

06

landscape framework

Aims of Landscape Framework

As part of the New Pentland Masterplan, the landscape framework is intended to achieve the following:

- 1 Enhance and/or create defensible landscape edges and corridors;
- 2 Biodiversity increased through addition of swales and water bodies/aquatic habitats, greatly increased native tree planting, shrubs and wild grassland enhancement;
- 3 Long term arrangement and maintenance built into ownership legacy!
- 4 Create contemporary open spaces - a focus for both the small and vibrant proposed community (young and old), but also for visitors to play, retail facilities, and importantly for the surrounding communities.

The landscape framework has considered the work by Donald Rodger on Trees and Hedges and the Ecology survey by ITPE, in the formulation of the landscape framework principles notably those related to species choices, habitat creation and biodiversity.

Details of how these aims are delivered throughout the site are shown on the following pages, to enable a fuller understanding of the framework. An illustration of the intended landscape character along with indicative species choices and management practices can be seen at Figure 61 and associated legend opposite.

All these areas contribute to the requirement for Public Open Space (POS) on the site. Full details of how the site complies with POS requirements, as set out by MLC, in Policy Dev 9 of the LDP, are set out in Appendix B. (Table 1). In summary the POS provided within the 12 areas (Figure 61) is:

• Play areas -	0.04ha
• Amenity green space -	0.921ha
• Parks and gardens -	0.402ha
• Natural and semi natural -	0.40ha

Total PPIp provision 1.763ha

LEGEND

- 1 SUDS Detention pond
- 2 Buffer area - west (north)
- 3 Buffer area - west (south)
- 4 Central Green Public Open Space
- 5 Northern Link
- 6 Eastern boundary edge
- 7 Existing mature tree line
- 8 A701 boundary interface
- 9 Southern arrival
- 10 Southern boundary interface
- 11 The Street
- 12 Northern arrival/axis



Figure 61 -Landscape Framework key plan

6.1

western buffer zones 1-3

This western area abuts the existing Pentland Residential Park, along most of its length and in the north, adjoins agricultural fields. It is an important area in the masterplan as it has a shared boundary with existing community and residents of Pentland Park. The Landscape Framework has therefore carefully considered the future amenity of these residents, particularly the scale and intensity of the buffer landscape proposal at this western edge of the subject site.

The Western Buffer area brings together zones 1, 2 and 3 (Figure 62) and considers it as a single entity, where the landscape proposals share common attributes, but with varying localised responses.

Design intentions for the Western Buffer are to:

- retain, protect, repair (arboriculturally) and integrate the existing trees and shrubs along the boundary with Pentland Residential Park, into a new edge landscape, which;
- give a variety of separation from the existing Residential Park boundary/gardens and the development areas, particularly buildings, based on minimum MLC standards (see dimensions added to Figure 62 opposite);
- provide new footpaths and cycleways as part of the integrated circulation network - timber edged and finished in permeable materials.
- increase the biodiversity by integrating the proposed SuDS drainage requirements, of swales and pond, into a new rich mix of new wild and flowering grassland, native trees and shrub planting - using the following background indicative native species (which can be added to in particular zones):
 - Trees -
 - Alnus glitiosa (15%)
 - Betula pubescens (25%)
 - Populus tremula (20%)
 - Prunus avium (10%)
 - Shrubs -
 - Cornus sanguinea spp (20%)
 - Crataegus monogyna (35%)
 - Prunus spinosa (10%)
 - Rosa canina (15%)
 - Viburnum opulus (20%)
 - Grassland -
 - Germinal: A4 - Low Maintenance grassland mix and RE2 - Lowland meadow, or similar.

Zone 1 - Detention Pond/basin (0.40ha)

The most bio-diverse zone in the masterplan, which currently includes proposals for:

- A SuDS detention pond - sized (in 2D and 3D) to suit the requirements of the surface water drainage strategy - as set out indicatively in Section 02 by Goodson Associates, Engineers.
- A peripheral walking track for pedestrians, cyclists and dog walkers (with waste collection bins);
- Bridges and boardwalks to facilitate circulation over the water bodies and swales, with integrated smart lighting;
- Emergent and marginal aquatic planting of grasses and wildflowers;
- The existing hedge along Pentland Road, retained and enhanced through formative pruning, with additional native hedgerow planted to complete the northern edge and enclose the habitat from the road;
- New native trees and shrubs planted at the boundaries with open countryside to the west allowing occasional views out to the Pentland Hills.

Please refer to Figure 63 - illustrating the proposals in a sectional elevation through the detention pond area.

Zone 2 - Buffer Area (North) (0.255ha)

Acting as the central part of the Western Buffer area, Zone 2 is of variable depth - ranging from 10 to 25m at its widest. Sitting alongside the Pentland Residential Park and containing some of the most mature trees along this edge, the proposals here include:

- new native wild and flowering grasses associated with the swale/ditch proposals, groupings of native feathered tree planting and shrubs areas (see Figure 64), and;
- a greater degree of 'screening' for the proposed development plots notably their proposed car parking area/circulation areas by an increased proportion of



Figure 62 - Landscape Framework - 1

6.2

western buffer cont/d-

heavy standard and feathered native trees groups (not continuous), in combination with native and ornamental shrub planting, to embolden this zone in terms of its density and depth;

- Additional species - for additional massing and impact it is intended to use extra heavy standards and semi mature stock, in key locations:

- Trees -
 - Acer platanoides (3%)
 - Fraxinus ornus (3%)
 - Sorbus intermedia (2%)
 - Tilia X europea Pallida (2%)

Zone 3 - Buffer Area (South) (0.175ha)

Acting as the southern part of the Western Buffer area, Zone 3 is a minimum of 10m wide, but backs onto the garden zones of two key development plots - so in some cases the green zones between existing Residential façades in Pentland Residential Park and the proposed buildings ranges between 40 and 60m at its deepest.

This part of the buffer edge will create an appropriate degree of separation, whilst achieving an integration of the two residential areas. Planting proposals here mirror those of the other two Zones, adjacent to it, with the same intentions for species choices - trees, shrubs and grassland. The intensity of the planting may be less here, however, to achieve the goal of integration - it is not intended as a buffer 'screen'.

A traditional buffer 'screen' here (10-15m, or greater) would not, in our view, be productive and actually detrimental to residents of Pentland Residential Park. A deep woodland screen during its growth period, and upon reaching maturity, would deprive residents of sunlight and daylight throughout the greater part of the year.

Please refer to Figure 65 - illustrating the proposals as a sectional elevation through the buffer edge.

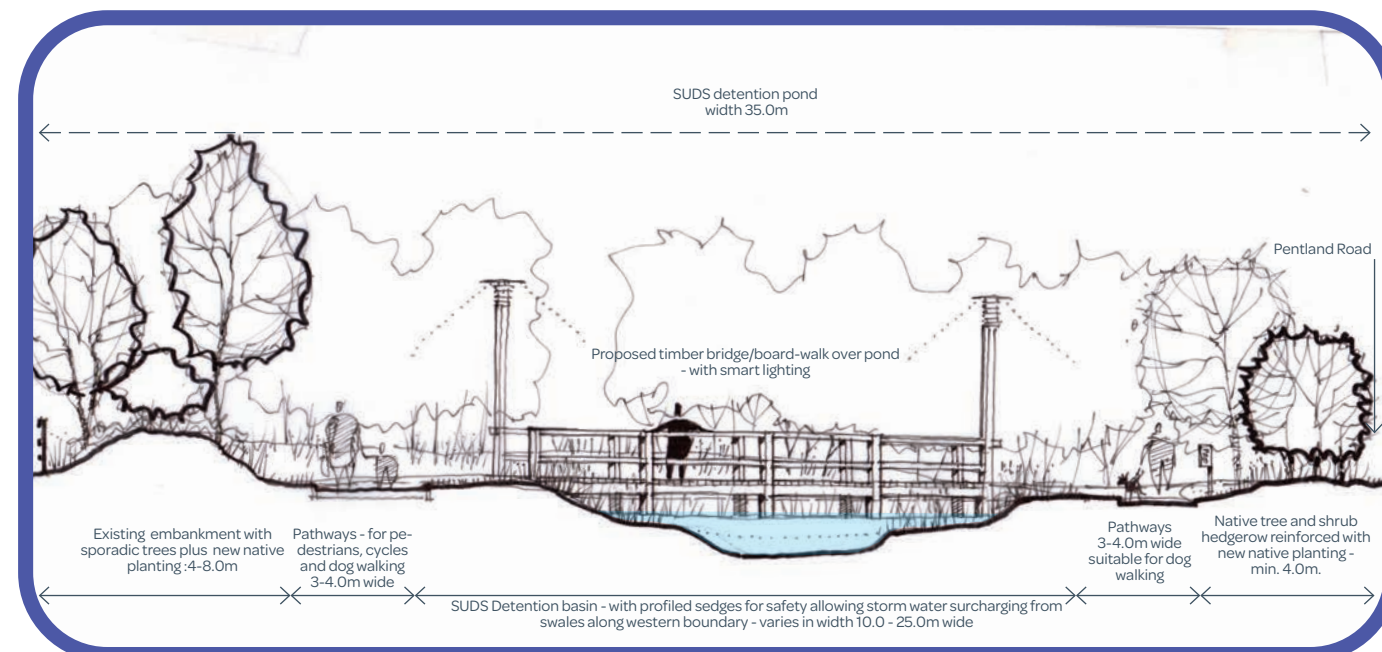


Figure 63 - SECTION AA' - Detention Pond section looking west

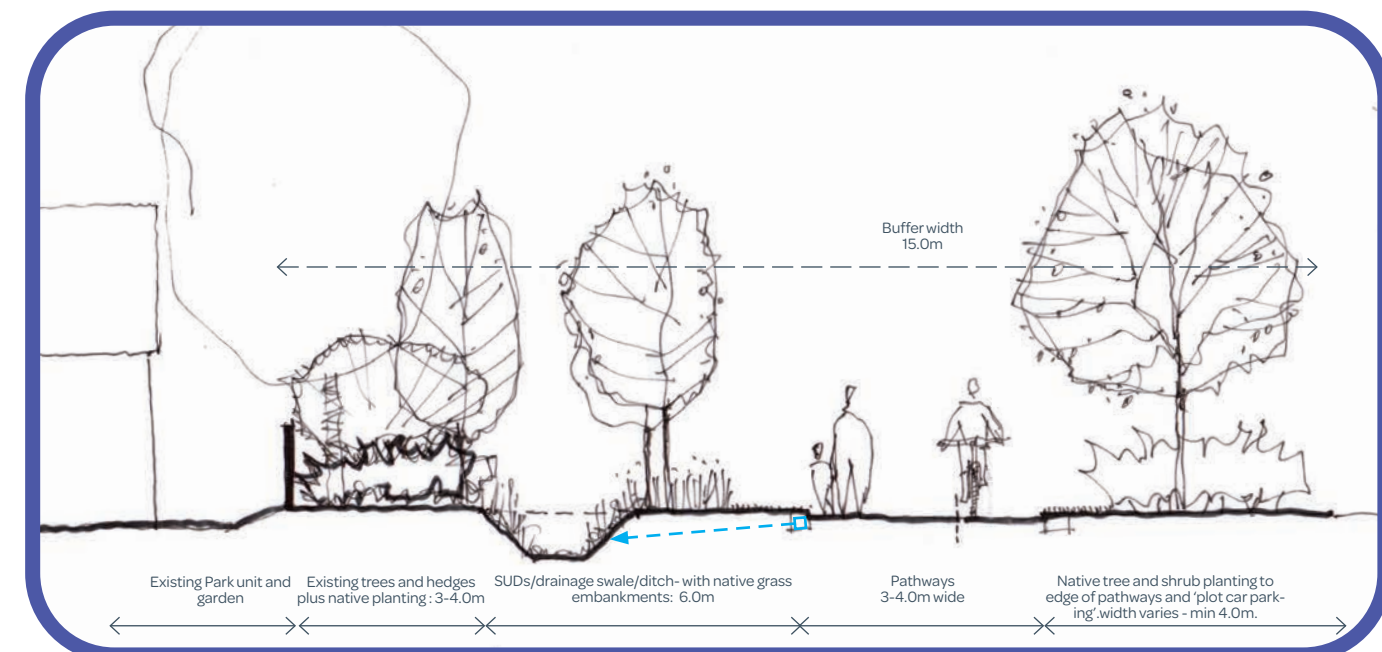


Figure 64 - SECTION BB' - western buffer section 1

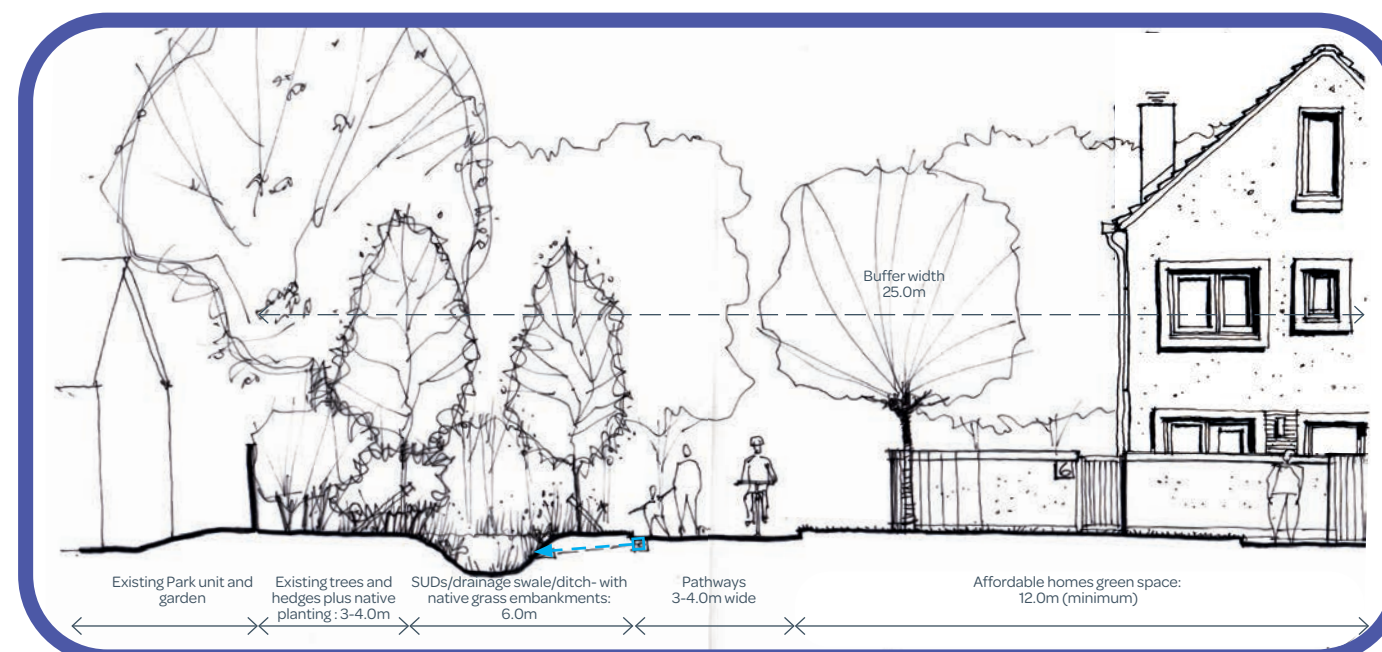


Figure 65 - SECTION CC' - western buffer section 2

6.3

central POS and eastern edge zones 4-6

Zone 4 - Central Green Open Space (0.442ha)

Sitting centrally within the framework (Figure 66) this generous space is intended to act as a multi functional public space, both a formal park, with seating and lighting, but also as an informal play space within the central green.

A designed park space sitting adjacent to the affordable housing to the south and contained in the north by the Community Building with its south facing walled garden and usable outdoor space. Figure 67 illustrates the scale of the space intended.

The landscape character here is in contrast, but supporting, the Western Buffer area, with a more formal character. Given by the following indicative species, most of a ornamental nature:

- Trees -
 - Fraxinus ornus (20%)
 - Prunus sargentii (18%)
 - Sorbus X intermedia (20%)
 - Tilia X cordata (40%)
 - Pinus sylvestris (2%)
- Shrubs -
 - Amelanchier canadensis (10%)
 - Cornus alba spp (20%)
 - Dryopteris felix mass (10%)
 - Hedera helix + Vinca minor (5+5%)
 - Prunus lusitanica (15%)
 - Rosa canina (15%)
 - Viburnum tinus (20%)
- Grassland -
 - Germinal: A19 - All purpose grassland mix, or similar. Cut 24 times/yr.

Attached to the green space, to the north, we propose a formal children's play area - a Local Area for Play (LAP), catering for children from 2-10 years. As per the requirements of the Fields In Trust (FIT)/MLC requirements, it will therefore include the following:

- children's safety surfaced play area of 150m2
- a walled and fenced boundary to the south with access gates onto the central green, plus;
- seating for adults and children, with covered shelter;

- play equipment to include, as suits the age groups intended - swings, slide, climbing frame/stepping stones and toddler rockers;
- planting to screen the service wall to the north using ornamental shrubs to give all round foliage, colour and form with semi mature trees for shade and shelter.

Zone 5 - Eastern Link (0.032ha)

A small but essential landscape zone acting as a key part of the overall movement network, connecting the public road and communities to the east. Most importantly linking the bus stop and movement on the A701, via a route alongside the Aldi car park, into the masterplan area and the main green open space.

Intended as a 3.0m wide footpath cycleway, flanked by ground covered margins to maintain bright and open corridor.

The species used will draw upon the shrubs listed above for zone 4.

The link will also critically have new lighting to maintain this open corridor as a safe space 24/7 - using a range of solar and street lighting systems to ensure a fail safe functionality.

Zone 6 - Eastern Boundary (0.047ha)

A limited but critical landscape zone, sitting alongside the existing boundary brick walling of the mixed residential and commercial units on the A701 frontage.

The planting species used will draw upon the shrubs listed above for zone 4, utilising the evergreen species and a limited number of new trees (between the two existing mature trees) to animate this edge without it becoming a screen. This design intention will allow light and air movement along the The Street with its associated pathways and parking areas.

Again in this zone the accent is on integration not screening.

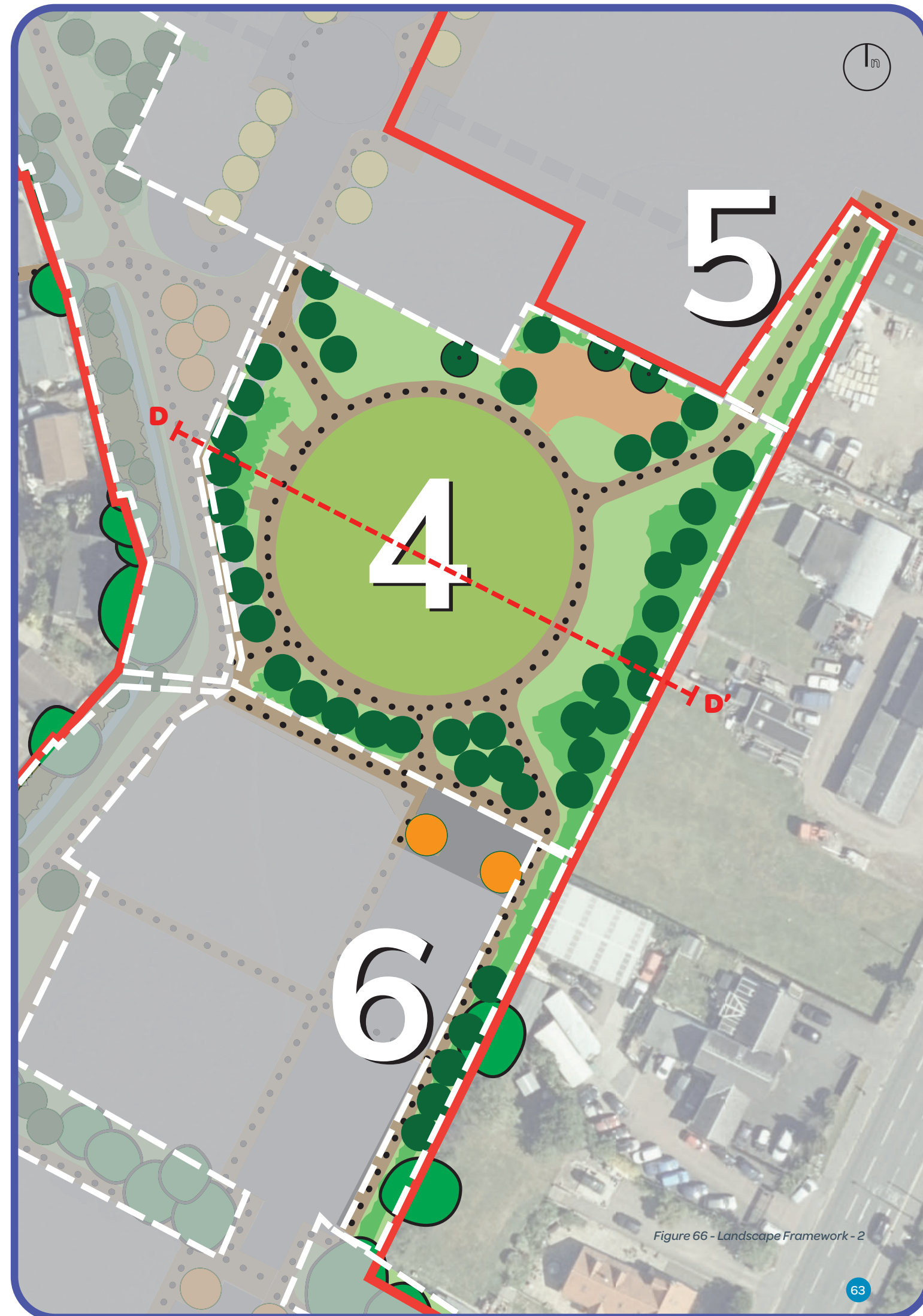


Figure 66 - Landscape Framework - 2

6.4

central POS and eastern edge zones 4-6



Plates 28,29 - Precedent images of intended character of central open space



Plates 30-33 - Precedent images of intended character of central open space; including play areas

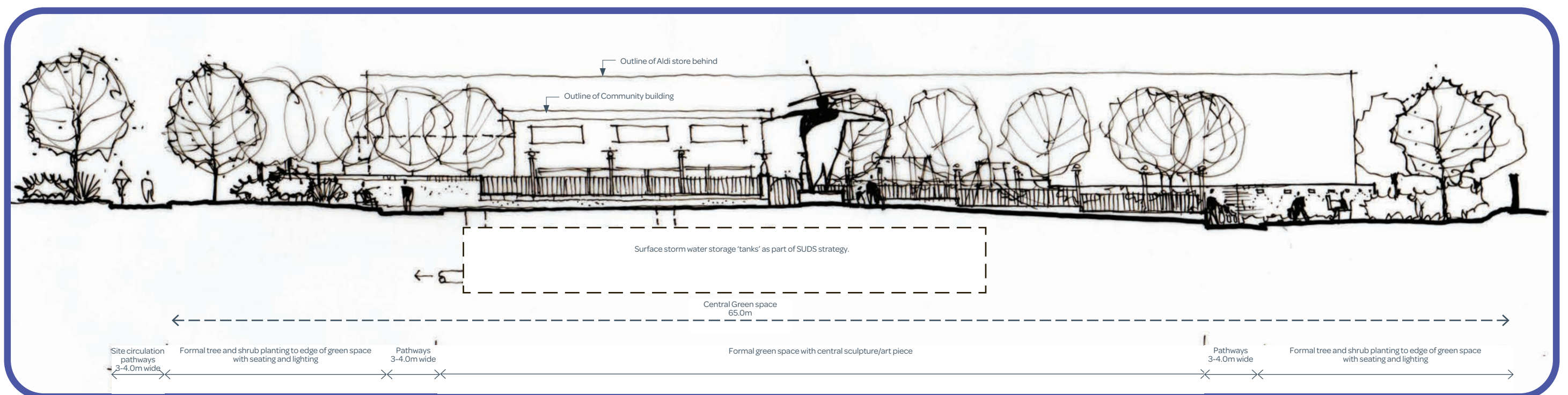


Figure 67 - SECTION D D' - Indicative long section through proposed Central Public Open Space looking north

6.5

southern access and edges zones 7-11

Zone 7 - existing tree belt/edge (0.126ha)

The existing trees are retained in their entirety. Suitable arboricultural work will be undertaken to maintain their shape, health and vigour. It is intended that additional trees will be planted to fill in gaps in the main tree line, we anticipate that these will be:

- extra heavy standards;
Sorbus intermedia/aria
Acer platanoides

Zone 8 - eastern A701 edge (0.04ha)

The landscape character intention here is to allow urban design and massing issues to dominate, with the proposed development overlooking the street to give a whole new urban feel to this edge.

At the same time, the existing mixed native hedge, along the A701, will be retained along its length. It will be enhanced by new planting to fill gaps, with suitable species, and maintained to a cut height of 1.5m:

- 1+2 transplants;
Crataegus monogyna
Prunus spinosa
Rosa canina
Viburnum opulus

The area behind the hedge will be in filled to raise levels and remove surface water flooding issues, forming development plot no 9. Small front garden areas will run up to the hedge, suitable for proposed care home users.

Zone 9 - southern arrival (0.077ha)

This zone will require some minor regrading to achieve the new road alignment to the development from the A701, and off the existing access road to the Pentland Residential Park.

This change in level to accommodate the new access road, will unfortunately, necessitate the removal of some maturing shrubs and small trees. These will be replaced with a substantial

new planting bed, to a high specification, to create an instant impact and a bold statement for the new development at this southern arrival point; using the following indicative species:

- Semi mature trees (20-25cm):
Aesculus hippocastanum
Carpinus betulus
Tilia x europaea Pallida
- Shrubs (5/10- 100L pots):
Amelanchier canadensis (10%)
Cornus alba spp (15%)
Dryopteris felix mas (10%)
Elaeagnus X ebbingei (5%)
Hedera helix + Vinca minor (5+5%)
Ilex aquifolium (5%)
Prunus lusitanica (15%)
Rosa canina (15%)
Viburnum tinus (15%)

The general condition at the entrance is shown via an indicative section/elevation at Figure 72.

Zone 10 - southern boundary edge (0.75ha)

Sitting adjacent to the Residential park, this zone is a comprises two parts:

- Existing boundary planting reinforced with a narrow evergreen strip of new planting, from the following indicative ornamental species:
Dryopteris felix mas (5%)
Elaeagnus X ebbingei (15%)
Hedera helix + Vinca minor (5+5%)
Ilex aquifolium (20%)
Prunus lusitanica (25%)
Viburnum tinus (25%)
- Proposed semi mature trees alongside car park for the proposed 'retirement units'. The intended species are:
Trees - Tilia X europaea Pallida
- Along this boundary the set back to the development buildings from the Residential Park units ranges from 25 to 40m.



Figure 68 - Landscape Framework - 3

6.6

zones 7-11cont/d.

Zone 11 - The Street (0.,023ha)

This zone will have a dominant urban feel - that of a residential 'street'.

Accordingly the landscape character is reflected in the use of bold street trees at strategic locations - such as its arrival in the south, its closure in the north and at pathway crossing points. Figure 71 illustrates its general condition by way of a sectional/ elevation.

It is intended trees will be planted as semi mature specimens (20-25cm), set in tree grilles and protected by steel tree guards.

The indicative species will be:

Corylus corluna and,

Tilia 'Pallida'



Plates 34,35 - Precedent images of intended character of The Street, trees and grilles/guards and furniture

Figure 71 - SECTION EE' - General section through 'The Street' looking north

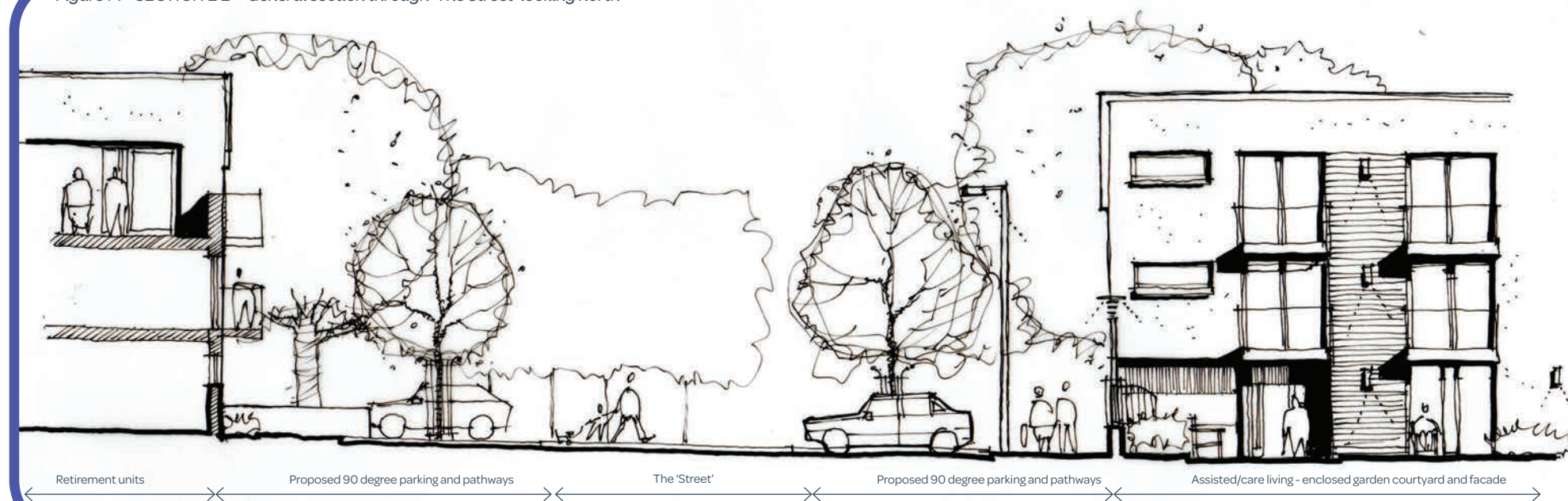
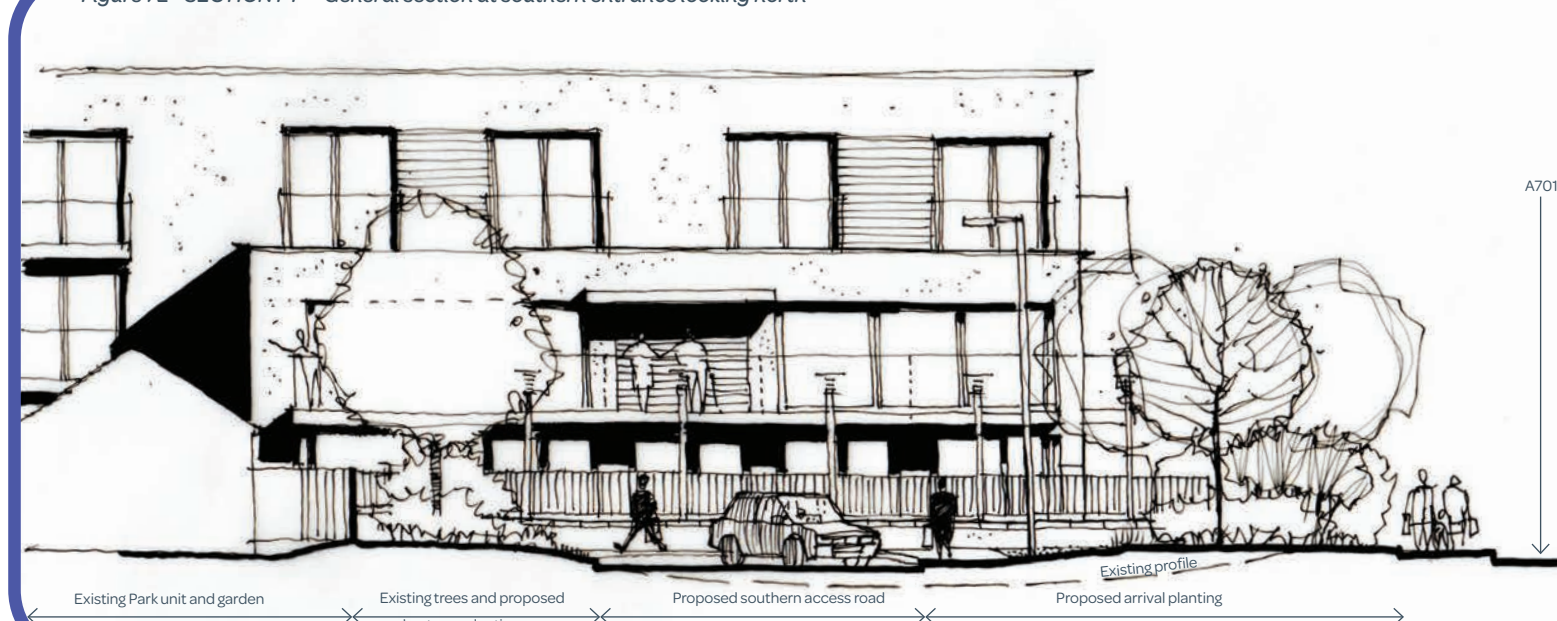


Figure 72 - SECTION FF' - General section at southern entrance looking north



Plates 34,35 - Precedent images of intended character of The Street and affordable units

6.7

northern arrival and spine road zone 12

Zone 12 - northern arrival and spine road road (0.094ha)

This zone is defined by both commercial development plots and a major new access junction off Pentland Road. It has a dominant axial arrangement where individual development plots will take access off the main spine road.

There will be a strong and formal character to this zone - see the indicative section at Figure 73.

The indicative species will be:

- Trees > Tilia X europaea Pallida
- Shrubs > Elaeagnus X ebbingei (40%)
> Hedera helix (10%)
> Viburnum tinus (40%)
> Vinca minor (10%)

It is also intended that a small plaza is created to accompany a drop off/pick up lay-by off the spine road.



Plate 36 - Precedent image - Tilia pallida in a formal arrival situation.

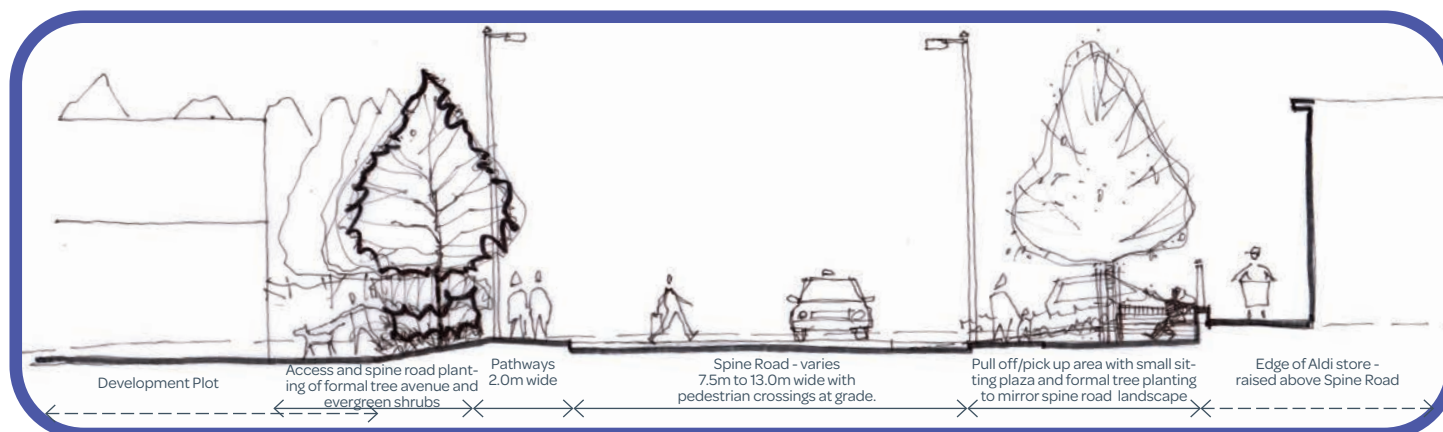


Figure 73 - SECTION GG' - General section through the northern arrival avenue/axis



Figure 74 - Landscape Framework - 4

07

summary of benefits + conclusion

This Design and Access Statement has been prepared have been prepared on behalf of Pentland Park Marine Ltd. (PPML). They relate to the landowner's interests at New Pentland, immediately west of the A701 and south of Pentland Road.

Summary of proposal benefits - as info-graphics

The New Pentland Masterplan will deliver a number of significant benefits locally. Those benefits are summarised within the info-graphics opposite which are significant across a number of disciplines - Environmental (nature and biodiversity) ; Community; Jobs and Investment; Highways and Infrastructure.

Conclusion

The New Pentland Masterplan is informed and supported by a suite of technical assessments. Those assessments have identified any necessary mitigation measures required to ensure that a sustainable development can be delivered.

This proposal, and its design intentions, represents an opportunity to deliver a community-facing development which integrates well with, and complements, the surrounding land uses and future proposals whilst also creating and enhancing landscape character.

It, therefore, demonstrates how this land can successfully contribute towards the development of the A701 Strategic Growth Corridor, revitalising the sites landscape and providing much needed economic development, employment, and amenities to the benefit of the local community.

Figure 74- The proposed masterplan set into context



jobs + investment



14,000 sq. m.
New Development



81% affordable
housing and
assisted living



19% commercial
(discount foodstore,
food & beverage)



£22.4 million
Estimated Construction
Investment



Further Investment
by Occupiers
and Operators



Resident Population
to help support facilities



172 short term jobs in construction

112 long term jobs in new facilities

Estimated 33 further jobs - indirect/induced

community



New Nursery/Crèche
as part of the community core



Family orientated
accommodating access and
activities for all ages



Dedicated dog
walking area
- with doggy facilities



Care in Community
care home with
assisted living



Retirement homes
cradle to grave community



Affordable housing
starter units and
family homes



80 bed care home-linked to...

40 retirement flats-adjacent to...

10 affordable homes-starter and family units.

Plates 37 - 40 - Info graphics

environment



1 hectare Greenspace
New Public Green Space
created across the site



2.5 km. pathways
footpaths and cycleways
- to DDA standards



Wildlife habitats
new habitats created
alongside existing boundaries



200 trees
public spaces, roadsides and
car parks



Public Park
with Seating, Lighting and
Public Art



Equipped Play area
Fenced Local Area for Play



40 short term jobs in landscape construction

6 long term jobs in landscape maintenance

5-10 Nursery related jobs and other related
voluntary job opportunities

highways + infrastructure



Public transport
new connections integrated
into development



Cycling
new cycling pathways



Less car movement
... more walking ...



Flooding/SUDS
flood risk minimised, with new
sustainable drainage network



Land recycling
with historic contamination
resolved



Smart lighting
street and amenity lighting
controlled across site



1200 m2 SUDS pond - with 1km of drainage
swale

2.5km of cycleways - criss crossing the site

8.0 ha of recycled land - after 40 years of
under-use.