OP25 Persley Den, Woodside

Masterplan

Prepared by Halliday Fraser Munro on behalf of
GSS Developments (Aberdeen) Ltd, Aberdeen Lads Club and Aberdeen City Council
April 2014

The Persley Den Woodside Masterplan was first produced prior to the adoption of the Aberdeen City and Shire Strategic Development Plan 2020 and the Aberdeen Local Development Plan 2022. 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 523470 or pi@aberdeencity.gov.uk) for clarification.

‘A northern linear suburb of Aberdeen drawn out along the south bank of the River Don between Old Aberdeen and Bucksburn, Woodside developed as a separate mill village from the late 18th century in association with cotton spinning, bleaching, papermaking, iron founding and the Aberdeenshire Canal, which gave the settlement its linear morphology.’

(www.scottish-places.info)

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The Vision

Stoneywood Mill

Davidson's Mill

Persley Den

**'To create a new Donside village continuing and re
established pattern of small settlements along Abe
River Don valley.'**

Grandholm

Brig o’
Balgownie

Donside

einterpreting the erdeen’s lower

MASTERPLAN

1. The Masterplanning Process

1.1 The Process

The OP25 Woodside (Persley Den) Masterplan is produced in accordance with Aberdeen City Council's Masterplanning process. The allocation states that the:

'Site capable of accommodating up to 300 homes, including affordable housing as per masterplan for Woodside Sports Park and Village. Parts of the site may have a risk of flooding and development may have to be avoided in those areas. A Flood Risk Assessment will be required to support any development proposals for the site.'

The scale of development proposed at Persley Den requires it to be Masterplanned. Aberdeen City Council guidance on the 'The Aberdeen Masterplanning Process' sets out that:

'Masterplanning reduces the risk of piecemeal and inappropriate development in the City. Mixed use development and the efficient use of land will contribute towards the Council's aim of promoting sustainable development.'

Masterplanning also brings efficiencies to the overall planning process, by encouraging early consultation with communities and statutory consultees and speeding up the formal planning application determination process by frontloading it. It also allows statutory bodies such as SEPA and Council Roads Projects to be well aware of any infrastructure requirements, streamlining the delivery process accordingly. Masterplanning allows the key **'*development concepts and aspirations'*** to be clearly defined early on in the planning process in order that they can be set out and adhered to through each stage. Key considerations in the preparation of this Masterplan document have been the public consultation undertaken with the local community at Woodside and Hutcheon Low, and the collaborative approach taken to progressing the Masterplan with Aberdeen City Council's Masterplanning team and statutory consultees at various steps of the process.

1.2 Background

The local community have been well aware of development proposals for the site since the First Bus Headquarters planning application in 2005. This proposal was supported by Aberdeen City Council (the application being subject to a 'willingness to approve' recommendation from the planning authority), however the development was not progressed. The site was zoned as Green Belt / Green Space Network in the Aberdeen Local Plan 2008.

The site was submitted to the Council through the development bid process as a proposed site to be included in the Main Issues Report. It was subsequently adopted in the 2012 Local Development Plan. Following due consideration and committee process, the site was carried forward in the Local Development Plan 2017.

The 'Woodside Sports Village' development concept promoted at that time was an earlier version of the current Masterplan. The advantages the current Masterplan has over the original proposal is the specialist input on refining the design and technical matters, detailed community consultation and discussions with key agencies such as Transport Scotland and Sport Scotland. ***The original development concept however remains as is. The land use concept set out in the 'Woodside Sports Village Indicative Masterplan' shows housing in the southern section of the site, mixed use village in the centre, and sports facilities and pitches in the northern part of the site.***

1.3 Engagement

Within the context of the Local Development Plan consultation and preparation process, a programme of community engagement on the Masterplan commenced in June 2013. The 'engagement strategy' has comprised the following:

- **Programme meetings with Aberdeen City Council Masterplanning and Development Management teams;**
- **Invite to briefing session for Hilton / Woodside / Stockethill and Dyce/ Bucksburn/ Danestone Councillors;**
- **Public exhibition in Woodside Sports Complex 27 June 2013;**
- **Workshops with Aberdeen City Council and Statutory Consultees on 22 July and 5 August 2013;**
- **Public exhibition in Britannia Hotel 29 August 2013.**

It is intended that as part of the Masterplanning process, Aberdeen City Council will adopt the Masterplan as Supplementary Guidance. This guidance will then be used to inform any planning application for development on the OP25 site.

FIG: 1: WOODSIDE SPORTS VILLAGE INDICATIVE MASTERPLAN

1.4 Process Diagram

SITE ALLOCATED IN LDP

MASTERPLAN CONCEPT DISCUSSIONS

COMMUNITY / STATUTORY CONSULTEE CONSULTATION

PRODUCTION OF MASTERPLAN

(we are here)

COMMITTEE CONSIDERATION

MASTERPLAN ADOPTED AS SUPPLEMENTARY GUIDANCE

PLANNING PERMISSION IN PRINCIPLE APPLICATION SUBMITTED

PPP APPLICATION APPROVED

MATTERS SPECIFIED IN CONDITIONS APPLIED FOR

MSC APPROVED

WARRANT AND OTHER CONSENTS

DEVELOPMENT COMMENCES

1.5 Project Team

Halliday Fraser Munro
Architects and Planning Consultants

Fairhurst
Structural and Civil Engineers

Wallace Whittle
Mechanical and Electrical Engineers

Northern Ecological Services

Struan Dalgleish Arboriculture

1.6 Ownership

FIG: 2: OWNERSHIP DIAGRAM

GSS Developments (Aberdeen) Ltd

Aberdeen Lads Club

Aberdeen City Council

The Persley Den site is under the ownership of three parties, see figure 2:

GSS Developments (Aberdeen) Ltd;

Aberdeen Lads Club;

Aberdeen City Council.

These parties are progressing development on the site through a consortium agreement.

Access rights along the roads within the site are enjoyed by Persley Castle and Woodside Care Homes, Woodside Cottage and SSE.

2. Public Consultation

FIG 3: PUBLIC CONSULTATION EVENT 001

FIG 4: EXAMPLES OF CONSULTATION BOARDS

The OP25 Persley Den, Woodside site has been the subject of a long programme of public consultation dating back to 2008 when the site was put forward as a possible future development allocation. Residents of the adjacent existing housing at Hutcheon Low have shown a keen interest in how the site might be developed. This is due in part to the previous high profile proposals for a First Bus headquarters on the site. Engagement with the community in respect of the Masterplan has however been worthwhile and meaningful. The majority of local residents accept that the site is allocated for development. It has been made clear that Hutcheon Low is a popular, individual area with a strong community spirit. It has been suggested that the Persley Den could represent a newer phase of Hutcheon Low.

The public have had the opportunity to get involved in, and influence, the Local Development Plan preparation process. The Persley Den site was included in the Proposed Local Development Plan as a potential future development allocation.

Two formal pre-application consultation events have been held. These events followed the submission of a formal Proposal of Application Notice (PoAN) in February 2013 in relation to a future application for Planning Permission in Principle and the Masterplanning process. Both local ward councillors (Hilton / Woodside / Stockethill) and the neighbouring ward councillors (Dyce / Bucksburn / Danestone) have been kept informed of the process. This has involved:

Invite to a Councillor briefing session (May 2013);

Invite to public consultation event 27th June 2013;

Invite to public consultation event 29th August 2013;

It has not been possible to involve the Community Council, as there is not one covering the Woodside area at present.

The same process has been followed for each of the two public consultation events. This comprises:

- Issue of over 400 invitations to residents living in Hutcheon Low, Mill Court and adjacent flatted properties opposite the site south of the railway and other local stakeholders, such as the Woodside and Persley Castle care homes, Woodside Sports Complex and businesses on Mugiemoss Road. The invite letters outlined the purpose of the consultation process and provided details of the consultation event.
- Advertisement of the public exhibitions in the Citizen newspaper. The advert included the location and description of the development, details as to where further information could be obtained including a contact email address for the agent, the date and place of the event, a statement explaining how and by when persons wishing to make comment to the prospective applicant relating to the proposal may do so and a statement indicating that comments made to the prospective applicant are not representations to the planning authority in respect of a planning application;
- Holding an afternoon and early evening exhibition. The first exhibition was held in the Woodside Sports Complex adjacent to the site. This was extremely accessible to local residents, and the site could be viewed from the sports complex. Unfortunately it was not possible to hold the second exhibition in this location due to the presence of travellers on the site. The drop-in sessions took the form of exhibition boards displaying various context plans, aerial images and site analysis plans. These explained the Masterplan concept and how this had been arrived at through site analysis and various influencing factors such as access, topography, natural landscape features and character of surrounding areas. The second exhibition included additional display material containing a more detailed Masterplan layout and a summary of the changes proposed following the previous consultation. During the events two members of staff from Halliday Fraser Munro were present in addition to representatives from GSS Developments (Aberdeen) Ltd and Fairhurst engineers. The team were on hand to provide explanations, answer any questions and record comments on the development. It is estimated that over 100 people attended the first event and around 30 the second. The majority of attendees were neighbouring residents. Comment forms were made available for attendees to complete at the exhibition or to return to Halliday Fraser Munro. Reference was also made to the website www.persleyden.co.uk.

A website, www.persleyden.co.uk was also set up to assist with public consultation. This went live on 28th June 2013, the day after the first consultation event. The website was publicised through at the consultation events. The website contained general information on the


The Town and Country Planning (Scotland) Act 1997 as amended by the Planning etc. (Scotland) Act 2006

Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2008

Notice Published Under Regulation 7 (3)

GSS Developments (Aberdeen) Ltd and Aberdeen Lads Club give notice of a proposed Residential and Leisure Development at Woodside, Aberdeen

Further information on the proposed development and Masterplan will be available at a second public consultation event to be held at:

THE BRITANNIA HOTEL,
MALCOLM ROAD, BUCKSBURN,
ABERDEEN, AB21 9LN

on Thursday 29 August 2013, 1500 – 1900.

Any persons wishing to make comments relating to the proposal or wishing to obtain further information may do so by contacting:

Halliday Fraser Munro
Architects - Planners - Project Managers
Carden Church, 9 Carden Place
Aberdeen AB10 1UR
Tel: 01224 388 700
email:planning@hfm.co.uk

Comments can be submitted by email to:
planning@hfm.co.uk
by 5 September 2013

PLEASE NOTE:
That comments made at this stage are not representations to the planning authority in respect of a planning application. If a planning application is submitted there will be an opportunity to make representations on that planning application to the planning authority at that time.

FIG 5: ADVERTISEMENT


FIG 6: PUBLIC CONSULTATION EVENT 001

process, the Masterplan proposals and a survey questionnaire to allow comments to be left.

The questions on the comment forms used at the exhibitions and on the website included:

What do you think of the development concept suggested for Persley Den?

Do you have any comments on the specific development areas?

Are there any types of uses and facilities, other than those suggested, that you think might be useful to include?

Please use the space below for any other comments you may have:

The comment forms also gave the email address of the agent as a further point of contact and another means of submitting comments. This resulted in some additional comments being submitted. From the first consultation event, 12 comments forms were completed. 10 surveys were completed through the website.

General comments received included:

- **Support providing development is sympathetic to landscape with open space;**
- **Small scale retail should be provided;**
- **Need replacement sports facilities;**
- **Further consultation is required;**
- **Development has potential to bring benefits to Hutcheon Low, through the upgrading of access, resurfacing of roads and possible domestic gas provision;**
- **Concerns regarding flooding potential;**
- **Concerns regarding traffic impact on Mugiemoss Road and Haudagain;**
- **Supportive of green space within and around development;**
- **Access roads should be kept separate;**
- **Concerns over "Social Housing"**
- **Riverside paths should be upgraded;**
- **Concerns over impact on wildlife;**
- **Supportive of idea of new village;**
- **Need buildings with character;**
- **Concerns about conflict between sports pitches and public open space and housing;**
- **Development should only be on the higher ground;**
- **Supportive of play area and community spaces;**
- **Development should not happen until Third Don Crossing;**
- **Trees should be retained;**
- **Private and social housing should be mixed.**

These issues have become key in the preparation of the Masterplan and have been further explored as the project has progressed. The Masterplan is based upon a detailed analysis and design process. The updated Masterplan has taken account of comments received through the consultation process and also through the on-going dialogue with Aberdeen City Council and statutory consultees such as Transport Scotland and Sport Scotland.

The following changes were made to the Masterplan:

- **Development pulled back from Woodside House to lessen impact and allow for enhanced sports facilities;**
- **Development removed from NW area – this will now be an amenity area;**
- **Creation of a wildlife corridor along the eastern boundary and SUDS areas;**
- **Enhanced riverside footpaths and pedestrian linkages to Great Northern Road;**
- **Further consideration of sports provision;**
- **Further consideration of access;**
- **Flexibility over the adaptability of some units to be used as community / commercial / retail space;**
- **Further consideration of housing numbers and formats.**

The updated Masterplan was presented at the public consultation on 29th August 2013. The following comments were received

- **Changes welcomed;**
- **Good Masterplan;**
- **Support for footpath links under the railway, providing they are adequately lit;**
- **Still some concern about access onto Mugiemoss Road.**

In summary, the public consultation, in addition to the discussions with Aberdeen City Council and statutory consultees has resulted in a Masterplan concept which has been tested and refined in order to address valid concerns. Some aspects will be revisited at the detailed planning application stage. The programme of public engagement on the Persley Den development has been effective in bringing the development proposals to the attention of local residents and raising awareness.

3. Context

3.1 Context

FIG 7: STRATEGIC DEVELOPMENT PLAN EXTRACT

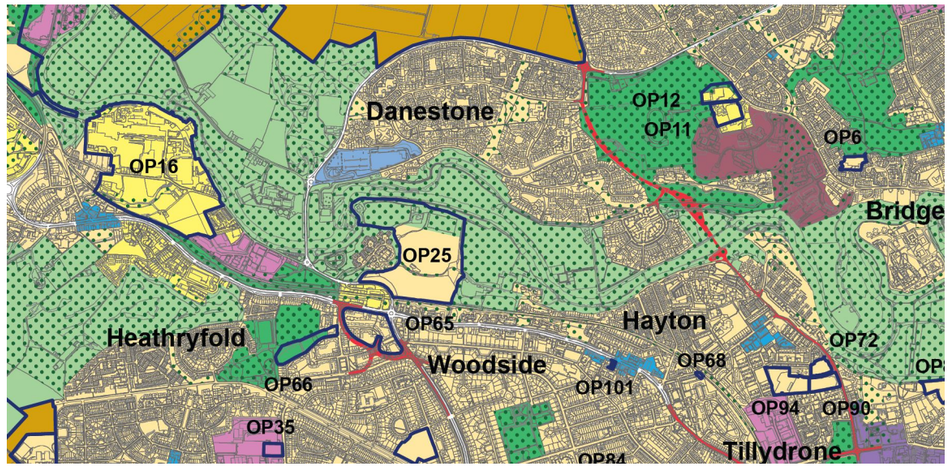


FIG 8: ABERDEEN LOCAL DEVELOPMENT PLAN EXTRACT

Regional Context

The Aberdeen City and Shire Strstegic Development Plan (2014) identifies four Strategic Growth Areas (SGA): 1-Aberdeen City; 2-Aberdeen to Peterhead; 3-Aberdeen to Huntly, and 4-Aberdeen to Laurencekirk. Woodside OP25 lies within the boundaries of the Aberdeen City Strategic Growth Area. In the context of the Strategic Development Plan, see figure 7, a key objective is to provide opportunities which encourage development within Strategic Growth Areas.

Local Context

The Aberdeen City Local Development Plan allocates Woodside OP25 for residential development in the 2017—2026 period. Although not part of a specific Masterplan area, a masterplan is required for the Persley Den site due to the scale of development proposed. The LDP sets out three major Masterplan zones north of Persley Den at Grandhome, Stoneywood and Dyce Drive / Newhills. These represent a considerable amount of development and are individually at various stages in the planning process.

The general Woodside area (principally that on the south side of the Inverness railway line and north of Clifton Road) has been designated a 'Regeneration Area' since the early 2000s. This area does not include the Persley Den site, but is still an important consideration in the context of the Masterplan and the delivery of affordable housing as part of the development.

Relevant Planning Policy and Guidance

The Masterplan has been prepared in accordance with the following policy and guidance:

- **Scottish Planning Policy;**
- **The Aberdeen Masterplanning Process: A Guide for Developers**
- **Creating Places;**
- **Designing Streets;**
- **PAN 65 Planning and Open Space;**
- **PAN 75 Planning for Transport;**
- **PAN 83 Masterplanning;**
- **PAN 3/2010 Community Engagement;**
- **Aberdeen City and Shire Strategic Development Plan;**
- **Aberdeen Local Development Plan;**
- **ALDP Supplementary Guidance.**

3.2 Influences

FIG 9: HAUDAGAIN IMPROVEMENT OPTION 11

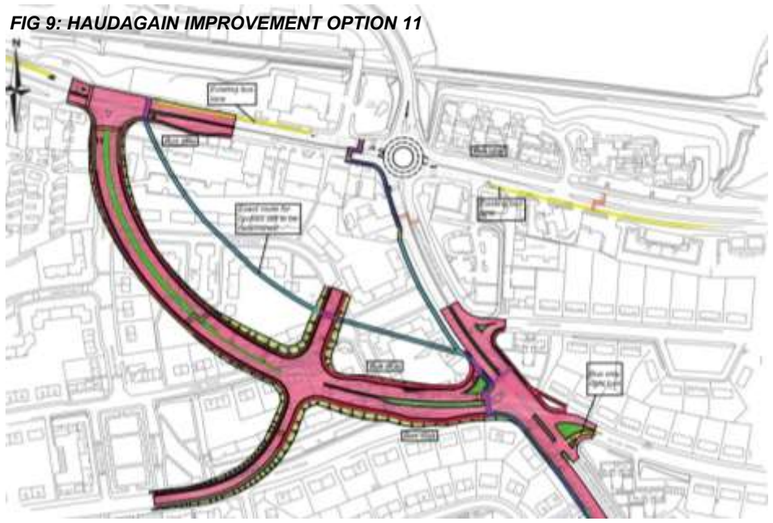


FIG 10: IMAGE OF PROPOSED THIRD DON CROSSING

FIG 11: ALC FACILITIES, DILL ROAD, TILLYDRONE

The OP25 Persley Den, Woodside site lies in a part of Aberdeen that is subject to major short and long—term development and infrastructure proposals. These have been taken into account in the preparation of the Masterplan. Relevant factors include:

- **AWPR**

The opening of the Aberdeen Western Peripheral Route is anticipated to dramatically reduce traffic levels in the north of Aberdeen. The dual carriageway route, between Stonehaven and Blackdog, passes around the City and is due to be completed in Spring 2018.

- **Haudagain Roundabout Improvements**

The Haudagain roundabout, situated at the junction of the A90 and A96 Trunk Roads, is 100m from the OP25 site at its closest point. Large number of vehicles pass through this junction on a daily basis, leading to congestion on all approaches at peak times, causing issues for residents of the adjacent Hutcheon Low development.

The Scottish Government have confirmed that they will upgrade the junction after the AWPR is in place, and following consultation, a 'Haudagain Bypass' to the south west of the roundabout has been proposed. Work is expected to begin in 2018. In addition, a new junction to serve Hutcheon Low and Persley Den is proposed from Mugiemoss Road. This will likely be signalised and would represent a considerable improvement for existing Hutcheon Low residents and care home staff. Figure 9 illustrates one of the options currently being considered.

- **Diamond Bridge (Third Don Crossing)**

The Diamond Bridge (Third Don Crossing) is a single carriageway road and cycle route between Gordon's Mills Road in Tillydrone and The Parkway, Bridge of Don. The crossing point is 1.5 km downstream from the OP25 site.

- **National Cycle Route**

National Cycle Network Route 1 passes through the OP25 site. It is presently in a poor state of repair and is not particularly welcoming. The Persley Den development presents an excellent opportunity to upgrade and enhance the NCN, in line with the upgrades proposed on nearby development sites at Donside, Davidson's Mill and Stoneywood. NCN Route 1 at Woodside is close to, and linked to cycle routes on Anderson Drive (proposed) and Auchmill Road

- **Affordable Housing Provision**

The Persley Den development has the potential to deliver a high percentage of much needed affordable housing in the area.

In addition to the considerable future development allocations in the north of the city, the major projects described above have the potential to considerably alter the character of this area of Aberdeen.

- **Aberdeen Lads Club**

Aberdeen Lads Club own part of the Persley Den site. At present this comprises dilapidated sports pitches and changing room facilities. The club is well established in the Tillydrone area and was founded in 1924 to promote the moral, social and physical wellbeing of young people, particularly in deprived areas of the city. Within Tillydrone, the club runs an Urban Aid project, nursery and toddler groups and after school clubs, as illustrated in figure 11.

Aberdeen Lads Club have used the ground at Woodside as football

3. Context

3.2 Influences (cont.)

FIG 12: ALC EXISTING CHANGING FACILITIES ON SITE

pitches for over 25 years. This continues earlier initiatives to encourage youths into sport, and off the streets. The facility as a whole is however in very poor condition, refer to figure 12. Site survey work and inspections suggest that this is owing to poor construction methods employed when the pitches were set out, including the bulldozing of clay materials and poor quality fill into some of the undulations which previously existed. Whilst the grass pitch surfaces maintained, the surface levels are extremely irregular, well beyond tolerances for pitch levels and gradients by today's standards and requirements for the Scottish Football Association. The ground also suffers from poor ground drainage.

In recent times, Aberdeen Lads Club have leased the higher quality pitch in the northern part of the site to a local football club. This arrangement is however now coming to an end. Through the redevelopment of OP25, the main pitch and training area would be retained and upgraded, resulting in the improvement of the current sports provision that would potentially attract sports clubs back to Woodside.

3.3 Site Description

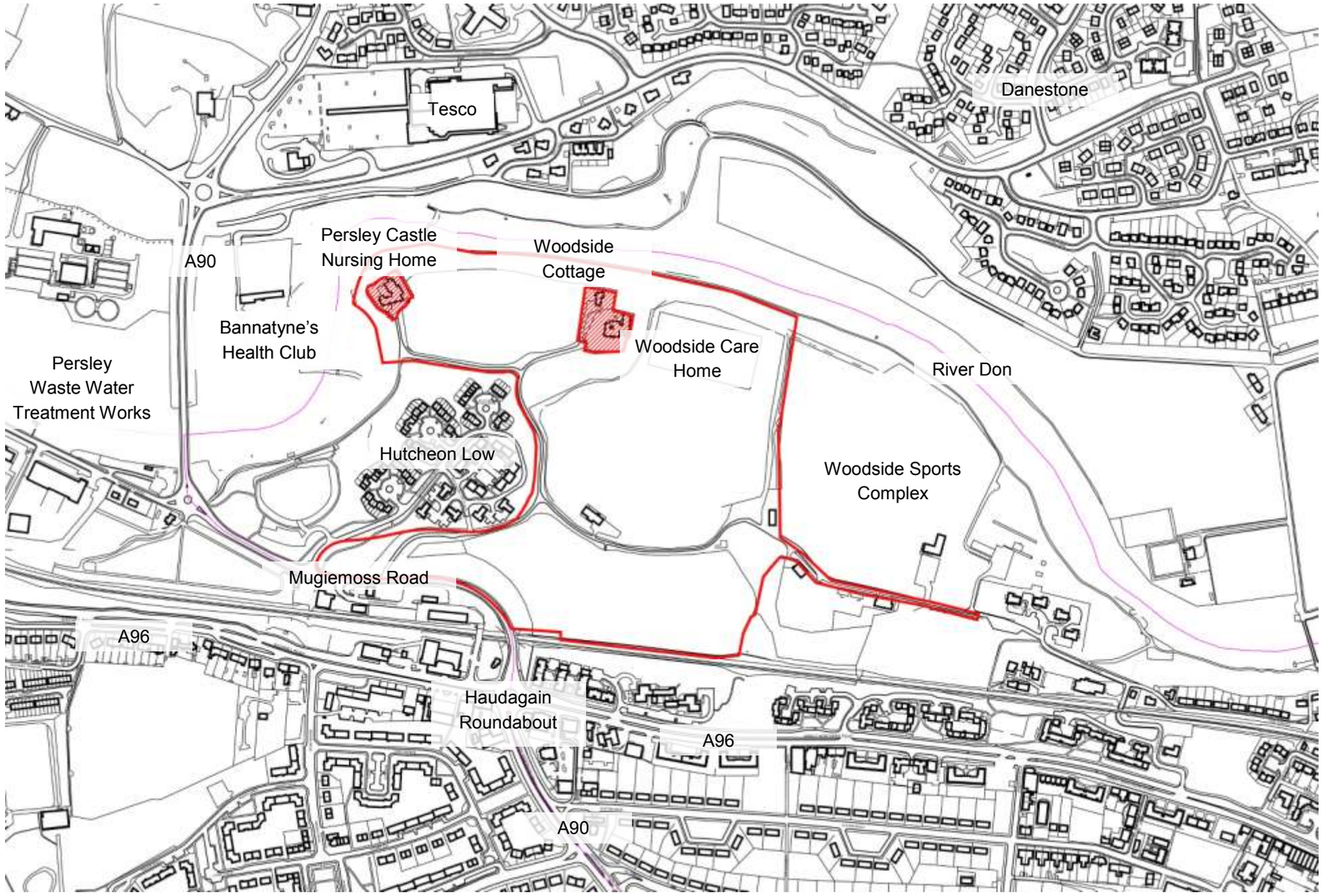


FIG 13: SITE AND CONTEXT PLAN

Persley Den lies within the Woodside suburb of Aberdeen that runs in a linear strip west — east along the banks of the River Don between Old Aberdeen and Bucksburn. This linear strip is a result of the natural and man—made features of the River Don, former Aberdeenshire Canal, Aberdeen—Inverness Railway Line and A96 Trunk Road. The site is a broad area adjacent to the River Don surrounded by mature trees and, although easily accessible from nearby commuter routes, it is shielded from main roads. The site is presently accessed via the former Woodside Estate road from a junction on Mugiemoss Road. Across the river is a large Tesco superstore, Bannatyne's Gym and waste water treatment works.

The Woodside area developed as a separate Mill Village in the 18th century in association with water powered mills and with cotton spinning, bleaching, papermaking, iron founding and the Aberdeenshire Canal. The Canal was replaced by the Railway and in 1891, Woodside was incorporated into the City of Aberdeen. The Persley Den site was originally the drying and bleaching greens associated with the substantial Woodside Mill complex that stood on what is now the Woodside Sports Complex and pitches. More recently, a pet food factory previously existed on the site.

The OP25 site extends to 19.1 ha and comprises:

- **Disused playing fields;**
- **Tree belts;**
- **Dilapidated sports changing facilities;**
- **Access tracks;**
- **National cycle network.**

The site benefits from the existing defensible boundaries of the River Don to the north, Hutcheon Low to the west, pylons, overhead HV cables and tree belts to the east and the railway line to the south. Within, but not forming part of the site are the existing properties of:

- **Persley Castle** (B—Listed former mill accommodation—now care home);
- **Woodside House** (B—Listed former dwelling house— now care home);
- **Woodside Cottage** (private dwelling house).

Surrounding the site are areas of interesting and diverse characters. Along Don Terrace to the west, the character is similar to Old Aberdeen, with small granite cottages, dykes and traditional building details such as bay windows and chimneys. Contrastingly Hutcheon Low to the east of the site is a relatively modern development of Cul-de -sacs, terraced and flatted properties. Donside Village further downstream is a recently completed modern development based on 'designing streets' principles (shared spaces between users and a movement hierarchy). South of the OP25 site lies sheltered and local authority housing in high and low rise blocks. This demonstrates the diversity of character found in the various areas close to Persley Den.

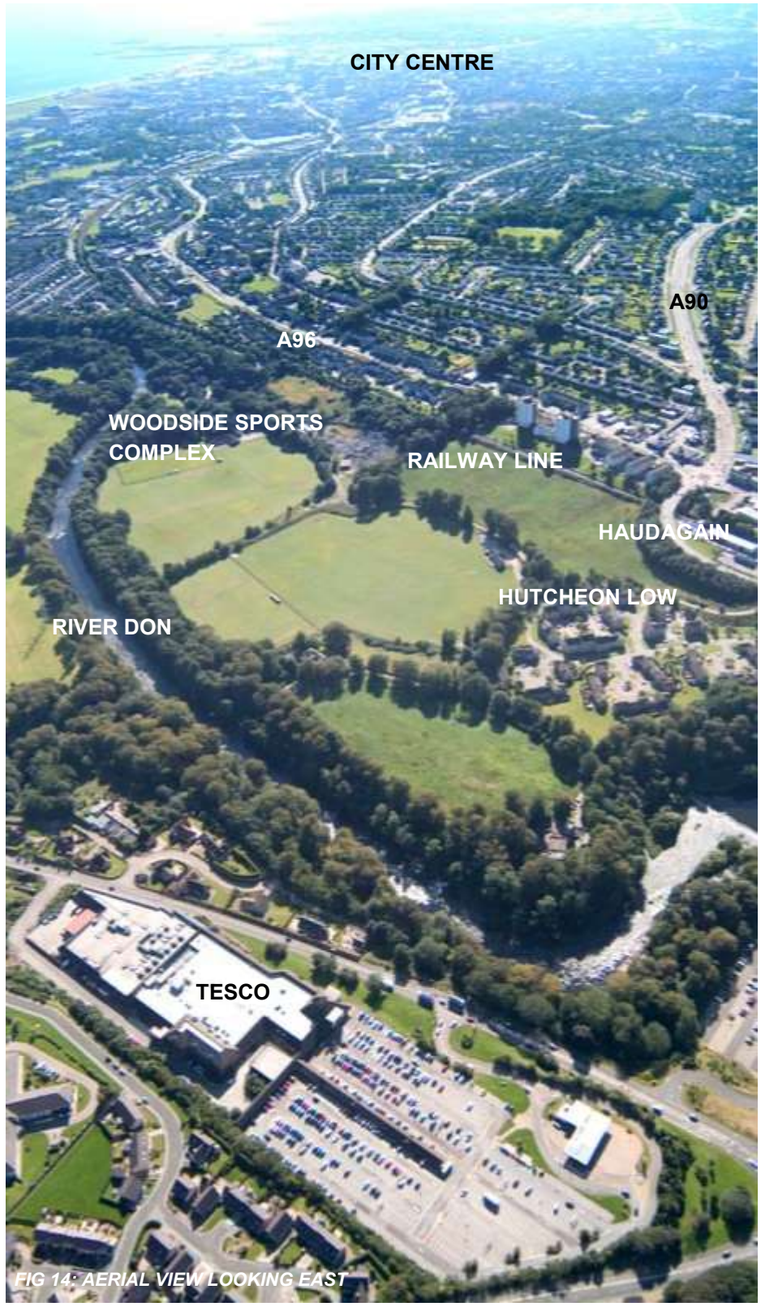


FIG 14: AERIAL VIEW LOOKING EAST

FIG 15: AERIAL VIEW LOOKING WEST

4. Analysis

4.1 Area Overview

Local amenities and commuting distances:

The Persley Den site is central to many existing services and facilities, with good connectivity.

Education

Woodside Primary	1.0 miles
Manorpark Primary	1.2 miles
Danestone Primary	1.4 miles
Bridge of Don Academy	2.3 miles
St. Machar Academy	1.4 miles
Northfield Academy	1.6 miles
Bucksburn Academy	1.8 miles
Robert Gordon University	5.0 miles
Aberdeen University	2.3 miles

Supermarkets

Tesco Danestone	0.8 miles

Employment centres

Aberdeen City Centre	3.0 miles
Aberdeen University	2.3 miles
Pitmedden Road Industrial Estate	4.4 miles
Kirkhill Industrial Estate	4.6 miles
Bridge of Don	2.9 miles
Westhill	7.2 miles

Travel

Dyce rail station	3.9 miles
Aberdeen International Airport	4.1 miles
National Cycle Route 1	on site

Recreation

Woodside Sports Complex	on site
Core Path no.7	on site
Aberdeen Sports Village	2.9 miles
Auchmill Golf Club	1.7 miles

The OP25 site can be broken down into three main parts, refer to figures 16-19.

1 Persley Brae:
The sloping area that falls from the boundary of the railway embankment to the existing access road.

2 Central Area:
The dished central green area, currently occupied by disused sports pitches.

3 Riverside:
The uneven wild area to the north west of the site enclosed within mature tree planting.

FIG 16: AERIAL VIEW LOOKING NORTH

FIG 17: VIEW OF PERSLEY BRAE

FIG 18: VIEW OF CENTRAL AREA

FIG 19: VIEW OF RIVERSIDE

4.2 Site History

Site History

Historically the Persley Den site was used variously as 'estate policies' for Woodside House (which dates from circa 1850 and also appears on the 1869 OS map, figure 23), as bleaching fields. There are old mill lades adjacent to the site which served the former Woodside Mill Works site to the immediate east. A substantial 6-storey mill existed from the early 19th Century at Woodside, see figure 24, but was demolished in 1900. This was called Woodside Works and was one of the most significant industrial buildings in Aberdeen at the time, located in close proximity to several other significant industrial complexes on Donside including the Mugiemoss Mill, Crombie Mills and Donside Mills, all of which have now been redeveloped.

The Woodside Works, which have now been demolished, were located to the east of Woodside House. As a brief historical summary of the works, calico printing was carried out at an early date at Woodside Works. It was also the site of earlier industries including a Waulk Mill, which was subsequently converted to a copper mill, then snuff mill. In January 1764 the snuff mill was enlarged. Around 1775 the lower parts of ground at Woodside were established as bleach fields and print fields. The cotton mill at Woodside opened in 1785, with 3000 employees at its peak and closed in 1850. For a short while after this the buildings were purchased and used for the papermaking industry. The population of Aberdeen was 65,000 in 1850. By 1900, nearing the end of the working life of Woodside Mills the population of Aberdeen was nearer 150,000.

The geographic rationale for these early industrial buildings at this location was originally the presence of waterpower from the River Don but with the advent of electricity became the readily available supply of the water for their respective industrial processes. These mills were paper mills, cotton mills and woollen mills which added value to local raw materials from the Grampian hinterland, or worked with products imported from the wider Empire.

Persley Castle, figure 20, to the north and west of the site was originally built as stables for the Woodside estate, before being converted to Woodside Mill apprentices' accommodation. A railway station existed at Station Road in Woodside, however this closed in 1937. The site of the former Persley Station is close to the present access road leading to Hutcheon Low. This was one of a number of stations which existed between Aberdeen Joint Central Station and the present Dyce Station. It can be seen from this historical evidence this part of Woodside was a significant industrial area during Victorian times.

Although there are no archaeological sites indicated on the 'Sites and Monuments Record' Persley Den's rich industrial history should be taken into account when considering any future development on the site. Obvious evidence exists at the riverside (see figures 21 & 22), however there may be as yet unidentified archaeological and historic sites within the development area. The site will be surveyed at the planning application stage prior to the commencement of development to establish if further evidence exists.

The site was recently being used as football training pitches by the Aberdeen Lads' Club. The land is also used informally as recreation ground. The National Cycle route uses the existing track that connects Woodside Road to Woodside Station Road. This track is unkempt and neglected, though it provides an important access to an electricity sub station which is located to the east of the Masterplan area. The riverbank has a path, which is popular and is identified as Core Path 7 in the City Council's Core Paths Plan (April 2009).

FIG 20 PERSLEY CASTLE

FIG 21 & 22 THE REMAINS OF INDUSTRIAL HERITAGE ARE STILL EVIDENT AT THE RIVERSIDE

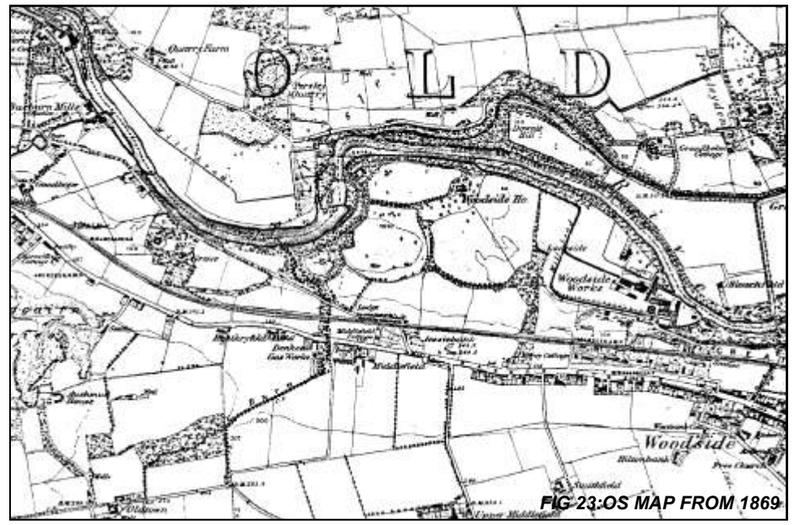


FIG 23:OS MAP FROM 1869

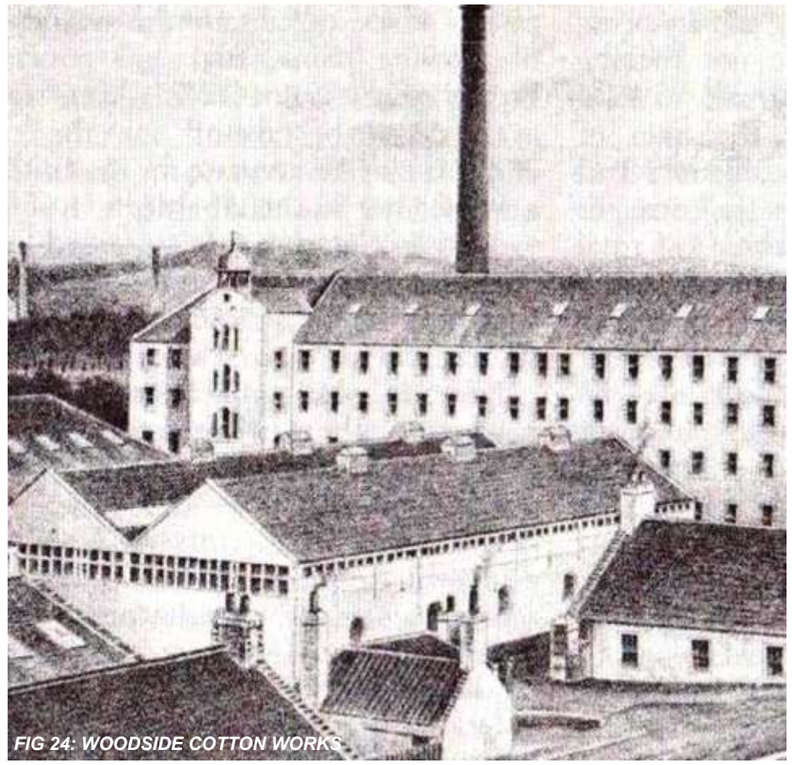


FIG 24: WOODSIDE COTTON WORKS

HISTORIC PHOTOGRAPH SOURCE: http://www.mcjazz.f2s.com/Woodside.htm

4. Analysis

4.3 Adjacent Uses

FIG 25: HUTCHEON LOW DRIVE

Hutcheon Low Residential Development

Adjoining the site to the east is the established residential community of Hutcheon Low, a mix of flatted and semi detached properties in a cul -de-sac arrangement. The development is relatively modern, built in the 1980's by a single volume house builder, illustrated by figure 25.

The development is inward looking in aspect, but the abundant green space, riverside paths and nearby walled gardens are clearly enjoyed by the residents.

The development is currently served by a single un-signalised access on to Mugiemoss Road.

Masterplan Opportunities:

- *Improved maintenance and care of trees;*
- *Improved, safer access to Mugiemoss Road;*
- *Improved street lighting;*
- *Improved paths and access to green space;*
- *Connectivity between Hutcheon Low and Persley Den.*

FIG 26: RIVER DON

River Don

The River Don is the 6th largest river in Scotland flowing from the Grampian Mountains into the sea 5km east of the site. The river has a strong association with Salmon fishing. 'Snuffies Pool' at the bend in the river to the north of the site is popular with anglers. This stretch of the River Don provides evidence of the area's rich industrial heritage. Mill lades, sluice gates and other industrial relics are still evident along the riverside, making an interesting leisure path network, see figure 26. The riverside path is however in poor condition in some areas, overgrown and poorly maintained. Despite this, this stretch of the river is popular with the local community for recreation and is a core path. Opportunities exist to improve recreational access at the Riverside, and to celebrate the area's industrial past. This accords with City Council initiatives such as the 'Sustainable Urban Fringes (SURF)' project and the River Don Corridor Framework (2012). The SURF initiative seeks to 'untap' the green space resource along the River Don. The area around the River Don at Persley Den is classified as a local designation of Green Space Network and a green network connection. Both the River Don and Aberdeen—Inverness railway line are Local Nature Conservation Sites.

Masterplan Opportunities:

- *Riverside path, core path and green space network improvements;*
- *Survey, record and enhance heritage assets;*
- *Interpretative signage and information on the area's industrial past..*

FIG 27: PERSLEY CASTLE NURSING HOME

FIG 28: WOODSIDE CARE HOME

Care Homes

Two care homes lie adjacent to the Masterplan area. These are the Renaissance Care Persley Castle Nursing Home, figure 27 and the Four Seasons Health Care Woodside Care Home, figure 28. The future development has the potential to bring benefits to these.

Masterplan Opportunities:

- *Improved, safer access for staff and visitors;*
- *Street lighting;*
- *Improved paths and access to green space.*

4.4 Access and Connectivity

Core Paths

Core Path no.7 runs alongside the river. There is an ambition to provide a pathway that is unbroken from the Persley Bridge, along the river to the Don Mouth, as this is currently not possible.

Within the site the path is in poor repair. A new section of path is currently in the process of being constructed as part of the Donside Urban Village to aid a continuous route to Donmouth.

Cycle

National Cycle Network Route 1 runs through the site from east to west. NCN Route 1 is also a pedestrian route and access road. At present it is gated at points, unlit and in general poor repair. There is also a cycle route on the A96 west of the Haudagain roundabout.

There is a long-term aspiration to develop a Donside cycle way between the Bridge of Don and Dyce route.

Public Transport

A number of bus services are available from the A96 / Great Northern Road / Mugiemoss Road, these are of varying frequency and include:

4	ARI / Dubford	(First Bus)
	(low frequency service, however closest bus stop)	
17/17A	Faulds Gate/ Newhills	(First Bus)
18	Gateway / Dyce	(First Bus)
35A	Aberdeen / Banff	(Stagecoach)
37	Aberdeen / Inverurie	(Stagecoach)
220	Aberdeen / Kintore / Alford	(Stagecoach)
305	Aberdeen/ Oldmeldrum	(Bains)
727	Aberdeen / Airport Express Service	(Stagecoach)
	(limited service Airport bus service)	
N37	Aberdeen / Inverurie Night Service	(Stagecoach)
X20	Aberdeen /Airport / Kemnay /Alford	(Stagecoach)

Refer to figure 30 on page 17.

FIG 29: ACCESS AND CONNECTIVITY

Pedestrian

The site can be accessed from Mugiemoss Road at an existing access which serves the care homes. Access can also be gained from the east via Don Terrace, linking to Gordon's Mills Road and Station Road via Great Northern Road. Both these roads arrive at the Woodside Sports Complex. The track through the site is presently gated to avoid rat-running and fly-tipping.

Vehicular

The site can be accessed from Mugiemoss Road at the existing access that leads to the two nursing homes. Accesses via Don Terrace and Station Road arrive at the Woodside Sports Complex and are gated beyond this point.

4. Analysis

Masterplan Opportunities:

The Masterplan presents opportunities to improve the pedestrian, cycle and vehicular accessibility of the general area and the proposed development. This can be achieved by enhancing pedestrian routes in the area and through the creation of a new junction on Mugiemoss Road.

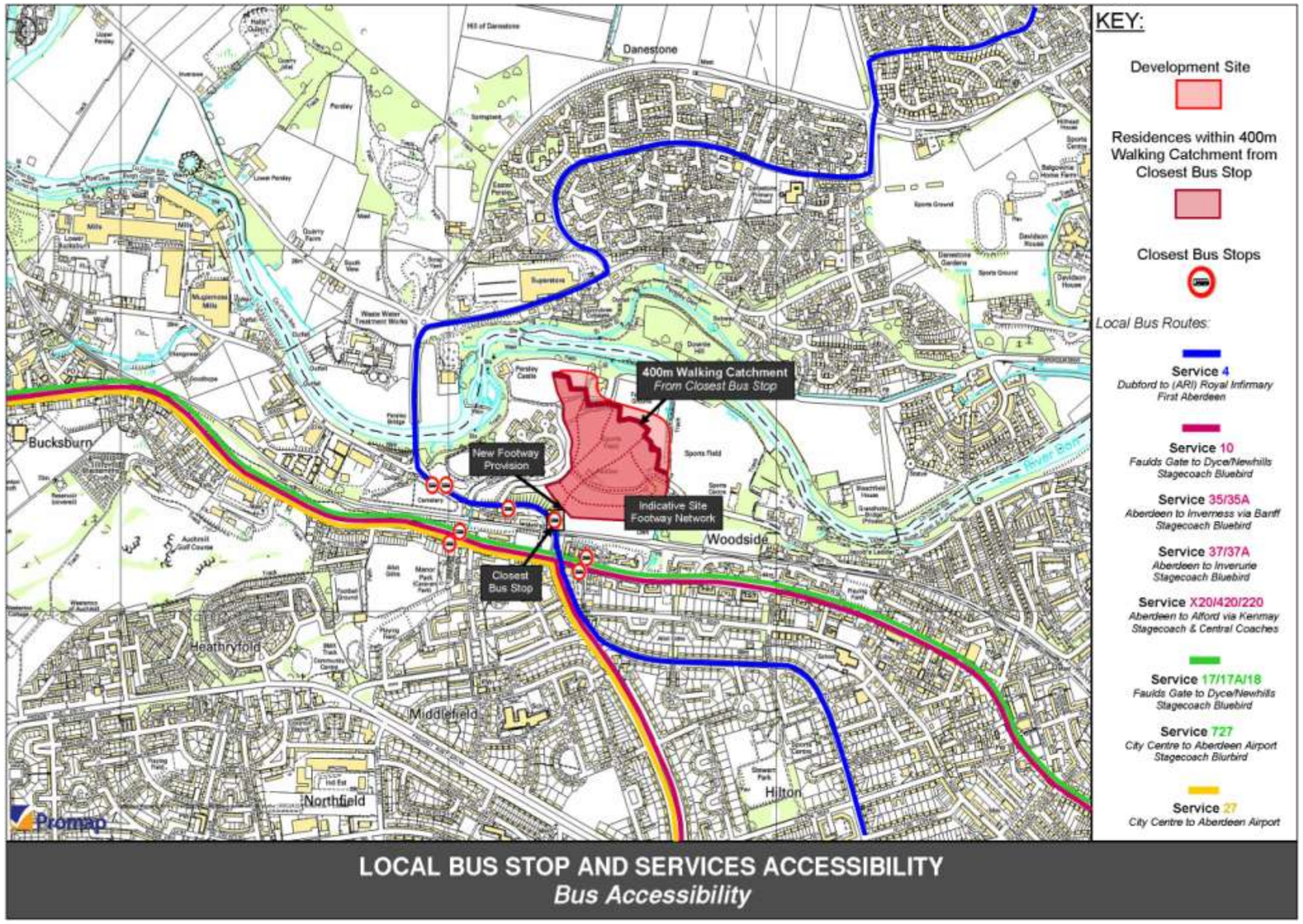


FIG 30: LOCAL BUS STOP AND SERVICES ACCESSIBILITY PLAN

4.5 Topography

Persley Brae:
The topography here is at its most extreme as the slope falls from the railway embankment at around 35m to 20m Above Ordnance Datum (AOD) northwards down to the edge of the central area delineated by the existing access road.

The upper part of the site is the steepest and becomes more gentle toward the bottom third. To the east of this slope there is a mounded area, a copse of mature beech trees. This area currently provides good screening from the substation beyond.

Central Area:
The central area is a largely flat area ranging from 14-20m AOD across this area of the site indicated in light blue There is a 'dished' area in front of the Aberdeen Lad's Club changing facilities. Water is known to gather in this area following heavy rainfall due to the poor condition of existing drainage ditches and the poor natural drainage due to some of the site comprising made ground.

At the western edge of this area the land rises more steeply to the Hutcheon Low housing development. To the east the site boundary is strongly defined by a partially culverted watercourse / drainage channel and tree belts. The central area sits around 3.5m to 4.5m above the notional river level.

Riverside:
The riverside area is a uneven mound ranging from 20m-30m AOD. The area addressing the edge of the access road to Persley Castle nursing home is more even and rises more gently from the road. This area sits around 5.5m above the notional river level.

FIG 31: SITE TOPOGRAPHY

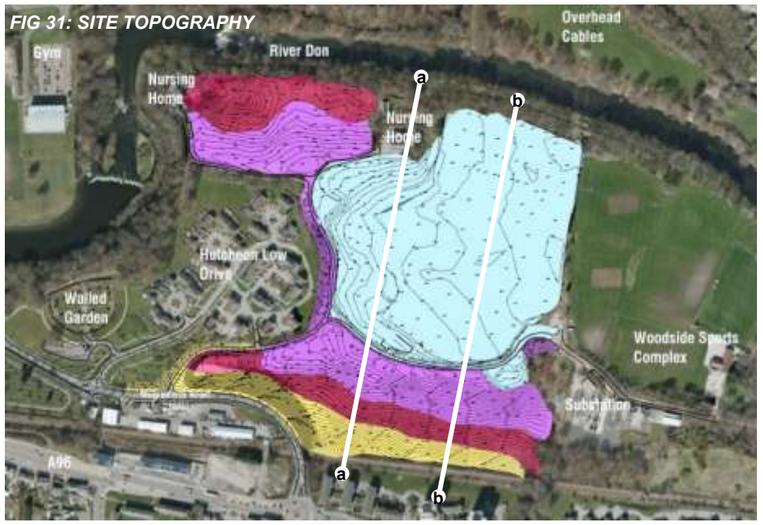
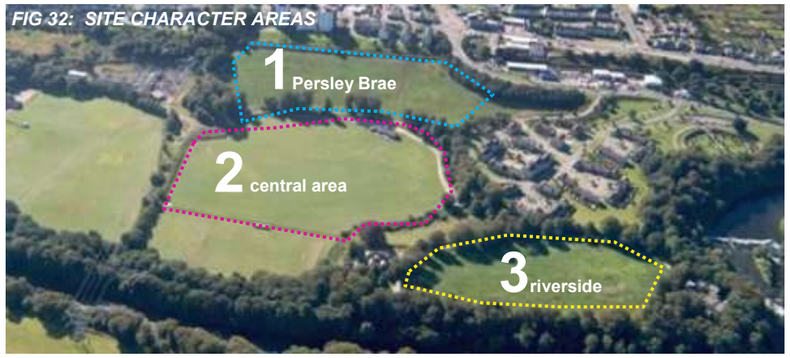


FIG 32: SITE CHARACTER AREAS



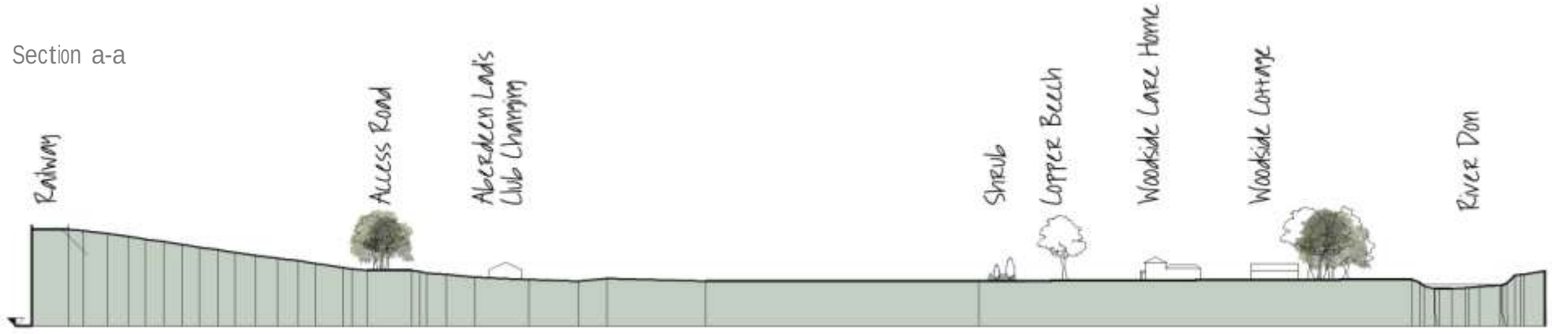
14-20m

25-30m

20-25m

30-35m

Section a-a



Section b-b

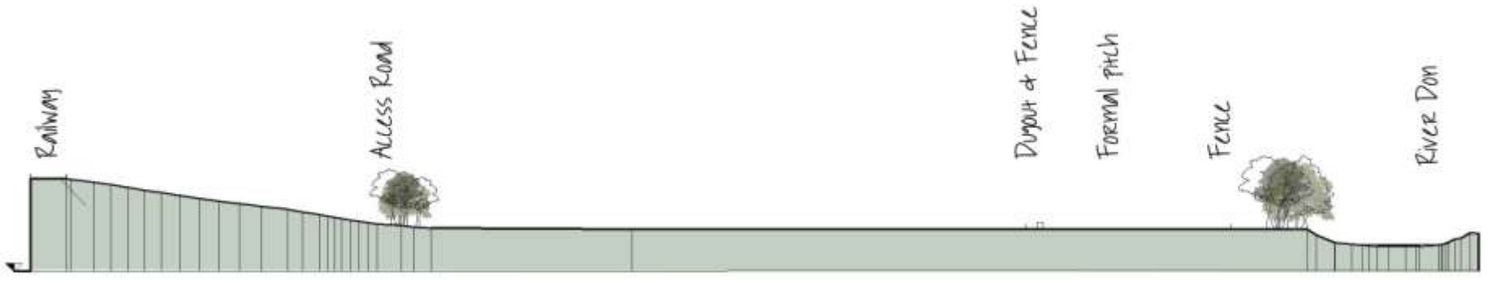


FIG 33: SITE SECTIONS

4. Analysis

4.6 Ecology

Survey work undertaken

The nature conservation interest of the site and likely ecological impact of the development has been assessed based on both the field surveys and from records received from the North-east Scotland Biological Record Centre. The site was visited on three occasions in August 2013 by Dr W Latimer of Northern Ecological Services for the purposes of undertaking a ecological survey of current conditions with respect to vegetation and the possible presence of protected species (an Extended Phase 1 Habitat Survey). During the site visit, vegetation was examined and classified according to the Phase 1 Habitat Survey methodology (JNCC 1993) see figure 33.

Two Local Nature Conservation Sites (LNCS) lie to the north and south of the OP25 site, along the River Don and the Aberdeen—Inverness railway line. These are important habitat corridors and will not be adversley impacted upon by the Persley Den development.

Conclusions and Recommendations

The core areas of the proposal site, under amenity sports turf and species-poor grassland, are of low ecological value and development within these areas is unlikely to be of any direct ecological significance. With new habitats provided by open green space and garden areas, there may be some overall increase in biodiversity. Otters and bats use the site and its environs for foraging but there is no evidence that these, or other protected species apart from breeding birds, have breeding sites, or other resting places on the parts of the site highlighted for development. Otters and bats are however European Protected Species and development proposed through subsequent planning applications will be required to consider the potential impact on these species.

Development will need to minimise the impact, from general disturbance and lighting in particular on species within the adjacent LNCS and wildlife corridors provided by the old lanes and their avenue plantings of mature trees. Mitigation by local reinforcement planting and new areas of screen planting will strengthen the local ecological network and provide new habitat areas to the advantage of wildlife.

The risk of adverse effects arising upon the River Don LNCS will be minimised by the site layout which allots housing to the southern section and retains open green space in the north, adjacent to the Don woodlands. Further measures will be taken by addressing lighting design, minimising lighting of retained green spaces and reinforcing the existing woodland edge by new screen plantings of native trees and shrubs. This approach also allows for the enhancement of buffer strips/zones between the development areas and the River Don and watercourse along the eastern boundary.

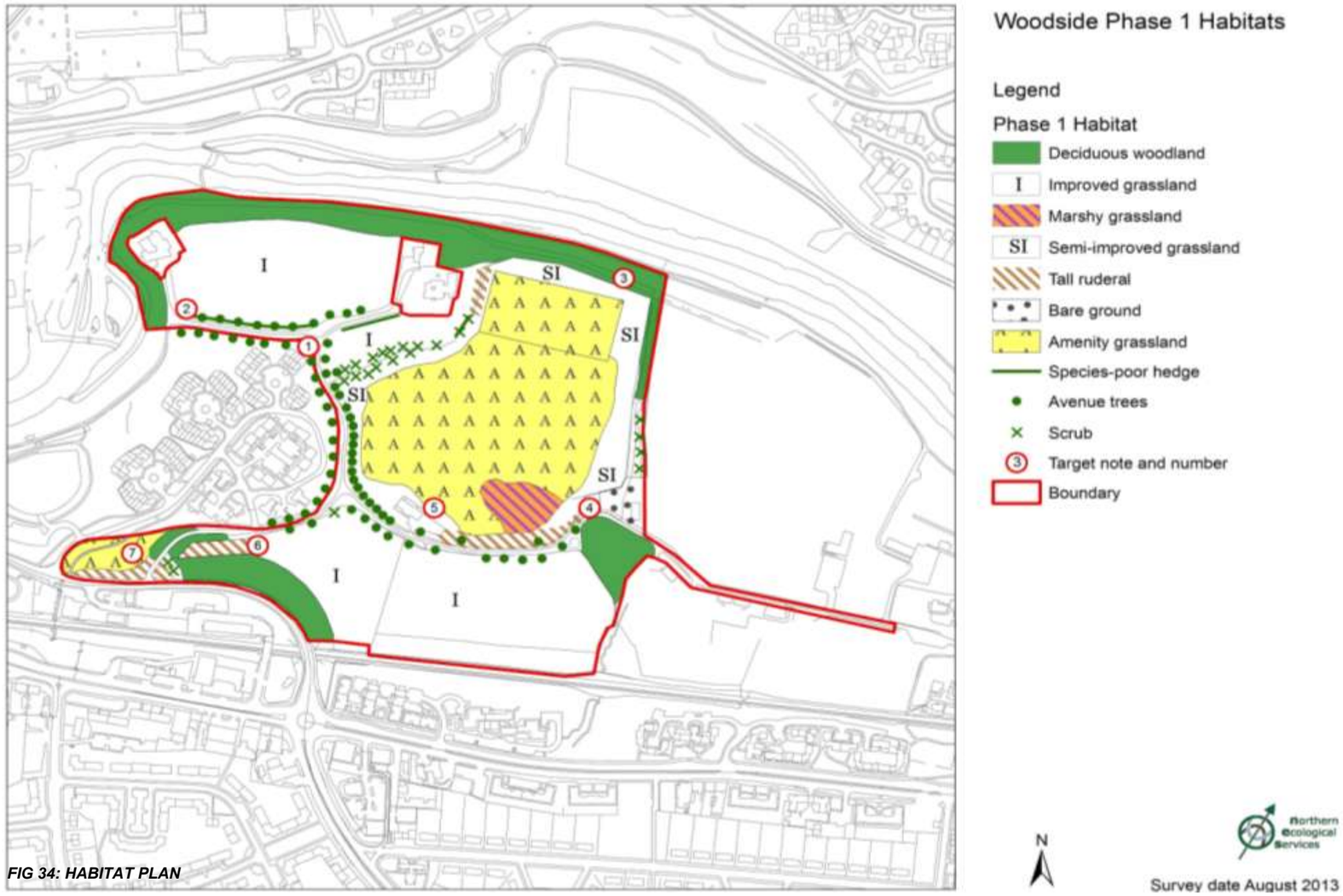


FIG 34: HABITAT PLAN

Adverse impacts on river hydrology will be minimised by the construction of SUDS sized to accommodate and attenuate the expected run-off from the hard surfaces of the development in naturally vegetated detention basins. These will serve to store and treat run-off pollutants by settlement, filtration and biological action. Located along the eastern boundary they will add wildlife habitat and reinforce the ecological network.

As part of the initial development stages, any Japanese Knotweed found on site will be removed and disposed of appropriately.

With the adoption of these measures, development on the site should not result in any significant adverse ecological impacts and will comply with local planning policies relating to the protection of wildlife, conservation of green spaces, habitats and ecological networks. By

the use of good planting design and the selection of an array of native species appropriate to the locality, some local gains in biodiversity may be achieved.

Bat surveys (buildings and trees) will be required prior to any felling of trees and further bat surveys, including any appropriate mitigation, may be required as part of any future planning application and before any work can commence.

As the development progresses to detailed stage, we will investigate opportunities to redevelop water features on site, such as identify the location of any poorly designed or redundant structures which could be removed or improved. For example, the removal of a redundant weir, upgrading of a culvert, ensuring adequate buffer strips between the water environment and development which may also reduce flood risk and improve the water environment

As part of any planning application for the site, the Phase 1 habitat survey will be reviewed using the SNIFFER-A Functional Wetland Typology for Scotland in order to identify any possible groundwater dependent terrestrial ecosystems (GWDTE's) and any necessary mitigation required.

The bat surveys undertaken in support of the Masterplan and those to be undertaken in relation to any subsequent planning applications will accord with Aberdeen City Council Supplementary Guidance on Natural Heritage.

In terms of water quality issues in the River Don, development of the OP25 Woodside site and the installation of SUDS measures will greatly improve the quality of surface water run off from the site and accordingly the discharges into the River Don. This meets the objective of achieving improved ecological status as set out in the River Basin Management Plan.

A detailed ecological survey has informed the production of this Masterplan. A full Ecological Survey will be submitted as part of any planning application for the OP25 site.

Masterplan Opportunities:

- *Improve wildlife corridors;*
- *Implementation of an ecology management programme;*
- *Increase biodiversity;*
- *Improve River Don water quality..*

FIG 35: SCRUBLAND IN NORTH WEST CORNER OF OP 25

4. Analysis

4.7 Woodland

FIG 36: MATURE TREES AT THE RIVERSIDE, WITH A DEAD ELM TREE EVIDENT

FIG 37: FORMAL PLANTING ROADSIDE, LEADING TO WOODSIDE HOUSE

FIG 38: EXISTING WOODLAND EDGE AT ROADSIDE

Survey Objectives

To identify, record and describe groups of tress, woodland areas and any particular notable individual trees within the site boundaries.

To provide preliminary tree and woodland management recommendations for reason of good woodland management and arboricultural practice.

To provide guidance as to the quality of these trees to inform the planning process.

Survey work undertaken

A visual inspection of the trees was carried out by Arboricultural Consultant, Struan Dalgleish on the 26th of August 2013. The inspection was carried out within the boundaries of the site and adjacent public highways.

Summary

The tree cover comprises of a mixture of native, naturalized and common exotic species; mature beech, wych elm, sycamore, and lime were frequently encountered within the avenues, rows and as small groupings along the minor roads within the site.

Mature trees of these species also occur en masse within the woodland strip lining the southern bank of the River Don.

It is estimated that these oldest trees will be in-excess of 150 years old and they form significant and important arboricultural features that break up with site visually.

In more recent times, estimated at around 20-30 years ago substantial areas of mixed broadleaf trees have been planted forming shelter belts and screen adjacent to roads, beneath the high voltage power line and adjacent to the substation. This planting includes Norway maple, ash, rowan, whitebeam, gean, alder, oak, beech, lime and sycamore.

It is also likely that the area of well spaced ornamental broadleaf tree at the western site boundary were also established 20-30 years ago. Conifer area less frequent on the site although a similarly aged group of mixed species located at the boundary with Mugiemoss Road contains a significant proportion of Sitka spruce and larch.

Overall the condition of the more recently established planting was considered to be fair.

The mature trees within the site however are of variable condition and several considered to be of very limited life expectancy (<10 years).

A detailed tree survey has informed the production of this Masterplan. A full and detailed tree survey will be submitted as part of any detailed development proposals for the OP25 site.

Masterplan Opportunities:

- *Improved maintenance and care of trees;*
- *Strengthen existing historic tree belts;.*
- *Supplementary planting;*
- *Removal and management of diseased and dangerous trees;*
- *Improve wildlife corridors;*
- *Provide an established, attractive setting for new development.*

4. Analysis

4.8 Flooding and Drainage

Previous consideration of this site for another proposal in 2004 and 2005 concluded, in agreement with SEPA, that historical information did not indicate flooding of the development site and that recorded flood events up to November 2002 showed no flooding on the site.

Subsequently, the same position has been confirmed during flood events of 2009 and 2012. However, the site area is partly covered by SEPA's indicative flood map, which is a guide to areas potentially susceptible to flooding and which should therefore be considered for flood risk assessment in planning and development stages. SEPA's flood map is a precautionary approach and it has been agreed with SEPA and Aberdeen City Council that a detailed Flood Risk Assessment will define consideration of flooding relative to the development.

As part of the detailed Flood Risk Assessment, an existing hydrodynamic model of the River Don has been extended to cover the reach of the river adjacent to the site. Fourteen additional river cross-sections and two weirs were surveyed in order to extend the model. The model now covers a reach of about 5.6km from the normal tidal limit to the former papermill at Mugiemoss.

The model has been run to predict water levels in the 1 in 200 year flood event as required by Scottish Planning Policy and an inundation plan has been prepared. The flood extent is shown on the site plan, figure 39.

This first assessment shows that the predicted 200yr flood extent encroaches slightly into the red line boundary of the site onto the site along its northern edge, following the line of the partly filled mill lade. In the north-west corner, the site is naturally protected as the ground levels are much higher than the predicted flood levels. It is predicted that flood water would back up onto the drain located on the eastern boundary. The 200yr water levels predicted at the location of the drain nevertheless indicate that the flood water would be contained within the ditch.

Concerns over flooding of the site stem partly from drainage issues, not river flooding. A Drainage Assessment undertaken in 2004 confirmed that the site falls generally from south-west to north-east, towards the River Don and that site levels were of the order of 6 m above normal river bank level at the north-east corner, see figures 41 - 43. Occasional ponding of surface water is visible on the existing grassed areas, after periods of heavy or sustained rainfall. This is related entirely to poor drainage, topography and soil characteristics. There is a depression in the centre of the pitch area which collects water and the soil does not allow this to soak away by infiltration.

The proposed sustainable drainage system for the development will entirely remove local drainage issues and provide better management of surface water on site. This may include de-culverting a small ditch on the east boundary under the pylon line. The use of buffer strips in the development will also reduce any flood risks, in line with Aberdeen City Council's Natural Heritage Supplementary Guidance.

FIG: 39: INUNDATION PLAN

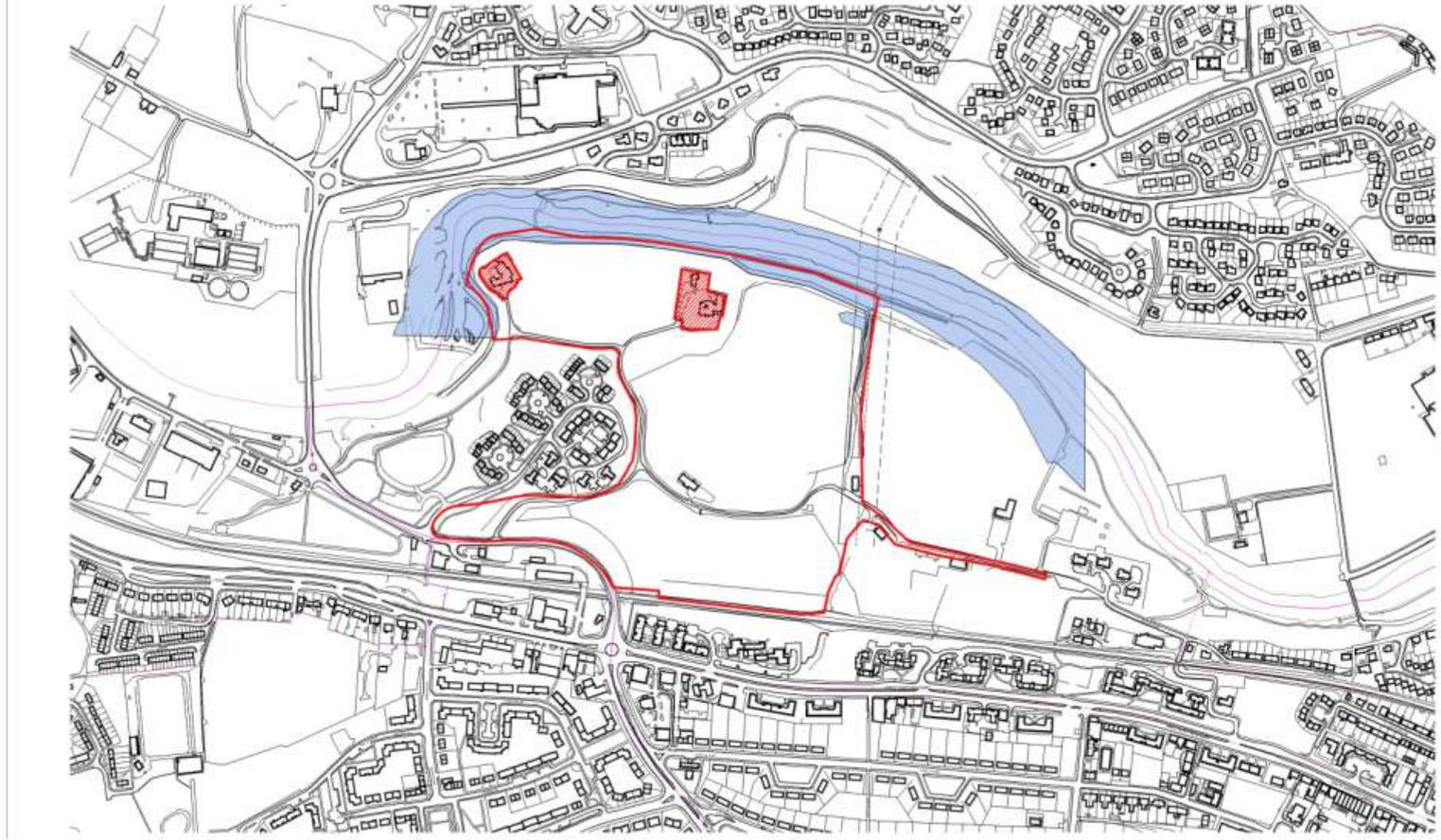


FIG 40: RIVER SECTION LOCATIONS

Considering, again, previous understanding of possible river flooding, two previous planning applications as noted opposite have been approved by Aberdeen City Council, with no adverse flood implications in their scrutiny and approval.

A4/1904 (First Bus Headquarters, approved 26/10/2005)
A6/0867(First Bus Headquarters and Bus Depot, approved 22/6/2006)

A full and detailed Flood Risk Assessment will be submitted as part of any future planning application for this site.

Masterplan Opportunities:

- *Improve existing drainage and ponding issues;*
- *Implementation of a SUDS strategy that will remove local drainage issues and provide better management of surface water;*
- *The de-culverting of the existing ditch which may increase biodiversity, and be and attractive feature of the proposed development.*

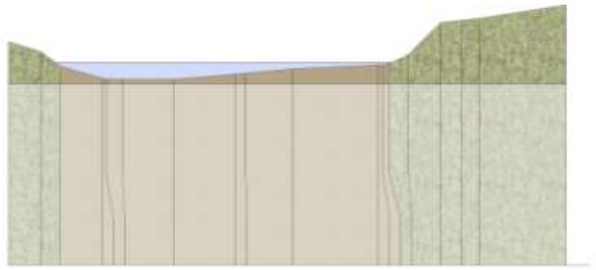


FIG 41: RIVER SECTION 001 -*RIVER BANK +5M ABOVE NOTIONAL RIVER LEVEL*

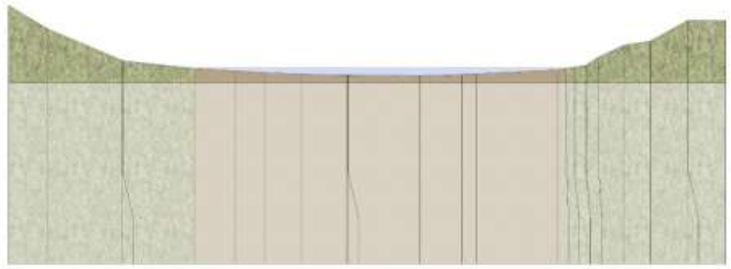


FIG 42: RIVER SECTION 002 -*RIVER BANK +4.2M ABOVE NOTIONAL RIVER LEVEL*

FIG 43: RIVER SECTION 003 - *RIVER BANK +3.8M ABOVE NOTIONAL RIVER LEVEL*

FIG 44: PHOTO ILLUSTRATING GROWTH OF RASHES AND BOGGY SITE CONDITIONS

FIG 45 PHOTO ILLUSTRATING SITE LEVEL COMPARED TO RIVER LEVEL

4. Analysis

4.9 Open Space and Sports Provision

A key characteristic of the Persley Den Masterplan development concept is the provision of sports pitches and open space. These considerations arise from the existing site character of green riverside space and sports pitches.

The existing sports pitches have been assessed and a package of upgrading / replacement / financial contributions has been discussed with Sport Scotland. These are illustrated and summarised in the plan and table opposite, figures 46 and 47.

The Masterplan indicates the retention and upgrading of the existing pitch and training pitch at the northern part of the site. These upgrading works will greatly improve the quality of sports facilities on offer. These would potentially be managed from the adjacent Woodside Sports Complex which would provide changing and social facilities following the removal of the existing building on the OP25 site.

Masterplan Opportunities;

- *Consolidate sports facilities;*
- *Improve quality of sports provision;*
- *Broaden the diversity of sports provision;*
- *Improve access to the sports provision;*
- *Raise awareness of the sports facilities;*
- *Increase hours of play through-out the year.*

FIG 46: EXISTING PITCH PROVISION AT WOODSIDE

Pitch No / Building	Dimensions (m)	Use	Present Condition / Comments
1	39 x 60	Football	Uneven, not cut, reasonably well marked and appears to have been in use recently. Position defined by topography immediately to south and west.
2	62 x 100 (FULL SIZE)	Football	The main pitch at Woodside, dug out provision and separated from the other pitches by palisade fencing. Probably the flattest, and most used of the Lad's Club pitches
Training	37 x 62	Training	Not cut, very dated and in poor repair. No markings. Not regularly used, only for warming up.
3	60 x 92	Football	Not cut, uneven, historic markings, suffering from drainage issues, generally not in good condition.
4	60 x 92	Football	Not cut, uneven, historic markings, suffering from drainage issues, generally not in good condition.
5	35 x 55	Football	Not cut, newish markings, suffering from drainage issues.
Aberdeen Lads Club changing rooms, Woodside	N/A	Football	Dilapidated building in poor repair.
Woodside Sports Complex	N/A	Rugby & Football	N/A

FIG 47: SUMMARY TABLE OF EXISTING SPORTS PITCH PROVISION AT WOODSIDE

Also part of the Persley Den Masterplan is a clear hierarchy of Open Space, in line with Aberdeen City Council's Supplementary Guidance.

According to the quality criteria set by the Council's Open Space Audit 2010, the OP25 site is currently assessed as a range of between 11—19, the pitches being the lowest scoring areas. This indicates that the quality of open space needs to be enhanced and improved. The site scores high in terms of its health and place value because it provides opportunities for sports activities. The area east of Persley Castle and the designated Green space Network provides high biodiversity value because of the habitats and species it supports.

Masterplan Opportunities;

Create a range of open space provision to enhance the character and amenity of the development and surrounding area.

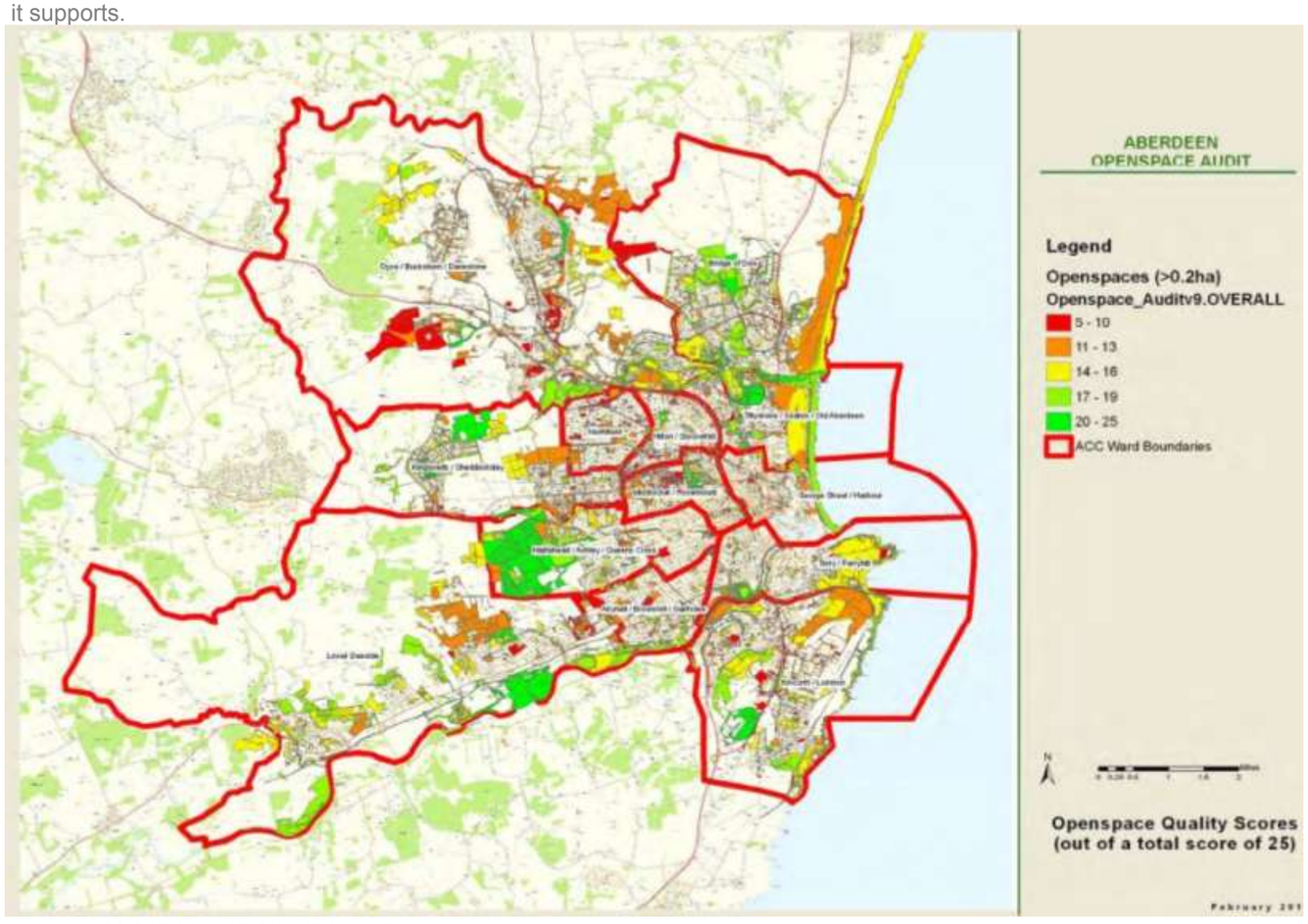


FIG 48: ACC OPEN SPACE QUALITY AUDIT

4.10 Green Space Network

FIG 49: GSN INFORMATION FROM ACC INTERACTIVE WEBSITE

The northern part of the OP25 allocation is designated as 'Green Space Network' and 'Green Belt' in the LDP. The Masterplan concept respects this through a number of means:

- *Provision of public open space;*
- *Enhancement of riverside routes and core paths;*
- *Enhancement of north—south and east—west wildlife corridors linking to Green Space Network*

The key characteristic of the GSN / Green Belt in this location is a green riverside corridor. This will be enhanced by the Masterplan proposals.

The Masterplan recognises that the GSN serves multiple benefits and over 14 datasets have been used to define the network. The quality of the GSN will be enhanced through the improved water quality from proposed SUDS measures.

4. Analysis

4.11 Utilities + Services

FIG 50: EXISTING SUB STATION COMPOUND

The proposed site for the development has existing utility services located to the East, West and South of the site.

To the east of the site there is 132kV overhead electricity lines supported on towers. The overhead lines follow a North to South Direction and terminate in to Persley Den Primary Substation, figure 49, which is owned and operated by Scottish & Southern Energy. To the south of the site there are existing buried 33kV Cabling which follow the road line towards the Haudagain Roundabout.

To the West of the Site, following along the existing roadway to the Nursing homes there is an existing water main pipe, an existing Intermediate pressure gas pipe, telecommunications cabling, Foul drainage pipe and Low Voltage power cabling.

These services only have sufficient capacity to serve the existing nursing homes. As part of this development the existing services locations will be reviewed and where required they will be altered where new road openings have been created.

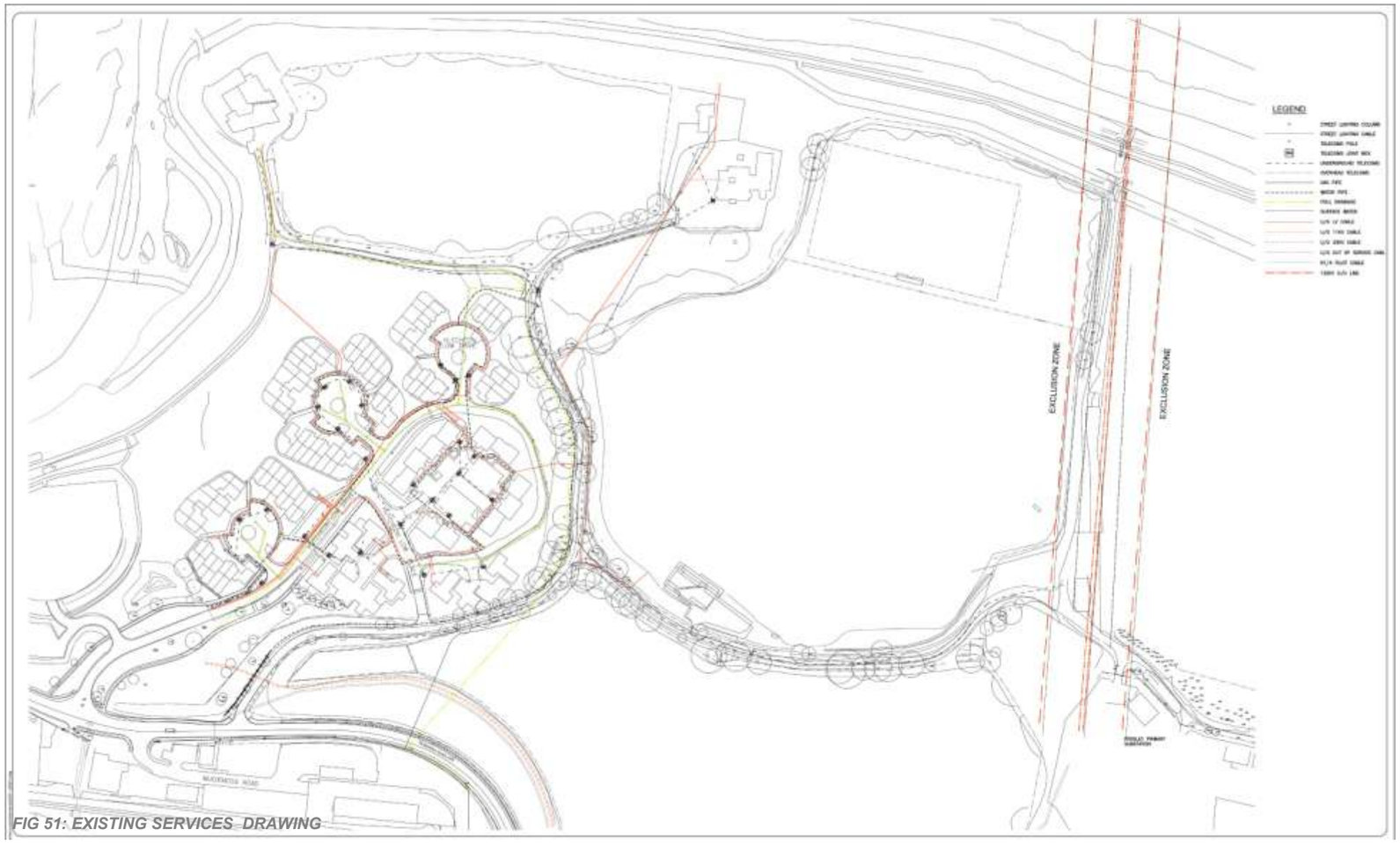


FIG 51: EXISTING SERVICES DRAWING

4.12 Contamination

FIG 52: VIEW FROM NORTH WEST CORNER OF SITE TOWARD WOODSIDE CARE HOME

The following history and usage of the site have been extracted from historical Ordnance Survey maps extending back over 140 years. Although minor, mainly sports related developments, have been in place since 1956 or prior, there is no evidence of significant built development or usage which suggests any ground contamination or requirements for investigations associated with contaminated land.

Two detailed ground investigations have been carried out and neither has revealed anything to suggest any ground contamination. Natural soils are generally sands and fine gravels with silt, the silt content contributing in places to poor drainage characteristics across the current sports fields.

1869 The site location is in a field surrounded by trees on all sides except the north boundary. A mill lade runs from north-west to north-east of the site, but this is a considerable distance from the boundary. Fields surround the boundary of the site. There are no buildings.

1901 The site looks to have remained as per 1869.

1926 A sand pit has been opened to the east of the site.

1956 The site has become a sports field which includes tennis courts to the south-east and a Pavilion to the south-west. There are no other built developments.

1970 The site looks to have remained as per 1956, but the pavilion has been replaced with a smaller version. A Dog Meat factory and kennels have been constructed to the east of the site but outwith the boundary of the current proposed development. A disused pit is located to the west of the site.

The site looks to have remained as per 1970, with the addition of a football ground constructed to the north of the site.

The site is sports fields and a small pavilion. All other features are natural and no other buildings are present.

2013 As 2004, the site consists of sports fields.

No direct consultation has been undertaken with the Council's Contaminated Land Unit to date as investigations have shown no evidence of contamination.

Results from Site Investigations will be included as part of any future planning application.

4.13 Air Quality

FIG 53: AIR QUALITY

An air quality assessment will be required to be carried out to determine the impact of the proposed development on the existing air quality management area.

This will be submitted as part of any forthcoming planning application.

5. Design Principles and Concept

Capture and reinterpret the spatial qualities of Old Aberdeen and Brig O' Balgownie;

Create a village development layout with a clear hierarchy of recognisable spaces, whether streets, parks or courtyards;

Create a development contained by the established topography and landscape elements of tree belts, green open space, steep slopes and the riverside;

Create a development that is complimentary to and inclusive regarding the existing residential cluster at Hutcheon Low;

Deliver consolidated and improved sports facilities at Woodside;

Deliver an improved, safer access onto Mugiemoss Road.

FIG 54 AERIAL VIEW LOOKING SOUTH EAST

5. Design Principles and Concept

Access and Connectivity

The new village must be permeable and allow easy movement throughout the development and beyond to the Green Space Network, Core Path and cycle routes. Access and connections to the Green Space Network and cycle routes will be enhanced. Destinations within the development will also be created, see figure 55.

Street Hierarchy

Persley Den will have a clear hierarchy of streets and spaces. This will reflect the types of routes and spaces that might be found in Old Aberdeen. There will be a 'high street' that is the main route through the development, followed by secondary access streets, then lanes, mews and courts, see figure 56.

Landscape Strategy

The site has a strong, well established landscape setting, which will be strengthened as part of the new village proposal. The strong tree belts and policy type planting will be enhanced and replicated in the development and a central green space will be created in the heart of the development, see figure 57.

Development Block

The roads and landscape provide us with a framework and block plan that can be developed into a Concept Masterplan, see figure 58.

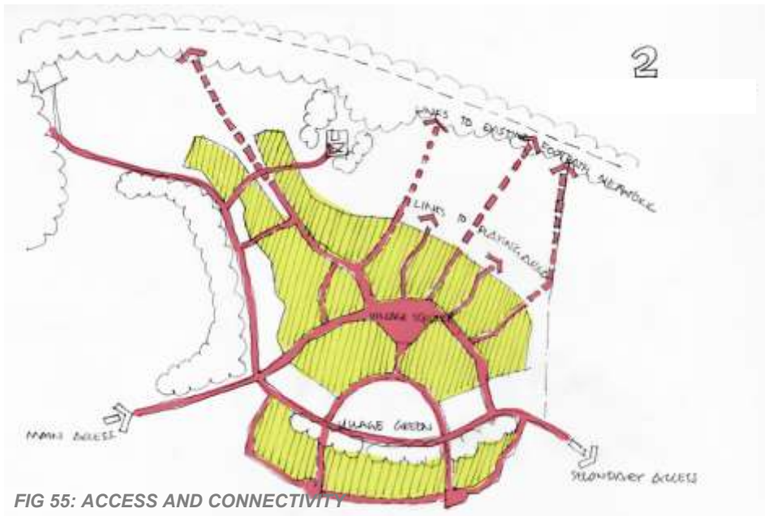


FIG 55: ACCESS AND CONNECTIVITY

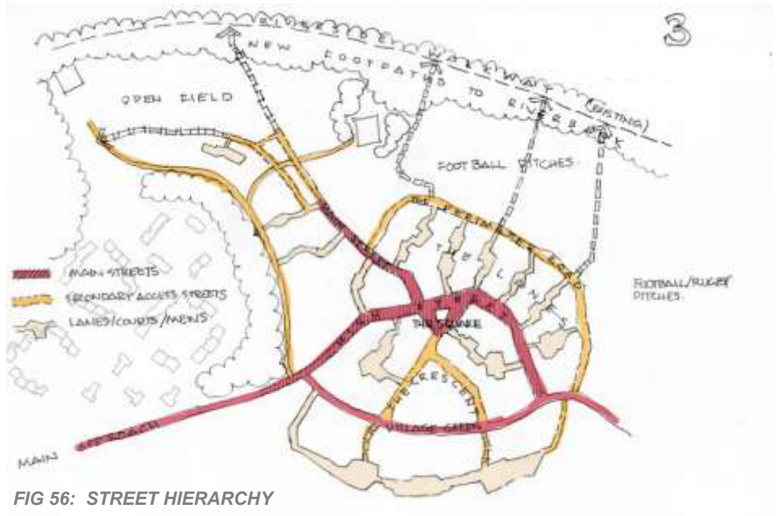


FIG 56: STREET HIERARCHY

Access and Connectivity

Landscape Strategy

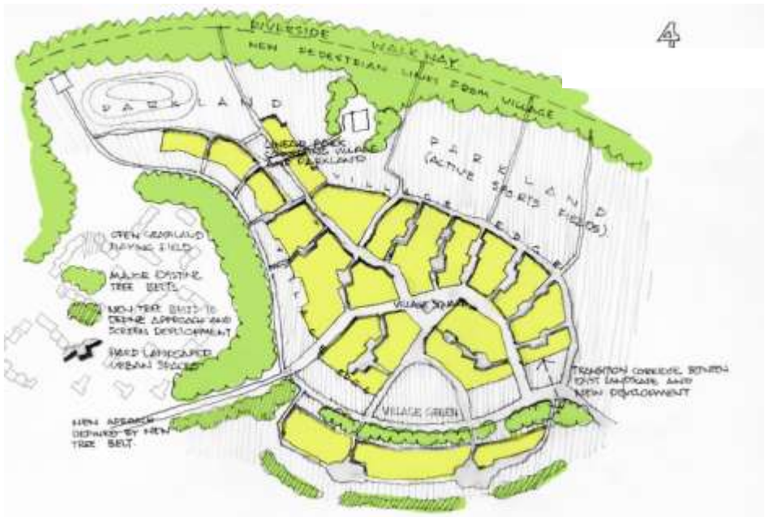


FIG 57: LANDSCAPE STRATEGY

Development Blocks

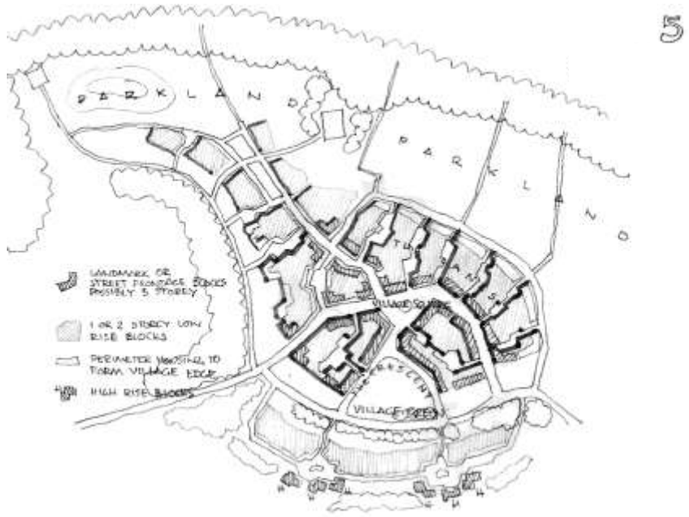


FIG 58: DEVELOPMENT BLOCKS

FIG: 59: CONCEPT MASTERPLAN

Concept Character Considerations

"To create a new Donside village continuing and reinterpreting the established pattern of small settlements along Aberdeen's lower River Don valley"

Features:

Walling and enclosures;

Buildings defining street , lanes and courts;

Trees;

Surface finishes;

Distances between buildings and reflection of street hierarchy;

Layout:

Street defined and enclosed by buildings, walls, landscape;

Traffic speeds controlled by constricted roadways and surface materials;

Public domain enclosed and overlooked, private secure spaces contained at the rear of properties.;

Shared surfaced e.g. Wrights and Coopers Place (Old Aberdeen) leading directly from Main Street (High Street);

Streets leading to a destination e.g. village square, village green, community building.

FIG: 60: OUTLINE CHARACTER SKETCHES

6. Masterplan

The design process has involved a comprehensive approach to the analysis of the brief and the site. It has concluded in the production of a clear and exciting masterplan solution. The masterplanning process has been iterative and evolved over a number of months through public consultation and workshops with consultees and specialist consultants.

Successful places are sustainable and have distinct identity. Designing Places and Designing Streets policy statements set the context for creating places. Successful places are safe, pleasant, easy to move around and welcoming to visitors. They are sustainable and adaptable to changing circumstances in social, economic and environmental conditions.

(The Aberdeen Masterplanning Process: A Guide for Developers)

The analysis and design process has resulted in a masterplan that could accommodate up to 400 houses within the agreed development area, of which 150 would be affordable.

FIG 61: 3D MODELLING OF MASTERPLAN

FIG 62: 3D MODELLING OF MASTERPLAN

FIG 63: WORKING MASTERPLAN

6. Masterplan

6.1 Affordable Housing

FIG 64: DONSIDE URBAN VILLAGE

FIG 65: DONSIDE URBAN VILLAGE

A key component of the Persley Den development is the provision of 150 affordable housing units. This was considered when the site was being allocated and accordingly the LDP explicitly refers to this. The LDP refers to 50% of the 300 houses allocated on OP25 being affordable. Although up to 400 houses may be delivered at Persley Den through the current Masterplan, the commitment to 150 of these being affordable remains.

Delivery of 150 affordable houses on a single site represents the highest individual allocation of affordable housing in Aberdeen City. Affordable housing provision in the city is typically 25% of the total number of houses allocated. The location of the Persley Den site, along with the more strategic regeneration objectives of the neighbouring Manor / Logie area presents an opportunity for the delivery of a key affordable housing site.

As part of the Masterplanning process, discussions have taken place with Aberdeen City Council's Housing Strategy and Performance Service and various affordable housing providers. This is to ensure that the Masterplan concept meets the general objectives of these parties and will allow for the delivery of 150 affordable houses.

A detailed planning application will set out the exact location and format of the affordable units. The relatively dense layout and mix of house types proposed at Persley Den does however create flexibility when considering the delivery of these affordable homes.

Masterplan Objectives:

- Delivery of 150 affordable homes;
- Integration of affordable homes within the overall development in terms of design and operation;
- Contribution to the Council's affordable housing strategy.

6.2 Density

Up to 400 houses can be accommodated on the OP25 site, at an appropriate density and layout entirely in keeping with the surrounding area.

The Aberdeen City and Shire Strategic Development Plan sets out the following key target:

For all housing development of over one hectare in strategic growth areas to … generally have no less than 30 dwellings per hectare.

Considering 400 houses on the Persley Den site results in a density of **37 dwellings per hectare** (dwph).

Comparable surrounding developments are being developed at the following densities:

- **Donside 43 dwph;**
- **Davidson's Mills 40 dwph;**
- **Vision, Mugiemoss Road 60 dwph;**
- **Hutcheon Low 50 dwph.**

Historically, traditional four story urban tenements, such as those found on parts of Great Northern Road were developed at a density of 120 dwph. This is generally considered to be a maximum. More recent flatted developments in Aberdeen at Bannermill and Froghall have however been developed at densities higher than this.

Persley Den has the advantage of delivering a development density in excess of the Structure Plan target through a layout appropriate to the site and surrounding area. It is a further advantage that this will be achieved through a range of house types, designs and tenures.

This development proposes up to 400 units based on the following outline mix:

1 bed: 10-15%
2 bed: 20-25%
3 bed: 35-40%
4 bed: 25-30%
5 bed:5%

FIG 66: DENSITY ANALYSIS

Masterplan Objectives:

- Deliver a development at an appropriate density to meet Structure Plan targets;
- Deliver a layout of appropriate density to create an attractive neighbourhood.

ACCESS ROADS

PYLON EXCLUSION ZONE

STEEPLY SLOPING AREAS

GREENBELT / GREEN SPACE NETWORK

RED LINE SITE BOUNDARY

6. Masterplan

6.3 Topography

The masterplan has been developed to respect and work with the existing slopes and undulations of the existing site.

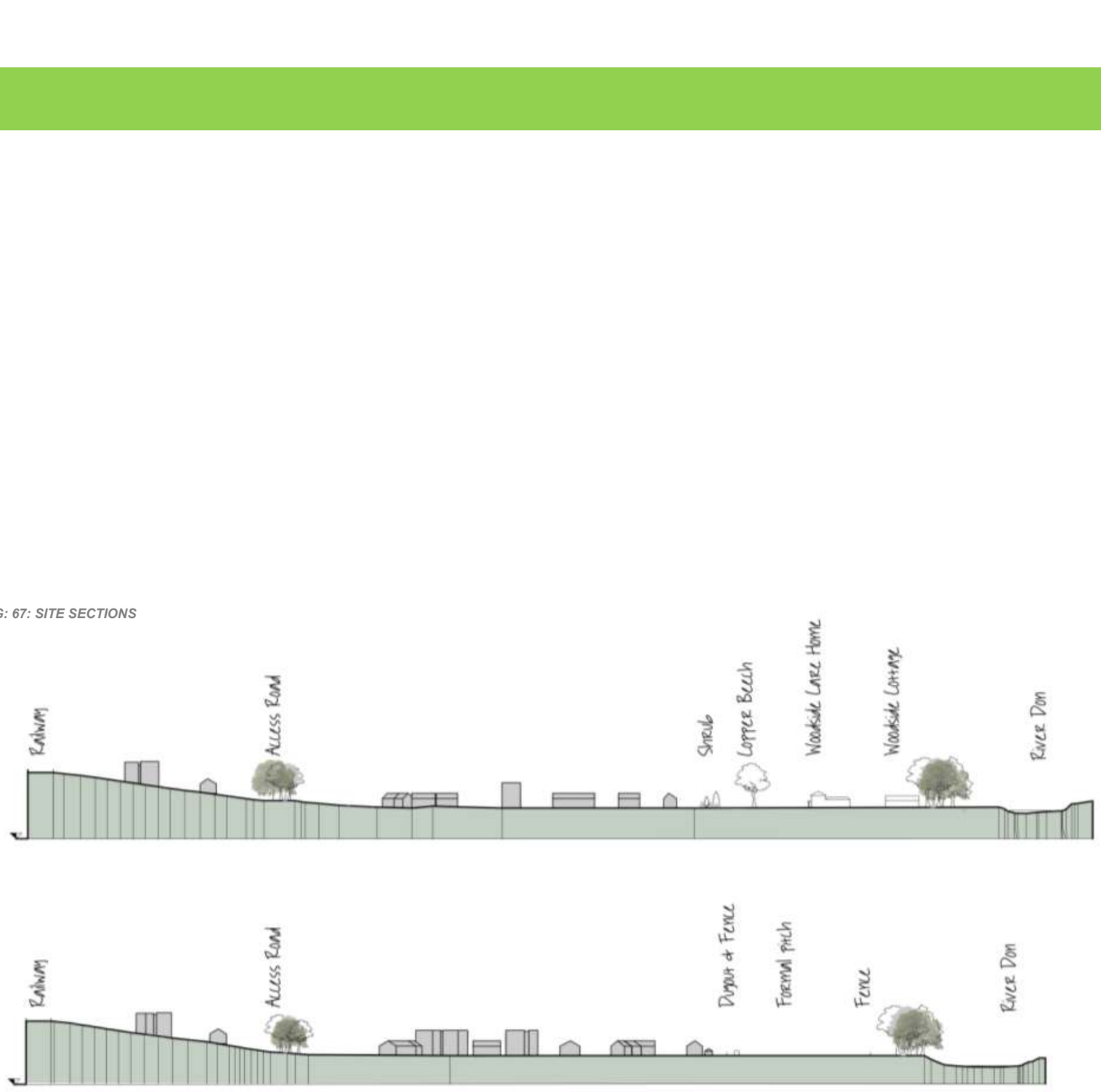
The majority of the housing sits within the flat central area, to ensure that minimum cut and fill will be required. The slight fall that exists across this area will used to help with the overall site drainage.

There is some limited development on the sloping area, this will be arranged as a single road that curves to follow the contours of the slope to minimise excess cut and fill. Some flatted properties will be located here. There is a pattern of higher flatted building further downstream, at Donside and Tillydrone.

These flats will enjoy an elevated position and great views across the site to the mature riverside tree belts and will have a relatively small footprint.

The rear gardens of the terraces opposite will benefit from a southerly aspect.

FIG: 67: SITE SECTIONS



6.4 Landscape

Usable, well-designed, public space is recognised as creating opportunities for communities to interact, promoting a sense of place and helping to encourage healthy lifestyles.

The existing landscape at Persley Den provides an attractive natural setting for the proposed development, it provides excellent opportunities for making use of the landscape and enhancing ecology.

The existing tree belts, woodland and river will be celebrated, improved and strengthened where possible. Existing tree lined roads will be upgraded sensitively to minimise any potential damage to the established trees.

The development should work with the existing topography and any opportunities for the SUDS should be optimised.

The precedent of strong tree planting will be used as an edge to the Persley Brae part of the development. This will also act as a noise buffer on the southern boundary adjacent to the railway line and A96.

A detailed landscape strategy, including details of species choice and maintenance, will be submitted as part of any future planning application for the site.

In addition, a detailed assessment of trees with regard to proximity to new housing, separation distance and excavation impacts will form part of any future planning application for the site.

FIG 68: LANDSCAPE

Masterplan Objectives:

- Ensure public spaces are overlooked, to encourage use through security;
- Create green links and wild life corridors;
- Create attractive routes and enhance existing routes to promote sustainable transport;
- Improve, maintain and enhance existing woodland, policy planting and tree belts;
- To make the rich amenity space more accessible and attractive.

6. Masterplan

6.5 Open Space

A variety of open spaces are proposed around and within this development. These spaces will encourage pedestrian movement, enhance the setting and amenity and help foster a feeling of neighbourhood.

1 Entrance Avenue & Persley Brae

Area: 2.5 Hectares

Designation: (PAN65 / ACC Open Space Supplementary Guidance): Green corridor , Natural Semi– natural / Local Open Space and Green corridors.

Accessibility: This amenity space is comfortably within a 400m walk of the entire development

Description: A large area of open space that will create a green gateway to the development and the existing development at Hutcheon Low. This space should include an informal paths that include desire lines to Mugiemoss Road, and opportunities to take in the views across the site from this elevation positions This area will also provide opportunities to promote contact with nature, and healthy life style activities.

The existing pattern or tree lined avenues and policy planting will be a feature here. This area should also support the Aberdeen—Inverness, Kittybrewster Railway Line LNCS. Opportunities for enhance nature conservation will be investigated.

2 Village Square

Area: 0.13 Hectares

Designation: (PAN65 / ACC Open Space Supplementary Guidance): Civic Space / Neighbourhood Open Space

Accessibility: This amenity space is comfortably within 400m walk of the entire development

Description: A generous civic square positioned in the centre of the development, it will be a key landmark within the development. It will be a predominately hardscaped area that will provide a focus for pedestrian activity. This is where any potential retail provision would be located.

3 Village Green

Area: 0.30 Hectares

Accessibility: This amenity space is comfortably within a 400m walk of the entire development, including the existing community of Hutcheon Low.

Designation: (PAN65 / ACC Open Space Supplementary Guidance): Public Park, Playspace for Children / Local Open Space,

Description: A large soft and green area located between the Persley Brae and main village development. It will provide variety within the urban development and extend a green wedge deep into the proposed development.

This area will be formal in design and layout. It will include path connections to promote safe and convenient connections between the upper and lower part of the new development.

This area will also include an equipped play area, to promote interaction between the new and existing communities.

4 Sports

Area: 1.4 Hectares

Designation: (PAN65 / ACC Open Space Supplementary Guidance): Sports Area / Out door Sports Area.

Accessibility: This amenity space is comfortably within a 400m walk of the entire development

Description: Full size football pitch and 7 a side pitch.

Immediately adjacent to the site are further football and rugby pitches of Woodside Sports Complex

5 Riverside

Area: 4.8 Hectares (with more accessible beyond the site boundaries)

Designation: (PAN65 / ACC Open Space Supplementary Guidance): Green corridor, Natural Semi– natural / Major Open Space

Accessibility: This amenity space is comfortably within 400m walk of the entire development

Description: A large area of informal open space that provides high quality amenity to the River Don LNCS, access to a diversity of habitat and landscapes, as well as a generous recreational resource. There will be an informal network of paths that provide access to woodland and riverside walks, and the core path network. This space provide an important fringe and edge to the development.

Consideration should be given to the possibility of an interpretative walk and signage, to celebrate the areas industrial heritage, and the LNCS, e.g. types of habitat and species that might be fournd here. This area forms part of the Green Space Network. Opportunities to enhance and protect the LNCS will be investigated.

The proposed development meets with the following standards:

Aberdeen City Council; Open Space and Green Infrastructure

Supplementary Guidance

This development proposes up to 400 units based on the following outline mix:

1 bed: 10-15%
2 bed: 20-25%
3 bed: 35-40%
4 bed: 25-30%
5 bed:5%

Using the Scottish Household Survey 2007/ 2008, and using the Aberdeen sample, the population of this development would be in the region of 998 people. For this number of people a requirement of 2.8ha would be required, this masterplan offers over 9ha of meaningful and useful open space.

The open space area (+9ha) does not include the semi private or sports areas.

Any enhancement work proposed by this masterplan will consider the nature conservation value and the designated site interests.

FIG: 69: OPEN SPACE

P Location for Play Zone

S Location for SUDS

6.6 Sports Provision

Leisure provision is a key element of the Persley Den Masterplan concept. Public open space will be provided in the village centre area. This will create opportunities for informal leisure use. The site has, in the recent past been used as sports pitches, principally for football. This use is now all but gone from the site due to various external factors, mainly the poor condition of the pitches.

In addition to the proposed upgrading of the two pitches on site, an off site financial contribution will be agreed. This figure will be based on the amount and quality of the pitches being removed in order to result in 'no net loss of pitches' within Aberdeen City, in line with Scottish Planning Policy. The off site contribution will be spent on a project yet to be identified. This will be controlled through a legal agreement as part of the formal planning application process. A specialist sports consultant has been appointed as part of the Masterplan process to ensure that the new pitches are designed to meet Sport Scotland standards.

As part of the Persley Den Masterplan, improved sports pitches will be delivered in the northern part of the site. This area has been selected for a number of reasons:

- **It has the pitches that are in the best existing condition;**
- **It will not conflict with the additional residential uses being introduced;**
- **It will integrate well with the surrounding Green Space Network.**

Opportunities for other leisure uses are also being created through the Masterplan, including the enhancement of the National Cycle Network, pedestrian linkages and improved public path network.

FIG 70 *MASTERPLAN EXTRACT HIGHLIGHTING SPORTS PITCH PROVISION*

Pitch No / Building	Dimensions (m)	Use	Present Condition / Comments	Proposal
1	39 x 60	Football	Uneven, not cut, reasonably well marked and appears to have been in use recently. Position defined by topography immediately to south and west.	Remove
2	62 x 100 (FULL SIZE)	Football	The main pitch at Woodside, dug out provision and separated from the other pitches by palisade fencing. Probably the flattest, and most used of the Lad's Club pitches	**Retain and upgrade**
Training	37 x 62	Training	Not cut, very dated and in poor repair. No markings. Not regularly used, only for warming up.	**Replace with new seven-a –side pitch**
3	60 x 92	Football	Not cut, uneven, historic markings, suffering from drainage issues, generally not in good condition.	Remove
4	60 x 92	Football	Not cut, uneven, historic markings, suffering from drainage issues, generally not in good condition.	Remove
5	35 x 55	Football	Not cut, newish markings, suffering from drainage issues.	Remove
a. ALC changing rooms,	N/A	Football	Dilapidated building in poor repair.	Remove
b. Woodside Sports Complex	N/A	Rugby & Football	N/A	N/A

FIG 71 *EXISTING AND PROPOSED SPORTS PITCH PROVISION*

6.7 Access and Connectivity

FIG 72: ENTRANCE ROAD TO HUTCHEON LOW DRIVE

FIG 73: PEDESTRIAN CROSSING AT MUGIEMOSS ROAD

Improving connectivity through linkages between existing and proposed development areas, the riverside, the Core Paths Network and Green Space Network is one of the key concepts behind the Persley Den masterplan.

This section outlines access proposals for the Persley Den site by reviewing proposed connectivity with existing travel networks, considering firstly access by the most sustainable modes of walking and cycling, then public transport connections, and finally travel by private car via Mugiemoss Road.

Pedestrians and Cyclists

The site will be directly connected to footways on the development access road which will connect to footways on A90 Mugiemoss Road and Don Terrace. These routes form part of the extensive on and off road path network within the local area providing connections to convenience shopping, recreational, and other local facilities available close to in the Haudagain Roundabout area within an average walk distance of approximately 1km, see figure 69.

The Transport Assessment will include consideration of Safe Routes to Schools. Woodside Primary School is within 1600m walking distance via Mugiemoss Road, a signalised pedestrian crossing of Great Northern Road, Anderson Road and Clifton Road. Manor Park Primary School is also located nearby and can be reached using footways on Mugiemoss Road, Anderson Drive, Manor Avenue and Wilkie Avenue utilising signalised pedestrian crossing facilities on Great Northern Road and Anderson Drive.

The site lies within the catchment area of St Machar Academy, which is a walking distance of 2400m from the site utilising a route via Great Northern Road and St Machar Drive. Existing footway provision on this route is good, with signalised pedestrian crossings available at all major junctions.

The site is directly connected to National Cycle Network Route 1 which routes on-road via Hutcheon Low Drive and Station Road as part of the extensive Aberdeen Cycle Network. NCN provides on-road connections west to the Dyce area, and east towards Old Aberdeen and the University campus. Further cycle route connections can be made via Persley Bridge to routes via A90 Parkway, the A96 cycle route and to the north side of the River Don. Upgraded cycle facilities are proposed on Anderson Drive, see figure 78 page 46.

FIG: 74: IMPROVED CYCLE ROUTES AT MUGIEMOSS RD / ANDERSON DR

FIG 75: ROUNDABOUT AT MUGIEMOSS ROAD AND A90

Core Path 7 follows a route on the south side of the River Don, linking Persley Bridge to Don Terrace, see figure 77. It connects to further footways and Core Paths at these points which allow onward travel in all directions by pedestrians. Core Path 7 will require upgrading, with details such as path dimensions and surface material to be confirmed as part of the future planning application process. The Transport Assessment will also consider how access to Core Path 7 will be gained from the development site.

Public Transport Connections

The entire development site is currently located within a walking distance of approximately 900m, via the existing site access of a very high frequency bus corridor on the A96 at Great Northern Road. Services there are approximately every three minutes to Aberdeen City Centre and a number of local and longer distance destinations, and it is envisaged that these would be extremely attractive to future residents.

In addition to bus services operating on Great Northern Road, Service 4 currently operates on Mugiemoss Road on an hourly basis between Dubford and Aberdeen Royal Infirmary. The closest bus stops on Mugiemoss Road are within 400m of parts of the development site, utilising the existing access. The existing access can be retained as a pedestrian / cycle access, offering a direct link between the site and bus stops on Mugiemoss Road.

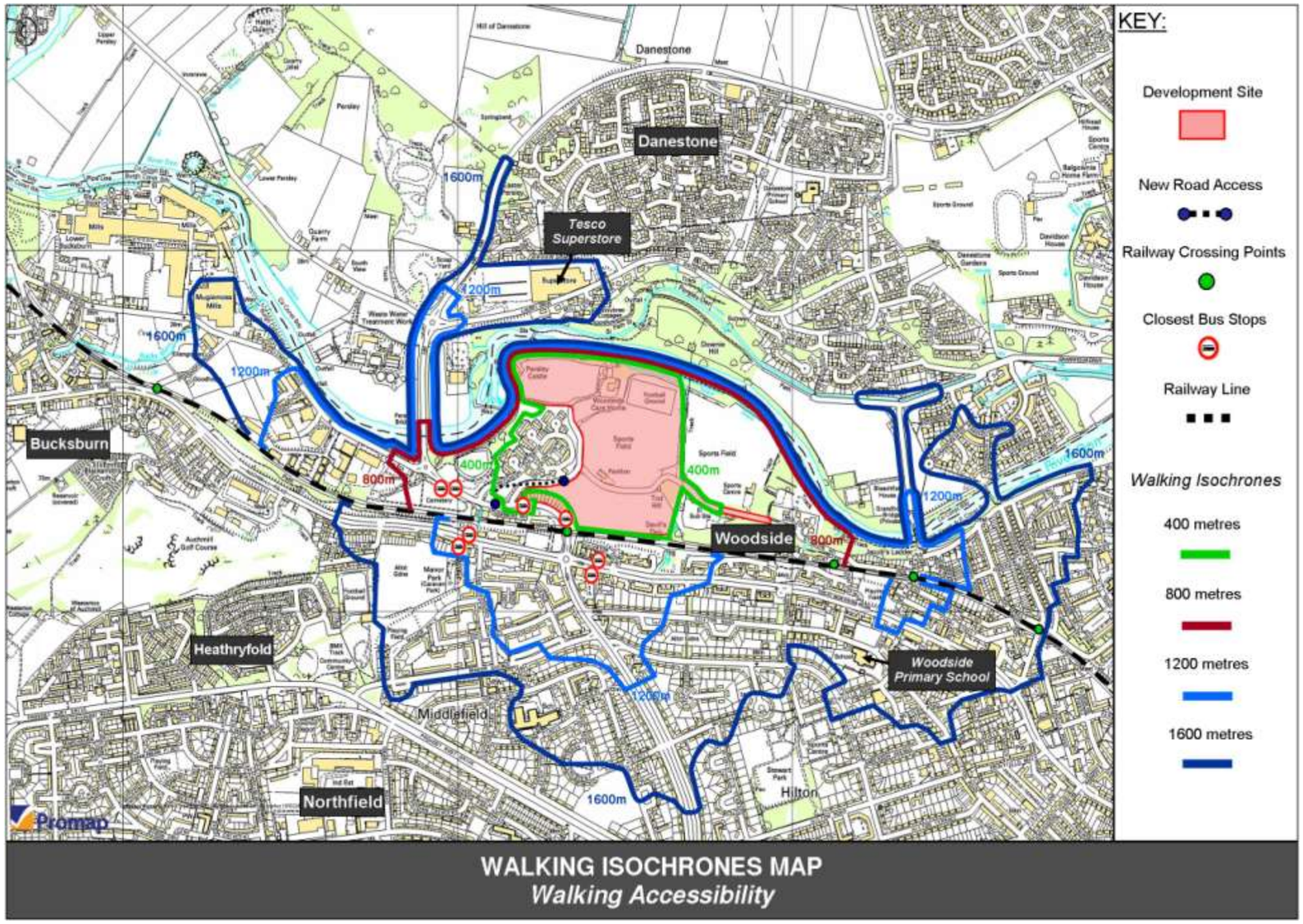


FIG 76: WALKING ISOCHRONES MAP

6.7 Access and Connectivity (cont.)

In addition to the existing access route, a new footway can be formed linking the site to Mugiemoss Road, connecting to an existing bus stop close to the railway bridge. The route may include steps down the Mugiemoss Road embankment. It would enable approximately 90% of houses to be located within 400m of an existing bus stop on Mugiemoss Road, see figure 30, page 17. The route would allow all houses to be within a 600m walking distance from the very high level of public transport service availability on Great Northern Road.

The provision of a footway connecting the entire development site to within 400m of an existing bus service would meet with planning policy. The requirement to provide an enhanced bus service at 15 minute frequency on Mugiemoss Road is noted, and the detail of service enhancements would be considered further through the Transport Assessment process. There is an existing railway underpass adjacent to the Great Northern Road cul-de-sac, and there is also potential to explore options to provide a shorter walking route from the site to bus stops on Great Northern Road utilising the underpass.

Diverting Service 4 into the site may be of limited benefit to residents except for journeys to ARI. The operation of this and previous services via Persley Bridge at modest frequency suggests that there is limited critical mass in terms of existing patronage on the corridor which could be developed as part of any additional service. Discussions with the Public Transport operators indicate that there would be operational difficulties associated with diverting Service 4 into the site, as it interfaces with other services at Dubford and ARI. Scheduling a diversion could have significant operational implications and is not likely to be welcomed.

A bus service diverting into the site may not generate significant levels of patronage, as passengers will be attracted to the high frequency service available within 600m at Great Northern Road instead, (utilising a new footway connection to Mugiemoss Road), rather than wait for a less frequent service within a shorter walk. This pattern of passenger behaviour is evidenced elsewhere in the City, with First altering routes to provide higher frequency services on key corridors rather than serve every residential area directly as has happened in the past. Any new service would simply provide additional capacity on the A96 corridor on leaving the development, and is not justified as it would almost certainly require to be fully funded. Whilst there is potential to provide a new bus service entering the site, there is concern that the service would be of limited value and may not be viable in the long term due to the attractiveness of alternative services operating at high frequency

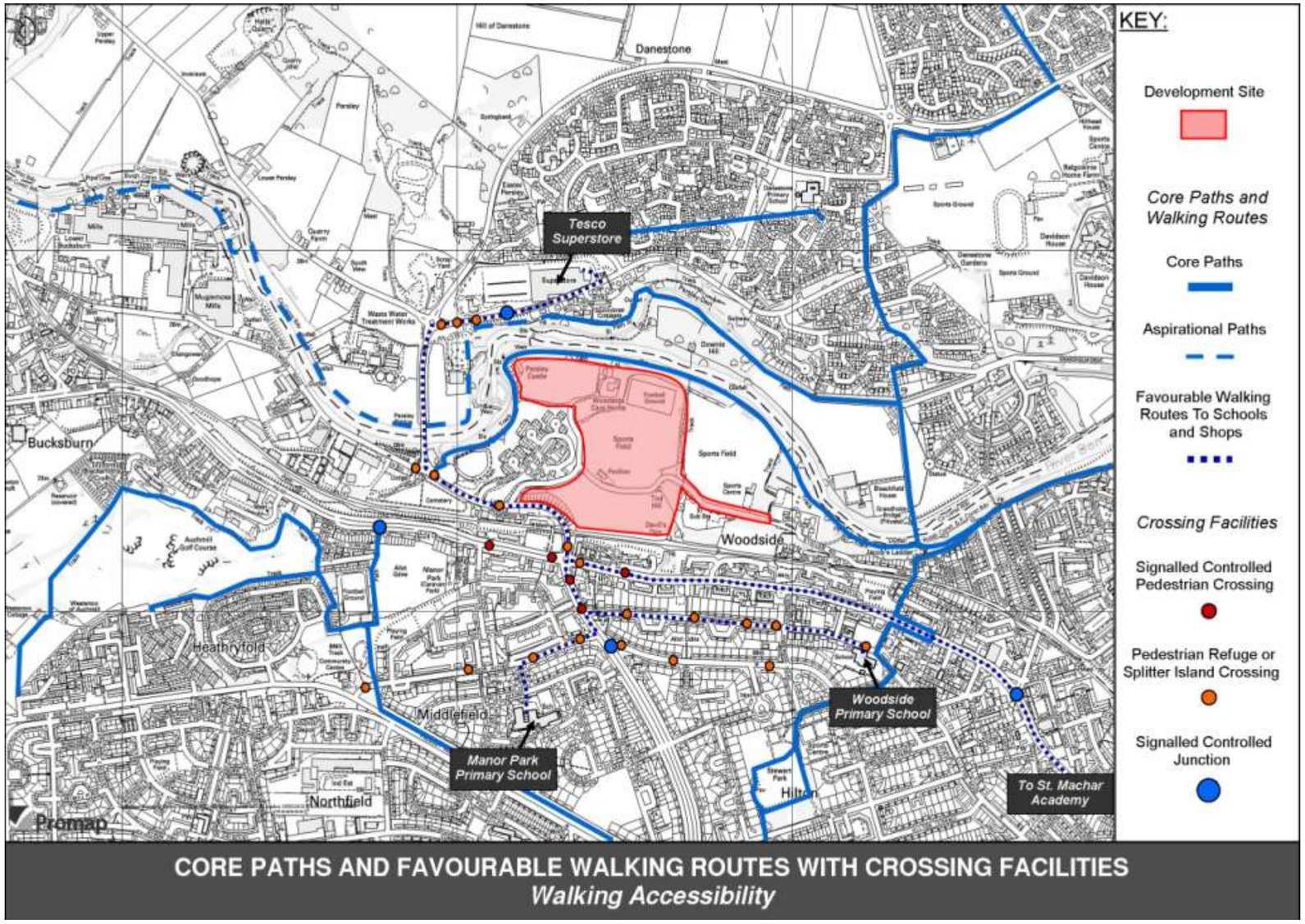


FIG 77: CORE PATHS AND FAVOURABLE WALKING ROUTES WITH CROSSING FACILITIES

nearby on Great Northern Road. However there remains potential to consider this option, particularly in conjunction with other nearby development proposals. This can be considered further though the Transport Assessment process. Discussions with bus operators and exploration of potential options has begun at the Masterplan stage and there is a commitment to providing adequate accessibility to public transport. However, further detailed work on the precise type and level of provision and any mitigation and compensatory measures necessary to improve accessibility to existing services will be required and confirmed through the Transportation Assessment and planning application stage.

Road Connections

Access for vehicles is to be provided from A90 Mugiemoss Road by a new connection which may incorporate and replace existing connections to Hutcheon Low Drive and Persley Den Nursing Home. The connection could take the form of a crossroads junction to incorporate the local access to the west side of A90 Mugiemoss Road. Alternatively the arrangement could take the form of a staggered junction. It has been anticipated that the site access junction will be signalised, but this will be determined through the Transport Assessment process which will also consider priority controlled options. All options will be considered through the Transport Assessment process in order to arrive at the optimal solution. Liaison with Transport Scotland and Aberdeen City Council will be required, as the junction will be designed to allow for the replacement of Haudagain Roundabout, which is anticipated to provide additional lane capacity on Mugiemoss Road.

In order to satisfy road standards with respect to vehicular access, discussions have been held with Aberdeen City Council surrounding development of a wide section of road between Mugiemoss Road and a point where the internal site roads form a loop. Details of the width and operation of this section of road are yet to be agreed, but the principle would allow for half of the carriageway to be closed whilst still permitting two way traffic flows to operate on the remaining half of the carriageway. Under that scenario maintenance could be carried out without preventing vehicular access to and from the development site.

The requirement for a secondary emergency access to the east is also currently being discussed with the Roads Authority.

Development will not impinge on the embankments of Mugiemoss Road and the development will allow for access to be provided for all parties in relation to the Council's preferred scheme of improvements on Mugiemoss Road.

At present, the A90(T) Mugiemoss Road forms part of the strategic road network to the Buchan Coast and meets the A90(T) Anderson Drive, for destinations in central Scotland, and A96(T), for destinations via Elgin to Inverness at the Haudagain Roundabout. However, the completion of the Third Don Crossing, anticipated to be in 2016, and the Aberdeen Western Peripheral Route, anticipated in 2018, will alter the character of the route as strategic traffic is diverted away. This could potentially facilitate increased pedestrian and cycle provision on this route.

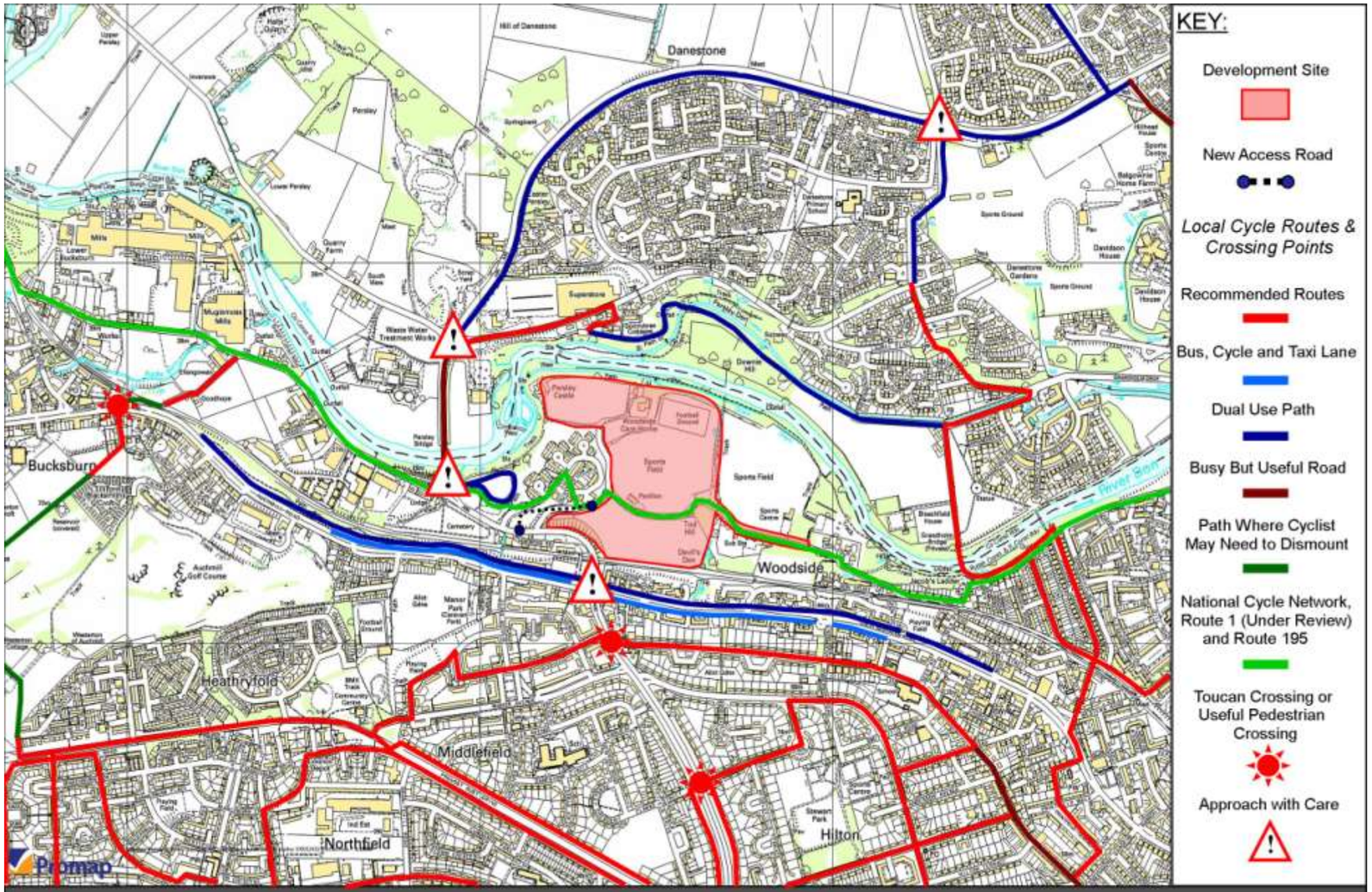


FIG 78: IDENTIFIED LOCAL CYCLE ROUTES AND CYCLING FACILITIES

It is for the Transport Assessment to determine whether development can be accommodated on the road network prior to the mentioned infrastructure being in place. The TA will also determine what infrastructure is required and when.

6. Masterplan

6.7 Access and Connectivity (cont.)

Path networks and pedestrian routes are illustrated on the plan opposite, figure 79.

The existing access at Mugiemoss Road, to the site and Hutcheon Low is to be retained and reused as pedestrian links.

Links to core paths will be strengthened through the formation of a path network through the development that links to adjacent areas.

The most direct possible link to Mugiemoss Road will be investigated, topography permitting.

Current desire lines from Hutcheon Low will be formalised as paths.

NCN 1 will be improved, surfacing and lighting to create a more attractive and safe route.

Safe routes to schools and local shops have been outlined at the Masterplan stage and will be further considered in detail as part of any future planning application for the site.

Path connections to Hutcheon Low will be designed to an adoptable standard. Details of path design will be submitted as part of the planning and Road Construction Consent application processes.

Any proposed pedestrian route to Don Terrace (to the east) will require to be upgraded to an adoptable standard.

The development access road will be designed to have a shared use foot and cycleway on one side and a footway on the other.

FIG 79: PEDESTRIAN NETWORK

6.8 Street Hierarchy

Civic Space—Village Square

Primary Route

Residential Courtyard

Residential Street

Street Hierarchy

A hierarchy of streets is proposed, with the difference between a primary access road and lane being obvious to users, this should also encourage a sense of place, see figure 80 opposite. The development will vary in density from the tight urban pattern at the proposed village centre, to lower density homezone layouts at the village edges, and will be reflected in the street scale and layout.

The streets will change in character as they move from the village centre to the edge of the village, by including more gardens, trees and open landscaping forming a transition zone to the surrounding undeveloped areas.

On street parking throughout the development will be kept to a minimum and discouraged through design. On all residential streets, all individual residential car parking should be located to the rear of properties and accessed along streets in accordance with Designing Streets.

The central square area will be largely pedestriansed with adequate and designated car and cycle parking.

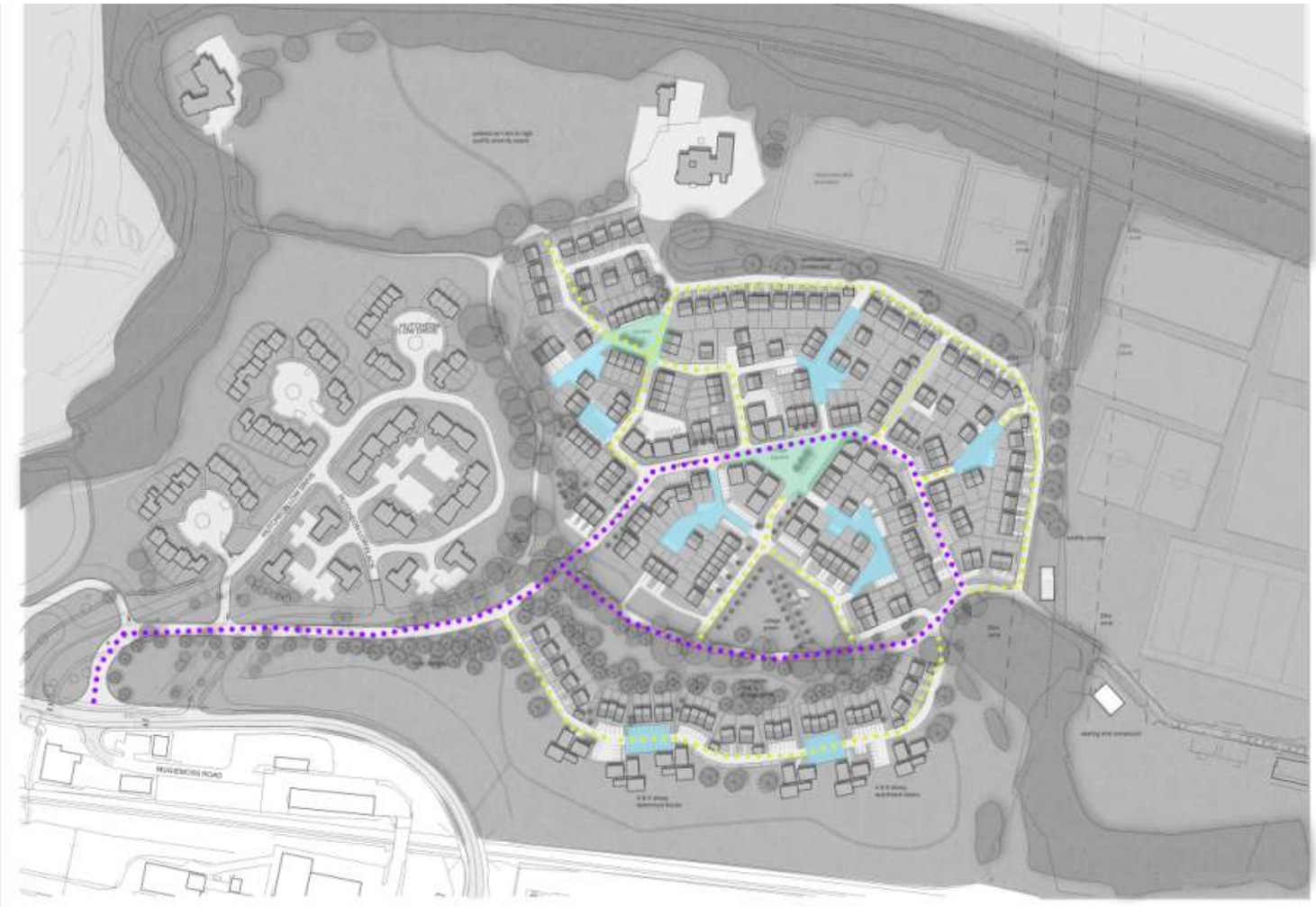


FIG 78: STREET HIERARCHY

These street and other further streets, lanes and shared surfaces will be designed to meet appropriate Aberdeen City Council standard and requirement as well as ‘Designing for Streets’ policy.

The successful development at Donside further downstream sets a good precedent and benchmark.

None of the streetscape other than the central village square (the main civic space) has been included in the open space calculations.

Details of road surfaces, dimensions and parking arrangement will be assessed and considered through the subsequent planning and Roads Construction Consent applications.

6. Masterplan

6.8 Street Hierarchy (cont)

Generally there are four main distinct categories of street / space design within this site.

Civic Space—Village Square: The civic square is the neighbourhood hub, the focus of the urban zone. It will be a simple clear space with shared surfaces, with trees and street furniture, any future bus provision will be able to pass through this space without dominating it.

Following 'Designing Streets' guidance, the design of the spaces will put the creation of 'place' ahead of vehicular movement. The street forming this space will not divide the village square, but will be thoughtfully designed to fully integrate as part of the overall design. These spaces should be seen as an opportunity to influence driver behaviour to the advantage of pedestrian movement.

This area will be a key landmark within the development, and will provide opportunity for passive recreation, community interaction and a potential location for community events. The space will be traffic calmed, pedestrian priority with safe crossing of the street.

Further detail on surface treatment, use and movement routes of the two Civic Spaces identified will be submitted as part of the planning and Road Construction Consent application processes, including details of cycle/car parking arrangements and traffic management for these areas.

The primary street: the core street that connects Persley Den to Mugiemoss Road., designed to accommodate a future public transport link, carriageway will be a minimum of 6m.

The residential courtyard: the priority is for pedestrian and cyclist in these areas, speeds will be kept to a minimum (<10mph) due to road narrowing, the character of the area and landscaping.

The residential street: the design of these street will keep speeds low (<20mph), using landscaping and street geometry. Limited forward visibility will require drivers to slow down, and promote natural pedestrian priority.

A simple palette of materials will be used, the use of colour coded hierarchy for the streets, lanes, courts and civic spaces will be investigated.

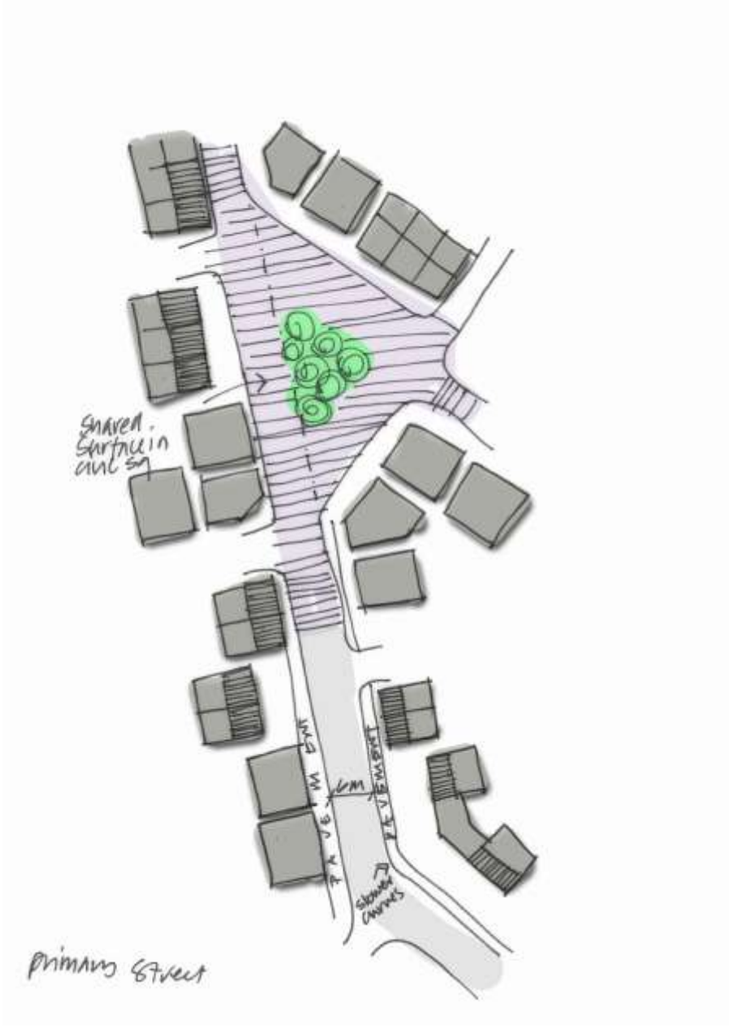
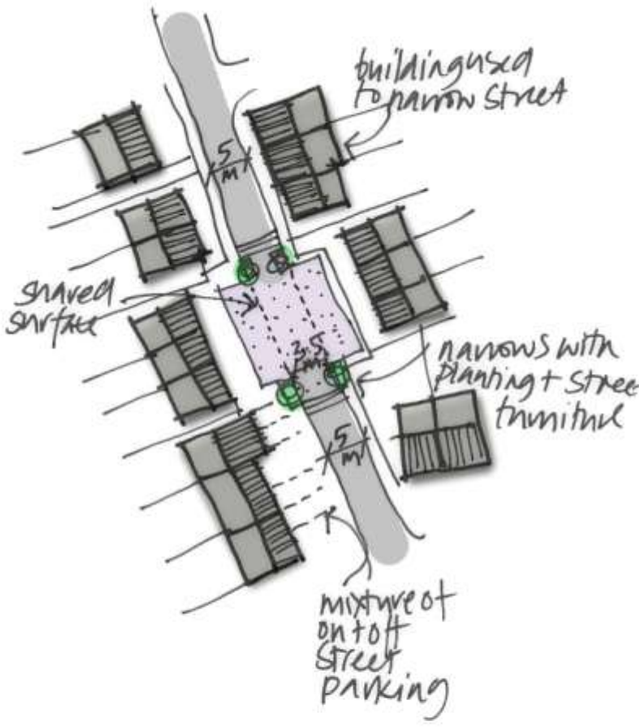


FIG: 81: PRIMARY STREET INDICATIVE LAYOUT



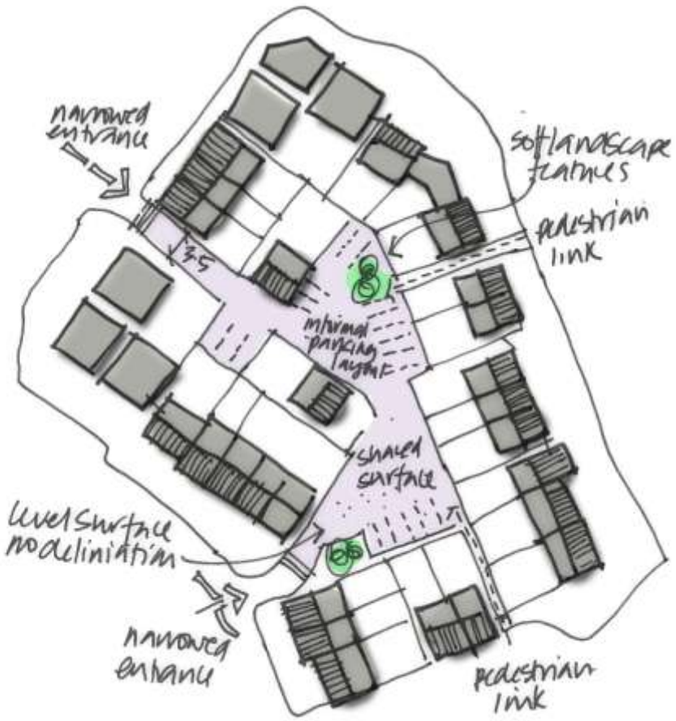
residential street

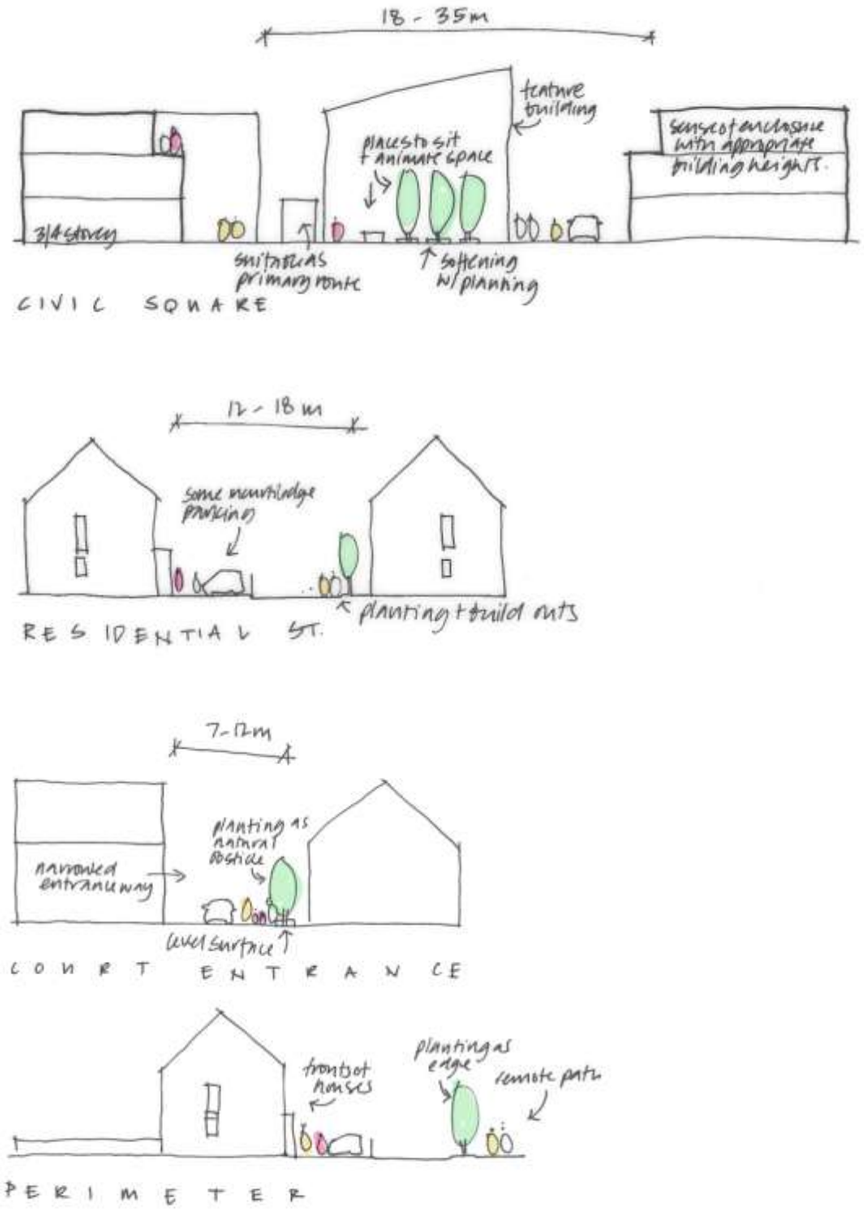
FIG: 82: RESIDENTIAL STREET INDICATIVE LAYOUT

It is the ambition that all roads, lanes and spaces will be of adoptable standard.

The masterplan recommends that only the minimum of signage is utilised other than street signage, so that unnecessary street clutter is minimised.

Street lighting should be carefully considered, potential for wall mounting should be investigated, especially in rear courts and civic spaces. Street lighting that limits upward light throw to reduce any night time light pollution.





residential courts

FIG: 83: RESIDENTIAL COURTYARD INDICATIVE LAYOUT

FIG: 84: INDICATIVE STREET CROSS SECTIONS

6. Masterplan

6.9 Heights and Massing

4-6 storey flatted properties

3/4 storey buildings

2/3 storey

2 and 1 and 1/2 storey detached, semi detached

The proposed development is suitable for up to 400 dwellings with a general mix of 1/3 flatted properties and 2/3 houses. Around 130 properties are sited in the Persley Brae area, the majority of the dwellings are found in the central area with further pocket of 14 located to the north west corner.

In the main the development is at its most dense and formal at the centre of the development in and around the village square and becomes notably less so at the peripheries. The In the centre of the development flatted buildings may be used to define the square where are detached properties will be found at the village edge looking out toward the river.

Persley Brae has a notably different topography and as such apartment blocks with smaller footprints have been used to the slopes to the south of the site. The density here will be higher as a result of the apartment blocks. These will enjoy views over the roof scape of the development, to the River Don and Bridge of Don beyond. The variety of differing heights adds character and variation to the streetscape.

There will be 150 affordable dwellinghouses within the development, these will be tenure blind and fit in with the whole of the development. A wide range of dwellings have been provided, from one bedroom flats

FIG 85: HEIGHTS AND MASSING DIAGRAM

to a five bedroom house, as per the following mix. These will be integrated throughout the development.

Proposed Outline Mix:

1 bed:	**10-15%**	**4 bed:**	**25-30%**
2 bed:	**20-25%**	**5 bed:**	**5%**
3 bed:	**35-40%**		

6.10 Edges / Key Buildings

Key building lines

Key development edges

Key buildings / end buildings

Key building lines and buildings within the development will help define public spaces and routes, whilst adding character.

Sensitively handing the edge of the development will help create an appropriate village edge.

Key buildings / end buildings can be used to finish a street access or turn a corner. These will have gable feature window to assist with natural supervision and to avoid blank gables, a gable window features are a traditional detail of Aberdeen housing.

Strong building line will help define the ‘urban’ gateway to the development and the civic spaces.

FIG 86: KEY EDGES AND BUILDING DIAGRAM

7. Character Areas

Village Centre / Main Avenue

The Lanes

Persley Brae

Parkside

To create a village development with recognisable special ‘character’, the village has been broken down into different character areas. These areas will celebrate key townscape features and use their design to create a sense of place and identity.

FIG 87: CHARACTER AREAS

7.1 The Village Centre / Main Avenue

Description

This is the formal urban heart of the village and will include formal recreational space overlooked by housing. This will also be the appropriate area for small-scale retail provision if demand can be identified. A convertible residential / retail unit is being considered for this location..

The buildings here will be positioned in such a way and of an appropriate scale to help define an appropriately sized central space. This node will be the centre of activity within the development and represent the heart of the development.

Good connections to the rest of the site will help ensure the success of the area, and encourage social integration.

Materials

The palette here will feature predominately hard surfaces, such as granite setts. A simple palette of materials will be identified and agreed with Aberdeen City Council. All materials should be robust and easy to maintain and replace.

Massing and Density

This is the most urban and dense area of Persley Den village, with a high concentration of flats. The massing in this area can rise to 4 storey in feature blocks or corner blocks

The buildings here will be positioned and of an appropriate scale to enclose the space and shape the main street.

Parking

Cycle parking will be provided in this area, it will be secure, overlooked and part of the street furniture.

Both on street and off street parking is applicable in this location. The careful use of materials will emphasise that parking is an integrated part of the public realm.

FIG 88: CHARACTER AREA SKETCH

Architecture

Marker buildings should be celebrated in this location to emphasise the key public space. The use of feature windows at corners and active frontages onto public realm will help activate the space and maximise the natural surveillance of public spaces.

Landscape Design and Features

Opportunities to sit outdoors will be included. Benches and potential gathering areas will be located to encourage social interaction whilst minimising any disruption to dwellings. Opportunities for cycle and car parking will be provided. However, this will not be at the expense of pedestrian movements.

Following ‘Designing Streets’ guidance street design must consider place before movement. Streets will be designed as part of the space, contributing to place creation as well as serving a movement function. Where the primary street passes through the village centre it will do so sensitively and in an integrated manner.

FIG 89: KEY CHARACTER AREA OBJECTIVES

7. Character Areas

7.2 The Lanes

Description

The lanes are a semi-private and more intimate area than the village square. The houses will in the main face to the outside of the blocks addressing the street whilst behind a shared surface courtyard area will be created. Within the courtyard there will also be housing fronting lanes.

Houses will have small planted areas in front to create a defensible space to the street. Trees and street furniture used as speed governors constricting entrances to courtyards to slow traffic.

Massing

Massing in this area will be generally 2 to 2 and 1/2 storey with pockets of 3 and 4 storey required to create an urban edge of public square etc.

Density

This will be an area of medium density housing coverage.

Parking

There will be limited in curtilage parking and courtyard parking will be provided to the interior of the urban blocks.

Architectural Features

Gable windows to ensure discreet viewing of courtyard areas.

Built walls and garages and turning building gables end on will be used to define courtyard entrances and to reduce the carriageway width.

Landscape

Small and medium trees will be used at key locations in order not to block any light.

FIG 90: KEY CHARACTER AREA OBJECTIVES

FIG: 91: CHARACTER AREA SKETCH

FIG: 92: CHARACTER AREA SKETCH

FIG: 93: CHARACTER AREA SKETCH

7.3 Persley Brae

Description

This area here enjoys an elevated position on the site and will benefit from great views across the site. There is a mix of buildings types here including, terraces, semi-detached, detached and apartment blocks.

The road here meanders following the contours and topography of the site the feel here is less formal. The apartments buildings are clustered with terraced housing to create informal squares. These squares are then strongly connected by pedestrian links to the village green and the rest of the development.

Materials

The palette here will feature hard surfaces and perhaps the use of landscaped terraces, special attention will be required in regard to porous materials and the SUDS strategy.

A simple palette of materials will be identified and agreed with Aberdeen City Council. All materials should be robust easy to maintain and replace.

Massing and Density

The height in this area can rise to 4-6 storey at the apartment blocks, which will be clustered with other buildings to create informal squares. Due to the naturalistic characteristics of this part of the site the use of apartments allows lesser footprints, meaning that more green to be visible. Overall the density here is medium.

Parking

Parking for the apartments and terraces will be available in the squares and supplemented a limited amount of on street parking. In curtilage parking will be used for the semi-detached and detached housing The careful use of materials should emphasis that parking is an integrated part of the public realm.

Architecture

The apartment buildings will be used to good effect in this location to maximise the public space. The use of feature windows at corners and active frontages onto public realm will help create activity in the space and maximise the natural surveillance of public spaces.

FIG 94: EXAMPLE OF HIGH QUALITY FLAT DESIGN, CRAIGMILLAR

The building materials will be carefully considered to ensure cohesion between the apartment blocks and the housing. Clear simple detailing will be promoted.

Landscape Design and Features

Opportunities to sit outdoors included. Benches and potential gathering areas will be arranged and located to encourage social interaction whilst minimising any disruption to dwellings.

Paths connecting this area to the village green and square will be attractive and enjoyable to use, not too steep or meandering, and appropriately lit

Opportunities for cycle and car parking must be provided, However, this will not be at the expense of pedestrian movements.

Design of primary street and space to be considered and designed together. Streets will be designed as part of the space, contributing to place creation as well as serving a movement function.

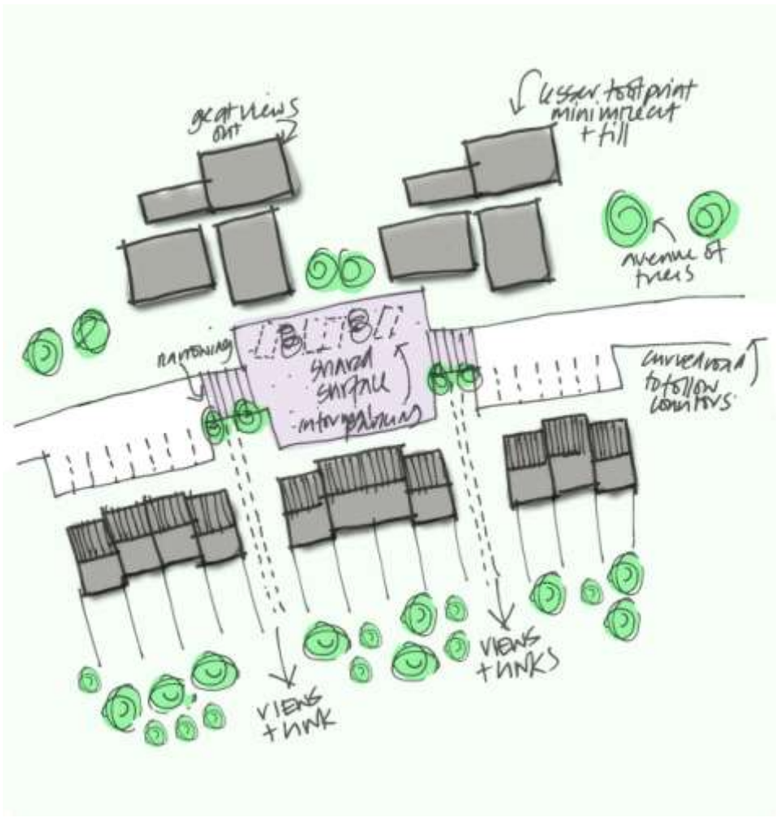


FIG 95: KEY CHARACTER AREA OBJECTIVES

7. Character Areas

7.4 Parkside

Description

This area is soft and informal, all housing has been orientated to look out over the parkland. This area will provide an attractive and appropriate edge to the development when viewed from the riverside and wider amenity areas...

Semi and detached housing would be suitable in this location.

Massing and Density

Housing in this area will be 2 to 2 and half storey and the housing coverage will be at its lowest density.

Parking

Parking will mostly be in curtilage in this location, with some areas of on street parking for visitors.

Architectural Features

This area in particular is suitable for high quality development, and housing has deliberately been orientated to overlook the parkland and mature trees. As such high quality materials should be used in this location.

Landscape

To help create a soft and green edge to the development as well an add to transition from village to parkland the perimeter road will have a remote path and outside which has informal tree planting.

Using trees as build outs and speed governors to the inside of the road would also be appropriate.

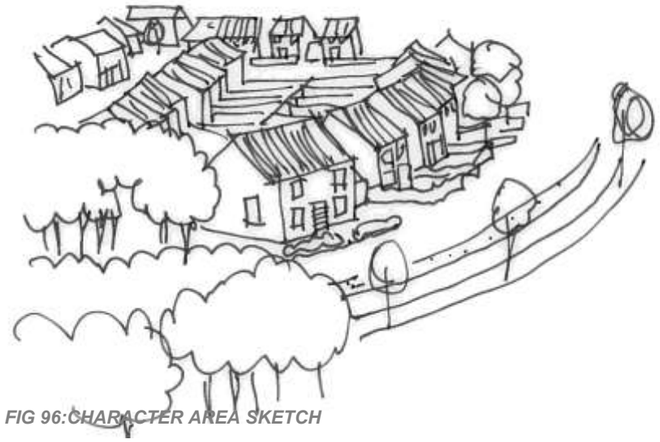


FIG 96:CHARACTER AREA SKETCH

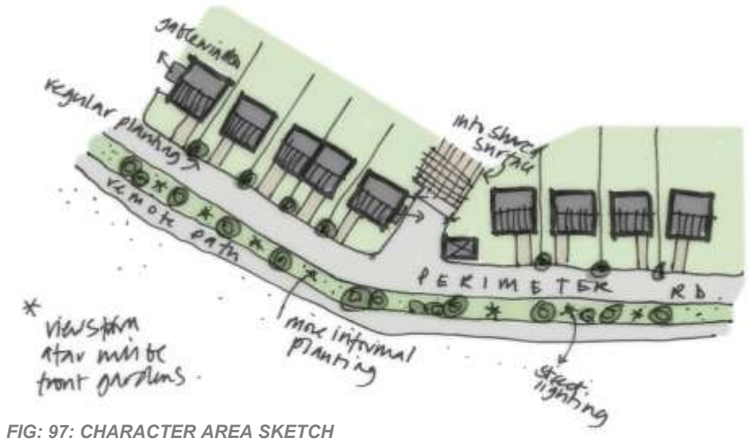


FIG: 97: CHARACTER AREA SKETCH

FIG 98:CHARACTER AREA SKETCH

FIG 99: CHARACTER AREA SKETCH

8. Flooding and Drainage

Foul Drainage

New gravity foul sewers will be provided to serve the development and these will be located within the proposed roads and communal driveways where required.

There is existing Scottish Water infrastructure located within the site. At the western boundary near to Hutcheon Low Drive there is an existing Waste Water Pumping Station. Discussions are ongoing with Scottish Water to determine whether this Waste Water Pumping Station and associated rising main can service the proposed development.

The foul flows from the development will either discharge to the existing pumping station or to a new Waste Water Pumping Station and will be pumped by a rising main to the existing Scottish Water sewers located within Great Northern Road.

All individual houses and properties will each be connected to the foul sewers via a disconnection chamber.

Surface Water Drainage

New gravity surface water sewers will be provided to serve the development and these will be located within the proposed roads, communal driveways and areas of open space where required. All individual houses and properties will each be connected to the surface water sewers via a disconnection chamber.

All surface water flows will be directed to an extended detention basin at the northern part of the site, which will provide treatment and attenuation, see figure 100.

The SUDS basin is intended to be fully adopted by Scottish Water. This requires the basin to be designed and constructed in accordance with Scottish Water's Regulations detailed in their document 'Sewers For Scotland, 2nd Edition'. The basin will be constructed to respect existing ground levels and will have a 'controlled' outlet to the existing burn. The basin will effectively be empty for the majority of the time, as every rainfall event must empty from the basin within 24 hours. The basin is only likely to be holding water during significant rainfall events, such as those that would prevent the pitches from being operated.

FIG 100: SUDS STRATEGY SKETCH

The basin will be grass lined and maintained by Scottish Water. A fence will extend around the perimeter of the basin.

The extended detention basin will discharge into a grass conveyance swale, which will provide further treatment and sediment removal.

Surface water discharge from the site will be discharged at a controlled rate either into the existing sewer located along the eastern boundary of the development or directly into the River Don via an offsite sewer. The discharge point and rate is to be agreed with Scottish Water and Aberdeen City Council.

The proposed discharge rate will not exceed that of the pre development run off value. Existing surface water drainage will be upgraded.

Sewers and SUDS measures will be designed and installed in accordance with Sewers for Scotland, Second Edition, November 2007 and / or The SUDS Manual (CIRIA C697). All areas of the site will drain to the extended detention basin and the grass swale. These measures will provide two levels of treatment for the development.

The use of buffer strips in the development will also improve control over drainage and reduce any flood risks, in line with Aberdeen City Council's Natural Heritage Supplementary Guidance

A Water Impact Assessment and Drainage Impact Assessment are being progressed and will form part of any subsequent planning application for the OP25 site.

FIG 101: EXAMPLE OF GRASS SWALE

FIG 102: EXAMPLE OF GRASS SWALE

FIG 103: INUNDATION PLAN AND CURRENT MASTERPLAN

Flooding

The inundation plan shows that the flood extent is largely confined within the banks of the river and the former mill lades to each side. None of the proposed buildings or access routes as shown on the provided masterplan is located within the predicted flood extent, see figure 103.

9. Services and Utilities

FIG 104: WATER

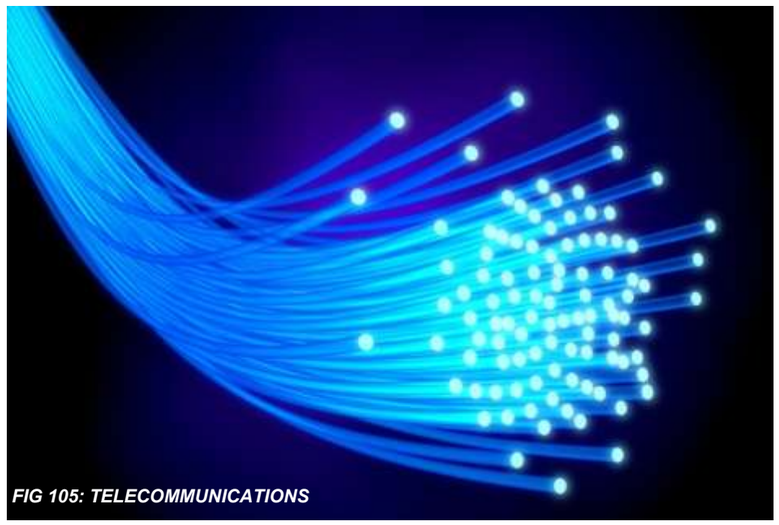


FIG 105: TELECOMMUNICATIONS

The development will require new utility services to be brought in to the site to serve the demand required for Gas, Water, Electricity & Telecommunications as follows:

Gas

The new Gas service will be provided from the existing Intermediate Gas Pressure pipe located on Mugiemoss Road which will be extended to the site edge where a pressure reducing station will be located to reduce the supply line to a low pressure for onward distribution of gas infrastructure around the development in the spine roads. Individual building connections will be taken from this low pressure main and terminated in gas meters. Any required off-site reinforcement of the gas network to accommodate the development will be implemented.

Water

The new water service will be provided from the existing Scottish Water trunk main located on Mugiemoss Road. From here a new water main will branch off and enter the site distributing around the development in the spine roads. Individual building connections will be taken from this main and terminated in water meters. Any required off-site reinforcement of the water network to accommodate the development will be implemented.

Electricity

The new Electricity infrastructure to the development will be provided by connecting to the existing SSE network via the underground 11Kv circuit presently serving Hutcheon Low Drive and extending this circuit around the spine roads to new 11Kv Substations which will be strategically located to service the development without aesthetically or spatially compromising the proposed design & layout. From these substations electricity will be distributed to the development via a network of LV cabling routed underground following the spine roads with individual building connections taken from this and terminated in electricity meters. SSE have confirmed no off-site reinforcement of the SSE network is required to accommodate the development.

Telecommunications

Telecommunications infrastructure will be provided to the development by connecting to the nearby Openreach network. A network of telecoms ducting will be laid underground along the spine roads connecting to the existing BT Openreach infrastructure located on Mugiemoss Road. Individual building connections will branch off this network & terminate internally. Both fibre & copper connections for telephone and broadband services will be available over the Openreach network via a wide range of service providers such as BT, Orange, Talk Talk etc.

10. Sustainability

Sustainability

The guiding philosophy will be to reduce the energy demands of the development through passive design, energy efficiency measures and the selection and recycling of building materials, taking advantage of the site characteristics through the building form and fabric, before meeting the reduced demand in a carbon efficient manner. Our aim is always to minimise operational energy and potable water consumption while ensuring a thermally comfortable and functional environment. A combined energy efficiency and renewable energy strategy will be developed at detailed design stage through the use of dynamic thermal simulation, to optimise the proposed development's performance.

The primary aim will be to demonstrate energy efficiency and a reduction in CO2 emissions by complying with and surpassing the requirements set in legislation. Thermal analysis modelling during detailed design will enable the detailed energy usage patterns to be predicted and the most appropriate and energy efficient Fabric, HVAC and lighting to be determined and their associated carbon emissions fully calculated.

FIG 106: RENEWABLE ENERGY

FIG 107 DAYLIGHTING

Regulations

The new Scotland Building Regulations to be released in October 2013 require carbon emissions to be reduced by a further 30% compared to the 2007 Standard. A phasing of the development may require some elements of the development to meet the 2013 standards and some to meet the requirements of future legislation, e.g. 2016.

Passive Design and Energy Efficiency

Our approach will be to develop an energy strategy for the complete development site. We would initially establish a schedule of accommodation for the site. Benchmarks for energy demands and carbon usage would then be established for each of the plot types. This assessment will utilise published standards and in-house data, together with projected forthcoming mandatory standards, to provide estimated energy demands and CO2 emissions.

In order to meet the targeted CO2 reduction passive design and energy efficiency measures are recommended in order to reduce the operational energy demands, the heating demand in particular.

Building Fabric

U-values which meet current and imminent Building Regulations changes are recommended

Air Permeability

The building construction should maximise air tightness. A maximum air permeability rate of 5m³/m²/hr@50pa is recommended. Air tightness testing should be carried out following construction completion to demonstrate that the targeted air permeability has been achieved.

Orientation

The dwelling orientation should be optimised to reduce the heating demand. Living areas and bedrooms should be south facing to take advantage of low winter sun heat gain. Solar shading could be provided to minimise any unwanted solar heat gain during summer.

Glazing should be selected to maximise useful solar gain, minimise unwanted solar gain and maximise day lighting.

Whole House Ventilation

Living areas and bedrooms should be naturally ventilated via openable windows whereas toilets and kitchens will likely need local extract fans. It is recommended that make up air and natural ventilation from trickle vents is supplied from the roof space to provide solar pre-heat via solar gain and internal heat gain naturally rising to the roof space.

Day lighting

Day lighting should be optimised to reduce reliance on artificial lighting. This should include facade glazing but also sun pipes and roof lights to central areas.

11. Phasing and Delivery

January 2014	Masterplan Adopted as Supplementary Guidance
Spring 2014	Planning Permission in Principle Approved
Autumn 2014	Matters Specified in Conditions Approved
End 2014	Building Warrants and other Statutory Consents Approved
Spring 2015	Commencement of Development
End 2015	Enabling Infrastructure Works (Roads, Drainage, site works)
Throughout 2016	Construction and completion of phase 1 75 units at Persley Brae west; Construction and completion of phase 1 70 units at Village Centre
Throughout 2017	Construction and completion of phase 2 75 units at Persley Brae east; Construction and completion of 70 units at The Lanes
Throughout 2018	Construction and completion of 110 units at The Lanes and Parkside

FIG 108: PHASING DIAGRAM

12. Infrastructure and Developer Contributions

In line with the Aberdeen Local Development Plan Action Programme and the Council's Developer Contributions Manual, a number of contributions from the Persley Den development have been identified.

In accordance with, and having regard to, extant Scottish Government policy and guidance on planning obligations and developer contributions, the developer will aim to deliver the requirements set out in ALDP Action Programme and the Infrastructure and Developer Contributions Manual. These are set out in the table opposite.

Considerations for contributions to the wider infrastructure needs as detailed opposite will be included in the context of the community benefits delivered on site which include 150 affordable houses and sports facilities. In addition to the developer contributions outlined in the table opposite, the following aspects will also have to be considered:

Flooding

Site OP25 (or part of) is at risk of flooding. Developers will be required to provide a Flood Risk Assessment (FRA) in support of any development proposals for this site, including a masterplan.

Water

A possible contribution to water and waste water infrastructure may be required to fund any necessary upgrades to Part 3 Assets to accommodate the development and maintain the existing customer's level of service.

Pollution Control

There will be a requirement for pollution prevention and environmental management to be addressed by the applicant during the construction phase and details of this submitted as part of any planning application for the site.

Waste Management

All properties within the development will be designed to provide for waste separation and collection, details of which will be provided as part of any planning application for the site.

A site waste management plan will be submitted as part of any planning application for the site, including details how waste, including construction and demolition waste, will be managed, minimised and reused at the construction stage, demonstrating that waste on the site is managed in a sustainable manner.

Strategic Transport Fund	Contributions to the Strategic Transport Fund (STF) will be required as the STF policy applies to this site.
Roads / Access	Road connection from OP135 Woodside development to Mugiemoss Road including rationalisation of existing access points on the north side of Mugiemoss Road. Contribution towards improvements of Mugiemoss Road to Persley Bridge. Further road infrastructure improvements may be required depending on the results and assessment process of the Transport Assessment.
Walking / Cycling	Contribution to new pedestrian/cycle bridge across the River Don at Mugiemoss Mills. Connections through site to local walking/ cycling networks, including upgrades to Core Path 7, contribution to walk/cycle route from Aberdeen to Blackburn along A96 with connections into Dyce and retention and upgrade of National Cycle network running through southern section of the site and immediately beyond.
Sustainable Travel	A residential travel plan leaflet will be required as part of the development to highlight options available to residents.
Education	The site is zoned to Woodside Primary School which is forecast to have some spare capacity to accommodate pupils generated up until 2020, however an extension or temporary accommodation may be required. The site is zoned to St Machar Academy, which has some spare capacity to accommodate pupils generated up until 2019, however an extension or temporary accommodation may be required and developer contributions will be sought.
Health	This site will be required to make a proportionate contribution towards the provision of additional health facilities in the area.

FIG 109: DEVELOPER CONTRIBUTIONS TABLE

Environmental Licensing

It is acknowledged that planning permission is separate to environmental licensing and even if planning consent is granted any environmental authorisation will be assessed separately and may not be granted.