

Proposed Integrated Constructed Wetland at Dodder Valley
Park, South County Dublin
(DURL_Project_#Life17_ENV/IE/000281)

Preliminary Examination (for the purposes of EIA) in accordance
with Article 120 of Planning and Development Regulations 2001-
2019



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**Brady Shipman
Martin**

**Built.
Environment.**

Strategic
Assessment
**Built
Environment**

Client:

DURL Project SDCC

Date:

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1 Introduction

1.1 Background

The Dublin Urban Rivers LIFE (DURL) project, a collaboration between South Dublin County Council and Dún Laoghaire-Rathdown County Council, seeks to improve water quality in County Dublin and promote water quality improvement in urban areas in Ireland and across Europe. Domestic misconnections, caused by incorrectly plumbed washing machines and dishwashers discharging to the rainwater drainage network, cause water pollution and reduce the habitat value of rivers and streams. This hinders Ireland's ability to meet the requirements of the Water Framework Directive and the River Basin Management Plan for Ireland 2018-2021. As part of the response to this challenge it is proposed to build integrated constructed wetlands (ICW) at several strategic locations in South County Dublin. South Dublin County Council is the lead authority on the project.

SDCC proposes to develop a total of five ICWs at four sites in the county:

- **Kilnamanagh:** A single site adjacent to a canalised stream – a tributary to the River Camac;
- **Griffeen Valley Park, Lucan:** A single site adjacent to the River Griffeen;
- **Dodder Valley Park:** Two sites within the park (DR033 and DR035), adjacent to the River Dodder, approximately 400m from each other;
- **Tymon Park/Poddle:** a single site within the existing park.

As part of the current project, the proposed ICWs at Kilnamanagh, Griffeen Valley Park and Dodder Valley Park (four separate ICWs in total) are being assessed.

The purpose of the ICWs is to provide an element of treatment for potentially contaminated surface water that currently flows into watercourses in the county (the Camac, the Griffeen and the Dodder). It is intended that the ICWs will have several benefits – while water treatment is a priority, the ICWs are also expected to enhance local biodiversity and the amenity value of each site.

Given these objectives it is essential that each ICW proposal is subject to an appropriate level of biodiversity survey and environmental appraisal.

The DURL Project (Agreement number: LIFE17 ENV/IE/000281) has received funding from the European Union.

This report reflects only the author's view and the Executive Agency for Small and Medium-sized Enterprises is not responsible for any use that may be made of the information it contains.

1.2 The current project

As part of the overall project South Dublin County Council (SDCC) is seeking permission under Part 8¹ of the Planning and Development Regulations 2001-

¹ Provisions with respect to certain development by or on behalf of local authorities

2019 (hereafter PDR 2001) for the development of the proposed ICWs at Dodder Valley Park.

Brady Shipman Martin was appointed by SDCC to prepare a Preliminary Examination of, at least, the nature, size or location of the proposed ICW development at Griffeen Valley Park, in relation to the requirement, or not, for Environmental Impact Assessment (EIA). This is in accordance with article 120² of the PDR 2001, and the purpose is to allow the planning authority to make a conclusion, based on such preliminary examination, that –

- (i) there is no real likelihood of significant effects on the environment arising from the proposed development, the authority shall conclude that an EIA is not required,
- (ii) there is significant and realistic doubt in regard to the likelihood of significant effects on the environment arising from the proposed development, it shall prepare, or cause to be prepared, the information specified in Schedule 7A for the purposes of a screening determination, or
- (iii) there is a real likelihood of significant effects on the environment arising from the proposed development, it shall—
 - (I) conclude that the development would be likely to have such effects, and
 - (II) prepare, or cause to be prepared, an EIAR in respect of the development.

This report is a Preliminary Examination of the proposed development prepared on behalf of SDCC by Matthew Hague BSc MSc Ad. Dip. Planning & Environmental Law CEnv MCIEEM MIELA, Senior Ecologist with Brady Shipman Martin. Matthew has over 18 years' experience in ecological and environmental consultancy.

Technical review was by Thomas Burns, (BAgrSc. (Landscape); Dip. EIA Management; Ad. Dip. Planning & Environmental Law) MIELA, Partner with Brady Shipman Martin, environmental, landscape and planning consultants. Thomas has over 25 years' experience in the area of Environmental Assessment.

The application for Part 8 permission for the proposed ICW development is accompanied by a Report for the purposes of Appropriate Assessment (AA) Screening prepared by Brady Shipman Martin, an Archaeological and Cultural Heritage Impact Assessment Report prepared by Gort Archaeology, an Ecological Baseline Report prepared by Roughan & O'Donovan Consulting Engineers, a Soil Analysis Report prepared by IGSL, and a Petrifying Spring Survey and Assessment prepared by Denyer Ecology, a Hydrogeological Assessment prepared by CDM Smith, as well as the project design details prepared by SDCC.

These documents also accompany the application.

² Sub-threshold EIAR

2 Environmental Impact Assessment

2.1 Background and Applicable Legislation

EIA requirements derive from Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment. The Directive and its amendments were subsequently codified and replaced by Directive 2011/92/EU, as amended in turn by Directive 2014/52/EU³. This amending Directive was transposed into national planning consent procedures in September 2018 through the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018).

The objective of EIA is to ensure a high level of protection of the environment and human health, through the establishment of minimum requirements for environmental impact assessment prior to development consent being given, for public and private developments that are likely to have significant effects on the environment.

2.2 Mandatory Requirement for EIA

EIA is mandatory for certain types of projects as set out in Annex 1 of the EIA Directive (and Part 1 of Schedule 5 of the PDR 2001). EIA is also mandatory for other projects that meet or exceed a stated threshold as set out in Annex II of the Directive (and Part 2 of Schedule 5 of the PDR 2001).

The proposed development does not correspond to a class of development set out in Annex 1 (or Part 1 of Schedule 5 of the PDR 2001) for which EIA would be a mandatory requirement.

As a project designed to hold water it may be considered as a class of development falling within Class 10(g) of Part 2 of Schedule 5 of the PDR 2001:

10 Infrastructure Projects

(g) Dams and other installations not included in Part 1 of this Schedule which are designed to hold water or store it on a long-term basis, where the new or extended area of water impounded would be 30 hectares or more.

However, at a maximum area of c.1.2 hectares (construction stage, both ICWs combined), the proposed development does not meet or exceed any threshold stated in Annex 2 (or Part 2 of Schedule 5 of the PDR 2001) for which EIA would be a mandatory requirement.

³ Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment

2.3 Requirement for 'Sub-threshold' EIA

Certain developments by planning authorities prescribed under Section 179⁴ of the Planning and Development Act 2000-2019 (hereafter the PDA 2000) that are not listed in Part 1 of Schedule 5 and that do not meet or exceed a stated threshold for EIA of a class of development listed in Part 2 of Schedule 5 (i.e. where requirement for EIA is not mandatory) are subject to a Preliminary Examination in accordance with article 120 of the PDR 2001 for the requirement, or not, for 'sub-threshold' EIA.

The Preliminary Examination must consider, at least, the nature, size or location of the proposed development.

The report has had regard to the requirements of Schedule 7 of the PDR 2001 in preparing this Preliminary Examination.

3 The Proposed Development

The proposed ICWs at Dodder Valley Park will improve water quality through the treatment of storm water contaminated with misconnections from domestic dwellings which currently discharge directly into the watercourse. It is proposed to provide two separate ICWs at this location:

DR033 Dodder Valley Park

- Temporary Access Works;
- New Surface Water manhole and flow controller with 100 to 150mm diameter PVC pipe to ICW (20 to 25m);
- Excavating and filling to create stream like ICW down the slope, working its way to river. Designed to have very little spoil for removal off site;
- The total ICW works area will be c.7000m² (during construction). Up to 1m in excavations, up to 1m in build up;
- The ICW will be stream-like, without cells, in a gently sloping, winding, narrow treatment area;
- The total final ICW area will be 5940m², with a treatment area of 1196m², discharging directly to the river;
- Following construction of the ICW any temporary works/access areas will be reinstated.

DR035 Dodder Valley Park

- Temporary Access Works;
- New Surface Water manhole and flow controller with 100 to 150mm diameter PVC pipe to ICW (c.65m to ICW, c.16m between cells and c.45m to discharge MH, total c.126m);
- Excavation/build up of ICW area and banks. Depth of excavation from 0mm to 550mm, with some areas built up above existing (to about 500mm);
- -The ICW is designed to have very little spoil to be removed from site, if any;
- The total ICW works area will be c.5000m² (during construction).
- There will be two cells:
 - ICW Cell 1, overall Area 1751m²; (treatment area 1106m²);

⁴ Local authority own development

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- ICW Cell 2, overall Area 1343m² (treatment area 895m²);
 - Total overall ICW footprint 2725m², total treatment area 2000m²;
- A discharge pipe back to the existing manhole will be provided;
- Following construction of the ICW any temporary works/access areas will be reinstated.

The proposed development site location is shown in **Figure 1**.

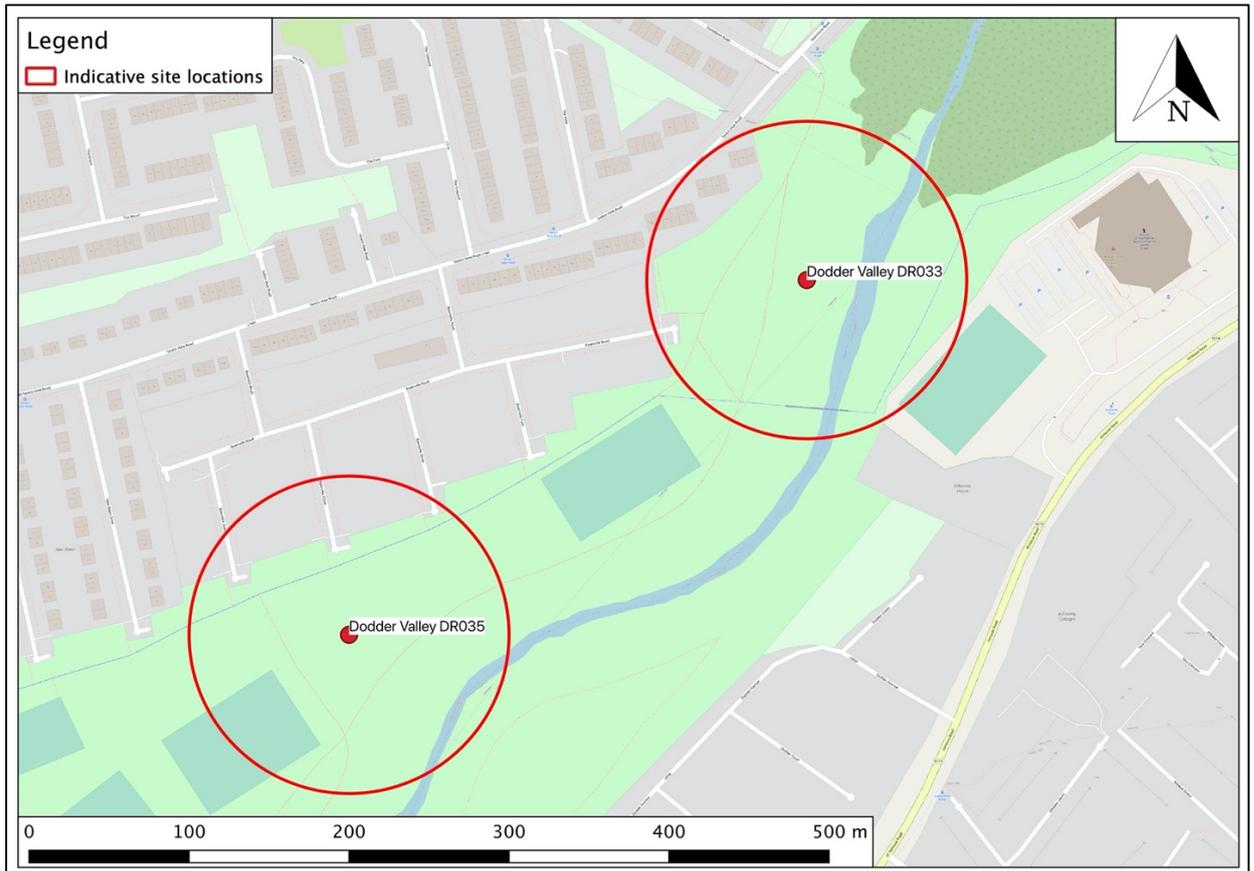


Figure 1 Location of proposed ICW development sites at Dodder Valley Park (refer to accompanying documentation for full details)

4 Preliminary Examination of the Proposed Development

The Preliminary Examination considers, at least, the nature, size and location of the proposed development and the requirements of Schedule 7 of the PDR 2001.

4.1 The nature of the Proposed Development

4.1.1 The Proposed Development

The project description is included as Section 3 above.

The proposed site layouts are illustrated on Figure 2a and 2b.



Figure 2a Proposed Site Plan DR033

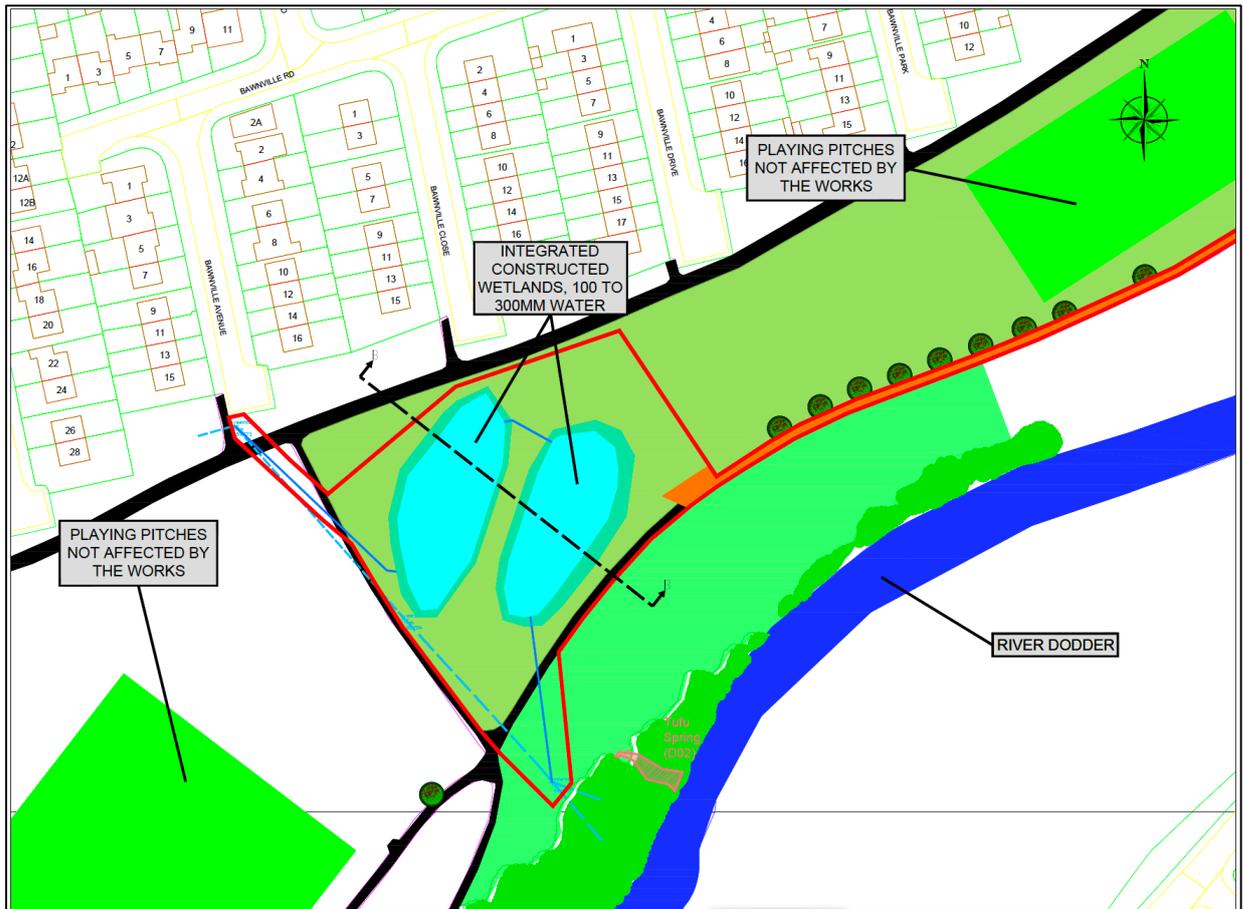


Figure 2b Proposed Site Plan DR035

4.1.2 Appropriate Assessment

A report for the purposes of Appropriate Assessment (AA) Screening has been prepared by Brady Shipman Martin and accompanies the planning application. The Report notes that significant effects on any European sites as a result of the proposed development have been ruled out, and potential significant effects on European sites have been excluded at a preliminary screening stage.

The assessment concludes that:

Following review of the characteristics of the proposed ICW development against the Conservation Objectives of the relevant European sites, it is concluded that there is no possibility that the proposed development could result in any likely significant effects on European sites on its own or in combination with other plans and projects. This assessment was reached without considering or taking into account mitigation measures or measures intended to avoid or reduce any impact on European sites.

In view of best scientific knowledge therefore, this report concludes that the proposed ICW developments at Dodder Valley Park, individually or in combination with another plan or project, is not likely to have a significant effect on European sites under Article 6

of the Habitats Directive (92/43/EEC) in light of their conservation objectives. The proposed development does not require Appropriate Assessment.

4.1.3 Archaeological and Cultural Heritage Impact Assessment

The Archaeological and Built Heritage Assessment, prepared by Gort Archaeology, was based upon a desk-study of available published historical and documentary sources and complimented with a walk-over survey. There are no known archaeological monuments or protected structure within the footprint of the proposed ICWs. The only known monument and protected structure is a bridge and associated weir c.350m to the south west of ICW DR035, neither of which will be impacted upon by the proposed development.

Cartographic sources indicate that the site of the proposed ICWs was part of the grounds associated with Oldbawn House in the mid-eighteenth century. Oldbawn House dates to the sixteenth/seventeenth century and was located c.850m to the south west of the site. The land was subsequently enclosed as small fields by the mid-nineteenth century. The cartographic sources indicate that the general area within the vicinity of the sites was used for industrial activity associated with milling of paper (Haerlem Mill) and flour since the mid-eighteenth century. Both mills were subsequently demolished prior to, or as part of the development of housing at Bawnville adjacent to the west of the sites.

The Ordnance Survey maps show the variations in the line of flow of the River Dodder within its deeply cut floodplain from the mid-nineteenth to mid-twentieth centuries. The river fluctuations within the site of the ICW DR033 indicated that the present land surface was altered, either infilled or landscaped, to form the present break of slope. The site of the ICW DR035 shows less fluctuation in river flow. The only feature shown within the footprint of the site is a mid-nineteenth century field boundary that was removed before the twentieth century and has no visible surface expression.

4.1.4 Biodiversity Assessment

There are two separate sites within Dodder Valley Park, which is located approximately 1.5km to the southwest of the M50/N81 motorway interchange. Both possible ICW sites are situated on the northern banks of the River Dodder. They are separated by approximately 250m of open amenity grassland. The valley at this location contains significant areas of riparian woodland in the floodplain of the river – however it is not proposed to remove any of this woodland in order to develop the proposed ICWs.

One of the proposed ICWs (DR035, the southern/western ICW) will be located in an area dominated by amenity grassland bordered by a narrow section of scattered trees and parkland habitat. It is proposed to located the second, northern/eastern ICW (DR033) in an area of dry meadow with grassy verges that is currently subject to encroachment by bramble scrub. No mature trees, tree lines, hedgerows or riparian habitats are present within the proposed ICWs construction areas. Part of the River

Dodder in this area is designated for nature conservation as a proposed Natural Heritage Area (Dodder Valley pNHA, site code 000991) and one of the potential ICW sites (the northern/eastern site, DR033) is partly located within the pNHA boundary. However as noted in this report the two sites proposed for the constructed wetlands can be classified as being of low ecological value and there are no implications for the nature conservation status of the Dodder Valley pNHA.

As noted in the accompanying petrifying spring assessment there is a 'spring zone' in an area of the riverbank in the southern part of the site. Within the spring zone, eight calcareous springs/ seepages were identified and mapped. These comprise: three Annex I priority petrifying springs; three non-Annex spring/seepages with tufa; and three non-Annex spring/seepages with no tufa formation. The spring assessment report concluded that the study site at Dodder Valley Park is of County Importance in relation to petrifying springs.

In addition to the presence of tufa-forming springs, the River Dodder⁵ is a very highly significant river in an ecological context. It is a salmonid river, and a review of information available in planning application files for proposed developments within 3km of the site, held by SDCC, confirms that otter, badger and several bat species as well as rare plants and a wide variety of wetland habitats are all present in the vicinity.

No species listed on the Third Schedule of the *European Communities (Birds and Natural Habitats) Regulations 2011-2015* (the Habitats Regulations) have been recorded within the proposed ICW sites themselves however both Japanese knotweed and Himalayan balsam, both listed on the Third Schedule, have been recorded by the author within 500m of this site on previous surveys.

There is no hydrological link or any other pathway between the proposed ICW development site at Dodder Valley Park and Glenasmole Valley SAC. It is almost 3km distant and is completely unconnected. One of the Qualifying Interests in this site is petrifying springs with tufa formation, a habitat that is also present in Dodder Valley Park. However the location of the proposed ICWs is downstream of Glenasmole Valley and there is no conceivable pathway surface water between the two sites. As confirmed in the Hydrogeological Assessment prepared by CDM Smith and submitted separately, the depth to bedrock at the proposed ICW location is likely several metres thick based on observations along the river and GSI data sources at nearby locations. The proposed ICW (DR035) is very shallow, <0.5 m below ground surface. Hence, the construction of the proposed ICW will not affect or impact petrifying springs. There is therefore no groundwater pathway between the two sites.

Petrifying springs with tufa formation is listed as a Priority habitat in Annex I of the EU Habitats Directive. It is a QI in Glenasmole Valley SAC. However the River Dodder is not a designated SAC at Dodder Valley Park and given the presence of petrifying springs in the wider area the springs at this location are classified as being of County Ecological Importance in the accompanying Petrifying Spring Assessment. The results of the hydrogeological assessment and the conclusions of the petrifying spring assessment show that there will be no residual impacts to the springs/seepages recorded at this site as a result of the ICW construction and operation.

⁵ <https://gis.epa.ie/EPAMaps/>

4.2 The Size of the Proposed Development

As noted in Section 2.2 the construction area of the proposed ICWs will be c.12,000m², with a final area on completion of c.8,665m², including a treatment area across the two ICWs of c.3,196m².

The development, comprising two separate ICWs, is small in scale and the existing site at Dodder Valley Park is well suited to the proposed ICW developments.

4.3 The Location of the Proposed Development

4.3.1 South Dublin County Development Plan 2016-2022

The site is located within land zoned HA (LV, DV, DM) – To protect and enhance the outstanding natural character and amenity of the Liffey Valley, Dodder Valley and Dublin Mountains areas in the County Development Plan (see Figure 3 – extract from Sheet 9 of the South Dublin County Development Plan).

There is an objective to Protect and Preserve Significant Views in Dodder Valley Park. The proposed ICW development is not in conflict with this objective.

The site is subject to Specific Local Objective C12 (SLO:2): To promote a passive recreational area along the Dodder Valley Park in proximity to the Bawnville, Newbawn and Seskin View Estates. The proposed ICW development is not in conflict with this objective.

There is one feature listed on the Record of Monuments and Places (record DU022-047 – Old Bawn Tallaght Bridge site) and on the Record of Protected Structures (record 339 – City Weir, Old Bawn, Tallaght). These are to the south west of the proposed ICW development site and will not be affected in any way by the proposed development. There are no trees subject to Tree Protection Orders or objectives. There is a Geological Site for Protection on the southern bank of the Dodder, this area will not be affected in any way by the proposed ICW development.

The Site is not located within or adjacent to an area identified as being susceptible to flooding and in any case the proposed development is not of a type listed as vulnerable in the context of the OPW Guidelines for Planning Authorities⁶: *The Planning System and Flood Risk Management*. It is considered to be ‘water-compatible development’ and the Justification Test would not be required.

The Site is not located within or adjacent to a European site. The River Dodder at this location, including a small section of ICW DR033 is part of the Dodder Valley pNHA. There will however be no impacts on the pNHA as a result of the proposed development.

⁶ <https://www.opw.ie/wp-content/uploads/2019/08/2009-Planning-System-Flood-Risk-Mgmt-1.pdf>

The NTA Greater Dublin Cycle Network Plan includes potential cycle routes through Dodder Valley Park, however the proposed ICW development is not in conflict with these objectives.

The proposed ICW development aligns fully with the policies and objectives of the Plan in relation to Infrastructure and Environmental Quality, Green Infrastructure and Heritage, Conservation and Landscapes.

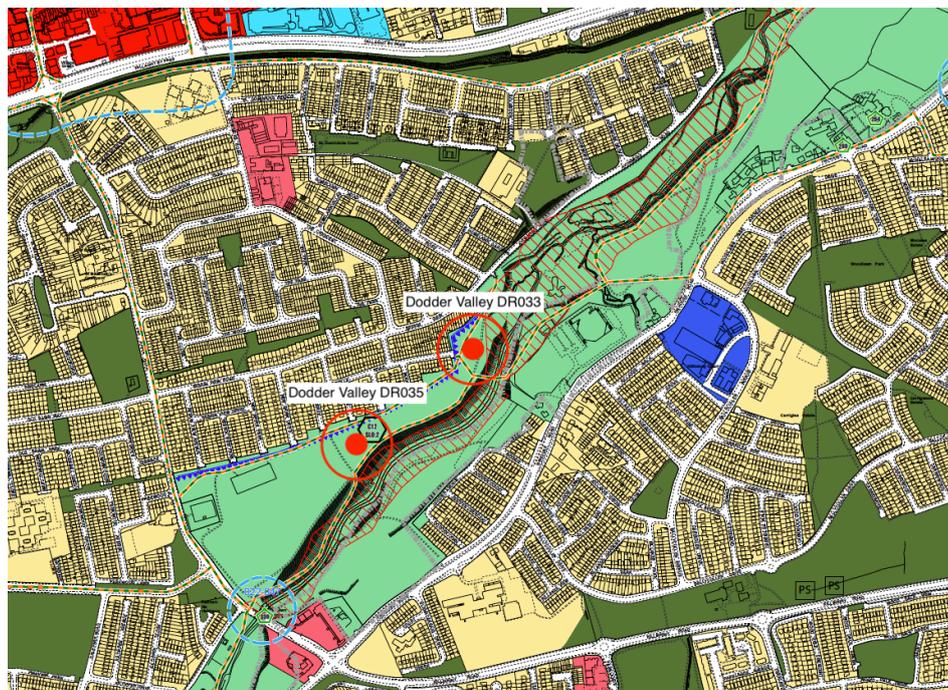


Figure 3: Extract from Sheet 9 of South Dublin County development Plan; the land is zoned HA (LV, DV, DM) – To protect and enhance the outstanding natural character and amenity of the Liffey Valley, Dodder Valley and Dublin Mountains

4.4 Criteria under Schedule 7 of Planning and Development Regulations 2001-2019

The criteria for determining if a development *would, or would not*, be likely to have significant effects on the environment is set out in Schedule 7 to the PDR 2001. The criteria are grouped under three headings as follows:

1. Characteristics of the Proposed Development
2. Location of Proposed Development
3. Characteristics of Potential Impacts.

Each of the above groupings includes a number of sub-criteria and information is provided for each in the following Sections 4.4.1 - 4.4.3 respectively.

4.4.1 Characteristics of the Proposed Development

Table 1 assesses the environmental sensitivity of the characteristics of the proposed development and the potential for significant impact.

Table1: Characteristics of the Proposed Development

Type and Characteristics of Proposed Development	Comment
a) the size and design of the whole of the proposed development,	<p>The proposed development is located on a small site. The total construction area of the proposed ICWs will be c.1.2ha, with a final area on completion of c.8,665m², including a treatment area of c.3,196m² across the two ICWs.</p> <p>ICW DR033 will be stream-like, without cells, in a gently sloping, winding narrow treatment area. The total final ICW area will be 5940m², with a treatment area of 1196m², discharging directly to the river.</p> <p>ICW DR035 will comprise two cells, with a total footprint of 2,725m² and a total treatment area of 2,000m².</p>
b) cumulation with other existing development and / or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and / or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment,	<p>The site is within the area zoned HA (LV, DV, DM) – To protect and enhance the outstanding natural character and amenity of the Liffey Valley, Dodder Valley and Dublin Mountains</p> <p>There are no other relevant developments in the vicinity and there are no elements of the proposed development that will conflict with these objectives, and there is no likelihood of <i>significant environmental effects</i> by reason of cumulation with other development for the purposes of Section 172(1A)(b) of the PDA, 2000.</p>
c) the nature of any associated demolition works	<p>No significant demolition work will be required. An existing pipeline or manhole will need to be broken into or replaced to install a flow controller and pipe to take water to the ICW.</p> <p>The construction of the proposed ICW will require minor excavation and any spoil arising will be either removed from site or reused locally. Following construction of the ICWs any temporary works/access areas will be reinstated.</p>
d) the use of natural resources, in particular land, soil, water and biodiversity,	<p>There are no unusual aspects to the proposed development. The proposed development, once complete, will enhance water quality and local biodiversity value. There will be no impacts on adjacent habitats and species of ecological value, including the petrifying springs with tufa formation associated with the banks of the River Dodder at this location.</p> <p>Use of natural resources will be limited to the normal use of building materials and planting.</p>
e) the production of waste	<p>The construction of the proposed ICWs will require minor excavation. Spoil arising will be either removed from site or reused locally. Following construction of the ICW any temporary works/access areas will be reinstated.</p> <p>There are no unusual aspects to the proposed development.</p>

Type and Characteristics of Proposed Development	Comment
	Therefore, production of waste will be limited and subject to appropriate reuse, recycling or removal to approved, licensed facilities.
f) pollution and nuisances,	Construction works have the potential for noise disturbance. However, any such disturbance will be temporary (limited to the construction phase), localised and controlled and mitigated by standard construction best practice and normal day-time working hours. No other pollution or nuisances are identified.
g) the risk of major accidents, and / or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge, and	There are no unusual aspects to the proposed development. No particular risks are identified.
h) the risks to human health (for example, due to water contamination or air pollution).	There are no unusual aspects to the proposed ICW development. There will be shallow, permanent water in the ICWs. No particular risks to human health are identified. It is noted that the main intended purpose of the proposed development will be to reduce water pollution.

4.4.1.1 Section Summary

There is no likelihood of significant effects on the environment arising from the nature of the proposed development.

The proposed development is located on a small site. the construction area of the proposed ICWs will be c.12,000m², with a final area on completion of c.8,665m², including a treatment area across the two ICWs of c.3,196m².

The construction of the proposed ICWs will require minor excavation (up to c.1m deep at DR033). Spoil arising will be either removed from site or reused locally. Following construction of the ICW any temporary works/access areas will be reinstated.

Therefore, the scale of the proposed development, when viewed individually and/or cumulatively, is very small in terms of the extent of development and significantly below relevant EIA thresholds.

This scale of development will not give rise to significant effects on the environment either by way of its size or design.

Any potential construction-related pollution aspect will be avoided through appropriate standard construction practice management regimes.

Any noise and nuisance associated with the proposed construction works will be short-term and subject to standard construction management and best practice procedures.

The Proposed Development will not result in any significant environmental effects arising from the nature of the development. On completion, the proposed ICW will result in an overall improvement in water quality in the River Dodder system.

4.4.2 Location of the Proposed Development

Table 2 assesses the location of the proposed development with regard to the environmental sensitivity of the geographical area likely to be affected and the potential for significant impact.

Table 2: Location of Proposed Development

Type and Characteristics of Potential Impacts	Comment
i) the existing and approved land use	The site is within the area zoned HA (LV, DV, DM) – To protect and enhance the outstanding natural character and amenity of the Liffey Valley, Dodder Valley and Dublin Mountains.
j) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground,	The construction of the proposed ICWs will require minor and limited excavations. Spoil arising will be either removed from site or reused locally. Following construction of the ICW any temporary works/access areas will be reinstated. The proposed development will improve on the quality and regenerative capacity of natural resources in the area.
k) the absorption capacity of the natural environment, paying particular attention to the following areas:	Having regard to the criteria listed below, it is considered that the Site has a high absorption capacity for the scale and type of development proposed.
(i) wetlands, riparian areas, river mouths;	No impact arises.
(ii) coastal zones and the marine environment;	No impact arises.
(iii) mountain and forest areas;	No impact arises.
(iv) nature reserves and parks;	No impact arises.
(v) areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive and;	A separate Screening Report for the requirement for Appropriate Assessment (AA) has been prepared and excludes any potential for impact on Natura 2000 Sites. The River Dodder at this location, including a small section of ICW DR033 is part of the Dodder Valley pNHA. There will however be no impacts on the pNHA as a result of the proposed development. No impact arises.

Type and Characteristics of Potential Impacts	Comment
(vi) areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure;	It is noted that the main intended purpose of the proposed development will be to reduce water pollution.
(vii) densely populated areas;	The development proposed is small in scale and will be located on a site appropriate to such development.
(viii) Landscapes and sites of historical, cultural or archaeological significance.	The proposed development will have no direct impact on any known feature of archaeological or heritage significance. The proposed ICW development will have no significant impact on a sensitive or significant landscape.

4.4.2.2 Section Summary

There is no likelihood of significant effects on the environment arising from the location of the proposed development, including on European sites (AA Screening).

The proposed ICW development is located in close proximity to the River Dodder, which has high ecological value. However, the design, construction and operation of the proposed ICW development will ensure that there are no impacts on biodiversity including for example on otters or on the petrifying springs with tufa formation.

In terms of other environmental sensitivities, the proposed development will not give rise to any significant effects.

The Proposed Development will not result in any significant environmental effects arising from its location.

4.4.3 Type and Characteristics of Potential Impacts

Tables 3 and 4 assesses likely significant effects on the environment of the proposed development in relation to criteria set out under paragraphs 1 and 2 (*i.e.* Sections 4.4.1 & 4.4.2 and Tables 1 and 2 above), having regard to the impact of the project on the factors specified in paragraph (b)(i)(I) to (V) of the definition of 'environmental impact assessment report' in section 171A of the PDA 2000.

Table 3: Type and Characteristics of the Potential Impacts

Type and Characteristics of Potential Impacts	Comment
a) the magnitude and spatial extent of the impact (for	The site for the proposed development is small (c.1.2ha at the construction stage) and any potential

Type and Characteristics of Potential Impacts	Comment
example, geographical area and size of the population likely to be affected),	impact will be temporary, short-term and limited to the Site area. Therefore, the geographical extent and population likely to be affected are very small.
b) the nature of the impact	There are no unusual aspects to the proposed development and any potential impacts are consistent with and typical of normal small scale development.
c) the transboundary nature of the impact	No transboundary impacts arise.
d) the intensity and complexity of the impact,	No impact of an unusual intensity or complexity is expected.
e) the probability of the impact	N/A
f) the expected onset, duration, frequency and reversibility of the impact,	Any potential impacts will be temporary or short-term associated with the normal construction and / demolition works of the proposed development.
g) the cumulation of the impact with the impact of other existing and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment, and	The proposed development does not give rise to cumulation with other development for the purposes of Section 172(1A)(b) of the PDA, 2000.
h) the possibility of effectively reducing the impact.	Any potential impacts will be temporary or short-term associated with the normal construction and / demolition works of a proposed development. Such potential impacts may be appropriately mitigated through standard construction best practice and control of working hours. On completion, the proposed ICW will result in an overall improvement in water quality in the River Dodder System.

Table 4: Assessment against the environmental factors specified in Section 171A(b) of the Planning and Development Act 2000, as amended.

EIA Factor	Comment
Population	Positive impact as the proposed development will improve overall water quality for the benefit of the local population. No negative impact arises.

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EIA Factor	Comment
Human Health	No negative impact arises.
Biodiversity	<p>No adverse impact arises. No impact arises on any European site (Natura 2000 Sites) or nationally designated site. The proposed ICWs, in addition to improving local water quality, will also contribute positively to local biodiversity by enhancing native habitat and species diversity at the site.</p> <p>As confirmed in the Petrifying Spring Assessment report, during construction, standard best practice guidelines and strict adherence to the project design will be required, however there will be no residual impacts to the springs/seepages recorded at this site as a result of the ICW construction and operation.</p> <p>Standard mitigation measures, as outlined in the Ecological Baseline Report, will ensure that there will be no impacts on mammals (including bats), birds and other flora and fauna that will continue to utilise Dodder Valley Park.</p>
Land	<p>The proposed development is located on a small site. The total construction area of the proposed ICWs will be c.1.2ha, with a final area on completion of c.8,665m², including a treatment area of c.3,196m² across the two ICWs.</p> <p>ICW DR033 will be stream-like, without cells, in a gently sloping, winding narrow treatment area. The total final ICW area will be 5940m², with a treatment area of 1196m², discharging directly to the river.</p> <p>ICW DR035 will comprise two cells, with a total footprint of 2,725m² and a total treatment area of 2,000m².</p>
Soil	The construction of the proposed ICW will require minor excavations. Spoil arising will be either removed from site or reused locally. Following construction of the ICWs any temporary works/access areas will be reinstated.
Water	The Site is not located within or adjacent to an area identified as being susceptible to flooding. The purpose of the development is to benefit surface water management and improve water quality.
Air and Climate	The proposed development will consist of excavation and soil movement works. The works will be undertaken to the required high standards of environmental performance.
Material Assets	The proposed development will contribute positively to the local surface water management infrastructure.
Cultural Heritage	Consultation on the proposed development with the staff of the National Monuments Service will be undertaken to enable them make appropriate recommendations at a pre-planning stage of

EIA Factor	Comment
	hitherto unknown archaeological/ heritage features or soils.
Landscape	The River Dodder at this location, including a small section of ICW DR033 is part of the Dodder Valley pNHA. There will however be no impacts on the pNHA as a result of the proposed development. There will be no impact on Special Amenity Areas, Protected Views or other landscape features of note.
Interaction between factors	No adverse impact arises as a result of any potential for interaction between environmental factors.

4.4.3.1 Section Summary

The type or characteristics of the potential impacts arising from the proposed development will not give rise to *significant environmental impacts*.

There are no medium or long-term negative impacts and the proposed development is capable of successful integration in the surrounding environment. It will, on completion result in an overall improvement in water quality in the Dodder river systems.

While temporary or short-term impacts relating to noise and dust are typical of any small-scale construction, the proposed works will be confined to the Site and any potential impact on nearby receptors will be effectively managed through standard best practice construction measures.

The primary purpose of the Proposed Development, which comprises the construction of an ICW, is to improve water quality. It does not give rise to any significant impact on environmental (EIA) factors provided in Section 171A(b) of the PDA, 2000.

4.5 Overall Summary

The proposed ICW development (two separate ICWs at Dodder Valley Park) is small-scale in nature and is in-keeping with the landuse character of the existing site. It will make a positive contribution to the site and the wider area.

Based upon the results of the desk based research and the site surface inspection, the site of ICW DR035 is considered to have a low potential for the discovery of previously unidentified features of archaeological or heritage significance. No archaeological mitigation is required for the groundworks associated with the construction of ICW DR35.

The site of ICW DR033 appears to be infilled/landscaped ground on the eastern side. The proposed construction of a stream-like ICW with the associated removal of up to 1000mm of surface material has the potential to expose the original ground surface level associated with the River Dodder. This ground reduction has the potential, albeit low, for the discovery of previously unidentified features or

artefacts of archaeological significance. The ground works associated with the construction of the ICW should be archaeologically monitored in order to identify any potential sub-surface archaeological features or artefacts and carry out appropriate mitigation if/as required.

Consultation on the proposed development with the staff of the National Monuments Service will be undertaken, to enable them make appropriate recommendations at a pre-planning stage of the planning process.

There will be no long-term impacts on biodiversity, including on otters and petrifying springs as a result of the proposed development, and any potential temporary (construction phase) impacts will be prevented through straightforward mitigation measures.

The Site is otherwise not considered sensitive in terms of environmental aspects, including human beings, or landscape. The proposed development will not impact any European site.

The proposed development will not give rise to significant environmental impacts by virtue of its characteristics, size or location or from the types of potential effects.

5 Conclusion

Having regard to the nature and limited scale of proposed development and to the limited nature of environmental sensitivities the Preliminary Examination has concluded that there is no real likelihood of significant effects on the environment arising from the proposed ICW development at Dodder Valley Park.

The need for further screening for Environmental Impact Assessment (EIA) or for Environmental Impact Assessment (EIA) can therefore be excluded on the basis of the Preliminary Examination, in accordance with article 120(1)(b)(i) of the Planning and Development Regulations 2001-2019.

6 References

- *Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment.*
- *Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.*
- *Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports*, Environmental Protection Agency, 2017.
- *Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development*, Department of Environment, Heritage and Local Government, 2003.

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Development Regulations 2001-2019

- *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*, Department of Housing, Planning and Local Government, 2018.
- *South Dublin County Development Plan 2016-2022*, South Dublin County Council.
- *Planning and Development Act 2000-2019*.
- *Planning and Development Regulations 2001-2019*.

Brady Shipman Martin

DUBLIN

Canal House
Canal Road
Dublin 6
+353 1 208 1900

CORK

Penrose Wharf Business Centre
Penrose Wharf
Cork
+353 21 242 5620

LIMERICK

11 The Crescent
Limerick
+353 61 315 127

mail@bradyshipmanmartin.com
www.bradyshipmanmartin.com

