on the opposite side of the road.

The Den of Maidencraig

There is a steep embankment from the southern edge of Maidencraig South East down to the Denburn. This provides an immediate separation but the buildings will be pulled further back and additional woodland planting will add to the screening and provide an ecological link between the nature reserve and the new development. There will be pedestrian routes to encourage greater access and the views from and to the reserve have been carefully considered. The formation of residential courtyards opening out to the green space creates an appropriate transition between the development and the surrounding countryside. Information on the Den of Maidencraig Local Nature Reserve will be included in the sales packs for house buyers, including responsible access principles.

The landscape strategy report (appendix 2) states that there is potential for conflict between providing additional public access to the Local Nature Reserve, and protecting the nature conservation interests of it. In order to ensure no detriment is caused to these interests, we have identified up to three possible links from the site into the area. These are identified on fig 19 above.

If appropriate, these routes and their locations will be designed in consultation with the Council and Scottish Natural Heritage as part of the detailed planning applications for phases 1a, 2a and 3a. The position of the paths have been chosen to link with the existing core path network, and to provide convenient access to the 11 service bus route, the recreational facilities at Hazlehead, and primary and secondary schools. The intention is to provide appropriately designed links, with crossing points of the Denburn appropriately constructed, to avoid potentially damaging desire lines emerging.



Fig 27 – The Denburn crosses the Lang Stracht and the land opens out to the nature reserve

The opportunity will be taken to create maximum landscape and ecological value from the SUDS basins at the southern edge of the site. That, added to the choice of planting, will enhance biodiversity and, including the two landscape routes which pass through the southern part of the development, it should encourage wildlife to permeate through the site. Many private gardens are known to have a high bio-diversity level, so this, matched with additional ecological features including bat boxes and swift boxes, should ensure that this site is sympathetic to the nature reserve. The details of such provisions will be developed as part of detailed planning application submissions. Details of planting proposals are shown below on the landscape strategy plan in fig 30.

Junction of Lang Stracht and Queens Road/Skene Road

Although included in the development zoning, this area is not promoted for development as part of the masterplan, and will be retained as agricultural land.

The Lang Stracht South

There is a small group of houses on the southern edge of the Lang Stracht opposite the Cocker's Roses / Whitemyres House site and a further two opposite the Dobbies Garden Centre entrance. The proposal is to extend that along most of the length, but maximising the number of properties with the principle elevation facing the Lang Stracht (albeit set back from the road edge). In this way a varied urban frontage can be achieved which connects visually to the main road and ultimately to the northern site.

At the eastern end a new entrance to the site will be created which will link with a new entrance on the northern side and incorporate the SUDS area and related open space.

The Lang Stracht North

On the north face the character is set by the trees round Cocker's Roses and Whitemyres House and their relationship to the adjoining fields. Dobbies Garden Centre adds an urban element but it is far enough away to sit on its own and allow the trees and fields to retain this softer character. This character is then carried into the new development by replacing the fields with the SUDS areas and wider open space adjacent to them. These larger green areas will also include further tree planting to soften the impact of the housing behind them. This move to have a hard face on the south and a soft face on the north ensures that the development does not combine to overpower the road as it heads into rural Aberdeenshire. The approach will also protect the setting of the listed buildings at Whitemyres House and Farm.

Lang Stracht at Sheddocksley

This part of the site fills the gap between Sheddocksley and Cocker's Roses and includes the SUDS area. As a result, housing is kept well back from the road and this becomes an important soft feature along both the Lang Stracht and when entering into North East Maidencraig.

Between Cocker's Roses and Dobbies Garden Centre

Housing is also kept well back from this face of the road and the second SUDS area contributes to an important piece of designed open space. The design will also retain many of the dry stone walls which permeate this area. As a result of this more open treatment the northern face of the Lang Stracht, along this stretch, is lush green landscaping. This planting follows round and along the access road to Dobbies Garden Centre to screen the car park from the housing. It also provides a soft lead into the new northern commercial centre.



Fig 28 – View from Dobbies out to the Lang Stracht and across to Cocker's Roses

The Top Woodland

The proposed site neatly abuts the woodland owned by Aberdeen City Council. The southern edge of this ground is already a popular walkway and it could be a valuable part of the Green Space Network. Although it is outwith the land owned by Bancon Developments the new site will be designed to provide routes through the development and out onto the green space.



Fig 29 – The top woodland provides a valuable link across to Sheddocksley

Sheddocksley North

Along the boundary between the site and Sheddocksley there is an existing stretch of mature conifer woodland with a narrow stream running through it. It is already used as a popular walking area by the residents of Sheddocksley. It also works in effectively screening the Sheddocksley development from the adjacent fields, so it should continue to provide a strong visual barrier. It will also provide an important part of the pedestrian routes through and round the development. However, there are already signs of the trees reaching to and beyond their maturity. Maintenance will be an important issue. The land is in the Council's ownership, so it is assumed that maintenance is their responsibility.

Sheddocksley South

This open space continues further south. Unfortunately it does not retain the same tree cover. A tree screen is required, and is proposed as a fairly dense tree belt. Any overshadowing or public safety concerns are addressed by locating the road (bus link) between the buffer strip and the housing, and providing safe and convenient pedestrian and cycle routes from north to south outwith the tree belt (i.e. along the road line). To the east of the proposed planting, an appropriate space will be maintained to ensure overshadowing occurs to existing dwellings. The principle function of the buffer is as a visual break and a wildlife corridor between the northern woodland and the Den of Maidencraig, not for public access.

4.1.5. Green Space Network

The allocation of the site in the Aberdeen Local Development Plan includes an area of Green Space Network along the eastern edge of the site.

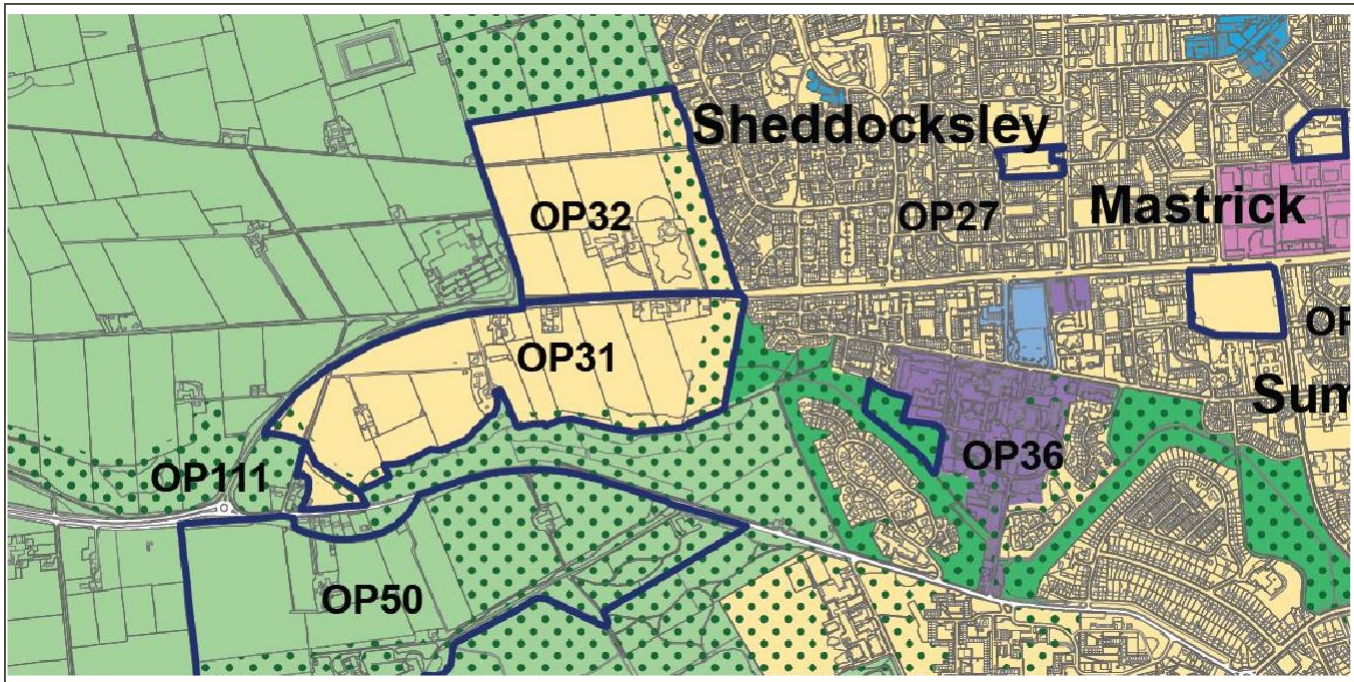


Fig 31 – ALDP Proposals Map Extract Showing Green Space Network

The areas of woodland to the north of the site, and the Den of Maidenraig Local Nature Reserve to the south offer valuable contributions to the Green Space Network, and the provision of a connection between them is essential along the eastern boundary of the proposed development. However, the plan indicatively shows a corridor which is in parts over 70m in depth. This appears excessive for the purpose, but fortunately the Local Development Plan indicates that detailed boundaries are a matter for the masterplan.

In order to provide appropriate access and circulation (for buses in particular), it is essential to include a second means of access to the OP32 site. Through detailed negotiations with the local community, the potential to take vehicular access from the site to the east into Sheddocksley has been fervently opposed, and has therefore been ruled out as a deliverable solution.

The value of this area at present is limited – it is merely agricultural pasture, and it is therefore deduced that the purpose of the strip in the Local Development Plan is to provide a visual buffer between the site and Sheddocksley/Summerhill, and to provide a suitable link between the Den of Maidenraig and the woodland to the north of site OP32, to maximise connectivity and avoid fragmentation of the Green Space Network.

The solution to maintaining a suitable proportion of Green Space Network is to provide a second strip between the development and Dobbies Garden Centre. This will connect with two separate green corridors running through the southern part of the masterplan area, providing a better overall connection between the Den of Maidenraig and the woodland to the north than one single 70m wide belt. Together, these belts will be in excess of the 70m width identified in the Local Development Plan.

Fig 32 shows the Green Space Network as identified in the Local Development Plan, and Fig 33 clearly shows the benefit of this approach achieving better connection and permeability of the Green Space Network, providing several links between the Den of Maidenraig and the woodland to the north instead of one single green corridor. In terms of wildlife corridors, each of the belts is of an adequate width to provide shelter and habitats to ensure the long terms connection between the main green spaces.



Fig 32 – existing Green Space Network imposed on aerial photograph of the site.



Fig 33 – proposed Green Space Network after development of the site

4.1.6. Local Recreational Facilities and Open Space

The Aberdeen Local Development Plan sets out the requirements for open space within new developments. These are further explained in the Supplementary Guidance on Open Space. The responses are set out below and illustrated in fig 34. More detail will be provided as part of the planning applications for the site.

Major Open Space

Initially there is a requirement for Major Open Space, greater than 5ha, within 1500m. The site falls within 1500m of Hazlehead Park, and appropriate developer contributions towards the improvement of that facility is considered logical.

Neighbourhood Open Space

South of the Lang Stracht the Neighbourhood Open Space continues down from the north and follows the east, south and west boundaries of the site. This forms the defining boundary with the Den of

Maidencraig and, in so doing, allows for a continuation of the habitat provided by the Nature Reserve. The footpath allows a long pedestrian and cycle route which connects back to the north of Maidencraig and ultimately with the Core Path. The two areas provide a total of 9.32ha.

Local Open Space

In the north there is one Local Open Space (1.66ha) within 400m of most of the houses in this part of the site. There is a small area in the northeast corner which is slightly beyond the limit. However this area is covered by the woodland area to the north, the Neighbourhood Open Space to the east and various small areas of open space in Sheddocksley. In the south the central Local Open Space (0.44ha) covers most of the site with the exception of a small area at the east end. This is covered by a second area of Local Open Space (0.25ha). This gives a total coverage of 2.35ha

Play areas

In the current layout there are 930 residents in the north and 1153 in the south. This gives a total of 2083 and a play area requirement of 0.62ha. There are four play areas proposed, one in the north (0.26ha) and three in the south (0.22 and 0.45ha). This gives a total of 0.93ha. Most of the site is within 400m of these play areas as is shown by the 400m radius circles on fig 30. Again, there is a small group of houses in the far east corner that are outwith the limit. This is covered with an equipped play zone set on the edge of the new woodland and as part of the public street treatment in that location. This allows a full and generous coverage of equipped play facilities.

Outdoor sports

In the public consultations the response has been that there is no requirement for additional outdoor sports facilities, taking into account what is currently available at Sheddocksley Sports Grounds. This is conveniently accessible from the site via a choice of pedestrian and cycle routes on the core path network. There are areas at both ends of the site, in the north western and south western corners, which could comfortably meet any requirements.

Natural Green Space

The requirement here is for 1ha per 1000 population, working out at 2.085ha. This is comfortably met by the 9.65ha of Neighbourhood Open Space.

Allotments

This figure is similar to the play requirement at 0.3ha per 1000 population who do not have at least 60m private garden area. This would therefore apply only to the flats on site. The requirement is therefore very small. It may be more suitable to provide allotments off site.

Amenity Open Space

From the above the specific requirements have been comfortably met. However, this does not take account of the large amount of amenity open space which has been carefully designed into the development.



Fig 34 – Open Space Strategy

4.1.7. Topography

The plan below shows the masterplan imposed onto the topographical plan, demonstrating the measures taken through the design to ensure the development respects the slopes appropriately.

The land covered by the combined Maidencraig Masterplan slopes down from north to south, and the slopes become quite severe as one approaches the Denburn valley. However, the more severe slopes were taken as a primary constraint to development, and for that reason, building on those areas has mostly been avoided. This southern orientation has great potential for maximising passive solar gain, particularly if the streets can be laid out in a generally east – west configuration. As a consequence of the slope of the land, sunlight can readily penetrate between streets. The slope thus provides opportunities to introduce changes in building height without compromising the potential for utilising passive solar gain.

Looking in detail firstly at OP32, the slope from the northern woodland down to the Lang Stracht is fairly gentle. The fall is of the order of 20 metres but is evenly spaced over 500 metres, giving an overall gradient of 1:25. This is not excessive and does not require particular resolution when considering layout and house type design.

Looking at OP31, the slope is much the same as above the Lang Stracht. However, one can see from the overlay drawing that there are areas of the site where the gradients are potentially excessive, and where the house types will require to be tailored to suit the levels. Most of the areas of steeper ground have been avoided, however, to minimise any inappropriate visual impact or excessive re-contouring of land.



Fig 35 – Contours overlaid on masterplan

4.1.8. **Designing Places**

In recent years the Scottish Government’s policies on Designing Streets and Designing Places have been issued and have played a major role in the change of attitude to masterplanning: The six key features that are now required are:

- Distinctive
- Safe and pleasant
- Easy to move around
- Welcoming
- Adaptable
- Resource efficient

Distinctive

The proposed development is carefully set into the existing landscape. It extends the City boundary west, but does so in a manner that will create a softer transition between the open countryside and the urban realm. The development will incorporate architecture of traditional proportions, but with a modern clean finish using a limited palette of materials, including a limited mix of renders, timber cladding, and limited use of stonework, to create a uniform character. The location of the access points will welcome people into the site, and the extensive landscaping will provide a sense of enclosure.

The southern edge of the development will address the Den of Maidenraig with open courtyards and gables (ensuring these are not blank gables with no windows), rather than turning its back on it, creating attractive views into and out of the site. Along the Lang Stracht, a main arterial route into the City, houses on the south side are orientated to address the road, and landscaping will provide a green edge to the north. This will give a welcoming approach to the city as well as the site itself.

Safe and pleasant

The site contains one principle bus loop, which will be designed to be suitable for larger vehicles, with a distinctly separate pedestrian and cycle path provision. However, these streets will contain the highest density of development, with taller buildings, and the sense of enclosure they provide will give a more urban feel.

Outwith this main loop, the street designs and courtyard designs will take on a pedestrian and cycle priority, with landscaping to reduce traffic speeds and maximise safety. The specification of street lighting and related signs and markers will be undertaken to meet the Council’s requirements but to ensure that they are as discreet as possible. In addition the relation of the buildings to each other will work to encourage socialising without being overpowering.

Children’s play will be located so that there is freedom for young children but that there will be maximum informal supervision. Older children will have places that they can congregate in without

appearing threatening, through the provision of considerable areas of informal open space. Access via the core path network to the Sheddocksley Playing Fields is also convenient at the north of the site, offering organised sports facilities. It is also important that there are places where the elderly can meet and socialise. The commercial square, and the residential squares at the north west and southern central areas will be designed to be a safe, accessible and well overlooked landscaped areas on the bus route. Seating will be incorporated into these areas to encourage use by all agegroups.

Easy to move around in

Special care has been taken to provide good connectivity for all modes of transportation and public transport routes have been considered. Foot and cycle path connections to and from the site have been located and designed where desire lines would otherwise be likely, to link to specific locations, such as routes to schools, public open space and bus routes.

The site is on a slope and, in certain parts, the slope can be quite steep. Access routes will be carefully considered to ensure that the less able can move freely around. The footpaths and cycle routes through the green areas will also help to encourage walking and cycling.

Welcoming

The principle access point, opposite Dobbies Garden Centre has been designed to provide an attractive and welcoming access to the southern site, and the provision of a commercial square immediately east of the garden centre provides a similarly welcoming character to the northern area. Houses have been designed to address the Lang Stracht and surrounding open space to reduce the insular impression that a more standard layout would.

Adaptable

The street patterns are fully integrated with the surrounding area and will allow full flexibility with future changes. The parking has been designed to sit near the houses but have minimum visual impact by incorporating various hard and soft design treatments. At the same time there is full access for service vehicles without compromising the overall urban and landscape character. The housing layout in the northern area in particular has been designed to retain the potential for future vehicular links to the north and east (to Sheddocksley), should these be required in the future.

Flexibility has also be designed into this masterplan to allow for any future education or healthcare facilities, and also to provide a range of opportunities in the commercial areas, such as live/work units or commercial units.

Resource efficient

The architect has worked to ensure that the buildings are located in the most environmentally efficient manner without compromising the character of each individual location.

The SUDS system has been used to effectively deal with rain water whilst also contributing to the open space and bio-diversity, with the minimum number of individual basins.

The sociable and welcoming nature of the development has been the prime factor in the design. Roads and utilities have been secondary to that and designed to fit effectively within that framework. The architect and the landscape architect have worked together to ensure that the landscape fits seamlessly through the development and that there is no unused space. The planting will then be specified to ensure an appropriate mixture of native planting and habitat creation and local areas of excitement and interest.

The choice of materials will be made to reflect the character and environmental requirements of this Aberdonian location, with appropriate renders and stone detailing reflective of the traditional granite buildings.

4.1.9. Designing Streets

Designing Streets is a policy document aimed at changing the fundamental design of streets, aiming to create a ‘sense of place’ rather than primarily facilitating traffic movement.

Distinctive

The roads layout for the development will be designed to be clearly different from the established standards, through compliance with Designing Streets. The general principles of road design can be broken down into three types around the site, the bus route, the residential streets, and the residential courtyards. These are described in figs 36–42 below.

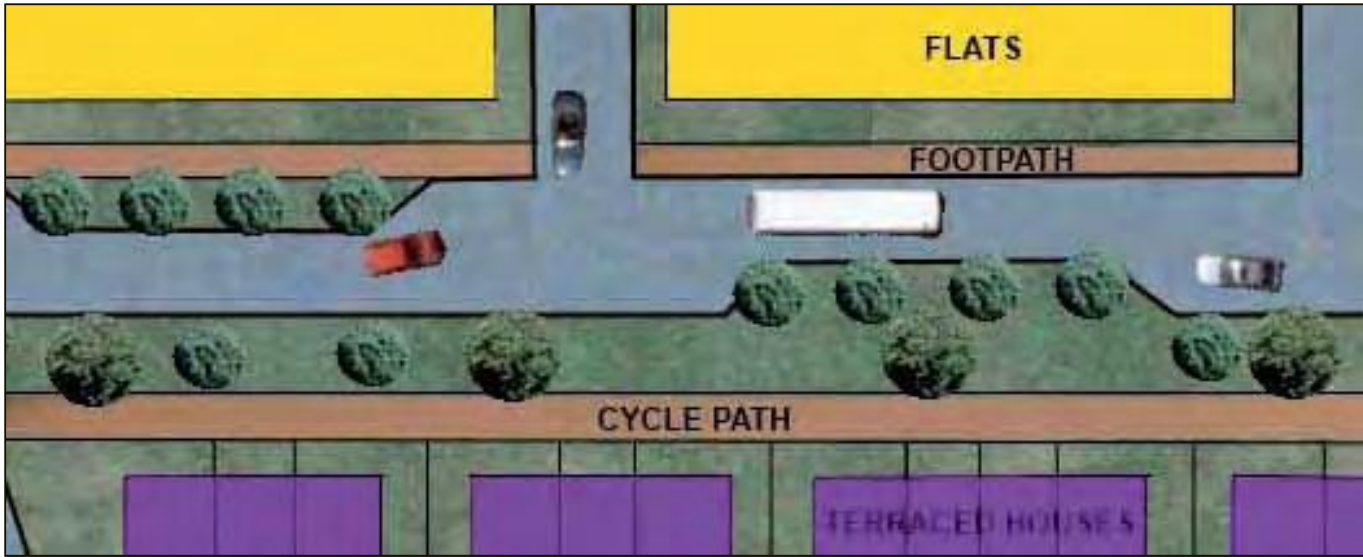


Fig 36 – The principle bus route – indicative arrangement

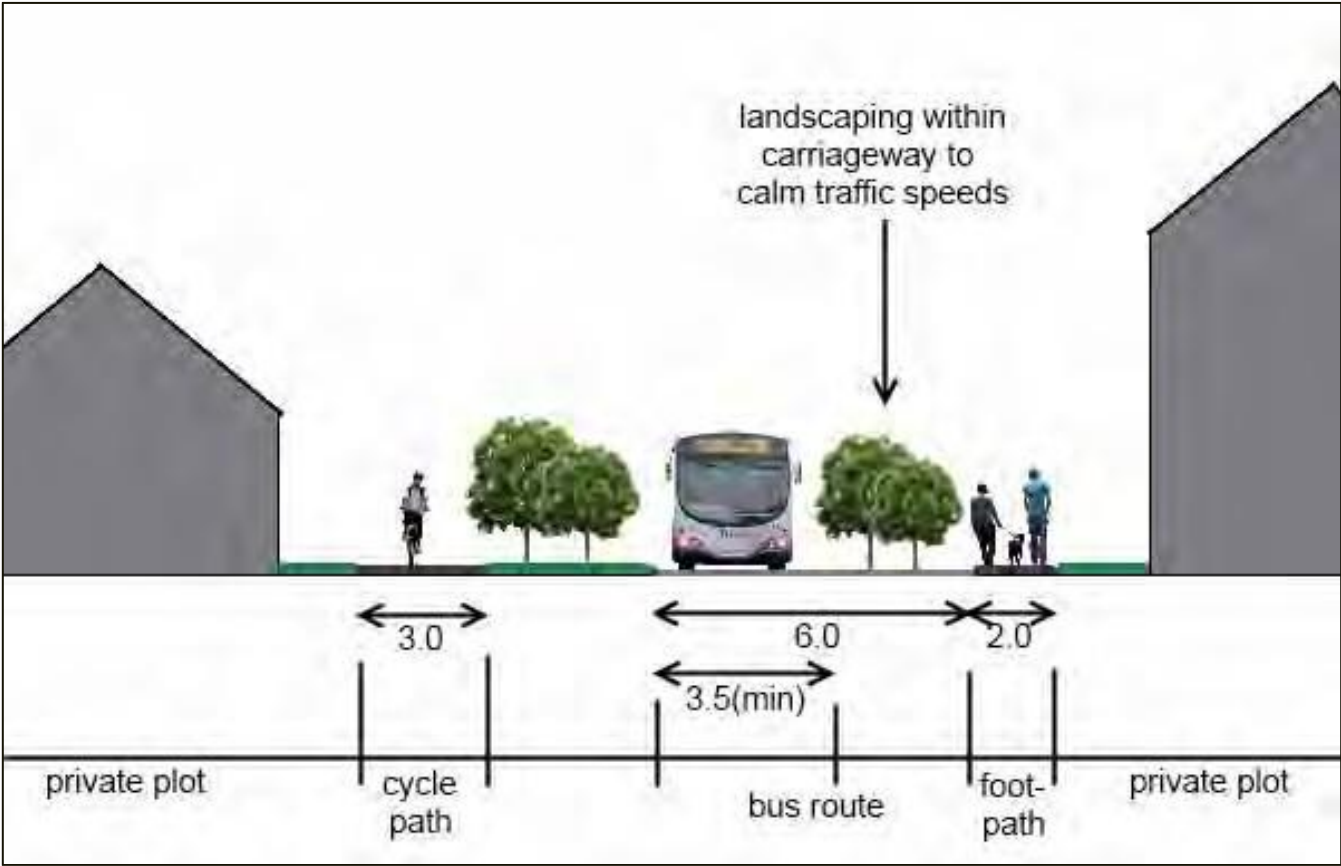


Fig 37 – indicative section through the bus route

Along the bus route, long straights will be avoided by introducing landscape features as traffic calming. These will be designed having regard to the swept path which buses require, so that their visibility and free-flow, is not interrupted. Roads will be finished in bitmac, and will not include any vertical deflection to calm traffic speeds. Buses will use the route in a clockwise direction, but cars will be able to travel in both directions – limited by the left-in, left-out arrangements at the east and west junctions with the Lang Stracht. As the width and alignment of the carriageway vary, a minimum of 2.0m verge width will also be provided at all times.

Due to the volume of movement along these high density corridors, pedestrians and cyclists will be segregated from the bus route in the interest of increased public safety.

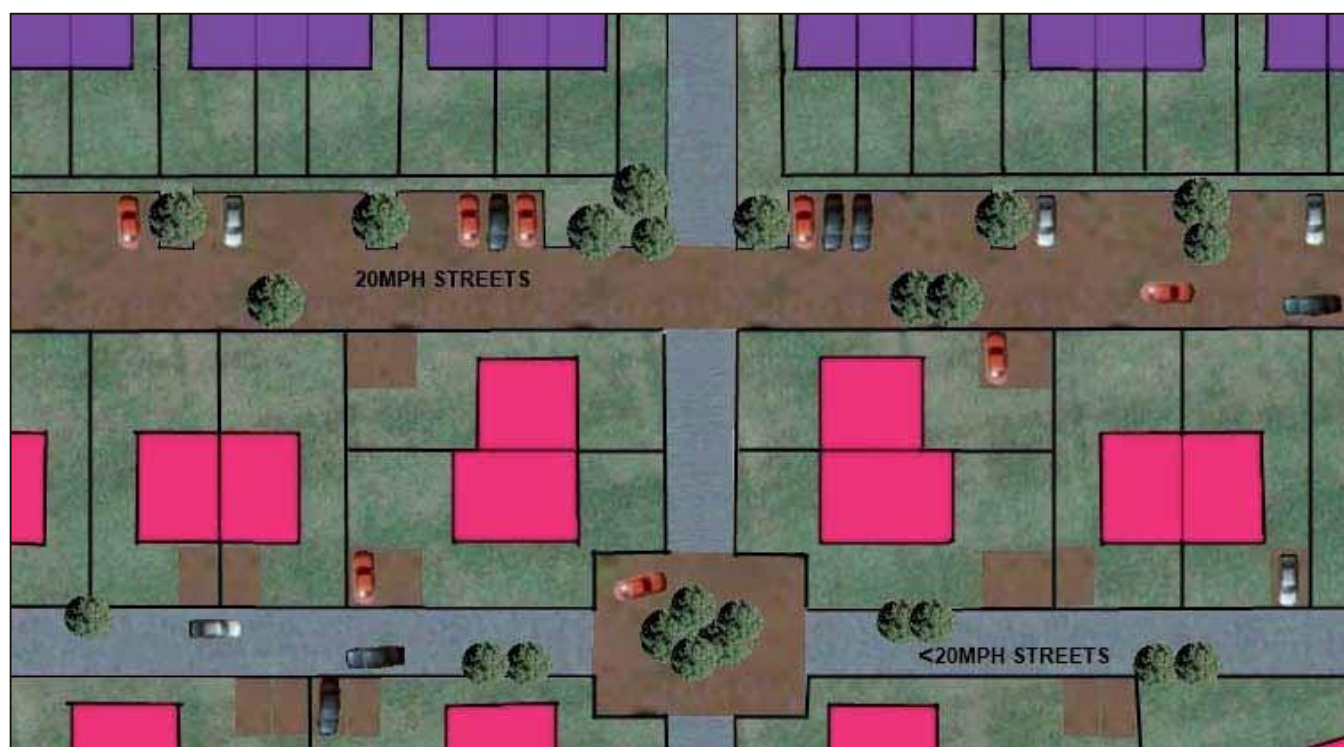


Fig 38 – Residential streets – indicative arrangement

The design of the streets in the residential areas will be less than 20mph, with speeds controlled by landscaping and road geometry. Limited forward visibility will require drivers to drive slowly and naturally give way to pedestrians. Right angled bends and landscaped squares will further reduce speeds and maximise pedestrian safety.

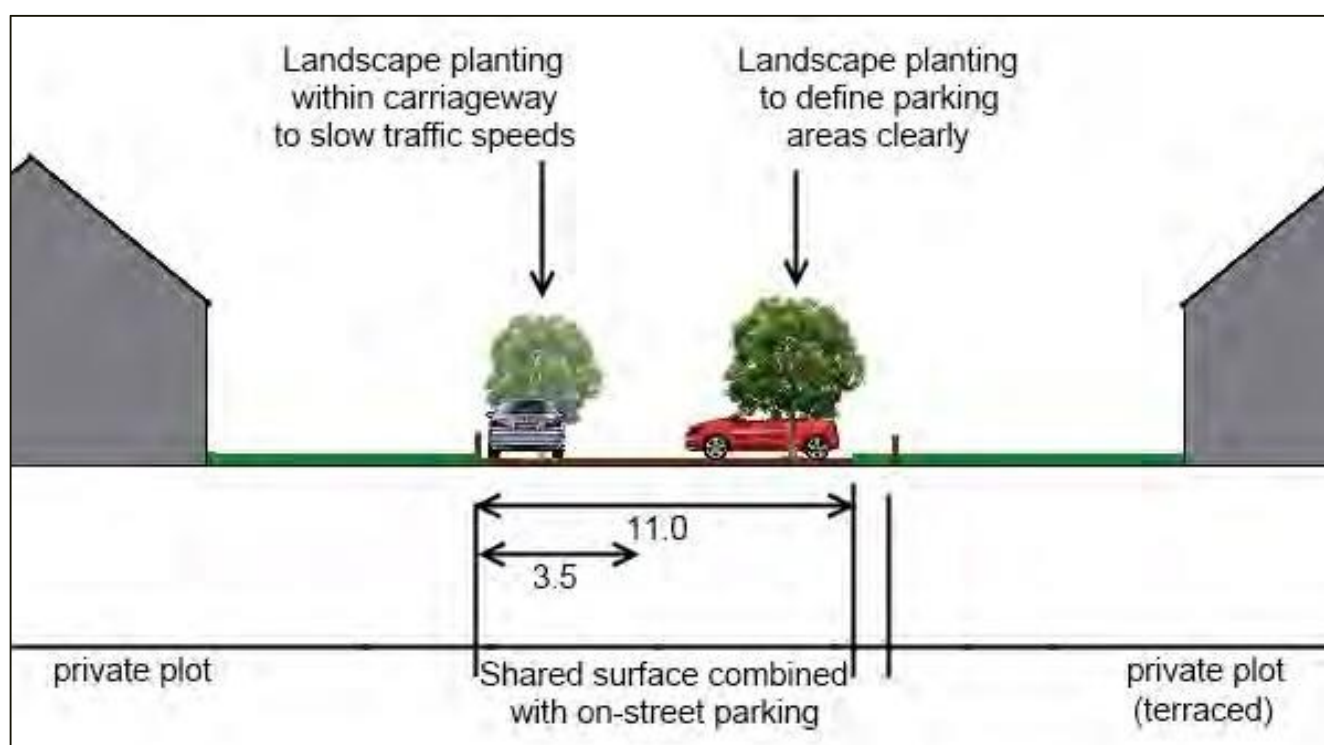


Fig 39 – indicative section through road to rear of terraced housing

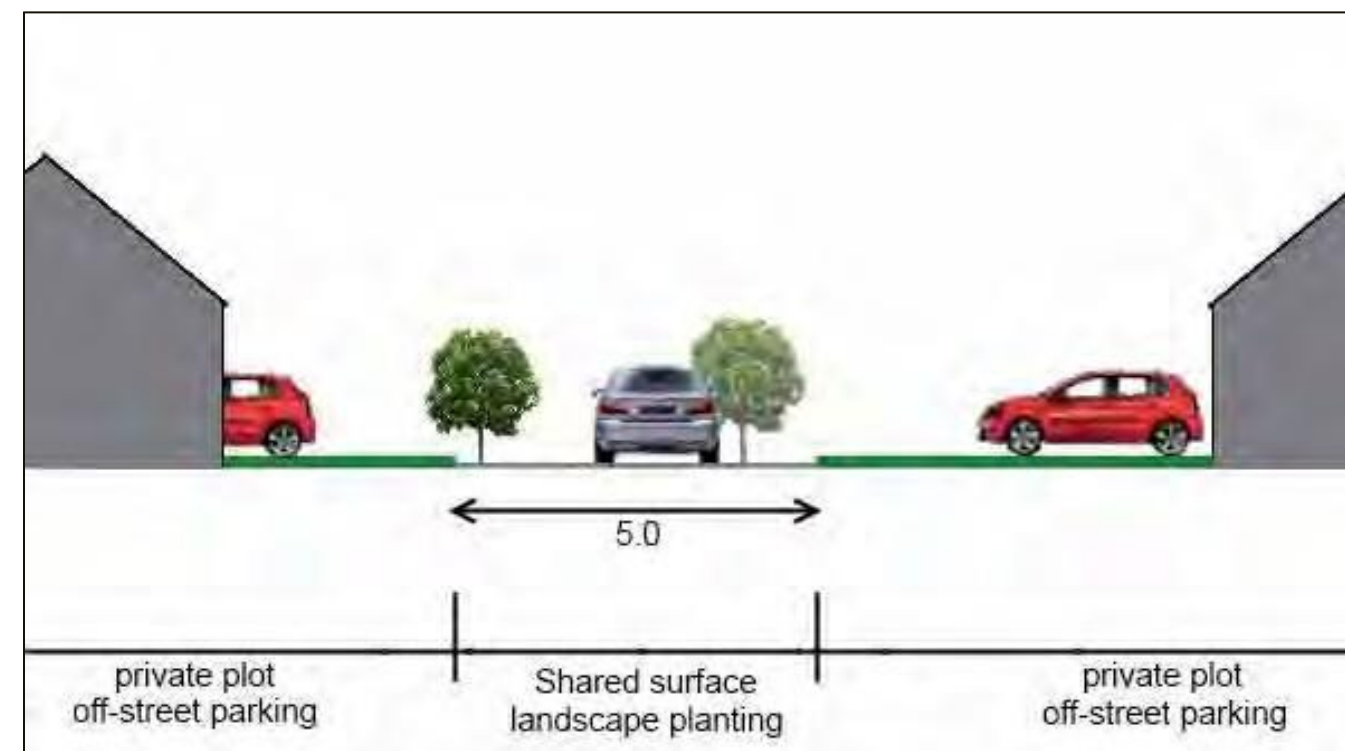


Fig 40 – indicative section through road serving low density housing

The terraced houses are designed to provide a frontage addressing the main bus route, but the bus route will not provide on-street parking (to ensure free flow for the buses and maximise pedestrian safety). Parking for the terraces will be provided at the rear of the properties in a 'nose-in' arrangement. These parking areas will be marked by landscaping blocks. The materials will be continuous from the carriageway to the parking areas, to define it as a shared surface for pedestrians, cyclists and vehicles. Landscape planting within the carriageway will be positioned to calm traffic speeds without restricting manoeuvrability from car parking areas.

Moving out from the higher density bus route, the density of development is lower, with primarily detached and semi-detached housing. In these areas, parking will be provided off-street either on private driveways or garages (to be determined in detailed planning applications). Streets in these areas can therefore be narrower, as manoeuvring space is provided within the private house plots. On street parking will not be formally marked, but it is expected that a degree of visitor parking will be accommodated on street to supplement the off-street provision for the housing. Landscape planting and hard landscaping will be incorporated into the carriageway to calm traffic speeds to less than 20mph. The detail of landscaping would be provided as part of a detailed planning application and/or Roads Construction Consent application.

Where streets cross, small squares have been developed. These will provide a change in material, or colour, and will (where appropriate) include some form of hard landscape feature or landscape planting in the centre, to ensure that traffic from all directions gives way as they enter the square. This will

further reduce traffic speeds, and remove the need to determine one route as a priority over another. These squares will also provide an opportunity for attractive landscaping to break up streets in a visual sense. The shape of the site lends itself to a grid network of streets, but visually this could become monotonous without features like this to break it up.



It is proposed that the main streets be finished in bitmac, and the features, such as the above mentioned squares at junctions, can be finished in an alternate colour or material, such as lock-block paving. The use of bitmac on the long stretches of street will be cost efficient and ensure easier long term maintenance, subject to detailed discussions.

Tree planting can be provided within a metal grid installed in the road, such as in the image on the left.

With the exception of the six houses to the east of phase 1a, and the affordable housing to the east of phase 1b, all the properties on the bus route will be served by parking at the rear. This will also be practical for storage of wheelie bins, to ensure that the refuse vehicles can collect them without interfering with the flow of traffic on the principle bus route.

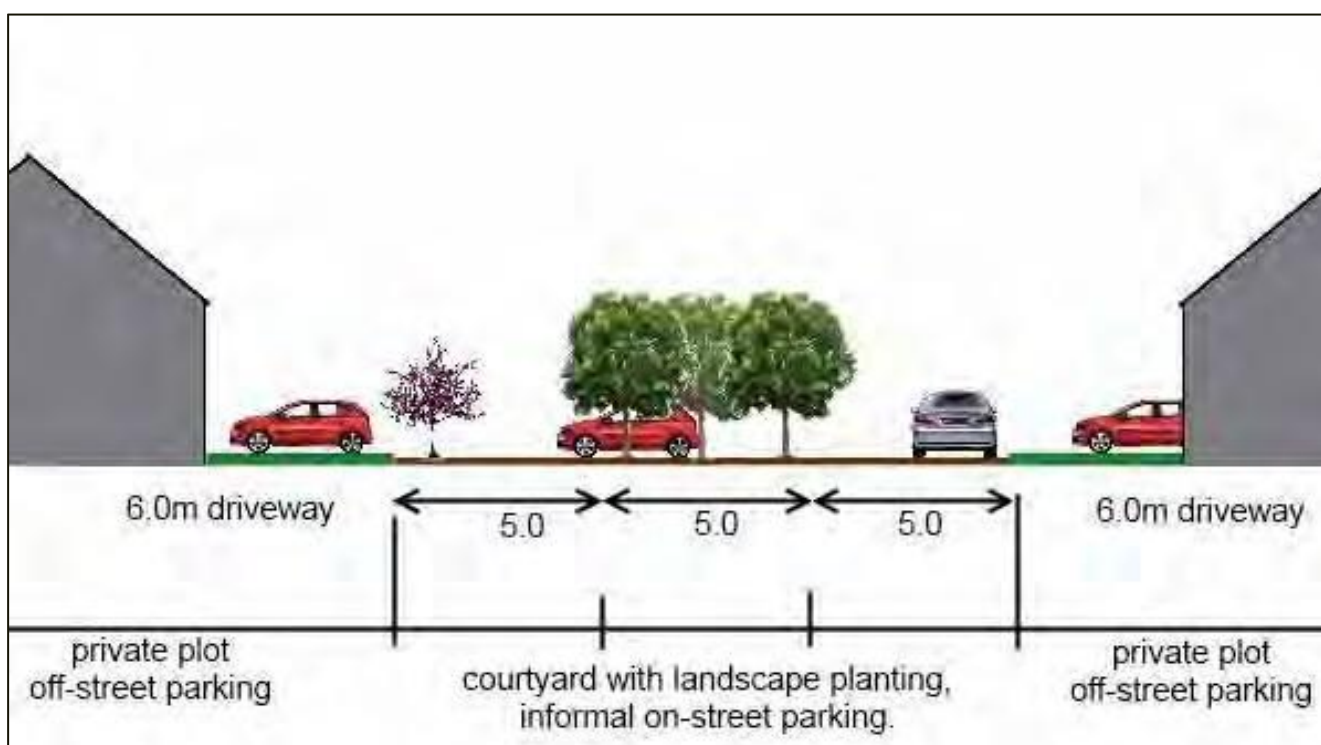


Fig 41 – indicative section through a residential courtyard

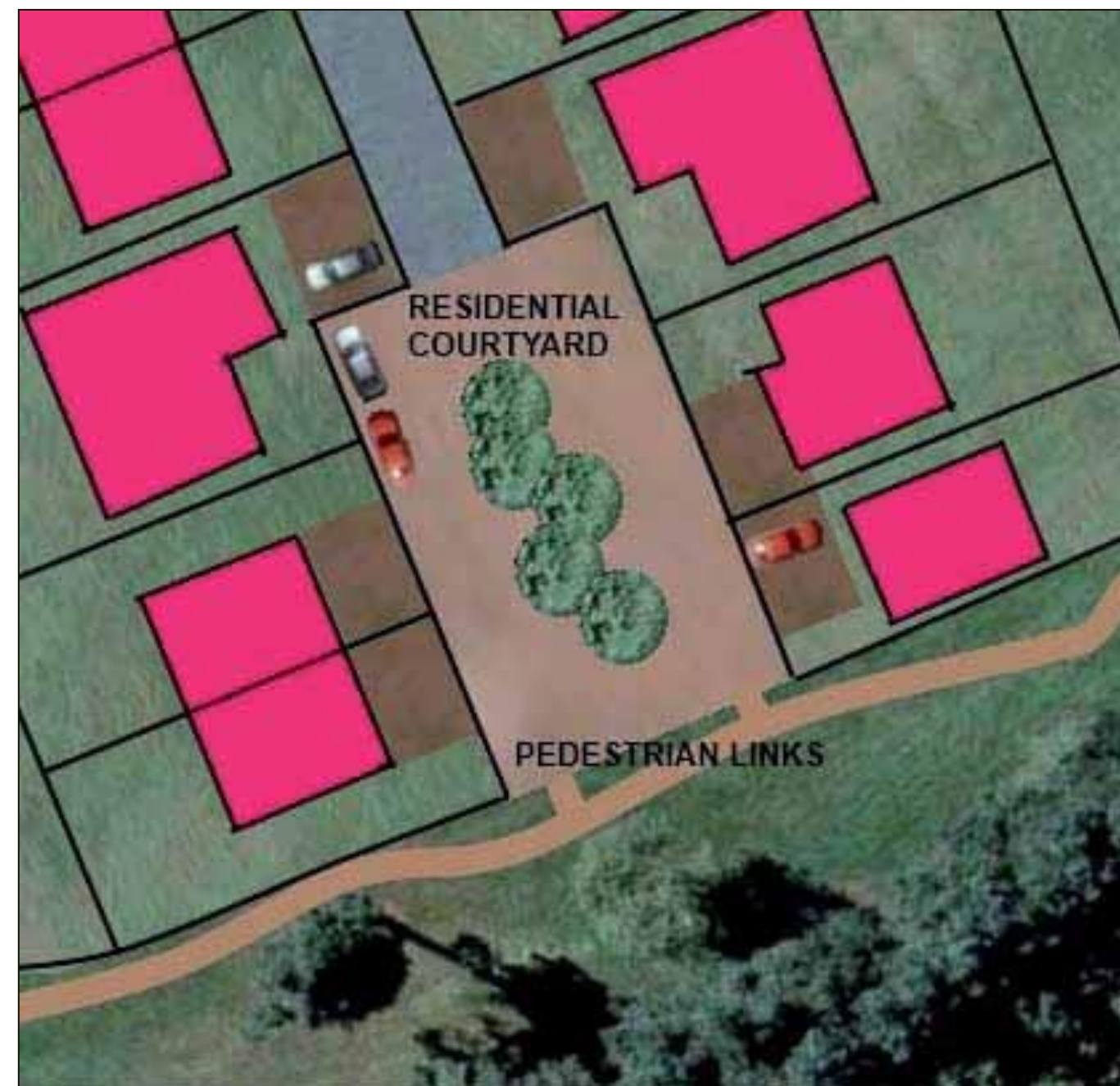


Fig 42 – Residential courtyards – indicative arrangement.

Within the courtyard areas, the priority is firmly with the pedestrian and cyclist, with speeds as low as <10mph through the nature of the area and the landscaping. Whilst the road network terminates in these courtyards, they provide the interface between the adjacent open space and the residential areas for pedestrians and cyclists. More informal parking will occur in these areas. There is an opportunity to look at the detailed landscaping proposals as part of detailed planning applications, with a view to giving each courtyard a slightly different visual character, through species of planting, hard landscaping etc. As part of the detailed planning application submissions, a swept path analysis will be carried out to ensure that a refuse lorry can turn in the courtyard.

The courtyards could feature different materials from each other, but should be clearly different from the principle streets that lead into them – again as a measure to reduce traffic speeds through the impression of entering a new area where pedestrians and cyclists have priority. Where the size of the courtyard permits, there may also be scope to delineate on–street parking spaces, but where they are smaller, this may be left to occur more informally.

As the masterplan stands, these courtyards are located along the boundary of the site and the Den of Maidenraig, where density of development is low and houses are detached and semi–detached. Parking provision for the houses will therefore be provided off–street on private drives or in garages. On street parking would therefore cater for additional visitor parking.

Safe and pleasant

The distinction between the bus route, with segregated foot and cycle paths, and the residential streets and courtyards aims to ensure the safety of cyclists and pedestrians at all times. The road geometry and traffic calming measures will ensure a designed traffic speed of 30mph on the bus route, and less than 20mph on the residential streets and courtyards.

Traffic calming will not include vertical deflection, but will be achieved through reduced forward and on–street visibility, the use of hard and soft landscaping at appropriate points to require additional driver care and reduced speed. The omission of long straight sections of road will also reduce speeds.

The hard and soft landscaping will be designed and located in a manner to benefit pedestrians and cyclists, and not obstruct their movement. Outwith the main bus route, the pedestrian and cyclist must be considered as the priority user in the design process.

The use of signage and lighting must also be carefully considered. Signage should be minimised to reduce clutter, and also ensure that vehicular users are not distracted from driving safely. Street lighting must be suitable for the location, and seek to provide a safe environment for all users.

Easy to Move Around In

The street layouts have been designed to maximise interconnectivity. Only at the periphery of the site, where it addresses the woodland to the north, or the Den of Maidenraig to the south does the grid pattern of residential streets give way to open courtyards. Notably, these courtyards are linked along the north and south boundaries by footpaths, to ensure pedestrian and cycle connectivity is maximised.

The main bus route has been designed to be more suited to larger vehicles, with segregation of pedestrians and cyclists. The buses will only navigate the site in a clockwise direction, and as a result their free movement will not be compromised by necessity to pass other buses. Again, there will be no

vertical deflection designed as traffic calming on this route, although long straights will be designed out by the inclusion of landscaping and on–street parking at appropriate locations.

Junctions have been designed to maximise pedestrian and cyclist safety, and ensure slow traffic speeds.

Welcoming

The layout of the roads will be welcoming primarily through their design to be safe and accessibility to all. The masterplan seeks to provide access for all residents to the bus route and to local services within a 400m or minute walk, encouraging people to walk or cycle.

Adaptable

Ultimately, there is the requirement for all the roads to be accessible by service vehicles, and whilst the traffic speeds can be controlled by design, there is also an adaptability to accommodate future changes. In the case of Maidenraig, the most likely significant future requirement is the potential to provide a vehicular link either north to Greenferns or east to Sheddocksley identified in the Local Development Plan. The residential streets to the north of the bus route in this area are capable of being widened and redesigned to accommodate greater traffic flows, with pedestrian and cycle access segregated from the main carriageway.

With regard to parking, the masterplan shows the amount of off street parking we deem appropriate to accommodate the maximum number of houses/commercial premises in each phase. These will ultimately be reduced through the detailed design process as maximum building heights are established, and affordable housing reductions are accommodated and detailed discussions about uses take place. Through the detailed road design of each phase, appropriate levels of on–street parking will be provided to ensure a flexible approach to parking, and to reduce the large areas of car parks. Additional landscaping and public open space can be incorporated through this process.

Resource Efficient

The grid layout of roads in the masterplan is efficient, ensuring that there are as few roads with development on only one side as possible. One of the benefits of considering a site as a masterplan also ensures the most efficient surface water drainage arrangements can be designed at the outset, rather than in a piecemeal fashion.

The masterplan and landscape plans give an indication of the landscaping proposed within the road network, and this will be embellished with detailed proposals as part of each detailed planning application.

Similarly, agreement with the Council on specific materials in the early phases will dictate the materials for the whole of the site. It is important to ensure that the materials used will be affordable and available in the long term to ensure maintenance is simplified as much as possible and also cost effective.

4.1.10. Sustainability

Priority has been given to developing a set of house types that utilise the very best timber frame technology to minimise energy consumption through insulation and air tightness. In Bancon's experience, this 'fabric first' approach is the most cost effective and successful manner to reduce the carbon footprint of developments. Developing a standard building envelope specification will enable it to be transferred to the non-standard buildings within the masterplan area, as well as the standard house types.

It is not appropriate to consider the details of such a specification in this report, as the relevant building standards will change through the life of the development, and new technology and building techniques will undoubtedly contribute to an ever improving product. However, Bancon are committed to meeting the Local Development Plan policy on Low and Zero Carbon Buildings (Policy R7) through the 'fabric first' approach, and will ensure that the requirements of the Building Standards are exceeded.

Should the fabric first approach be insufficient to address the requirements of the Local Development Plan, a district heating scheme may be suitable for the site. However, as policy and technology changes, no decision has yet been made on the potential power source. Earlier plans included a large biomass combined heat and power plant, which may yet prove to be the best solution. However, the scale of the development, and the phasing proposed, may lead to a more efficient solution of several small biomass plants linked in serial around the network. The necessity for these will be addressed through the detailed applications for individual phases of development. Such a scheme would include energy centres of a size comparable with a double garage, and therefore could be accommodated with minor adjustments to plans. With the unknown nature of heat demands from housing as the Building Standards and planning requirements change over time, it is not possible to accurately predict how many energy centres will be required, or in what locations as part of the masterplan.

A great benefit of the masterplan area is the mix of uses proposed, with a potential primary school, retail and business uses providing the necessary off-peak heating demand to make a district heating network a potentially viable solution to reducing overall carbon emissions.

In terms of appearance, the use of a district heating network to achieve the requirements for Low and Zero Carbon Generating Technology in the masterplan allows a greater flexibility in building design. There is no need for the inclusion of unsightly micro generating technology. Building design can therefore reflect traditional proportions and appearance, with the use of high quality modern materials and finishes, to create an attractive, appropriate and high quality development.

The site as a whole benefits from a gentle south facing slope, and as such the masterplan has been designed to maximise the use of passive solar gain. This, combined with the afore-mentioned use of very high quality wall specifications and insulation levels, will minimise the heat demand of houses greatly. The provision of south facing gardens where possible is also ideal.

However, regardless of how well a building performs thermally, or what its main heat source is, modern living also demands an electricity supply too. In this respect, many of the buildings are oriented in a north-south manner, to ensure there are as many south facing roofs as possible. This provides an opportunity for the use of photovoltaic or solar panels on the roofs to generate electricity. At the current time, these can be a viable investment for householders, due to guaranteed 'feed in tariffs'. It is therefore possible to offer them as an option when building houses. New technology that allows conversion of the power generated to an AC current for domestic use may be available in the future, making the use of PV panels more attractive to householders. It may be possible to offer solar panels or photovoltaic panels on the houses as a standard feature, although heat and hot water may be provided using a district heating network.

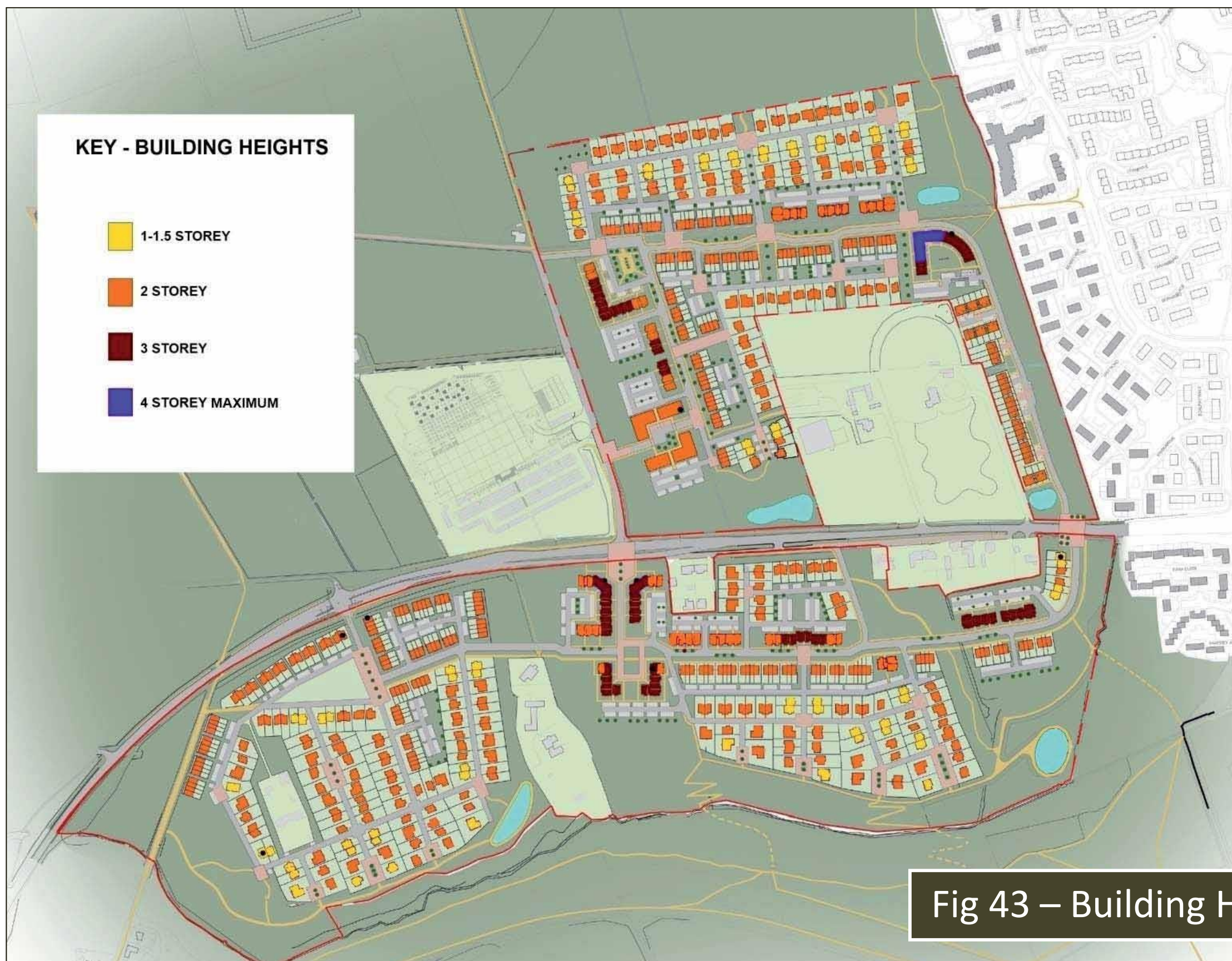
It is vital to take account of the fact that the field of low and zero carbon technology is fast moving, and that the best solution for house design and construction in 12 months might not be the same as it is now. It must, therefore, be accepted that such details will be revisited throughout the duration of the development.

4.1.11. Density/Housing Mix

The Local Development Plan specifies a general density requirement for development in the strategic growth areas of 30 dwellings per Ha. However, our approach has been to ameliorate this having regard to the particular surroundings of the site and the adjoining urban grain. We have located the highest density areas around the neighbourhood centre, concentrated medium density housing along the bus route and provided lower density layouts on the edges where the development abuts the Green Space Network.

In terms of the heights of buildings, there will be a range from single storey houses to four storey flats. Fig 43 overleaf shows indicatively the heights of properties on the masterplan, suggesting one location where four storeys may be suitable. The final decision on building heights should, however, be reserved for assessment as part of detailed planning applications.

Considering four typical areas, the net density to the south of the central junction, where development is primarily flatted, is around 41 dwellings per hectare (16.6 per acre). A typical area around the bus route, with a mix of flatted and terraced development is 32 dwellings per hectare (13 per acre). In the lower density areas, where there is largely terraced development, density is in the region of 22 dwellings per hectare (8.9 per acre), and in the very low density areas of detached housing this falls to around 14 dwellings per hectare (5.7 per acre). The Local Development Plan requires a mix of house sizes and types, and our offer will range from 1 bed apartments to 5 bed detached houses. Affordable housing will be provided in accordance with the Local Development Plan requirements.



4.1.12. Building Design and Materials

There is a mix of building types in and around the Masterplan Area.

Within the site the buildings are of a more traditional design, generally cottage style farmhouses or steadings, with granite walls and pitched slated roofs. Newer 'holdings' were constructed between the wars. These buildings generally have rendered walls with piended roofs. The newer additions to these groups are also generally rendered with some modern materials used, but they also have tiled roofs.

To the east of the site, the urban landscape quickly changes, with 2, 3 and 4 storey development on both sides of the A944. The 1980's housing in Summerhill adopts traditional proportions, and is rendered with pitched tiled roofs. A similar approach has been adopted in the Sheddocksley housing development, but the houses are clad in timber linings. The recently developed Dobbies Garden Centre is itself not a tall building, but has been built on a raised platform above the A944, making it prominent in the surrounding landscape. This existing feature offers an opportunity for a higher development area opposite, creating an entrance to the **OP31** site around the proposed main signalised junction.

In responding to these surrounding design influences, a series of design options was presented at the consultation event held in May. There was a clear preference among the respondees for a traditional design approach, with pitched roofs and local materials being popular. We have considered this in our design approach.

The wall proportions are traditional in scale, while roofs will be pitched at a minimum of 30 degrees. Windows will have a vertical emphasis. No mock astragals or transoms will be added to the windows. Roofs are to be pitched, and finished with slate grey tiles. Walls will be finished with a limited amount of synthetic stone, but mostly rendered. The renders will be matched to the selected stone colours. Some areas of timber cladding will be employed to add interest and variety to house types. Base-courses will be synthetic stone. Windows and doors will be either white or grey pvc, or stained timber.

Where buildings face onto areas of open space, including the Den of Maidenraig, or where they address more than one road, it is imperative that there are not blank gable walls, and that windows are introduced to provide surveillance and architectural interest to such elevations. Development will not exceed 3 storeys in height without specific justification as part of a detailed planning application. Indeed, only in limited areas of the site, where topography and surrounding landscape and built form create an acceptable setting, development in excess of 3 storeys may be permissible. This is most likely in the centre of the site, around the elevated setting of Dobbies Garden Centre, or the flats to the east of the northern development area, where mature landscaping exists to provide suitable scale for such a building.

Some examples of possible house types are shown on the right. The detailed designs and heights of buildings, and materials to be used will be determined at the detailed planning application stage.



Indicative flats



Indicative flats



Indicative detached and semi-detached house types.

4.2. The Three Character Areas

4.2.1. Area A

Area A sits to the North of the Lang Stracht, and is identified as site **OP32** in the Local Development Plan, suitable for 300 houses.



Fig 44 – Area A

Fig 44 shows the woodland to the North, and areas of Green Space Network both to the east and west of the area. The layout exploits this relationship and by drawing the landscape into the scheme, opening up ready access to this resource and providing attractive views, and settings for the residents.



Fig 45 – interface with the woodland to the North of the site.

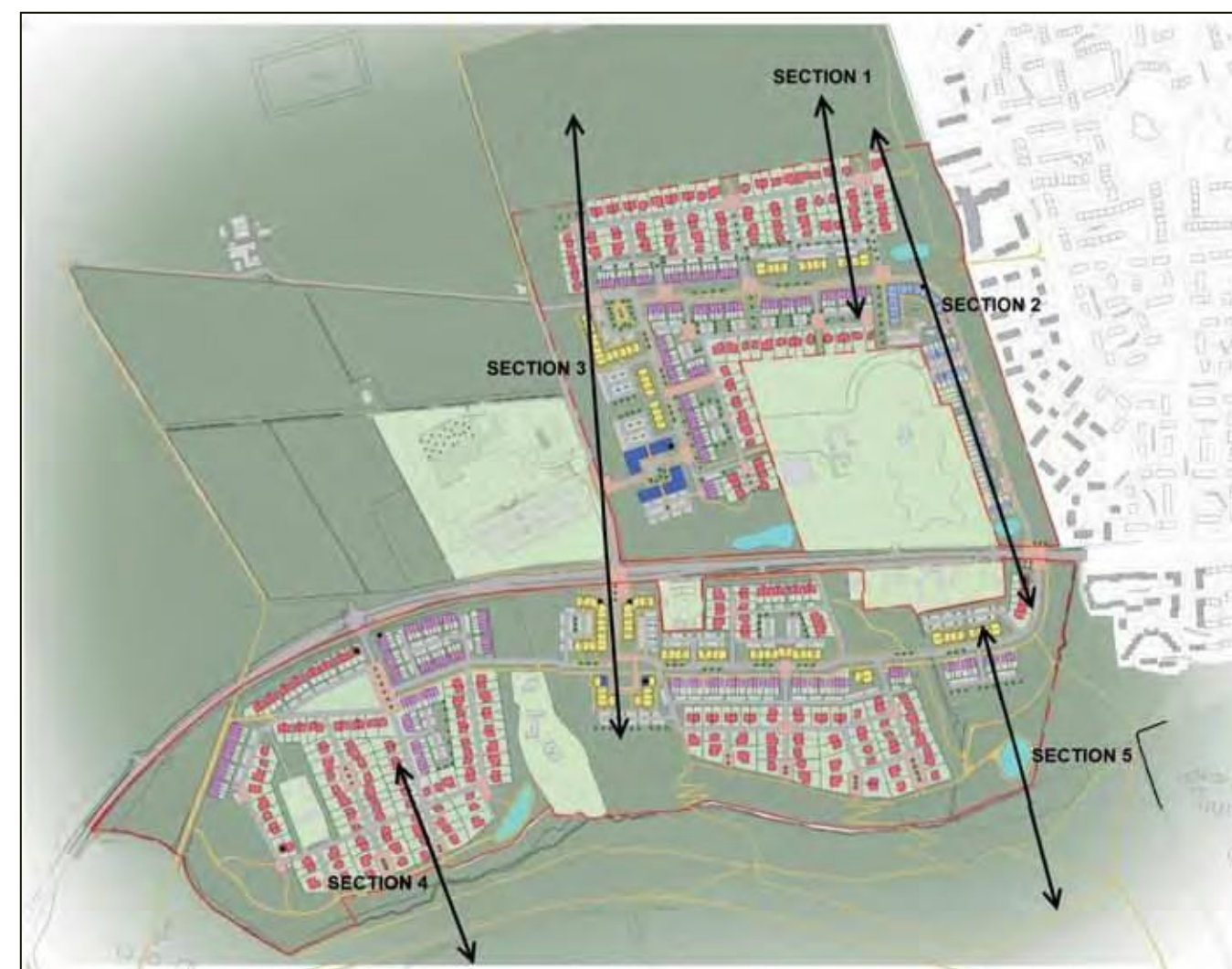


Fig 46 – location of sections referred to in coming pages.

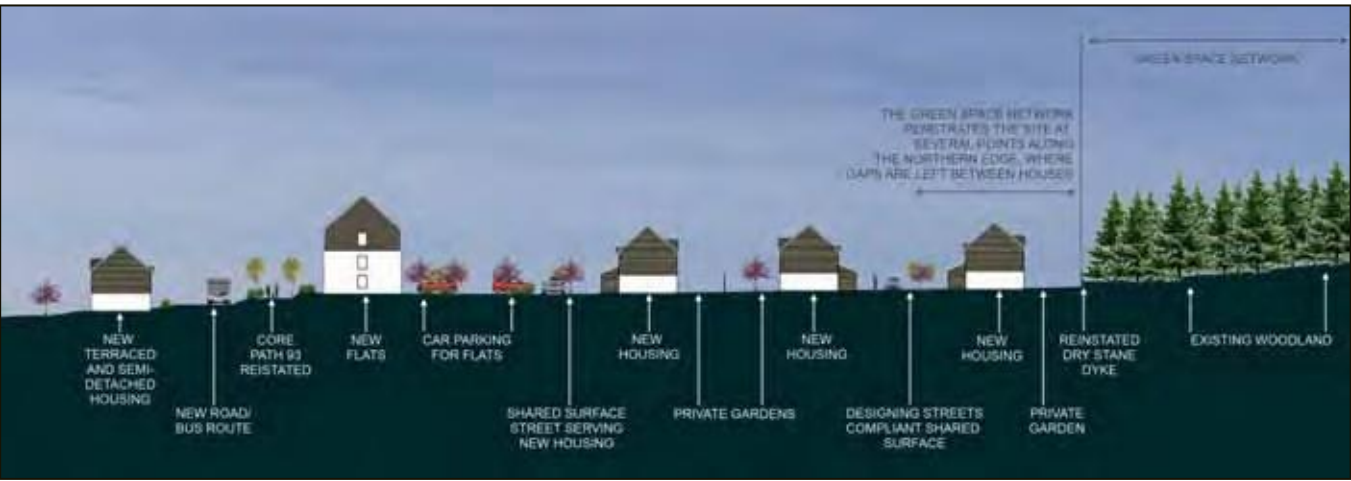


Fig 47 – section 1 – indicative section through the boundary of area A and the woodland to the North.

The interface between the northern part of area A and the existing woodland beyond is shown in fig 48 on the left.

On the southern boundary, the existing urban grain and character of the Lang Stracht suggested that development should be set back as shown on sections at figs 48 and 49 below.



Fig 48 – section 2 – through the eastern area of Area A, between Whitemyers House and Sheddocksley.

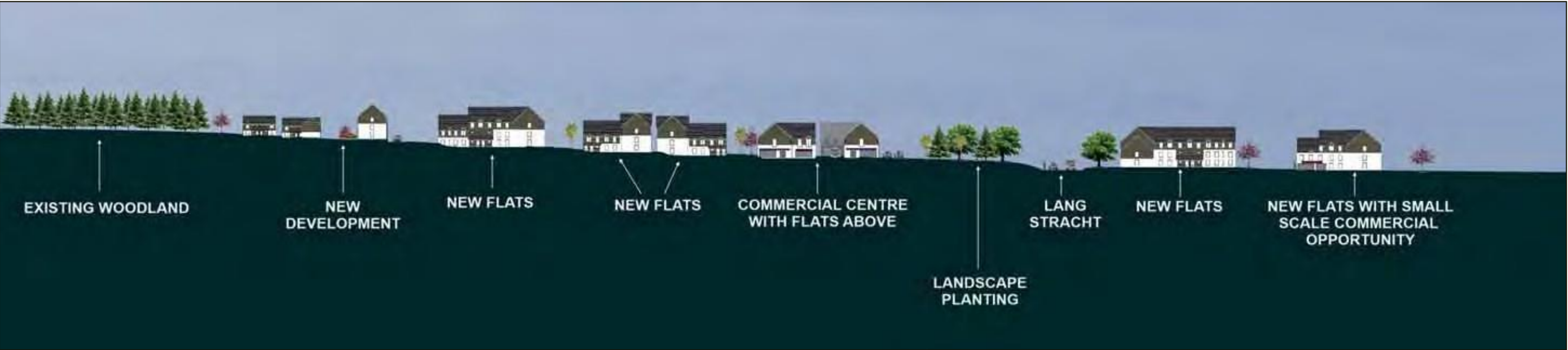


Fig 49 – section 3 – through the western part of Area A, between Whitemyers House and Dobbies Garden Centre

Dobbie's Garden Centre lies to the west, and this presents a commercial development opportunity, by associating a new neighbourhood centre with this existing commercial draw.

The Sheddocksley residential area – which is relatively high density at around 21 dwellings per hectare – lies to the east of the area. It is appropriate therefore that the density of Area A should also reflect this more urban feel. It also contains existing community facilities which it will be important to develop connections with. These surrounding influences have therefore given the layout its basic shape.

Within that framework the layout is planned to give a strong sense of place, dominated by its landscape setting. The main route through the area will be a bus route so it is punctuated by several landmarks along the way. The location of landmark buildings are identified on the masterplan.



Fig 50 – Feature square opposite Dobbies Garden Centre, including commercial uses.

On turning into the site there is firstly a 'sense of arrival' created by the location of a new landscaped square – linking the masterplan area to Dobbies Garden Centre.

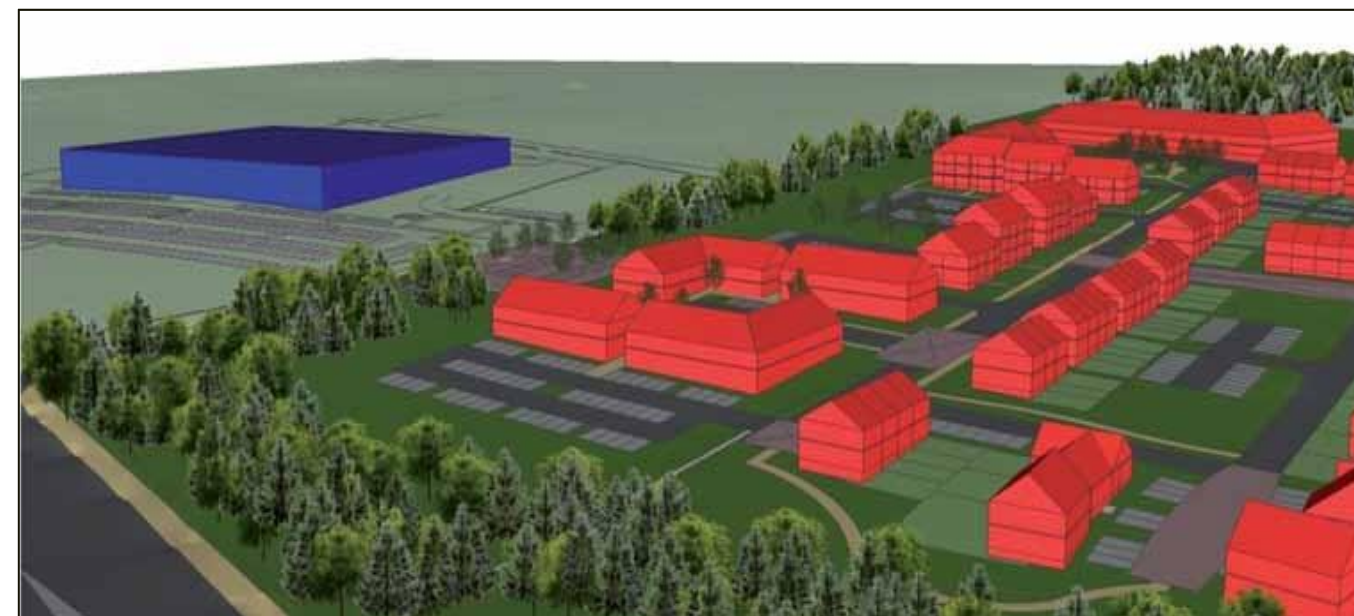


Fig 52 – View of the commercial square looking North from above the Lang Stracht.

Figs 50 and 52 clearly show the relationship of the commercial area, the flats to the north of it, and the terraced, detached and semi-detached houses to the east. The wider view in fig 51 shows the relationship with Dobbies Garden Centre to the west, set on higher ground, and the lower level buildings of Whitemyers Farm and Cocker's Roses to the east.



Fig 51 – shows a longer section from Dobbies Garden Centre (blue building to the left) through to Whitemyers Farm and Cocker's Roses (blue building to the right)

One then moves into another square containing the commercial offer. This will include a landmark building on the northeast corner. Turning northwards the bus route then moves through a higher density area along a landscaped street.

The street is punctuated by several lanes with views to the rear lower density areas. At the end of this street one arrives at a landscaped square which is contained by apartments. The alignment of the bus route is such that views to this building will be available from the Lang Stracht.



Fig 53 – Landscaped square to the northwest of area A.

The bus then turns east along a further street of higher density apartments (to the north) and terraced town houses. It is similarly punctuated by lanes giving views into the lower density courtyards. At the two main intersections one will have long views out into the northern woodland. This section of the bus route is designed to be open-ended, with views to the open countryside to the west, and to the Green Space Network between the site and Sheddocksley to the east.

At the east end of the street another landmark building is placed, turning the corner in a curve to return to the Lang Stracht.



Fig 54 – Curved feature building on the eastern edge of area A.

This stretch of the bus route will be attractive, with Green Space Network on its east side. Beyond the corner building, on the west side, there will be a series of linear courtyards designed to relate to the Green Space Network opposite. The housing in this area will be semi-detached, low cost / affordable units designed in discussion with an Registered Social Landlord. The road will terminate in a wider area of Green Space Network, which will contain a SUDS pond. It is hoped that the intersection of the road with the Lang Stracht can be designed as part of the urban realm to mark this entrance to the development area.

The affordable apartments in this area will be a mixture of 4,3, and occasionally 2 stories high. The houses will be predominantly 2 storey, with the occasional 3 storey town house introduced to provide definition and legibility.

The potential exists for pedestrian linkages between this part of the site and the existing residential area of Sheddocksley. These connections are essential in ensuring the connectivity and permeability of the site and meeting the principles of designing streets.

The plan shows an indicative connection between the two specific opportunities to make the connection will be assessed as part of the detailed planning process.

Phase 1b

Area A includes the area identified on the phasing plans as phase 1b. This will be affordable housing, with a mix of semi-detached houses and flats.

The layout of phase 1b is very important, as it is located on a narrow stretch of land between existing housing at Sheddocksley and the curtilage of the listed Whitemyrs House, which is bounded by mature trees. The Local Development Plan identified the area as Green Space Network, demanding a clear visual and functional link between green space to the north and south of the site, and a visual break between the new development as Sheddocksley. Covered in detail in the landscape report, the layout provides a 30–40m landscape strip along the eastern edge of the site, with a mixture of planting to achieve this aim.

The result will be an attractive setting for the housing, and an area highly accessible by a range of transport methods. The proposed extended 23 bus will travel down the main access road through phase 1b.

The 3D impression overleaf shows how this phase of development will sit in the landscape, against existing mature trees around Whitemyrs House and new planting to the East.

The connections to Sheddocksley are essential in ensuring the connectivity and permeability of the site and meeting the principles of designing streets. This will be considered in more detail as part of the detailed planning application, where individual opportunities to link the two areas can be assessed.

The plan for phase 1b is shown on the right.



Fig 55 – Phase 1b layout plan.



Fig 56 – 3D image of the eastern edge of area A

4.2.2. Area B

Area B forms the western section of Local Development Plan site **OP31**, to the south of the A944 Lang Stracht. The Denburn runs along the southern side of the site in a deep gully.



Fig 57 – Area B

Fig 58 shows the Den of Maidenraig running to the south and south west of the area. The layout exploits this relationship in 2 ways. Firstly by drawing the landscape into the residential area through a series of landscaped courtyards on the south side. There are no gardens backing on to this boundary (so no long line of fences facing the Den), and the courtyards will be designed to maximise these attractive views – including gable windows. Secondly by opening the whole of the south-western boundary (where there are no houses on the Den side of the road) up to the Den.

Fig 58 shows a section through this area, demonstrating the interface between the site and the Den of Maidenraig, and how the green space penetrates the site through the courtyards.



Fig 58 – section 4 – Indicative section through interface between Area B and the Den of Maidenraig

The Switch-back Road (with landscaping beyond) will form the western boundary of the area, and the houses here will be orientated to face the road, and provide a traditional street-scape.



Fig 59 – Area B viewed from the Lang Stracht, looking south west.

The south side of the Lang Stracht contains more existing buildings than the north, giving it a more urban character. Nevertheless it is important to improve its setting as a main entry to the City. Buildings will therefore be set back (circa 20m) and a tree lined avenue created. The houses will again be orientated to the road with rear access, and a traditional streetscape designed.

On the east boundary of this area there is a group of well-established traditional houses. A stream and gully runs beyond them, so a swathe of Green Space Network has been created adjoining this natural habitat. As well as providing a wildlife corridor, the Green Space Network provides both screening and a continuing rural setting for these existing properties.

This area is the furthest from the existing built up area, and has the most rural character. It is appropriate therefore that this should be an area of lower density development.

These surrounding influences have therefore given the area its basic shape and character. Within that framework, the layout has been developed on the same highly landscaped theme. There is no bus route through this area but the main access will come in from the north (opposite the existing bus gates) in a central position. The first buildings on either side here will be landmark buildings to give a sense of arrival.

One then quickly enters a triangular area laid out as a village green, which would provide amenity and a wonderful setting for the surrounding (50) houses. Moving westwards across the green, one turns south onto a loop road which serves a variety of different landscaped courtyards.

The first stretch has terraced houses to the west and detached units to the east. It then opens out on one side to the Den of Maidenraig, and the large detached units here have great views over the valley and westwards towards Kingswells. A landscaped square marks the transition where one turns east where gable elevations dominate. However windows will be designed in to maintain surveillance, and maintain visual interest. As one passes along this street views are obtained northwards into groups of low density housing designed around landscaped courtyards. The views to the south through similar courtyards will be over the Den of Maidenraig. At the termination of this street there will be fine view (over the SUDS pond) back towards the spire of Woodend Hospital, with the Aberdeen skyline beyond.

Moving back northwards, there is an area of slightly higher density development in the northeast of the area. This group will have main frontages to the adjoining streets, and parking provided in a rear courtyard.

Throughout this area, where junctions are not marked by landscaped courtyards, landmark buildings will be introduced to assist navigation, and provide visual interest.

The housing in this whole area will be largely two storey, with only the occasional three storey town house introduced to provide definition and legibility. In addition, there will be some single and two storey (attic) type housing.

The location of the detention basin to collect surface water drainage for this area will be detailed as part of a planning application submission, which will include a tree survey of the area covered by a Tree Preservation Order to ensure no protected trees are lost. The position of the detention basin is flexible, due to the topography of the site.



Fig 60 – View looking north east towards area B, over the Den of Maidenraig.

4.2.3. Area C

Area C forms the eastern part of Local Development Plan site OP31, Sloping from north west down to the south east and the Den of Maidenraig Local Nature Reserve.



Fig 61 – Area C

As noted above, a group of existing houses adjoining a stream and a deep gulley mark the western boundary of this area. It was logical to strengthen this wildlife corridor by adding a swathe of Green Space Network on its eastern edge to improve screening, and setting, and avoid undermining the character which the houses currently enjoy.

The steep slopes of the Den of Maidenraig define the southern boundary of the area, and the layout responds to this by drawing the greenery into the housing area through landscaped courtyards. None of the houses in this area back on to the Den (to avoid long lines of garden fencing) and the courtyards are designed to maximise views – including the inclusion of gable windows where appropriate.



Fig 62 – 3D impression of the residential courtyards leading the open space into the site, and providing views out to the south.

The extreme southeast corner of the area is the lowest point of the site, and the obvious location for the SUDS pond, as shown in the section in fig 63.



Fig 63 – section 5 – indicative section through the southeast corner of Area C and the Local Nature Reserve.

On the eastern boundary of the area a further strip of Green Space Network is associated with the extant Public Open Space on the western edge of Summerhill. Some of the land is quite steep in this area and unsuitable for development, so the Green Space Network has been expanded towards the stand of existing trees.



Fig 64 – proposed Green Space Network (dark green) and existing trees (light green) referred to.

The habitat corridor created by this strip of trees is then extended northwards (through to the Lang Stracht). This stretch of Green Space Network breaks up Area A into two phasing sections, and creates a complete corridor of green space from the Den of Maidenraig to the woodland to the north of the development, only intersected by the Lang Stracht.

The Lang Stracht runs along the northern boundary of this character area, and as described above, there is a need to improve the setting of the road. The existing buildings in this area are already set back (on a slip road) and this approach is adopted in the layout with a circa 20m landscaped strip introduced, and the buildings designed to face the road. These will however be serviced from the rear, rather than from the slip road.



Fig 65 – Proposed building line along the Lang Stracht, in keeping with the existing properties.

This area adjoins the relatively high density Summerhill housing area. It is therefore appropriate to reflect this urban grain and character in the design of this area of the masterplan.

These surrounding influences have therefore given the layout its basic shape and character. Within that basic framework, the detailed layout has been designed around the same highly landscaped theme.

This approach is apparent at both the entry points to this character area, where the intersection will be designed to mark the entrances and give an immediate sense of arrival. This will be further emphasised with the positioning of landmark buildings at both these gateways. This will be particularly emphasised at the central interchange, opposite the Dobbies Garden Centre. Increasing the height of the buildings in this location (to three storeys) may be suitable, as it will be in context with the raised platform on which the garden centre sits. This is shown in the 3D images below.

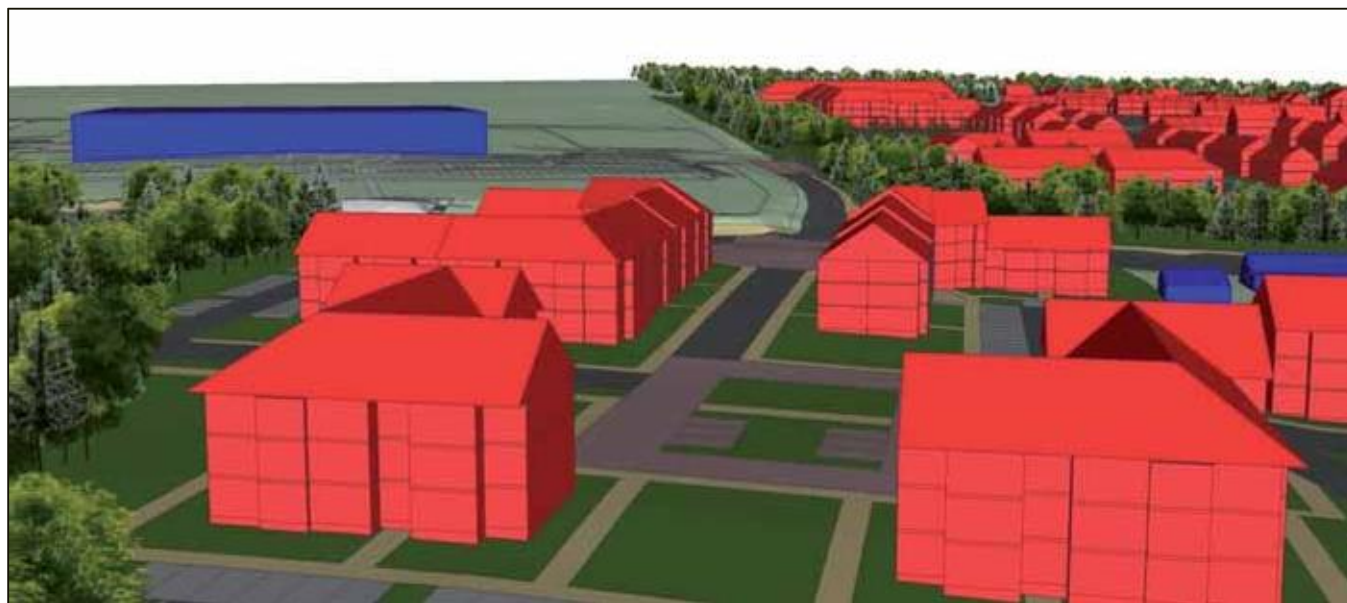


Fig 66 – looking north through the main junction towards the area A and Dobbies Garden Centre (blue) in its elevated location.

Looking at this relationship from a different angle, it is clear that the location of taller buildings around the entrance square will sit comfortably in the landscape, and provide a sense of arrival to the site at its main access point (fig 67 at the foot of the foot of the page).

A bus route is required to penetrate this area, and higher density housing will be associated with this loop road. Moving from the eastern gateway, the road will pass a group of terraced houses (the first show village) which are open onto, and overlook the Green Space Network and over to Hazlehead beyond. As the road turns westwards, it moves into the higher density area, with higher flatted properties on the north and lower terraced houses on the south. This layout enables max sunlight penetration, and optimises views.



Fig 68 – 3D impression of the bus route through Area C

The road is relatively straight along this east to west axis, but bends are introduced along with landscaped courtyards at junctions to provide the degree of traffic calming appropriate to a bus route. Nevertheless there is a fine vista along this route from the Village Green in the west to the Green Space Network in the east.

From the junctions along this section one gets glimpses into the landscaped courtyards which form the lower density areas lying to the south of the bus route. From some junctions vistas are opened up to the Den of Maidenraig.

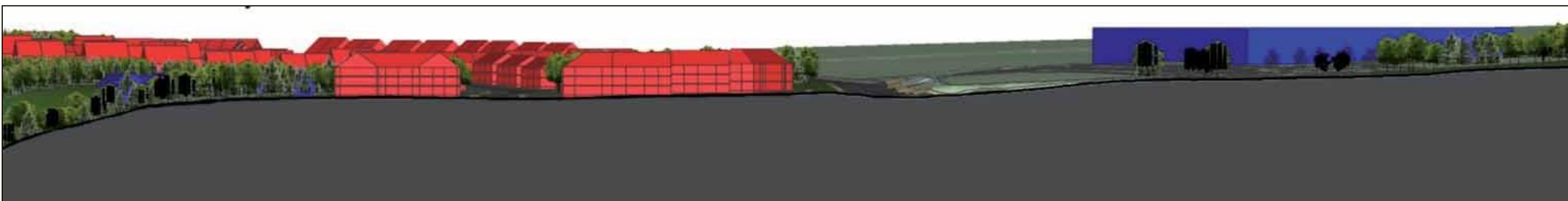


Fig 67 – the relationship of the southern entrance square to the Dobbies Garden Centre (blue) in its elevated location.



Fig 69 – Landscaped courtyards opening out to the Green Space Network beyond

Similar views into landscaped housing courtyards are available to the north, but the houses here are orientated towards the streets – including the Lang Stracht, with parking provided in rear courts.

The western end of the bus route is terminated in a public square which is enclosed by two blocks of 2 and 3 storey apartments. A gap is retained between the blocks, so that a vista is retained from Dobbies Garden Centre access road, through the square and over the Den. The ground floor of 2 of these units will be reserved for commercial use to provide potential for the establishment of a local retail/commercial offer so that families do not have to cross the Lang Stracht for day to day convenience shopping. With a bus stop in this location, a coffee shop could potentially be established here.



Fig 70 – 3D impression of the southern square area looking southeast.

At the square, the bus route turns north and is flanked on both sides by 2 and 3 storey apartment blocks. These will be designed as landmark buildings to mark the western entrance to this character area.

The apartments in this area will be a mixture of 2 and 3 storeys in height. The houses along the bus route will be a mixture of 3 storey town houses and 2 storey terraced properties. In the lower density areas behind the bus route, the houses will all be 2 storey high.

Phase 1a

This phase proposes between 80 and 90 houses (depending on the number of flats in each of the blocks). These are a mix of small flats, terraced, semi-detached and detached houses, with the provision of 25% affordable houses again mixed between flats and semi-detached or terraced houses.

The levels of this part of the site, the Green Space Network to the east and south, and the proximity of the Den of Maidenraig Local Nature Reserve make the visual impact of this phase perhaps the most important to address. Development has been set back a considerable distance from the site boundary, with landscaping proposed to help soften the impact of new buildings.

Whilst it is intended to utilise a relatively simplistic palette of materials throughout the site, including renders and timber linings used on elevations to give a modern clean look, this particular part of the masterplan offers an opportunity to introduce additional architectural features to add interest to the site, particularly when viewed from outwith its confines. Fig 71 shows an indicative view from the Local Nature Reserve, showing the southern elevations of terraced houses with flats behind.

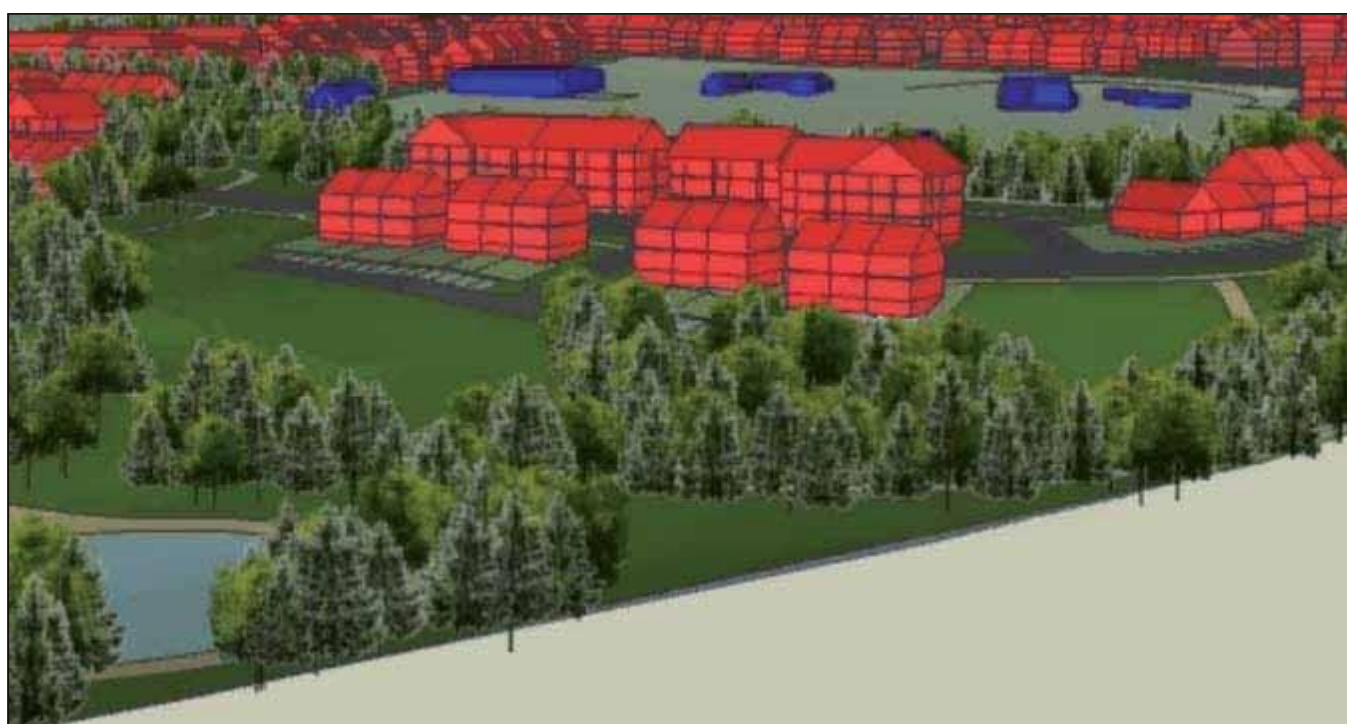


Fig 71 – 3D image of the view of the eastern part of phase 1a from the South



Fig 72 – Phase 1a proposed layout.

4.3. Community Engagement

Bancon have consulted with the local community throughout the development of the masterplan. This included meetings with the local Community Councils, and an exhibition of our initial proposals in March 2012. The feedback, and Bancon's response to the feedback, is included as appendix 1.

In summary, however, the following points were drawn from the consultation exercise, and have been taken account of in the continued development of the masterplan. Bancon's response to these matters is also summarised.

Traffic Impact: - Many people in the local community raised concerns over the impact of 750 houses on the road network, with the anticipated traffic flows adding to the already overly congested A944. This would be compounded by the distance to education facilities.

Bancon are aware of the traffic impact issues, and are continuing to make progress on a detailed Transport Assessment, which will be required as part of the planning application process. This will determine the level of development that can be accommodated on the local road network, what improvements will be required and when to facilitate the development, and what strategic improvements such as the AWPR and Strategic Transport Fund will offer as a benefit to the locality. The provision of the best possible range of alternative means of travelling, via excellent foot and cycle path provision, and a frequent and convenient bus service have been treated as priorities, to minimise reliance on private car use.

Vehicular, Pedestrian and Cycle penetration and connectivity: - Concerns were raised about the potential to link footpaths and cycle paths from the site into Sheddocksley. The local residents do not want pedestrian and cycle traffic through the existing quiet cul-de-sacs. The objection to a potential vehicular or bus route from the site to Lewis Road met with similarly fervent opposition. The pedestrian and cycle connections to Sheddocksley are, however essential in ensuring the connectivity and permeability of the site and meeting the principles of designing streets. An alternative bus route is now proposed.

Wildlife: - The development will have a significant impact on existing wildlife in the area.

Any development on greenfield land will impact upon wildlife in some manner, but the key to successful development in this regard is to maintain and improve habitats. One of the key objectives of the masterplan has been to avoid fragmentation of habitats, and the provision of north-south green corridors of appropriate depth has been carried from the early concept plans to the final masterplan. Significant landscaping is also proposed, which will provide a range of wildlife habitats that the existing agricultural land does not.

A phase 1 habitats survey will be carried out in support of a planning application for the site, and will inform any changes required.

Education: - There is local concern that the proposed education provision requires excessive distance to travel, therefore encouraging more car use, and that the schools cannot cope with additional pupils. (The distances are shown in fig 12)

Bancon have aimed to be flexible with regard to education, with the opportunity to provide a new primary school on site maintained in case the Council's position changes in due course. Bancon will continue to liaise with the Council with regard to education provision.

Health Care: - The Council's requirement to contribute to improvements to the health centre in Kingswells has raised concerns with the local community, due to the limited public transport access to that facility. A preference for a new facility on site has been raised.

Bancon are happy to maintain the potential for the provision of a medical centre on the site as with the primary school. Discussions will be carried out with NHS Grampian and the Council to consider the options for the provision of such a facility. This may require cross funding from other nearby developments, as the Maidencraig site itself could not deliver it, but this does not mean that Maidencraig is not the best location for it. As far as the masterplan is concerned, the best solution is to ensure there is adequate flexibility to include a facility should its delivery come to fruition.

These are the principle issues raised by the greatest number of respondents to the community consultation process. Further detail and additional issues are included in appendix 1.



5 Delivering the Masterplan

View southeast across Maidencraig South East towards the Den of Maidencraig Local Nature Reserve, and Hazlehead beyond

5.1. Phasing

The Local Development Plan sees both Maidencraig SE (450 houses) and NE (300 houses) being delivered by 2016. If this timetable is to be achieved, it is desirable that the following table is adhered to:

	Winter 2011	Winter 2011/12	Spring 2012	Summer 2012	Autumn 2012	Winter 2012	Spring 2013	Summer 2013	Autumn 2013	Winter 2013	Spring 2014	Summer 2014	Autumn 2014	Winter 2014	Spring 2015	Summer 2015	Autumn 2015	Winter 2015	Spring 2016	Summer 2016	Autumn 2016	Winter 2016
Public Consultation Process																						
Masterplan reported to Committee																						
Apply for Planning Permission in Principle																						
Apply for Detailed Planning Permission for Phase 1																						
Site servicing																						
Development (c. 200 houses per annum)																						

Fig 73 – Phasing proposals

The Local Development Plan was adopted on 29th February 1012, and a Proposal of Application Notice was submitted on 23rd February 2012. On completion of the community engagement process, we will be in a position to submit an application for planning permission in principle for the whole site, and ideally a detailed application for phases 1a and 1b relatively quickly thereafter to permit an early start on site.

It is logical that development begins in the east of the site, given that access will be taken from the A944, and the existing services are located there. Similarly, foul water drainage is located to the south of site OP43. In order to maintain momentum of the development, it is proposed that the two sites, OP43 and OP44 be developed concurrently, beginning in the east and moving west. This will enable junction works on the A944 to be constructed in a phased manner, as demonstrated in the phasing drawing in fig 74.

It is hoped that areas of affordable housing will be delivered in partnership with a registered social landlord, and the remainder of the land delivered as mainstream housing. However, it is also possible that the mainstream housing areas will contain a percentage of affordable housing delivered by methods such as low cost home ownership, shared equity, mid-market rent and other options in accordance with Planning Advice Note 2/2010. Discussions will take place with the Council’s Housing Service as part of the planning application process.



Fig 74 – phasing

Phase 1

As mentioned, phase 1 will be split between the two sites, with an area of predominantly affordable housing in the north (phase 1b), and mainstream housing in the south (phase 1a). This development will incorporate the first of the three new junctions, which will eventually be a left in-left out arrangement to prevent excessive queuing at peak times. However, to avoid short term congestion issues. An arrangement allowing traffic to turn right in and out of the junction will be developed as a temporary solution until such time as the main central (fully signalised) junction with the A944 is complete. The eastern junction developed in phase 1 will incorporate a pedestrian crossing across the A944.

A temporary emergency access will be required to the north west of phase 1a to meet roads standards, but this can revert to a pedestrian access at a later date. The approximate housing numbers are for phase 1a – 88 units, and phase 1b – 78 units.

Phase 2

Phase 2a will deliver around 131 houses, including around 35 affordable homes. There is a range of house types, from detached to small flats. Phase 2b will include a mix of detached, semi-detached and townhouse homes in the east, with the main north to south street in the west with flats and townhouses. In the north west of phase 2b there is the northern square, which incorporates commercial and retail uses on the ground floors and flats above. In total, phase 2b includes around 138 houses.

Phase 2 will provide the second principle access point into the OP44 site, with the existing access serving the Dobbies Garden Centre improved and becoming a light controlled 4-way junction, as identified in the Transport Assessment. This junction will also provide access for site 2a, with the requirement to complete the north and south accesses at the existing Dobbies Garden Centre junction due to the total number of houses.

Phase 3

Phase 3a will deliver the southern square, with a mix of commercial, retail and flatted development, totalling around 88 units, including 23 affordable homes. Phase 3b is proposed to include around 114 houses, including around 19 affordable units. Phase 3b is on land owned by Aberdeen City Council.

Phases 4 and 5

Phases 4 and 5 will deliver further housing, including around 27 affordable housing units in phase 4, and up to 182 mainstream houses across the two phases. Phase 5 in particular will contain the greatest proportion of larger detached and semi-detached housing, although some townhouses are proposed to make the most of the levels and the impressive south-westerly views over the Den of Maidencraig. Phase 4 will provide the final access onto the A944, in accordance with the requirements of the Transport Assessment.

Overall

The table below shows the breakdown of numbers for each phase and the provision of affordable housing in each. Whilst the proposals for phases 1a and 1b are relatively well developed, the remainder of the masterplan is indicative, ensuring there is flexibility to accommodate a housing mix to accord with the current market conditions, as well as to provide space for a school and/or health care facilities if required, and to accommodate the findings of detailed ecological assessments for each phase of development. It is necessary to consider the housing numbers as a maximum at this stage, to feed into the Transport Assessment in particular, to ensure an appropriate consideration of traffic impact is made. The numbers in the table below are within 10% of the allocation of 750 houses in the Local Development Plan. Final numbers will be determined through the process of planning applications, and will vary depending on the requirement for land for education and/or healthcare facilities.

Phase	Number of Units	Number of Affordable Units
Phase 1a	88	22
Phase 1b	78	78
Phase 2a	c. 131	c. 35
Phase 2b	c. 138	
Phase 3a	c. 88	c. 23
Phase 3b	c. 114	c. 19
Phase 4	c. 104	c. 11
Phase 5	c. 78	c. 16
Totals	c. 816 (330 North and 486 South)	c. 204

Fig 75 – Indicative Housing and Affordable Housing numbers.

5.2 Affordable Housing

Affordable housing providers generally want to acquire land in easily developable and manageable blocks. It is important that, in order to retain fair land values for all parties, that the provision of affordable housing is fairly allocated between landowners. It will therefore be spread across the site to ensure sustainable mixed communities.

It is also essential to seek an appropriate mix of house size, type and tenure to address the demand specific to this part of the City, rather than assuming a generic mix. We are therefore working closely with the Council and affordable housing providers to deliver the right product. It is also an aim to create, through the masterplan, a template for designs of buildings that will be common to all housing, thereby not singling out affordable housing areas as different or substandard in any way. Bancon are committed to ensuring that 25% of the final housing number is provided as affordable. This may include provision by Registered Social Landlord (RSL). The type of affordable housing provision will be assessed at the planning application stage.

5.3. Mixed Use Opportunities

Whilst there will be no specific business or commercial zonings on the site, as the masterplan is developed, it is intended that the commercial areas in the centre of the sites will contain a mix of uses, including flats above class 1, 2, 3 and 4 uses, perhaps with flats above. This is difficult to reflect in a 2-dimensional masterplan, and is therefore noted here as a concept to be developed further.

With regard to the non-residential uses within the site, it is envisaged that these buildings will be higher, perhaps three storeys, in order to create a sense of enclosure to the main commercial square – opposite Dobbies Garden Centre. These would incorporate commercial premises on the ground floor, and residential uses above. This will offer opportunities for live-work units, where commercial premises can be marketed along with a residential use above, to maximise sustainability. Similarly, the commercial uses may be separate from the residential uses above. In many developments over recent decades, commercial ‘arcade’ type developments have been separate from residential uses, and as a result have often suffered from a lack of care and provide an unsupervised gathering place for youths. Whilst it is very difficult to address a culture through planning, the mix of commercial and residential uses, in a more traditional pattern, will increase the levels of surveillance, security and pride that comes with ownership or tenancy of a home.

At this point in the process, it is impossible to accurately gauge the level of commercial interest there will be in the development area. It has already been suggested from the local Community Council that one (or more) pre-school nurseries would be advantageous, as well as potential community and healthcare facilities. The promotion of live-work units may be more likely to be office and professional services than retail. What is absolutely key to the success of the commercial element of this development is flexibility. Should there be limited demand, then the commercial areas could become residential, and vice versa. This was, it can be assured that there will be no speculative building leading to empty commercial units, or empty sites within the development.

Ultimately, the allocation for the development in the Local Development Plan is for residential development, and the commercial elements of this masterplan must remain flexible in this way, as they are to cater primarily for the population generated by the development.

5.4. Infrastructure

The Aberdeen Local Development 2016 Action Programme sets out the relevant Infrastructure Requirements for Masterplan Zone 6 – Maidencraig. These are shown in the table below.

Infrastructure Requirement Category	Nature of Contribution	Delivery
Cumulative Transport Infrastructure		Contributions will be made in accordance with the agreed policy, to aid delivery of strategic transport infrastructure improvements in the City Region. (See detailed text on page 59)
Roads	New major junctions to access sites OP31 Maidencraig South and OP32 Maidencraig North from A944. Consideration should be given to the potential impact on North Anderson Drive.	Phasing of development to start in the east, so the three new junctions delivered from east to west as required through the development of the site. Transport Assessment to consider impacts on surrounding road network, including North Anderson Drive.
Public Transport and Walking and Cycling Infrastructure	Frequent public transport services to serve the whole masterplan area which may include extensions to existing services. May be possibility for public transport only link connecting OP33 Greenferns and OP32 Maidencraig North. North South link through site connecting to Langstracht cycle	The main roads through the site are designed to be suitable for bus penetration, and all houses will be within a 400 metre walking distance of a bus stop. Discussions with the bus operators indicate support for an extension to the 23 service to loop through the site. Potential to provide connectivity to the 11 service (Queen’s Road) and an additional stop on the A944 for the 41 service (Kingswells Park and Ride bus) will be explored as further benefits. The option to link a public transport only link between OP33 and OP32 Greenferns area will not be precluded by the masterplan. The provision of such a link would be on land owned by Aberdeen City Council, and ultimately such a project is

	<p>route and OP33 Greenferns.</p> <p>Links to and extensions of Westhill/Aberdeen cycle route.</p> <p>East West link connecting OP32 Maidencraig North to Northfield.</p>	<p>likely to be led by them. However, it would fit with the OP32 development quite comfortably.</p> <p>The proposed masterplan will incorporate a network of cycle and pedestrian routes that will link into the existing network wherever possible, thereby creating the links noted, with the co-operation of Aberdeen City Council to deliver links across land between Greenferns, Northfield and the OP32 site. Developer contributions will therefore be made towards the identified improvement of core path 46 and the extension of core path 45.</p> <p>There remains the opportunity to provide pedestrian links to Sheddocksley from the eastern edge of Maidencraig North, and these will be explored in detail as part of a planning application for phase 1b.</p>
Education (contributions set against residential development sites only)	<p>OP31 Maidencraig South Zoned to Fernielea PS which is forecast to have some spare capacity to accommodate pupils generated, but an extension or temporary accommodation may be required. Zoned to Hazlehead Academy which is forecast to have some spare capacity to accommodate pupils generated, but an extension or temporary accommodation may be required. Alternatively, any rebuild of Hazlehead Academy could accommodate the pupils generated. Community facilities including Learning & Development facilities may also be required.</p> <p>OP32 Maidencraig North Zoned to Kingsford PS which has spare capacity of 65 pupils by 2010 and 89 in 2018, can accommodate development at this scale. Additional capacity is likely to be required at Northfield Academy to accommodate pupils generated by this development. Possible re-build of Northfield Academy could create capacity to accommodate these pupils and those from OP33 Greenferns development.</p>	<p>There is a degree of uncertainty in terms of school roll forecasts and subsequent education provision requirements, and Bancon are comfortable with progressing with the masterplan on the basis of appropriate developer contributions being required on a phase by phase basis. The use of temporary accommodation to house pupils is supported in principle as the emerging population statistics suggest a changing demographic with limited growth in the school age population over the long term.</p> <p>The masterplan will be taken forward with the flexibility to accommodate a new primary school, should that be a requirement of the Council in due course. The location of a school will be determined as and when the issue arises.</p> <p>The distances to schools, and the most appropriate and safe routes to access them shall be considered in detail in this report.</p>
Water	<p>The area is to be served from Fernhill District Service Reservoir. Further text in Action Programme 2016 should be referred to.</p>	<p>A Drainage Impact Assessment and Water Impact Assessment will be prepared for discussion with Scottish Water, and contributions paid where appropriate.</p>
Health	<p>Planning Gain Contributions and Land (where identified) will be required to support the provision a new Health Centre (including land already identified) in the Maidencraig area to support the General Medical Services. Will require to accommodate a 9 GP Unit for 5 existing GP's with 4 extra GP's to support the developments.</p>	<p>To be considered at planning application stage.</p>

	developments.	Discussions have been initiated with NHS Grampian.
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Potential Additional Infrastructure

In addition to what is shown in the table above, the public consultation exercise raised some local concerns and desires that we will seek to include in the development. Whilst we cannot physically deliver these things, we can make efforts to facilitate their delivery, and provide the opportunities for them.

- Opportunity for a privately operated pre-school nursery (or two) in the commercial cores.
- Opportunity for general community facilities within the commercial cores.
- Opportunity for the provision of the health care facilities on site.

As discussed in the site description, there is mains gas, electric and phone provision to the site, and the phasing proposals – starting in the east of the site – logically favour the phased extension to the existing infrastructure from the existing urban edge. There are no known constraints to capacity.

Drainage Strategy

A number of factors impact on the strategy adopted to provide both foul and surface water drainage.

- The natural falls of the site which generally slopes towards the south and east.
- The location of existing public sewers
- The location of the Denburn relative to the site.
- The irregular shape of the site and the incursion of property outwith the development site.

Foul Drainage

Existing foul sewage is located to the East and South of the site; with the topography of the site suggesting that connection to the sewer along the south side is the most practical. A network of pipework will ensure that all properties have foul drainage. This network is likely to take the form of a series of smaller systems connecting to the existing network in more than one location. This will be necessary to take account of site irregularity and the position of boundaries and properties outwith the development. Capacity for the development will be determined by Scottish Water following the adoption of the Local Development Plan. A Drainage Impact Assessment has been carried out for the site, and is included in section 6 of this report. Fig 44 shows the indicative drainage concept in detail.

Surface Water Drainage

The site forms part of the natural catchment area for the Denburn, which is located at the floor of the Den of Maidenraig. In developing a sustainable urban drainage system the existing run off must continue to find its way into the Denburn to maintain the balance of this water course. However, the runoff will require to be controlled in such a way as to avoid increasing the natural rate of water infiltration to the burn, to avoid creating flood situations. The natural fall is shown in fig 76.

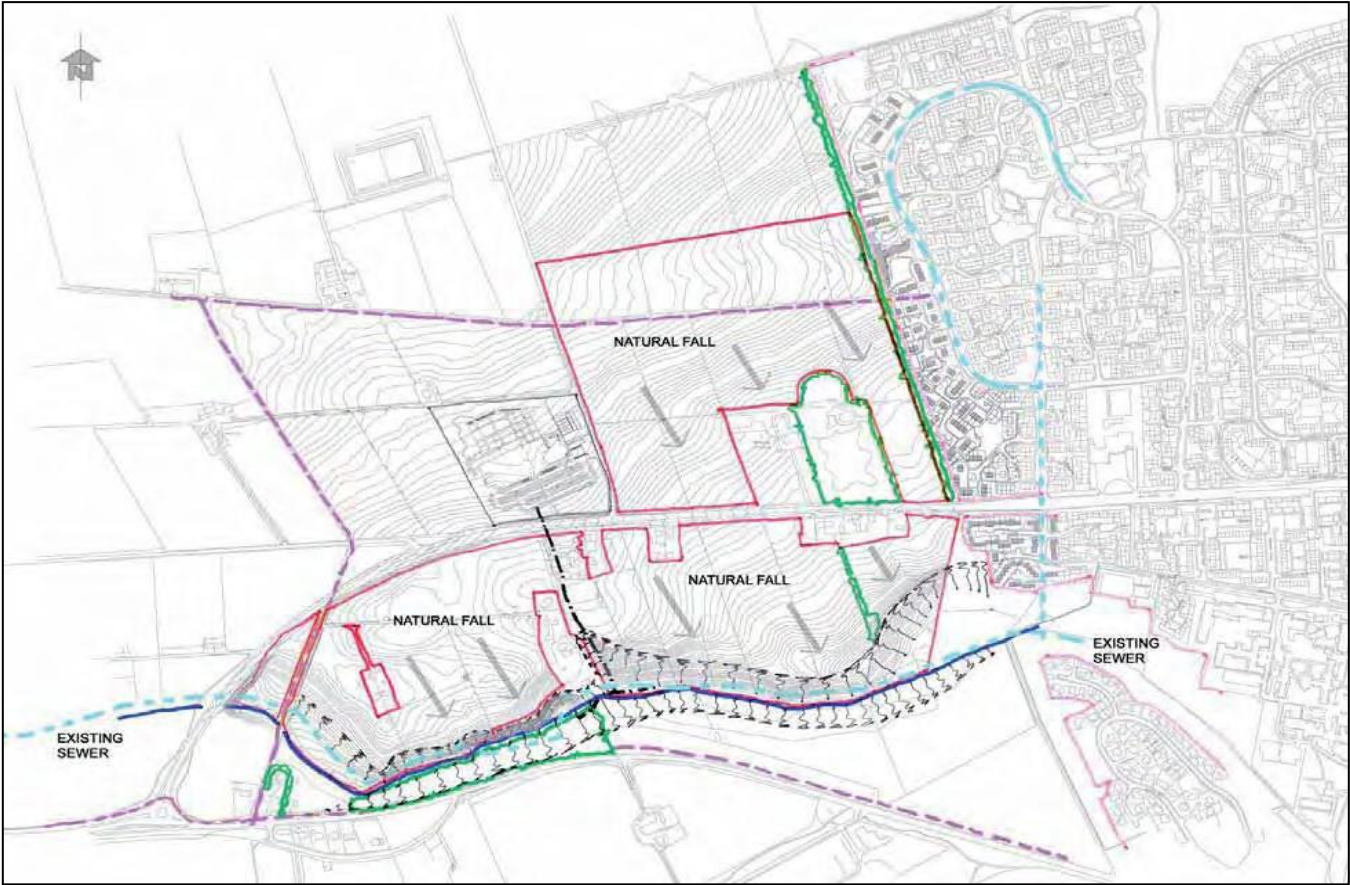


Fig 76 – Drainage potential

The introduction of detention basins is therefore desirable. This is likely to take the form of a number of basins integrated into the layout at strategic locations determined by topography and site constraints. Detailed calculations for these basins are set out in the Drainage Impact Assessment. Rainwater will be directed towards these basins by a system of swales; open water courses and pipes. Where swales and open water courses are utilised, the design of these must be kept as natural as possible, and appropriate native planting and landscaping utilised.

The detailed location of the SUDS basin serving phases 4 and 5 will be determined following a tree survey of the area covered by a Tree Preservation Order. For the avoidance of doubt, no trees covered by this designation will be felled to make way for the SUDS basin. In terms of levels and engineering, the position of this basin is flexible.

Strategic Transport Infrastructure

In considering the impact of development on the strategic transport network, applicants shall comply with Local Development Plan Policy I1 – Infrastructure Delivery and Planning Obligations and Policy T2 – Managing the Transport Impact of Development, as well as any other relevant policy/guidance. In considering the acceptability of proposals, the impact of development on the strategic transport network will need to be assessed. Applicants must demonstrate (e.g. via a Transport Assessment) how they might mitigate any such impact. In appropriate cases, proportionate contributions may be sought to support strategic projects that are related to the developments concerned and that are necessary to make those developments acceptable in planning terms.

A legal challenge was lodged at the Court of Session (Inner House) in August 2015 by the Elrick Development Company Ltd and Goodrun Ltd, against the adoption by the Strategic Development Planning Authority (SDPA) of Supplementary Guidance entitled “Delivering Identified Projects through a Strategic Transport Fund”. The Inner House issued its decision on 29 April 2016 which allowed the appeal. The SDPA has sought leave to appeal that decision from the Supreme Court and, at the time of writing, awaits the outcome of this process. Should the appeal be upheld then the Council retains the right to apply the Strategic Transport Fund policy as per the arrangements set out in the SDPA’s Supplementary Guidance.

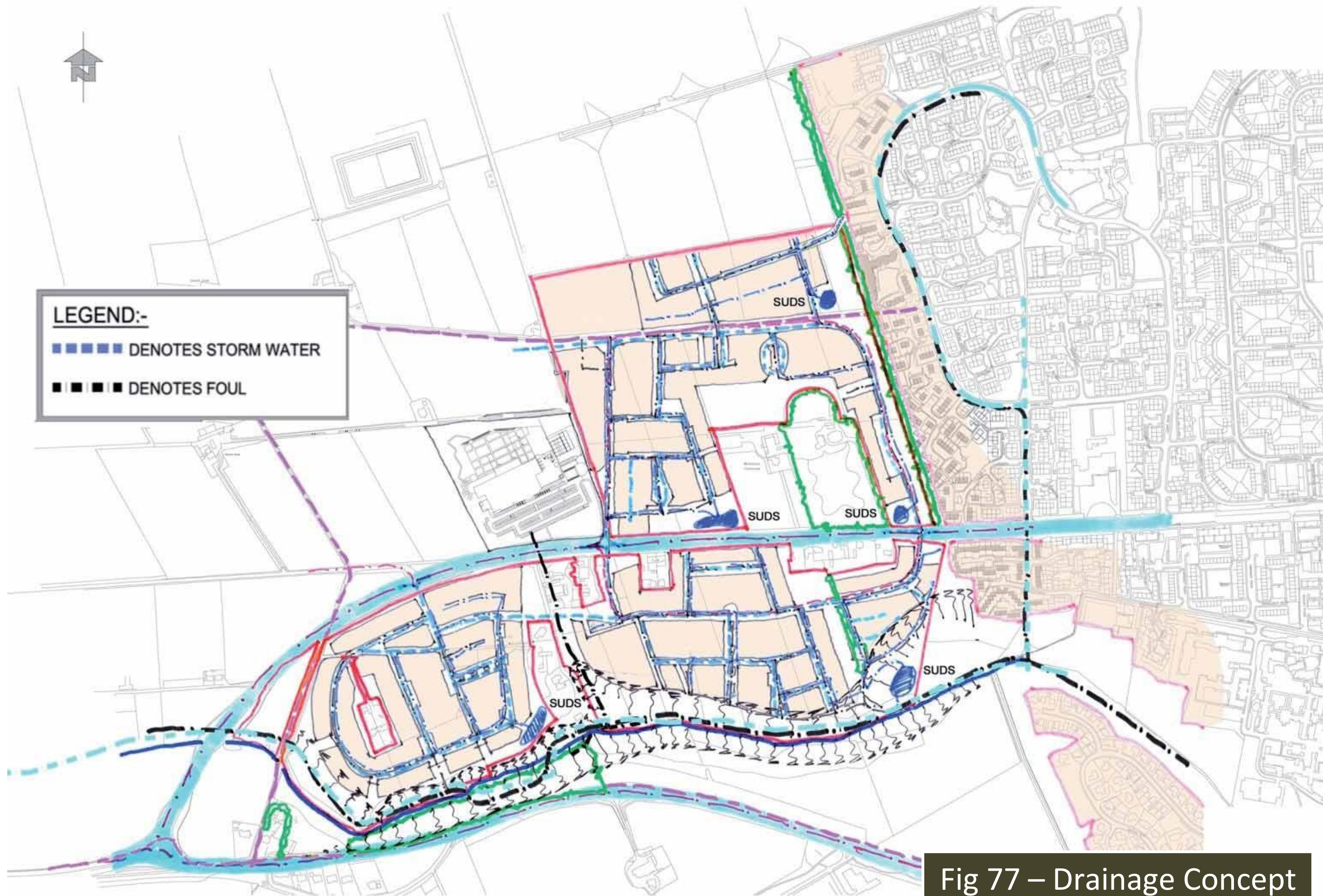


Fig 77 – Drainage Concept



6 Appendices

View southwest from the Core Path 45 to the North of Whitemyers House and Cocker's Roses.

6 Appendices

- 6.1. Community Engagement**
- 6.2. Ecological Assessment**
- 6.3. Landscape Strategy**
- 6.4. Landscape and Visual Impact Assessment**
- 6.5. Ownership Plan**
- 6.6. Drainage Impact Assessment**
- 6.7. Exhibition Slides (A4 size)**

Documents available upon request.