

REPORT	Landscape response to South Dublin County Council Request for Additional information
REG. REF.	SDZ22A/0014
PROJECT NR.	19-044
PROJECT NAME	Aderrig Phase 3
DATE	March 2023

Introduction

The South Dublin County Council Request for Additional Information contained the following items 2(e), 3(e), 5, 6, 7(c), 8 which have been addressed in the Landscape plans and details prepared by Doyle + O'Troithigh Landscape Architecture Ltd.

Request Item 2(e)

Item 2(e) states:

It is noted that car parking is provided around the open space to the south east. The application is requested to remove the car parking to the south west of this park.

Response to Item 2(e)

The proposed parking to the south and south east of the open space has been removed. The layout of the park has been revised to accommodate the removal of the proposed parking spaces. See Landscape Plan LP-01-FI and LP-03-FI for details of the revised open space and the development of a planted verge between the parks western and south western pathways and Homezone 1 (now called Road 7 Homezone), in lieu of the carparking spaces proposed as part of the planning application.

Request Item 3(d)

Item 2(f) states:

The applicant is requested to provide a pedestrian and cycle link from the South West corner of the development to the Local Park, in lieu of the linear area of communal open space that runs between Road 9 and Homezone 1.

Response to Item 3(e)

Working as part of the wider project team with BKD Project Architects and Waterman Moylan Project Engineers, a pedestrian and cycle link has been provided between Road 9 and Homezone 1 (now called Road 7 Homezone), creating a direct link to the central open space. See Landscape Plan LP-01-FI and LP-02-FI for details of the link and associated landscape works.

Request Item 5 (inclusive)

Item 5 states:

Street Trees

A redesign of the streets is required to provide street trees on both sides throughout the development. Trees that are integral to the street need to be in public ownership and comply with the requirements of Adamstown SDZ (2014), Adamstown Street Design Guide (2014) and DMURS (2019):

i. Street trees to be provided on all streets in the public realm, integral to the street, outside the footpath on both sides. Street tree provision is deficient along the following streets:

- Road 1 East side*
- Road 2 Northside*
- Road 3 North side*
- Road 4 South side*

- Road 5 East Side (retained vegetation to West is noted)
- Road 6 (one)
- Road 8 East side (retained vegetation to West is noted)
- Road 9 North side
- Homezone 2 Eastside
- Pedestrian link (Links Road 3 to Celbridge Link Road)

Response to Item 5i

Working as part of the wider project team with BKD Project Architects and Waterman Moylan Project Engineers, the site layout has been revised to allow for additional street trees to

- Road 1 East side
- Road 2 Northside
- Road 3 North side
- Road 4 South side
- Road 5 East Side (retained vegetation to West is noted)
- Road 6 (one)
- Road 8 East side (retained vegetation to West is noted)
- Road 9 North side
- Homezone 2 Eastside
- Pedestrian link (Links Road 3 to Celbridge Link Road)

See Landscape Plans LP-01-FI, LP-02-FI and LP-03-FI for locations of all street trees. This has allowed for an increase of 32 Nr. Street trees giving a total of 193 Nr. Street trees to the site. Of these 187 Nr. are proposed in bio retention tree pits and increase of 81 Nr. from the planning application.

Item 5ii States:

'Not more than five perpendicular or two parallel car parking spaces... between trees.'
(2.4.24 Adamstown SDZ 2014)

Response to Item 5ii

The site plan and parking arrangements have been revised to ensure that not more than five perpendicular and two parallel spaces are set out between trees. See Landscape Plans LP-01-FI, LP-02-FI and LP-03-FI for locations of all street trees.

Item 5iii States:

Include details of SuDs tree trench with engineered soil to run continuously along the Celbridge Link Road.

Response to Item 5iii

As part of the Aderrig Phase 2 (SDZ 21A/0014) grant of planning order Number PR/0384/22 South Dublin County Council noted that:

The verge detail and tree pits for the Celbridge Link Road shall be carried out in accordance with Planning Reference SDZ17A/0009.

Therefore, the details for the Aderrig Phase 2 tree pits along the Celbridge Link Road were ultimately defined by the Planning Reference SDZ17A/0009 application to ensure its consistency along its entire length. As part of the Aderrig Phase 3 development our proposal is for the tree pits along the Celbridge link Road to be carried out in accordance with Planning Reference SDZ17A/0009 also, thereby mirroring the Phase 2 application) and respecting the original application for the road.

Item 5iv States:

Remove geotextile layers from compacted stone layers within the SuDS tree pit due to their tendency to clog and cause water logging of the tree pit. Geotextile can be wrapped around services/collector drains.

Response to Item 5iv

See Landscape drawing LD-01-FI for details of the Bio retention tree pits. The geotextile layers have been removed from the pit details. A layer of geotextile is wrapped around the collector drain.

Item 5v states:

Confirm that the proposed tree species proposed along the Celbridge Link Road match those previously agreed for SDZ17A/0009.

Response to Item 5v

The trees proposed to the Celbridge link road as detailed on Landscape Plan LP-01-AI are in line with the SDZ17A/0009, the proposed species are *Corylus colurna* at a size of 16-18cm and *Tilia cordata* at a size of 16-18cm.

Item 5 vi states:

Street trees to be a minimum 18-20cm girth at planting and to be predominantly native and or pollinator friendly species.

Response to Item 5vi

All proposed street trees with the exception of those to the Celbridge Link Road as detailed in response to RFI item 5v are 18-20cm in size at planting, and are native or pollinator friendly. See Landscape Plan LP-01-FI planting schedule for details of all proposed planting Aderrig Phase 3 site. The one exception to this is the proposed *Cercis canadensis* 'Forest pansy' due to availability this is currently proposed at a size of 16-18cm. During construction, as the trees are being sourced we hope to be in a position to source the *Cercis* at a size of 18-20cm however at present this is proving difficult.

Request Item 6

Item 6 states:

2. Green Infrastructure Provision

a) Additional information is required to demonstrate how the plans contribute to the protection or enhancement of Green Infrastructure in the County through the provision of green infrastructure elements as part of the application submission, having regard to the following:

i. In the case of small-scale developments this may consist of a simple landscape plan which includes objectives to protect or restore existing on-site GI assets, provides for connection to local or primary GI corridors or includes elements which allow the site to act as a local stepping stone;

Response to Item 6ai

While the site is considered a large-scale development, the landscape proposed within the site lands are connected to the green infrastructure corridor of the western boundary, this is achieved by the provision of tree lined streets which connect the open spaces provided within the development to the Western boundary GI corridor. These tree lined corridors allow the open spaces provided within the site to act as local GI stepping stones.

See Landscape Plan LP-01-PP and the Green Infrastructure Plan GIP -01-FI for details of green infrastructure connections which link the open spaces within the development to the wider Green infrastructure corridor of the western boundary.

Item 6aii

Where the development site is located within or close to a Core or Corridor the development should, at a minimum, protect any existing GI assets and enhance same (for example, not breaking a GI Corridor but enhancing same with a connecting piece of planting, retaining hedgerows or woodlands);

Response to Item 6aii

The western boundary hedgerow is an existing townland boundary and Green infrastructure corridor. The proposed development has been informed by the retention, protection and enhancement of this corridor. As per GI Objective 5 of the 2022-2028 South Dublin County Development Plan.

GI Objective 5:

To protect and enhance the County's hedgerow network, in particular hedgerows that form townland, parish and barony boundaries recognising their historic and cultural importance in addition to their ecological importance and increase hedgerow coverage using locally native species including a commitment for no net loss of hedgerows on any development site and to take a proactive approach to protection and enforcement.

As part of the retention, protection and enhancement of the western boundary GI corridor an exclusion zone (ranging from 5-12mtrs) from the existing western boundary trees and hedgerow was established, to protect the roots of the hedgerow and trees. See site Trees and Hedgerow survey prepared under BS 5837:2012 for information on the existing trees and hedgerows and the Root protection areas of the surveyed vegetation.

The exclusion zone provides a buffer to the western hedgerow and trees into which no roads, buildings or sub surface services are to be located. In doing so, this ensures that roots of the retained hedgerow and trees are not impacted on by the development. The exclusion zone to the western boundary hedgerow and trees allows for the retention of 673 linear mtrs of hedgerow and associated trees. See

Green Infrastructure Plan GIP-01-FI for details of the retained western boundary hedgerow. The establishment of the exclusion zone informed the extent of the built environment to the western boundary and allowed the development of a linear park.

The linear park has been designed as a green lung with planting proposed to reinforce and enrich the retained hedgerow and trees. A pathway constructed using a cellweb system with gym equipment at accessible locations will provide a trim trail and active amenity walk to the residents. Along a significant section of the park a road side grass swale is proposed, this will take the surface water from the adjacent roadway. (See Landscape Drawing LD-02-FI Detail 01) The pathway set within the linear park will connect to the internal pathway system to give ease of access between the linear park and wider environment. This provides further connectivity to the surrounding sites including the future school site. See Landscape Plan LP-01-FI.

The retained western boundary hedgerow will be enhanced with the planting of Hawthorn, Hazel, Spindle, Blackthorn and Holly as agreed with the project Ecologist Matt Hague. At the junction with the constructed Celbridge Link Road the retained and enhanced hedgerow will be allowed to grow high in an effort to bridge the gap in the Green Infrastructure corridor caused by the Celbridge Link Road.

See Landscape Plan LP-01-FI and Green Infrastructure Plan GIP-01-FI for details of the proposed retention of the western boundary hedgerow and development of the western boundary linear park to establish the western boundary of the Aderrig Phase 3 development as a central component of the wider green infrastructure strategy.

Item 6aiii

The characteristics and assets of the proximate GI Core, Corridor or Stepping Stone should be reflected within proposed development, for example continuation of hedgerows, tree planting, waterways;

Response to Item 6aiii

The characteristics of green infrastructure found in the surrounding sites will continue across the Aderrig Phase 3 site. The open spaces proposed as part of the Aderrig Phase 3 development are planted with species found in the western boundary hedgerow and the adjoining green infrastructure connecting to the western boundary. See Green Infrastructure Plan GIP-01-FI for details of the proposed tree, hedge and Miyawaki planting proposed within the site and details of the street tree planting which connects the open space areas to the western boundary green infrastructure corridor. The Green Infrastructure Plan GIP-01-FI also illustrates the Phase 3 development's green infrastructure connectivity with the Phase 2 development to the east via street tree corridors, the Tubber Lane Development Area to the north-east via continuation of the western hedgerow and to lands outside the SDZ to the west and south via hedgerow offshoots. They all combine to create a network of interlinked and integrated green infrastructure to support ecology, biodiversity and surface water management.

Item 6aiv

iv. Development should seek to enhance or restore features that act as ecological corridors, particularly water features, hedgerows, tree lines, areas of un-cultivated land. These, or some element of them, should be incorporated into the proposed development to

create pathways for wildlife and / or increase amenity value;

Response to Item 6a iv.

The proposed Aderrig Phase 3 development has been centered on the retention of the western boundary hedgerow. this hedgerow is both a townland boundary and a green infrastructure corridor. As part of the development this hedgerow is retained, protected and enhanced with the provision of a linear park within the 5-12mtr exclusion zone proposed to the east of the western boundary hedgerow.

The retained hedgerow is enhanced with the planting of Hawthorn, Hazel, Spindle, Blackthorn and Holly. The retained western boundary and proposed linear park are connected to the open spaces proposed as part of the development with tree lined streets, see green infrastructure plan GIP-01-FI for details of the retained and proposed landscape elements. These elements will work together to create pathways for wildlife and increase the amenity value of the development.

Item 6a v.

Development sites which are not located proximate to designated GI Cores or Corridors should identify the nearest designated GI Core, Corridor or Stepping Stone and make provision for GI interventions on the site which could eventually provide a link to local Stepping Stones, Cores or Corridors;

Response to item 6a v.

While the site lands are located in close proximity to a GI Corridor (the western boundary hedgerow) the proposed open spaces within the development are linked back to the western boundary through the provision of tree lined streets. The provision of tree lined streets will allow for the development of pathways for certain feeding species linking the site open spaces to the western boundary green infrastructure corridor. See green infrastructure plan GIP-01-FI fore details of all proposed site planting, open spaces and tree lined streets.

Item 6a vi

vi. Developers should be aware that ecological corridors can also act to quickly spread non-native invasive species. Therefore, identification and control of invasive species site should be included in planning applications and the GI Plan.

Response to item 6a vi.

As part of the development works an invasive species survey will be undertaken. With any invasive species being removed from site in a controlled manner.

Item 6b

b) All development proposals shall be accompanied by a Green Infrastructure Plan, which will normally be submitted as part of the suite of Landscape Plans that are required for a development. Plans shall include the following:

i. Site location plan showing the development site in the context of the wider GI as shown on the Council's GI Plan for the County;

Response to 6b i.

A green infrastructure plan has been prepared as part of the response for further information. See GIP - 01-FI for details. This plan shows the surrounding green infrastructure elements and how these connect to the retained, protected and enhanced western townland boundary hedgerow.

Item 6b ii

Site survey and analysis, identifying existing GI Infrastructure and key assets within the site;

Response to Item 6b ii.

The green infrastructure plan GIP-01-FI prepared as part of the response to further information includes the key green infrastructure assets currently on the Aderrig Phase 3 site as informed by the tree and hedgerow survey and ecology survey.

Item 6b iii.

Indicate how the development proposals link to and enhance the wider GI Network of the County; Proposals are required that recreate the green infrastructure connection severed by the road through the western boundary hedgerow.

Response to item 6b iii

Through the proposed landscaped open spaces and tree lined streets as details in landscape plan LP-01-FI and Green Infrastructure Plan GIP-01-FI the site will development corridors, stepping stones and links which will facilitate and create pathways for wildlife and increase amenity value for the residents. These green infrastructure proposals allow the site to connect into and enhance the wider green infrastructure networks, facilitating the movement of wildlife through the site to the surrounding lands.

While it is not possible to recreate the severed green infrastructure connection caused by the roadway infrastructure through the western boundary hedgerow (which was proposed and developed as part of the Adamstown SDZ), additional planting is proposed. This planting and that of the retained hedgerow will be allowed to grow higher in an effort to bridge the gap in the Green Infrastructure corridor caused by the Celbridge Link Road.

Item 6b iv.

Proposed GI protection, enhancement and restoration proposals as part of the landscape plan, where appropriate, for the site.

Response to item 6b iv.

As part of the retention, protection and enhancement of the western boundary GI corridor an exclusion zone (ranging from 5-12mtrs) from the existing western boundary trees and hedgerow was established to protect the roots of the hedgerow and trees. See site Trees and Hedgerow survey prepared under BS 5837:2012 for information on the existing trees and hedgerows and the Root protection areas of the surveyed vegetation.

The exclusion zone provides a buffer to the western hedgerow and trees into which no roads, buildings or sub surface services are to be located. In doing so, this ensures that roots of the retained hedgerow and trees are not impacted on by the development. The exclusion zone to the western boundary hedgerow and trees allows for the retention of 673 linear mtrs of hedgerow and associated trees. See Green Infrastructure Plan GIP-01-FI for details of the retained western boundary hedgerow. The establishment of the exclusion zone informed the extent of the built environment to the western boundary and allowed the development of a linear park.

Item 6b v.

Demonstrate habitat connectivity for badgers

Response to item 6b v.

The landscape design maintains habitat connectivity along the western boundary, and additional biodiversity-focused habitat has been provided. The accompanying response to RFI Item 7, prepared by Brady Shipman Martin, addresses the issues related to the protection of badgers in detail.

Item 6b vi.

Continue GI links from adjoining site.

Response to item 6b vi.

The proposed tree lined streets and planted open spaces allows for the surrounding green infrastructure connects to connect into and across the site lands, as articulated in response to 6aiii. This makes the site act as a corridor for green infrastructure to the wider environs. See green infrastructure plan GIP-01-FI for details of the proposed green infrastructure elements retained and proposed as part of the Aderrig Phase 3 development.

Item 6b vii

vii. Planting proposals that recreate the severed GI connection caused by the roadway through the western hedgerow.

Response to item 6b vii

While it is not possible to recreate the severed green infrastructure connection caused by the roadway infrastructure through the western boundary hedgerow (which was proposed and developed as part of the Adamstown SDZ), additional planting is proposed. This planting and that of the retained hedgerow will be allowed to grow higher in an effort to bridge the gap in the Green Infrastructure corridor caused by the Celbridge Link Road.

c) Refer to Chapter 4 of SDCC County Development Plan (2022-2028): Chapter 4 Green Infrastructure and Chapter 12 Implementation and Monitoring.

Response to item 6c

As part of the response to item 6a, b and c. Doyle + O'Troithigh in consultation with the project ecologists BSM we have prepared a green infrastructure plan which provides details on the:

- Retention of the western hedgerow which is a key Green infrastructure asset to the Aderrig Phase 3 site. The retention of this hedgerow has been informed by GI Objective 5 of South Dublin County Development Plan 2022-2028.

GI Objective 5:

To protect and enhance the County's hedgerow network, in particular hedgerows that form townland, parish and barony boundaries recognising their historic and cultural importance in addition to their ecological importance and increase hedgerow coverage using locally native species including a commitment for no net loss of hedgerows on any development site and to take a proactive approach to protection and enforcement.

- The existing hedgerow is being retained and enhanced with infill planting of similar native hedgerow species Hawthorn, Hazel, Spindle, Blackthorn and Holly. At the junction to the Celbridge Link Road a 'book end' of new planting is proposed in an effort to create two key Green infrastructure stepping stones which can help to bridge the gap created by the Celbridge Link Road under the Adamstown SDZ.
- The Green infrastructure plan includes the location of the proposed hedgerows and green infrastructure assets which connect with the retained western boundary hedgerow. This illustrates how the proposed site street tree planting establishes a series of conduits which connect the retained western hedgerow with the open space provided as part of the development, and in turn connect to the wider environment via the hedgerow connecting with the retained western boundary hedgerow.
- The proposed Green Infrastructure plan details the quantities of open space proposed across the site with a total of 18,100 Sq/mtr being proposed. The majority of which is proposed as a buffer / exclusion zone to the western boundary hedgerow. The exclusion zone provides a buffer to the western hedgerow and trees into which no roads, buildings or sub surface services are to be located. In doing so, this ensures that roots of the retained hedgerow and trees are not impacted on by the development. The exclusion zone to the western boundary hedgerow and trees allows for the retention of 673 linear mtrs of hedgerow and associated trees.
- The Green Infrastructure plan illustrates the extent and location of native hedgerow planting which is proposed to mitigate against hedgerow removal. A total of 247 linear mtrs of native hedgerow and 500 Sq/mtr of native woodland planting are proposed as part of the development. The new hedgerow planting will ensure that following construction there is a net gain of native hedgerows on site. The selected species Hawthorn, Hazel, Spindle, Blackthorn and Holly have been reviewed and agreed with the project Ecologist Matt Hague.
- The extent of street trees which have increased as part of the RFI in line with item 5 of the RFI. A total of 193 Nr. Street trees are proposed an increase of 32 Nr. from the planning application, with a total of 187 Nr. Bio retention tree pits and increase of 81 Nr. from the planning application. A further 219 Nr. Trees are proposed in the open space areas, an increase of 17 Nr. From the planning application.
- As part of the development the Green infrastructure indicates a total of 138 Linear mtrs of grass swales (See drawing LD-01-FI for details) and 5,183 Sq/mtr of Miyawaki Planting in compliance with condition GI Objective 7 of the South Dublin County Development Plan. 2022 – 2028.

GI Objective 7:

To develop linked corridors of small urban 'Miyawaki' native mini-woodlands, a minimum of 100

sq. m in size, to capture carbon and encourage biodiversity in suitable existing built-up areas, in low grade parkland, and other areas of zoned lands where deemed suitable and appropriate.

Request Item 7 (c).

Item 7(c) states:

Public Lighting

Revised proposals that incorporate the recommendations regarding reduction of light disturbance. There shall be no light spill from the proposed development into the retained areas of linear vegetation. Public lighting proposals to be clearing shown on the landscape plans to also ensure Street tree proposals can be implemented.

Response to Item 7(c)

The Landscape Plans LP-01-FI, LP-02-FI and LP-03-FI include the updated lighting layout as prepared by Sabre Electrical Services Ltd. The landscape plans have been prepared to ensure that no clashes exist between the proposed lighting and landscape, to ensure that the lighting layout can be implemented without the requirement to amend the proposed street tree planting.

Request Item 8.

Item 8 states:

Additional SuDS.

The applicant is requested to provide additional SuDS proposals that include permeable paving and further bio retention tree pits within the requested additional street trees required to comply with the planning scheme.

Response to Item 8.

As detailed in the Site Investigation reports completed by Ground Investigation Irelands for the existing development surrounding the Aderrig Phase 3 site, “the water level dropped too slowly to allow calculation of ‘f’ the soil infiltration rate”. The site’s soil conditions are not suitable for surface water permeability, due to this, permeable paving and filter drains have not been proposed for development.

The proposed SUDS measures will include:

- Waterbutts in each unit’s back garden – 200ℓ capacity each,
- Roadside swales within open green space areas throughout the site, where possible, and
- Bio-retention tree pits – to be connected to the main surface water network with the streets,

The site plan has been revised to provide additional street trees to the listed streets. All street trees in public areas for taking in charge will be planted in Bio retention tree pits. See Landscape Plans LP-01-FI, LP-02-FI and LP-03-FI for location of all the bio retention tree pits and drawing LD-02-FI and LD-03-FI for details of the bio retention tree pits.

Section 3 Drawings prepared in response to the RFI

The drawings prepared and noted below, provide a detailed response to the items raised under the item 2(e), 3(e), 5, 6, 7(c), 8 of the South Dublin County Council requests for additional information.

Drawing Type: Plans

Dwg	Title	Rev	Scale	Size
LP-01-FI	Landscape Plan		1:500	A1
LP-02-FI	Landscape Plan 1 of 2		1:200	A1
LP-03-FI	Landscape Plan 2 of 2		1:200	A1
GIP-01-FI	Green Infrastructure Plan		1:500	A1

Drawing Type: Details

Dwg	Title	Rev	Scale	Size
LD-01-FI	Landscape SuDS details		1:25	A1
LD-02-FI	Landscape SuDS details		1:20	A1

