

Habitats Directive Assessment

Screening of Tubber Lane- Phase 3 Residential Development, Tubber Lane Development Area, Adamstown, Lucan, Co. Dublin



for Appropriate Assessment in accordance with the requirements of Article 6(3) of the EU Habitats Directive

Final Report

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Faith Wilson
ECOLOGICAL CONSULTANT

Faith Wilson Ecological Consultant BSc CEnv MCIEEM
Kestrel Ridge, Tigrooney West, Avoca, Co. Wicklow

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SECTION 1

1.1. INTRODUCTION

This document represents the Report for Screening for Appropriate Assessment (AA) for a proposed housing development on lands at Tubber Lane, Adamstown, Co. Dublin, as shown on **Figure 1** below. Faith Wilson Ecological Consultant was engaged by Tierra Ltd and Hugh McGreevy & Sons to prepare this report to inform the Screening for Appropriate Assessment to be prepared by the statutory agency – in this case the local authority South Dublin County Council.

The aim of the European Habitats Directive (Council Directive 92/43/EEC on the conservation of wild habitats and of wild fauna and flora) is to create a network of protected wildlife sites across Europe, which are to be maintained at a favourable conservation status¹. Each member state must designate their most important natural areas as Special Areas of Conservation (SAC). The Directive specifies the scientific criteria on the basis of which SAC sites must be selected and very strictly curtails the grounds that can be used as justification for damaging a site. The network of sites is referred to as NATURA 2000 and includes SACs (Special Areas of Conservation) for protected habitats and species and SPAs (Special Protection Areas) for birds, which are designated under the European Birds Directive (Council Directive 79/409/EEC as amended by Directive 2009/147/EC).

It is a requirement of the Habitats Directive ((92/43/EEC) that the competent consent authority, which is either the planning authority (or in the case of an SHD application or on appeal, An Bord Pleanála), must ensure that a proposal, which is likely to have a significant effect on an SAC or SPA, is authorised only to the extent that the authority is satisfied it will not adversely affect the integrity of the area and that an appropriate assessment of the implications of the development for the conservation status of the site is undertaken.

The European Parliament, in a communication to the European Council in September 2000, states: The implementation of the European Habitats Directive and Birds

¹ The conservation status of a **habitat** can be taken as "favourable" when its natural range and area it covers within that range is stable or increasing and the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future.

The conservation status of a species can be taken as "favourable" when population dynamics data on the species concerned indicate that it is maintaining itself on a long term basis as a viable component of its natural habitats, the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future and there is and will continue to be a sufficiently large habitat to maintain its populations on a long-term basis. Article 1 (i) of the Habitats Directive 92/43/EEC.

Directive, both with respect to species conservation and with respect to the establishment of the Natura 2000 network, is one of the most important tools for achieving the objectives of the Convention on Biological Diversity in the European Union and member states (European Parliament 2000).

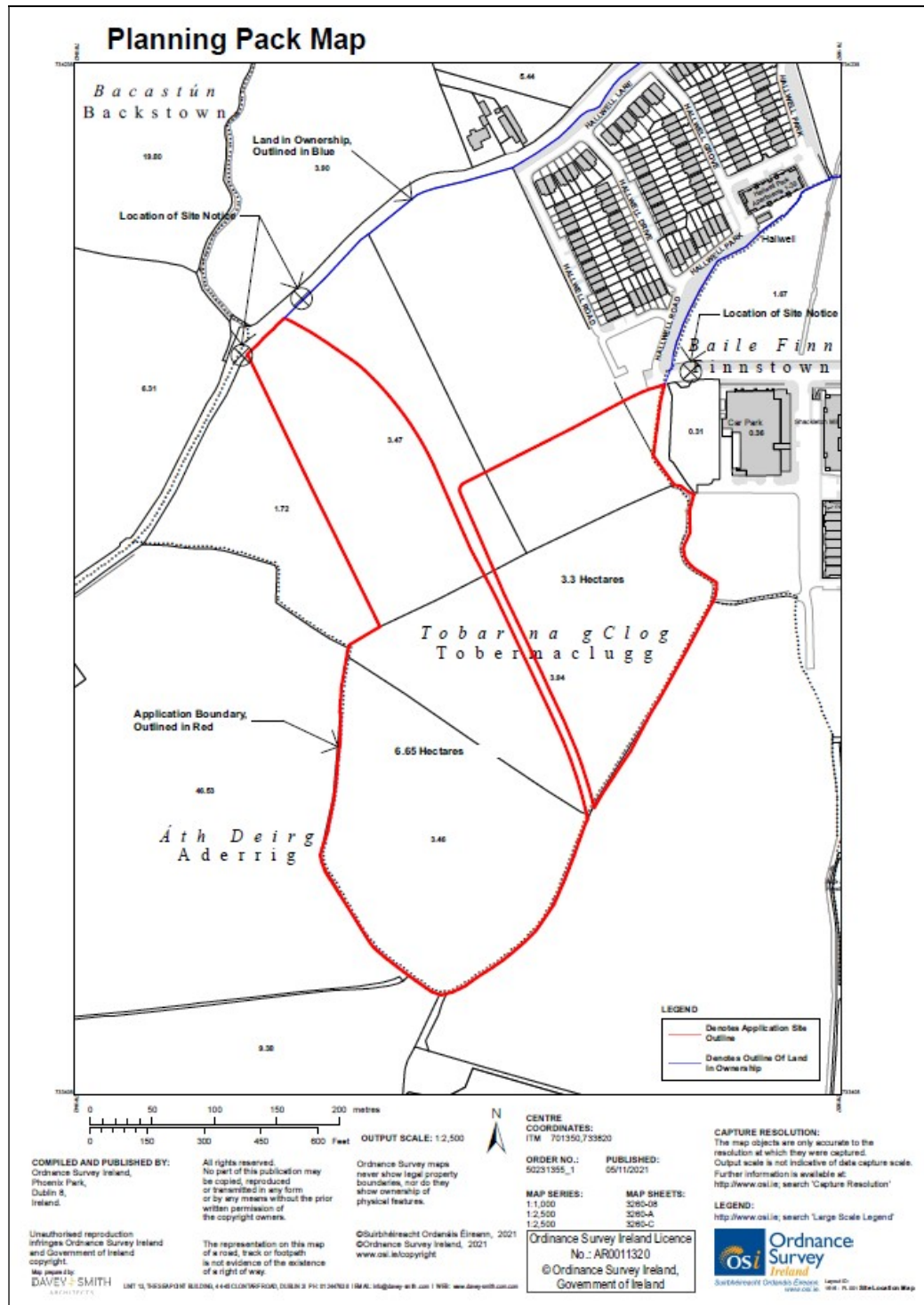


Figure 1. Lands proposed for development in Phase 3 at Tubber Lane, Adamstown (outlined in red).

Article 6 of the Habitats Directive provides a strict assessment procedure for any plan or project not directly connected with or necessary to the management of a designated European site but which has the potential to have implications for the site in view of the site's conservation objectives.

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment (AA):

Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

Article 6(4) states:

If, in spite of a negative assessment of the implications for the [Natura 2000] site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

The European Communities (Birds and Natural Habitats) Regulations 2011 were implemented to transpose the Habitats Directive and the Birds Directive into Irish law as well as addressing transposition failures identified in the Court of Justice of the European Union (CJEU) judgements. This report has taken into consideration the relevant requirements of the Planning and Development Act, 2000 (as amended by the Planning and Development Act 2010). References to Natura 2000 sites throughout this report are to be taken as referring to European sites as defined in the above Planning Act.

1.2. METHODOLOGY

This report has been undertaken in accordance with the European Commission methodological guidance on the provisions of article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC 2001), the European Commission Guidance 'Managing Natura 2000 sites) and the Department of Environment, Heritage and Local Government guidance document (2010)². This report has followed the stage by stage approach detailed in the above guidelines as outlined below:

Stage 1. Screening – the process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant;

Stage 2. Appropriate Assessment – the consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts;

Stage 3. Assessment of Alternative Solutions – the process, which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site;

Stage 4. Assessment where no alternative solutions exist and where adverse impacts remain – an assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

This report was based on a desk-top study drawing on information sources which included the following: NPWS on-line data for Natura 2000 sites; Ordnance Survey of Ireland mapping and aerial photography; and geological, hydrological and soils data available from GSI.

² Assessment of plans and projects significantly affecting Natura 200 sites- methodological guidance on the provisions of Article 6(3) and 6 (4) of the Habitats Directive 92/43/EEC. European Commission (2001).

Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC. Clarification of the Concepts of Alternative Solutions, Imperative Reasons of Over-riding Public Interest, Compensatory Measures, Overall Coherence. Opinion of the European Commission. European Commission (January 2007).

Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. European Commission (2019).

Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. Department of Environment, Heritage and Local Government. (2010).

OPR Practice Note PN01 - Appropriate Assessment Screening for Development Management. March 2021. Office of the Planning Regulator (2021).

Field surveys of the Phase 3 lands were completed on the 23rd October 2018, 7th October 2019, 9th March 2021, and 1st June 2021.

The lands within this section of the Adamstown SDZ were first visited in May and June 2006 and more recently in May 2018. The surveys built on previous surveys conducted of the neighbouring lands (including Tobermaclugg Park) in 2018 and a survey which was carried out on the Phase 2 lands on 23rd October 2018. Further details are presented in the Ecological Impact Assessment Report, which accompanies the planning application.

This report consists of one stage in Appropriate Assessment; the Screening for Appropriate Assessment (Stage 1). Neither **Stage 2. Appropriate Assessment, Stage 3. Assessment of Alternative Solutions** nor **Stage 4. Assessment where no alternative solutions exist and where adverse impacts remain** were applicable in this instance, as the proposed development of the lands at Tubber Lane will not adversely affect the integrity of any Natura 2000 site.

SECTION 2 SCREENING MATRIX

2.1 DESCRIPTION OF THE PLAN OR PROJECT

2.1.1 Description of the Proposed Development.

This application relates to development within the Adamstown Strategic Development Zone (SDZ) and is subject to the Adamstown Planning Scheme 2014.

Hugh McGreevy & Sons Ltd and Tierra Ltd, intend to apply for full planning permission for development on site located in the Tubber Lane Development Area within Adamstown SDZ, Adamstown, Lucan, Co Dublin. The application site is located to the south of Tubber Lane, in the north-west of the Adamstown SDZ lands and to the west and south west of the permitted / under construction Tubber Lane Phase 2 development (Reg. Ref.: SDZ19A/0008, as amended under Reg. Ref.: SDZ20A/0014).

The development will comprise of 455 no. residential units (including a mixture of 2 and 3 storey semi-detached and terraced houses, and duplex units and apartments in 3 and 4 storey blocks), new internal roads and footpaths, site access, public open space, car parking, cycle stores, landscaping, bin stores, foul and surface water drainage, boundary walls and fences, ESB substations and all associated site development works. Private and semi-private open space to serve the proposed units will be provided in the form of balconies, terraces and gardens.

The development also includes the provision of the finishing course to part of the Celbridge Link Road (part of Loop Road 3), permitted under Reg. Ref.: SDZ17A/0009, from the junction with Adamstown Avenue to the southern site boundary, and associated revisions to provide access to the development, parallel parking bays, and public lighting.



Figure 2. Proposed site layout at Tubber Lane.

The 455 no. residential units are to be provided as follows:

- 58 no. 2 bed, 2 storey, terraced houses (Type E1, E2, E3, J1 & J2);
- 6 no. 3 bed, 2 storey, semi-detached houses (Type I1);
- 190 no. 3 bed, 2 storey, terraced houses (Type A1, A2, A3, B1, B2, C1, C2, C3, D1, D2, F1, F2, I1 & I2);

- 5 no. 3 bed, 3 storey, terraced houses (Type H)
- 6 no. 4 bed, 2 storey, terraced houses (Type K1, K2);
- 7 no. Apartment Blocks (Blocks B, D, E, G, H, I & K) containing 111 no. apartments/duplexes including 50 no. 1 bed apartments, 4 no. 2 bed apartments, 39 no. 3 bed duplex apartments and 18 no. 2 bed duplex apartments over 3 storeys;
- 4 no. Apartment Blocks (Blocks A, C, J & L) containing 37 no. apartments/duplexes including 8 no. 1 bed apartments, 29 no. 3 bed duplex apartments over 4 storeys;
- 1 no. Apartment Block (Block F) containing 42 no. apartments including 2 no. 1 bed apartments and 40 no. 2 bed apartments over 4 storeys.

2.1.2 Description of the receiving environment at Tubber Lane

The proposed development lands are located to the south of Tubber Lane Road in Adamstown, Lucan. The site is bounded to the north west by Tubber Lane Road, to the north and north east by existing housing (some of which is currently under construction), to the east by additional housing and to the south and west by undeveloped agricultural lands as shown on **Figure 3** below.



Figure 3. Proposed development lands (Google Maps).

Habitats

The lands proposed for development are two agricultural fields, which are currently under arable crops (BC1).

The lands in the northern field are bounded by hedgerows (WL1) along the northern and western boundaries, with a drainage ditch (FW4) along the southern boundary of the lands and housing to the east.

The southern field adjoins this field to the south. It is bounded by a treeline (WL2) with a drainage ditch (FW4) at the base along the eastern and southern boundaries

and a broken remnant hedgerow/treeline on an earthen bank (BL2) on the south western boundary.

The drainage ditches in the site link into the Tobermaclugg/Lucan Stream, which is located c.80m to the east of the site and flows through the Aderrig lands.

Located along the northern boundary with 'Tubber Lane' and along the western and southern boundary of the northern field is a deep open drainage ditch (FW4) adjoining a heavily flailed hedgerow dominated by ash (*Fraxinus excelsior*) and bramble (*Rubus fruticosus* agg.).

The western boundary of the northern field consists of a deep drainage ditch (FW4) and a hedgerow (WL1) growing on an earthen bank (BL2). The dominant species are ash (*Fraxinus excelsior*) and oak (*Quercus* sp.) below which is an understorey of hawthorn (*Crataegus monogyna*), willow (*Salix cinerea*), elder (*Sambucus nigra*), bramble (*Rubus fruticosus* agg.), wild privet (*Ligustrum vulgare*) and dog rose (*Rosa canina*). Large amounts of this hedgerow had been recently removed and lay in the field to the west outside the Phase 3 lands.

The shared boundary hedge with the Phase 2 lands contained hawthorn (*Crataegus monogyna*), ash (*Fraxinus excelsior*), elder (*Sambucus nigra*), bramble (*Rubus fruticosus* agg.), sycamore (*Acer pseudoplatanus*), willows (*Salix* sp.) and dog rose (*Rosa canina*).

Sparse willow (*Salix* sp.) and immature ash (*Fraxinus excelsior*), along the southern ditch (FW4) of the northern field had been heavily flailed on the first visits and in subsequent visits had been completely removed.

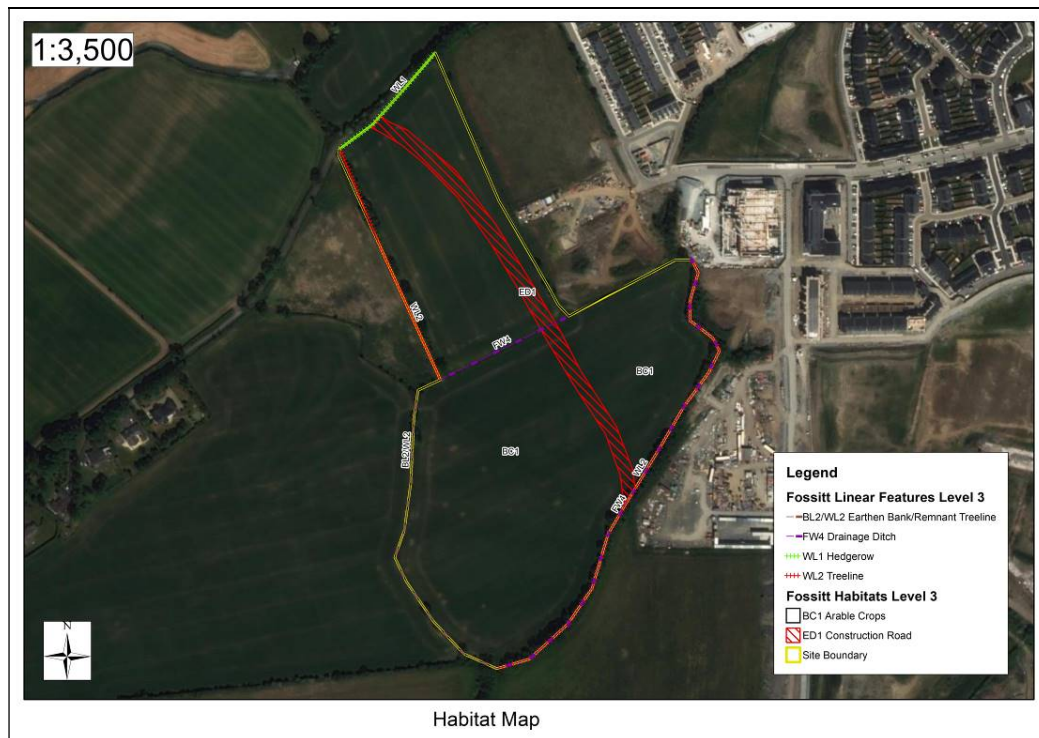


Figure 4. Habitat Map of the Phase 3 lands.

There are two semi-mature ash (*Fraxinus excelsior*) and one mature sycamore (*Acer pseudoplatanus*) within the remnant hedgerow/treeline on an earthen bank (BL2) along the north western corner of the southern field. The main species recorded within the treeline along the eastern, southern and south western boundary of the southern field are mature and semi-mature ash (*Fraxinus excelsior*), sycamore (*Acer pseudoplatanus*) and oak (*Quercus* sp.) below which is an understorey of hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), elder (*Sambuccus nigra*), bramble (*Rubus fruticosus* agg.), wild privet (*Ligustrum vulgare*) and dog rose (*Rosa canina*). An unvegetated drainage ditch (FW4) is found at the base of this treeline which is growing on an earthen bank (BL2). Vegetation along this ditch/bank is limited to shade tolerant species such as bramble (*Rubus fruticosus* agg.), lords and ladies (*Arum maculatum*), ivy (*Hedera helix*) and lesser celandine (*Ficaria verna*).

The fields are very intensively managed under arable crops with limited field margins. At the base of treelines and hedgerows and along drainage ditch banks species such as cleavers (*Galium aparine*), dandelion (*Taraxacum* agg.), germander speedwell (*Veronica chamaedrys*), bush vetch (*Vicia sepium*), hogweed (*Heracleum sphondylium*), field bindweed (*Calystegia sepium*), herb Robert (*Geranium robertianum*), lords and ladies (*Arum maculatum*), ivy (*Hedera helix*), cow parsley (*Anthriscus sylvestris*), meadow buttercup (*Ranunculus acris*), creeping buttercup (*Ranunculus repens*), hairy willowherb (*Epilobium hirsutum*), greater willowherb (*Epilobium angustifolium*), nettle (*Urtica dioica*), ivy (*Hedera helix*), creeping thistle (*Cirsium arvense*), lesser celandine (*Ficaria verna*), broad leaved dock (*Rumex conglomeratus*), spear thistle (*Cirsium vulgare*) and ragwort (*Senecio jacobaea*) were recorded. Grass species recorded include creeping bent (*Agrostis stolonifera*), Yorkshire fog (*Holcus lanatus*), false oat-grass (*Arrhenatherum elatius*), red fescue (*Festuca rubra*), perennial rye-grass (*Lolium perenne*), meadow fescue (*Festuca pratensis*) and cock's-foot grass (*Dactylis glomerata*).

The Celbridge Link Road has been constructed in the interim period and divides the site between 2/3 on the west and 1/3 east. This area is currently unvegetated consisting of a hard core road (ED1). Stored heaps of topsoil are found in the north eastern section of the southern field.

Invasive Species

No invasive species as listed under Schedule Three – Part 1 of the Birds and Habitats Regulations 2011 were recorded from within the site.

Rare & Protected Flora

The presence of seven red data book vascular plant species (Wyse Jackson *et al* (2016)) including *Acinos arvensis* (Basil thyme), *Galeopsis angustifolia* (Red hemp-nettle), *Groenlandia densa* (Opposite-leaved pondweed), *Hordeum secalinum* (Meadow barley), *Hypericum hirsutum* (Hairy St. John's-wort), *Stachys officinalis* (Betony) and *Viola hirta* (Hairy violet) are known from the 10km square (O03) in which the proposed development is located. These historic records do not relate to the actual Phase 3 development lands.

Consultation with the ecologists who recorded the Hairy St. John's-wort (*Hypericum hirsutum*) populations nearby in June 2020 was completed to determine the

background to this recent discovery, as the species was previously unknown from the immediate area.

Populations of this plant have been long documented by NPWS as a native species from sites on the River Liffey valley (St Catherine's, about Lucan, Luttrellstown, Palmerstown, Knockmaroon, etc.), the Rye Water (Carton) and also near Barnhill some 2.5km north of Lucan, as well as at a site in Santry.

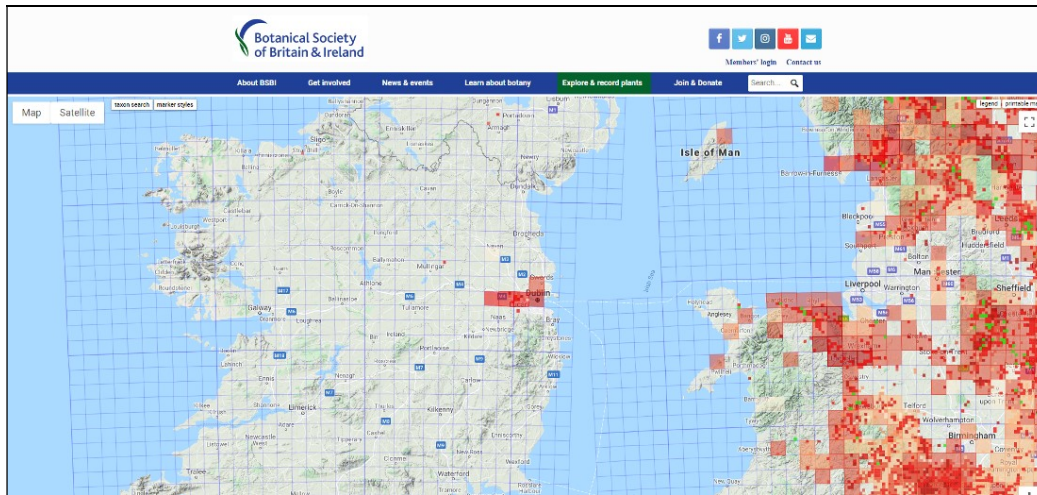


Figure 5. Distribution of Hairy St. John's-wort (*Hypericum hirsutum*) (Source: BSBI Maps).

The population occurs on the remains of a cleared hedgerow bank on the edge of Airlie Park and are c.300m from the Phase 3 lands. They are likely to have emerged from the soil seed bank following this disturbance event. It is considered that they are likely to be present in the seed bank of other hedgerows within and adjacent to the development in the Adamstown area, including those in the Phase 3 lands. Both the species and its habitat are protected under the Flora (Protection) Order, 2015.

A dedicated survey was completed for Hairy St. John's-wort (*Hypericum hirsutum*) in the Phase 3 lands in June 2021 by Faith Wilson. No evidence of the species was recorded at this time.

However, it is possible that further populations may develop once the applications of herbicide and fertiliser associated with intensive agriculture ceases. Mitigation measures to monitor for same are presented in the ecological impact assessment report which accompanies this AA screening report.

Fauna - Bats

Consultation with Bat Conservation Ireland has identified that several species of bats have been recorded within the 10km square in which the Phase 3 lands are located. These include Common pipistrelle (*Pipistrellus pipistrellus*), Soprano pipistrelle (*Pipistrellus pygmaeus*), Daubenton's bat (*Myotis daubentonii*), Leisler's bat (*Nyctalus leisleri*), Brown long-eared bat and an unidentified pipistrelle species (*Pipistrellus* sp.).

These include records of roosts, ad hoc observations, EIS surveys and the results of surveys such as the BATLAS 2010 project and the All Ireland Daubenton's Monitoring Project.

Previous bat surveys conducted by this author as part of various infrastructural developments associated with the Adamstown SDZ have recorded a number of bat species and roosts from the general environs of these lands. Detector surveys conducted in June 2008³ confirmed the presence of a small roost of Leisler's bat (*Nyctalus leisleri*) in a private residence downstream of the pumping station, which is located to the north of the development lands. A minimum of six bats were detected emerging from this house although the owner reported that previous counts conducted by him and his wife documented the presence of up to thirty bats. These bats were recorded foraging over the wooded area and also over the more open habitats of the golf course. This survey also recorded two common pipistrelle bats (*Pipistrellus pipistrellus*) foraging up and down along Tubber Lane.

The route of the Celbridge Link Road was surveyed for bats on the 3rd and 13th August 2017 (Scott Cawley, 2017)⁴. These surveys recorded four species of bats, three of which were recorded within the Phase 3 lands (brown long-eared bat (*Plecotus auritus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and Leisler's bat (*Nyctalus leisleri*)) as shown on **Figure 6** and **7** below. This survey identified three hedgerows within the study area as being of importance for bats. These are shown on **Figure 8** below.

The lands proposed for development as Tobermaclugg Park to the north of Phase 1 of the development were first surveyed for bats in 2006⁵ and more recently in June 2018 by the author of this report⁶. Species recorded here include; common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and Leisler's bat (*Nyctalus leisleri*).

A detector survey conducted on the Phase 2 lands on the 23rd October 2018 by this author recorded three species of bats using the area for foraging purposes. These were common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and Leisler's bat (*Nyctalus leisleri*).

Similar results were recorded during the surveys conducted on 7th October 2019 and 1st June 2021 on the Phase 3 lands. The most frequently recorded species was the common pipistrelle (4–6 bats were encountered), followed by soprano pipistrelle and Leisler's bat. No detections of brown long-eared bat (*Plecotus auritus*) were made but this species is difficult to detect on a bat detector given the quiet nature of their echolocation calls.

There are no buildings or structures suitable for bats to avail of and no bat roosts were confirmed in any of the trees within the site, however a number of trees were identified as potential bat roosts. These are shown on **Figure 9** below.

³ Wilson, F. (2008). Tobermaclugg, Adamstown, Lucan, West Dublin - Bat survey. Unpublished report.

⁴ Scott Cawley (2017). Bat Survey Report Proposed Celbridge Link Road, Adamstown, Co. Dublin. Prepared On Behalf Of Castlethorn Construction Ltd. 23/10/2017.

⁵Wilson, F. (2006). Tobermaclugg Park, Adamstown, Lucan, West Dublin - Flora and Fauna survey. Unpublished report.

⁶Wilson, F. (2018). Tobermaclugg Park, Adamstown, Lucan, West Dublin - Flora and Fauna survey. Unpublished report.

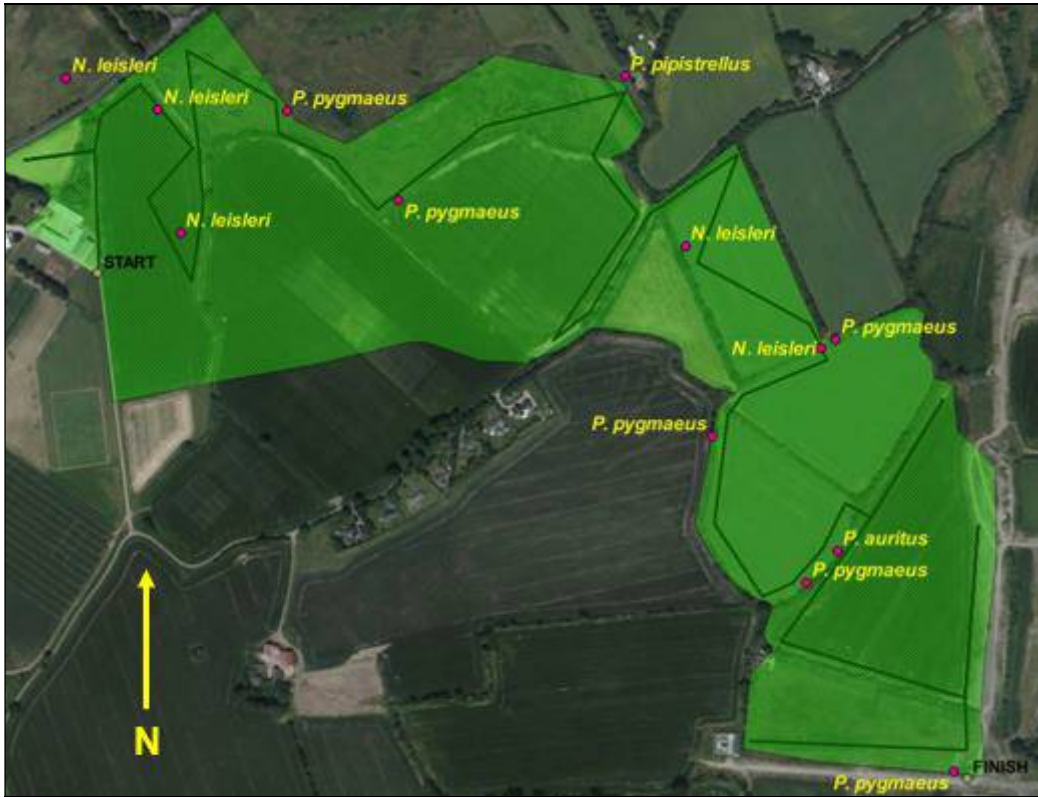


Figure 6. Bat species detected on 3rd August 2017 during field surveys for the Celbridge Link Road (Scott Cawley, 2017).



Figure 7. Bat species detected on 13th August 2017 during field surveys for the Celbridge Link Road (Scott Cawley, 2017).



Figure 8. Notable features identified as being of potential interest for bats during field surveys conducted for the Celbridge Link Road (Scott Cawley, 2017).

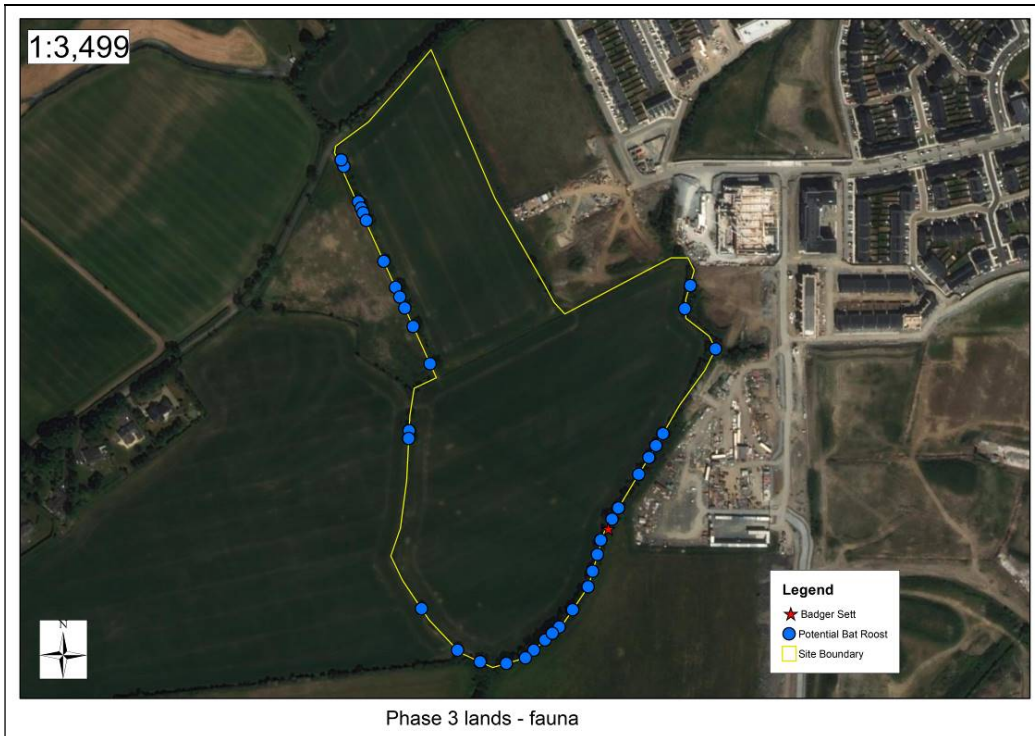


Figure 9. Potential bat roosts identified within the Phase 3 lands.

Fauna - Badger

An active badger sett with a minimum of two entrances was recorded along the south eastern boundary of the lands (as shown on **Figure 9** above) during the surveys conducted in October 2019. A series of trails lead from the sett along the earthen bank and signs of active digging were recorded.

Activity at the sett was assessed in March and June 2021 during subsequent site visits and no significant changes were recorded with the sett remaining active and in use.

Other Fauna

Both fox and rabbit were recorded on the site and species such as brown rat, house mouse, and possibly hedgehog would be expected to use the site.

Birds

The following bird species were recorded during the site visits and all would be expected to breed either within the site hedgerows/treelines or in the local area; blackbird (*Turdus merula*), rook (*Corvus frugilegus*), robin (*Erithacus rubecula*), greenfinch (*Carduelis chloris*), chaffinch (*Fringilla coelebs*), jackdaw (*Corvus monedula*), starling (*Sturnus vulgaris*), coal tit (*Parus ater*), great tit (*Parus ater*), long-tailed tit (*Aegithalos caudatus*), blue tit (*Parus caeruleus*), magpie (*Pica pica*), woodpigeon (*Columba palumbus*), hooded crow (*Corvus corone corvix*) and jackdaw (*Corvus monedula*). Summer migrants such as willow warbler (*Phylloscopus trochilus*), chiffchaff (*Phylloscopus collybita*), and swallows (*Hirundo rustica*) were also recorded. Skylark (*Alauda arvensis*) was holding territory over the southern field during the June 2021 visit. Buzzard (*Buteo buteo*) has been regularly recorded in the area.

Fisheries

The main ecological sensitivity of the site from a fisheries perspective is the Tobermaclugg/Lucan Stream (IE_EA_09L012100) which is found to the east of the site and to which the lands ultimately drain.

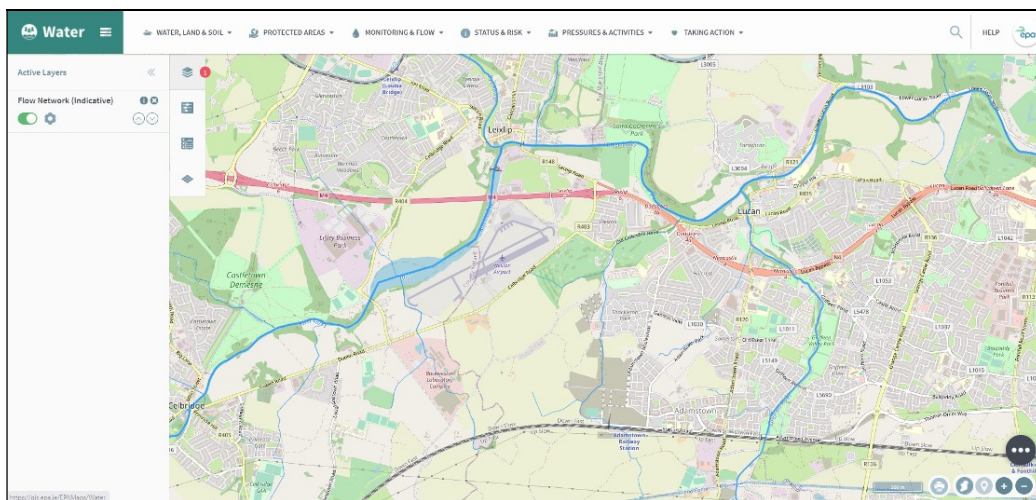


Figure 10. The Tobermaclugg (Lucan) Stream is found to the east of the site (Source: www.catchments.ie).

This is a tributary of the River Liffey and the site is located within the Liffey and Dublin Bay Catchment (Catchment 09) and the Liffey Sub-Catchment (Liffey_SC_090). This stream was identified as a waterbody in ecologically moderate condition in the monitoring round 2013 to 2018 and is under review as part of the 3rd cycle monitoring under the Water Framework Directive (see **Figure 10** above).

2.2 ASSESSMENT OF RELEVANCE OF PROPOSED DEVELOPMENT TO NATURA 2000 SITES

In line with the European Commission Methodological Guidance (EC (2001)) and the DoEHLG Guidance (DoEHLG (2010)) a review of all Natura 2000 sites that could be potentially affected by the proposed project was made using the NPWS online map viewer. These included any Natura 2000 sites within or adjacent to the lands at Tubber lane, and any Natura 2000 sites within the likely zone of impact of the proposed development (a 15km radius) including those downstream.

The lands proposed for development at Tubber Lane are not currently designated for any nature conservation purposes and there are no Natura 2000 sites located either within or directly adjacent to the lands.

Best practice recommends assessing Natura 2000 sites located within 15km of a proposed plan or project. There are no Natura 2000 sites located either within or directly adjacent to the lands at Tubber Lane. There are three Natura 2000 sites within a 15km radius of the site as set out in **Table 2.2** below and shown on **Figure 11**.

There are three Special Areas of Conservation (SAC) within a 15km radius of the site. These are the Rye Water valley/Carton SAC (Site Code: 001398), Glenasmole Valley SAC (Site Code: 001209), and the Wicklow Mountains SAC (Site Code: 002122), which are 2km north-west, 12km south-east, and 13.7km south-east of the site respectively. There are no ecological links (source-pathway-receptors) between the lands at Tubber Lane and any of these Natura 2000 sites.

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are habitats of international significance that have been identified by NPWS and submitted for designation to the EU.

The Lucan Stream is the only ecological link (source-pathway-receptors) between the lands at Tubber Lane and any Natura 2000 site as this watercourse is a tributary of the River Liffey and the Natura 2000 sites in Dublin Bay lie within the potential zone of influence of the proposed development. These are:

- North Dublin Bay SAC (000206)
- South Dublin Bay SAC (000210)
- South Dublin Bay and River Tolka Estuary SPA (004024)
- North Bull Island SPA (004006)

As negative impacts on these Natura 2000 sites are highly unlikely by virtue of distance the proposed development at Tubber Lane will have no direct relevance to these protected sites and they are not considered further in this report.

There are no other designated biodiversity areas affected by the development at Tubber Lane that have a recognised European Union or International protection status. Some of the Natura 2000 sites and a number of other sites in the area (within 15km of the site at Tubber Lane) are also designated as proposed Natural Heritage Areas. These include:

- Dodder Valley pNHA (Site Code: 000991)
- Glenasmole Valley pNHA (Site Code: 001209)
- Grand Canal pNHA (Site Code: 002104)
- Killeel Wood pNHA (Site Code: 001394)
- Liffey Valley pNHA (Site Code: 000128)
- Lugmore Glen pNHA (Site Code: 001212)
- Royal Canal pNHA (Site Code: 002103)
- Rye Water Valley/Carlton pNHA (Site Code: 001398)
- Slade Of Saggart And Crooksling Glen pNHA (Site Code: 000211)

There are no ecological or hydrological links between the development site at Tubber Lane and these or any other pNHA beyond that of the Lucan Stream as mentioned above, which links the site to the Liffey Valley pNHA (Site Code: 000128), the boundary of which is 1.5km to the north.

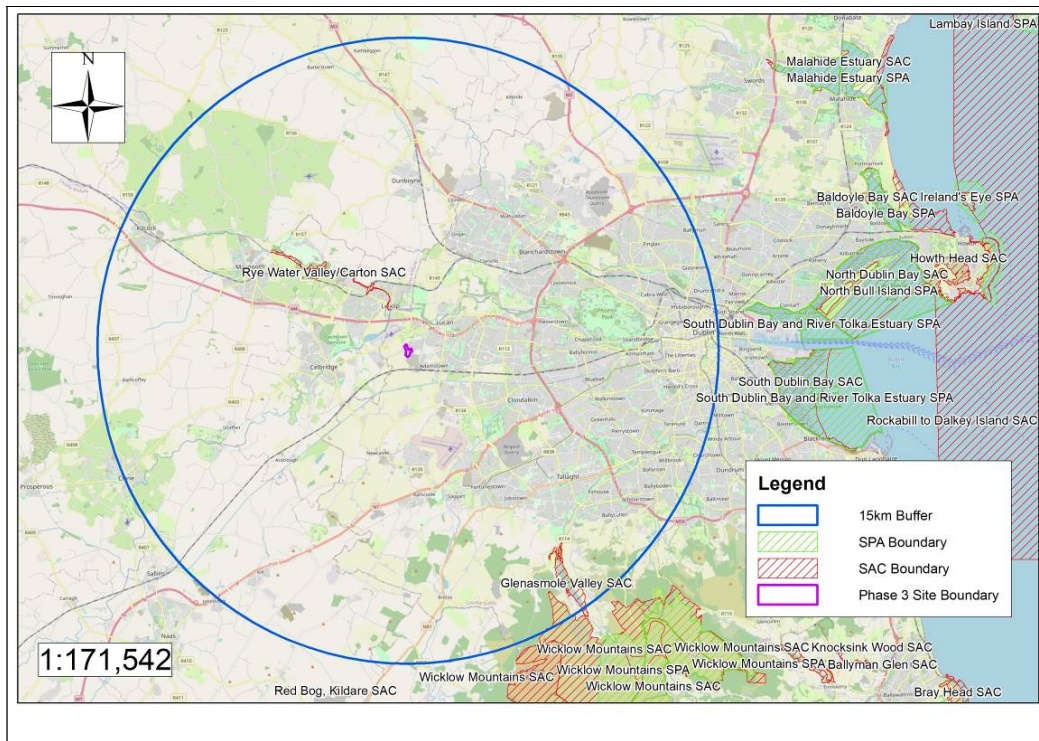


Figure 11. Designated sites within a 15km radius of the Phase 3 lands at Tubber Lane.

Table 2.2. Natura 2000 sites within 15km of the location of the proposed development at Tubber Lane.

Site Code	Site Name and Designation	Approximate distance from Tubber Lane	Qualifying Interest	Conservation Objectives
001398	Rye Water Valley/Carton SAC	2.1km north-west	<ul style="list-style-type: none"> • 7220 Petrifying springs with tufa formation (<i>Cratoneurion</i>)* • 1014 Narrow-mouthed Whorl Snail <i>Vertigo angustior</i> 1016 Desmoulin's Whorl Snail <i>Vertigo moulinsiana</i> 	<p>Source: NPWS (2021) Conservation objectives for Rye Water Valley/Carton SAC [001398]. Generic Version 8.0. Department of Housing, Local Government and Heritage.</p> <p>Accessed 12th December 2021</p> <p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:</p> <ul style="list-style-type: none"> • 7220 Petrifying springs with tufa formation (<i>Cratoneurion</i>)* • 1014 Narrow-mouthed Whorl Snail <i>Vertigo angustior</i> 1016 Desmoulin's Whorl Snail <i>Vertigo moulinsiana</i>

Site Code	Site Name and Designation	Approximate distance from Tubber Lane	Qualifying Interest	Conservation Objectives
001209	Glenasmole Valley SAC	12.km south east	<ul style="list-style-type: none"> • (6210) Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco Brometalia</i>) (*important orchid sites) • (6410) <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) • (7220) Petrifying springs with tufa formation (<i>Cratoneurion</i>) 	<p>Source: NPWS (2021) Conservation Objectives: Glenasmole Valley SAC 001209. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage. Dated 10th December 2021.</p> <p>Accessed 12th December 2021</p> <p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:</p> <ul style="list-style-type: none"> • (6210) Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco Brometalia</i>) (*important orchid sites) • (6410) <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) • (7220) Petrifying springs with tufa formation (<i>Cratoneurion</i>)

Site Code	Site Name and Designation	Approximate distance from Tubber Lane	Qualifying Interest	Conservation Objectives
002122	Wicklow Mountains SAC	13.7km south east	<ul style="list-style-type: none"> • (3130) Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoeto-Nanojuncetea</i> • (3160) Natural dystrophic lakes and ponds, • (4010) Northern Atlantic wet heaths with <i>Erica tetralix</i>, • (4030) European dry heaths, • (4060) Alpine and Boreal heaths, • (6230) Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas, • (7130) Blanket bog (*active only), • (8110) Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>), • (8210) Calcareous rocky slopes with chasmophytic vegetation, • (8220) Siliceous rocky slopes with chasmophytic vegetation, • (9990) Blanket bog (not active), • (1355) Otter (<i>Lutra lutra</i>), • Peregrine falcon (<i>Falco peregrinus</i>), • Merlin (<i>Falco columbarius</i>) 	<p>Source: NPWS (2017) Conservation Objectives: Wicklow Mountains SAC 002122. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.</p> <p>Accessed 12th December 2021</p> <p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:</p> <ul style="list-style-type: none"> • (3130) Oligotrophic to mesotrophic • standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoeto-Nanojuncetea</i> • (3160) Natural dystrophic lakes and ponds, • (4010) Northern Atlantic wet heaths with <i>Erica tetralix</i>, • (4030) European dry heaths, • (4060) Alpine and Boreal heaths, • (6230) Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas, • (7130) Blanket bog (*active only), • (8110) Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>), • (8210) Calcareous rocky slopes with chasmophytic vegetation, • (8220) Siliceous rocky slopes with chasmophytic vegetation, • (9990) Blanket bog (not active), • (1355) Otter (<i>Lutra lutra</i>), • Peregrine falcon (<i>Falco peregrinus</i>), • Merlin (<i>Falco columbarius</i>)

SECTION 3 DESCRIPTIONS OF NATURA 2000 SITES

There are no Natura 2000 sites located within or adjacent to the site at Tubber Lane. The Natura 2000 sites located within 15km of the site and their conservation objectives are listed in **Table 2.2** above.

This report for Screening for Appropriate Assessment has examined the conservation objectives for each of the relevant Natura 2000 sites and has determined that the proposed development and subsequent use of the lands at Tubber Lane will have no negative impacts on same.

SECTION 4 ASSESSMENT OF POTENTIAL IMPACTS

4.1 ASSESSMENT OF PROPOSED DEVELOPMENT AT TUBBER LANE

The potential impacts of the proposed development at Tubber Lane on nearby Natura 2000 sites were assessed using the following factors:

- size and scale
- land-take
- distance from the Natura 2000 site or key features of the site
- resource requirements (water abstraction etc.)
- emissions (disposal to land, water or air)
- excavation requirements
- transportation requirements
- duration of construction, operation, decommissioning, etc.
- reduction of habitat area
- disturbance to key species
- habitat or species fragmentation
- reduction in species density
- changes in key indicators of conservation value (water quality etc.)
- climate change
- key relationships that define the structure of the sites
- key relationships that define the function of the site

<p>Brief description of the project or plan</p>	<p>Development of a new Housing Development on lands at Tubber Lane, Adamstown.</p> <p>These works will require the following:</p> <ul style="list-style-type: none"> • Temporary landtake (e.g. working areas within the site); • Construction activities (e.g. runoff and other pollution, increase of suspended solids, alteration of hydraulic conditions and noise and dust emissions); and, • Permanent landtake for the new housing.
<p>Brief description of the Natura 2000 sites</p>	<p>There are no Natura 2000 sites either within or directly adjacent to the proposed development site at Tubber Lane.</p>

	Natura 2000 sites occurring within a 15km radius of the site are detailed above in Table 2.2 .
Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 sites	<p>Water quality impacts have been taken into account during the proposed development of the lands at Tubber Lane (see below).</p> <p>The development of housing at Tubber Lane will have no impacts on any Natura 2000 site and there are no cumulative elements expected which are likely to give rise to impacts on any Natura 2000 site.</p>
<p>Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of:</p> <ul style="list-style-type: none"> • size and scale; • land-take; • distance from the Natura 2000 site or key features of the site; • resource requirements (water abstraction etc.); • emissions (disposal to land, water or air); excavation requirements; • transportation requirements; • duration of construction, operation, decommissioning, etc.; • other 	<p>The proposed development is not within or directly adjacent to any Natura 2000 site, therefore there will no impacts arising from the project regarding size and scale or land-take.</p> <p>The proposed development site is over 2km distant from the nearest Natura 2000 site (Rye Water Valley/Carton SAC). Apart from the Dublin Bay Natura 2000 sites, significant impacts on which are ruled out on account of distance, there are also no potential ecological or hydrological links to the other Natura 2000 sites listed in Table 2.2.</p> <p>As set out in the Engineering Services report which accompanies the planning application (POGA Consulting Engineers, 2021) an existing ø250mm HDPE watermain and an existing ø150mm HDPE watermain run under Celbridge Link Road and Adamstown Drive as part of the overall strategic SDZ. The existing infrastructure was provided in accordance with Adamstown masterplan. In addition, there is an existing ø150mm HDPE watermain at the adjacent lands to the Eastern boundary which was constructed by the applicant. This site is currently under construction, refer to Planning Application Reference Number SDZ17A/006.</p> <p>There are no requirements to abstract water from any Natura 2000 site or potential hydrological impacts on same.</p> <p>As set out in the Engineering Services report which accompanies the planning application (POGA Consulting Engineers, 2021) there is an existing ø450mm foul pipe that runs under Adamstown Drive which connects into a ø750mm foul pipe that runs parallel with the Tobermaclugg Valley and outfalls to the Adamstown pumping station. This was provided as part of the overall strategic SDZ.</p>

	<p>Furthermore, there is an ø225mm and 375mm wastewater network at Celbridge Link Road, which is built by SDCC as part of the Celbridge Link Road construction.</p> <p>As set out in the Engineering Services report which accompanies the planning application (POGA Consulting Engineers, 2021) surface waters will discharge into an existing network of surface water pipes. There is an ø600mm, 750mm and 900mm surface water pipe location in the Celbridge Link Road and Adamstown Drive respectively which was built by SDCC as part of the Celbridge Link Road construction. This pipe outfall to the trunk surface water pipe located in Tobermaclugg Valley. This was provided as part of the overall strategic SDZ.</p> <p>Further detail on all of these are provided in the 'Residential Development at Adamstown Tubber Lane - Engineering Report - Ref: 20065' prepared by POGA Consulting Engineers.</p> <p>Any potentially polluted surface water associated with the proposed works such as silt laden waters, etc. will be captured during the construction period by the pollution control systems and during the operational period by the drainage and pollution control systems installed in the development's surface water drainage system.</p> <p>Due to the distance of the lands from the boundary of any Natura 2000 sites and the proposed surface drainage and pollution control systems within the development, no significant indirect effect on the Qualifying Interests/Species of Conservation Interest is predicted as a result of the proposed works.</p> <p>Due to the location of the proposed development at distance from any Natura 2000 site, there are also no impacts to Natura 2000 sites expected from transportation, duration of construction, operation, or decommissioning of any element of the development.</p>
<p>Describe any likely changes to the site arising as a result of:</p> <ul style="list-style-type: none"> • reduction of habitat area • disturbance to key species; • habitat or species fragmentation; • reduction in species density; • changes in key indicators of conservation value (water quality etc.); 	<p>Due to the distance of the proposed development from any Natura 2000 site and the expected implementation of South Dublin County Council Development Plan policies and objectives relating to the maintenance and protection of water quality including SUDS measures, there are no changes expected to any Natura 2000 site relating to habitat or species reduction, changes to key indicators of</p>

<ul style="list-style-type: none"> • climate change 	conservation value, or to climate change.
<p>Describe any likely impacts on the Natura 2000 site as a whole in terms of:</p> <ul style="list-style-type: none"> • interference with the key relationships that define the structure of the site • interference with key relationships that define the function of the site 	There will be no impacts on any Natura 2000 site as a whole in terms of interference with the key relationships that define the structure of the site or interference with key relationships that define the function of the site.
<p>Provide indicators of significance as a result of the identification of effects set out above in terms of:</p> <ul style="list-style-type: none"> • Loss • Fragmentation • Disruption • Disturbance • Change to key elements of the site (e.g. water quality etc.) 	There will be no impacts to any Natura 2000 sites relating to loss, fragmentation, disruption, disturbance, or changes to key elements of the site.
<p>Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.</p>	There will be no direct, indirect, or cumulative impacts from the proposed development on any Natura 2000 sites.

Cumulative/in Combination Effects

The EC Habitats Directive, the Planning Acts and the Habitats Regulations 2011 require that the impacts on Natura 2000 sites from the plan or project in question are assessed and that they are assessed in combination with other plans and projects that could affect the same Natura 2000 sites. The Appropriate Assessment Screening Process identified other plans and projects that could act in combination with the proposed housing development at Tubber Lane to pose likely significant effects on European sites within the study area and its environs.

These included:

- The adjoining lands, which are also owned by the applicant and are currently under construction, were also the subject of Appropriate Assessment⁷⁸.
- The South Dublin County Development Plan 2016 - 2022.
- Adamstown SDZ Planning Scheme (2014),
- Dublin City Development Plan 2016 - 2022,
- Dún Laoghaire-Rathdown County Development Plan 2016 - 2022,
- Fingal Development Plan 2017-2023,
- and other county level land use plans, which could influence conditions in Dublin Bay via rivers and other surface water features.

All of these plans and/or projects have been screened for Appropriate Assessment or undergone an Appropriate Assessment themselves and it is therefore assumed that if

⁷ Scott Cawley (2017). Provision of information regarding Appropriate Assessment Screening Proposed Residential Development, Tubber Lane Development Area, Adamstown, Lucan, Co. Dublin.

⁸ Wilson, F. (2019). Habitats Directive Assessment. Screening of a proposed housing development at Tubber Lane, Adamstown, Co. Dublin for Appropriate Assessment in accordance with the requirements of Article 6(3) of the EU Habitats Directive.

a plan has been adopted or a project given planning permission following an AA that it cannot pose likely significant adverse effects on a Natura 2000 site.

In addition the proposed housing development at Tubber Lane, in combination or cumulatively with the above plans and projects, is not likely to have a significant effect on any of the Natura 2000 sites identified.

SECTION 5 CONCLUSION

This screening report has evaluated the proposed development of housing on lands at Tubber Lane, Adamstown, Lucan, Co. Dublin, to determine whether or not significant negative impacts on Natura 2000 sites are likely to arise by virtue of its construction and use.

The Lucan Stream is the only ecological link (source-pathway-receptors) between the lands at Tubber Lane and any Natura 2000 site as this watercourse is a tributary of the River Liffey. The Natura 2000 sites in Dublin Bay, which lie within the potential zone of influence of the proposed development are:

- North Dublin Bay SAC (000206)
- South Dublin Bay SAC (000210)
- South Dublin Bay and River Tolka Estuary SPA (004024)
- North Bull Island SPA (004006)

These European Sites are deemed not to be at risk of likely significant effects from construction or operation of the proposed development for the following reasons:

- None of the species, which form part of the Conservation Interest for which the Dublin Bay European Sites located downstream have been designated are considered likely to utilise the habitats within the subject lands;
- There is a significant distance over the surface water network between the proposed development and the Dublin Bay European Sites downstream (>20km);
- A series of SUDs techniques have been employed in the surface water drainage system for the development. The discharge of water from the site will not be of a scale which would have any significant effect on any European site;
- Foul water generated on site is not likely to result in a significant effect on Ringsend WWTP's capacity to process and treat this waste.

The existing local surface water drainage network (which drains to Dublin Bay via the local surface water network and the River Liffey), and the discharge of treated effluent from the foul drainage network are also potential pathways between the proposed development and Dublin Bay. No significant effects are predicted from these sources due to the following:

- The temporary nature of any discharges related to construction of the site;
- The distance between the site and Dublin Bay and potential for pollution in the drainage network;
- The surface water drainage system designed as part of the proposed development provides for separate management of surface and storm water.

Foul waters generated on site during operation will be treated at Ringsend WWTP before being discharged into Dublin Bay. The plant currently operates above its capacity of 1.64 million P.E. at 1.9 million P.E. Any existing or proposed projects discharging to the plant have the potential to act cumulatively to reduce water quality in Dublin Bay, affecting European sites therein. Despite Ringsend WWTP historically operating at or above capacity, no significant effects from discharge arising from the proposed development are predicted due to the following:

- The net increase in foul water loading to Ringsend WWTP as a result of the proposed development is not expected to have a significant effect on Ringsend WWTP's capacity to treat and process such effluent.

This report finds that the development will not, either individually or in combination with other plans and projects, give rise to any significant effects on any Natura 2000 site.

The Appropriate Assessment procedure for this proposed Plan is therefore concluded at this Screening Stage and it is the opinion of this author that a detailed (Stage 2) Appropriate Assessment is not required.