

Kirkcaldy Charrette Area Green Infrastructure Masterplan

April 2018



Employer: Fife Council
Fife Council Economy, Planning and Employability Services
Kingdom House
Kingdom Avenue
Glenrothes
KY7 5LY

Agent: UrbanPioneers
116 Redhall Drive
Edinburgh
EH14 2DT
www.urbanpioneers.co.uk

Prepared by: UrbanPioneers Ltd

with: Calum Duncan Architects
Neilson Partnership (Cost Consultancy)

Approved by: Ian McCrory
Lead Professional (Economic Regeneration)

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00 Executive Summary

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Background & Site Boundary

UrbanPioneers were commissioned in May 2017 to prepare a Green Infrastructure (GI) Masterplan, which encompasses all green and blue spaces, for the Pathhead Area in Kirkcaldy based on findings from the Charrette, a series of intensive and collaborative consultation workshops, held in spring 2014.

Since the completion of the Charrette in 2014 a substantial amount of new affordable housing has been built on the junction of Maltings/Smeaton Road. Further areas for housing and economic development were identified and it is hoped that these will follow on the back of the first development. These are the first and much welcomed steps towards regeneration of the former industrial heart of Kirkcaldy.

Successful regeneration and sustainable housing however also requires accompanying green infrastructure to turn new housing into attractive and desired neighbourhoods, tie the new developments into the existing urban fabric and meet the Council's and Scottish Government's own targets to create happy, healthy and sustainable towns and cities.



Kirkcaldy is Fife's second-largest settlement (just under 50,000 residents) and is one of its key centres. The masterplan area contains one of the highest concentrations of long term vacant and derelict land in Fife. For a number of years, proposals to improve this part of Kirkcaldy and efforts to realise the area's regeneration failed to materialise. This is now starting to change with a number of projects coming forward. In particular there are substantial numbers of new affordable homes being built within the masterplan area. This presents a challenge as there are still many areas of dereliction and vacant land close to the new houses and the greenspaces, including all areas of grass, trees, or other vegetation set apart for recreational or aesthetic purposes, and paths which exist in the area are poor quality and poorly overlooked which will deter public usage.

The masterplan area also represents a gap in the wider network of greenspace habitats and with it disconnections in active travel routes. Several green networks are located within the Kirkcaldy area, most of them along the edges. Originally these networks would have been connected to the coast but these links to the coastline have been reduced and broken through settlements and industrialisation. Within the masterplan area itself elements of the Kirkcaldy Dens network are still visible. The vision is to re-establish the link to the coastline but also to create east to west corridors that connect the various networks to each other. (Refer to page 22 for more information on green networks)

It is widely accepted that high quality green infrastructure provides social, economic and environmental benefits to the areas around them. It is therefore considered that the creation of high quality green spaces, habitat corridors, paths and cycleways through the masterplan area are fundamental to the successful regeneration of the area by enhancing the lives of the new residents and providing an attractive place for businesses.

The Charrette report sets out the following vision for the masterplan area:

- A better connected place, with priority on convenient, comfortable and safe walking / cycling routes and reduced dominance by motor vehicles.
- An attractive public realm, the external places that are accessible to all, framed by a fine-grained culturally rich urban fabric, focussed particularly along the Victoria Rd axis which offers a prime walking/ cycling route to the town centre.
- Improved visual and physical connections to the coastline.

This masterplan outlines Design Proposals and Principles to improve qualitative greenspace provision, expand the green infrastructure network and active travel routes within the masterplan area and beyond its boundary in order to deliver this vision.

Note: The greenspace calculation undertaken as part of this report may differ from those used in other documents such as The Fife Greenspace Audit. The basis of the calculations used are set out within the report.

To achieve the outlined masterplan for the Kirkcaldy Charrette area, the following specific opportunities and challenges have emerged through the masterplanning process. Each has been addressed in the report:

Opportunities

Location

- The close proximity to town centre, railway station and regional greenspaces (Pathhead Sands, Ravenscraig Park) as well as key attractions, public amenities within the masterplan area form a good basis for regeneration of the area.

Topography & exposure

- Due to falling topography towards the coast and south facing, the area benefits from views that inform and shape identity as well as offer good solar aspect.

Building development

- Within FIFEplan several sites within the area have been identified as development opportunity sites, with a majority for housing, which will bring desired increase in the number of residents into this area.

Greenspaces

- Existing greenspaces and corridors can be improved by opening up access, increasing their quality and biodiversity as well as creating new greenspaces that establish missing links between the existing ones as well as increase greenspace provision for adjacent homes.

Walking and cycling networks

- The existing network is disconnected and offers limited adequate cycling provision.
- By improving existing routes, creating new connections and expanding existing pathways into wide shared paths a coherent and well connected sustainable network can be created.

Constraints

Access

- Existing greenspaces offer limited access points with some not accessible at all
- Two major roads (Hayfield Road & Nether Street) create barriers in regards to connection and permeability
- Railway line limits connectivity with only two access points in east & west of the site

Potential Barriers

Land Ownership

- Proposed connections and greenspaces are located on land not owned by Fife Council. In some instances the ownership has to be established in the first place before implementation is possible.
- The establishing of the proposed greenspace provision and connecting green infrastructure & active travel routes on development sites needs to be secured through early discussions with developers as well as through the planning system

Land contamination

- Due to high industrial activity in the area it is most likely that the existing land is contaminated and adequate remediation measures have to be in place in order to mitigate this

Green Infrastructure Masterplan Strategy

In order to establish the Green Infrastructure Masterplan key elements have to be achieved:

- Creating **two continuous green networks** from Dunnikier to the Coast. One to the west of the site boundary, the other one along its eastern edge. Both should bridge the railway line to enable easy movement between both halves of the development site
- Linking these two green fingers with a **east-west axis** via a **linear green network** following the railway line to create a connecting network of off-road path and greenspaces whilst simultaneously addressing the lack of close accessible local open space.
- Creating connections that tie into the adjacent surrounding developments as well as within the site
- Establish attractive entrances and social meeting points
- Create a sustainable network that increases permeability within the area and links into existing routes in the wider area



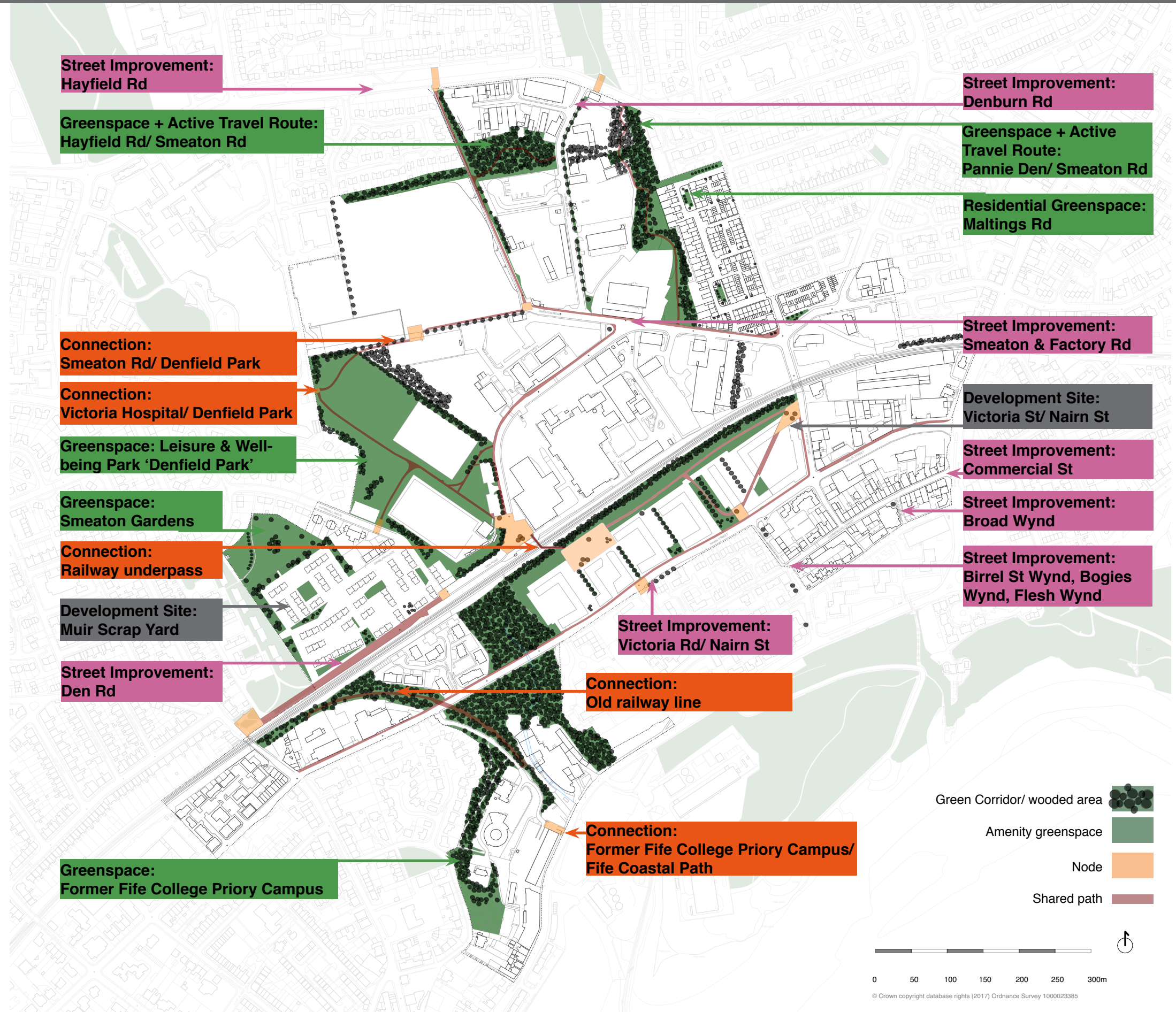
Delivery Action Plan

To achieve these key elements for the Charrette area, the masterplan outlines projects within three different categories:

- Greenspaces
- Connections
- Street Improvements

Furthermore the masterplan outlines site plans for two sites:

- Previous Nairn's site along Victoria Rd/ Nairn St
- Muir Scrap Yard along Den Road





Delivery Action Plan & Budget Costs

Project	Scale			Nature		Timescale			Impact			Priority			Lead Agency	Potential Funder	Budget Costs £
	S	M	L	Easy to deliver	Complex	S	M (1-4 yrs)	L (over 4 yrs)	Low	Medium	High	Low	Medium	High			
Greenspaces																	
Greenspace: Leisure & Well-being Park 'Denfield Park'			X		X		X				X			X	Fife Council Fife Sports Council		757,000
Greenspace + Active Travel Route 'Hayfield Rd to Smeaton Rd'			X	X			X				X			X	Fife Council	Sustrans (Match funder)	397,000
Greenspace + Active Travel Route 'Pannie Den to Smeaton Rd'			X		X (Ownership by others)			X		X		X			Fife Council		477,000
Residential greenspace 'Maltings Road'	X			X		X			X				X		Fife Council		10,000
Greenspace: 'Former Fife College Priory Campus'	X			X		X			X			X					46,000
Residential greenspace 'Smeaton Gardens'		X		X			X		X				X		Fife Council		116,000
Connections																	
Former Fife College Priory Campus/ Fife Coastal Path			X		X (Ownership by others)			X			X			X		Developer Contribution	118,000
Railway Underpass			X		X (Ownership by others)			X			X			X	Fife Council Network Rail	Developer Contribution Sustrans (Match funder)	164,000 (opening up of underpass not included)
Smeaton Road/ Denfield Park		X			X (Ownership by others)			X		X	X				Fife Council	Developer Contribution	248,000
Victoria Hospital/ Denfield Park	X			X				X			X			X	Fife Council NHS Fife		51,000
Old railway line		X			X			X		X		X			Fife Council	Sustrans (Match funder)	261,000
Street Improvements																	
Hayfield Road (Removal of fencing only)	X			X		X			X				X				2,350
Smeaton & Factory Road		X			X			X			X				Fife Council		145,000
Denburn Road		X		X				X			X		X		Fife Council		123,000
Birrel St Wynd/ Bogies Wynd & Flesh Wynd		X		X			X				X		X		Fife Council		60,000
Commercial Street/ Broad Wynd	X			X		X					X			X	Fife Council		42,000
Victoria Road/ Nairn Street			X		X			X			X			X	Fife Council		322,000
Den Road		X			X			X			X				Fife Council		199,000
Development sites																	
Victoria Street/ Nairn Street (KDY 44/17) (incl. Linear Corridor)			X		X (Ownership by others)		X				X			X			945,000 (Linear corridor only)
Muir Scrap Yard (KDY 18)			X		X (Ownership by others)			X			X	X					558,000 (Shared path only)
Greenspaces as part of development plots	Dependent on home units			Dependent on plot size		As per development						As per development					

Scale: S=Small (less than £50k budget); M=Medium (£50-300k budget); L=Large (above £300k budget)

Nature: Easy to deliver=Not many obstacles in order to implement; Complex=Constrains such as ownership, drainage issues, or level changes have to be address & solved prior to implementation

Timescale: As defined in brief

Impact: Based on the impact it has on user groups: Low=Residents; Medium=Local community; High=Town wide & regional community

Priority: A mix of low cost, high impact, easy to deliver projects as well more complex, ambitious projects

Kirkcaldy

Victoria Road Regeneration Corridor

Monday 2nd October 2017



Are you:

- A member of the community?
- A Local Business?
- A Community Group?
- A Local Landowner?

We would like to hear your views on streets, paths & greenspaces

We would like to hear your views on streets, paths & greenspaces

[www.kirkcaldy.gov.uk](#)

01 Context

Background: 2014 Charrette

Approach & Methodology

Engagement

Policy Context

History

Background: 2014 Charrette

Fife Council commissioned Ironside Farrar Ltd to carry out a charrette in Spring 2014 as a means of informing a Land Use Regeneration Strategy for the Victoria Road Regeneration Corridor in Kirkcaldy. This formed the basis of the brief for the Green Infrastructure Masterplan.

The **key outcomes** of the charrette at the time were:

- Place image
- Connections
- Local heritage & character
- Local needs
- Aspirational place
- Adaptability & resilience

This can be achieved by designing spaces, which demonstrate the following **qualities** of successful places defined in policy 14 of FIFEplan (2017):

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

Key Landscape Issues identified through the charrette

- Overall, helping to reverse the economic, physical and social decline of the area
- Gaps in the wider green network - a need to link path/cycleway and environmental habitat between north and south of Kirkcaldy.
- Improve visual and physical connections to the coastline
- General uplifting of place image

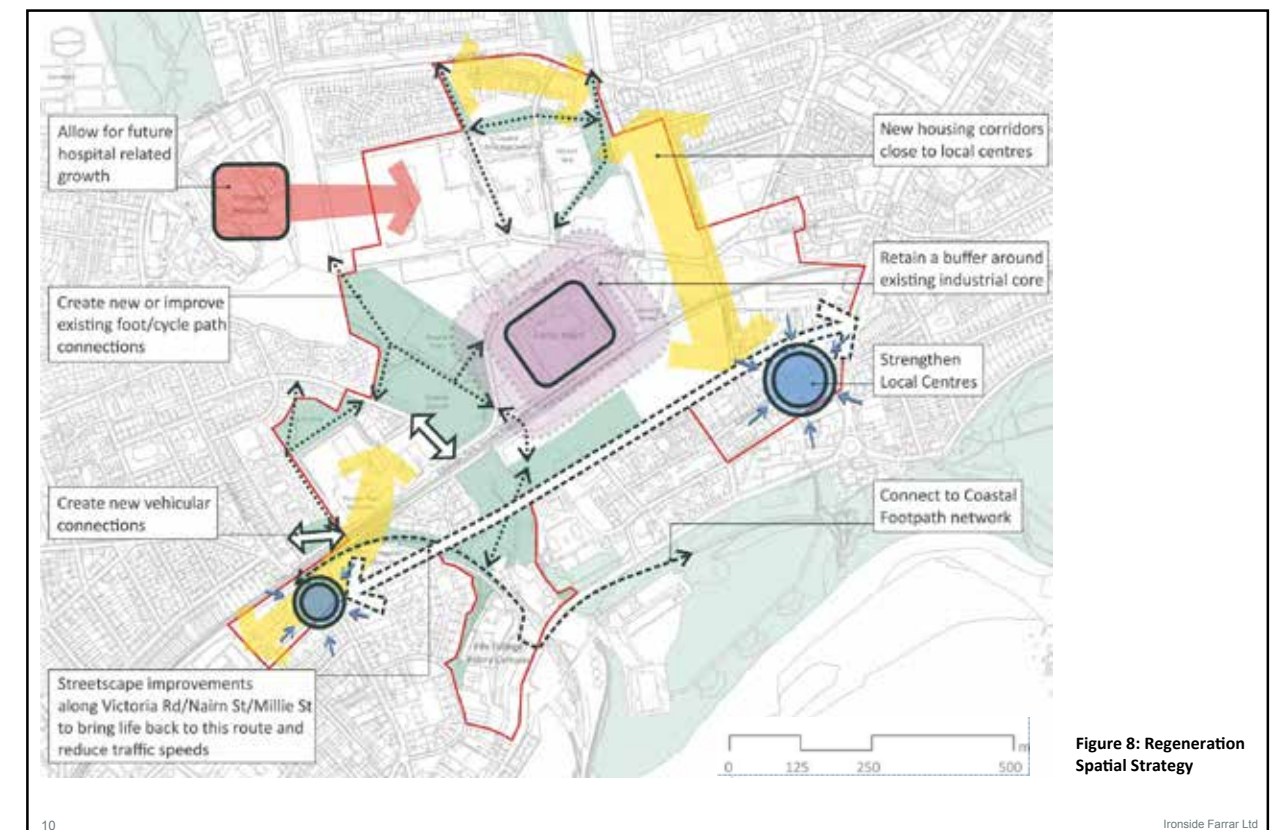
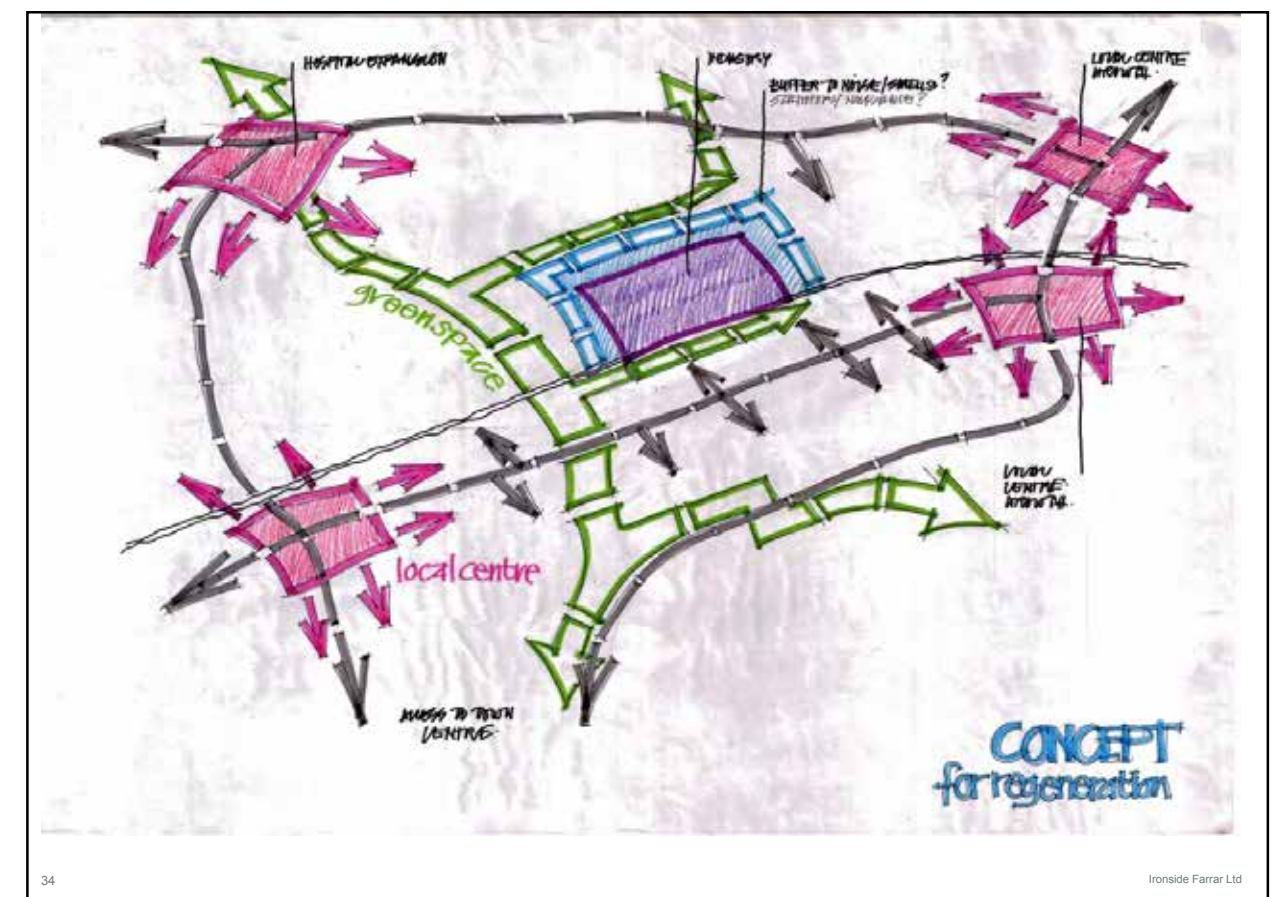


Figure 8: Regeneration Spatial Strategy



Extracts from the Ironside Farrar Charrette report 'Part 2: Regeneration Strategy'

Approach & Methodology

The aim is to deliver:

- A green infrastructure Masterplan (GI) that helps turn the degraded Pathhead area into an **attractive and vibrant** area
- A GI Masterplan that **builds on existing work** such as the 2014 Charrette and takes into account recent improvements to networks and/or new housing developments
- A GI Masterplan that is **achievable** and that meets the **highest aspirations** in a challenging climate.

Critical to this was to establish a baseline which required a thorough review of **existing work done** to date as well as **existing greenspaces** within the site boundary.

This included a review of the following documents:

- Charrette 2014: Victoria Road Consultation Report
- Charrette 2014: Victoria Road Regeneration Strategy
- Charrette 2014: Victoria Road Regeneration Action Plan
- Fife Council Making Fife's Places 2015
- Fife Council Adopted FIFEplan 2017
- Fife Council Greenspace Strategy and Audits for Kirkcaldy, 2009
- Fife Greenspace Audit
- Greenspace Strategy
- Green Networks in Fife
- Green Networks in Fife - FIFEplan Background Paper
- Fife Local Biodiversity Action Plan

Review of GIS mapping and:

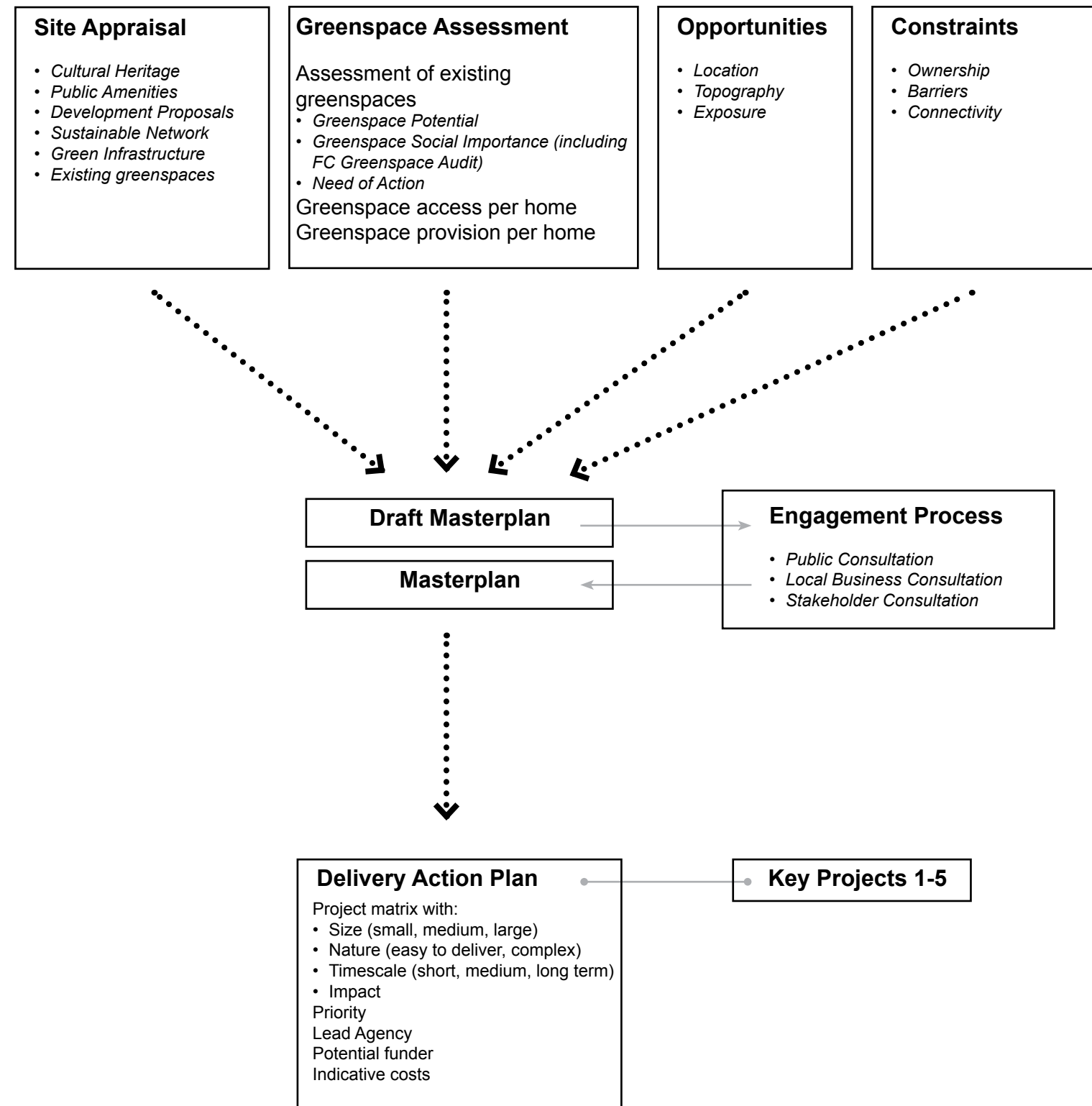
- Fife Council Core Path Strategy – Pathhead Area
- Fife Council Biodiversity and Environment Map – Pathhead Area
- Fife Council Cycle Network – Pathhead Area
- Fife Council Development – Pathhead Area
- Fife Council Green Network – Pathhead Area
- Fife Council Heritage – Pathhead Area
- Fife Council Tree Preservation Orders – Pathhead Area

In addition all existing greenspaces were reviewed with regards to their catchment area, accessibility and quality to maximise their potential and to identify a lack of greenspace within the site boundary to inform the suitable location of any proposed greenspaces.

The resulting GI Masterplan (stage 1) focuses on two key elements:

- Providing sufficient **greenspace** as set out in FC planning guidelines for existing as well as new housing developments by improving access or quality of existing greenspace or proposing additional greenspace where needed
- Improving **networks** and/or proposing new connections to bring life and movement into closed-off impermeable areas

As part of this masterplan a **Delivery Action Plan** was developed identifying key projects. Out of the projects scoring 'high priority' five have been selected to realise the first elements of the GI Masterplan independent of future housing developments within the area.



In addition to the documents listed on the previous page the following documents have been considered in the development of the proposed Green Infrastructure Masterplan:

- The Town and Country Planning (Scotland) Act 1997 as amended by the Planning etc. (Scotland) Act 2006
- The Town and Country Planning (Development Planning) (Scotland) Regulations 2008;
- Climate Change (Scotland) Act 2009
- National Planning Framework for Scotland 3 (June 2014)
- Scottish Planning Policy (2014)
- Various other Circulars and Planning Advice Notes

National Policy

The National Planning Framework (NPF 3) sets the context for development planning in Scotland and provides a framework for the spatial development of Scotland as a whole.

Key Planning Outcomes are:

- A successful **sustainable place** - supporting **economic growth, regeneration** and the creation of **well-designed** places.
- A **low carbon place** - reducing our carbon emissions and adapting to climate change.
- A **natural resilient place** - helping to protect and enhance our natural cultural assets and facilitating their sustainable use.
- A more **connected place** - supporting better transport and digital connectivity.

A key focus for NPF3 is promoting high quality development and sustainable economic growth, reducing energy demand, promoting an integrated approach to the provision of green infrastructure and reducing the need to travel and ensuring economic competitiveness.

Scottish Planning Policy (SPP)

The purpose of the SPP is to set out national planning policies which reflect Scottish Ministers' priorities for the development and use of land and is intended to promote consistency across Scotland whilst allowing sufficient flexibility to reflect local circumstances. The SPP is also intended to support the delivery of the Scottish Government national outcomes in respect of planning, namely:

- Planning improves quality of life by helping to create well-designed sustainable places for Scotland's people
- Planning protects and enhances Scotland's built and natural environments as valued national assets
- Planning supports sustainable economic growth and the transition to a low carbon economy.

The SPP also sets out two overarching 'Principal Policies' on sustainability and placemaking. It is with these points in mind that the proposed master plan has been developed.

Government Design Policy

The Government design guidance documents 'Designing Streets', 'Creating Places' as well as 'Green Infrastructure: Design and Placemaking' have been considered as key reference documents during the development of the Green Infrastructure Masterplan.

Designing Streets (March 2010)

This is the first policy statement in Scotland for street design and provides guidance on street design where the focus is moved from the dominance of motor vehicles towards the creation of place. The document is based on the premise that 'good street design should derive from an intelligent response to location rather than the rigid application of standards'.

Creating Places (June 2013)

This policy on architecture and place sets out the value good design can deliver, emphasising the strong, established relationship between architecture and place and planning.

Green Infrastructure: Design and Placemaking (November 2011)

This guidance builds on 'Designing Places' and 'Designing Streets' and aims to give practical tips on incorporating green infrastructure into masterplans.

Regional Policy

Strategic Development Plan

Edinburgh and South East Scotland Strategic Development Plan (SESplan) provides the geographical framework of development within South Fife.

Strategic Development Plans set out a long-term strategy for future development across the city regions. It identifies strategic transport improvements, green network priority areas and strategic growth. These strategies form the basis for local development plans, including the FIFEplan, which identifies specific sites.

The Strategic Development Plan also identifies the housing requirement for both the private and affordable sectors based upon the findings of the 2015 SESplan Housing Need and Demand Assessment and promotes sustainable locations for development.

Local Policy

Local Development Plan (FIFEplan)

The FIFEplan outlines the aims of Fife Council with regards to development in Fife, identifies the main proposed land use changes and sets out policies for the assessment of new development proposals. The importance and role of green network assets and opportunities for enhancement are also key components of the plan. It includes policies that protect the built and natural environment and require the design of new development to meet the six qualities of successful places. Section 2.4 gives guidance as to how these policies will be applied.

The FIFEplan reflects local priorities identified through the Fife Greenspace Strategy, Fife Forestry and Woodland Strategy, Fife Local Biodiversity Action Plan (LBAP) and the Fife Core Path Plan.

As part of the Kirkcaldy Area Strategy it mentions "A long term development framework diagram is included for Kirkcaldy's Victoria Road/Nairn Street corridor based on the community engagement event held in Pathhead in February/March 2014. The framework identifies development opportunities to aid renewal in the area and will be used as a basis for regeneration discussions with the community, local landowners and businesses."

Making Fife's Places Planning Policy Guidance

This document sets out Fife Council's expectations for the design of development in Fife. It explains the role of good design in creating successful places where people will want to live, work and play through an integrated approach to buildings, spaces and movement.

History

Greenspaces

From the historic maps it is visible that once two green corridors used to run North to South, joining within the masterplan area, and continuing down to the coast/ Pathhead Sands. Within both corridors burns used to run towards the Firth.

Through the industrialisation within Kirkcaldy and Pathhead the green network, especially within the masterplan area, has been reduced significantly. Wooded areas have been removed and part of the burns have been culverted underground. Current drainage issues are evident in Denfield Park and most likely connected to the previous burn along this location.

Industrialisation

“The Victoria Road area of Kirkcaldy was once a hub of industrial activity centred around the linoleum business developed and fabricated by Nairn. Remnants of this bygone era can still be found scattered throughout the area and still continue to form strong elements of the area’s identity.

Today Forbo Nairn Linoleum Works remains a large employer with a strong presence in the area. Many of its former buildings and those associated uses, such as the tram works and power station, are either derelict or have been demolished. These uses, buildings and infrastructure have for the large part not been replaced by sustainable modern uses, leaving a scarred and fragmented townscape.”

Victoria Road, Kirkcaldy, Regeneration Strategy Report, 2014, p.3

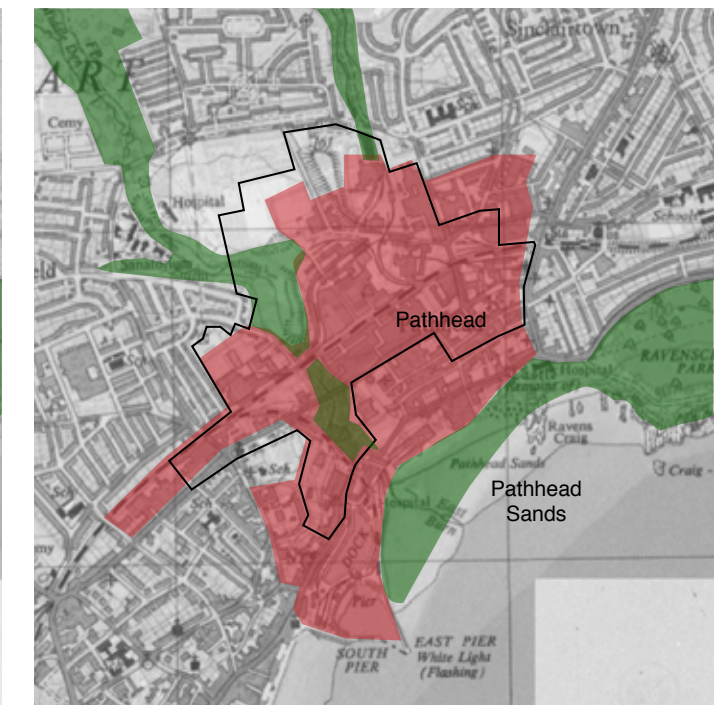
The decline of greenspaces was originally caused by an increase of industrial activity, however as this activity has more recently ceased to exist the masterplan area has been left with

- Reduced & disconnected green network/ infrastructure
- Low opportunities for recreation and play
- Drainage issues
- Derelict and vacant land
- Contaminated land
- Low feeling of safety
- Streetscapes designed for industrial traffic
- Disconnected walking and cycling routes
- Low public facilities and amenities
- Low public spaces and opportunities to meet people

1843



1937



Today



Key (all maps)

- Green corridor
- Area of industrial activity
- Area of derelict/ vacant land

An engagement plan was implemented to develop the masterplan. The process involved interviews with 23 local businesses, relevant Fife Council departments, Pathhead Primary School, NHS, and the Police. A Public Consultation was carried out on the 2nd October 2017 with approximately 50 members of the public attending. This was advertised through email, social media and posters. In order to meet local residents and users within the area this event was held outdoors at three locations where the draft masterplan was presented for comment and discussion.

Two walks within the Charrette area were offered to discuss issues, constraints and proposals in more detail. The proposed projects i.e. greenspace and active travel routes, connections and street improvements generally received positive support. Through the consultation process participants had the opportunity to vote on their top five projects.

Key Outcomes:

Greenspaces

(Denfield Park, Smeaton Road/Gardens)

- Antisocial and vandalism issues
- Isolated/secluded - not overlooked and limited access/connections
- Drainage and most likely contamination issues
- Denfield Park is underutilised - lack of activities - potential for football centre and Leisure /Wellbeing Park development
- Smeaton Gardens - potential for community garden/allotments
- Constraints: lack of resources/funding for maintaining/managing new greenspaces

Connections

(Smeaton Rd - Denfield Park, Denfield Park - Victoria Hospital, Rail Underpass, Former Fife College Priory Campus - High Street, Existing railway line -Dunnikier Road to Former Fife College Priory Campus)

- Link Charrette area to wider network and linking connections within the Charrette area
- Increase access points across the railway
- Increase pedestrian movement through site - natural surveillance/ feeling of safety
- Shared paths or segregated cycle lanes are preferable option
- Linking greenspaces provides alternative route for cyclists
- Beneficial to create shortcut e.g. connecting hospital to Denfield Park

Street Improvements

(Denburn Road, Smeaton Road, Den Road, Dunnikier Road, Victoria Road/Nairn Street, Birrel Wynd, Bogies Wynd, Flesh Wynd and Broad Wynd)

- Busy traffic
- Not visually attractive/ negative road image
- Streetscape too wide and unattractive for cycling/walking - feeling unsafe/ vulnerable
- Road parking causes tailbacks and potential accidents
- Conflict between pedestrians and cars at Balsusney Road
- Dunnikier Road - no busses due to bridge and bikes use pavement
- Parking restrictions and general parking/ lack of parking should be addressed
- No cycle parking
- Conflict between cyclists and pedestrians on pavement (Victoria Road/ Dunnikier Road)

Key Projects

Consultation participants had the opportunity to vote for their top five key projects. Participants were asked to use five sticky dots to vote and the following priority list emerged:

1. Proposed greenspace + active travel route on Development site Victoria Rd/ Nairn St

2. Leisure & Well-being Park: Denfield Park
Railway Underpass
3. Old railway line (Dunnikier Rd to Former Fife College Priory Campus)
4. Connection: Denfield Park to Victoria Hospital
Connection: Former Fife College Priory Campus/ Coastal Path
Street Improvement Victoria Rd/ Nairn St
Connection: Former Fife College Priory Campus/ High St/
Street Improvement: Birrel Wynd, Bogies Wynd & Flesh Wynd
5. Connection: Smeaton Road to Denfield Park
6. Existing greenspace: Former Fife College Priory Campus
Existing greenspace + active travel route: Hayfield Road to Smeaton Road (beside FC recycling yard)
Street Improvement: Den Road

(Note: not all participants voted on the projects)

The engagement process was influential to the development of the masterplan. Key components, such as shared paths throughout the area, the connection 'Victoria Hospital/ Denfield Park' and 'Old Railway', as well as creating suitable streetscapes for the elderly and a management appropriate design have been informed through this process.

The projects selected through voting have been influential and reflected on identifying the five key projects developed in further detail as part of the masterplan.

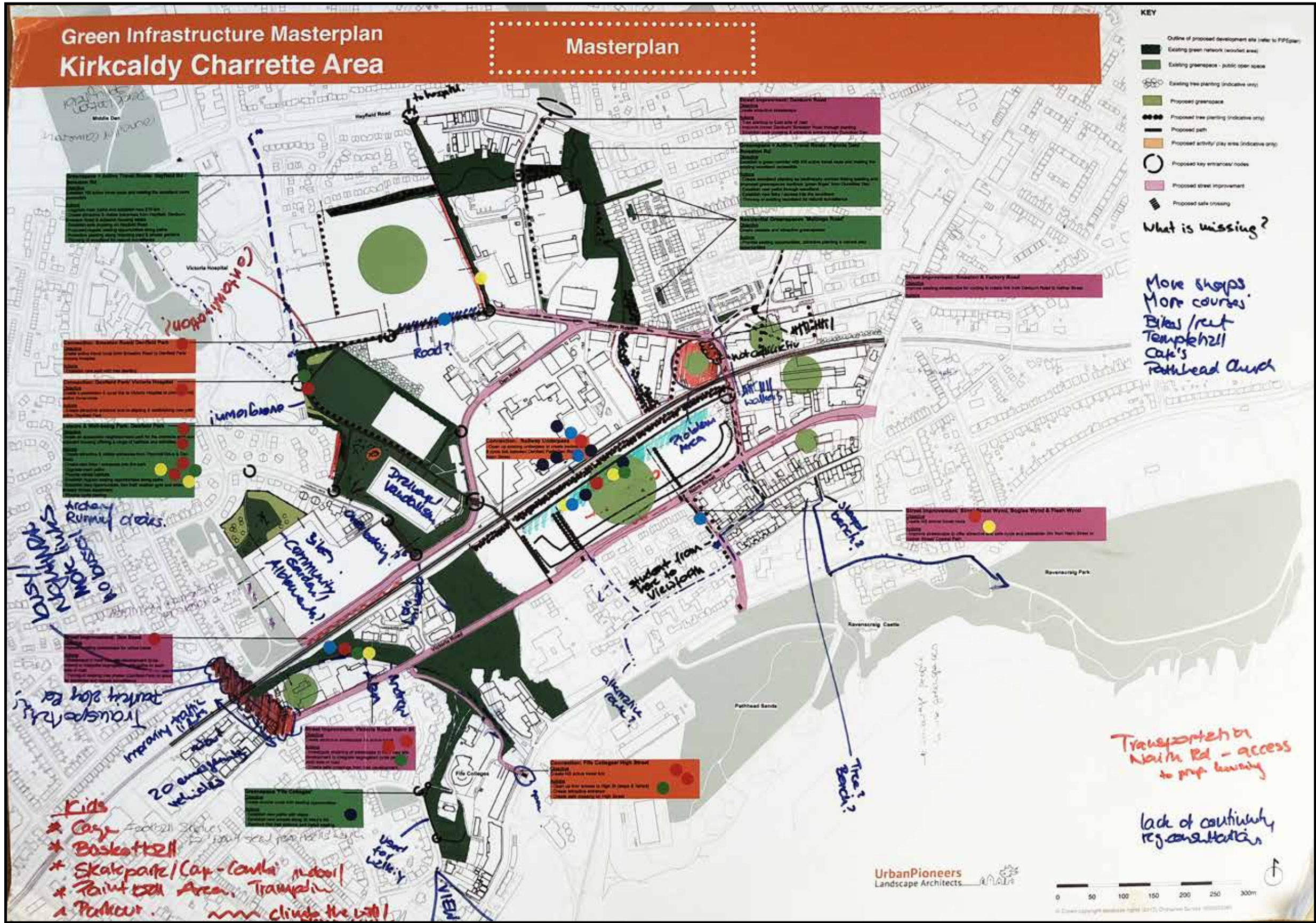


Green Infrastructure Masterplan Kirkcaldy Charrette Area

Masterplan

KEY

- Outline of proposed development site (refer to PFCover)
- Existing green network (outlined area)
- Existing green space - public open space
- Existing tree planting (indicative only)
- Proposed green space
- Proposed tree planting (indicative only)
- Proposed path
- Proposed activity/play area (indicative only)
- Proposed key entrances/nodes
- Proposed street improvement
- Proposed safe crossing



What is missing?

More shops
More courses
Bikes / rent
Templehill
Cafe's
Parkhead Church

Transportation
North Rd - access
to prep building

lack of continuity
reg consultation

Archery
Rummy
cricets.

Improving traffic
20 mph zone
vehicles

Kids
 * Cafe
 * Basketball
 * Skatepark / Cap - Conk's indoor
 * Paintball Area, Trampoline
 & Parkour.
 ... include the wall!

UrbanPioneers
Landscape Architects





02 Site Appraisal

Investigating the current situation

Cultural Heritage

Public Amenities

Building Development Proposals

Cycling and Walking Network

Green Networks

Existing greenspaces

Greenspace assessment

Access to existing greenspaces

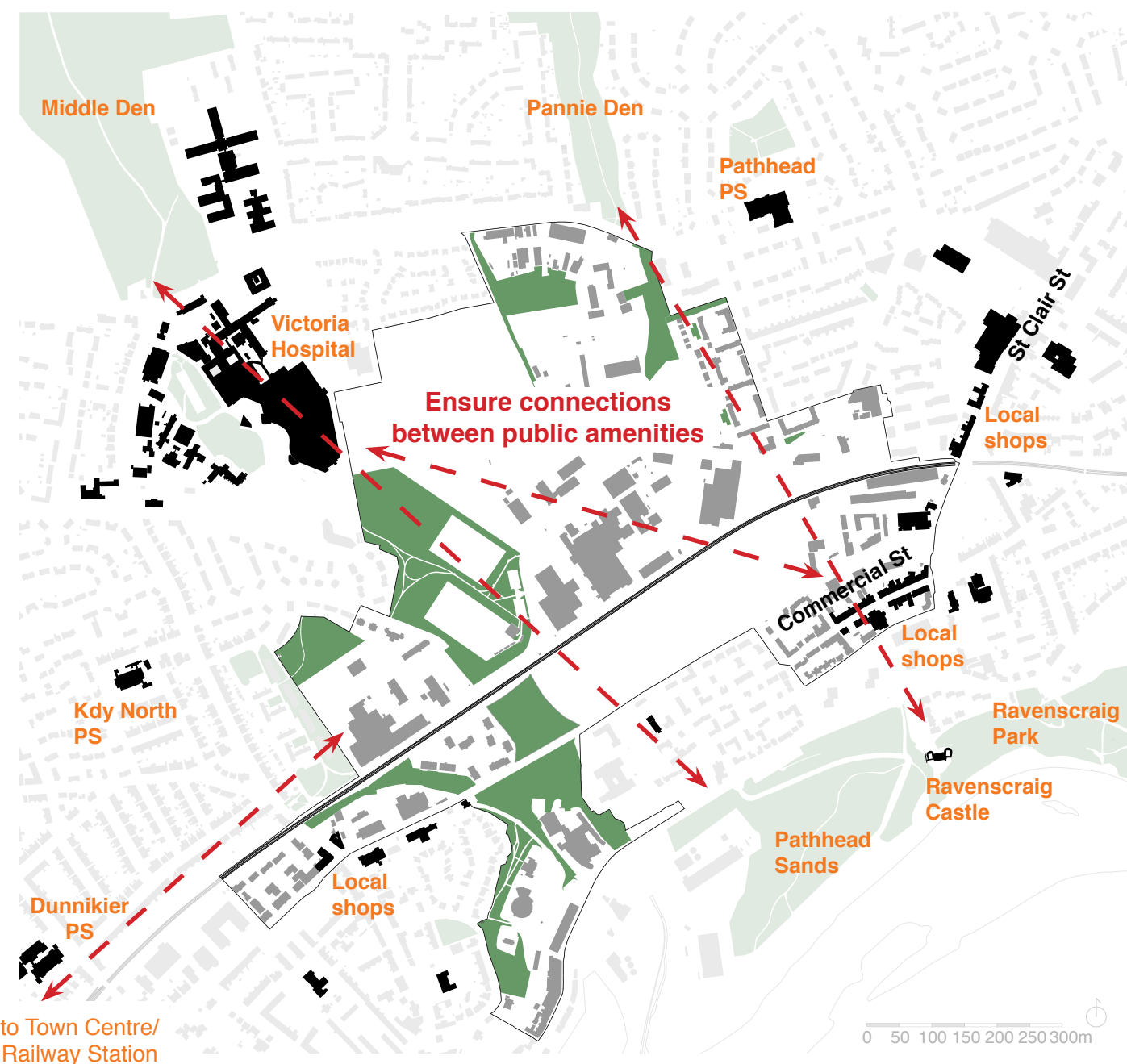
Assessment of individual greenspaces



A number of listed buildings are situated within the charrette area including the A-listed Feuars Arms public house and B-listed Pathhead Halls along Commercial Street. The B-listed former Victoria Power Station at the western side of Victoria Road is currently vacant and of poor condition with an application submitted for its demolition.

The Forbo Nairn Linoleum Works, situated at the centre of the charrette area, are of importance to the industrial and cultural history of this area. Due to the size and location of the building it is a focal point from many views within the area, e.g. from Denburn Road or Victoria Road.

Within the masterplan area not many buildings of heritage importance remain and with many being vacant and / or in poor condition, it is crucial to ensure that relevant buildings of heritage value are being retained.

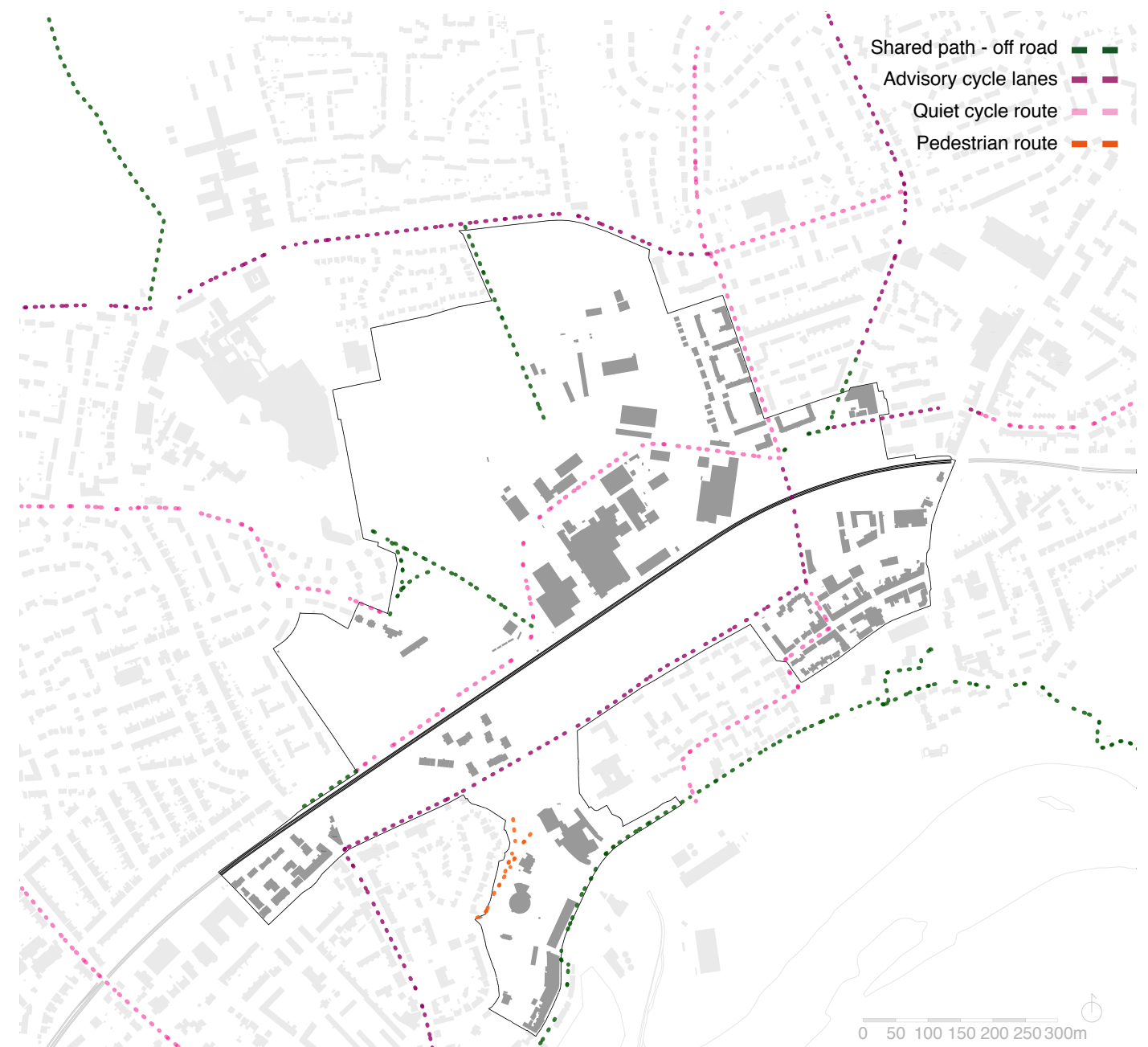


The masterplan area is located east of the City Centre and Railway Station, between regional greenspaces (Middle & Pannie Den leading to Dunnikier Park, Pathhead Sands, Ravenscraig Park). Victoria Hospital is situated adjacent to the North East of the area and various schools in the surrounding neighbourhoods. Smaller shopping areas along St Clair Street, Commercial Street and Dunnikier Road/ Victoria Road are situated in the East and South of the area.

With most public amenities located outside the masterplan area it has to be ensured that routes and connections within the area are improved and to allow safe and easy access to them.



Fife Council's adopted FIFEplan September 2017 sets out planning policies and proposals for the development and use of land across Fife. Within the charrette area several sites have been outlined for development. Some of these sites are vacant or derelict but others still have businesses operating from them. The majority of these sites have been allocated for housing, which will bring desired and needed residents into this area. For two of these proposed sites (Nairn & Muir Scrap Yard Site) detailed concepts have been developed as they are critical for the Green Infrastructure Masterplan.



The current sustainable network consists mainly of advisory cycle lanes and quiet routes with only a few shared paths (off-road). There are no connections between public buildings, greenspaces or even just within the masterplan area, which is bisected by the railway line. It makes it difficult to navigate around the area, forcing people to go around it rather than through it.

Missing key links:

- Direct access/ link to Victoria Hospital from south and vice versa access for mobile patients to nearby suitable greenspaces
- Overcoming the physical barrier presented by the railway line that bisects the masterplan area but also interrupted connections between hospital, shops, libraries and schools

Green Networks

Green Networks in Fife – FIFEplan Background Paper Prepared by Fife Council + Scottish Natural Heritage (Oct 2012)

The background paper outlines the definitions, core principles and priorities as following:

Definition

A 'green network' broadly speaking, is a concept that is explicitly concerned with the connectivity of areas of open space. There is no single agreed definition of the term 'green network', but the following definition was used by SESplan and will be used for this report:

The Green Network comprises the network of green spaces within and around our towns and cities, linking out into the wider countryside, which underpins the region's quality of life and sense of place and provides the setting within which high quality, sustainable growth can occur.

It is made up of interconnected networks of:

1. Woodlands;
2. Other terrestrial natural and semi-natural habitats (e.g. species rich grassland; raised bogs and heathland);
3. Watercourses, wetlands and other blue spaces;
4. Formal and informal greenspace in and around urban areas; and
5. Active travel routes (including footpath and cycle routes).

[...] one of its key objectives is to:

'Enhance the condition and connectivity of the networks of green spaces and watercourses within and between the region's settlements to reduce flood risk, support cycling and walking, increase tree planting and carbon capture, support bio-diversity and provide better habitats, leisure opportunities, and agricultural and economic potential.'

This objective fits with the SESplan definition of Green Networks set out above. It is therefore proposed to use the SESplan definition as the basis for identifying Green Networks across the whole of Fife.

Core Principles

The core principles of green networks are:

- **Connectivity:** Linking people and places, and providing habitats and corridors for species movement.
 - **Multi-functionality:** the provision of multiple functions on individual sites through the integration of different activities and land uses, to maximise efficiency of land use.
- 'Connectivity' and 'multi-functionality' are also core principles within Scottish Planning Policy (SPP), being directly relevant to a number of key objectives, particularly in relation to delivering high quality sustainable places and efficient use of land. (e.g SPP paragraphs 14, 37, 39)

Priorities for Green Network Planning in Fife

The key priorities that were identified for green network planning in Fife are set out in the table below (The priorities were established through consideration of the Fife Community Planning priorities and Scottish Planning Policy objectives.):

	Green Network Priority/ Key Issue	Function
1	Connecting people and places	Access and Active Travel
2	Alleviating drainage and flooding problems	Climate Change
3	Providing useable greenspaces for communities	Greenspace
4	Providing landscape setting and improving the quality of places	Landscape Setting
5	Providing connected habitats for wildlife	Habitat and Biodiversity

A total of 6 settlement-scale green networks were identified in the Kirkcaldy workshop, all of which were recommended for inclusion in the LDP:

1. Kirkcaldy Coast Green Network
2. Raith to Seafield Green Network
3. Dunnikier and Northern Edge Green Network
- 4. Kirkcaldy Dens Green Network**
5. Kirkcaldy East Strategic Land Allocation Green Network
6. Chapel to the Dens Green Network



Kirkcaldy Dens Green Network

A finer grain green network consisting of two branches through Middle Den and East Den, which converge at Denfield and provide significant north-south connectivity.

Key Features:

- Existing active travel network, albeit with **key missing links around Victoria Hospital and Smeaton**. Connects to the Dunnikier and Northern Edge Green Network (3), which includes Kirkcaldy High School, and to the Chapel to the Dens Green Network (6).
- Greenspace assets include: Middle Den, Pannie Den, **Denfield**, Gallatown Park, Kirkcaldy Cemetery, albeit greenspace quality is variable.
- Pannie Den abuts the institutional grounds of St. Maries Primary School and St. Andrews High School.
- Provides a flooding and drainage function – the Dens and networks of greenspace relate to Den Burn and East Burn, albeit the watercourses are culverted in places.
- Contributes to landscape setting, with good potential to improve.
- Provides important habitat value – with good habitat connectivity to the Dunnikier to
- Northern Edge Green Network (3) to the north.

Opportunities for Enhancement:

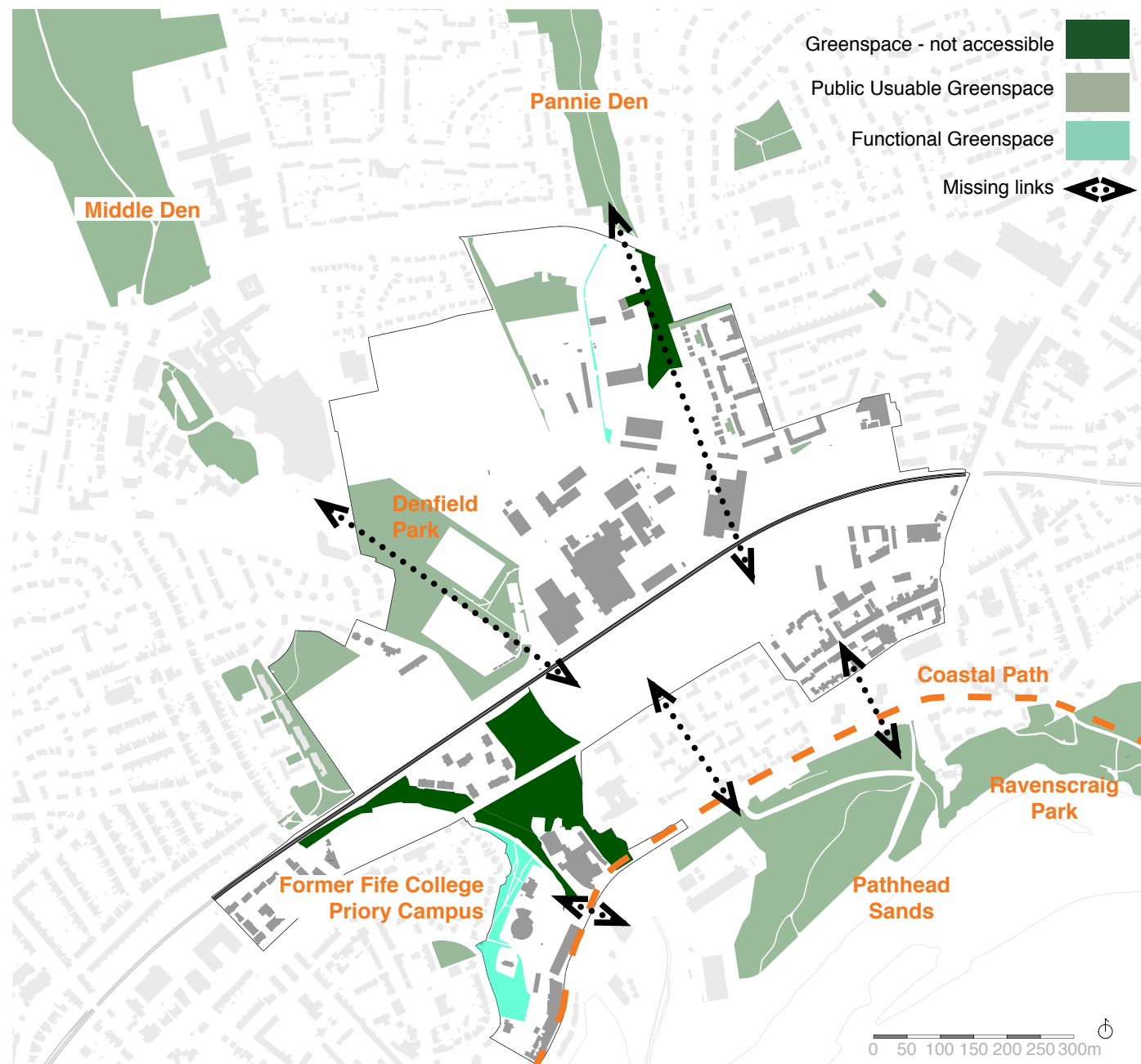
- **Investment required to enhance greenspace quality** including Middle Den, **Denfield**, Pannie Den and Gallatown Park.
- Opportunity to establish key **missing landscape and access link between Middle Den and Denfield, through the Victoria Hospital Grounds** – requires a discussion with the NHS Estate.
- Opportunity to establish key **missing landscape and access link between Pannie Den and Denfield**, along the edge of the Denburn Council Depot and through the Smeaton Industrial Estate.
- Look at potential to enhance and **strengthen the 'on-street' connection** from the Dens to the Kirkcaldy Coast Green Network (1) and the town centre.
- Potential to improve habitat and landscape value through appropriate new planting and management of existing vegetation.

Development Plan Priorities:

- Protect existing green network assets

Existing greenspaces

Greenspace assessment



The masterplan area contains and is surrounded by astonishing greenspaces. However some of the spaces are not accessible and few of them are linked or connected. Nevertheless the existing framework is an excellent starting point. Opening up some of the closed off connections does not only increase permeability through the site into adjacent neighbourhoods, it will also immediately increase the greenspace accessibility for adjacent homes.

Critical links, which are currently missing:

- North to south link from Pannie Den
- North to south link from Middle via Denfield Park (i.e. access to Victoria Hospital & re-opening tunnel below railway line)
- Connection Former Fife College Priory Campus to Fife Coastal Path
- Connection to Pathhead Sands & Ravenscraig Park to provide much needed access for houses without appropriate access to greenspace

As part of surveying the existing greenspaces within and adjacent to the masterplan area, a greenspace assessment for each individual greenspace has been undertaken to analyse the Potential, Social Importance and Need of Action for each greenspace. The detailed analysis for the greenspaces within the masterplan area can be found on the following pages 27-33. This assessment highlights which greenspaces have the lowest to highest Potential, Social Importance and Need of Action: All greenspaces shown in green are the ones which should be improved in the first instances as they are of higher need.

Note: The Fife Greenspace Audit developed by Fife Council feeds into this assessment (refer to Appendix B).

Greenspaces access per home



Greenspaces provision per home



Fife Council Planning Guidance outlines that each home should be given provision to open greenspaces within 250m walkable distance. The above map shows the area of homes that are within 250m walking distance to a greenspace. Due to restricted access to the greenspaces (fences and limiting access points) and barriers (e.g. railway line) there is a large area within the charrette area which currently has no access to greenspaces.

The charrette area was tested against FIFEplan policy requirements and the standards set out in the Fife Greenspace Strategy 2010 to establish if there was sufficient greenspace in the area. Following this analysis it is apparent that insufficient areas of greenspaces are being provided. This analysis identifies a large area within the masterplan area that currently has insufficient (60m² per home) greenspace within 250m walkable distance available.

Refer to detailed assessment on the following pages
 Refer to 'Fife Council: Making Fife's Places - Aug 2015'

Refer to detailed assessment on the following pages

Greenspace Assessment: Former Fife College Priory Campus



Entrance into greenspace hidden and not welcoming



Existing trim trail along path - no seating opportunities



Attractive planting along well maintained path

Greenspace provision

4,163m² existing accessible greenspace

- ▲ 125 homes within 250m walking distance
- ▲ 69 homes (of 125) with greenspace provision (4,140m² provided)
- ▲ 79 homes (of 125) no greenspace provision (4,740m² required)

Constraints

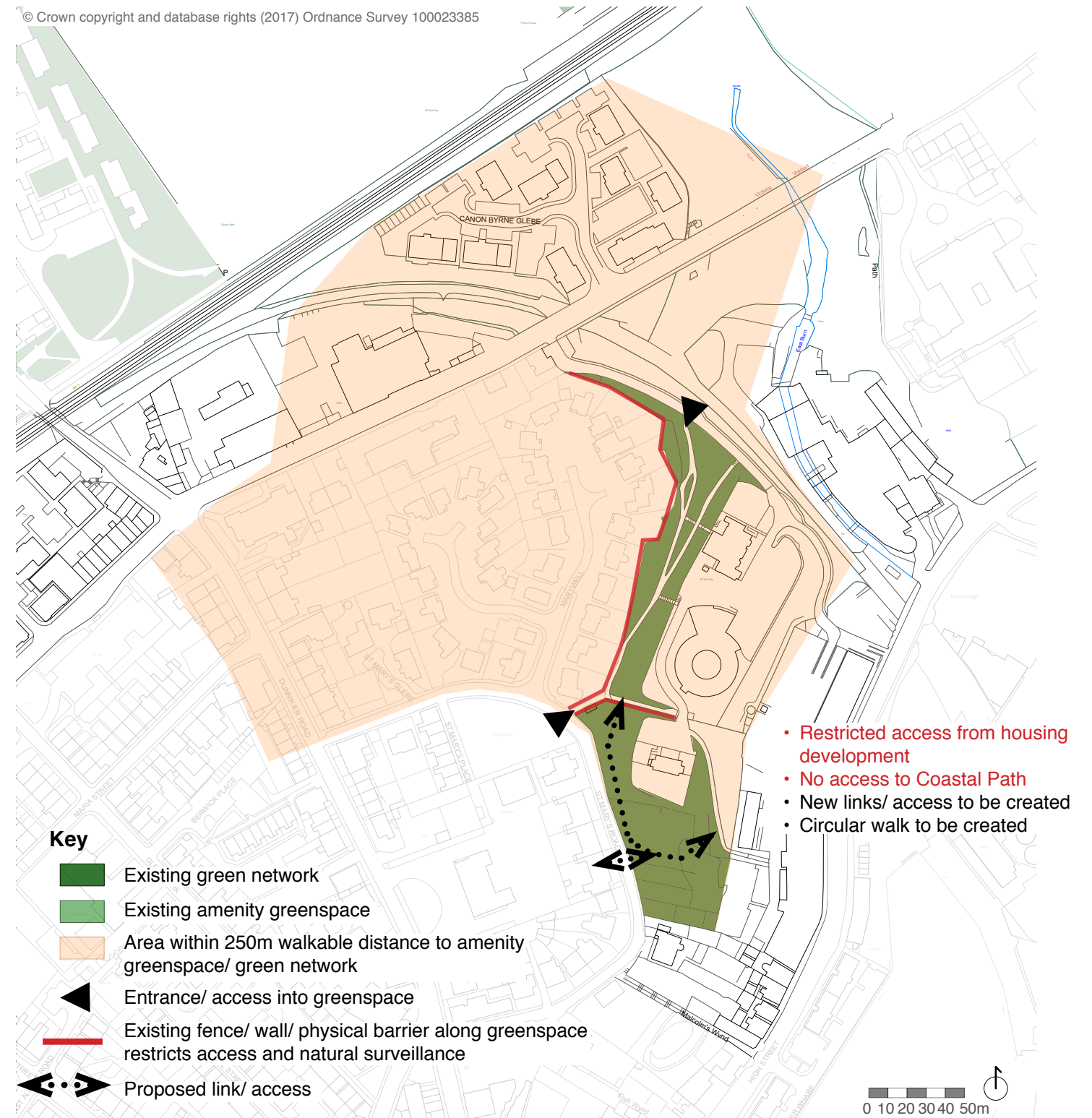
- Only parts of wooded area accessible
- No circular route available
- Woodland is secluded and not connected to Fife Coastal Path/ Harbour
- Entrances are hidden and hard to find
- Old trim trail elements

Opportunities

- Create prominent entrances into greenspace (signage into space, but also from main road)
- Create link to Fife Coastal Path/ Harbour
- Investigate access and circular route through currently inaccessible greenspace
- Create seating opportunities

Potential	Points achieved
User Group	1
Prominence of site	1
Relationship	1
Social Importance	
Fife's GS Audit	1
Cultural significance	1
Need of Action	
GS Density	3
Safety	2
Attractiveness	2
Habitat	3
Estimated Social Return	2
TOTAL	17

(Refer to Appendix for Greenspace Assessment)



Greenspace Assessment: Victoria Road



Greenspace provision

29,000m² existing non accessible greenspace

Constraints

- No access to greenspace due to fencing & railings along boundary
- Not accessible due to nature of greenspace - steep slopes to small water course
- TPO area

Opportunities

- Opening of old railway link would give access to part of the greenspace as well as creating a new link

Potential	Points achieved
User Group	2
Prominence of site	2
Relationship	2
Social Importance	
Fife's GS Audit	1
Cultural significance	2
Need of Action	
GS Density	3
Safety	3
Attractiveness	2
Habitat	1
Estimated Social Return	2
TOTAL	20

(Refer to Appendix for Greenspace Assessment)



For design proposals refer to drawing 'Area 3', p.52

Greenspace Assessment: Smeaton Gardens



Fencing between public greenspaces creates unnecessary barrier & clutter



Monotone greenspace - no varied habitats or opportunities for activities



Shrub planting at some corners, however quite unattractive and bland

Greenspace provision

17,500m² existing accessible greenspace

▲ 275 homes within 250m walking distance

▲ 275 homes with greenspace provision (16,500m² provided)

Constraints

- Main greenspaces fenced in with two entrances
- Main greenspace feels secluded and to be used mainly for immediate residents, however natural surveillance is given
- Greenspaces close to flats feel they belong to immediate residents
- Bland greenspaces - do not offer variety of activities or habitat

Opportunities

- Removed existing fence towards adjacent greenspace to connect greenspaces, create openness and reduce barriers/ visual clutter
- Create different habitats such as wildflower, long grass, hedges, tree planting
- Create natural play opportunities
- Create seating opportunities

Potential	Points achieved
User Group	1
Prominence of site	1
Relationship	1
Social Importance	
Fife's GS Audit	1
Cultural significance	2
Need of Action	
GS Density	1
Safety	3
Attractiveness	3
Habitat	3
Estimated Social Return	2
TOTAL	16

(Refer to Appendix for Greenspace Assessment)



For design proposals refer to drawing 'Area 2', p.51

Greenspace Assessment: Denfield Park



Monotone greenspace, path surfaces not suitable for different mobilities



Dead end path - no access/ connection to hospital



Shrub & tree planting around car park - no natural surveillance or sightlines

Greenspace provision

31,300m² existing accessible greenspace

▲ 26 homes within 250m walking distance

▲ 26 homes with greenspace provision (1,560m² provided)

Constraints

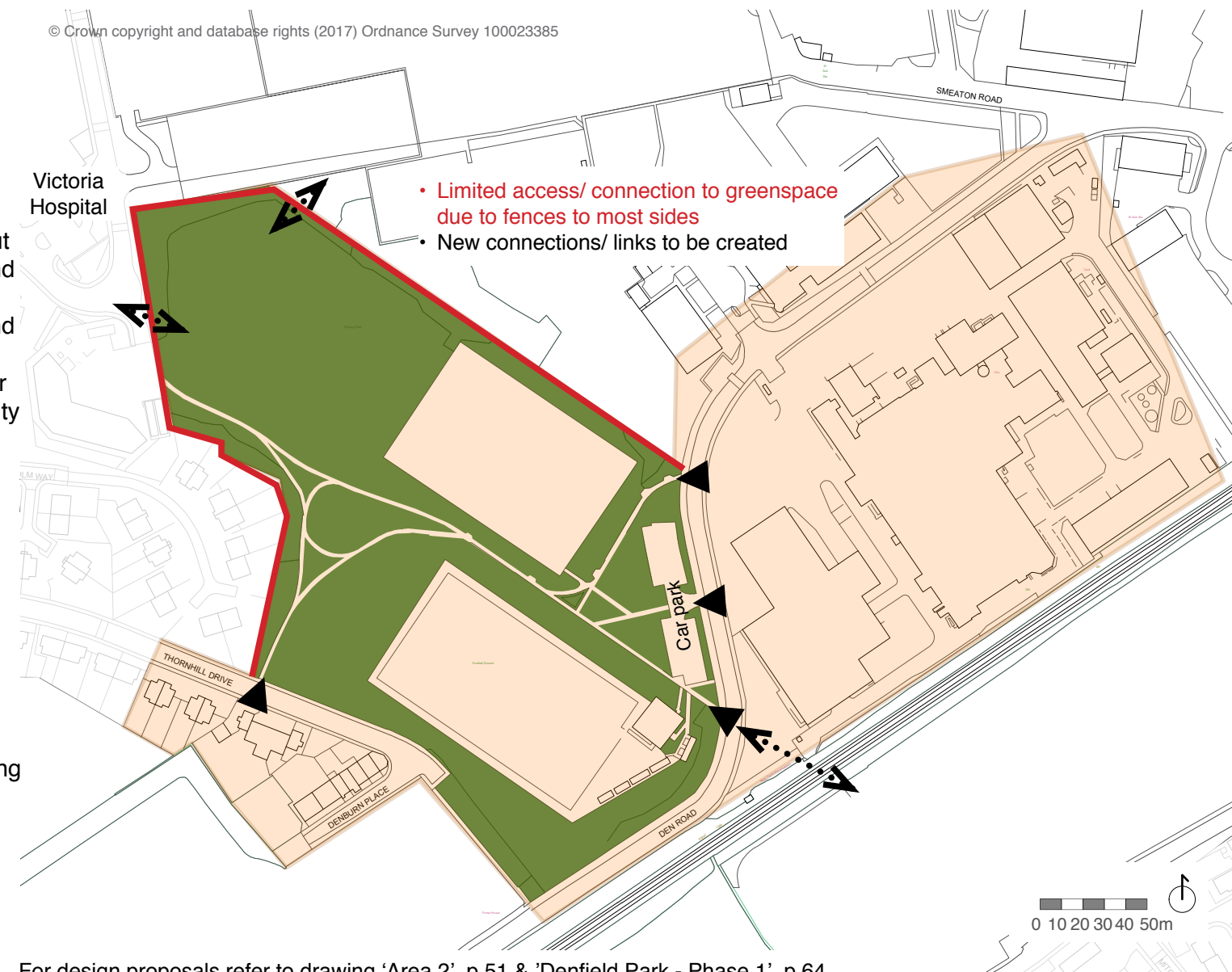
- Largest accessible greenspace within site but very limited access to surrounding homes and other greenspaces
- Isolated to surroundings due to fences around most of greenspace
- No access to Victoria Hospital - especially for mobile patients & staff this is a lost opportunity
- No direct link to Middle Den
- No direct link to Hayfield Road
- Paths lead to dead ends
- Major greenspace which offers limited activities (football, dog walking)

Opportunities

- Create better connections through link to Victoria Hospital and railway underpass
- Create different habitats such as wildflower, long grass, shrub & tree planting
- Create natural play opportunities - use existing topography/ slopes
- Create activities for different ages & mobility
- Create seating opportunities

Potential	Points achieved
User Group	2
Prominence of site	1
Relationship	3
Social Importance	
Fife's GS Audit	1
Cultural significance	1
Need of Action	
GS Density	3
Safety	2
Attractiveness	3
Habitat	2
Estimated Social Return	3
TOTAL	21

(Refer to Appendix for Greenspace Assessment)



For design proposals refer to drawing 'Area 2', p.51 & 'Denfield Park - Phase 1', p.64

Fife Greenspace Audit Recommended Actions (2010)

- A sports area which apart from the sports pitches has a feel of neglect. The space could be multifunctional if planting and path network is improved.

Key

- Existing amenity greenspace
- Area within 250m walkable distance to amenity greenspace
- Entrance/ access into greenspace
- Existing fencing along greenspace restricting access and natural surveillance
- Proposed link/ access

Greenspace Assessment: Hayfield Road/ Smeaton Road



Litter (mainly from recycling yard)



No access to adjacent housing development



Narrow and overgrown path with uninviting fence to one side

Greenspace provision

8,600m² existing accessible greenspace

- ▲ 75 homes within 250m walking distance
- ▲ 75 homes with greenspace provision (4,500m² provided)

Constraints

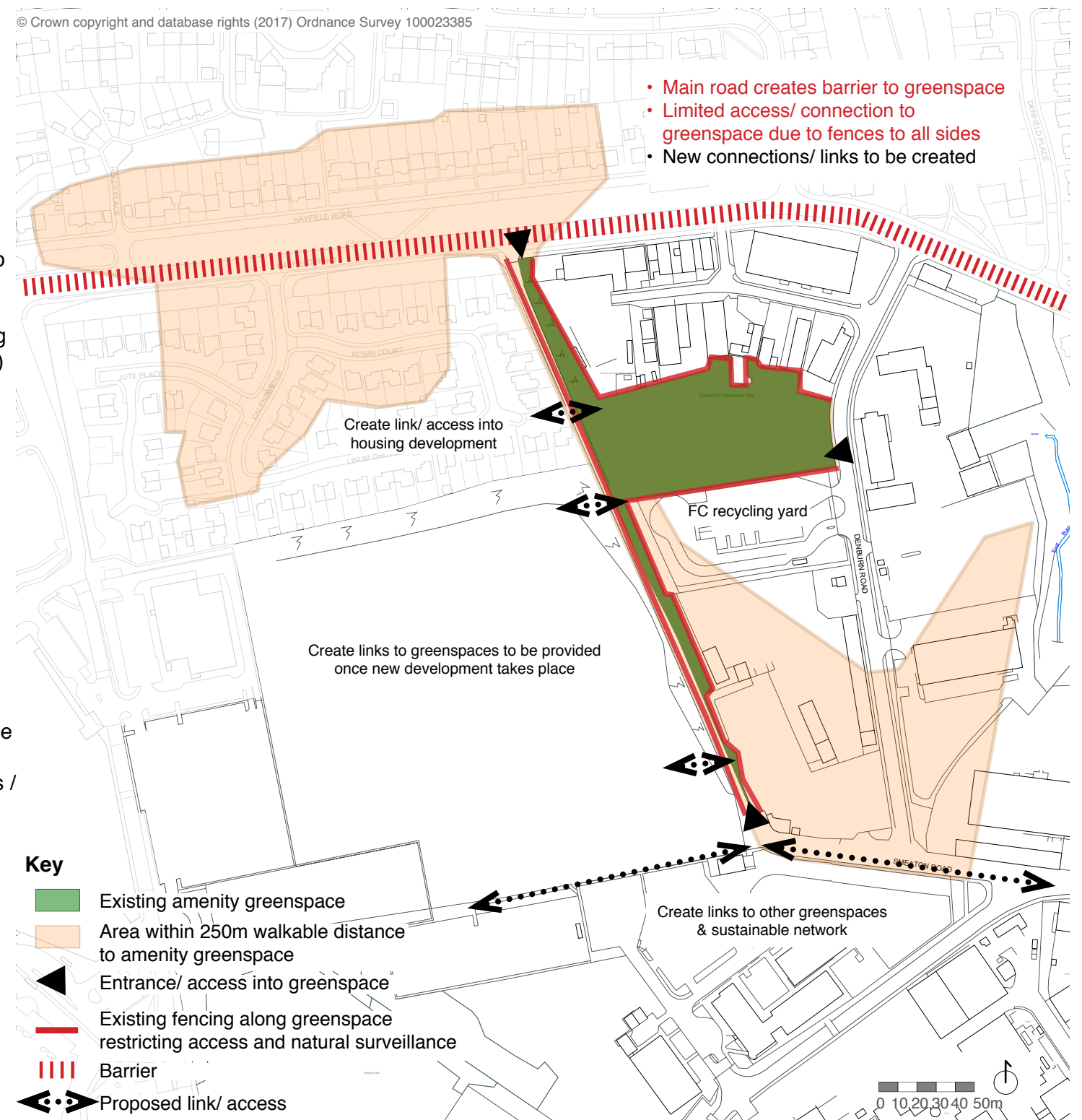
- Hayfield Road as a main road forms a barrier for access to greenspace
- No direct safe crossing on Hayfield Road to access greenspace
- Not overlooked
- Very littered (people climbing over recycling yard fence to removing material from there)
- Feels unsafe
- Currently not usable for residents as amenity greenspace

Opportunities

- Create hard surface paths to formalise access
- Move existing crossing at Hayfield Road (f.ex tiger crossing) closer to entrance into greenspace
- Create link/ access into housing development at western boundary
- Deterrent planting (f.ex. dense shrubs) along fence at recycling centre could reduce people climbing over and littering
- Thinning of woodland to allow views across / natural surveillance

Potential	Points achieved
User Group	2
Prominence of site	2
Relationship	2
Social Importance	
Fife's GS Audit	1
Cultural significance	1
Need of Action	
GS Density	1
Safety	3
Attractiveness	3
Habitat	1
Estimated Social Return	2
TOTAL	18

(Refer to Appendix for Greenspace Assessment)



Greenspace Assessment: East Burn Court



Unwelcoming railing & site (dead branches & litter) along road



Dense undergrowth



No access from adjacent houses

Greenspace provision

6,200m² existing non accessible greenspace

Constraints

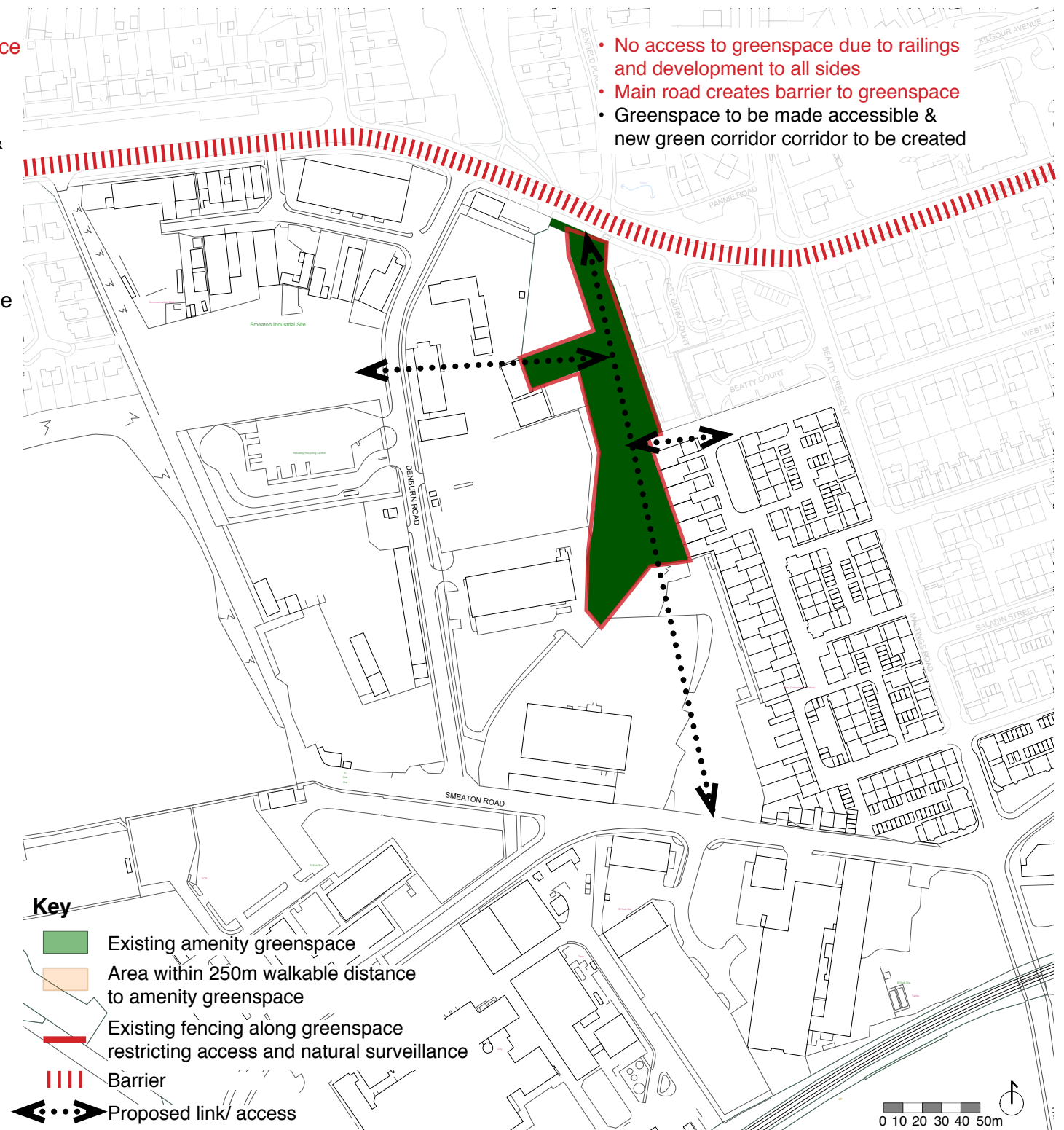
- No access to greenspace due to fencing & railings along boundary
- Currently fenced off

Opportunities

- Provide greenspace access for adjacent housing with low percentage of greenspace provision
- Create new North-South link & connecting into Pannie Den
- Wildlife corridor
- Potential to have boardwalks through wetland

Potential	Points achieved
User Group	2
Prominence of site	1
Relationship	3
Social Importance	
Fife's GS Audit	1
Cultural significance	1
Need of Action	
GS Density	2
Safety	0
Attractiveness	1
Habitat	1
Estimated Social Return	2
TOTAL	14

(Refer to Appendix for Greenspace Assessment)



- No access to greenspace due to railings and development to all sides
- Main road creates barrier to greenspace
- Greenspace to be made accessible & new green corridor to be created

For design proposals refer to drawing 'Area 1', p.50

Greenspace Assessment: Housing Maltings Road



Greenspace unuseable: Not seeded & large stones



Small & monotone greenspaces



Greenspace unuseable: Not seeded & large stones

Greenspace provision

- 11,120m² existing accessible greenspace
- ▲ 160 homes within 250m walking distance
- ▲ 18 (of 160) homes with greenspace provision (1,080m² provided)
- ▲ 142 (of 160) homes no greenspace provision (8,520m² required)

Constraints

- Small pockets of greenspaces within housing development - not adequate for the home numbers
- Greenspaces are unusable as of poor quality (have not been seeded and large stones within soil)
- Greenspace in southern part of development (currently under construction) is on a slope and therefore unusable

Opportunities

- Provision of varied planting (wildflower, long grass, perennials or hedging) could improve greenspaces significantly
- Provision such as natural play and seating opportunities could create small pocket parks

Potential	Points achieved
User Group	1
Prominence of site	2
Relationship	1
Social Importance	
Fife's GS Audit	1
Cultural significance	1
Need of Action	
GS Density	2
Safety	1
Attractiveness	3
Habitat	3
Estimated Social Return	1
TOTAL	16

(Refer to Appendix for Greenspace Assessment)



- No sufficient greenspace provision
- Improve quality of existing greenspaces
- Create access to close by greenspaces

Key

- Existing amenity greenspace
- Area within 250m walkable distance to amenity greenspace/ green network
- Proposed link/ access

For design proposals refer to drawing 'Area 1', p.50



03 Opportunities & Constraints

Location

Topography

Exposure

Barriers

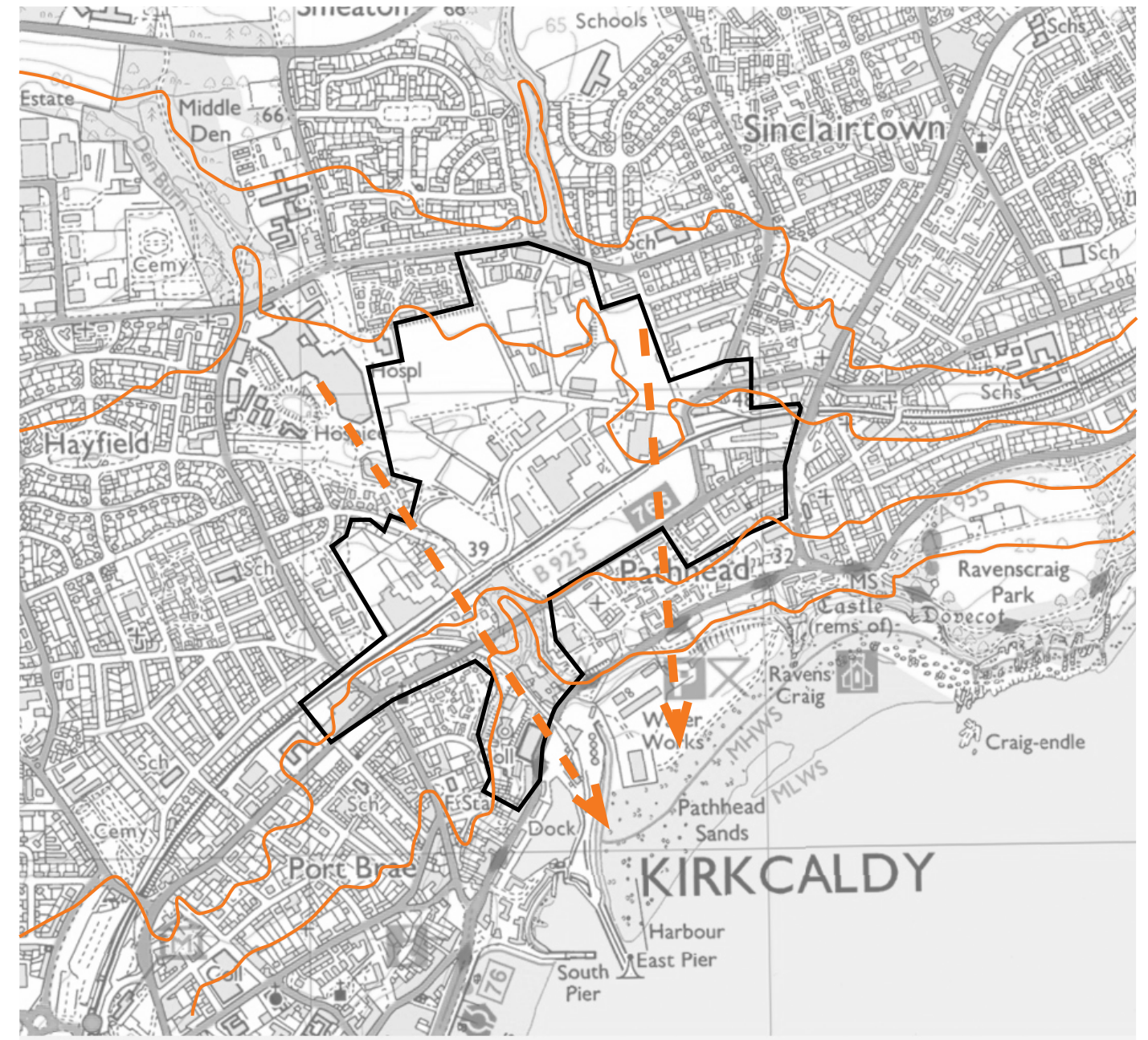
Location



The masterplan area is located north-east of the town centre and railway station. Within and in close proximity to the area lie key attractions, public amenities, regional greenspaces (e.g. Ravenscraig Park) as well as commercial businesses. These assets form a good basis for the regeneration within the area as outlined within the broad spatial elements of the charrette regeneration strategy:

- Strengthen existing local centres
- Victoria Road
- Encourage new housing
- Protect industrial/ employment core
- Create new connections
- Extend and improve the greenspace network
- Victoria Hospital

Topography



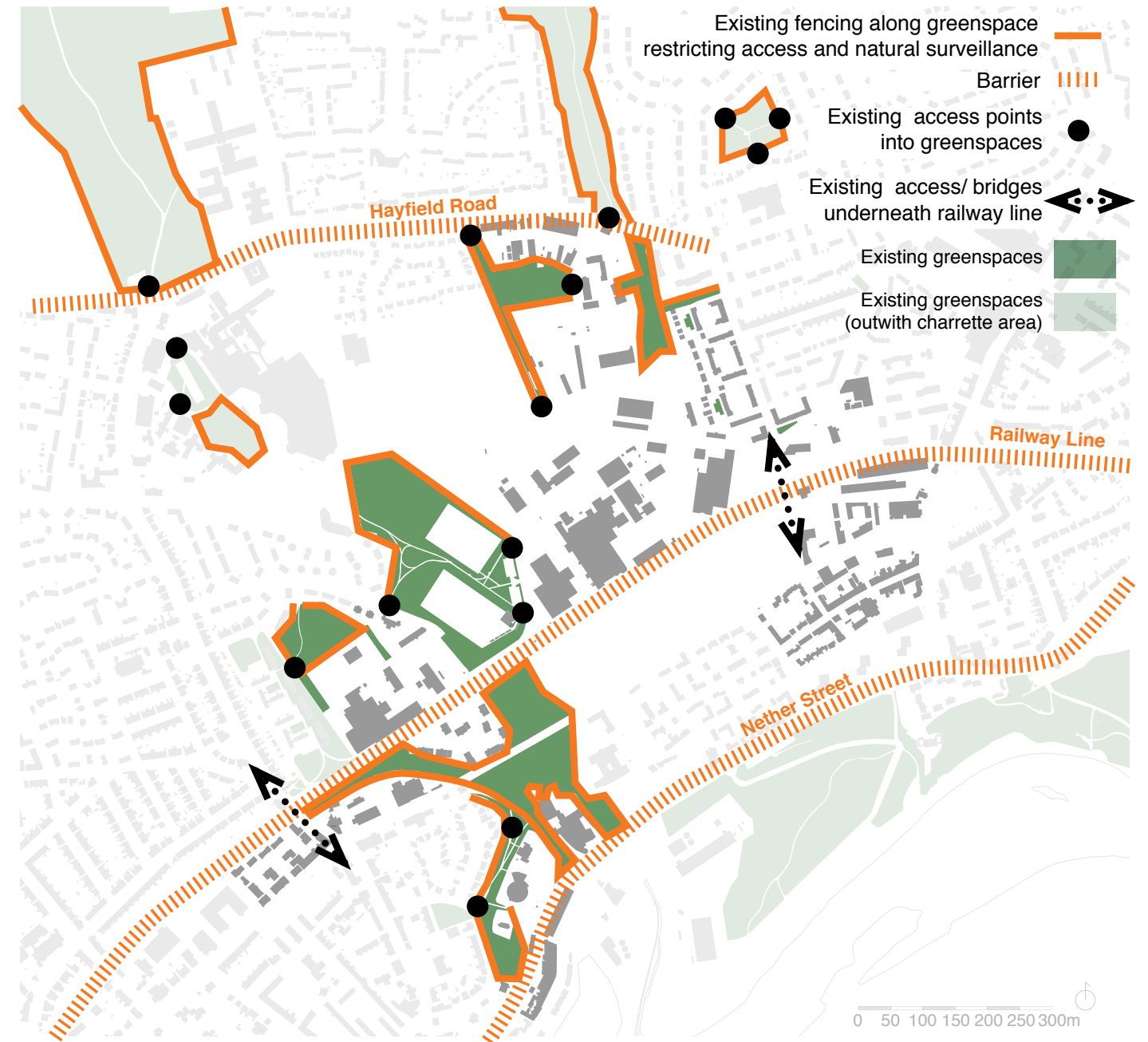
Due to the close location to the coastline, as well as a falling topography (North to South) throughout the side, views to the Forth inform and shape the areas identity

Exposure



Located to the North of the Forth and on a South facing slope, Kirkcaldy, including the masterplan area, benefits from a wide solar aspect: it is open to sunshine throughout the year and throughout the day.

Barriers



In regards to accessing the existing greenspaces, all greenspaces offer limited access points, or in some cases are not accessible at all. As indicated most of the greenspaces have fencing along their boundary, often to private gardens or businesses, but also to public accessible spaces. To the North and South of the area major roads form a barrier to connectivity and easy access throughout as well as to greenspaces. However the biggest impact on limiting North to South connectivity through the site is the railway line that runs through the masterplan area: currently only two access points (bridges) in the east and west of the area allow access under the railway.



04 Design Principles

Improved Existing Greenspaces

Greenspace Design Principles

Proposed New Greenspaces

Planting

Active Frontages

Connection & Nodes

Cycling and Walking Network

Masterplan



Improved Existing Greenspaces

The proposed Green Infrastructure Masterplan builds on the existing, perhaps under-utilised and underdeveloped assets of the sites to address the **lack of quality, useable greenspace provision** and the **lack of permeability** throughout the masterplan area.

Addressing these two key issues will bring more activity and life into the area and turn it into an inviting place to invest, live and work in.

This chapter outlines design principles that should be applied to existing greenspaces to ensure a qualitative improvement as well as a continuing approach for all greenspaces. In order to achieve sufficient greenspace provision, as outlined within the planning guidance (60m² per home within 250m walking distance), proposals for new greenspaces are being defined.



Based on the assessment of the existing greenspaces, those with potential for improvement have been identified. Design Principles, as outlined on the following page, should be applied to these.

Greenspace Design Principles

Design principles are used to describe fundamental ideas about best practice design. Applying these principles to the spaces and its elements will bring them together into one coherent design and can improve existing spaces significantly.

Attractive Entrances

- Low planting/ boundary to allow for clear views
- Attractive and well-maintained planting, such as wildflower seeding at entrances



Boundaries

- Remove or reduce height of boundary treatment where possible to allow for natural surveillance
- Along private boundaries such as fencing: Strip of long grass with single tree planting. Tree planting not to obscure views from housing or overshadow private gardens/ houses



Tree Planting

Existing Woodland

- Low shrubs to be removed to improve natural surveillance
- Besides path: 1m mowing strip and min. 5m distance to trees



Street trees

- Where sufficient space provide row of street trees either in soft or hard landscaping
- Clear stem of 2m
- Grass seeding or groundcover within soft landscaping



Along paths within open greenspaces

- Row of smaller trees along main paths to guide through space
- Clear stem of 2m
- If suitable fruit trees could be used to become part of a community growing space



Group of trees within open greenspaces

- Where sufficient space provide group(s) of trees with long grass seeding
- Offering a vertical element with different habitat and point of interest as well as play opportunities

Activities

As appropriate offer a range of activities for

- Different age groups
- Different abilities
- Different size of groups
- Different social groups



Lighting

- Provide sufficient lighting (existing lighting might require upgrading)
- Use solar lighting where suitable

Drainage/ Rain gardens

- Where drainage issues exist, installation of rain gardens should be investigated



Seating

- Provide different seating opportunities for different sizes of groups, e.g. single chairs, standard benches, long benches, picnic benches, lower benches for children, group of seating
- Consider views, exposure to wind, attractive planting and other activities when placing seating
- Furniture to be robust, made of timber and elderly friendly (back- & arm rests)

Play opportunities

It is important to offer play opportunities within close distance to housing allowing children to reach them without traveling long distances or relying on adults to take them there.



Small open greenspaces

- Provide informal natural play along main path, e.g. land forms, rocks, timber logs, willow tunnels

Larger greenspaces/ local park

- Provide play equipment, fitness equipment or therapeutic equipment
- Final elements to be established through community engagement

Community Gardens

Where appropriate and through involvement with local residents provide growing opportunities, e.g. raised or on the ground beds, orchard, fruit tree planting along main path



Cycle parking

- If greenspace important as destination or as a stopping point en route, cycle parking to be provided
- Type: Cycle rack or cycle loop fixed to existing post if insufficient space for racks



Community engagement

- For local greenspaces the input from the local residents should be sought for seating, play opportunities allotments/ community gardens, lighting
- Where possible local contractors should be involved in delivering elements of the greenspace improvement

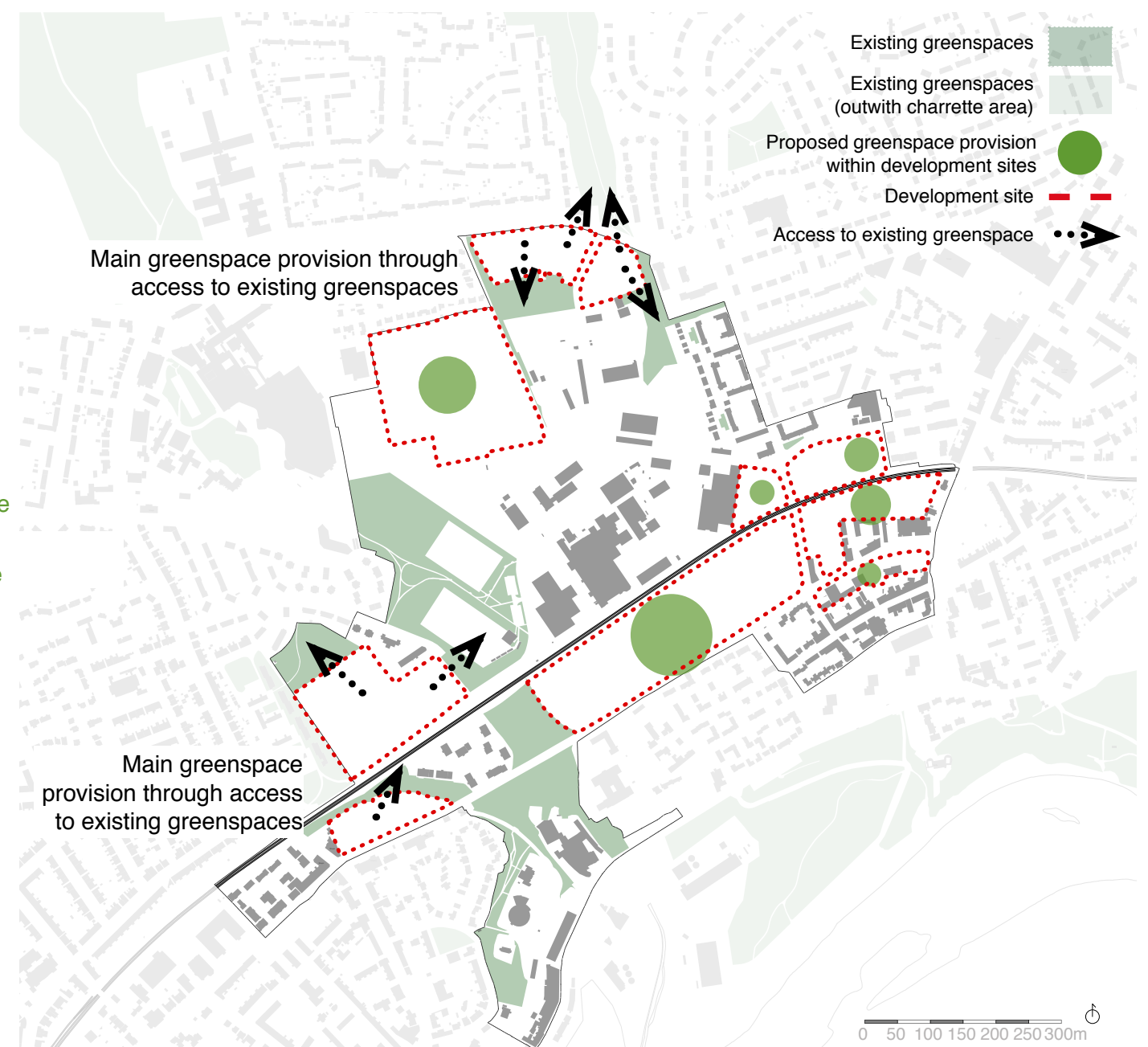
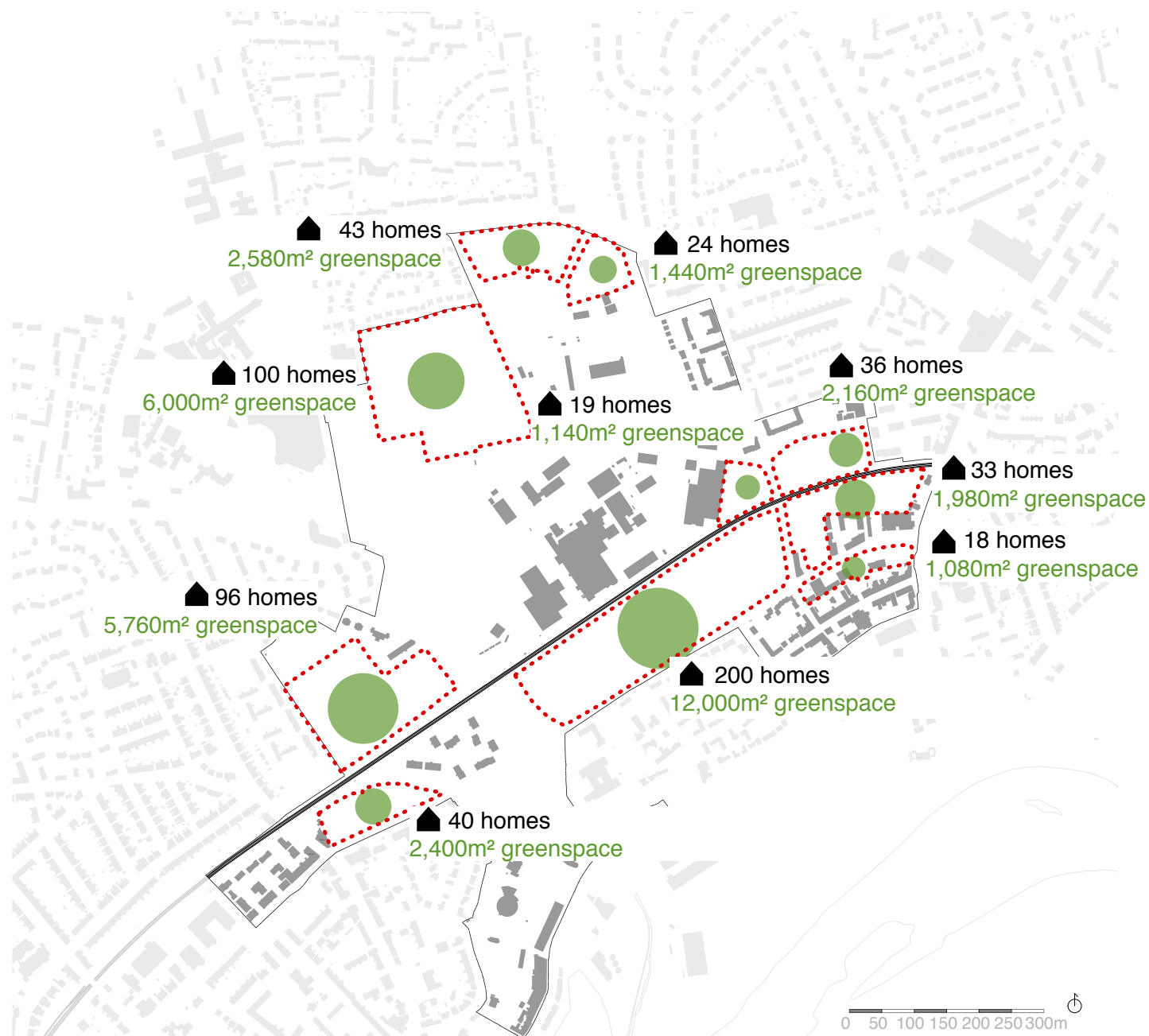
Dementia & Age-Friendly Neighbourhoods

Design elements that create dementia and age-friendly outdoors:



- Pedestrian-only walkways
- Seamless, wide footpath with well-defined edges and dropped kerbs
- Shuffle friendly surfaces, avoid slippery surfaces
- Provide seating and resting points in regular intervals
- Furniture to be elderly friendly (e.g. timber surfaces, back- & armrests)
- Ensure good lighting along path and within spaces
- Provide dementia-friendly symbols and signage
- Provide public toilet access
- Ensure handrails at slopes
- Diversify outdoor spaces for different activities
- Allow for inter-generational spaces and activities
- Diversify planting (e.g. all year interest, increase biodiversity)
- Create spaces that stimulate all senses

Proposed new greenspaces: Greenspace provision



For each development site a housing density has been identified as outlined within the Charrette Regeneration Strategy or based on the size of the density of the new Robertson homes at Maltings Road. For the sites at Den Road and Nairn Street housing proposals have been developed as part of this masterplan.

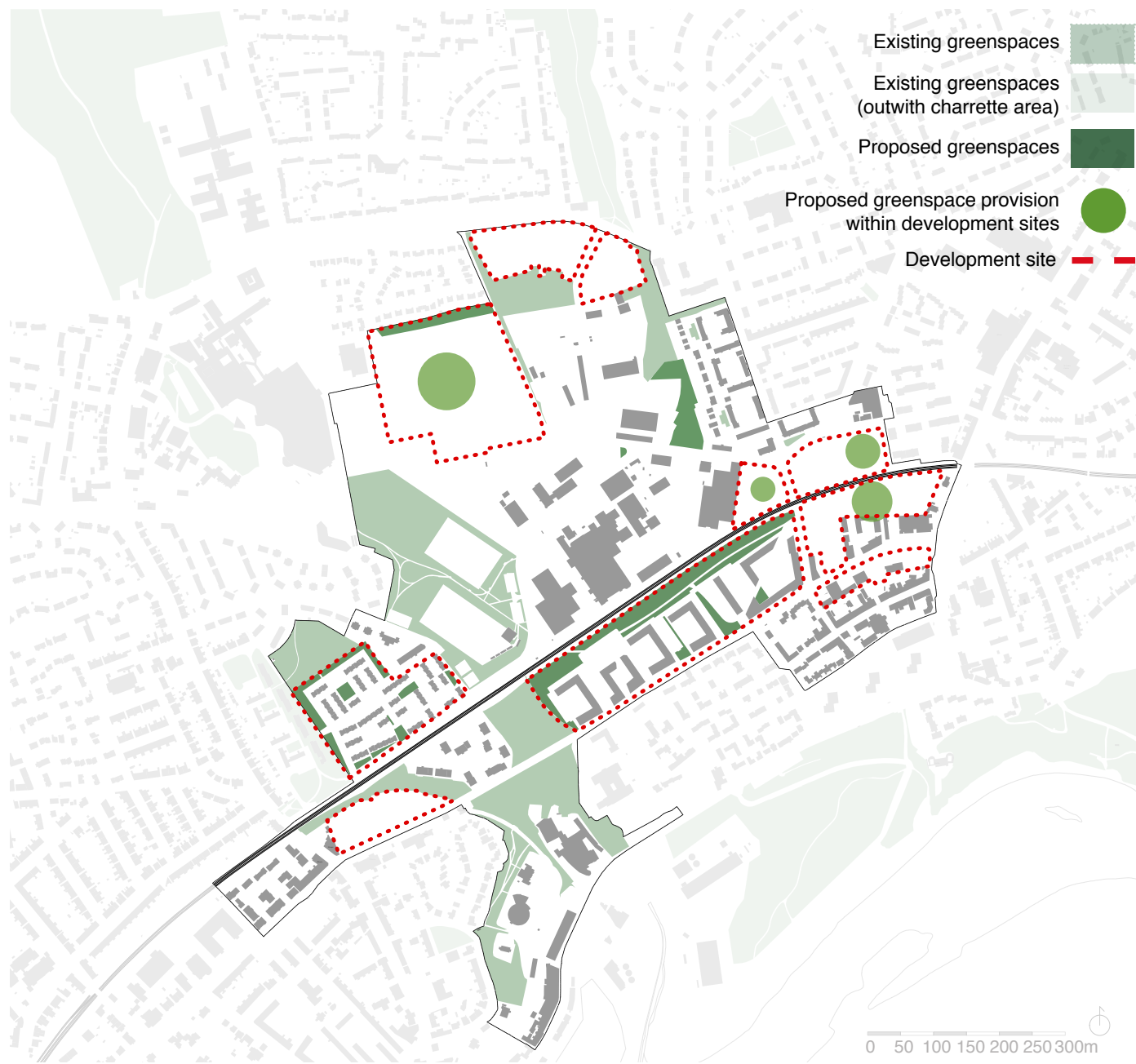
Based on the planning requirement of providing 60m² greenspace per home, the greenspace area has been calculated for each site. This is a guideline only and doesn't take into account the sites that are within 250m of existing greenspace. Exact areas of greenspace have to be calculated once housing proposals are being progressed and access to existing greenspace investigated.

If all available areas are developed new accessible greenspace of around 36,540m² would be required.

However not all of the 36,540m² have to come from new greenspaces, as some of the sites are within 250m of existing greenspace. If barriers are removed, additional links and connections established and existing green spaces improved some of the required greenspace can be provided through the existing greenspaces.

Final greenspace proposal

Final area with no access to greenspace

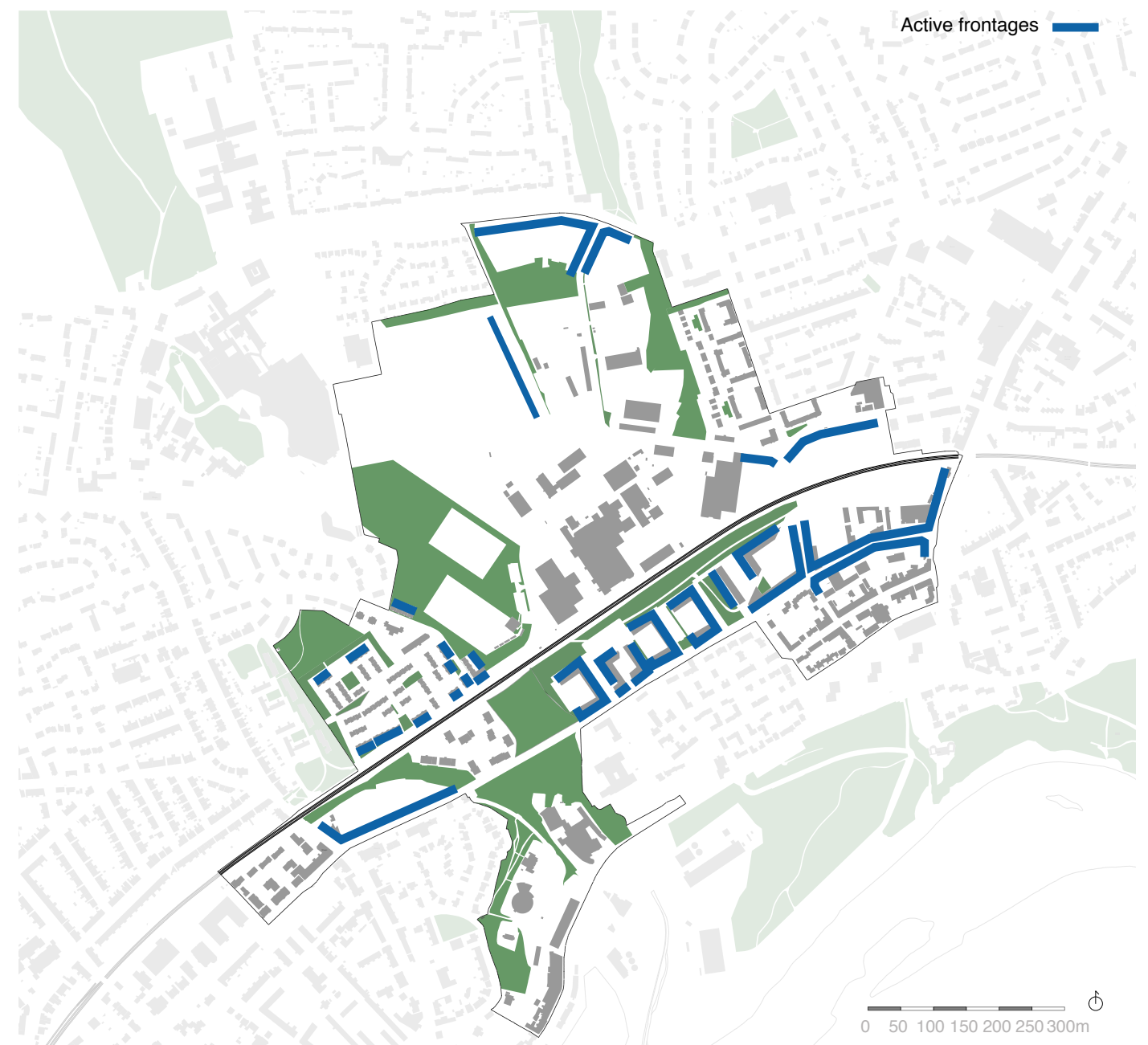


The Green Infrastructure Masterplan outlines an overall larger access to greenspace by improving access to existing greenspaces as well as creating new greenspaces.

Based on the previously identified requirement of providing 60m² of open greenspaces within 250m walkable distance, the improvement of access to existing greenspaces as well as providing new greenspaces significantly reduces the area of homes having not sufficient greenspace provision. (Refer to 'Access to existing greenspaces' p. 26 for existing area with no greenspace access)

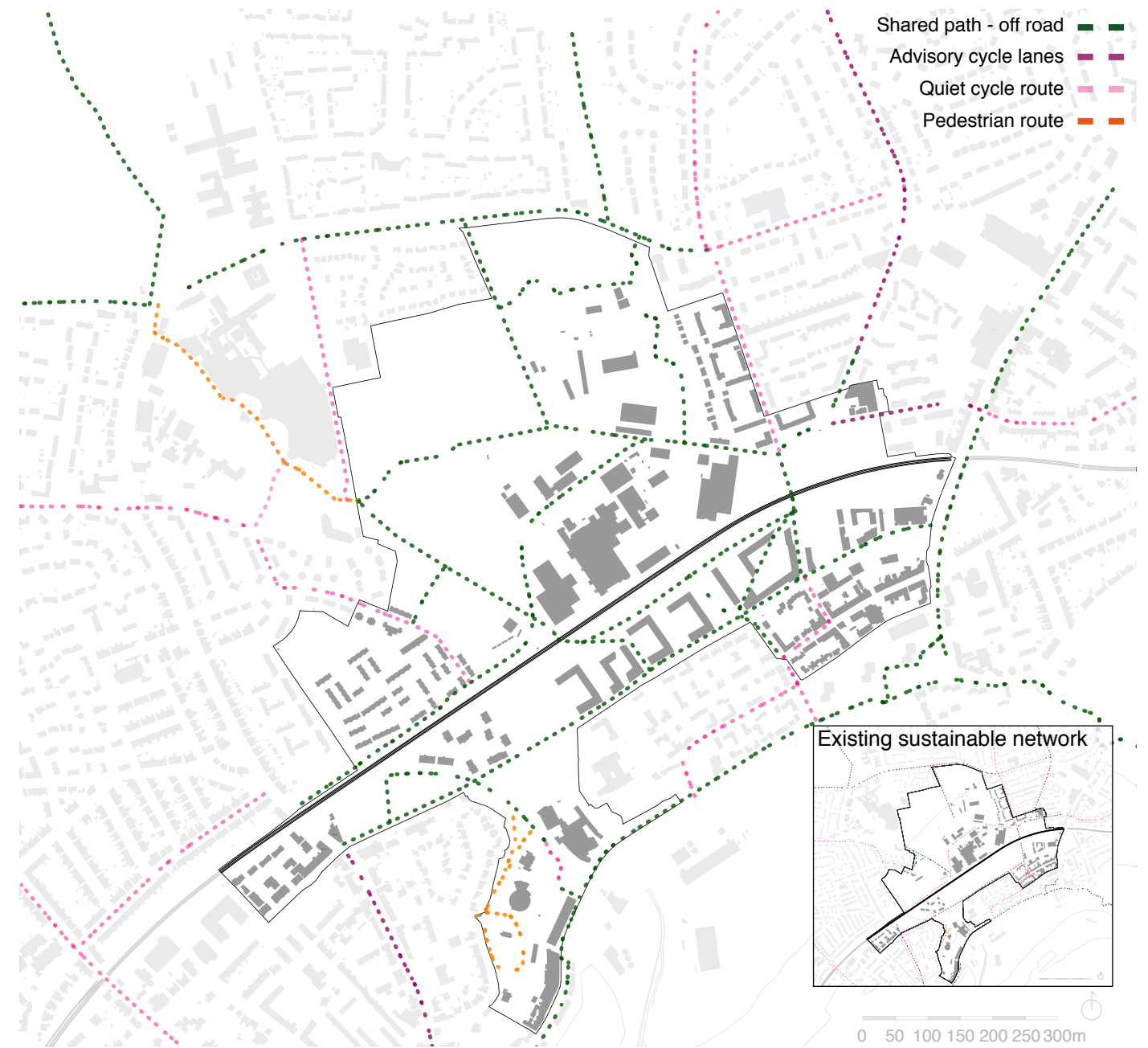
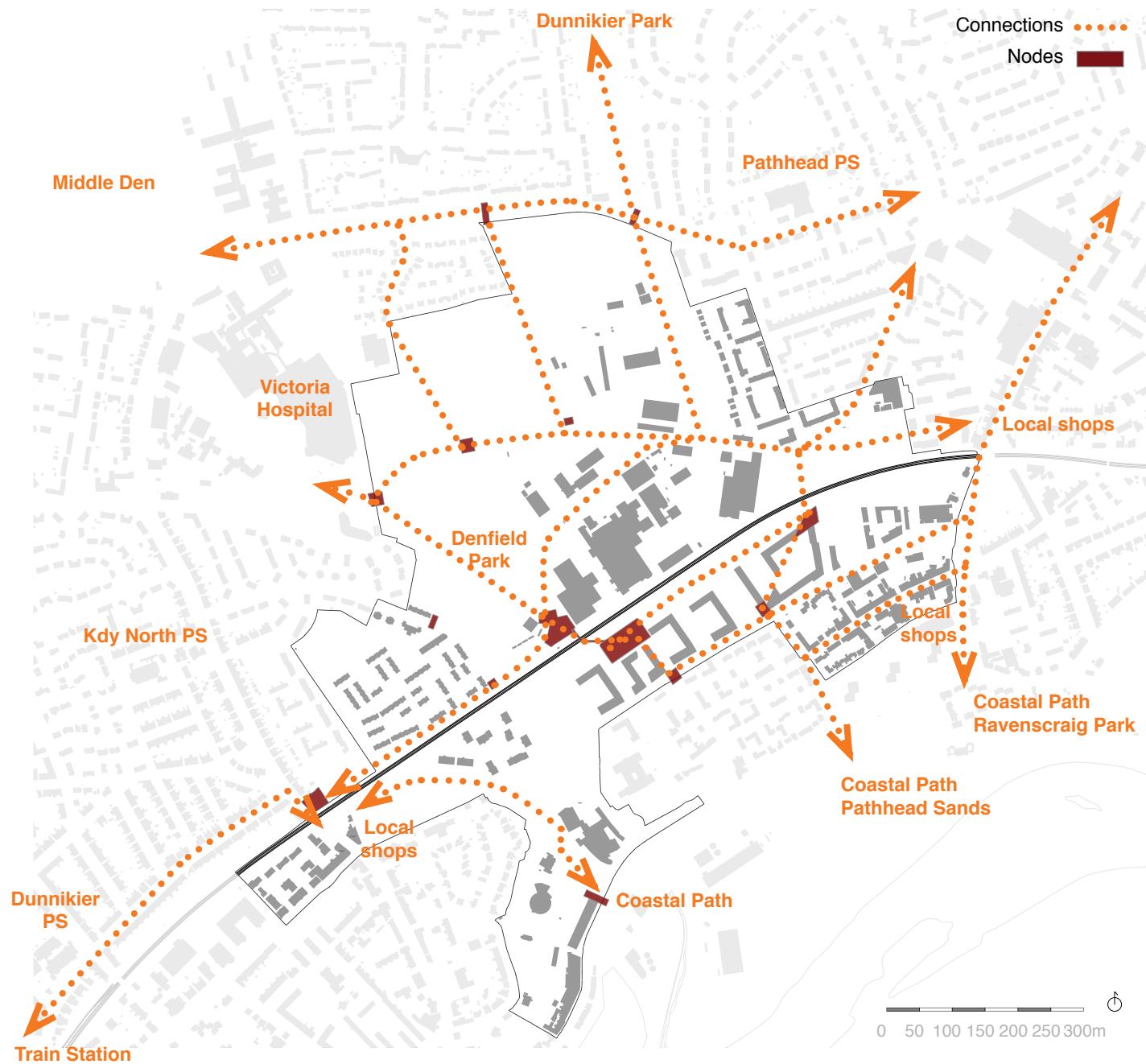
Planting

Active frontages



The proposed planting has been selected under two criteria: to offer visual guidance and to increase biodiversity and habitat. Cypress Oak and Swedish Whitebeam have been selected as street trees guiding people along main routes through the area and Crab apples highlighting smaller greenspaces within development sites. Feature trees (trees with special interest, such as flowers, habitat or autumn colour) have been selected at points of interest or focal points. Within Denfield Park wildflower seeding will mark the entrances into the park. To increase biodiversity and habitat within the masterplan area as well as connecting into the existing networks, native specimens have been selected for woodland planting as well as trees such as Swedish whitebeam and Crab apple providing habitat for native wildlife. In larger greenspaces long grass will also provide new habitats.

Active frontages towards streetscapes and greenspaces help to define primary routes as well as addressing and overlooking greenspaces. Strong frontages linked to the green networks will encourage the active use by providing natural surveillance as well as users in adjacent properties.



By creating new connections, improving access through existing greenspaces as well as establishing new routes on currently vacant land and development sites, new nodes and connections are being created. These increase the permeability through the masterplan area significantly. Nodes are being established where key routes meet and at entrances to greenspaces or new developments and should be designed as distinctive and people friendly spaces to aid navigation through the area and to encourage social interaction.

Within the masterplan area shared off road paths will form the majority of the sustainable network. The previous disconnected routes have been joined together allowing pedestrians and cyclists to move easily and safely through the area as well as connecting to key routes within the wider area. (Refer to page 23 for existing sustainable network)

Denburn Road Street Improvement



Linear tree planting (Swedish Whitebeam) with groundcover to improve streetscape visually as well as continuing the green network and providing new habitats for wildlife

05 Green Infrastructure Masterplan

Green Infrastructure Masterplan

Area 1

Area 2

Area 3

Area 4

Development Site: Nairn Street

Development Site: Muir Scrap Yard

Key catalysts are required for Pathhead to develop it into a coherent, attractive and lively neighbourhood. These catalysts are:

Density and Life: through new developments, both residential and commercial

Interaction and Community: Meeting spaces, public buildings, shops and greenspaces where people can meet

Permeability and Connections: Improved links for people as well as wildlife

Density through new development has been addressed within the Charrette and is also reflected within the Local Development Plan. Increasing density through mixed use will bring life and activity into the area. It will be critical that people who live and work in the area or move through Pathhead have the opportunity to meet, stop for a chat, get to know their neighbours, establish a sense of community and with it, ownership. These first interactions with neighbours tend to happen in public spaces, in the shops, the library and the park. Better equipped and more attractive greenspaces will increase use and activity and with it, the number of interactions between its users and the community.

Greenspaces are enablers of community building. As outlined within the previous chapters the improving of quality and access to existing greenspaces is required, as well as creating new greenspaces in order to fulfil the adequate greenspace provision requirement. Furthermore better connections between greenspaces, but also between shops, libraries, schools and buildings need to be improved to enhance communal life.

To achieve these aims and outlined vision for the Charrette area, the masterplan outlines projects within three different categories:

- **Greenspaces**
- **Connections**
- **Street Improvements**

Furthermore the masterplan outlines site plans for two sites:

- **Previous Nairn's site along Victoria Rd/ Nairn St**
- **Muir Scrap Yard along Den Road**

These two sites have been chosen to be worked up in more detail to illustrate how new developed sites within the area should be connected into the existing and proposed green network.

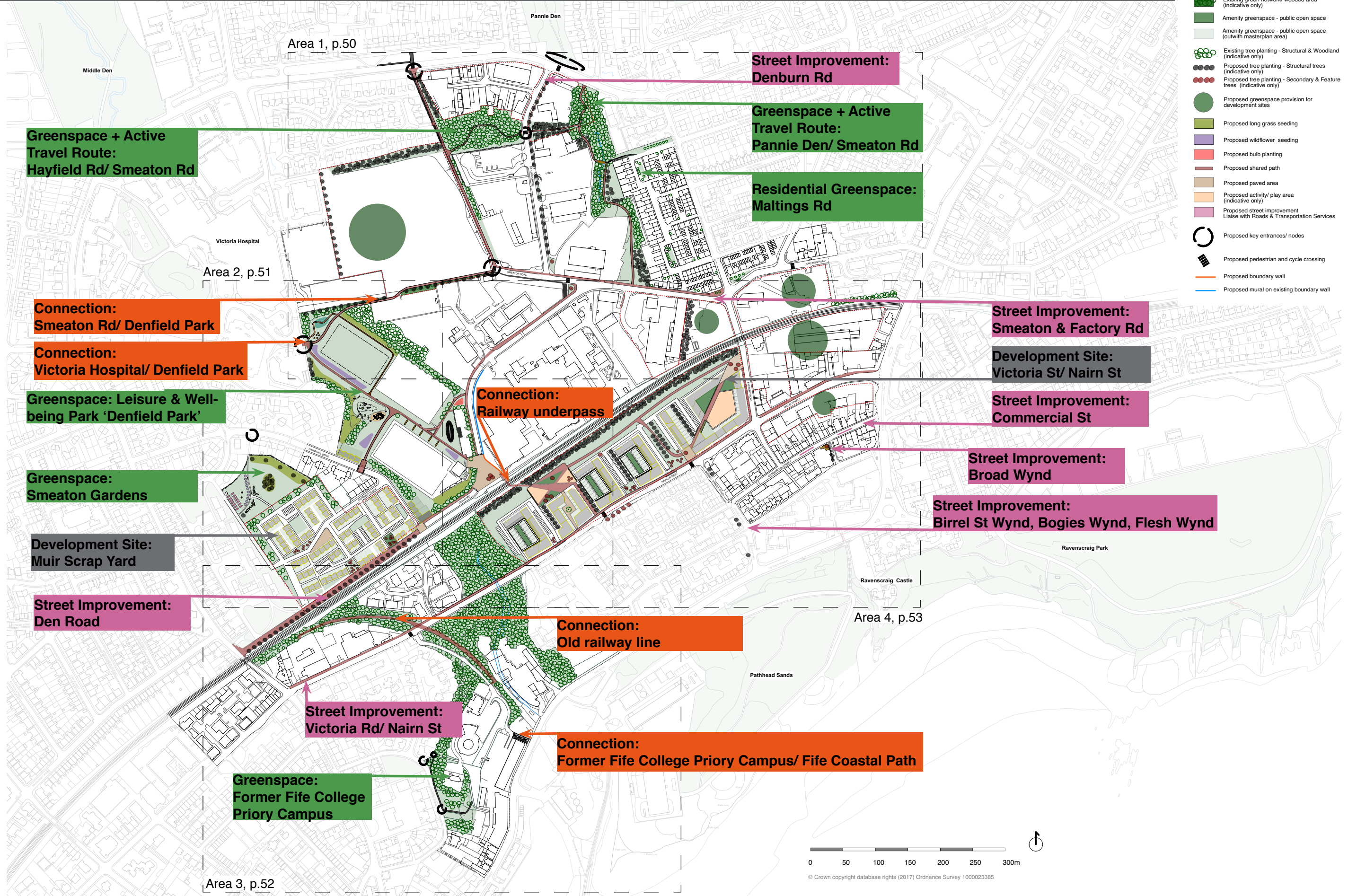
To achieve this the following common design principles have been set out:

- **Safe and usable streets**
- **South and west facing gardens**
- **Permeability and green routes**
- **Front doors**

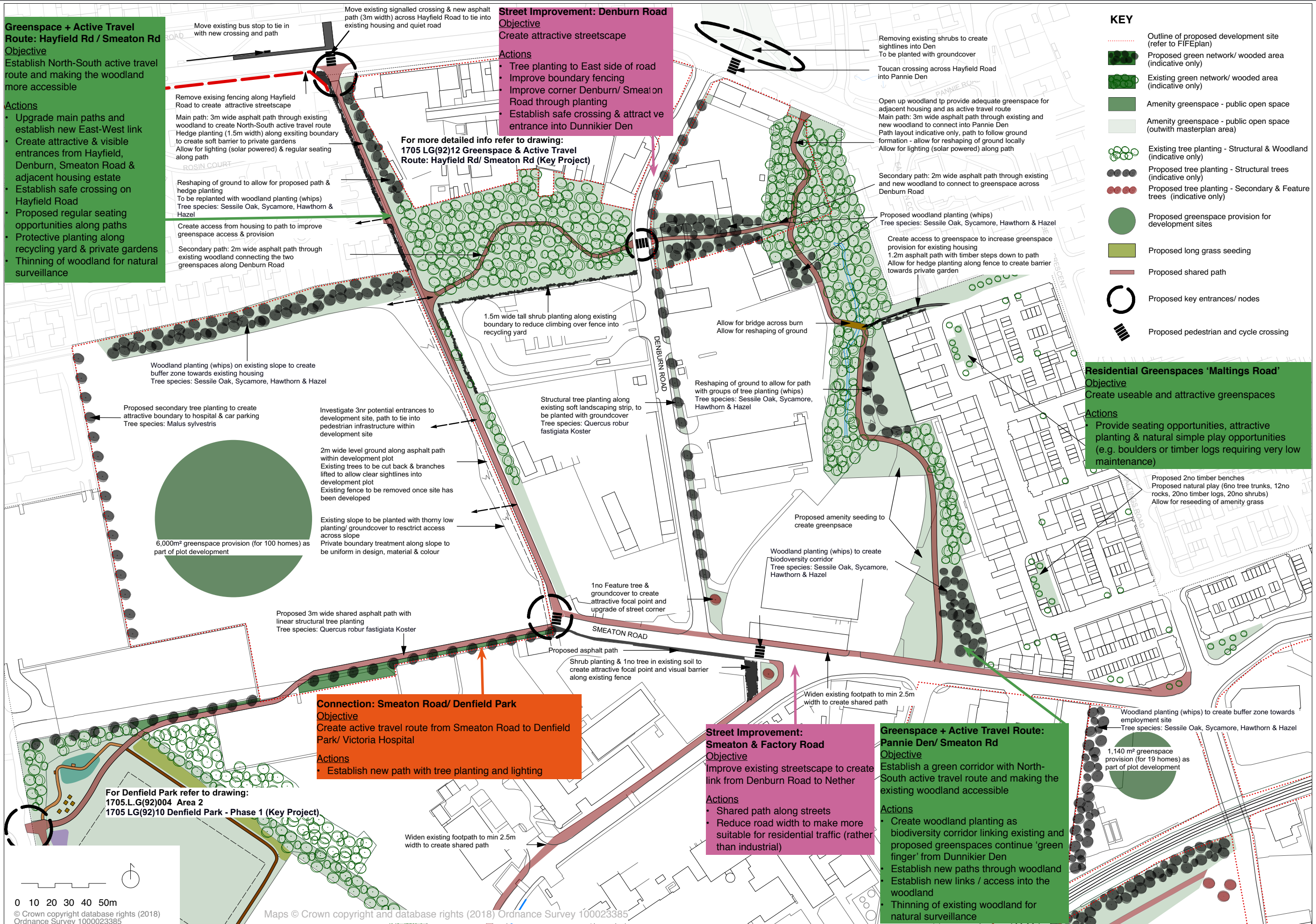
The areas of Muir Scrap Yard Site and Nairn Street have been investigated in terms of massing and architectural composition in response to the green infrastructure masterplan. Rather than looking at either site in isolation, consideration is given to town wide connections, whether pedestrian, vehicular or cycle routes. On both sites, an approach is taken where their development can benefit existing adjacent neighbourhoods through improved circulation, access and connection to greenspaces, amenity and the general vigour of the streetscape. Design considerations to achieve this include: connecting into the existing green networks as well as creating new green corridors, appropriate locations of new streets and routes; establishing and linking to new lively common spaces as well as considering views to and from the neighbouring streets, courts and buildings.

Although the developed proposals for both sites are indicative only, they set out design principles and design considerations which should be followed for any site to be developed within the masterplan area.

Green Infrastructure Masterplan



Area 1



Greenspace + Active Travel Route: Hayfield Rd / Smeaton Rd
Objective
 Establish North-South active travel route and making the woodland more accessible

Actions

- Upgrade main paths and establish new East-West link
- Create attractive & visible entrances from Hayfield, Denburn, Smeaton Road & adjacent housing estate
- Establish safe crossing on Hayfield Road
- Proposed regular seating opportunities along paths
- Protective planting along recycling yard & private gardens
- Thinning of woodland for natural surveillance

Street Improvement: Denburn Road
Objective
 Create attractive streetscape

Actions

- Tree planting to East side of road
- Improve boundary fencing
- Improve corner Denburn/ Smeaton Road through planting
- Establish safe crossing & attract ve entrance into Dunnikier Den

- KEY**
- Outline of proposed development site (refer to FIFEplan)
 - Proposed green network/ wooded area (indicative only)
 - Existing green network/ wooded area (indicative only)
 - Amenity greenspace - public open space
 - Amenity greenspace - public open space (outwith masterplan area)
 - Existing tree planting - Structural & Woodland (indicative only)
 - Proposed tree planting - Structural trees (indicative only)
 - Proposed tree planting - Secondary & Feature trees (indicative only)
 - Proposed greenspace provision for development sites
 - Proposed long grass seeding
 - Proposed shared path
 - Proposed key entrances/ nodes
 - Proposed pedestrian and cycle crossing

Residential Greenspaces 'Maltings Road'
Objective
 Create useable and attractive greenspaces

Actions

- Provide seating opportunities, attractive planting & natural simple play opportunities (e.g. boulders or timber logs requiring very low maintenance)

Remove existing bus stop to tie in with new crossing and path

Move existing signalled crossing & new asphalt path (3m width) across Hayfield Road to tie into existing housing and quiet road

Remove existing fencing along Hayfield Road to create attractive streetscape

Main path: 3m wide asphalt path through existing woodland to create North-South active travel route

Hedge planting (1.5m width) along existing boundary to create soft barrier to private gardens

Allow for lighting (solar powered) & regular seating along path

Reshaping of ground to allow for proposed path & hedge planting

To be replanted with woodland planting (whips)

Tree species: Sessile Oak, Sycamore, Hawthorn & Hazel

Create access from housing to path to improve greenspace access & provision

Secondary path: 2m wide asphalt path through existing woodland connecting the two greenspaces along Denburn Road

For more detailed info refer to drawing:
 1705.LG(92)12 Greenspace & Active Travel Route: Hayfield Rd/ Smeaton Rd (Key Project)

Woodland planting (whips) on existing slope to create buffer zone towards existing housing

Tree species: Sessile Oak, Sycamore, Hawthorn & Hazel

Proposed secondary tree planting to create attractive boundary to hospital & car parking

Tree species: Malus sylvestris

Investigate 3nr potential entrances to development site, path to tie into pedestrian infrastructure within development site

2m wide level ground along asphalt path within development plot

Existing trees to be cut back & branches lifted to allow clear sightlines into development plot

Existing fence to be removed once site has been developed

Existing slope to be planted with thorny low planting/ groundcover to restrict access across slope

Private boundary treatment along slope to be uniform in design, material & colour

6,000m² greenspace provision (for 100 homes) as part of plot development

Structural tree planting along existing soft landscaping strip, to be planted with groundcover

Tree species: Quercus robur fastigiata Koster

Proposed 3m wide shared asphalt path with linear structural tree planting

Tree species: Quercus robur fastigiata Koster

1no Feature tree & groundcover to create attractive focal point and upgrade of street corner

Reshaping of ground to allow for path with groups of tree planting (whips)

Tree species: Sessile Oak, Sycamore, Hawthorn & Hazel

Proposed amenity seeding to create greenspace

Woodland planting (whips) to create biodiversity corridor

Tree species: Sessile Oak, Sycamore, Hawthorn & Hazel

Widen existing footpath to min 2.5m width to create shared path

Connection: Smeaton Road/ Denfield Park
Objective
 Create active travel route from Smeaton Road to Denfield Park/ Victoria Hospital

Actions

- Establish new path with tree planting and lighting

Street Improvement: Smeaton & Factory Road
Objective
 Improve existing streetscape to create link from Denburn Road to Nether

Actions

- Shared path along streets
- Reduce road width to make more suitable for residential traffic (rather than industrial)

Greenspace + Active Travel Route: Pannier Den/ Smeaton Rd
Objective
 Establish a green corridor with North-South active travel route and making the existing woodland accessible

Actions

- Create woodland planting as biodiversity corridor linking existing and proposed greenspaces continue 'green finger' from Dunnikier Den
- Establish new paths through woodland
- Establish new links / access into the woodland
- Thinning of existing woodland for natural surveillance

Woodland planting (whips) to create buffer zone towards employment site

Tree species: Sessile Oak, Sycamore, Hawthorn & Hazel

1,140 m² greenspace provision (for 19 homes) as part of plot development

For Denfield Park refer to drawing:
 1705.LG(92)004 Area 2
 1705.LG(92)10 Denfield Park - Phase 1 (Key Project)

Widen existing footpath to min 2.5m width to create shared path

Area 2

Connection: Denfield Park/ Victoria Hospital Objective

Create a pedestrian & cycle link to Victoria Hospital providing a North-South active travel route

Actions

- Create attractive entrance and re-aligning & establishing new path within Denfield Park

Greenspace: Leisure & Well-being Park 'Denfield Park' Objective

Create an accessible neighbourhood park for the charrette area and adjacent housing offering a range of habitats and activities

Actions

- Create attractive & visible entrances from Thornhill Drive & Den Road
- Create new links / entrances into the park
- Upgrade main paths
- Provide varied habitats
- Establish regular seating opportunities along paths
- Establish play opportunities, trim trail/ outdoor gym and elderly/ therapy fitness equipment
- Provide cycle parking

Whin dust path (1.2m width) to create circular walk

Wetland area with planting to utilise area with current drainage issues

Timber board walk with platforms & seating

Fitness equipment
Location and type to be decided through community & NHS engagement

Attractive entrance with signage, seating & safe crossing to create West-East connection
Refer to drawing 1705 LG(92)11
Connection: Victoria Hospital/ Denfield Park

Wildflower seeding to create attractive entrance & increase biodiversity

Tree planting to create visual barrier to Energy Centre
Tree species: Sessile Oak, Sycamore & Hornbeam

Long grass seeding along edge of park to create interest & increase biodiversity

Vertical art feature

Proposed natural timber play

Outdoor gym equipment
Location and type to be decided through community engagement

Low shrub planting to create soft barrier to private houses

Wildflower seeding to create welcoming entrances & increase biodiversity

Entrance with raised table & signage

Low hedge planting to create soft barrier along existing fencing

Long grass seeding along edge for reduced maintenance and increased biodiversity with single tree planting (Positioned without obscuring views from houses)
Tree species: Sessile Oak or Sycamore

Fruit trees along path as community orchard (sightlines should be maintained)

Group of tree planting with long grass seeding to include vertical elements within open spaces
Tree species: Sessile Oak or Sycamore

2no benches & 2no picnic benches to offer variety of seating

Growing spaces to be positioned south facing

Natural play along main path

Entrance with feature tree planting and signage

Reduce tree planting within existing tree belt to allow views from new housing into existing greenspaces (Remove all leylandii & dead trees)

Proposed housing tying into existing and proposed green infrastructure
Refer to Masterplan report (p.58-61) for vision and design guidelines

Tree planting within development site:
Secondary tree planting for interest and biodiversity
Tree species: Malus sylvestris

Proposed paved shared path with linear structural tree planting
Tree species: Quercus robur fastigiata Koster

Reopen existing old railway: Allow for 5m wide asphalt path to create an off-road connection between Fife Coastal Path & Victoria Road and to provide greenspace provision for adjacent development site

Long grass seeding along edge of park

Existing pitch to be moved to line up with adjacent pitch & create space for new shared path & wildflower seeding

Allow for seating:
10no benches
5no picnic benches

For Phase 1 improvement details refer to drawing 1705 LG(92)10 Denfield Park - Phase 1

Widen existing footpath to min 2.5m width to create shared path

Mural/ artwork on existing boundary wall to uplift streetscape and/ or to inform about Forbo Nairn

Allow for signage at entrance

Bulb planting to create attractive entrance

Upgrading of existing path to 3m wide shared asphalt path

Low hedge planting to create visual barrier to car park

Maze planting with seating to create intergenerational point of interest

Raised table creating shared surface, creating North-South link and slowing car traffic down
Upgrading of entrances with signage, seating, lighting & proposed trees
Tree species: Malus sylvestris

Proposed boundary wall (to match existing) with mural/ artwork to uplift streetscape and/ or inform about Forbo Nairn
Approx 45m length

Opening of filled in railway subway to create North-South connection

Proposed pedestrian & cycle crossing to create safe crossing between shared path/ housing development and Mitchell Place

Proposed housing tying into existing and proposed green infrastructure
Refer to Masterplan document (p.54-57) for vision and design guidelines

Proposed paved shared path with linear structural tree planting
Tree species: Quercus robur fastigiata Koster

Reopen existing old railway: Allow for 5m wide asphalt path to create an off-road connection between Fife Coastal Path & Victoria Road and to provide greenspace provision for adjacent development site

Street Improvement: Den Road Objective

Improve existing streetscape for active travel

Actions

- Streetscape in front new site development & along Northern site to be widened to provide shared path
- Thinning of existing tree shelter (Denfield Park) to allow for sightlines and natural surveillance

Connection: Railway Underpass Objective

Create North-South active travel link

Actions

- Open up existing underpass to create pedestrian & cycle link between Denfield Park/ Den Road to Nairn Street

KEY

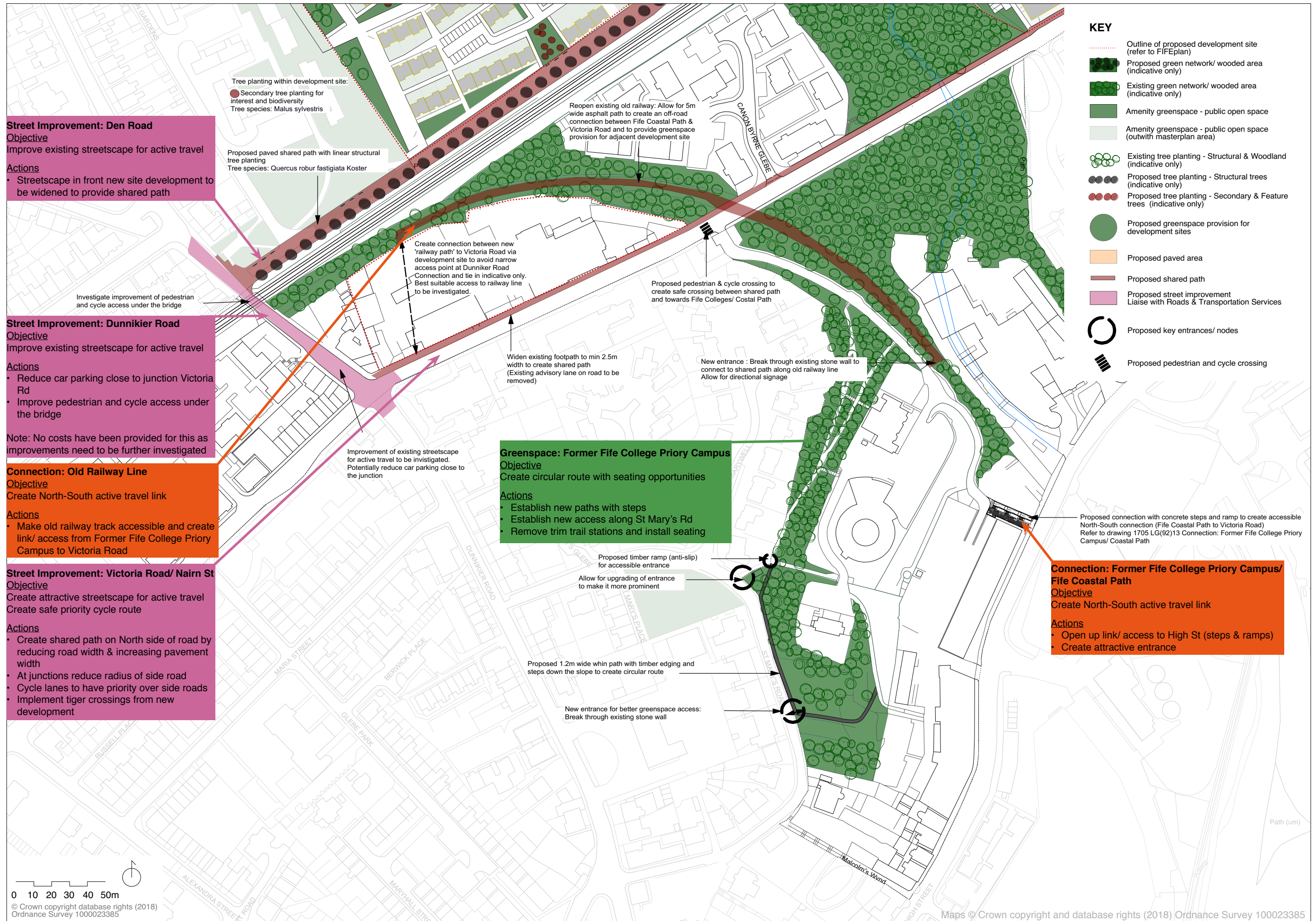
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- Proposed tree planting - Structural trees (indicative only)
- Proposed tree planting - Secondary & Feature trees (indicative only)
- Proposed greenspace provision for development sites
- Proposed long grass seeding
- Proposed wildflower seeding
- Proposed bulb planting
- Proposed shared path
- Proposed paved area
- Proposed activity/ play area (indicative only)
- Proposed key entrances/ nodes
- Proposed pedestrian and cycle crossing

0 10 20 30 40 50m

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Area 3



Street Improvement: Den Road
Objective
 Improve existing streetscape for active travel
Actions
 • Streetscape in front new site development to be widened to provide shared path

Street Improvement: Dunnikier Road
Objective
 Improve existing streetscape for active travel
Actions
 • Reduce car parking close to junction Victoria Rd
 • Improve pedestrian and cycle access under the bridge

Note: No costs have been provided for this as improvements need to be further investigated

Connection: Old Railway Line
Objective
 Create North-South active travel link
Actions
 • Make old railway track accessible and create link/ access from Former Fife College Priory Campus to Victoria Road

Street Improvement: Victoria Road/ Nairn St
Objective
 Create attractive streetscape for active travel
 Create safe priority cycle route
Actions
 • Create shared path on North side of road by reducing road width & increasing pavement width
 • At junctions reduce radius of side road
 • Cycle lanes to have priority over side roads
 • Implement tiger crossings from new development

Greenspace: Former Fife College Priory Campus
Objective
 Create circular route with seating opportunities
Actions
 • Establish new paths with steps
 • Establish new access along St Mary's Rd
 • Remove trim trail stations and install seating

Connection: Former Fife College Priory Campus/ Fife Coastal Path
Objective
 Create North-South active travel link
Actions
 • Open up link/ access to High St (steps & ramps)
 • Create attractive entrance

- KEY**
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 - Proposed green network/ wooded area (indicative only)
 - Existing green network/ wooded area (indicative only)
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 - Existing tree planting - Structural & Woodland (indicative only)
 - Proposed tree planting - Structural trees (indicative only)
 - Proposed tree planting - Secondary & Feature trees (indicative only)
 - Proposed greenspace provision for development sites
 - Proposed paved area
 - Proposed shared path
 - Proposed street improvement Liaise with Roads & Transportation Services
 - Proposed key entrances/ nodes
 - Proposed pedestrian and cycle crossing

Area 4

- KEY**
- Outline of proposed development site (refer to FIFEplan)
 - Proposed green network/ wooded area (indicative only)
 - Existing green network/ wooded area (indicative only)
 - Amenity greenspace - public open space
 - Amenity greenspace - public open space (outwith masterplan area)
 - Existing tree planting - Structural & Woodland (indicative only)
 - Proposed tree planting - Structural trees (indicative only)
 - Proposed tree planting - Secondary & Feature trees (indicative only)
 - Proposed greenspace provision for development sites
 - Proposed long grass seeding
 - Proposed shared path
 - Proposed paved area
 - Proposed activity/ play area (indicative only)
 - Proposed key entrances/ nodes
 - Proposed pedestrian and cycle crossing

Connection: Railway Underpass
Objective
 Create North-South active travel link

Actions

- Open up existing underpass to create pedestrian & cycle link between Denfield Park/ Den Road to Nairn Street

Proposed housing tying into existing and proposed green infrastructure
 Refer to Masterplan document (p.54-57) for vision and design guidelines

Proposed pedestrian & cycle crossing to create safe crossing between shared path/ housing development and Mitchell Place

Street Improvement: Victoria Road/ Nairn St
Objective
 Create attractive streetscape for active travel
 Create safe priority cycle route

Actions

- Create shared path on North side of road by reducing road width & increasing pavement width
- At junctions reduce radius of side road
- Cycle lanes to have priority over side roads
- Implement pedestrian & cycle crossings from new development

Street Improvement: Birrel Street Wynd, Bogies Wynd & Flesh Wynd
Objective
 Create North-South active travel route

Actions

- Improve streetscape to offer attractive and safe cycle and pedestrian link from Nairn Street to Nether Street/ Coastal Path
- Clear signage and street layout indicating that Birrel Street Wynd is for public access

Street Improvement: Broad Wynd
Objective
 Improve pedestrian access for elderly

Actions

- Install handrail to one side of street

Street Improvement: Commercial Street
Objective
 Improve streetscape for local businesses

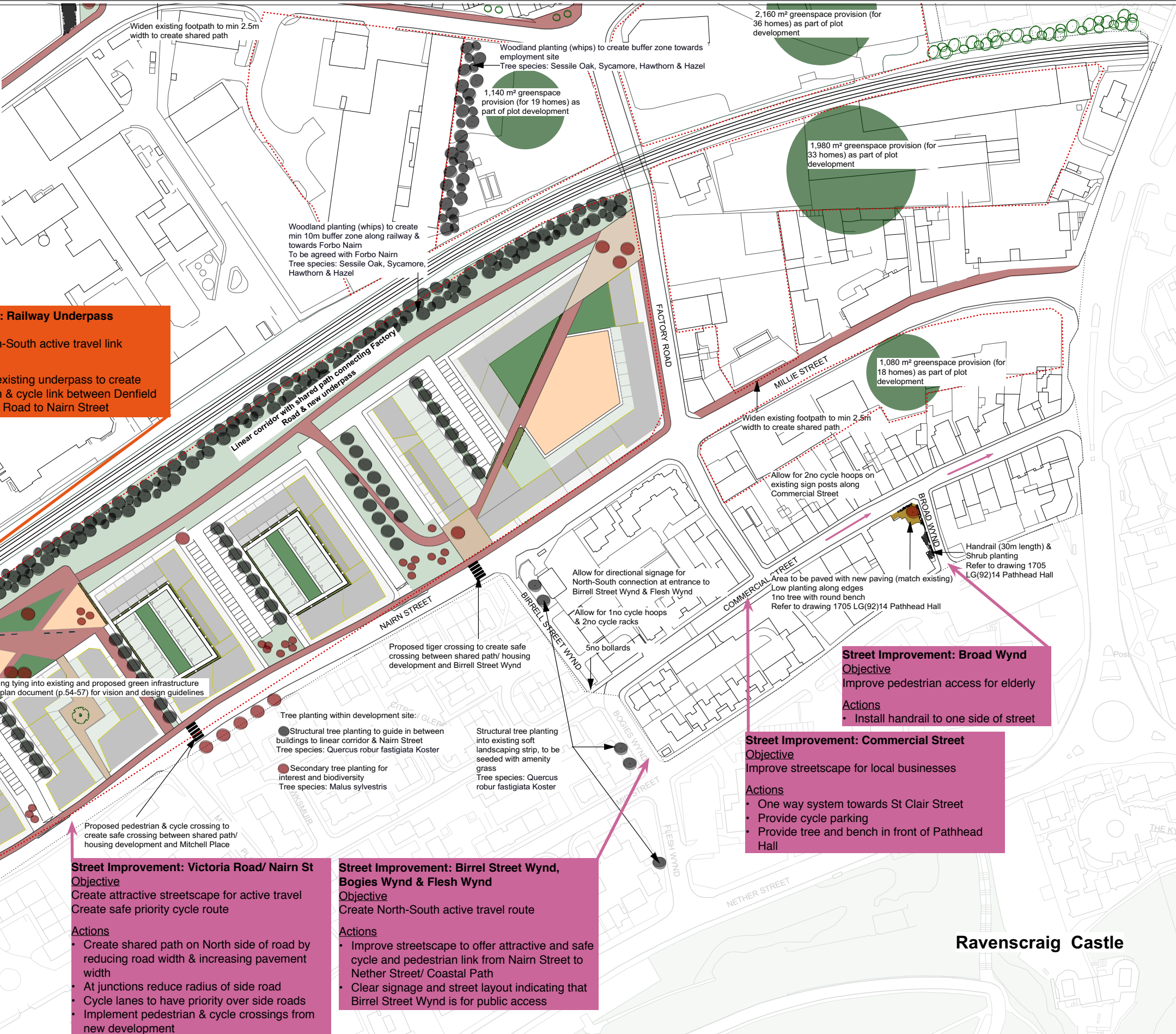
Actions

- One way system towards St Clair Street
- Provide cycle parking
- Provide tree and bench in front of Pathhead Hall

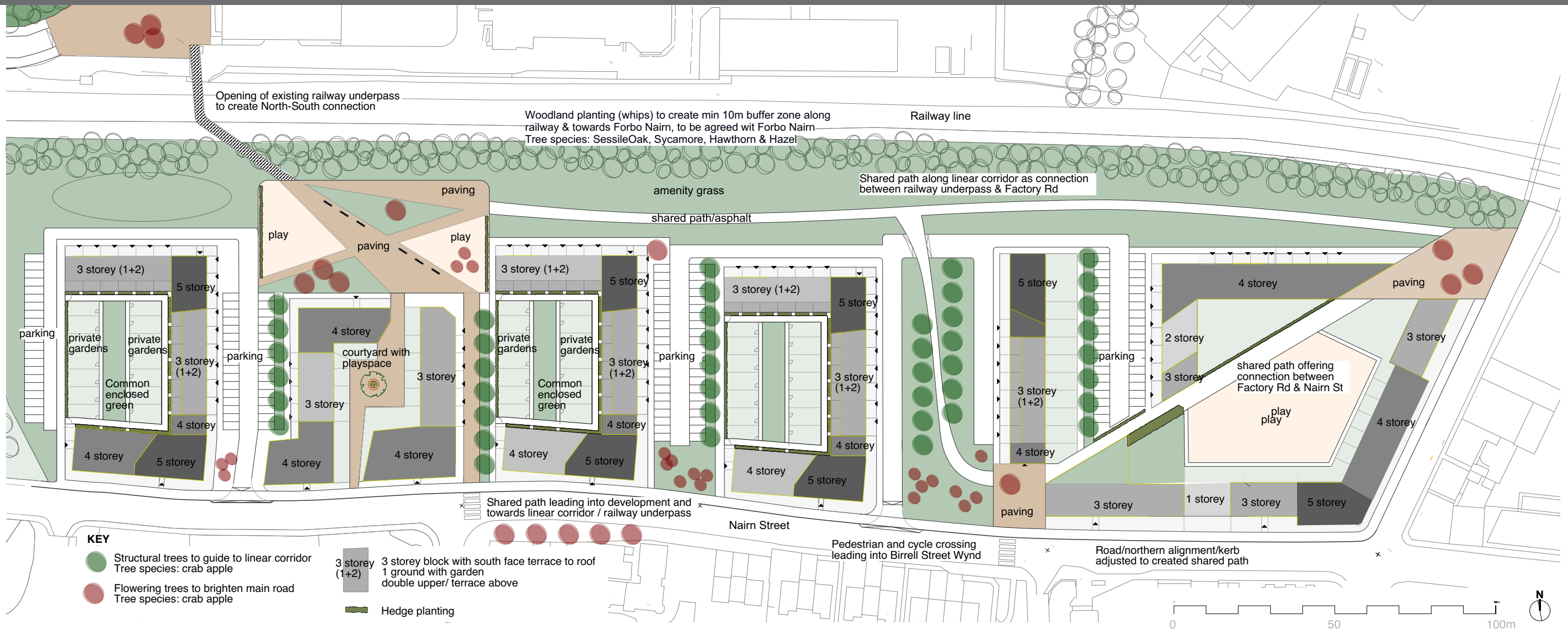
Raised table creating shared surface, creating North-South link and slowing car traffic down
 Upgrading of entrances with signage, seating, lighting & proposed trees
 Tree species: Malus sylvestris

Proposed boundary wall (to match existing) with mural/ artwork to uplift streetscape and/or inform about Forbo Nairn
 Approx 45m length

Opening of filled in railway subway to create North-South connection



Development Site: Nairn Street - General Layout



The proximity to the busy Nairn Street; the large factory building to the north and tenemental buildings to the east suggests the site is more successful and vibrant where the density is greater, and massing higher. Other than careful consideration of vehicular access from Nairn Street, there is no evident negative impact of this level of density, and will only enliven the surrounding area and active street frontages to Nairn Street. However, the site works effectively as a vigorous residential area, only where appropriate care is taken for vehicular routes; pedestrian connectivity and appropriately considered architectural solutions to the residential buildings. The challenge of this site is to bring an active frontage and higher blocks to (the north facing) Nairn Street, while making good sunny garden and circulation spaces which are not overshadowed. This is achieved by using a mixture of lower and higher building types, with breaks in the north facing street-front, introducing sunshine and daylight through to rear gardens and pedestrian circulation routes. The two building types used within the Nairn Street site massing study are:

1. Low terraces which comprise a ground floor garden flat with a small private garden to the rear, with a duplex apartment including a small private terrace space facing south or west.
2. Larger housing blocks with 2 storey terrace houses with private street access, with single storey apartments over 2-3 storeys accessed but common stairs above.

Note:
This is an initial investigation of massing and density. The 4/5 storey heights in particular could vary somewhat through the design process in relation to overall massing and ratio of housing to amenity space.



Precedent images:
(1) (2) Darbishire Place: Niall McLaughlin Architects – Housing around courtyards
(3) Fraser Avenue: 7N – Streetscape and defensible space is varying scale and massing
(4) Byhusene: Vandkunsten Architects – the sociable pedestrian street

Design Principles

The final layout of the site should utilise the Greenspace Design Principles as outlined on p.41 as well as the following common principles:

Greenspace provision

Based on the planning requirements 60m² greenspace per home is being provided within 250m walkable distance. The provision of the landscape and greenspaces should drive the layout of the buildings.

Greenspace and tree planting

A linear park along the railway line forms an east-west axis to create a connecting network of off-road path and greenspaces whilst simultaneously addressing a lack of close accessible local open space. It is important that greenspaces and development are interwoven and connected so that the linear greenspace can be easily accessed by young and old without crossing roads. Buildings/ frontages should address the greenspace to provide social surveillance and activity.

Greenspaces with structural tree planting create connections between the linear park and Nairn St and guide people to the linear greenspace. The Avenues provide structure and subdivide the space bringing it to human scale.

Nodes

Nodes are being established where key routes meet and at entrances to the site and should be designed as distinctive and people friendly spaces to aid navigation through the area and to encourage social interaction.

Play areas

It is important to offer play opportunities within close distance to the housing allowing children to reach them without travelling long distances or relying on adults to take them there. Within larger greenspaces play equipment, fitness equipment or therapeutic equipment should be provided. Informal natural play along main path or smaller greenspaces can also be provided, e.g. land forms, rocks, timber logs, willow tunnels.

Safe and usable streets

Cars are located away from the houses, on street or in parking clusters (no more than say 50m) from any house to make safe and usable streets for play and socialising, and improving the air quality of streets and houses. Common courtyard spaces make for car-free, enjoyable places with a sense of ownership for the houses adjacent them, bringing a stronger sense of community and shared living. It is acknowledged that this is most successful where the ground surfaces and landscape is suitably considered and long-term maintenance considered.

South and west facing gardens

Where possible, the main gardens to the rear faces the south or west and would connect to the living spaces at ground floor. Not only does make for more sunny and usable external spaces, but with larger glazing to the living space on this side, it improves the efficiency of the home through greater solar gain. This is balanced with some north facing gardens, where an active street frontage is the priority.

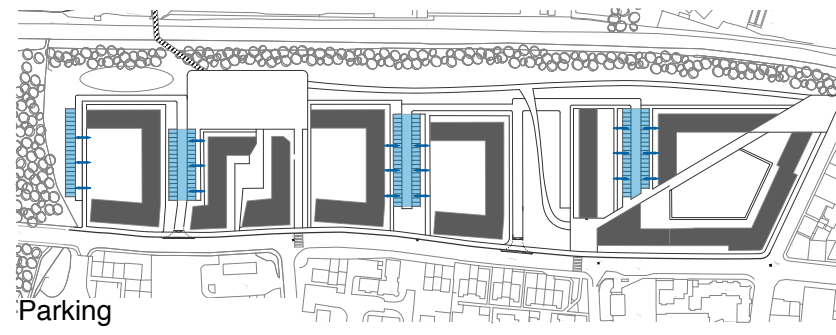
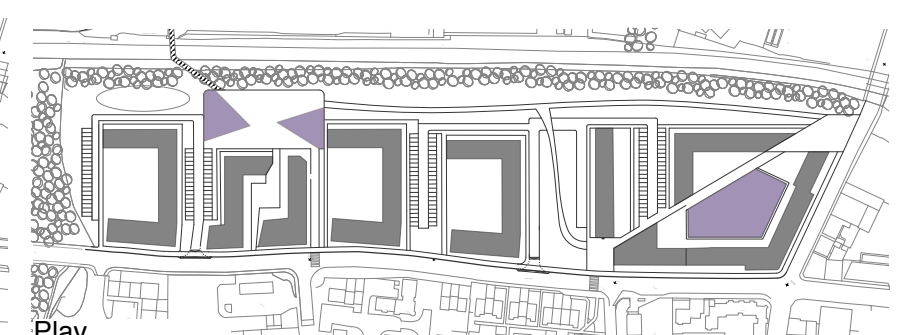
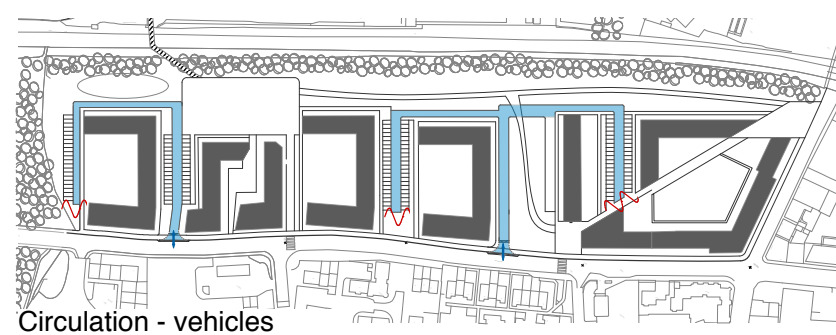
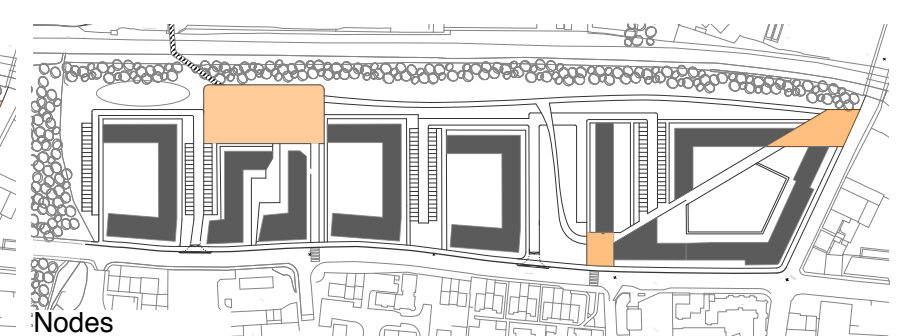
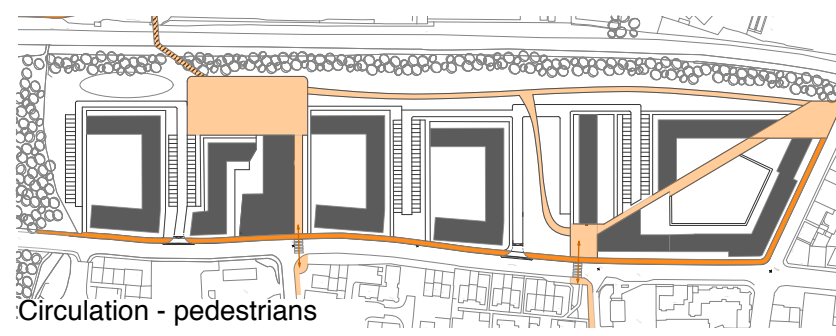
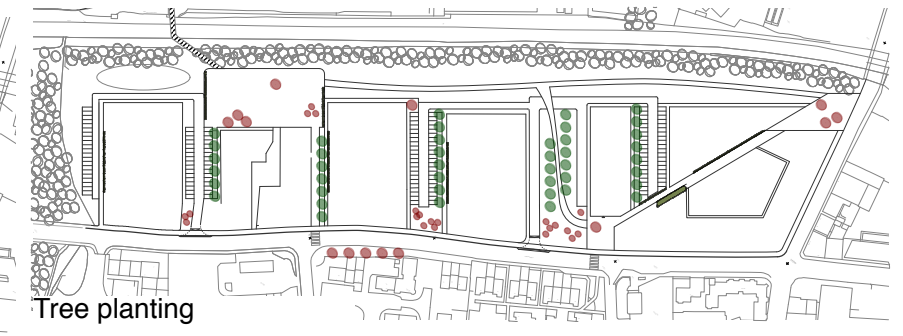
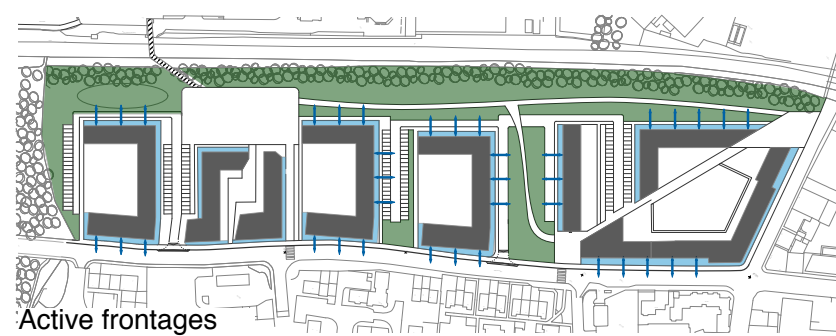
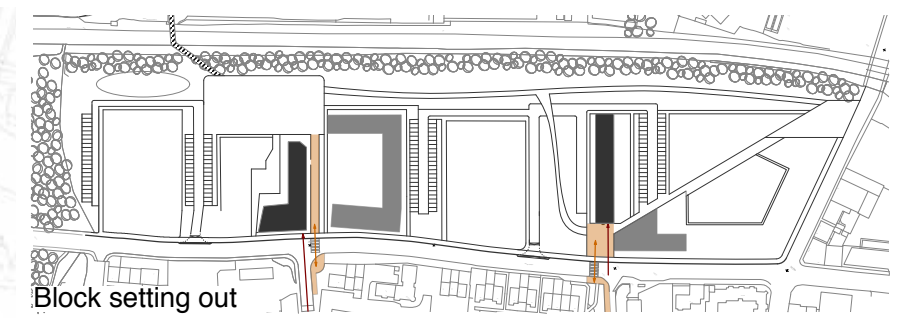
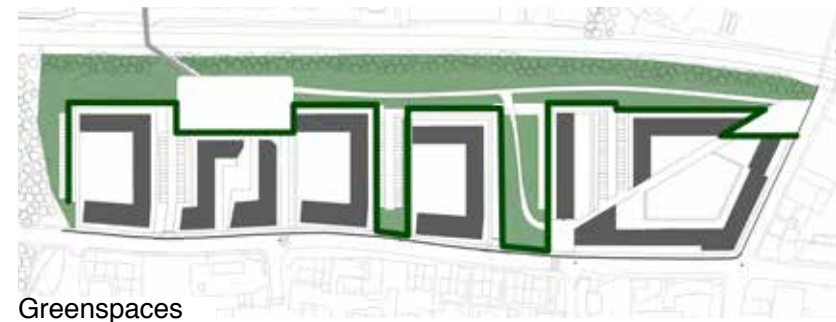
Permeability and green routes

The housing is arranged around primary pedestrian routes which connect to wider green spaces and within sites, interlink courtyard and green hearts to the sites.

Front doors

For both terraced housing and larger blocks, where possible, apartments and houses are provided their own main door and defensible space between door and street. Where a duplex apartment sits above a garden flat, these have been indicated with their own external stair access, again giving privacy but the opportunity to inhabit and socialise.

Diagrams



Development Site: Nairn Street - Aerial View



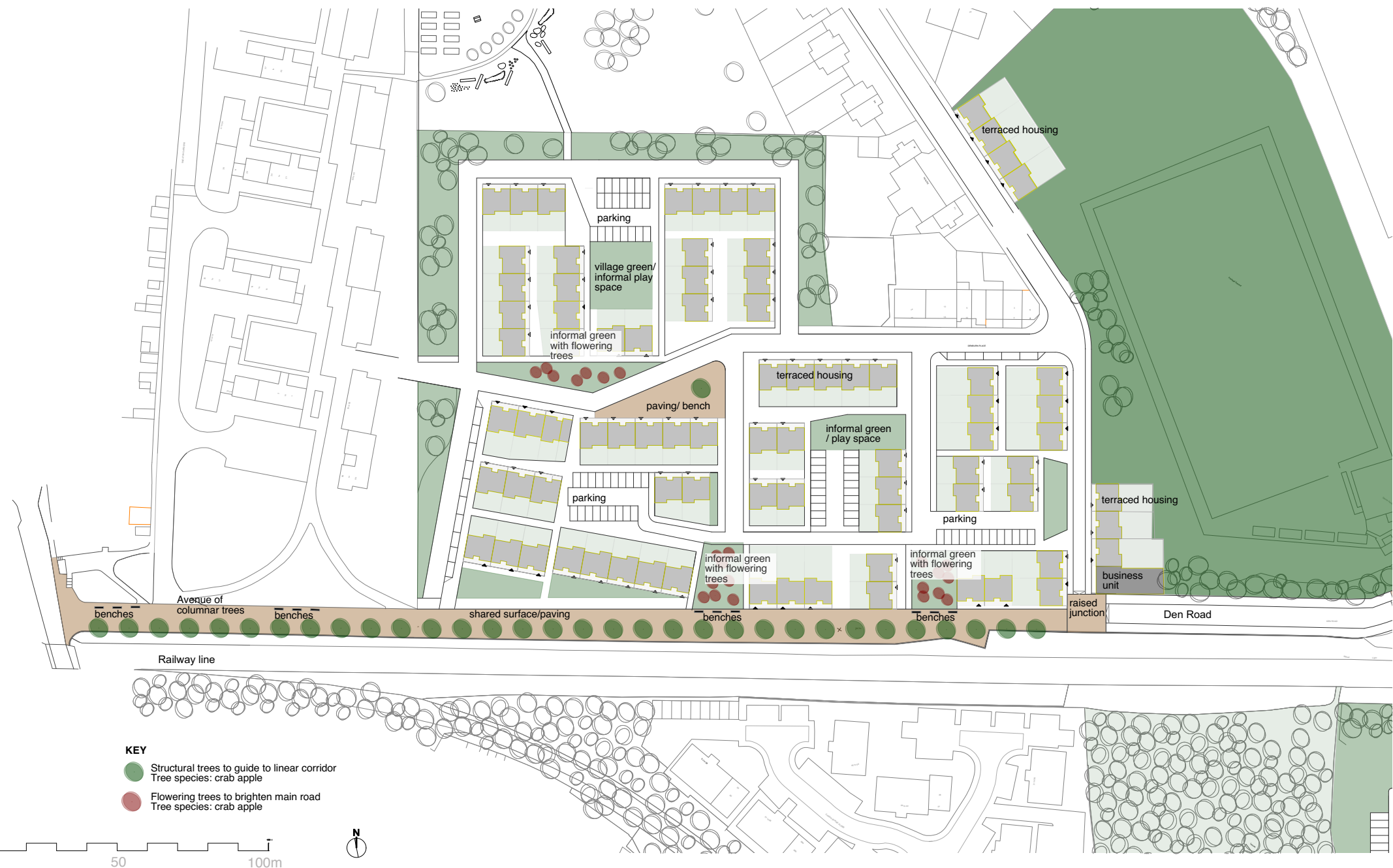
New greenspaces within proposed development creating new links throughout the site as well as attractive residential spaces

Development Site: Nairn Street - Visual: Linear Corridor with shared path



Linear corridor: shared path and establishment of new green network

Development Site: Muir Scrap Yard - General Layout



The massing study uses a house type which works as a terrace, but limited to a maximum of houses in any single terrace. The house type has the potential to vary between maybe a 3-4 bedroom house with a flexibility of scale and arrangement, over 2 or 2½ storeys (with dormers to the roof level). The scale of the house types feels suitable to the scale and type of buildings surrounding the site. Each house has a small 'defensible' space to the front, for the provision of bins/ bike storage but also provides an appropriate privacy to say a kitchen window, while the proximity to street still giving a sense of sociable neighbourliness on

this active street frontage. To the rear, the space is more generous to maximise sunny private garden space. Terraces are clustered in appropriate numbers to feel suitably friendly, and around occasional common green space which allow the housing to breath and create healthy, welcoming common social areas. Some of the terraced housing expands into Denfield Park to open up the edge of the park creating an active frontage and increasing natural surveillance into the park. A business unit at the edge of the park and with a frontage to Den Road brings activity to the street.

Precedent images:
 (1) Boness: MFA with Stuart Milne Housing – Common courtyard or greenspace
 (2) Highland Housing: MFA – Generous glazing to garden
 (3) Leith Colonies; MFA/Collective Architecture – Terraced housing massing
 (4) Canning Town: Sergison Bates Architects – Terrace housing massing and defensible space

Design Principles

Diagrams

The final layout of the site should utilise the Greenspace Design Principles as outlined on p.41 as well as the following common principles:

Greenspace provision

Based on the planning requirements 60m² greenspace per home is being provided within 250m walkable distance. The provision of the landscape and greenspaces should drive the layout of the buildings.

Greenspace and tree planting

As two areas of greenspace, Denfield Park to the East and a local park to the North are adjacent to this site, smaller greenspaces between the houses have been provided to enhance the open spaces and offering local meeting and informal play spaces. Smaller trees provide vertical elements and points of interest.

The existing tree shelter to the north is being thinned and opened up to allow views and connections to the surrounding.

Nodes

Nodes are being established where key routes meet and at entrances to the site and should be designed as distinctive and people friendly spaces to aid navigation through the area and to encourage social interaction.

Play areas

It is important to offer play opportunities within close proximity to the housing allowing children to reach them without travelling long distances or relying on adults to take them there. Informal natural play along main path or smaller greenspaces should be provided, e.g. land forms, rocks, timber logs, willow tunnels.

Safe and usable streets

Cars are located away for the houses, on street or in parking clusters (no more than say 50m) from any house to make safe and usable streets for play and socialising, and improving the air quality of streets and houses. Common courtyard spaces make for car-free, enjoyable places with a sense of ownership of the houses adjacent to them, bringing a stronger sense of community and shared living. It is acknowledged that this is most successful where the ground surfaces and landscape is suitably considered and long-term maintenance considered.

South and west facing gardens

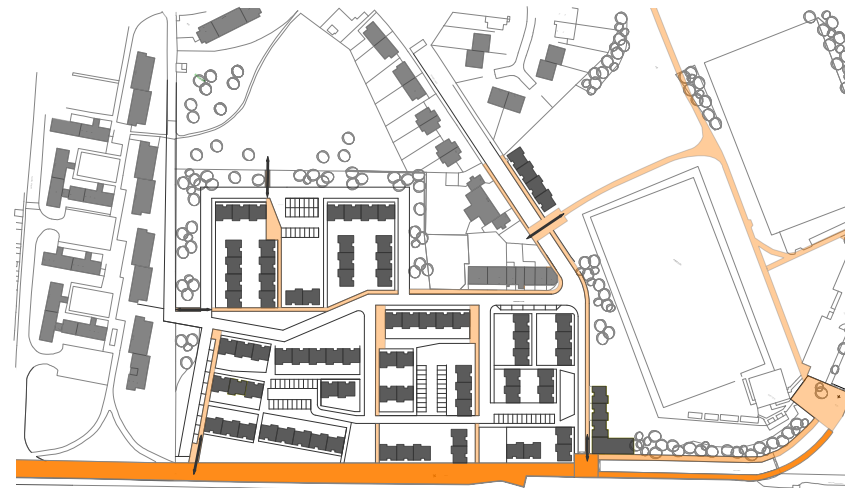
Where possible, the main gardens to the rear face the south or west and would connect to the living spaces at ground floor. Not only does this make for more sunny and usable external spaces, but with larger glazing to the living space on this side, it improves the efficiency of the home through greater solar gain. This is balanced with some north facing gardens, where an active street frontage is the priority.

Permeability and green routes

The housing is arranged around primary pedestrian routes which connect to wider green spaces and within sites, interlink courtyard and green hearts to the sites.

Front doors

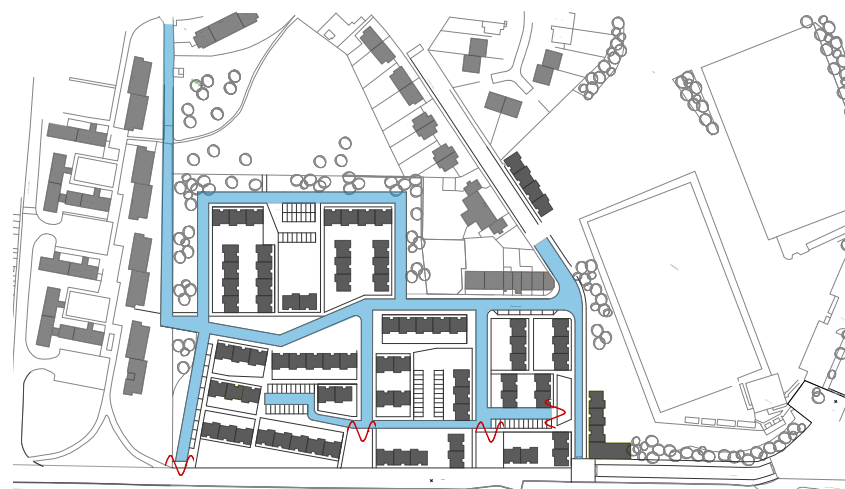
For both terraced housing and larger blocks, where possible, apartments and houses are provided their own main door and defensible space between door and street. Where a duplex apartment sits above a garden flat, these have been indicated with their own external stair access, again giving privacy but the opportunity to inhabit and socialise.



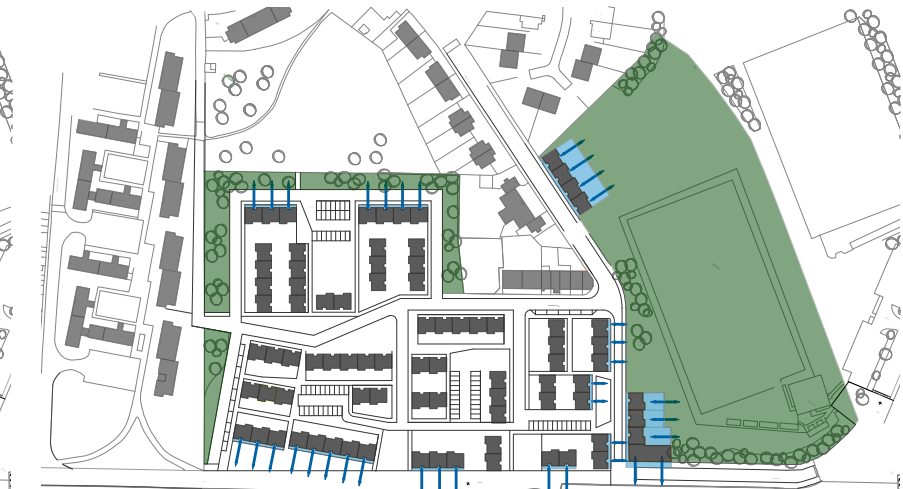
Circulation - pedestrians



Greenspaces



Circulation - vehicles



Active frontages



Parking



Trees

Development Site: Muir Scrap Yard - Aerial view



Development Site: Muir Scrap Yard - Visual: Shared path along Den Road



Proposed terraced housing with front garden

Improvement of greenspaces and shared path along Den Road

06 Key Projects

Greenspace: Leisure & Well-being Park: Denfield Park - Phase 1

Connection: Victoria Hospital/ Denfield Park

Greenspace + Active Travel Route: Hayfield Road to Smeaton Road

Street Improvement: Commercial Street & Broad Wynd

Connection: Former Fife College Priory Campus/ Coastal Path



The Key Projects further outlined and developed as part of the masterplan have been selected from the projects listed within the Delivery Action Plan. Five projects scored as being the 'highest priority' have been chosen as first elements of the Green Infrastructure Masterplan to be realised independently of future housing or employment developments within the area.

The selected Key Projects offer a mix of low cost, easy implementation but with high impact (e.g. Street Improvement: Commercial Street & Broad Wynd) as well more complex and ambitious projects (e.g. Connection: Former Fife College Priory Campus/ Coastal Path). Covering a mixed selection is of importance to deliver continuous progress since the start of the charrette in 2014. Implementing smaller projects such as the street improvement or soft landscaping within Denfield Park could potentially be part of ongoing maintenance and would make a big difference to peoples lives by offering better accessible routes or improved surveillance as well as improving the open spaces visually. Including more complex and ambitious projects makes it possible to start the process of delivering larger projects within the area.

As part of the community consultation participants had the chance to vote for their preferred Key Projects to be realised as first steps. The selected projects ' Greenspace: Leisure & Well-being Park: Denfield Park', 'Connection: Denfield Park to Victoria Hospital' and 'Connection: Former Fife College Priory Campus/ Coastal Path' featured high on the list.
(Refer to p.18 for more information on the community consultation)



Greenspace: Leisure & Well-being Park: Denfield Park - Phase 1

Denfield Park is the largest greenspace within the masterplan area but has very limited access to the surrounding homes and other greenspaces. It is isolated from its surroundings due to fences along most of its sides. The current layout and design of the park offers limited access through the park with paths leading to dead ends, limited activities and interests as well as few habitats and low biodiversity. Due to its location and boundary treatment (fences as well as dense tree and shrub planting), there is a lack of visual surveillance and feeling of safety. (Refer to p.30 for the greenspace assessment of the park)

As part of the masterplan it is the ambition to develop Denfield Park into a Leisure & Well-being Park, offering a variety of activities for existing and new residents as well as for patients and staff from Victoria

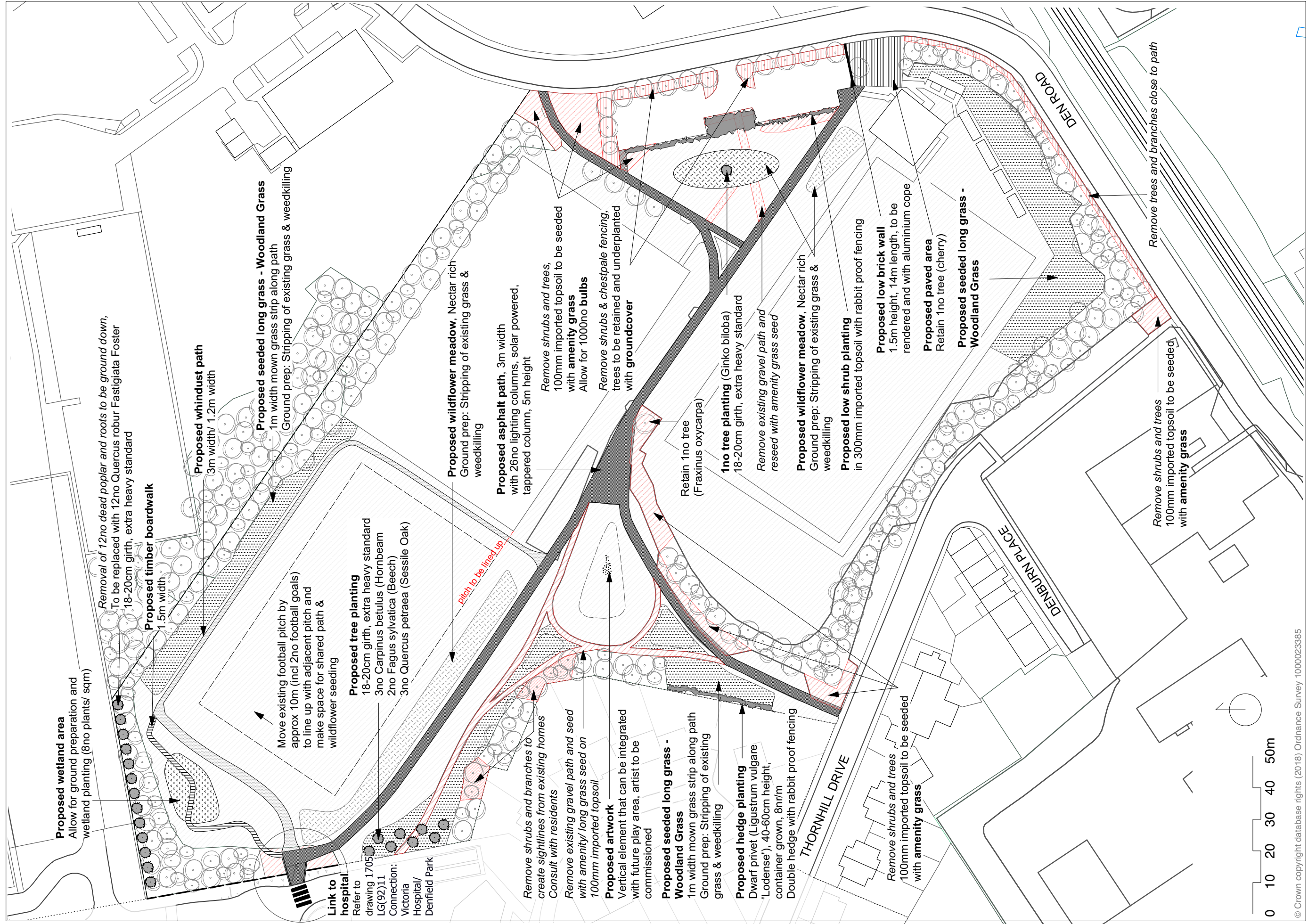
Hospital. Proposals include improving access and connections into and through the park as well as activating its edge by extending some residential development into the fringe of the park.

As these are long term ambitions dependent on the development of the surrounding sites, Phase 1 proposals for the park focus on soft and hard landscaping, improving access points, views, planting, biodiversity as well as turning constraints, such as drainage issues into opportunities, by creating a wetland area. These improvements will provide a solid framework for further developments, such as play or outdoor equipment, and for the increase of residents in its surroundings.



Wetland area with timber boardwalk

Secondary path: Whindust path



Proposed wetland area
 Allow for ground preparation and wetland planting (8no plants/ sqm)

Removal of 12no dead poplar and roots to be ground down, To be replaced with 12no Quercus robur Fastigiata Foster 18-20cm girth, extra heavy standard

Proposed timber boardwalk
 1.5m width

Proposed windtust path
 3m width/ 1.2m width

Proposed seeded long grass - Woodland Grass
 1m width mown grass strip along path
 Ground prep: Stripping of existing grass & weedkilling

Move existing football pitch by approx 10m (incl 2no football goals) to line up with adjacent pitch and make space for shared path & wildflower seeding

Proposed tree planting
 18-20cm girth, extra heavy standard
 3no Carpinus betulus (Hornbeam)
 2no Fagus sylvatica (Beech)
 3no Quercus petraea (Sessile Oak)

Pitch to be lined up

Proposed wildflower meadow, Nectar rich
 Ground prep: Stripping of existing grass & weedkilling

Proposed asphalt path, 3m width
 with 26no lighting columns, solar powered, tapered column, 5m height

Remove shrubs and trees, 100mm imported topsoil to be seeded with amenity grass
 Allow for 1000no bulbs

Remove shrubs & chestpale fencing, trees to be retained and underplanted with groundcover

Retain 1no tree (Fraxinus oxycarpa)

1no tree planting (Ginkgo biloba)
 18-20cm girth, extra heavy standard
 Remove existing gravel path and reseed with amenity grass seed

Proposed wildflower meadow, Nectar rich
 Ground prep: Stripping of existing grass & weedkilling

Proposed low shrub planting
 in 300mm imported topsoil with rabbit proof fencing

Proposed low brick wall
 1.5m height, 14m length, to be rendered and with aluminium cope

Proposed paved area
 Retain 1no tree (cherry)

Proposed seeded long grass - Woodland Grass

Remove shrubs and trees 100mm imported topsoil to be seeded, with amenity grass

Remove trees and branches close to path

Link to hospital
 Refer to drawing 17050111
 Connection: Victoria Hospital/ Denfield Park

Remove shrubs and branches to create sightlines from existing homes
 Consult with residents

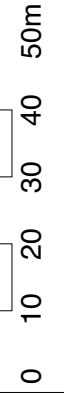
Remove existing gravel path and seed with amenity/ long grass seed on 100mm imported topsoil

Proposed artwork
 Vertical element that can be integrated with future play area, artist to be commissioned

Proposed seeded long grass - Woodland Grass
 1m width mown grass strip along path
 Ground prep: Stripping of existing grass & weedkilling

Proposed hedge planting
 Dwarf privet (Ligustrum vulgare 'Lodense'), 40-60cm height, container grown, 8nr/m
 Double hedge with rabbit proof fencing

Remove shrubs and trees 100mm imported topsoil to be seeded with amenity grass



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Connection: Victoria Hospital/ Denfield Park

Looking at the historic context, it shows that the development of the hospital created a gap and disconnection within the green network running from Middle Den to Pathhead Sands. Despite Victoria Hospital being located at the northern edge of Denfield Park, there is no access or physical link between these two. This disconnects the more direct north to south/ west access route through the masterplan area, adding difficulties for pedestrians and cyclists navigating through the site as well as restricting patients and staff from making use of the park.

Due to the significance of connecting the green and pedestrian & cycle network this connection forms a key element of the Regeneration Spatial Strategy.

(Refer to p.14 'Background: 2014 Charrette')

The new connection between Victoria Hospital and Denfield Park re-opens a previous access route and creates a welcoming key entrance into the park.

Low walls highlight the entrance, guide into and out of the park by still allowing natural surveillance of its surroundings. The layout of the walls have been arranged to slow down bikes naturally when exiting the park and moving towards the road and entrance to the energy centre.

At the same time the northern wall acts as a bench creating a meeting point and opportunities to rest and observe.



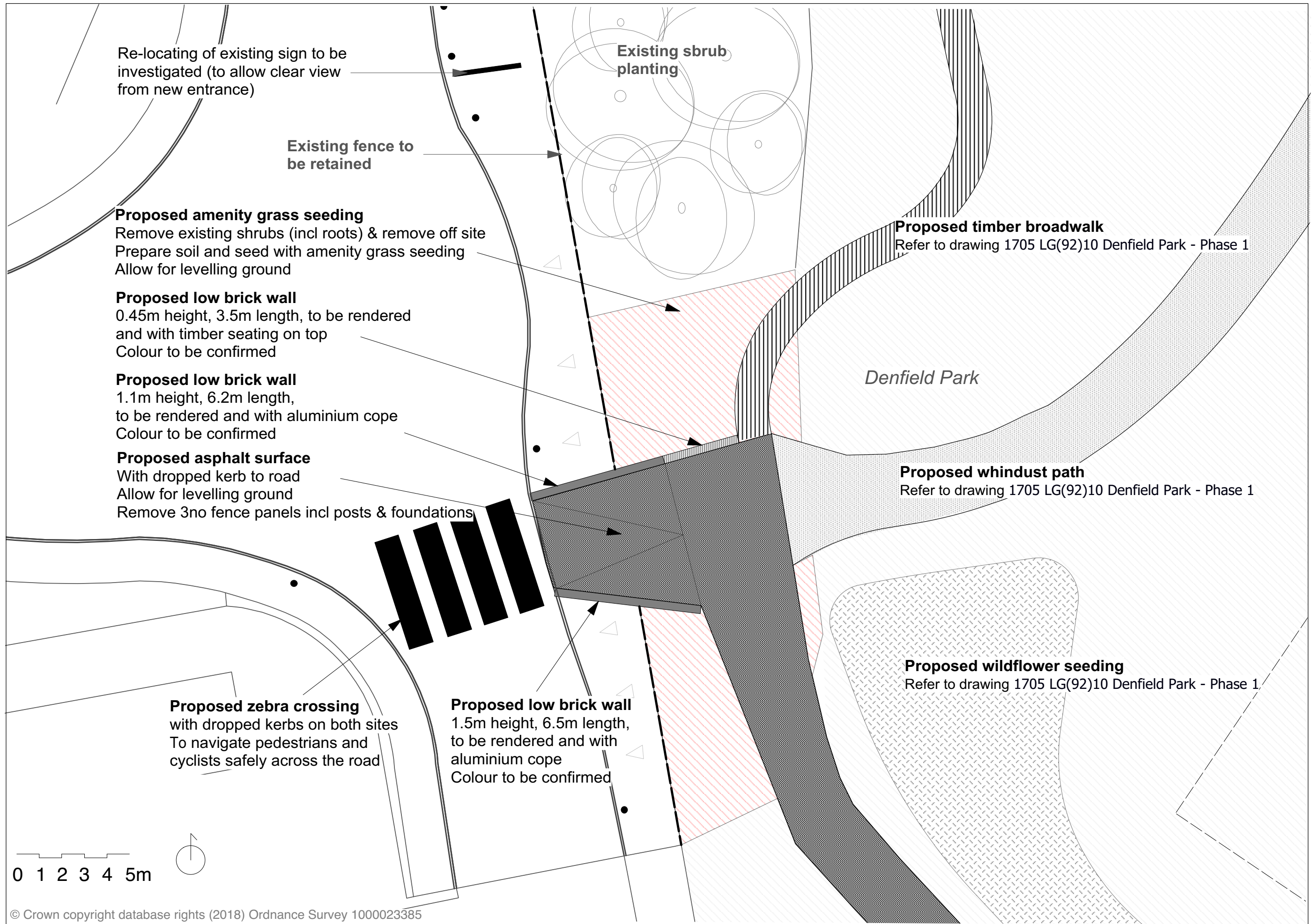
Tree planting screening energy centre & marking entrance

Access to Victoria Hospital with integrated bench

Timber boardwalk leading to wetland area

Asphalt path (3m width) leading to Victoria Hospital and secondary path around Denfield Park as a future link into adjacent development site

Wildflower seeding



Greenspace + Active Travel Route: Hayfield Road to Smeaton Road

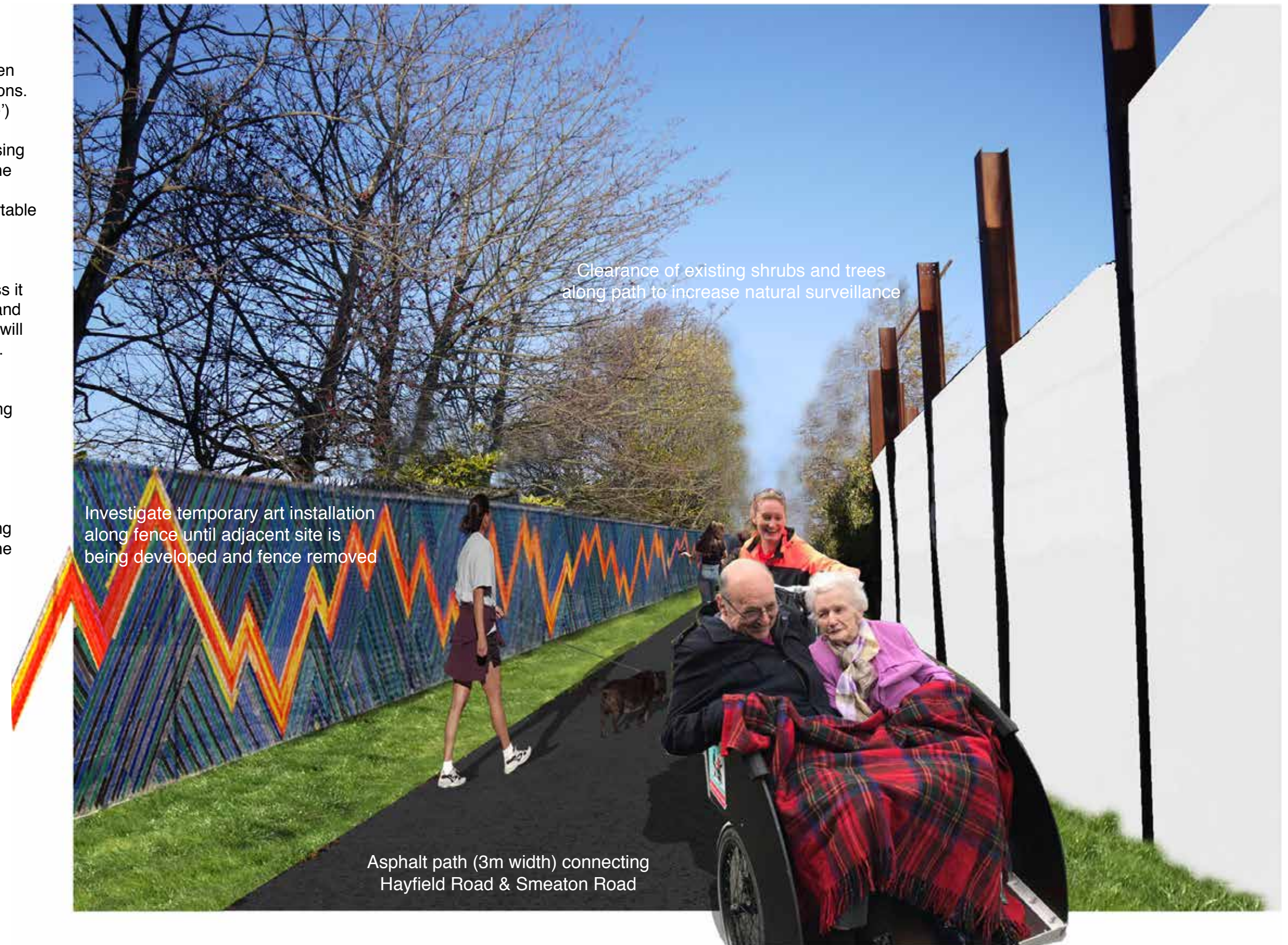
The existing route leading from Hayfield to Smeaton Road is an important north-south connection within the masterplan area and crucial for extending and improving the green network and pedestrian and cycle connections. (Refer to p.14 'Background: 2014 Charrette')

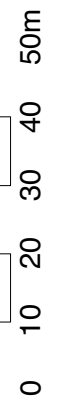
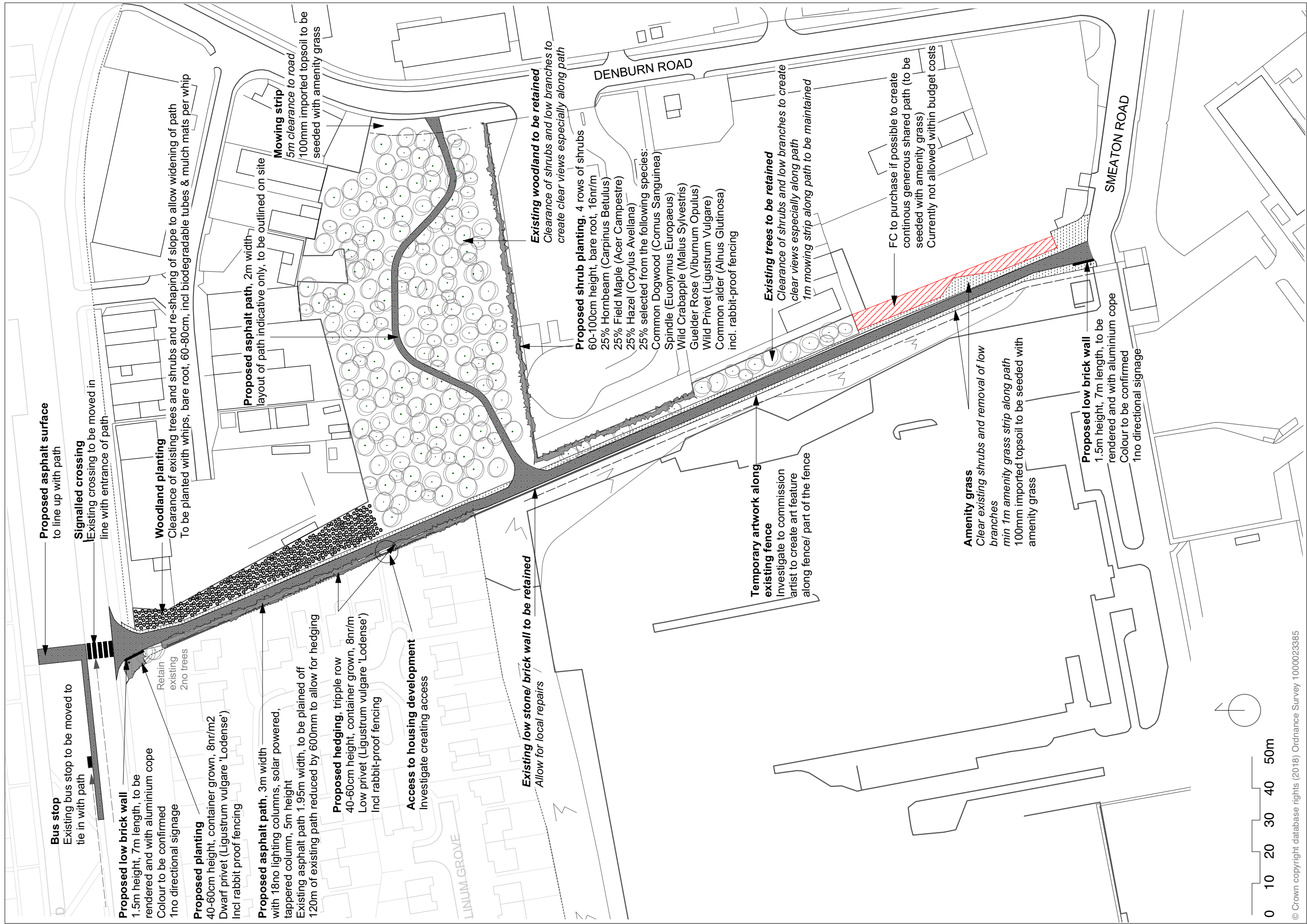
Derelict sites and fences to residential housing create a physical and visual barrier along the path. Trees and shrubs are overgrown and narrowing its width, making it feel uncomfortable and unsafe to use. (Refer to p.31 for the Greenspace Assessment)

In order to improve and formalise the access it is proposed to widen the path to 3m width and upgrading it to an asphalt surface. Lighting will increase the usability during the dark hours.

On either end of the route low walls are proposed to mark the entrances and creating a welcoming space. These are a recurring element within the masterplan area.

As a temporary element it is proposed to install an art work along the existing metal fence towards the development site, creating a positive and uplifting atmosphere along the route.





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Street Improvement: Commercial Street & Broad Wynd

Undertaking the consultation with local businesses along Commercial Street highlighted an access issue for elderly residents from the adjacent flats: The steep slope along Broad Wynd makes it difficult for them to walk up and visit local shops along Commercial Street. No seating is available to offer opportunities to stop and rest.

Commercial Street is currently dominated by car parking, not only on the street but also on pavement areas such as in front of Pathhead Halls.

Simple improvements such as a handrail along Broad Wynd and a seating area with tree and low planting in front of Pathhead Halls will not only make the streetscape more accessible but also create an attractive focal point with an opportunity to rest and meet or just enjoy a cup of tea by local employees.

The planters along the road will function as a parking restriction at the same time.

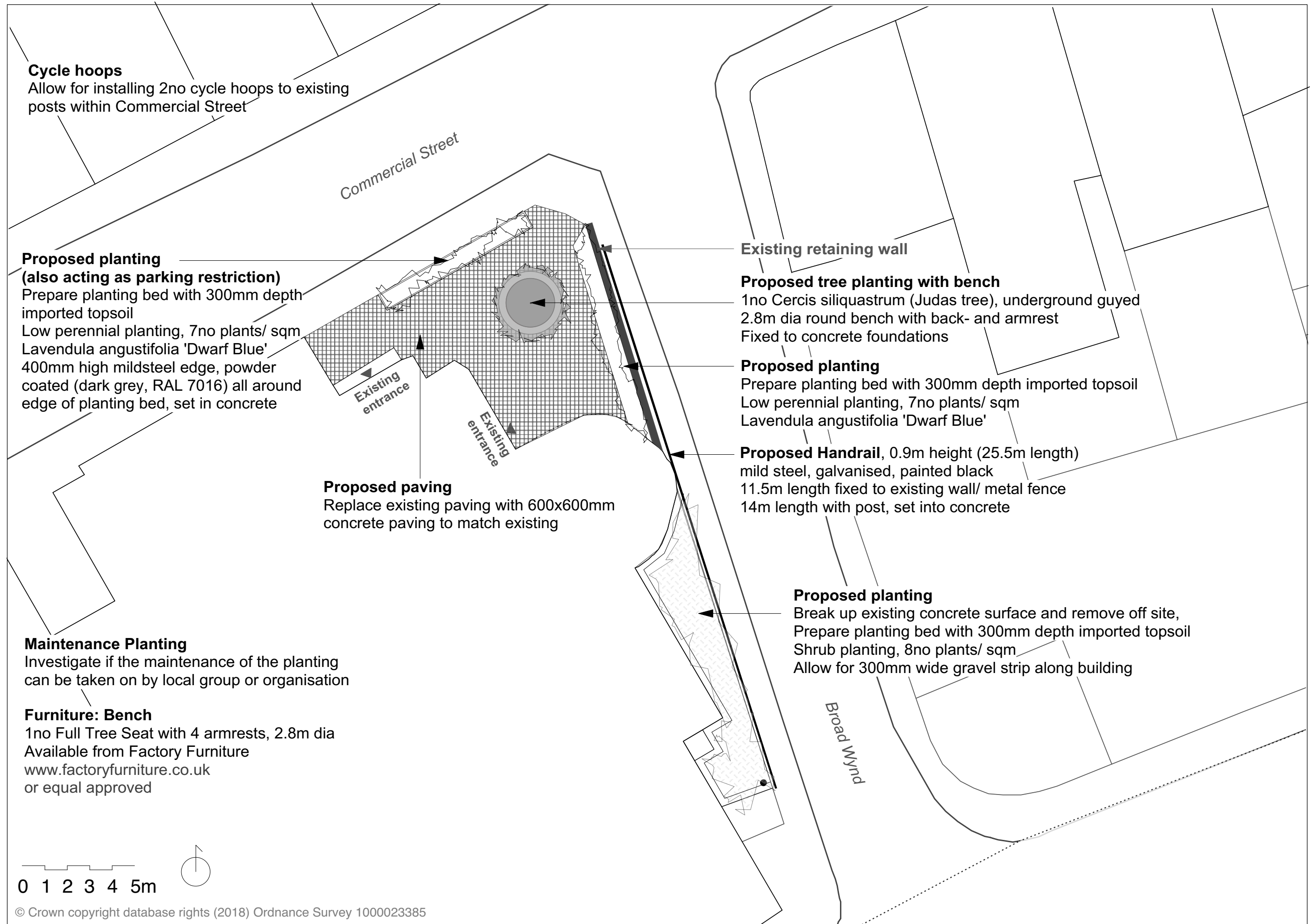
To increase ownership from the local community and businesses as well as to ensure future maintenance of the planting, it could be investigated having these undertaken by local organisations or businesses.



Tree with bench creating focal point and a space to meet and rest

Handrail to support especially elderly walking up steep slope

Planting to create attractive streetscape and entrance to Pathhead Hall as well as deter parking



Cycle hoops

Allow for installing 2no cycle hoops to existing posts within Commercial Street

Proposed planting

(also acting as parking restriction)

Prepare planting bed with 300mm depth imported topsoil
 Low perennial planting, 7no plants/ sqm
 Lavendula angustifolia 'Dwarf Blue'
 400mm high mildsteel edge, powder coated (dark grey, RAL 7016) all around edge of planting bed, set in concrete

Proposed paving

Replace existing paving with 600x600mm concrete paving to match existing

Existing retaining wall

Proposed tree planting with bench

1no Cercis siliquastrum (Judas tree), underground guyed
 2.8m dia round bench with back- and armrest
 Fixed to concrete foundations

Proposed planting

Prepare planting bed with 300mm depth imported topsoil
 Low perennial planting, 7no plants/ sqm
 Lavendula angustifolia 'Dwarf Blue'

Proposed Handrail, 0.9m height (25.5m length)

mild steel, galvanised, painted black
 11.5m length fixed to existing wall/ metal fence
 14m length with post, set into concrete

Proposed planting

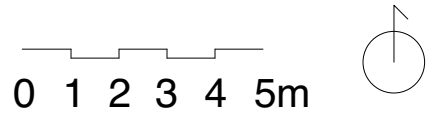
Break up existing concrete surface and remove off site,
 Prepare planting bed with 300mm depth imported topsoil
 Shrub planting, 8no plants/ sqm
 Allow for 300mm wide gravel strip along building

Maintenance Planting

Investigate if the maintenance of the planting can be taken on by local group or organisation

Furniture: Bench

1no Full Tree Seat with 4 armrests, 2.8m dia
 Available from Factory Furniture
www.factoryfurniture.co.uk
 or equal approved



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Connection: Former Fife College Priory Campus/ Coastal Path

With the closure of the Fife College Priory Campus and Nairn development, access from Victoria Street to the Coastal Path has been closed off and reduced pedestrian activity within this area significantly. Not only was the desire raised to re-establish this link during the community consultation, it also forms a key element of the Regeneration Spatial Strategy. (Refer to p.14 'Background: 2014 Charrette')

New steps and ramps within an existing and currently closed off entrance create an accessible connection point and re-open a significant North - South connection.

Perennial planting and a low feature wall highlight the access point and create a welcoming and attractive space.

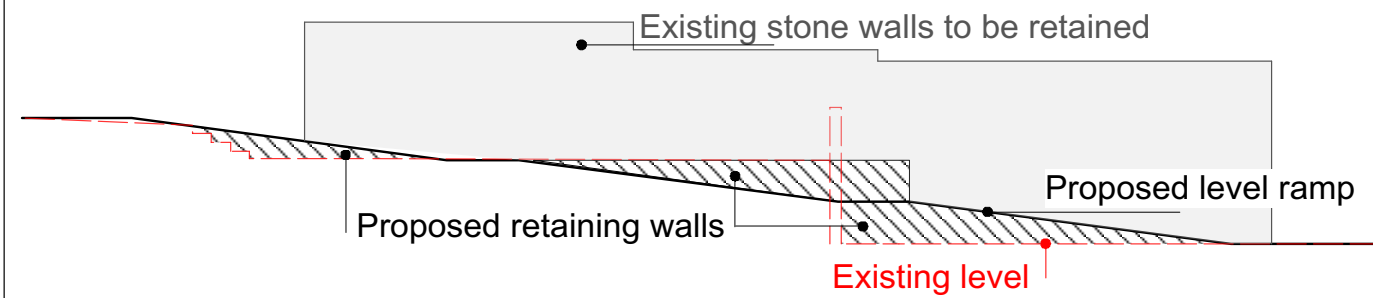


Steps and ramps creating accessible North/ South connection

Section AA'

1:200

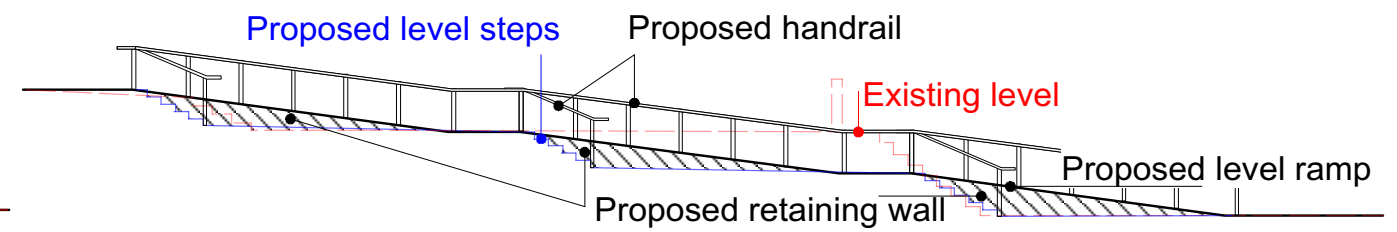
Existing and proposed levels



Section BB'

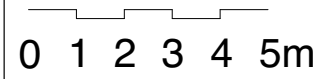
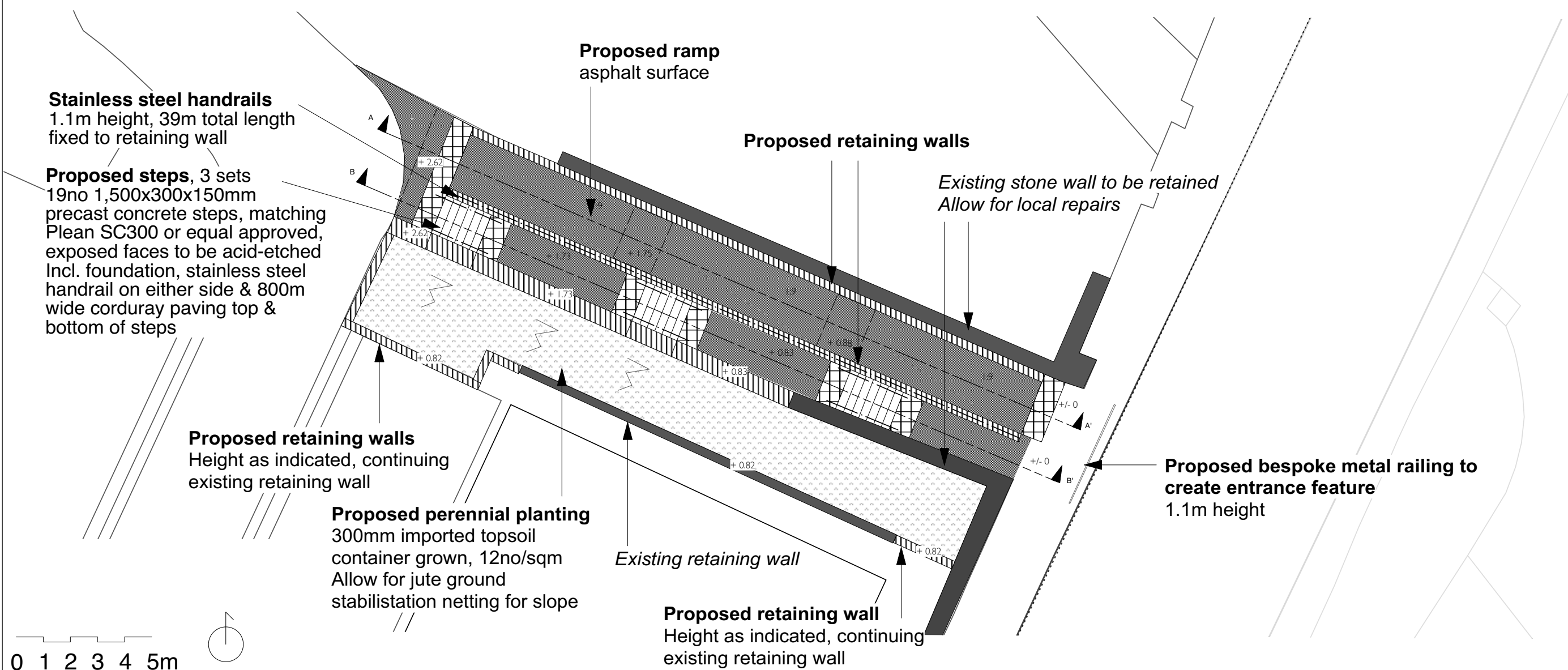
1:200

Existing and proposed levels



Plan

1:200



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07 Appendix

A - Greenspace Assessment

B - Fife Greenspace Audit

C - Costs

Table 1: Greenspace Potential

	1	2	3
User groups	Residents	Local	Regional
Prominence of site	Secluded	Noticeable	Highly visible
Relationship to wider context	Of slight or negligible importance	Moderate importance	High importance/ Important link

Table 2: Greenspace Social Importance

	1	2	3
Fife's Greenspace Audit	Low 0-49% 0-93 scoring points	Medium 50-69% 93-131 scoring points	High 70-100% 132-190 scoring points
Cultural Significance/ Local heritage and character	Slight to negligible recorded history	Local History	Regional History

Table 3: Need of Action

	1	2	3
Greenspace density	Substantial number of similar greenspaces with 5min walk	Moderate number of similar greenspaces with 10min walk	Slight or similar number of similar greenspaces with 15 or more minutes walk
Perceived safety	High	Moderate	Low
Current attractiveness	High	Moderate	Low
Importance for habitat creation and biodiversity	High	Moderate	Low
Estimated Social Return	Slight to negligible impact	Moderate impact	High Impact

Table 4: Greenspace Assessment Summary

	1
POTENTIAL	Total Points Table 1 = Greenspace potential
IMPORTANCE	Total Points Table 2 = Greenspace social importance
NEED FOR ACTION	Total Points Table 3 = Need for Action
TOTAL POINTS ACHIEVED PER SITE	

Table 1

	Points achieved
User Group	
Prominence of site	
Relationship	
TOTAL	

Table 2

	Points achieved
Fife's GS Audit	
Cultural significance	
TOTAL	

Table 3

	Points achieved
GS Density	
Safety	
Attractiveness	
Habitat	
Estimated Social Return	
TOTAL	

Table 4

	Points achieved
POTENTIAL	
IMPORTANCE	
NEED FOR ACTION	
TOTAL	

Appendix B - Fife Greenspace Audit

Greenspace	Former Fife College Priory Campus	Victoria Rd	Smeaton Garden	Denfield Park	Hayfield Rd/ Smeaton Rd	East Burn Court	Housing Maltings Road
Quality Indicator	Score						
Accessible and connected greenspaces							
Well located & close to community	3	3	1	1	3	n/a	5
Meets DDA requirements/ Disabled Needs	1	0	3	3	1	n/a	3
Provides surfaces, high quality paths	3	0	3	1	1	n/a	5
Connects to other transport nodes	1	1	3	1	1	n/a	1
Allows movement in & between places	1	0	1	1	3	n/a	3
Has accessible entrances in right places	1	0	3	1	1	n/a	3
Offers connected path network and signage	1	0	3	1	1	n/a	1
Subtotal	11	4	17	9	11	n/a	21
Attractive and appealing places							
Attractive with a positive image	3	3	1	1	1	3	1
Attractive setting for urban areas	3	5	1	1	3	3	1
Quality materials/ equipment/ furniture	1	n/a	1	1	1	n/a	1
Attractive planting/ landscape elements	3	5	1	1	3	3	1
Welcoming boundaries/ entrances	1	3	1	1	1	3	1
Facilities in clean/ safe/ usable condition	3	3	3	3	1	n/a	1
Low levels of litter & adequate bins	3	1	1	3	1	3	3
Well maintained	3	1	3	3	1	1	3
Subtotal	20	21	12	14	12	16	12
Biodiversity supporting ecological networks							
Habitats are actively managed	3	1	1	3	1	1	1
Supports a range of species and habitats	3	3	1	1	3	1	1
Offer diversity of habitats	3	3	1	1	1	1	1
Part of wider landscape structure	5	5	1	1	1	3	1
Connects to wider habitat network	1	3	1	1	1	3	1
Balance habitat protection & access	3	3	1	1	1	n/a	1
Resource efficient	3	1	1	1	1	n/a	1
Subtotal	21	19	7	9	9	12	7
Greenspace should promote activity, health and well being							
Provides a range of outdoor activities	1	n/a	1	1	1	n/a	1
Diverse play/ sport/ recreational opportunity	1	n/a	1	1	1	n/a	1
Offers good places for social interaction	1	n/a	1	1	1	n/a	1
High quality facilities meeting user needs	1	n/a	1	1	1	n/a	1
Appropriate facilities for location/ size/ use	1	n/a	1	1	1	n/a	1
Facilities well sited for all ages	1	n/a	1	1	1	n/a	1
Adaptable to changing needs/ use	1	n/a	1	3	3	n/a	1
Subtotal	7	0	7	9	9	n/a	7
Greenspace should have community benefits							
Safe and welcoming	1	n/a	1	1	1	1	1
Good levels of natural surveillance	1	1	5	1	1	n/a	5
Absence of anti-social behaviour	5	1	1	3	1	3	5
Appropriate lighting levels	3	n/a	3	1	1	n/a	5
Sense of local identity & place	3	5	1	1	1	1	1
Good routes to wider community facilities	1	1	3	1	3	n/a	1
Contains distinctive/ memorable places	1	5	1	1	1	1	1
Community involvement in management	1	1	1	1	1	1	1
Subtotal	16	14	16	9	10	7	20
TOTAL SCORE	75	58	59	50	51	35	67
Scoring points used for Greenspace Assessment (refer to pages 27-33)	1	1	1	1	1	1	1

Scoring based on:
Fife Council, Fife Greenspace Audit,
Appendix 2, Table 6-10

Grading used for Greenspace Assessment

Quality grading of greenspace	0-49% very poor - poor quality	50-70% below average- reasonable quality	70-100% good-very high quality
Score range based on a total of achievable 185 points	0-90	91-130	131-185
Points used for greenspace assessment	1	2	3

Appendix C - Budget Costs Summary: All projects

FIFE COUNCIL

KIRKCALDY CHARRETTE AREA GREEN INFRASTRUCTURE MASTERPLAN

BUDGET COSTS SUMMARY

22-Feb-18

	Clearance	Earthworks	Drainage	Hard Landscaping	Soft Landscaping	Street Furniture	Play	Lighting	Sundries	Preliminaries (15/ 20/ 25%)	Contingencies 10%	TOTAL
1.0 GREENSPACES:												
1.1 Hayfield Rd: Smeaton Rd	34,310	12,625	10,000	69,914	42,999	1,000	0	81,000	61,780	47,044	36,067	397,000
1.2 Pannie Den: Smeaton Rd	57,800	10,000	10,000	89,140	78,030	11,000	0	85,500	35,000	56,471	43,294	477,000
1.3 Maltings Road	0	0	0	0	2,086	2,000	3,000	0	0	1,417	850	9,400
1.4 Denfield Park	22,980	15,000	25,000	105,640	49,055	60,000	200,000	120,000	0	89,651	68,733	756,100
1.5 Smeaton Gardens	1,500	0	0	0	53,635	11,000	5,000	20,000	0	13,670	10,481	115,300
1.6 Former Fife College Priory Campus	8,000	2,500	2,500	16,500	500	5,000	0	0	1,000	5,400	4,140	45,550
2.0 CONNECTIONS:												
2.1 Smeaton Road/ Denfield Park	11,000	5,000	5,000	48,850	10,000	500	0	80,000	35,000	29,303	22,465	247,150
2.2 Victoria Hospital/ Denfield Park	3,000	500	0	2,434	279	500	0	0	31,800	7,703	4,622	51,000
2.3 Former Railway Line	19,000	10,000	10,000	81,115	0	1,000	0	85,000	0	30,917	23,703	260,750
2.4 Former Fife College Priory Campus/ Coastal Path	5,205	10,000	5,000	6,644	4,784	1,000	0	11,000	45,225	17,772	10,663	118,000
2.5 Railway Underpass (clearance of underpass not included)	11,250	20,000	5,000	73,025	1,750	1,000	0	0	17,450	19,421	14,890	163,800
3.0 STREET IMPROVEMENTS												
3.1 Denburn Road	2,300	0	0	0	59,600	0	0	0	35,000	14,535	11,144	122,600
3.2 Smeaton Road	5,500	0	0	64,750	8,620	0	0	0	35,000	17,081	13,095	144,050
3.3 Den Road	500	0	0	131,250	0	0	0	0	25,000	23,513	18,026	198,300
3.4 Victoria Rd & Nairn St	2,000	0	0	147,000	0	0	0	0	105,000	38,100	29,210	321,300
3.5 Commercial St/ Broad Wynd	1,490	750	0	5,850	3,388	7,400	0	0	11,040	7,480	3,740	42,000
3.7 Birrel Street Wynd, Bogles Wynd & Flesh Wynd	1,100	0	0	0	5,458	5,800	0	0	35,000	7,104	5,446	59,900
3.8 Millie Street	1,000	0	0	35,000	0	0	0	0	0	5,400	4,140	45,550
4.0 DEVELOPMENT PLOTS:												
4.1 Den Rd - Linear Shared Path	33,300	10,500	5,000	154,225	26,000	25,000	25,000	100,000	0	56,854	43,588	479,500
4.2 Den Rd - Road Extension	3,000	5,000	5,000	33,330	0	0	0	15,000	0	9,200	7,053	77,600
4.3 Nairn Street - Linear Corridor	12,500	35,000	15,000	363,800	170,100	0	150,000	0	0	111,960	85,836	944,200
GRAND TOTAL	£236,735	£136,875	£97,500	£1,428,467	£516,284	£132,200	£383,000	£597,500	£473,295	£609,993	£461,185	£5,076,050

Basis/

Basis of Budget Costs

- Proposals prepared by Urban Pioneers.
- Tender levels current in fourth quarter of 2017 (4Q17), obtained by competitive tendering.
- Excluding:
 - treatment of invasive species
 - work in connection with existing underground services
 - disposal or treatment of contaminated material
 - work to open existing railway underpass
 - CCTV installation
 - tender price inflation beyond 4Q17
 - professional fees
 - statutory fees
 - VAT

Neilson Partnership
 Chartered Quantity Surveyors
 Jacobean House, Glebe Street, East Kilbride, GLASGOW G74 4LY
 Tel: 01355-268266 Fax: 01355-265276 Email: david.neilson@neilsons.biz

Budget Costs Summary: Key Projects

Budget Costs Greenspace: Denfield Park - Phase 1

FIFE COUNCIL

KIRKCALDY CHARRETTE AREA GREEN INFRASTRUCTURE MASTERPLAN KEY PROJECTS

BUDGET COSTS

SUMMARY

20-Feb-18

		Denfield Park Ph 1	Victoria Hospital/ Denfield Park	Hayfield Rd/ Smeaton Rd	Former Fife College Priory Campus/ Coastal Path	Commercial St/ Broad Wynd
1.0	Clearance	22,980	3,000	34,310	5,205	1,490
2.0	Earthworks	15,000	500	12,625	10,000	750
3.0	Drainage	25,000	0	10,000	5,000	0
4.0	Hard Landscaping	137,321	2,434	69,914	6,644	5,850
5.0	Soft Landscaping	71,632	279	42,999	4,784	3,388
6.0	Metalwork & Fencing	3,300	350	8,280	10,825	7,540
7.0	Street Furniture	0	500	1,000	1,000	7,400
8.0	Play	1,000	0	0	0	0
9.0	Lighting Installation	117,000	0	81,000	11,000	0
10.0	Sundries	16,500	31,450	53,500	34,400	3,500
	<i>Sub-Total</i>	<i>409,733</i>	<i>38,513</i>	<i>313,628</i>	<i>88,858</i>	<i>29,918</i>
11.0	Preliminaries	61,460	7,703	47,044	17,772	7,480
	<i>Sub-Total</i>	<i>471,193</i>	<i>46,216</i>	<i>360,672</i>	<i>106,630</i>	<i>37,398</i>
12.0	Contingencies 10%	47,119	4,622	36,067	10,663	3,740
		518,312	50,837	396,739	117,293	41,137
	TOTAL BUDGET COST (say)	£520,000	£51,000	£397,000	£118,000	£42,000

Basis of Budget Costs

- Proposals prepared by Urban Pioneers.
- Tender levels current in fourth quarter of 2017 (4Q17), obtained by competitive tendering.
- Excluding:
 - treatment of invasive species
 - work in connection with existing underground services
 - disposal or treatment of contaminated material
 - CCTV installation
 - tender price inflation beyond 4Q17
 - professional fees
 - statutory fees
 - VAT

Neilson Partnership

Chartered Quantity Surveyors

Jacobean House, Glebe Street, East Kilbride, GLASGOW G74 4LY

Tel: 01355-268266 Fax: 01355-265276 Email: david.neilson@neilsonsbiz

Denfield Park Ph 1

Budget Costs; 22 February 2018

1.0	CLEARANCE					
	General clearance	Sum				2,500
	Tree clearance/ removing undergrowth/ arboricultural work	Sum				20,000
	Removing existing chespale fencing	m	120	4		480
	<i>Amount to Summary</i>					£22,980
2.0	EARTHWORKS					
	Excavating; disposing off site	m3	600	25		15,000
	<i>Amount to Summary</i>					£15,000
3.0	DRAINAGE					
	Allowance for surface water drainage	Sum				25,000
	<i>Amount to Summary</i>					£25,000
4.0	HARD LANDSCAPING					
	Paved area (Den Rd Entrance)	m2	242	100		24,200
	Edgings	m	63	50		3,150
	Asphalt paths	m2	1,630	38		61,940
	Edgings	m	1,067	18		19,206
	Whin paths	m2	401	25		10,025
	Edgings	m	480	10		4,800
	Allowance for soft spots	Sum				5,000
	Timber boardwalk	m	75	120		9,000
	<i>Amount to Summary</i>					£137,321
5.0	SOFT LANDSCAPING					
	Hedge planting; 2 rows	m	35	45		1,575
	Shrub planting	m2	200	50		10,000
	Groundcover planting	m2	337	50		16,850
	Tree planting	Nr	21	300		6,300
	Bulb planting	Sum				250
	Preparing/ long grass seeding	m2	3,113	2		6,226
	Preparing/ wildflower seeding	m2	930	2		1,860
	100mm topsoil/ amenity grass seeding	m2	1,471	5		7,355
	Wetland pond & planting	Sum				15,000
	Making good soft landscaping disturbed by the Works	Sum				1,000
	12 months maintenance of Soft Landscaping	Sum				3,500
	Topping up bark mulch at end of Maintenance Period	m2	572	3		1,716
	<i>Amount to Summary</i>					£71,632
6.0	METALWORK & FENCING					
	Rabbit proof fencing	m	220	15		3,300
	<i>Amount to Summary</i>					£3,300
7.0	STREET FURNITURE					
	Not applicable					-
8.0	PLAY					
	Re-positioning football pitch & goals	Sum				1,000
	<i>Amount to Summary</i>					£1,000
9.0	LIGHTING INSTALLATION					
	Columns/ luminaires; complete	Nr	26	4,500		117,000
	<i>Amount to Summary</i>					£117,000
10.0	SUNDRIES					
	Art feature	Sum				10,000
	Brick wall, 1500mm high; rendered both sides; aluminium cope	m	13	500		6,500
	<i>Amount to Summary</i>					£16,500

Connection: Victoria Hospital/ Denfield Park

Budget Costs; 22 February 2018

1.0	CLEARANCE				
	General clearance	Sum			500
	Removing shrubs and small trees	Sum			2,500
	<i>Amount to Summary</i>				<u>£3,000</u>
2.0	EARTHWORKS				
	Allowance for earthworks	Sum			500
	<i>Amount to Summary</i>				<u>£500</u>
3.0	DRAINAGE				
	Not applicable				-
4.0	HARD LANDSCAPING				
	Asphalt paths	m2	18	38	684
	Removing existing kerbs; new dropped kerbs; making good surfacing	m	14	125	1,750
	<i>Amount to Summary</i>				<u>£2,434</u>
5.0	SOFT LANDSCAPING				
	Preparing/ amenity grass seeding (including 12 months Maintenance)	m2	93	3	279
	<i>Amount to Summary</i>				<u>£279</u>
6.0	METALWORK & FENCING				
	Forming opening in existing fence; new end posts	Sum			350
	<i>Amount to Summary</i>				<u>£350</u>
7.0	STREET FURNITURE				
	Directional signs	Nr	1	500	500
	<i>Amount to Summary</i>				<u>£500</u>
8.0	PLAY				
	Not applicable				-
9.0	LIGHTING INSTALLATION				
	Not applicable				-
10.0	SUNDRIES				
	Zebra crossing	Sum			20,000
	Brick walls; rendered both sides; aluminium copes				
	1100mm high	m	4	425	1,700
	1500mm high	m	7	500	3,500
	Brick wall, 450mm high; rendered both sides; timber seating on top	m	6	350	2,100
	Extra for retaining walls	Sum			4,000
	Re-positioning existing sign	Nr	1	150	150
	<i>Amount to Summary</i>				<u>£31,450</u>

Greenspace Active Travel Route: Hayfield Rd/ Smeaton Rd

Budget Costs; 22 February 2018

1.0	CLEARANCE				
	General clearance	Sum			2,000
	Removing undergrowth/ thinning existing woodland	Sum			30,000
	Removing existing fencing	m	231	10	2,310
	<i>Amount to Summary</i>				<u>£34,310</u>
2.0	EARTHWORKS				
	Excavating; disposing off site	m3	175	25	4,375
	Breaking out existing footway; disposing off site	m2	72	15	1,080
	Planing existing footway; disposing off site	m2	717	10	7,170
	<i>Amount to Summary</i>				<u>£12,625</u>
3.0	DRAINAGE				
	Allowance for surface water drainage	Sum			10,000
	<i>Amount to Summary</i>				<u>£10,000</u>
4.0	HARD LANDSCAPING				
	Asphalt paths (full build-up)	m2	672	38	25,536
	Edgings	m	1,076	18	19,368
	Asphalt paths (existing sub-base)	m2	717	30	21,510
	Allowance for soft spots	Sum			3,500
	<i>Amount to Summary</i>				<u>£69,914</u>
5.0	SOFT LANDSCAPING				
	Hedge planting				
	3 row	m	105	55	5,775
	4 row	m	158	65	10,270
	Shrub planting	m2	30	50	1,500
	Tree planting (whips)	Nr	3,000	6	18,000
	100mm topsoil/ amenity grass seeding	m2	815	5	4,075
	Making good soft landscaping disturbed by the Works	Sum			500
	12 months maintenance of Soft Landscaping	Sum			2,000
	Topping up bark mulch at end of Maintenance Period	m2	293	3	879
	<i>Amount to Summary</i>				<u>£2,879</u>
6.0	METALWORK & FENCING				
	Rabbit proof fencing	m	552	15	8,280
	<i>Amount to Summary</i>				<u>£8,280</u>
7.0	STREET FURNITURE				
	Directional signs	Nr	2	500	1,000
	<i>Amount to Summary</i>				<u>£1,000</u>
8.0	PLAY				
	Not applicable				-
9.0	LIGHTING INSTALLATION				
	Columns/ luminaires; complete	Nr	18	4,500	81,000
	<i>Amount to Summary</i>				<u>£81,000</u>
10.0	SUNDRIES				
	Re-positioning Hayfield Road bus stop	Sum			1,000
	Re-positioning Hayfield Road signalled crossing	Sum			15,000
	Brick wall, 1500mm high; rendered both sides; aluminium cope	m	25	500	12,500
	Allowance for repairs to existing low stone/ brick wall	Sum			5,000
	Temporary art installation along existing fence, incl artist fee	Sum			20,000
	<i>Amount to Summary</i>				<u>£53,500</u>

Commercial St/ Broad Wynd

Budget Costs; 22 February 2018

1.0	CLEARANCE				
	General clearance	Sum			250
	Lifting existing pavings	m2	60	10	600
	Breaking out existing concrete surfacing	m2	32	20	640
	<i>Amount to Summary</i>				<u>£1,490</u>
2.0	EARTHWORKS				
	Excavating; disposing off site	m3	30	25	750
	<i>Amount to Summary</i>				<u>£750</u>
3.0	DRAINAGE				
	Not applicable				-
4.0	HARD LANDSCAPING				
	Paving	m2	56	100	5,600
	Allowance for soft spots	Sum			250
	<i>Amount to Summary</i>				<u>£5,850</u>
5.0	SOFT LANDSCAPING				
	Shrub planting	m2	46	50	2,300
	Tree planting	Nr	1	700	700
	12 months maintenance of Soft Landscaping	Sum			250
	Topping up bark mulch at end of Maintenance Period	m2	46	3	138
	<i>Amount to Summary</i>				<u>£3,388</u>
6.0	METALWORK & FENCING				
	Galvanised/ powder coated knee rail around planting	m	16	250	4,000
	Galvanised/ painted handrail; fixed to existing wall/ railing	m	12	120	1,440
	Galvanised/ painted handrail; including posts/ foundations	m	14	150	2,100
	<i>Amount to Summary</i>				<u>£7,540</u>
7.0	STREET FURNITURE				
	Round benches	Nr	1	7,000	7,000
	Cycle hoops	Nr	2	200	400
	<i>Amount to Summary</i>				<u>£7,400</u>
8.0	PLAY				
	Not applicable				-
9.0	LIGHTING INSTALLATION				
	Not applicable				-
10.0	SUNDRIES				
	Modifications to signage & road markings (re 1-way street)	Sum			3,500
	<i>Amount to Summary</i>				<u>£3,500</u>

Connection: Former Fife College Priory Campus/ Coastal Path

Budget Costs; 22 February 2018

1.0	CLEARANCE				
	General clearance	Sum			500
	Removing existing gate	Nr	1	35	35
	Lifting existing pavings	m2	54	10	540
	Removing existing steps	m	32	15	480
	Taking down existing stone wall	m2	7	50	350
	Taking down existing retaining wall	m2	33	100	3,300
	<i>Amount to Summary</i>				<u>£5,205</u>
2.0	EARTHWORKS				
	Excavating and filling	Sum			10,000
	<i>Amount to Summary</i>				<u>£10,000</u>
3.0	DRAINAGE				
	Allowance for surface water drainage	Sum			5,000
	<i>Amount to Summary</i>				<u>£5,000</u>
4.0	HARD LANDSCAPING				
	Asphalt paths	m2	92	38	3,496
	Edgings	m	11	18	198
	Allowance for soft spots	Sum			250
	Precast concrete steps	m	27	100	2,700
	<i>Amount to Summary</i>				<u>£6,644</u>
5.0	SOFT LANDSCAPING				
	Perennial planting	m2	68	60	4,080
	Making good soft landscaping disturbed by the Works	Sum			250
	12 months maintenance of Soft Landscaping	Sum			250
	Topping up bark mulch at end of Maintenance Period	m2	68	3	204
	<i>Amount to Summary</i>				<u>£4,784</u>
6.0	METALWORK & FENCING				
	Stainless steel balustrades	m	39	175	6,825
	Bespoke metal railing	m	4	1,000	4,000
	<i>Amount to Summary</i>				<u>£10,825</u>
7.0	STREET FURNITURE				
	Directional signs	Nr	2	500	1,000
	<i>Amount to Summary</i>				<u>£1,000</u>
8.0	PLAY				
	Not applicable				-
9.0	LIGHTING INSTALLATION				
	Columns/ luminaires; complete	Nr	2	5,500	11,000
	<i>Amount to Summary</i>				<u>£11,000</u>
10.0	SUNDRIES				
	Retaining walls	m2	84	350	29,400
	Allowance for repairs to existing stone walls	sum			5,000
	<i>Amount to Summary</i>				<u>£34,400</u>