

APPENDIX 6.1 PROTECTED SITES FOR NATURE CONSERVATION IN THE VICINITY OF THE PROPOSED DEVELOPMENT AND THE MASTERPLAN

European sites in the vicinity of the proposed development and the Masterplan are listed below in Table 1, along with their qualifying/special conservation interests, reference to the most recent conservation objectives document, and their location relative to the proposed development site.

Other nationally protected sites for nature conservation in the vicinity of the proposed development are listed below in Table 2, along with the nature conservation interests for which they are designated, and their location relative to the proposed development site and the Masterplan.

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site and the Masterplan
Special Area of Conservation (SAC)	
South Dublin Bay SAC [000210] [1140] Mudflats and sandflats not covered by seawater at low tide [1210] Annual vegetation of drift lines [1310] <i>Salicornia</i> and other annuals colonising mud and sand [2110] Embryonic shifting dunes NPWS (2013b) <i>Conservation Objectives: South Dublin Bay SAC 000210</i> . Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	c.3.5km south east of the proposed development site and the Masterplan
North Dublin Bay SAC [000206] [1140] Mudflats and sandflats not covered by seawater at low tide [1210] Annual vegetation of drift lines [1310] <i>Salicornia</i> and other annuals colonising mud and sand [1330] Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) [1395] Petalwort <i>Petalophyllum ralfsii</i> [1410] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [2110] Embryonic shifting dunes [2120] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2130] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2190] Humid dune slacks NPWS (2013a) <i>Conservation Objectives: North Dublin Bay SAC 000206</i> . Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	c. 5.3km north east of the proposed development and the Masterplan

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site and the Masterplan
<p>Baldoye Bay SAC [000199]</p> <p>[1140] Mudflats and sandflats not covered by seawater at low tide</p> <p>[1310] Salicornia and other annuals colonising mud and sand</p> <p>[1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)</p> <p>[1410] Mediterranean salt meadows (<i>Juncetalia maritimi</i>)</p> <p>NPWS (2013b) <i>Conservation Objectives: Baldoye Bay SAC 000199</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>c. 10.4km north east of the proposed development site and the Masterplan</p>
<p>Howth Head SAC [000202]</p> <p>[1230] Vegetated sea cliffs of the Atlantic and Baltic coasts</p> <p>[4030] European dry heaths</p> <p>NPWS (2016) <i>Conservation Objectives: Howth Head SAC 000202</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>c. 11km east of the proposed development site and the Masterplan</p>
<p>Glenasmole SAC [001209]</p> <p>[6210] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)</p> <p>[6410] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)</p> <p>[7220] Petrifying springs with tufa formation (Cratoneurion)</p> <p>NPWS (2018) <i>Conservation objectives for Glenasmole Valley SAC [001209]</i>. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.</p>	<p>c. 12.5km south west of the proposed development site and the Masterplan</p>
<p>Malahide Estuary SAC [000205]</p> <p>[1140] Mudflats and sandflats not covered by seawater at low tide</p> <p>[1310] Salicornia and other annuals colonising mud and sand</p> <p>[1320] Spartina swards (<i>Spartinion maritimae</i>)</p> <p>[1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)</p> <p>[1410] Mediterranean salt meadows (<i>Juncetalia etanus</i>)</p> <p>[2120] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)</p> <p>[2130] Fixed coastal dunes with herbaceous vegetation (grey dunes)</p> <p>NPWS (2013b) <i>Conservation Objectives: Malahide Estuary SAC 000205</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>c. 13.1km north east of the proposed development site and the Masterplan</p>

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site and the Masterplan
Special Protection Area (SPA)	
<p>South Dublin Bay and River Tolka Estuary SPA [004024]</p> <p>[A046] Light-bellied Brent Goose <i>Branta bernicla hrota</i></p> <p>[A130] Oystercatcher <i>Haematopus ostralegus</i></p> <p>[A137] Ringed Plover <i>Charadrius hiaticula</i></p> <p>[A141] Grey Plover <i>Pluvialis squatarola</i></p> <p>[A143] Knot <i>Calidris canutus</i></p> <p>[A144] Sanderling <i>Calidris alba</i></p> <p>[A149] Dunlin <i>Calidris alpina</i></p> <p>[A157] Bar-tailed Godwit <i>Limosa lapponica</i></p> <p>[A162] Redshank <i>Tringa totanus</i></p> <p>[A179] Black-headed Gull <i>Croicocephalus ridibundus</i></p> <p>[A192] Roseate Tern <i>Sterna dougallii</i></p> <p>[A193] Common Tern <i>Sterna hirundo</i></p> <p>[A194] Arctic Tern <i>Sterna paradisaea</i></p> <p>[A999] Wetland and Waterbirds</p> <p>NPWS (2015b) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	c.3.5km south east of the proposed development site and the Masterplan
<p>North Bull Island SPA [004006]</p> <p>[A046] Light-bellied Brent Goose <i>Branta bernicla hrota</i></p> <p>[A048] Shelduck <i>Tadorna tadorna</i></p> <p>[A052] Teal <i>Anas crecca</i></p> <p>[A054] Pintail <i>Anas acuta</i></p> <p>[A056] Shoveler <i>Anas clypeata</i></p> <p>[A130] Oystercatcher <i>Haematopus ostralegus</i></p> <p>[A140] Golden Plover <i>Pluvialis apricaria</i></p> <p>[A141] Grey Plover <i>Pluvialis squatarola</i></p> <p>[A143] Knot <i>Calidris canutus</i></p> <p>[A144] Sanderling <i>Calidris alba</i></p> <p>[A149] Dunlin <i>Calidris alpina</i></p> <p>[A156] Black-tailed Godwit <i>Limosa limosa</i></p> <p>[A157] Bar-tailed Godwit <i>Limosa lapponica</i></p> <p>[A160] Curlew <i>Numenius arquata</i></p> <p>[A162] Redshank <i>Tringa totanus</i></p> <p>[A169] Turnstone <i>Arenaria interpres</i></p> <p>[A179] Black-headed Gull <i>Croicocephalus ridibundus</i></p> <p>[A999] Wetlands & Waterbirds</p>	c. 5.4km north east of the proposed development site and the Masterplan

European Site Name [Code] and its Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site and the Masterplan
NPWS (2015a) <i>Conservation Objectives: North Bull Island SPA 004006. Version 1.</i> National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Baldoyle Bay SPA [004016] [A046] Light-bellied Brent Goose <i>Branta bernicla hrota</i> [A048] Shelduck <i>Tadorna tadorna</i> [A137] Ringed Plover <i>Charadrius hiaticula</i> [A140] Golden Plover <i>Pluvialis apricaria</i> [A141] Grey Plover <i>Pluvialis squatarola</i> [A157] Bar-tailed Godwit <i>Limosa lapponica</i> [A999] Wetland and Waterbirds NPWS (2013b) <i>Conservation Objectives: Baldoyle Bay SPA 004016. Version 1.</i> National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	c. 10.4km north east of the proposed development site and the Masterplan
Malahide Estuary SPA [004025] [A005] Great Crested Grebe <i>Podiceps cristatus</i> [A046] Light-bellied Brent Goose <i>Branta bernicla hrota</i> [A048] Shelduck <i>Tadorna tadorna</i> [A054] Pintail <i>Anas acuta</i> [A067] Goldeneye <i>Bucephala clangula</i> [A069] Red-breasted Merganser <i>Mergus serrator</i> [A130] Oystercatcher <i>Haematopus ostralegus</i> [A140] Golden Plover <i>Pluvialis apricaria</i> [A141] Grey Plover <i>Pluvialis squatarola</i> [A143] Knot <i>Calidris canutus</i> [A149] Dunlin <i>Calidris alpina</i> [A156] Black-tailed Godwit <i>Limosa limosa</i> [A157] Bar-tailed Godwit <i>Limosa lapponica</i> [A162] Redshank <i>Tringa totanus</i> [A999] Wetland and Waterbirds NPWS (2015b) <i>Conservation Objectives: Malahide Estuary SPA 004025. Version 1.</i> National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	c. 13.1km north east of the proposed development site and the Masterplan

Table 1: European sites in the vicinity of the proposed development.

Designated Site Name [Code] and its nature conservation features	Location Relative to the Proposed Development Site
proposed Natural Heritage Area (pNHA)	
Royal Canal pNHA [002103] Diversity of flora and fauna species the canal ecosystem supports and the presence of legally protected plant species, opposite-leaved pondweed <i>Groenlandia densa</i> .	c. 1.3km north east of the proposed development and the Masterplan
South Dublin Bay pNHA [000210] Diversity of coastal, estuarine, intertidal and marine habitats, and the flora and fauns species they support – <i>see also South Dublin Bay SAC and South Dublin Bay and River Tolka Estuary SPA</i>	c. 3.5km south east of the proposed development site and the Masterplan
Dolphins, Dublin Docks pNHA [000201] Nesting common terns – <i>see also South Dublin Bay and River Tolka Estuary SPA in Table 1 above</i>	c. 4.4km east of the proposed development and the Masterplan
North Dublin Bay pNHA [000206] Diversity of coastal, estuarine, intertidal and marine habitats, and the flora and fauns species they support – <i>see also North Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA in Table 1 above</i>	c. 5.3km north east of the proposed development and the Masterplan
Santry Demesne pNHA [000178] The site comprises the remnants of a former demesne woodland. The remaining woods are generally good quality. Hairy St. John's wort (<i>Hypericum hirsutum</i>), a species legally protected under the Flora (Protection) Order (2015), was recorded here in 1991. The primary importance of this site is that it contains a legally protected plant species. The woodland, however, is of general ecological interest as it occurs in an area where little has survives of the original vegetation.	c. 5.8km north of the proposed development site and the Masterplan
Boosterstown Marsh pNHA [001205] An enclosed area of saltmarsh and muds that is cut off from the sea by the Dublin/Wexford railway line, being linked only by a channel to the east, the Nutley stream. Sea water incursions into the marsh occur along this stream at high tide. - <i>see also South Dublin Bay and River Tolka Estuary SPA</i>	c. 5.9km south east of the proposed development site and the Masterplan
Liffey Valley pNHA [000128] Diversity of flora and fauna species the river ecosystem supports, including rare and/or legally protected plant species (hairy St. John's wort <i>Hypericum hirsutum</i> , green figwort <i>Scrophularia umbrosa</i> and yellow archangel <i>Lamiastrum galeobdolon</i>)	c. 5.9km east of the proposed development and the Masterplan

Designated Site Name [Code] and its nature conservation features	Location Relative to the Proposed Development Site
<p>Dodder Valley pNHA [000991]</p> <p>This site represents the last remaining expanse of natural river bank of the Dodder in the built up Greater Dublin Area with the proposed designation extending for approximately 2km between Firhouse Bridge and Old Bawn Bridge. The Dodder Valley supports riparian woodland and scrub mainly of Willow (<i>Salix</i> spp.) Along the banks are wild flower meadows with a good diversity of plant species. The Valley also supports several riparian bird species of conservation interest.</p>	<p>c. 8.2km south west of the proposed development site and the Masterplan</p>
<p>Fitzsimons Wood pNHA [001753]</p> <p>Fitzsimons Wood is a semi-natural woodland located west of Sandyford Village. Birch dominates the woodland with Alder and Holly distributed throughout. Some Oak, Beech and Sycamore also occur. Woodland birds are abundant, with Long-eared Owls, newts, foxes, badgers and deer also present. The woodland is a valuable wildlife reserve at the edge of the suburban landscape.</p>	<p>c. 9.1km south of the proposed development site and the Masterplan</p>

Table 2: Nationally protected sites in the vicinity of the proposed development

APPENDIX 6.2 DESK STUDY FLORA AND FAUNA RECORDS

Desktop records of protected, rare, or other notable plant species are listed below in **Table 1**. These are plant species which are legally protected under the Flora (Protection) Order, 2015 and/or are listed as Critically Endangered, Endangered or Vulnerable on the relevant national Red Data list for Ireland¹.

Common Name/ Scientific name	Legal Status ²	Red List Status	Source
Opposite-leaved Pondweed <i>Groenlandia densa</i>	FPO	Endangered	NBDC online database record
Round-leaved Crane's bill <i>Geranium rotundifolium</i>	None	Endangered	NBDC online database record
Fringed Heartwort <i>Ricciocarpos natans</i>	None	Near threatened	NBDC online database record
Common extinguisher-moss <i>Encalypta vulgaris</i>	None	Near threatened	NBDC online database record
Lance-leaved Pottia <i>Torula lanceola</i>	None	Critically endangered	NBDC online database record
Tall aloe-moss <i>Aloina ambigua</i>	None	Endangered	NBDC online database record
Tiny feather-moss <i>Amblystegium confervoides</i>	None	Near threatened	NBDC online database record
Twisting thread-moss <i>Bryum torquescens</i>	None	Vulnerable	NBDC online database record

Table 1: Records of protected, red-listed or notable flora recorded from the desk study in the vicinity of the study area.

Desktop records of protected, rare, or other notable fauna species are listed below in Table 2. In relation to amphibian, reptile and mammal species those which are protected under the Wildlife Acts, the Habitats Directive and/or are listed as threatened (Vulnerable to Critically Endangered) on the relevant national Red Lists are included. In the case of bird species, only those species listed in Annex I of the Birds Directive or on the Birds of Conservation Concern in Ireland (BoCCI) Red List are included in the table below. For invertebrate species, those which are listed as threatened (Vulnerable to Critically Endangered) on the relevant national Red List are included.

¹ Vascular flora from Wyse Jackson, M., FitzPatrick, Ú., Cole, E., Jebb, M., McFerran, D., Sheehy Skeffington, M. & Wright, M. (2016) *Ireland Red List No. 10: Vascular Plants*. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Dublin, Ireland.

Bryophytes from Lockhart, N., Hodgetts, N. & Holyoak, D. (2012) *Ireland Red List No.8: Bryophytes*. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

² HDII/IV/V = Habitats Directive Annexes II/IV/V; FPO = Flora (Protection) Order, 2015; WA = Wildlife Acts

Common Name/ Scientific Name	Legal Status ³	Red List Status ⁴	Source
Amphibians			
Common frog <i>Rana temporaria</i>	HD_V, WA	Least concern	NBDC online database record
Smooth newt <i>Triturus vulgaris</i>	WA	Least concern	NBDC online database record
Mammals (Terrestrial)			
Badger	WA	Least concern	NBDC online database record
Otter <i>Lutra lutra</i>	HD_II & IV, WA	Least concern	NBDC online database record
Nathusius's Pipistrelle <i>Pipistrellus nathusii</i>	HD_IV, WA	Least concern	NBDC online database record
Leisler's bat <i>Nyctalus leisleri</i>	HD_IV, WA	Least concern	NBDC online database record
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	HD_IV, WA	Least concern	NBDC online database record
Common pipistrelle <i>Pipistrellus pipistrellus</i>	HD_IV, WA	Least concern	NBDC online database record
Pygmy shrew	WA	Least concern	NBDC online database record
Red squirrel <i>Sciurus vulgaris</i>	WA	Least concern	NBDC online database record

Table 2: Records of protected, red-listed or notable fauna from the desktop study in the vicinity of the study area.

³ HD_II/IV/V = Habitats Directive Annexes II/IV/V; WA = Wildlife Acts; BD_I/II/III = Birds Directive Annex I/II/III; OSPAR = Convention for the protection of the marine environment of the North-east Atlantic 1992

⁴ Mammal Red-list from Marnell, F., Kingston, N. & Looney, D. (2009) *Ireland Red List No. 3: Terrestrial Mammals* and Marnell, F., Looney, D. & Lawton, C. (2019) *Ireland Red List No. 12: Terrestrial Mammals*.

Birds from Colhoun, K. & Cummins, S. (2013) Birds of Conservation Concern in Ireland 2014-2019. *Irish Birds* 9:523-544.

Amphibians, reptiles and fish from King, J.L., Marnell, F., Kingston, N., Rosell, R., Boylan, P., Caffrey, J.M., Fitzpatrick, Ú., Gargan, P.G., Kelly, F.L., O'Grady, M.F., Poole, R., Roche, W.K. & Cassidy, D. (2011) *Ireland Red List No. 5: Amphibians, Reptiles & Freshwater Fish*.

Non-Marine Molluscs from Byrne, A., Moorkens, E.A., Anderson, R., Killeen, I.J. & Regan, E.C. (2009) *Ireland Red List No. 2 – Non-Marine Molluscs*.

Butterflies from Regan, E.C., Nelson, B., Aldwell, B., Bertrand, C., Bond, K., Harding, J., Nash, D., Nixon, D., & Wilson, C.J. (2010) *Ireland Red List No. 4 – Butterflies*.

Moths from Allen, D., O'Donnell, M., Nelson, B., Tyner, A., Bond, K.G.M., Bryant, T., Crory, A., Mellon, C., O'Boyle, J., O'Donnell, E., Rolston, T., Sheppard, R., Strickland, P., Fitzpatrick, U., & Regan, E. (2016) *Ireland Red List No. 9: Macro-moths (Lepidoptera)*.

Damselflies and dragonflies from Nelson, B., Ronayne, C. & Thompson, R. (2011) *Ireland Red List No.6: Damselflies & Dragonflies (Odonata)*.

Water beetles from Foster, G. N., Nelson, B. H. & O Connor, Á. (2009) *Ireland Red List No. 1 – Water beetles*.

Common Name/ Scientific Name	Legal Status	Red List Status	Source
Birds			
Barn owl <i>Tyto alba</i>	WA	Red	NBDC online database record
Black-headed gull <i>Larus ridibundus</i>	WA	Red	NBDC online database record
Curlew <i>Numenius arquata</i>	BD_II (II), WA	Red	NBDC online database record
Dunlin <i>Calidris alpina</i>	BD_I	Red	NBDC online database record
Golden plover <i>Pluvialis apricaria</i>	BD_I, II (II), III (III), WA	Red	NBDC online database record
Goldeneye <i>Bucephala clangula</i>	BD_II (II), WA	Red	NBDC online database record
Herring gull <i>Larus argentatus</i>	WA	Red	NBDC online database record
Lapwing <i>Vanellus vanellus</i>	BD_II (II), WA	Red	NBDC online database record
Pochard <i>Aythya ferina</i>	BD_II (I), III (II), WA	Red	NBDC online database record
Redshank <i>Tringa totanus</i>	WA	Red	NBDC online database record
Shoveler <i>Anas clypeata</i>	BD_II (I), III (III), WA	Red	NBDC online database record
Tufted duck <i>Aythya fuligula</i>	BD_II (I), III (II), WA	Red	NBDC online database record
Twite <i>Carduelis flavirostris</i>	WA	Red	NBDC online database record
Wigeon <i>Anas penelope</i>	BD_II (I), III (II), WA	Red	NBDC online database record
Woodcock <i>Scolopax rusticola</i>	BD_II (I), III (III), WA	Red	NBDC online database record
Yellowhammer <i>Emberiza citrinella</i>	WA	Red	NBDC online database record
Arctic tern <i>Sterna paradisaea</i>	BD_I, WA	Amber	NBDC online database record
Bar-tailed godwit <i>Limosa lapponica</i>	BD_I, WA	Amber	NBDC online database record
Common tern <i>Sterna hirundo</i>	BD_I, WA	Amber	NBDC online database record

Great northern diver <i>Gavia immer</i>	BD_I, WA	Amber	NBDC online database record
Hen harrier <i>Circus cyaneus</i>	BD_I, WA	Amber	NBDC online database record
Kestrel <i>Falco tinnunculus</i>	BD_I, WA	Amber	NBDC online database record
Kingfisher <i>Alcedo atthis</i>	BD_I, WA	Amber	NBDC online database record
Little egret <i>Egretta garzetta</i>	BD_I, WA	Green	NBDC online database record
Little tern <i>Sterna albifrons</i>	BD_I, WA	Amber	NBDC online database record
Mediterranean gull <i>Larus melanocephalus</i>	BD_I, WA	Amber	NBDC online database record
Peregrine <i>Falco peregrinus</i>	BD_I, WA	Green	NBDC online database record
Red-throated diver <i>Gavia stellata</i>	BD_I, WA	Amber	NBDC online database record
Invertebrates			
Marsh fritillary butterfly <i>Euphydryas aurinia</i>	HD_II	Vulnerable	NBDC online database record
Wall butterfly <i>Lasiommata megera</i>	none	Endangered	NBDC online database record
Dark green fritillary butterfly <i>Argynnis aglaja</i>	none	Vulnerable	NBDC online database record
Grayling butterfly <i>Hipparchia semele</i>	none	Near threatened	NBDC online database record
Small heath butterfly <i>Coenonympha pamphilus</i>	none	Near threatened	NBDC online database record
Scarce Blue-tailed damselfly <i>Ischnura pumilio</i>	none	Vulnerable	NBDC online database record
Barbut's Cuckoo bee <i>Bombus (Psithyrus) barbutellus</i>	None	Endangered	NBDC online database record
Great yellow bumble bee <i>Bombus distinguendus</i>	None	Endangered	NBDC online database record
Hill Cuckoo bee <i>Bombus rupestris</i>	None	Endangered	NBDC online database record
Large red tailed bumble bee <i>Bombus lapidarius</i>	None	Near threatened	NBDC online database record
Moss carder-bee <i>Bombus muscorum</i>	None	Near threatened	NBDC online database record

Common shelled slug <i>Testacella haliotidea</i>	None	Vulnerable	NBDC online database record
Ear pond snail <i>Radix auricularia</i>	None	Vulnerable	NBDC online database record
Globular pea mussel <i>Pisidium hibernicum</i>	None	Near threatened	NBDC online database record
Glutinous snail <i>Myxas glutinosa</i>	None	Endangered	NBDC online database record
Heath snail <i>Helicella itala</i>	None	Vulnerable	NBDC online database record
Lake orb mussel <i>Musculium lacustre</i>	None	Vulnerable	NBDC online database record
Mauge's shelled slug <i>Testacella maugei</i>	None	Near threatened	NBDC online database record
Mollusc <i>Pisidium pseudosphaerium</i>	None	Endangered	NBDC online database record
Mollusc <i>Pisidium pulchellum</i>	None	Endangered	NBDC online database record
Silky snail <i>Ashfordia granulata</i>	None	Near threatened	NBDC online database record
Smooth grass snail <i>Vallonia pulchella</i>	None	Vulnerable	NBDC online database record
Smooth ramshorn <i>Gyraulus laevis</i>	None	Endangered	NBDC online database record
Swan mussel <i>Anodonta cygnea</i>	None	Vulnerable	NBDC online database record

Table 2: Records of protected, red-listed or notable fauna from the desktop study in the vicinity of the study area.

APPENDIX 6.3 EXAMPLES OF VALUING IMPORTANT ECOLOGICAL FEATURES

International Importance:
<ul style="list-style-type: none"> • 'European Site' including Special Area of Conservation (SAC), Site of Community Importance (SCI), Special Protection Area (SPA) or proposed Special Area of Conservation. • Proposed Special Protection Area (pSPA). • Site that fulfils the criteria for designation as a 'European Site' (see Annex III of the Habitats Directive, as amended). • Features essential to maintaining the coherence of the Natura 2000 Network.⁵ • Site containing 'best examples' of the habitat types listed in Annex I of the Habitats Directive. • Resident or regularly occurring populations (assessed to be important at the national level)⁶ of the following: - <ul style="list-style-type: none"> – Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; and/or – Species of animal and plants listed in Annex II and/or IV of the Habitats Directive. • Ramsar Site (Convention on Wetlands of International Importance Especially Waterfowl Habitat 1971). • World Heritage Site (Convention for the Protection of World Cultural & Natural Heritage, 1972). • Biosphere Reserve (UNESCO Man & The Biosphere Programme). • Site hosting significant species populations under the Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals, 1979). • Site hosting significant populations under the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats, 1979). • Biogenetic Reserve under the Council of Europe. • European Diploma Site under the Council of Europe. • Salmonid water designated pursuant to the European Communities (Quality of Salmonid Waters) Regulations, 1988, (S.I. No. 1988).⁷
National Importance:
<ul style="list-style-type: none"> • Site designated or proposed as a Natural Heritage Area (NHA). • Statutory Nature Reserve. • Refuge for Fauna and Flora protected under the Wildlife Acts. • National Park. • Undesignated site fulfilling the criteria for designation as a Natural Heritage Area (NHA); Statutory Nature Reserve; Refuge for Fauna and Flora protected under the Wildlife Act; and/or a National Park.

⁵ See Articles 3 and 10 of the Habitats Directive

⁶ It is suggested that, in general, 1% of the national population of such species qualifies as an internationally important population. However, a smaller population may qualify as internationally important where the population forms a critical part of a wider population or the species is at a critical phase of its life cycle.

⁷ Note that such waters are designated based on these waters' capabilities of supporting salmon (*Salmo salar*), trout (*Salmo trutta*), char (*Salvelinus*) and whitefish (*Coregonus*)

- Resident or regularly occurring populations (assessed to be important at the national level)⁸ of the following: -
 - Species protected under the Wildlife Acts; and / or
 - Species listed on the relevant Red Data list.
- Site containing 'viable areas'⁹ of the habitat types listed in Annex I of the Habitats Directive.

County Importance:

- Area of Special Amenity.¹⁰
- Area subject to a Tree Preservation Order.
- Area of High Amenity, or equivalent, designated under the County Development Plan.
- Resident or regularly occurring populations (assessed to be important at the County level)¹¹ of the following: -
 - Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive.
 - Species of animal and plants listed in Annex II and/or IV of the Habitats Directive.
 - Species protected under the Wildlife Acts; and/or
 - Species listed on the relevant Red Data list.
- Site containing area or areas of the habitat types listed in Annex I of the Habitats Directive that do not fulfil the criteria for valuation as of International or National importance.
- County important populations of species, or viable areas of semi-natural habitats or natural heritage features identified in the National or Local Biodiversity Action Plan, if this has been prepared.
- Sites containing semi-natural habitat types with high biodiversity in a county context and a high degree of naturalness, or populations of species that are uncommon within the county.
- Sites containing habitats and species that are rare or are undergoing a decline in quality or extent at a national level.

Local Importance (higher value):

- Locally important populations of priority species or habitats or natural heritage features identified in the Local BAP, if this has been prepared.

⁸ It is suggested that, in general, 1% of the national population of such species qualifies as a nationally important population. However, a smaller population may qualify as nationally important where the population forms a critical part of a wider population or the species is at a critical phase of its life cycle.

⁹ A 'viable area' is defined as an area of a habitat that, given the particular characteristics of that habitat, was of a sufficient size and shape, such that its integrity (in terms of species composition, and ecological processes and function) would be maintained in the face of stochastic change (for example, as a result of climatic variation).

¹⁰ It should be noted that whilst areas such as Areas of Special Amenity, areas subject to a Tree Preservation Order and Areas of High Amenity are often designated on the basis of their ecological value, they may also be designated for other reasons, such as their amenity or recreational value. Therefore, it should not be automatically assumed that such sites are of County importance from an ecological perspective.

¹¹ It is suggested that, in general, 1% of the County population of such species qualifies as a County important population. However, a smaller population may qualify as County important where the population forms a critical part of a wider population or the species is at a critical phase of its life cycle.



- Resident or regularly occurring populations (assessed to be important at the Local level)¹² of the following: -
 - Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive.
 - Species of animal and plants listed in Annex II and/or IV of the Habitats Directive.
 - Species protected under the Wildlife Acts; and/or
 - Species listed on the relevant Red Data list.
- Sites containing semi-natural habitat types with high biodiversity in a local context and a high degree of naturalness, or populations of species that are uncommon in the locality.
- Sites or features containing common or lower value habitats, including naturalised species that are nevertheless essential in maintaining links and ecological corridors between features of higher ecological value.



Local Importance (lower value):



- Sites containing small areas of semi-natural habitat that are of some local importance for wildlife.
- Sites or features containing non-native species that are of some importance in maintaining habitat links.



¹² It is suggested that, in general, 1% of the local population of such species qualifies as a locally important population. However, a smaller population may qualify as locally important where the population forms a critical part of a wider population or the species is at a critical phase of its life cycle.

APPENDIX 6.4 POTENTIAL ROOST FEATURE (PRF) PHOTOS FROM BUILDING INSPECTIONS

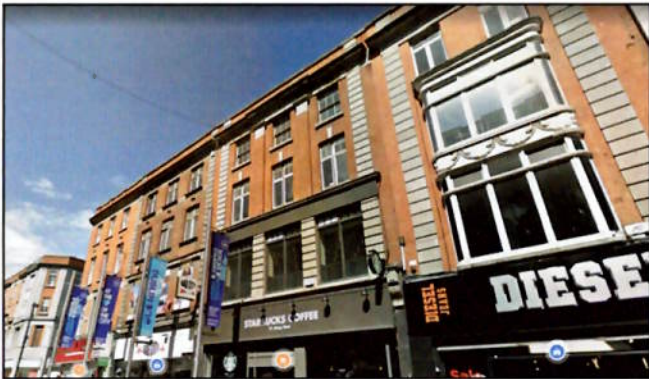
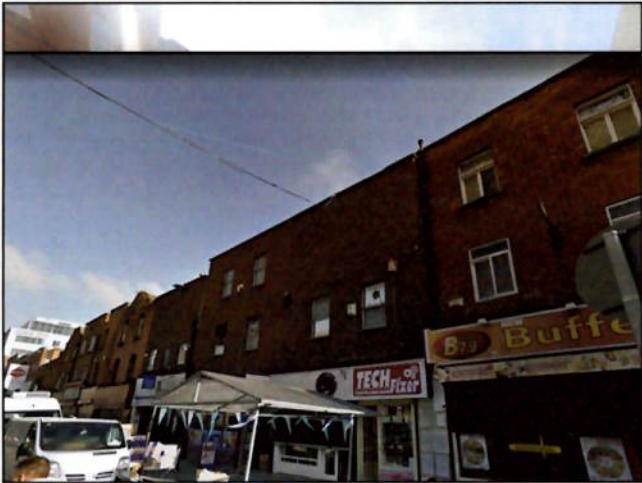
Building	PRFs	PRF Suitability	Photograph
Building 4 (10-11 Moore Lane)	Flat roofed building, with gaps on external wall between brick work and roof, and access into building above sliding door at entrance.	Low	 

Building	PRFs	PRF Suitability	Photograph
Building 5 (6-8 Moore Lane)	Pitched roof building with open grated buildings allowing access within, also gaps between brickwork on external walls.	Low	 

Building	PRFs	PRF Suitability	Photograph
Building 6 (10 Henry Place)	Pitched roof building with attic space, PRFs on external walls between brickwork and soffits where they join the external walls.	Low	 

Building	PRFs	PRF Suitability	Photograph
Building 7 (37 Henry Street)	No attic space within this building (flat roof), but PRFs on external walls and above window lintels .	Low	 

Building	PRFs	PRF Suitability	Photograph
----------	------	-----------------	------------

Building	PRFs	PRF Suitability	Photograph
Henry Street	Flat roofed, well-sealed retail units, no surrounding vegetation suitable for commuting/foraging.	Negligible	
Moore Street	Red brick flat-roofed buildings with very little gaps or crevices suitable for roosting bats. No surrounding vegetation for commuting/foraging bats.	Negligible	

Building	PRFs	PRF Suitability	Photograph
Moore Lane	Mostly dilapidated, run-down buildings, some with low potential as described above. Largely unsuitable for bats with no PRFs, or too exposed to be suitable for roosting bats. No surrounding vegetation for commuting/foraging.	Negligible	