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## Appendix B. Biodiversity

- B.1. 'Preliminary Ecological Appraisal (PEA): Haggardstown, Blackrock, Co. Louth' Corvus Environmental Consulting Ltd.; COR17116/pea final v.2 (March 2019)
- B.2. 'A Bat, Badger and Invasive Species Assessment of Blackrock, County Louth' Brian Keeley B.Sc. (Hons) in Zool. MCIEEM (August 2018)
- B.3. 'Natura Impact Statement (NIS): Haggardstown, Blackrock, Co. Louth' Corvus Environmental Consulting Ltd.; COR1716/nis final v.6 (March 2019)



# Preliminary Ecological Appraisal (PEA)

## Haggardstown, Blackrock, Co. Louth

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#### 1. INTRODUCTION

1.1 Corvus Consulting were commissioned to undertake ecological surveys and assessments for lands proposed for development at Haggardstown, Blackrock, Co. Louth.

#### Remit & Scope

- 1.2 Ecological assessment is required to inform an application for the comprehensive development of the site. Site surveys and assessments have been undertaken to understand the likely effects of the proposed development on ecological resources within, around and ecologically connected to the site. This document sets out the methodology and results of Preliminary Ecological Appraisal (PEA) along with ecological protection/mitigation measures and the further, detailed ecological surveys and assessments required for comprehensive Ecological Impact Assessment (EcIA).
- 1.3 A subsequent ecological survey report (bats, badgers and invasive species) and a Natura Impact Statement (NIS) are provided under separate cover.
- 1.4 This report has been updated as of March 2019 to take account of lands outside the site boundary required to install site drainage and discharge and to incorporate the results of supplementary/verification walkover surveys (October & December 2018, January & February 2019) completed prior to submission and on receipt of final design.

#### The Site and Immediate Surroundings

1.5 This is a large (c. 18 ha) greenfield site situated to the south of Dundalk and the north of Blackrock, Co. Louth [Figures 1a & 1b]. The site presents as rural and is in agricultural use, but the wider setting is within a predominantly developed area with low density housing to the immediate north and south-east and Dundalk Golf Club to the immediate west. Moving further away, the site, along with the golf course and adjoining agricultural areas, are entirely enclosed to the north, south and west by the extensive urban area of Dundalk/Blackrock and associated main roads and industrial/commercial areas [Figure 1b].



Plate 1.1: Typical View of the Site – open, exposed and elevated lands, dominated by large arable fields; winter cover planting on cultivated areas on day of inspection [February 2018]





Figure 1a: Site Location & Extent in Local Context



Site Boundary

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Figure 1b: Site Location in Wider Local Context







Plate 1.2: Typical View of the Site – large, open arable fields; peripheral areas in rough grassland; tree lines and hedgerows on external boundaries [February 2018]



Plate 1.3: Typical View of the Site – large, open arable fields; peripheral areas in rough grassland; tree lines and hedgerows on external boundaries [February 2018]



Plate 1.4: Typical View of the Site – proposed route for the main site access to the R172 Blackrock Road [February 2018]





Plate 1.5: Typical View of the Site – proposed route for the main discharge channel, along the R172 Blackrock Road to the north of the site [December 2018]



Plate 1.6: Typical View of the Site – proposed route for the main discharge channel, to the north of the R172 Blackrock Road site [December 2018]

- 1.6 The R172 Blackrock Road, a coastal thoroughfare which runs along the edge of Dundalk Bay, lies to the east. The site includes a strip of land alongside the R172 to accommodate the main discharge channel for the site drainage network.
- 1.7 The site is dominated by large agricultural (arable) fields, in cereal production or winter cover crop at various times during the assessment period, with marginal and peripheral areas of rough, semi-improved grassland. External site boundaries are marked, for the most part, by hedgerows variously, managed thorn hedges, non-native garden hedgerows and lines of mature trees or screen planting. Some defunct and patchy sections of hedgerow remain within the site, marking former internal field divisions. The route for the main site access runs to the east from the main site over an area of wet and rough marshy grassland and scrub to join with the R172 Blackrock Road. The site includes a strip of land alongside the R172 to accommodate the main discharge channel for the site drainage network. The site contains no built structures and, away from the site boundaries, no mature trees [Plates 1.1 1.6].
- 1.8 The interior of the site displays very little biologically or structurally diverse habitat and is ecologically

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uninteresting. The arable fields contain some sections of defunct hedgerow and small, isolated, rocky areas which remain uncultivated, with rough grassland and loose scrub cover.

1.9 The site boundaries, and in particular the proposed route for the main access to the site, do show some semi-natural habitat in the form of hedgerows, mature trees, scrub and marshy grassland but functional ecological connectivity at a landscape scale is limited to the local, enclosed area of agricultural and recreational lands [Figure 1b].

#### The Proposed Development

1.10 The site is proposed for comprehensive, sustainable housing development, to provide a total of 485 residential units of various types (apartments, duplexes, town houses, terraced, semi-detached and detached houses), a crèche (677 sqm) and includes access and egress points, pedestrian and cyclist facilities, carparking, storm water SuDS and attenuation as required, foul and potable water services and all associated ancillary works and infrastructure, open space provision and landscaping.

#### Personnel

- 1.11 Site surveys, inspections and analysis have been conducted and reported by Mr. Gareth Grindle B.Sc. (Hons.) M.Sc. L.L.M. M.I.Env.Sc. M.C.I.E.E.M.
- 1.12 Mr Grindle a Director of Corvus Environmental Consulting Ltd. He holds an Honours degree in Environmental Science (B.Sc. (Hons.), University of Stirling, 2000), a Master of Science in Environmental Change (M.Sc., King's College, London 2001) and a Master of Laws in Environmental Law (L.L.M., Queen's University, Belfast 2014). He has over 15 years' professional experience in the public, private and voluntary sectors and is a full member of both the Chartered Institute of Ecology & Environmental Management (M.C.I.E.E.M.) and the Institution of Environmental Sciences (M.I.Env.Sc.), organisations requiring peer-review for membership and a high standard of professional conduct.

#### **Sources of Information**

- 1.13 Data and information was sourced directly from site surveys conducted by the author in February, October & December 2018, drawings prepared on behalf of the client, and the following public sources:
  - National Parks & Wildlife Service (NPWS): www.npws.ie
  - National Biodiversity Data Centre (NBDC): www.biodiversityireland.ie

#### **Legislative Context**

- 1.14 The principal national legislation providing for nature conservation and the protection of biodiversity and wildlife in Ireland is the Wildlife Act 1976, updated by the Wildlife (Amendment) Act 2000 and the European Union (Natural Habitats) Regulations 1997, updated and amended twice in 1998 and 2005, and subsequently revised and consolidated as the European Communities (Birds and Natural Habitats) Regulations 2011.
- 1.15 The early legislation provided a solid basis for species protection and pre-empted many requirements of later EU Directives, but habitat and site protection measures were relatively weak. Following the



ratification of various international agreements, including the Bonn and Berne Conventions,<sup>1</sup> international, intergovernmental treaties concerned with the conservation of wildlife and habitats on a global scale, the European Community adopted Council Directive 79/409/EEC on the conservation of wild birds (*'the Wild Birds Directive'* now codified as 2009/147/EC) and Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (*'the Habitats Directive'*), now transposed into Irish law, as is set out above. These Directives provide *inter alia* for the protection of species, habitats of species and for the establishment of a European network of protected areas known as Natura 2000.

- 1.16 The Wild Birds Directive details special measures to conserve wild birds, with an overall purpose of providing for the protection, management and control of all naturally occurring species, and requires the identification of Special Protection Areas (SPA). The Habitats Directive covers habitats and non-avian species of fauna which are of nature conservation importance and in danger of disappearance, and for which the EC has particular responsibility in view of the proportion of their global range. It requires the identification and protection of Special Areas of Conservation (SAC) for Annex I habitats and Annex II species and provides for the establishment and protection of the Natura 2000 network of designated sites (SPAs and SACs) and includes a presumption in favour of conserving Annex I habitats and Annex II species wherever they occur (i.e. protection is not limited to specifically designated SACs). Articles 12 to 16 establish a regime of strict protection for the species of flora and fauna listed on Annex IV (European Protected Species), wherever they occur, making it an offence:
  - deliberately to capture, injure or kill a wild animal of a European protected species;
  - deliberately to disturb such an animal while it is occupying a structure or place which it uses for shelter or protection;
  - deliberately to disturb such an animal in such a way as to be likely to—
    - affect the local distribution or abundance of the species to which it belongs;
    - o impair its ability to survive, breed or reproduce, or rear or care for its young; or
    - o impair its ability to hibernate or migrate;
    - deliberately to take or destroy the eggs of such an animal;
  - deliberately to obstruct access to a breeding site or resting place of such an animal; or
  - to damage or destroy a breeding site or resting place of such an animal.
- 1.17 Several species native to Ireland, including bats and otters, are included in Annex IV and are therefore subject to the regime of strict protection. European Commission guidance<sup>2</sup> has been produced, intended to ensure a common understanding of the respective provisions among national and regional authorities, conservation bodies and other structures responsible for or involved in the implementation of the Habitats Directive.
- 1.18 The Wildlife Act 1976 (as amended) establishes protection for certain species of wild flora and fauna identified on Schedules 3, 4 & 5 and provides for Natural Heritage Areas (NHA), the primary national designation for the protection of wildlife and natural habitats. A range of species including badger, otter, pine marten, red squirrel, hedgehog, stoat, pygmy shrew, hares, bats, deer, lizards, newts, frogs and toads receive protection. The means by which this protection is implemented in practice varies from species to species and by situation depending on the specific requirements of species ecology. Wildlife licenses are required in many situations. The Wildlife Act also provides for genera and specific levels of protection for

<sup>&</sup>lt;sup>1</sup> The Convention on the Conservation of Migratory Species of Wild Animals (adopted in 1979; also known as CMS or Bonn Convention); The Convention on the Conservation of European Wildlife and Natural Habitats (adopted in 1979; the Bern Convention)

<sup>&</sup>lt;sup>2</sup> European Commission 'Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC' (EC; February 2007)

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wild birds and fish.

1.19 Other statutory instruments, such as the Planning and Development Act 2000, as amended; the Flora (Protection) Order 2015; and EU Regulation 1143/2014 on Invasive Alien Species are also relevant.



#### 2. PRELIMINARY ECOLOGICAL ASSESSMENT (PEA)

2.1 Preliminary Ecological Assessment (PEA) followed the methodology set out by CIEEM.<sup>3</sup> PEA is intended to identify ecological resources within and around the site; identify ecological constraints and opportunities; identify ecological protection and mitigation measures likely to be required; and determine the extent and scope of any further taxa-specific surveys that may be required to inform an Ecological Impact Assessment (EcIA).

#### **Statutory & Non-Statutory Designated Sites**

- 2.2 The site is on the western shore of Dundalk Bay, which is designated under international statute/convention as SAC, SPA and Ramsar, and under national legislation as pNHA [Figures 2a, 2b & 2c]. The bulk of the site is set back from the shore, on elevated ground, at least 250 m from the designated areas but the main access joins with the R172 Blackrock Road, which follows the coast to the east of the site, and a strip of land alongside the R172 to the north is also required to accommodate the main drainage discharge channel.
- 2.3 The site does not contain any significant watercourses or stream channels. The site drains naturally, via groundwater and surface flow, to Dundalk Bay. The proposed main access road traverses an area of lower-lying, wet and marshy ground between the main part of the site and the Blackrock Road. The proposed main discharge utilises an existing channel to the north-east of the site.



<sup>3</sup> 'Guidelines for Preliminary Ecological Appraisal' (Chartered Institute of Ecology and Environmental Management (CIEEM), 2<sup>nd</sup> Edition, 2017, Winchester)

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Figure 2b: Special Area of Conservation - Dundalk Bay SAC



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Site Boundary



2.4 The site is therefore hydrologically and ecologically connected to the designated areas of Dundalk Bay, in so far as adverse impacts on the SPA/SAC/Ramsar/pNHA may arise. A Natura Impact Statement (NIS) is provided under separate cover.

#### Habitats & Flora

- 2.5 The site was assessed for broad habitat type and extent by Mr Grindle on 26<sup>th</sup> February 2018, with verification walkover surveys completed in October and December 2018 and January and February 2019. Field assessment followed the standard JNCC Phase 1 Habitat Survey methodology, widely accepted for determining existing site conditions and assessing the impact of development.
- 2.6 The site was inspected and classified into broad habitat types, with a subsequent assessment of habitat extent and vegetation condition. Habitat types were then classified according to the JNCC methodology, and extent and distribution mapped [Figure 3; Plates 2.1 2.13]. Field survey results were augmented with the examination of aerial and site photographs. The additional strip of land along the R172 required for the main discharge channel has been surveyed and classified, as below, but is not mapped.
- 2.7 Due to the time of year at which the surveys were conducted it was not possible to examine species composition and condition in great detail however as the site is dominated by highly modified, homogeneous habitat types of relatively low nature conservation value this has not affected the overall assessment.

#### Habitat Type, Distribution & Extent (JNCC Phase 1)

#### J1.1 Arable

2.8 The site is dominated by large, open fields which have recently been in arable production and were covered with a low, stubbly sward of winter cover on the day of inspection [Plates 2.1, 2.3, 2.7, 2.8 & 2.9].

#### A1.3.2 Woodland – plantation, mixed

- 2.9 Lands to the immediate east of the site include small stands of mature, mixed plantation woodland associated with old farm buildings and the large, detached dwellings around the junction of Blackrock Road and Bóthar Maol. Woodland abuts the east of the site to the north of the proposed access road, where it presents as a mature tree line and scrubby site boundary; a small section of woodland is within the north-eastern corner of the site [Plates 2.2 & 2.11]. Species noted:
  - Beech Fagus sylvatica
  - Ash Fraxinus excelsior
  - Hawthorn Crataegus monogyna
  - Sycamore Acer pseudoplatanus
  - Pine Pinus spp.
  - Hazel Corylus avellana
  - Willow Salix spp.
  - Bramble *Rubus fruticosus agg*.
  - Gorse Ulex europaeus
  - Ivy Hedera helix

#### B6 Semi-Improved Grassland (poor)

2.10 Peripheral and marginal areas of the site, such as the proposed main access route, field margins, an embankment on the eastern boundary and several uncultivated, rocky outcrops within the arable fields, have developed a dominant sward of rough and rank species-poor grassland, with some scrub [Plates 2.1,



#### 2.2, 2.4, 2.7 & 2.9] Species noted:

- Perennial ryegrass Lolium perenne
- Annual meadowgrass Poa annua
- Yorkshire fog Holcus lanatus
- Rough meadow-grass Poa trivialis
- Cock's foot Dactylis glomerata
- Couch grass Elytrigia repens
- Sheep's Sorrel Rumex acetosella
- Soft rush Juncus effuses
- Clover Trifolium spp.
- Dandelion Taraxacum officinale
- Dock Rumex spp.
- Thistle Cirsium spp.
- Rosebay willowherb Chamerion angustifolium
- Common nettle Urtica dioica

#### A2.1 Scrub – dense

- 2.11 The embankment on the eastern boundary, between the arable lands and the mixed woodland outside the site to the east, has developed a covering of dense scrub in places. Other small stands of dense scrub (most are too small to be mapped) are present where boundary hedgerows have become overgrown and have spread into the site. [Plates 2.1 & 2.2]. Species noted:
  - Bramble *Rubus fruticosus agg*.
  - Hawthorn Crataegus monogyna
  - Ash Fraxinus excelsior
  - Willow Salix spp.
  - Sycamore Acer pseudoplatanus
  - Gorse Ulex europaeus
  - Ivy Hedera helix
  - Common nettle Urtica dioica
  - Rosebay willow-herb Chamerion angustifolium
  - Hedge bindweed Calystegia sepium
  - Cleavers Gallium aparine
  - Common hogweed Heracleum sphondylium
  - Thistle Cirsium spp.

#### A2.2 Scrub – scattered, gorse-dominated

2.12 Most of the small, raised, uncultivated and rocky areas within the arable fields are dominated by rank grassland with occasional gorse bushes, but a couple are dominated by loose gorse scrub. The route of the proposed access track, although dominated by rough grassland and marshy vegetation, shows significant encroachment of scattered beech saplings and gorse bushes [Plates 2.1, 2.4, 2.5, 2.6 & 2.8].

#### F1 Swamp

- 2.13 The lower-lying lands in the eastern extent of the site, where the end section of the proposed main access route meets the main Blackrock Road, were very wet on the day of inspection and despite significant intrusive scrub colonisation, presented as marsh or swamp and displayed a range of sedges, rushes and other typical swamp/wetland flora [Plates 2.6 & 2.10], including:
  - Common bulrush Typha latifolia
  - Reed Canary-grass Phalaris arundinacea



- Greater Tussock-sedge Carex paniculata
- Bottle sedge Carex rostrata
- Glaucous sedge Carex flacca
- Soft rush Juncus effuses
- Bramble *Rubus fruticosus agg.*
- Willow Salix spp.
- Gorse Ulex europaeus
- Yorkshire fog Holcus lanatus
- Rough meadow-grass Poa trivialis
- Couch grass Elytrigia repens
- Rosebay willowherb Chamerion angustifolium
- 2.14 The proposed main drainage culvert, to the north-east of the site, discharges to an existing channel within an area of marshy grassland to the north of the R172 Blackrock Road [Plate 2.13].



#### J2 Hedgerows

- 2.15 External site boundaries are, for the greater part, marked by hedgerows. These vary from species-poor, non-native coniferous screen planting and ornamental garden hedges on the northern and western boundaries, to native, species-poor tree lines (A1.3.2) along sections of the eastern boundary. A defunct, thorn-dominated but species-rich hedgerow (J2.2.1) divides the site internally, with a further remnant section also present in the south-east; other similar hedgerows are present just beyond the southern boundary [Plates 2.6 & 2.7]. Species noted:
  - Hawthorn Crataegus monogyna

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- Ash Fraxinus excelsior
- Willow Salix spp.
- Gorse Ulex europaeus
- Bramble *Rubus fruticosus agg.*
- Beech Fagus sylvatica
- Common nettle Urtica dioica
- Rosebay willow-herb Chamerion angustifolium
- Hedge bindweed Calystegia sepium
- Cleavers Gallium aparine
- Common hogweed Heracleum sphondylium
- Pine Pinus spp.
- Cypress Cupressus spp.
- 2.16 A managed, species-poor (hawthorn) and defunct field boundary hedgerow separates the road from an improved pasture field along the strip of land required for the main discharge channel [Plate 2.12].

#### J4 Bare Ground

2.17 The site includes short sections of adjoining public highways [Plates 2.5 & 2.13].

#### Protected & Valuable Natural/Semi-Natural Habitats

- 2.18 No habitat types resembling those identified on Annex I of the Habitats Directive were identified within the site or adjoining areas.
- 2.19 The site is dominated by agricultural fields which have been in arable production and are of very limited biodiversity interest. Similarly, the coniferous screen planting and ornamental garden hedges on the northern and western boundaries of little habitat importance.
- 2.20 The native hedgerows on the eastern boundary, the remaining sections within the site and those just outside the site to the south; and the mixed woodland to the east of the site and the small section in the north-eastern corner are of some inherent ecological value, particularly in the context of an otherwise sterile arable site.
- 2.21 The small section of marshy/swampy grassland to the east of the site is of some biodiversity and habitat interest. This is the only area of notable semi-natural habitat within the site which is likely to be lost or compromised by site development. However, this area appears to have been hydrologically compromised to a certain degree by adjacent development and land improvement and has experienced significant scrub encroachment. The construction of the main site access road through the scrubby and marshy area will result in some loss of semi-natural habitat which will be compensated, to some degree, by internal and boundary landscape planting and the creation of new pond/wetland areas in the north-eastern section of the site.
- 2.22 Site layout drawings indicate that the mature trees and hedgerows on the site boundaries, and the small section of woodland in the north-eastern corner, are to be retained and enhanced with additional planting where necessary. Sections of the internal hedgerow are to be retained and incorporated into an extensive open landscaped area. Substantial internal landscape planting is proposed. The proposed construction footprint is largely confined to the arable areas which dominate the interior of the site, with proposed new boundary and internal landscape planting to compensate for minor losses of hedgerows to site accesses etc.

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Plate 2.1: J1.1 Arable with B6 Semi-Improved Grassland (poor) and A2.1 Scrub (dense) on eastern embankment (left of frame); also, B6 Semi-Improved Grassland (poor) on raised, rocky patch (right of frame) [February 2018]



Plate 2.2: A1.3.2 Woodland (mixed, plantation) just beyond site boundary to east; B6 Semi-Improved Grassland (poor) and A2.1 Scrub (dense) on boundary embankment [February 2018]



Plate 2.3: J1.1 Arable in the southern section [February 2018]





Plate 2.4: B6 Semi-Improved Grassland (poor) & A2.2 Scrub (scattered, gorse-dominated) on the proposed access route [February 2018]



Plate 2.5: A2.2 Scrub (scattered, gorse-dominated) on the proposed access route, joining with J4 Bare Ground, the R172 Blackrock Road [December 2018]



Plate 2.6: F1 Swamp & A2.2 Scrub (scattered, gorse-dominated) on the proposed access route [February 2018]





Plate 2.7: B6 Semi-Improved Grassland (poor) on one of the rocky patches with J1.1 Arable, J2.1.2 Hedgerow (intact, species-poor) and J2.3.2 Hedgerow (species-poor, with trees) beyond [February 2018]



**Plate 2.8:** *J1.1 Arable, J2.1.2 Hedgerow (intact, species-poor)* and *J2.3.2 Hedgerow (species-poor, with trees)* in the north-western section with *A2.2 Scrub (scattered, gorse-dominated)* on one of the rocky patches [February 2018]



Plate 2.9: J1.1 Arable with B6 Semi-Improved Grassland (poor) on one of the rocky patches [February 2018]





Plate 2.10: F1 Swamp & A2.2 Scrub (scattered, gorse-dominated) on the proposed access route [February 2018]



Plate 2.11: A1.3.2 Woodland (mixed, plantation) on the site boundary in the north-eastern corner of the site; J1.1 Arable in winter cover [December 2018]



Plate 2.12: J2.1.2 Hedgerow (intact, species-poor) & J4 Bare Ground – proposed route for the for the main discharge channel [December 2018]





Plate 2.13: F1 Swamp – the main site drainage culvert discharges to an existing drainage channel to the north of the R172 Blackrock Road [December 2018]

#### Protected Flora

2.23 No species of protected flora (Flora Protection Order 2015) were found during the February 2018 surveys.

#### Invasive Alien Flora

2.24 No species of invasive alien flora (Schedule 3, the European Communities (Birds and Natural Habitats) Regulations 2011; EU Regulation 1143/2014 on Invasive Alien Species) were found within the site. An additional survey for invasive species was undertaken in the summer of 2018 (reported under separate cover) which confirmed these results.

#### **Protected & Notable Fauna**

- 2.25 Background research, habitat suitability assessments and field surveys of the site were undertaken by Mr Grindle in February 2018, with supplementary and verification surveys undertaken in October & December 2018 and January and February 2019. Detailed surveys for bats and badgers were completed in the summer of 2018 (reported under separate cover).
- 2.26 Broad habitat suitability assessment shows that the site and surrounding areas are suitable for and likely to support local populations of bats, an assemblage of rural, and possibly occasional wetland, breeding and nesting wild birds and terrestrial mammals such as badgers, hedgehogs, stoats, hares and possibly otters; habitat is generally unsuitable for overwintering birds and herpetofauna.
- 2.27 The NBDC records search confirms that several species of bats, badgers, red squirrels, otters, Irish hares, pine martens, hedgehogs and frogs have been recorded in the 10 km reporting grid square in the last decade, with Irish hare recorded within 2 km in 2011, likely within the site or the immediately surrounding area.

<u>Bats</u>

2.28 Background research on bat activity in the area, and habitat/roosting suitability assessments of the site were undertaken by Mr Grindle in February 2018.



#### 2.29 The NBDC records search returned the following information [Table 2.1]:

#### Table 2.1: Historical Species Records (Bats - NBDC)

Common Name	Scientific Name	Information Provided (most recent)
Brown long-eared bat	Plecotus auritus	3 no. within 10 km grid square (2006)
Brown long-eared bat	Plecotus auritus	1 no. within 2 km grid square (2004)
Soprano pipistrelle	Pipistrellus pygmaeus	8 no. within 10 km grid square (2009)
Soprano pipistrelle	Pipistrellus pygmaeus	1 no. within 2 km grid square (2004)
Daubenton's bat	Myotis daubentonii	84 no. within 10 km grid square (2014)
Pipistrelle	Pipistrellus pipistrellus s. l.	8 no. within 10 km grid square (2009)
Leisler's bat	Nyctalus leisleri	8 no. within 10 km grid square (2009)
Leisler's bat	Nyctalus leisleri	1 no. within 2 km grid square (2004)

2.30 Interrogation of the NBDC bat landscape resource yielded the following relative landscape importance records. As the sits site across two reporting grid squares, values are provided for the western and eastern sections:

#### Table 2.2: Bat Landscape Importance Records

Common Name	Scientific Name	Landscape Import	ance⁴ (west/east)
All Bats	Vespertilionidae spp.	34.11 [high]	13.78 [low]
Soprano pipistrelle	Pipistrellus pygmaeus	47 [very high]	25 [low]
Brown long-eared bat	Plecotus auritus	43 [high]	27 [low]
Common pipistrelle	Pipistrellus pipistrellus	49 [very high]	30 [low]
Lesser horseshoe bat	Rhinolophus hipposideros	0 [very low]	0 [very low]
Leisler's bat	Nyctalus leisleri	48 [very high]	17 [very low]
Whiskered bat	Myotis mystacinus	35 [high]	4 [very low]
Daubenton's bat	Myotis daubentonii	36 [high]	5 [very low]

<sup>&</sup>lt;sup>4</sup> The index ranges from 0 to 100 with 0 being least favourable and 100 most favourable for bats. Within the range of favourability presented for each species a 5-point range has been established which is translated here on a corresponding 5-point scale (very low – very high). It must be noted, however, that grid squares highlighted as less favourable may still have local areas of abundance.

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Nathusius' pipistrelle	Pipistrellus nathusii	8 [low]	2 [very low]
Natterer's bat	Myotis nattereri	41 [high]	14 [low]

- 2.31 The species records and relative landscape importance values returned indicate that terrestrial habitats in this area are of significant importance for several species. The lower landscape importance values returned for the eastern section are likely heavily influenced by the coastal and marine areas which dominate the reporting grid square; the much higher values returned for the western section are likely representative of the site as a whole.
- 2.32 However, the bulk of the site is open and exposed arable land, which is of limited utility to foraging and commuting bats. Activity is likely to be confined to the structurally diverse boundary vegetation, which also present some opportunities for roosting within mature trees and adjacent built structures.
- 2.33 Local populations of several species are certainly active in the area and are likely to make use of the site, for commuting and foraging and also possibly roosting.
- 2.34 As per site layout drawings, development is largely restricted to the open, central areas of the site, with all mature trees, hedgerows and scrub on the boundaries to be retained and enhanced with additional boundary and internal landscape planting. The strong and valuable features of the site and local landscape used by bats will persist post-development.
- 2.35 It is unlikely that site development in itself will adversely impact local populations as no useful commuting or foraging habitat and no actual or potential roost sites, will be degraded or lost to development.
- 2.36 However, increased artificial illumination can degrade the utility of natural and semi-natural habitats for commuting, foraging and roosting bats. The degree of impact varies according to species present. Lighting design should adopt general principles of minimising both the amount of lighting installed and the level of spillage onto the boundary vegetation, but specific design principles will depend on the species and numbers present, and the patterns of movement around the site. It is recommended therefore that bat activity surveys are undertaken to ascertain which species of bats are present determine and patterns of movement and behaviour.
- 2.37 In general terms, all lighting should be designed in accordance with BCT guidance<sup>5</sup> this advises that the '… use of asymmetric beam lights (as opposed to symmetric) orientated so that the glass is parallel to the ground will ensure that the light is cast in a downward direction and avoids horizontal spill.'
- 2.38 The BCT guidelines further recommend that adverse impacts on bats can be minimised through:
  - The use of low pressure sodium lamps instead of high pressure sodium or mercury lamps;
    - The use of mercury lamps fitted with UV filters;
    - Brightness set at the lower legal limits;
    - Minimising the times during which the lighting can be used to provide some dark periods; and
    - Directing light to where it is needed to avoid light spillage minimising upward lighting to avoid light

<sup>&</sup>lt;sup>5</sup> 'Artificial lighting and wildlife - Interim Guidance: Recommendations to help minimise the impact artificial lighting' (Bat Conservation Trust; 2014) Available from: http://www.bats.org.uk/pages/bats\_and\_lighting.html

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pollution.

#### Badgers, Otters & Other Terrestrial Fauna

- 2.39 The site was surveyed for terrestrial fauna by Mr Grindle in February 2018 with a verification survey (including the additional lands required fort the main site drainage channel) completed prior to submission in December 2018.
- 2.40 The survey focused on badger and otter activity, but the surveyor remained vigilant for field evidence or indications of other protected and notable fauna.
- 2.41 The site was inspected for the following diagnostic and forensic field evidence of the presence of badgers:
  - Setts (underground structures showing signs of current or recent occupation, or disused holes);
    - Paths & Trails (networks of paths linking setts with foraging habitat);
    - Paw prints & Tracks;
    - Guard hairs;
    - Snuffle holes & Feeding scrapes (vegetation or soft soil turned over during foraging);
    - Scratching posts (claw marks on tree trunks, fallen trees etc.);
    - Breach points (gaps in fences and hedges or crossing points over roads);
    - Dung pits (single faeces deposits placed in a small excavation); and
    - Latrines (collection of faecal deposits used to mark territorial boundaries).
- 2.42 Where tracks, trails and paths are identified these are followed to locate setts and other field evidence. Where latrines are located, the immediate vicinity is searched for additional evidence of territorial marking or dispute. Areas which cannot be accessed for close inspection (e.g. areas of dense, impenetrable scrub) are assessed for the likelihood of the presence of setts, based on the density of trails entering the area and other field evidence.
- 2.43 The main site does not contain any significant watercourses or stream channels but, as it is close to the coast and as it does contain some degraded wetland habitat and suitable terrestrial opportunities which were inspected to determine the likelihood of otters being present. The proposed main drainage culvert, to the north-east of the site, discharges to an existing drainage channel within an area of marshy grassland to the north of the R172 Blackrock Road.
- 2.44 The area was searched for diagnostic and forensic field evidence indicative of the presence of otters, such as resting places (holts, hovers, couches and grooming hollows); paths, trails, slides and breach points; paw prints and tracks; spraints, spraint mounds, sign heaps and urination 'green spots'; and feeding/predation remains.
- 2.45 The site and adjoining areas show a reasonable level of mammal activity. Badgers, foxes and rabbits were confirmed from field evidence; biological records and habitat suitability/availability suggest very strongly that hares and hedgehogs are present in the area. No field evidence of otters was found within the site.
- 2.46 A local population of badgers are certainly active in the area [Figure 4; Plates 2.9 2.14] and make some use of the site for commuting and foraging. It is likely that the use of the site for arable production has restricted activity to the field margins. No setts were found within the site, but a probable sett location was found in an undisturbed and well-protected location to the south. From the patterns of movement indicated from field evidence, it is likely that other setts are present within lands to the east and west.
- 2.47 Although the site presents as a rural site, and is in agricultural use, its wider setting is within a



predominantly developed area. The site is restricted by housing to the immediate north and south-east and Dundalk Golf Club to the immediate west; moving further away, the site, along with the golf course and adjoining agricultural areas, is entirely enclosed to the north, south and west by the extensive urban areas of Dundalk and Blackrock and associated main roads and industrial/commercial areas.





Plate 2.14: Badger Trail – heavily-used trail along field margin, close to woodland to the east of the site [February 2018]





Plate 2.15: Badger Trail – heavily-used trail leading to/from the site at the south-eastern corner [February 2018]



Plate 2.16: Breach Point – badger access under a fence, just outside the site to the south [February 2018]



Plate 2.17: Badger Scat – faecal deposit found close to the southern boundary [February 2018]





Plate 2.18: Badger Scat – faecal deposit found close to the likely sett location, to the south of the site [February 2018]



Plate 2.19: Badger Sett – probable sett location, in dense bracken, at an undisturbed location to the south of the site [February 2018]

- 2.48 There is no indication from field evidence that the open arable areas within the site are used by badgers for extensive foraging. As noted, the summer arable crops likely deter badgers from using the interior of the site and restrict movement to the field margins.
- 2.49 It is unlikely that the development of the site will impact the local population through loss of foraging. However, it will be necessary to ensure that commuting routes are maintained and that any setts that may be present on adjoining lands remain protected through the construction phase and once the site is occupied. It may be necessary, for example, to secure commuting corridors for badgers and provide underpasses beneath internal access roads etc.
- 2.50 It was recommended that a full, detailed badger survey of the site and adjoining lands to include a buffer zone of at least 50 m was undertaken to determine the locations of local setts and fully detail patterns of movement and behaviour. This was completed in the summer of 2018 (reported separately).

#### Breeding Birds

2.51 The interior of the site provides very little, if any, suitable nesting habitat. The cultivated areas are devoid

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of opportunities other than the few isolated areas of gorse scrub on the rocky outcrops. The site boundary vegetation, particularly the thorn hedgerows and woodland to the east, provide good nesting opportunities and are likely to be exploited by a typical assemblage of nesting passerines during the spring and early summer.

- 2.52 As per site layout drawings, development is restricted to the open, central areas of the site, with all mature trees, hedgerows and scrub on the boundaries to be largely retained and enhanced with additional boundary and internal landscape planting. Some sections of the internal hedgerow are to be retained and incorporated into an open landscaped area and substantial internal landscape planting is proposed, which will compensate for minor losses.
- 2.53 The construction of the access road through the scrubby and marshy area to the east of the main site will result in some loss of semi-natural habitat which is likely exploited by nesting birds. It is, however, unlikely that this area is used successfully by breeding waders or other ground-nesting species, as scrub encroachment has compromised the suitability of the area, both in terms of habitat structure and the increased availability of cover and vantage for predators.
- 2.54 Overall, development proposals for the site respect, incorporate and protect many peripheral areas of habitat which provide nesting opportunities for nesting. As such, it will be possible to develop the site without causing any significant adverse impacts on wild birds. Any incidental vegetation clearance that may be necessary should take place outside the bird breeding season to ensure that no active nests are damaged or destroyed.

#### Wintering Birds

- 2.55 The interior of the site provides very little, if any, suitable habitat for wintering birds. Arable fields overwintered with stubbles can provide some useful foraging resources for seed-eating passerines, game birds and some ground-nesting species such as skylarks and pipits.
- 2.56 Despite the location and situation of the site, close to Dundalk Bay, habitats within the site are generally unsuitable for any significant or habitual use of the site by waterfowl, and particularly the majority of SPA feature species, coastal and estuarine ducks, divers and waders, which rarely venture inland during the winter in significant numbers.
- 2.57 Some SPA feature species, particularly gulls and geese, do make use of terrestrial habitats such as open pasture and arable stubbles in coastal locations during the winter and may be present within the site from time to time but it is highly unlikely that any SPA target species are ever present in significant numbers or that the site is relied upon for foraging, high-tide roosts or any other purpose. No SPA target or assemblage species were noted within the site during site walkover surveys completed in February, October and December 2018 or in January and February 2019. Occasional individual birds were recorded in flight in the general area.
- 2.58 The small area of rough, marshy grassland and scrub to the east of the site, along the route of the main site access, is unlikely to be exploited by waders or other coastal/estuarine species during the winter. Scrub encroachment, and the proximity of development, has compromised the suitability of this area both in terms of habitat structure and the availability of cover and vantage for predators.
- 2.59 As is set out in greater detail in the NIS, construction operations within the site are unlikely to result in increased anthropogenic disturbance to SPA feature species within the SPA, although discrete elements



of site construction close to the shore may require specific mitigation to prevent disturbances to coastal and estuarine birds if carried out during the winter. Otherwise, habitat loss to the wintering assemblage as a result of site development is unlikely to be a significant issue.

2.60 Overall, it will be possible to develop the site without causing any significant adverse impacts on the wintering assemblage.

## A Bat, Badger and Invasive Species Assessment of Blackrock, County Louth



Brian Keeley B.Sc. (Hons) in Zool. MCIEEM

### August 2018

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#### Introduction

Most of Ireland's mammals enjoy protection under the Wildlife Act (1976) and the more recent updating of this legislation (Wildlife (Amendment) Act 2000, S.I. No. 94 of 1997, S.I. No. 378 of 2005, European Communities (Natural Habitats) (Amendment) Regulations, 2005). In conjunction with the enactment of the Habitats Directive into Irish legislation, all native mustelid species and bat species are protected with further protection given to otters and lesser horseshoe bats. Lesser horseshoe bats are not found in County Louth.

Bats account for nine of Ireland's terrestrial mammal species, approximately one quarter of the species of the Irish land mass. All of the species found to date and indeed all bat species that may remain undetected up to the present are afforded legal protection under Irish and EU legislation and agreements (Wildlife Act (1976), Wildlife (Amendment) Act (2000), S.I. No. 94 of 1997 and S.I. No. 378 OF 2005 implementing the EU Habitats Directive, Bonn Convention (The Convention on the Conservation of Migratory Species of Wild Animal) and the Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats).

A speedy and productive means of determining the mammal fauna within a site is to walk the entire site concerned, paying particular attention to all hedgerow, woodland, watercourses, fence lines, paths etc. to locate mammal signs. Determining the fauna of the surrounding area may involve a much greater level of assessment if the aim of the survey is to catalogue all mammals in all townlands but this is too detailed for the aim of creating mitigation for a new housing scheme. The survey undertaken within the current proposed scheme landtake allows a targeting of mitigation measures to the appropriate or most efficient sites to prevent accidental death or injury and to allow safe passage across long-established routes through new housing.

Fieldwork for the current report on bat distribution within the proposed development was carried out by Brian Keeley. This report addresses the main issues affecting the mammal fauna considered in this assessment. Housing and construction activities and subsequent occupancy of the houses create a number of significant short-term and long-term risks for the resident bats and badgers, in addition to impacts upon other vertebrates and the invertebrates upon which they depend. The construction of the houses may involve the removal of key features of the surrounding environment and of the habitats of many mammal species, such as trees, hedgerow lines, streams. The most damaging operation is the destruction of mammal dwellings during the vegetation clearance and early earthworks.

In relation to badgers, the clearance of hedgerow poses the risk of the removal of the badgers' home burrow and the associated burrows (all of which are known as setts) that are used seasonally or occasionally throughout the year. In winter, this is especially risky if the sett is not identified before hedgerow removal operations, as this is the time when badger cubs are born. In the classification used in this report, setts are considered to fall into four categories, which are best elaborated by long-term studies but can be interpreted to a relatively good accuracy in terms of status based on basic observations. This follows a seasonally appropriate badger survey and aims at determining if badger signs are in evidence at this time of year.

The basic sett type within which badgers are typically present throughout the year is the main sett. This is almost always the sett within which cubs are born. Bedding outside the entrance to these setts often identifies their use as such and paw prints and dung pits or latrines nearby also assist in their categorisation. There are typically a number of entrances to a main sett, some of which may be disused. Paths leading from the main sett are often very easy to trace for some distance.

Annexe setts are similar in construction to main setts and are typically accessed by a number of entrances. They are often discernibly connected to a main sett by well-worn paths, which is within 150 metres of the annexe sett.

Badgers do not necessarily use this type of sett throughout the year and they may be inactive at the time of any short-term study. Subsidiary setts are again not always active throughout the year. There may be a number of entrances to the sett and they are not clearly associated with any other sett. The last type of sett, the outlier sett, may only have one entrance and has no path leading to it. This type of sett is only sporadically used and may even be in areas subject to flooding or seasonally unsuitable to badger use. These setts may be overlooked if they have remained inactive for several weeks and this may be true of such setts in early winter during which time this survey was carried out.

Setts may be under threat from construction if they lie directly in the line of the houses or even within the land take of the estate. Setts outside of this land take area may also be threatened with damage from the normal activities of the heavy plant equipment required to build the houses. For example, if a badger sett entrance were located outside of the land take of the houses but led to a system of tunnels that lay under the working area of the heavy plant, there is a clear risk that the tunnels would be crushed under the repeated movement of equipment. These tunnels may occasionally go as deep as two metres underground but are also liable to surface to shallower depth to avoid rocky substrate or water.

Thus, badger setts may be affected by the immediate impact upon them from the excavation and removal of the soil within which they are established or by the indirect destruction of tunnels that lie under the construction corridor of the houses and infrastructure. Identifying whether badgers are greatly affected often hinges on whether a sett lies within or adjacent to the area proposed for construction.

Given the continued spread of invasive species throughout the island, the walkover survey endeavoured to identify any evidence of introduced species within the land take and provides measures to deal with the control of spread that may occur through vegetation clearance and movement through the area by clearance equipment and the future occupancy of the houses and associated infrastructure. A list of the species under consideration is given in the Appendices.

# **Materials and Methods**

#### Bats

# Equipment employed:

Maps of site

Nokia 2 TA-1007 with digital camera

This assessment was primarily a bat detector survey in addition to a basic visual inspection from ground level of trees and shrubs and scrub within or adjacent to the site.

The site was examined prior to dusk to identify the potential for roosts within the land take of the proposal. This was followed prior to sunset (21.30 hours with sunset at 21.47 hours on 17<sup>th</sup> July 2018) by a walked survey that covered all the lands proposed for construction and brief observations in lands surrounding the site including the golf course and perimeter roads. An Echometer 3 with a GPS attachment was used in conjunction with a Pettersson D240X detector to identify the species of bat present both at the time of survey and subsequently with sound analysis software (Batsound Pro and Kaleidoscope Pro). Surveying concentrated on the hedgerow within and around the fields but a number of transects through the cereal crop were undertaken to determine if bats were feeding in the open area above the fields.

Surveying continued up to midnight on 18<sup>th</sup> July 2018. A pre-dawn evaluation was undertaken on 19<sup>th</sup> July 2018 from 03.30 hours up to 05.10 hours and involved a transect that concentrated on the area to the north-east where bat activity was generally highest and there was high roost potential but also included the western field to cover roost potential in the houses along the northern perimeter.

#### Badgers

*Equipment employed:* Map of site Nokia 2 TA-1007 Smartphone

Badger presence was determined by:

1) the identification of setts or structures likely to be setts (some animal burrows may require further checking to rule out (or confirm) as badger setts).

2) badger tracks (digging and paw prints and badger dung and hairs)

The primary aim of this evaluation is to consider signs noted within the site and adjoining lands by On July 17<sup>th</sup> and 19<sup>th</sup> and again on August 5<sup>th</sup> 2018, the site of the proposed housing at Haggardstown, Blackrock, Co. Louth was walked over and examined for any field signs of badgers within the land take and adjoining habitat. All hedgerow, tree cover, obvious mounds or depressions and gorse within the survey band were examined for the presence of badger setts or other animal burrows. Any identified setts are typically considered in terms of the number of entrances, signs of activity, location relative to the proposed housing and the likelihood of alternative setts in the vicinity.

# **Invasive Species**

In addition to seeking the above species (bats and badgers), the invasive species list given in the Appendices were also sought during the walkover survey. This was undertaken in conjunction with the above surveys and included daytime and night-time examinations.

#### **Survey constraints**

The bat assessment was undertaken at an ideal time of year to uncover maternity roosts, young bats on the wing and good feeding sites and commuting corridors. Potential roosts on lands outside of the site were not accessed.

Discussions were held with one resident in an area where a roost was deemed to be present but in general, residents were not approached for information.

The badger re-evaluation / survey was carried out in July and August 2018, a period when wild vegetation is high and dense. At this period of the year, the presence of nettles, bramble and other vegetation can make investigations more difficult in unmanaged areas. While growth was affected by drought in 2018, brambles, nettles and grass was sufficiently high and dense to make surveying for tracks and see entrances difficult. While it is possible that this may have led to overlooking sett entrances, this is only a possibility rather than a probability as the area where a sett was proposed is not extensive and it is considered that a sett would be relatively prominent here.

Invasive species would be at their most evident at the time of year of survey and the timing was ideal overall for the most likely species to be present.

Common pipistrelle	Pipistrellus pipistrellus
Soprano pipistrelle	Pipistrellus pygmaeus
Leisler's bat	Nyctalus leisleri
Myotis bat species –	
either Whiskered bat	Myotis mystacinue
or Daubenton's bat	Myotis daubentonii

# **Results For Bats Bat species noted in the site in July 2018**

Bat records for the area within a 1 km radius are provided in the Appendices courtesy of Bat Conservation Ireland. There were bats noted during both survey dates within the site. The majority of activity was of common pipistrelle with occasional soprano pipistrelle activity. Common pipistrelle activity was noted throughout the site but was especially high around the metal barn, along a line of leylandii in the northern perimeter while there was relatively frequent activity on the western perimeter along the golf course edge. A common pipistrelle was noted flying along the internal hedgerow and very briefly over the crop. A common pipistrelle was noted flying from the leylandii in the centre of the northern perimeter to a shed slightly east of the treeline prior to dawn and was seen to circle this building several times before disappearing from view. Another area of high bat activity immediately prior to the end of all bat activity was the metal barn southeast of this shed. Here, both common and soprano pipistrelles were feeding or circling before disappearing.

Soprano pipistrelles were noted at the metal barn, along the golf course edge and along the northern perimeter at the leylandii treeline.

Leisler's bat activity was noted especially to the west close to the golf course. A male Leisler's bat was calling in the north-western corner of the site within the golf course. This species was also noted calling from a tree that lines the back avenue to a house on the eastern edge of the site.

A *Myotis* bat species was noted in the same tree line as the above calling Leisler's bat at 23.27 hours and again to the west of here at 23.39 hours. This species was not heard at any other stage. There is a highly suitable building close to the metal barn that would serve as an ideal roost site both for this bat and other species. The automatic identification suggests Brandt's bat (23.27 hours) or Daubenton's bat (23.39 hours) and a manual examination of the signal shows that the species concerned is either whiskered bat or Daubenton's bat (or two briefly present but separate species). The habitat would appear more suited to whiskered bats but it is not possible to be certain on the identification.

**Results For Badgers** There was no clear evidence of badger activity within the site or the adjoining fields in July and August 2018. There were no badger snuffle holes, dung pits, latrines, definitive tracks or snagged hairs. No setts were visible and there were no signs of spoil heaps, worn paths leading to entrances or other suggestions of badger setts.

It is not possible to confirm the presence of badgers within the adjoining fields based on the available signs in July and August 2018. There were ample signs of fox and dog activity throughout the site and hence it was not that there were no mammal signs present.

An active wasp nest in a hole along the driving range edge would suggest that badgers were not living in close proximity as such a nest would often draw attention from feeding badgers and would be dug up and destroyed.

There were several tracks through the long grass but these were superficial and had not been worn down to clearly defined paths where the soil was visible as would be typical of tracks routinely used by badgers.

There were no indications from this evaluation that badgers were present within the site or the adjoining fields. This is not to suggest that badgers were not present in February 2018 but it would indicate that there was not an active sett in the summer period and badgers may be feeding in other areas more commonly in this period.

# **Results For Invasive Species**

There were no invasive species within the landtake nor in the adjoining fields. This is not an issue for this site and there is no requirement to initiate any control measures. Precautionary measures in the introduction of any soil and plants should be implemented but no special requirements apply.

# **Potential Impacts On Bats**

- 1. Loss of roost sites
- 2. Death or injury during tree felling and clearance
- 3. Loss of feeding
- 4. Interruption to commuting
- 5. Disturbance from lighting

# 1. Loss of roost sites

Trees removed to clear the site will potentially lead to a loss of roost sites for bats. This is likely to be a slight, permanent negative impact given the scarcity of good trees within the fields. Trees in the north-east offer the best roost potential.

# 2. Death or injury during tree felling and clearance

There are a small number of trees with roost potential. If these were occupied by bats and if felling were undertaken during the hibernation period or early in the breeding season, this would create the highest risk to bats of death. Tree felling may pose a risk to bats when present within a tree at any time of year. This is likely to be a moderate short-term negative impact but with the potential of being more severe if a roost of several bats were in a tree at the time of felling and without mitigation.

# 3. Loss of feeding

The removal of hedgerow and mature trees removes feeding opportunities for bats. While the majority of the site has low feeding potential, any removal of hedgerow reduces feeding and removal of any mature trees whether individual or in a tree line reduces feeding opportunities. This is a long-term to permanent slight negative impact.

# 4. Interruption to commuting

The construction creates a risk to bats moving through the site. Road kill is known to occur in all species of bat and is likely to be a major cause of death for bats. This is more likely in areas where cars are exceeding 30 kmph as this approaches the maximum speed at which many bats could commute and close to large roosts or high-quality feeding.

# 5. Disturbance from lighting

Additional lighting will be introduced by construction and the occupancy of the houses that will raise ambient light levels and may directly illuminate roosts, feeding areas and commuting routes. This may prevent the feeding and movement of some bat species including *Myotis* bats while all bat species respond negatively to illumination of roost exits.

At present, most of the site is in complete darkness while there is some light pollution from houses along the northern edge and the house towards the northeastern corner.

This would be a long-term to permanent moderate negative impact for the local bat fauna.

# **Potential Impacts On Badgers**

# 1. Interference with commuting badgers and road death

The Badger movement will be hampered by the presence of the proposed housing development. Housing brings roads closer to lands within which badgers feed and it cuts through a number of feeding and commuting corridors. There is a loss of feeding through green land shrinkage. Intensive crop cultivation is not normally high in the invertebrates chosen by badgers but hedgerow between fields and grassland especially pasture grazed by cattle are highly beneficial for earthworms and other food sources.

At worst, this would lead to road death for this species and in all scenarios, it leads to reduced feeding.

# **Mitigation For Bats**

# 1. Examination of all trees earmarked for removal for the presence of bats by a bat specialist.

All trees shall be considered for bat presence by a bat specialist prior to removal. Any trees with good roost potential shall be examined further either by bat detector assessment or from a hoist etc. or by climbing and where necessary a derogation shall be sought from NPWS for removal of the protection site and in the presence of adequate mitigation if bats are deemed to be present or to use the tree at any stage as a roost.

# 2. Provision of bat boxes for bats within the surrounding area

6 Schwegler 2F bat boxes shall be provided on trees, poles or buildings within or outside of the land take, 3 with Double Front Panels and 3 with standard panels. All boxes must be no less than 3 metres above ground, be away from illumination and be away from dense scrub or branches.

# 3. Planting for wildlife

A variety of plant species that support insect diversity shall be incorporated into the planting regime for the housing. Species will high benefits to invertebrates include: plants such as *Lonicera periclymenum* (honeysuckle). This is beneficial to moths and other nocturnal insects while *Hebe* (*Buddleja* is no longer planted intentionally) is beneficial to daytime Lepidoptera and some night insects. Bees would benefit from lavender, jasmine, rosemary, violets, thyme, blue bells, wisteria, cone flowers and sunflowers. The wider abundance of insects would benefit bats and badgers as well as improve biodiversity generally.

Important areas for planting include the north-eastern area to the north of the metal barn and between the existing houses at the northern perimeter and proposed houses to create areas through which bats may commute to green areas such as the golf course perimeter.

#### 4. Speed restrictions in housing and associated roads

Within the housing area, speed should be restricted either by the road layout or by the provision of signage to limit speeds to 30 kmph. This creates less risk to bats from collision with vehicles.

# 5. Lighting control

Lighting must be kept from any vegetation intended to provide shelter for fauna and the canopy of any mature trees such as the north-eastern tree line that are retained around the site. Lighting should not exceed 3 lux along any hedgerow or mature trees to allow for bat feeding and commuting. No bat boxes or other roost sites shall be intentionally or inadvertently illuminated. Lighting should be directed at the required area (e.g. pavement, road) and should be cowled or otherwise manipulated to prevent light pollution or undesirable illumination of vegetation etc.

# **Mitigation For Badgers**

# 1. Speed restriction in housing and associated roads

Within the housing area, speed should be restricted either by the road layout or by the provision of signage to limit speeds to 30 kmph. This creates less risk to badgers from collision with vehicles.

# **APPENDICES**

# Invasive species sought in the landtake

Nuttall's Pondweed (Elodea nuttallii) New Zealand Pigmyweed (Crassula helmsii) Parrots Feather (Myriophyllum aquaticum) Curly Leaved waterweed (Lagarosiphon major) Fringed waterlily (Nymphoides peltata) Water fern (Azolla filiculoides) Floating Pennywort (Hydrocotyle ranunculoides) Himalayan Balsam (Impatiens glandulifera) Grey Squirrel (Sciurus carolinensis) Japanese Knotweed (Fallopia japonica) Giant hogweed (Heracleum mantegazzianum) Zebra mussel (Dreissena polymorpha) Giant Rhubarb (Gunnera tinctoria) Ruddy Duck (Oxyura jamaicensis)

#### Table 1: Bat Conservation Ireland data: search results 10 Aug 2018

Search parameters: Roosts Transects Ad-hoc observation sites with observations of Myotis brandti Myotis daubentonii Myotis mystacinus Myotis mystacinus/brandtii Myotis nattereri Myotis spp. Nyctalus leisleri Pipistrellus nathusii Pipistrellus pipistrellus (45kHz) Pipistrellus pygmaeus Pipistrellus spp. (45kHz/55kHz) Plecotus auritus Rhinolophus hipposideros Unidentified bat within 1000m of J0685504308.

Ad-hoc observations							
Survey	Grid reference	Grid ref easting	Grid ref	Date	Species		
			northing				
EIS and Road Surveys -	J0700005000	307000	305000	07/10/2004	Nyctalus	leisleri;	Pipistrellus
Conor Kelleher					pygmaeus; Plecotus auritus		
Faith Wilson	J0703	307000	303000	11/08/2006	Myotis	daubentonii;	Nyctalus
					leisleri;	Pipistrellus	pipistrellus
					(45kHz);	Pipistrellus	pygmaeus;
					Plecotus au	ıritus	

#### **FIGURES**



Figure 1: Transect covered prior to dawn on 19<sup>th</sup> July 2018 (white line) – All field edges were covered post-dusk on 17<sup>th</sup> July 2018



Figure 2: Bat activity within the site post-dusk on 17th July 2018 and pre-dawn 19th July 2018Green paddleCommon pipistrelleBlue paddleSoprano pipistrelleYellow paddleLeisler's batYellow boxLeisler's bat calling areaGreen ovalProbable roostsGreen arrowCommon pipistrelle activity (repeat)Black discMyotis bat species possibly whiskered bat



# Bat Spectrograms indicating signals received by the Echometer3 detector



23.30 hours – Common pipistrelle navigational signals and Leisler's bat social calls





23.32 hours – Common pipistrelle





23.39 hours – Possible whiskered bat signals Figure 3: Bat spectrograms plotting frequency change against time



Figure 4: Badger signs identified in February 2018 that formed the basis for the July / August examination



#### Plate 1: Dung noted along the golf course driving range edge

This is within the area considered as a likely site for a badger sett.

This dung has features that are attributable to a badger (an amorphous clump of faeces when the foodstuff is wet or the soil is very wet – the ground was very dry during this assessment) but such a dung can also be produced by foxes or other mammals (including dogs) depending on the food eaten and the health of the individual. The dung did not have a strong odour as would be typical for fox but it was not within a dung pit and there were no signs of badger feeding associated with it.



# Natura Impact Statement (NIS)

# Haggardstown, Blackrock, Co. Louth

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#### 1. INTRODUCTION

1.1 Corvus Consulting was commissioned to compile the Natura Impact Statement (NIS) for a site proposed for development at Haggardstown, Blackrock, Co. Louth.

#### **Remit & Scope**

- 1.2 Article 6(3) of the Habitats Directive<sup>1</sup> establishes an obligation to put concern for potential effects on Natura 2000 sites at the forefront of decision making - assessment pursuant to Article 6(3) must be undertaken for all implicated plans and projects to determine the nature and significance of any impacts which may arise on the integrity of the Natura 2000 network of sites. To this end, a Natura Impact Statement (NIS) must be compiled for all implicated plans and projects.
- 1.3 While it is the responsibility of the competent national authorities to undertake the formal assessment, it is the responsibility of the project proponent to collate and provide all of the necessary information, in a Natura Impact Statement (NIS). It is the function of this report to provide the required information and thereby assist the competent authority in the completion of formal Appropriate Assessment.
- 1.4 The NIS represents the final stage in the iterative, pre-application design and assessment process.

#### **Summary Conclusions**

- 1.5 The NIS in Section 4 demonstrates, on the basis of precautionary, objective scientific assessment, that the development proposals can be consented without causing significant adverse effects on the integrity of Dundalk Bay SAC or Dundalk Bay SPA.
- 1.6 Assessment has demonstrated that the required measures to avoid, mitigate and otherwise reduce the significance of adverse impacts on the integrity of the Natura 2000 sites are technically feasible and attach a high level of confidence in implementation and success. The proposed development will not interfere with any key relationships or elements within the environment which define and control the structure and function of any Natura 2000 sites and will not result in significant adverse impacts on the integrity of the Natura 2000 network or any associated/underlying designations.

#### Personnel

- 1.7 Assessment has been conducted by Mr Gareth Grindle B.Sc. (Hons.) M.Sc. L.L.M. M.I.Env.Sc. M.C.I.E.E.M., who has compiled the NIS and is the primary author of this report.
- 1.8 Mr Grindle a Director of Corvus Environmental Consulting Ltd. He holds an Honours degree in Environmental Science (B.Sc. (Hons.), University of Stirling, 2000), a Master of Science in Environmental Change (M.Sc., King's College, London 2001) and a Master of Laws in Environmental Law (L.L.M., Queen's University, Belfast 2014). He has over 15 years' professional experience in the public, private and voluntary sectors and is a full member of both the Chartered Institute of Ecology & Environmental Management (M.C.I.E.E.M.) and the Institution of Environmental Sciences (M.I.Env.Sc.), organisations requiring peer-review for membership and a high standard of professional conduct.

<sup>&</sup>lt;sup>1</sup> Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

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#### **Legislative Context**

- 1.9 The principal national legislation providing for nature conservation and the protection of biodiversity and wildlife in Ireland is the Wildlife Act 1976, updated by the Wildlife (Amendment) Act 2000 and the European Union (Natural Habitats) Regulations 1997, updated and amended twice in 1998 and 2005, and subsequently revised and consolidated as the European Communities (Birds and Natural Habitats) Regulations 2011.
- 1.10 The early legislation provided a solid basis for species protection and pre-empted many requirements of later EU Directives, but habitat and site protection measures were relatively weak. Following the ratification of various international agreements, including the Bonn and Berne Conventions,<sup>2</sup> international, intergovernmental treaties concerned with the conservation of wildlife and habitats on a global scale, the European Community adopted Council Directive 79/409/EEC on the conservation of wild birds (*'the Wild Birds Directive'* now codified as 2009/147/EC) and Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (*'the Habitats Directive'*), now transposed into Irish law, as is set out above. These Directives provide *inter alia* for the protection of species, habitats of species and for the establishment of a European network of protected areas known as Natura 2000.
- 1.11 The Wild Birds Directive details special measures to conserve wild birds, with an overall purpose of providing for the protection, management and control of all naturally occurring species and requires the identification of Special Protection Areas (SPA). The Habitats Directive covers habitats and non-avian species of fauna which are of nature conservation importance and in danger of disappearance, and for which the EC has particular responsibility in view of the proportion of their global range. The Habitats Directive requires the identification and protection of Special Areas of Conservation (SAC) for Annex I habitats and Annex II species and provides for the establishment and protection of the Natura 2000 network of designated sites (SPAs and SACs).
- 1.12 Article 3 of the Habitats Directive provides for the establishment of a coherent European ecological network of designated sites ('*Natura 2000*') comprised of sites designated, or in the latter stages of designation, under both the EU Birds Directive and EU Habitats Directive:
  - Special Areas of Conservation (SAC) sites notified under the Habitats Directive, which have been adopted by the EC and formally designated by the member state
  - Special Protection Areas (SPA) sites notified under the Wild Birds Directive, which have been adopted by the EC and formally designated by the member state
  - Sites of Community Importance (SCI) sites notified under either directive, which have been adopted by the EC, but not yet formally designated by the member state
  - Candidate and Proposed sites sites notified under either directive, which have been submitted to the EC, but not yet formally adopted
- 1.13 The Habitats Directive is transposed into Irish legislation by the European Communities (Birds and Natural Habitats) Regulations, 2011. Assessment is dealt with in Part 5. Article 6(3) of the Directive establishes the requirement for detailed prior, precautionary assessment of potential impacts on the integrity of the Natura 2000 network and further establishes that national authorities shall agree to the plan or project only once it has been demonstrated that the integrity of any Natura 2000 site concerned will not be compromised:

2

<sup>&</sup>lt;sup>2</sup> The Convention on the Conservation of Migratory Species of Wild Animals (adopted in 1979; also known as CMS or Bonn Convention); The Convention on the Conservation of European Wildlife and Natural Habitats (adopted in 1979; the Bern Convention)

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#### Article 6

3. Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the 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.

1.14 Article 6(4) then sets out the procedure for permitting derogation from this strict protection in certain restricted circumstances and when specific conditions are met.

#### **Data & Information**

- 1.15 The data and information compiled and presented herein were sourced directly from Corvus Consulting site surveys, planning drawings and technical reports prepared on behalf of Kingsbridge Consulting, including the final draft of the EIAR and the outline Construction Environmental Management Plan (CEMP),<sup>3</sup> and the following online public sources:
  - National Parks & Wildlife Service (NPWS): www.npws.ie
  - National Biodiversity Data Centre (NBDC): www.biodiversityireland.ie •
  - European Commission (Environment): www.ec.europa.eu/environment/nature/natura2000

#### Assessment Methodology

- 1.16 Assessment pursuant to Article 6(3) of the Habitats Directive Assessment has a narrow focus it is protection-led, conducted with due regard to the precautionary principle and is concerned exclusively with maintaining the integrity of the Natura 2000 network of sites.
- 1.17 Assessment is completed in accordance with the European Commission and Department of the Environment, Heritage and Local Government guidelines:
  - 'Assessment of plans and projects significantly affecting Natura 2000 sites, Methodological guidance on the provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC'.<sup>4</sup>
  - 'Managing Natura 2000 Sites, The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC'.<sup>5</sup>
  - 'Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities'<sup>6</sup>
- 1.18 The established assessment methodology, in line with legislative requirements, requires a staged approach where the results of each stage determines the requirement for and scope of the subsequent stage:

<sup>&</sup>lt;sup>3</sup> 'Strategic Housing Development, Blackrock, Dundalk, Co. Louth. Outline Construction Environmental Plan. Kingsbridge Consultancy Ltd.' (Atkins, December 2018)

<sup>&</sup>lt;sup>4</sup> Available from: http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura\_2000\_assess\_en.pdf

<sup>&</sup>lt;sup>5</sup> Available from: http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/provision\_of\_art6\_en.pdf

<sup>&</sup>lt;sup>6</sup> Available from: https://www.npws.ie/sites/default/files/publications/pdf/NPWS\_2009\_AA\_Guidance.pdf



- <u>Stage 1 Screening for Appropriate Assessment:</u> The process which identifies the potential impacts of
  the plan or project which are likely to arise on the identified Natura 2000 sites and determines whether
  or not these are likely to be significant, in view of the site's conservation objectives. The precautionary
  principle must be applied where significant adverse effects are likely, uncertain or unknown at
  screening, progression to the second stage is required. Significance is assessed against key indicators
  such as habitat loss, habitat degradation or fragmentation, species disturbance, species displacement or
  fragmentation, overall water and ecological quality etc. Mitigation, or other measures designed or
  envisioned to avoid or reduce the significance of adverse effects, are not taken into account.
- <u>Stage 2 Appropriate Assessment (AA)</u>: The detailed, scientific assessment of the likely effects on the integrity of the Natura 2000 sites. Impacts are assessed alone and in combination with other plans or projects with respect to the structure and function of the Natura 2000 sites and their published conservation objectives. Where adverse impacts are expected an assessment of the measures envisioned to avoid and/or mitigate impacts is also conducted. The aim of the assessment is to provide sufficient information, evidence and data to the competent authority on which to base their formal AA. The Natura Impact Statement (NIS) is prepared for this purpose.
- 1.19 Conservation Objectives for Natura 2000 sites, which aim to maintain or restore site features to favourable conservation status, are published by the National Parks and Wildlife Service (NPWS).
- 1.20 The majority of plans and projects are either consented or abandoned following a Stage 1 or Stage 2 assessment. Stages 3 and 4 are concerned with the procedure for consenting despite a negative assessment, in certain restricted circumstances.

#### Recent CJEU Case Law – People Over Wind

- 1.21 In a recent (April 2018) decision in *People Over Wind and Peter Sweetman v Coillte Teoranta* (C-323/17), a reference by the Irish High Court for a preliminary ruling on the interpretation of Article 6(3) of the Habitats Directive, the Court of Justice of the European Union (CJEU) ruled that it is not appropriate, at the screening stage, to take account of measures to avoid or reduce harmful effects on Natura 2000 sites. The case also addressed the degree to which integrated mitigation measures can/should be taken into account during screening.
- 1.22 The CECJ interpreted 'mitigation' to mean '... measures that are intended to avoid or reduce the harmful effects of the envisaged project on the site concerned...' and took the view that were mitigation measures were to be taken into account during screening for appropriate assessment this '... presupposes that it is likely that the site is affected significantly and that, consequently, such an assessment should be carried out...'. The CJEU observed that, per the Directive, '... a full and precise analysis of the measures capable of avoiding or reducing any significant effects ... must be carried out not at the screening stage, but specifically at the stage of appropriate assessment' noting that a full appropriate assessment would provide significantly more information on the adequacy of the proposed mitigation.
- 1.23 The CJEU ruled that Article 6(3) must be interpreted as meaning that it is not appropriate to take account of mitigation at the screening stage and that in considering the need for appropriate assessment the only requirements were that:
  - the plan or project is not necessary for the management of the Natura 2000 site, and
  - it must be likely to have a significant effect on the Natura 2000 site.



#### 2. BACKGROUND INFORMATION

2.1 This section provides information on the site, the proposed development and associated construction and operational activities.

#### The Site and Immediate Surroundings

- 2.2 This is a large (c. 18 ha) greenfield site situated to the south of Dundalk and the north of Blackrock, Co. Louth [Figures 1a & 1b]. The development area includes the main site [Figure 1a] and small areas of lands outside this boundary to the east, required for site drainage and discharge to Dundalk Bay.
- 2.3 The site presents as rural and is in agricultural use, but the wider setting is within a predominantly developed area, with low-density housing to the immediate north and south-east and Dundalk Golf Club to the immediate west. Moving further away, the site, along with the golf course and adjoining agricultural areas, are entirely enclosed to the north, south and west by the extensive urban areas of Dundalk and Blackrock and associated main roads and industrial/commercial areas [Figure 1b].
- 2.4 The site is dominated by large agricultural (arable) fields, in cereal production or winter cover crop at various times during the assessment period, with marginal and peripheral areas of rough, semi-improved grassland. External site boundaries are marked, for the most part, by hedgerows variously, managed thorn hedges, non-native garden hedgerows and lines of mature trees or screen planting with some defunct and patchy sections marking internal field divisions. The proposed route for the main site access runs to the east from the main site over a wet area of rough, marshy grassland and scrub to join with the R172 Blackrock Road on the western shore of Dundalk Bay.

#### The Proposed Development

- 2.5 The site is proposed for comprehensive, sustainable housing development, to provide a total of 483 residential units of various types (apartments, duplexes, townhouses, terraced, semi-detached and detached houses), a crèche and includes access and egress points, pedestrian and cyclist facilities, car parking, storm water SuDS and attenuation as required, foul and potable water services and all associated ancillary works and infrastructure, open space provision and landscaping.
- 2.6 Specifically, the project involves the sustainable development of:
  - 258 no. houses (41 no. five bedroom 3-storey units, 20 no. four bedroom 3-storey units, 80 no. four bedroom 2-storey units, 1 no. four bedroom 1-storey unit, and 116 no. three bedroom 2-storey units);
  - 213 no. apartments (64 no. one bedroom units and 149 no. two bedroom units);
  - 12 no. Duplex Units (6 no. two bedroom below duplexes and 6 no. three bedroom duplexes);
  - Crèche (677 sqm);
  - the access road and priority junction with right turning lane off the R172 (Dundalk to Blackrock Roadway);
  - car parking spaces (824 no.) (including underground car parking (64 no.) at Apartment Block A and Apartment Block B), and bicycle parking spaces (512 no.);
  - all associated landscaping and site development works;
  - storm water drainage system via. 4 no. catchment areas, with interception storage and treatment of runoff within the SuDS features, via. permeable paving, swales, filter drains, silt traps and oil separators, and 2 no. culverts to be located offsite along existing drainage channels;
  - foul sewerage pumping station with rising main to connect to the public gravity mains at stand-off manhole located at the N52 junction with the Crowne Plaza Hotel/Dundalk IT entrance; and,

5



- potable water supply (300 mm/200 mm diameter pipeline) extending from the existing 700 mm diameter pipeline extending along Bothar Maol before passing through the site and connecting into the existing mains located along the R172 at the northern end of Blackrock village (near the site entrance).
- 2.7 Full details of the project are set out in Ch. 2 of the EIAR.

#### Natura 2000 Sites

- 2.8 This section provides the background information on the Natura 2000 sites which have been identified as requiring assessment, with the underlying reasoning.
- 2.9 The assessment of ecological impacts on Natura 2000 sites is conducted utilising a standard sourcereceptor-pathway model where, in order for an impact mechanism to be established, all three elements must be in place. The absence or removal of one of the elements is sufficient to conclude that the associated potential impact mechanism is inoperable or insignificant, not relevant to the assessment and can, therefore, be excluded.

#### Screening of Natura 2000 Sites & Rationale

2.10 The site is not within any Natura 2000 site however it is on the western shore of Dundalk Bay, which holds SPA and SAC designations [Figures 2s & 2b] and is also designated as a Ramsar Site and a pNHA.



Site Boundary



Figure 1b: Site Location in Wider Local Context





Figure 2a: Dundalk Bay Special Protection Area



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Figure 2b: Dundalk Bay Special Area of Conservation





Plate 2.1: Dundalk Bay SAC & SPA – designated areas of coastal habitat to the immediate east of the R172 Blackrock Road [December 2018]





Plate 2.2: Dundalk Bay SAC & SPA – designated areas of coastal habitat to the immediate east of the R172 Blackrock Road, at spring high-tide [January 2019]

- 2.11 The bulk of the site is set back from the shore, on elevated ground, at least 250 m from the designated areas but the main site access joins with the R172 Blackrock Road which abuts the designated areas on the western shore Dundalk Bay [Plates 2.1 & 2.2].
- 2.12 The site does not contain any watercourses, stream channels, drainage ditches or other surface water features other than a small area of degraded wetland fringe habitat in the eastern periphery, close to the R172. Surface water across the site drains directly to ground, with any overland flow percolating to ground in more permeable areas, for example in the low-lying eastern portion of the site, and may flow in discrete permeable zones immediately beneath the subsurface, prior to discharge to Dundalk Bay. The Haggardstown River, the Marshes Upper River and an unnamed drainage ditch are the only watercourses identified within c.2km of the proposed development (EPA, 2018) but none are hydraulically connected to the site.
- 2.13 Based on the results of the desk-based review and site walkover survey provided in the hydrology section of the EIAR (Ch. 10 Water), there is no evidence of any current operational direct hydrological link between the site and Dundalk Bay. However, indirect links via shallow groundwater flow and diffuse discharge via groundwater and/or surface water discharge to Dundalk Bay are likely. It is considered, for the purposes of assessment, that the site drains naturally, via groundwater and surface flow, directly to Dundalk Bay.
- 2.14 The site includes a strip of land alongside the R172, to the north-east of the site, to accommodate the main discharge channel for the site drainage network. The proposed culvert links to an existing drainage channel which discharges to marginal, semi-natural coastal habitat to the immediate north-east of the R172 which are coherent with habitat areas within the SPA & SAC but outside the designated boundaries [Plate 2.3].
- 2.15 The site is therefore ecologically and hydrologically connected to the designated areas of Dundalk Bay, in so far as adverse impacts on the integrity of the Natura 2000 designations may arise. Pathways can be established for potential direct and indirect adverse impacts on Dundalk Bay SPA and Dundalk Bay SAC. No other Natura 2000 sites are implicated.





Plate 2.3: Drainage Discharge – the proposed culvert links to an existing drainage channel which discharges to seminatural coastal habitat to the north-east of the R172 which is coherent with the SPA & SAC (rear of frame) but outside the designated boundaries [December 2018]

#### Natura 2000 Sites – Detailed Information

2.16 Dundalk Bay, Co. Louth is a large open shallow sea bay with extensive saltmarshes and intertidal sand/mudflats, extending some 16 km from Castletown River on the Cooley Peninsula, in the north, to Annagassan/Salterstown in the south. The bay encompasses the mouths and estuaries of the Rivers Dee, Glyde, Fane, Castletown and Flurry.

#### **Dundalk Bay SPA**

- 2.17 Dundalk Bay was classified SPA in November 2003 and updated in September 2017 (site code IE0004026). It is one of the most important wintering waterfowl sites in Ireland, regularly supporting more than 20,000 waterbirds. Predominantly a marine site (97%), the designated area covers approximately 13,238 ha. Dundalk Bay was classified SPA for the following species:
  - Red-Throated Loon Gavia stellata (A001)
  - Common Loon Gavia immer (A003)
  - Great Crested Grebe *Podiceps cristatus* (A005)
  - Great cormorant *Phalacrocorax carbo* (A017)
  - Greylag Goose Anser anser (A043)
  - Light-bellied Brent Goose Branta bernicla hrota (A046)
  - Shelduck Tadorna tadorna (A048)
  - Eurasian Wigeon Anas penelope (A050)
  - Teal Anas crecca (A052)
  - Mallard Anas platyrhynchos (A053)
  - Pintail Anas acuta (A054)
  - Common Goldeneye Bucephala clangula (A067)
  - Red-breasted Merganser Mergus serrator (A069)
  - Oystercatcher Haematopus ostralegus (A130)
  - Ringed Plover Charadrius hiaticula (A137)
  - Golden Plover Pluvialis apricaria (A140)
  - Grey Plover Pluvialis squatarola (A141)
  - Lapwing Vanellus vanellus (A142)
  - Knot *Calidris canutus* (A143)
  - Dunlin *Calidris alpina* (A149)



- Ruff Philomachus pugnax (A151)
- Black-tailed Godwit Limosa limosa (A156)
- Bar-tailed Godwit *Limosa lapponica* (A157)
- Curlew Numenius arquata (A160)
- Redshank Tringa totanus (A162)
- Common Greenshank Tringa nebularia (A164)
- Ruddy Turnstone Arenaria interpres (A169)
- Black-headed Gull Chroicocephalus ridibundus (A179)
- Common Gull Larus canus (A182)
- Greenland White-Fronted goose Anser albifrons flavirostris (A395)
- Wetlands & Waterbirds (A999) as the Wild Birds Directive pays particular attention to wetlands, which form part of this SPA, wetland habitats associated avian species are of special conservation interest.
- 2.18 Table 2.1 (summarised from the Natura 2000 standard data form and conservation objectives) sets out the qualifying features and conservation objectives of Dundalk Bay SPA.<sup>7</sup>

		Site Assessment				Population		
Qualifying Feature		Population <sup>8</sup>	Conservation <sup>9</sup>	Isolation <sup>10</sup>	Global <sup>11</sup>	Breed	Winter	Stage
A054	Pintail <i>Anas acuta</i>	В	А	С	А		117	
A052	Teal Anas crecca	С	А	С	С		488	
A050	Eurasian Wigeon <i>Anas penelope</i>	С	В	С	С		394	
A053	Mallard Anas platyrhynchos	С	А	С	С		763	
A395	Greenland White-Fronted goose Anser albifrons flavirostris	С	В	С	С		18	
A043	Greylag Goose Anser anser	В	В	С	А		435	
A169	Ruddy Turnstone Arenaria interpres	С	В	С	С		56	
A046	Light-bellied Brent Goose Branta bernicla hrota	С	А	С	В		337	
A067	Common Goldeneye Bucephala clangula	С	В	С	С		36	
A149	Dunlin <i>Calidris alpina</i>	В	А	С	А		11515	
A143	Knot Calidris canutus	А	А	С	А		9710	
A137	Ringed Plover	С	А	С	В		147	

#### Table 2.1: Dundalk Bay SPA Qualifying Features and Conservation Objectives

<sup>&</sup>lt;sup>7</sup> SPA Site Synopsis, Standard Natura 2000 Data Form and Conservation Objectives are provided at Annex A.

<sup>&</sup>lt;sup>8</sup> Size and density of the population of the species present on the site in relation to the populations present within national territory: A (100% >= p > 15%), B (15% >= p > 2%), C (2% >= p > 0%), D (non-significant population).

<sup>&</sup>lt;sup>9</sup> Degree of conservation of the features of the habitat which are important for the species concerned, including possibilities for restoration: A (excellent), B (good), C (average or reduced).

<sup>&</sup>lt;sup>10</sup> Degree of isolation of the population present on the site in relation to the natural range of the species: A (isolated or almost isolated), B (not-isolated, but on margins of area of distribution), C (not-isolated within extended distribution range).

<sup>&</sup>lt;sup>11</sup> Global assessment of the value of the site for conservation of the species: A (excellent), B (good), C (significant).



	Charadrius hiaticula								
A003	Common Loon	с		в	C	C		9	
/ 1005	Gavia immer			В	C	C		Ĵ	
A001 Red-Throated Loon			С	В	С	С		9	
	Guvia stellata								
A130	A130 Haematopus ostralegus		В	А	С	А		8712	
A182	Common Gull		С	А	с	В		555	
	Larus canus				-				
A179	Black-headed Gull		С	А	С	В		6630	
	Par tailed Codwit	5							
A157	Limosa lannonica		В	А	С	А		1950	
	Black-tailed Godwit								
A156	Limosa limosa		В	A	С	A		1067	
	Red-breasted Merganser								
A069	Mergus serrator		В	A	C	A		121	
A160	Curlew		C	^	C	р		1724	
A100	Numenius arquata		C	A	C	D		1254	
A017	Great cormorant		C	^	C	C		97	
7017	Phalacrocorax carbo		C	^	C	C		57	
A151	Ruff		C	В	C	В		4	
/ 101	Philomachus pugnax		Ĵ					•	
A140	Golden Plover		В	А	с	А		5967	
	Pluvialis apricaria								
A141	Grey Plover		В	А	С	А		204	
	Pluvialis squatarola								
A005	Great Crested Grebe		В	A	С	A		302	
	Shaldwak								
A048	Tadorna tadorna		В	А	С			492	
	Common Greenshank								
A164	Tringa nebularia		C	В	С	С		16	
	Redshank								
A162	Tringa totanus		В	A	C	A		1489	
	Lapwing		_					4 4 9 5 9	
A142	Vanellus vanellus		В	A	C	A		14850	
Conser	vation Objectives <sup>12</sup>								
Overall	Objective	Fayour	able Conservatio	n Status.					
Pintail		To maintain the favourable conservation condition of Pintail in Dundalk Bay SPA (as defined by							
Anas acuta a		attributes and targets set out in the published conservation objectives).							
Teal To		To maintain the favourable conservation condition of Teal in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).							
Anas crecca									
Function M/incom									
Eurasian Wigeon		n/a							
Anus pe	enelope								
Mallard		To maintain the favourable conservation condition of Mallard in Dundalk Bay SPA (as defined by							
Anas platyrhynchos		attributes and targets set out in the published conservation objectives).							

<sup>&</sup>lt;sup>12</sup> The Standard Natura 2000 Data Form is accurate to the September 2017 update while the Conservation Objectives were published in 2011. As the SPA qualifying/feature species were revised in 2017, with several species added and two removed, there is some inconsistency between the two documents. Conservation objectives are not yet available for the newly added species but are assumed, for the purposes of assessment, to follow the same format as for other feature species.

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Greenland White-Fronted goose Anser albifrons flavirostris	n/a
Greylag Goose Anser anser	To maintain the favourable conservation condition of Greylag Goose in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Ruddy Turnstone Arenaria interpres	n/a
Light-bellied Brent Goose Branta bernicla hrota	To maintain the favourable conservation condition of Light-bellied Brent Geese in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Common Goldeneye Bucephala clangula	n/a
Dunlin Calidris alpina	To maintain the favourable conservation condition of Dunlin in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Knot Calidris canutus	To maintain the favourable conservation condition of Knot in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Ringed Plover Charadrius hiaticula	To maintain the favourable conservation condition of Ringed Plover in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Common Loon Gavia immer	n/a
Red-Throated Loon Gavia stellata	n/a
Oystercatcher Haematopus ostralegus	To maintain the favourable conservation condition of Oystercatcher in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Common Gull Larus canus	To maintain the favourable conservation condition of Common Gull in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Black-headed Gull Chroicocephalus ridibundus	To maintain the favourable conservation condition of Black-headed Gull in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Bar-tailed Godwit <i>Limosa lapponica</i>	To maintain the favourable conservation condition of Bar-tailed Godwit in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Black-tailed Godwit Limosa limosa	To maintain the favourable conservation condition of Black-tailed Godwit in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Red-breasted Merganser Mergus serrator	To maintain the favourable conservation condition of Red-breasted Merganser in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Curlew Numenius arquata	To maintain the favourable conservation condition of Curlew in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Great cormorant Phalacrocorax carbo	n/a
Ruff Philomachus pugnax	n/a
Golden Plover Pluvialis apricaria	To maintain the favourable conservation condition of Golden Plover in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Grey Plover Pluvialis squatarola	To maintain the favourable conservation condition of Grey Plover in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Great Crested Grebe	To maintain the favourable conservation condition of Great Crested Grebe in Dundalk Bay SPA (as



Podiceps cristatus	defined by attributes and targets set out in the published conservation objectives).
Shelduck Tadorna tadorna	To maintain the favourable conservation condition of Shelduck in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Common Greenshank Tringa nebularia	n/a
Redshank Tringa totanus	To maintain the favourable conservation condition of Redshank in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Lapwing Vanellus vanellus	To maintain the favourable conservation condition of Lapwing in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).
Wetlands & Waterbirds	To maintain the favourable conservation condition of the wetland habitat in Dundalk Bay SPA as a resource for the regularly-occurring migratory waterbirds that utilise it (as defined by attributes and targets set out in the published conservation objectives).

#### **Dundalk Bay SAC**

- 2.19 Dundalk Bay was classified SAC in September 2000 and updated in September 2017 (site code IE0000455). This is a site of significant conservation value because it supports good examples of a range of coastal habitats. Predominantly a marine site (92%), the designated area covers approximately 5,234 ha. Dundalk Bay SAC is selected for the following Annex I habitats:
  - Estuaries (1130)
  - Tidal Mudflats and Sandflats (1140)
  - Perennial Vegetation of Stony Banks (1220)
  - Salicornia Mud (1310)
  - Atlantic Salt Meadows (1330)
  - Mediterranean Salt Meadows (1410)
- 2.20 Table 2.2 (summarised from the Natura 2000 standard data form and conservation objectives) sets out the qualifying features and conservation objectives of Dundalk Bay SAC.<sup>13</sup>

		Site Assessment				Global
Qualifying Feature		Representativity <sup>15</sup> Relative Surface <sup>16</sup> Conservation Status <sup>17</sup> Cover (hat)		Cover (ha)	Assessment <sup>14</sup>	
1130	Estuaries	В	В	В	2,799.0	В
1140	Tidal Mudflats and Sandflats	A	A	В	4,374.9	A

#### Table 2.2: Dundalk Bay SAC Qualifying Features and Conservation Objectives

<sup>&</sup>lt;sup>13</sup> SAC Site Synopsis, Standard Natura 2000 Data Form and Conservation Objectives are provided at Annex A.

<sup>&</sup>lt;sup>14</sup> Global assessment of value of site for the conservation of the natural habitat type: A (excellent), B (good), C (significant).

<sup>&</sup>lt;sup>15</sup> Degree of representativity of the natural habitat type: A (excellent), B (good), C (significant), D (non-significant).

<sup>&</sup>lt;sup>16</sup> Area of the site covered by the natural habitat type in relation to the total area covered by that natural habitat type within the national territory: A (100% >= p > 15%), B (15% >= p > 2%), C (2% >= p > 0%).

<sup>&</sup>lt;sup>17</sup> Degree of conservation of the structure and functions of the natural habitat type concerned, including restoration possibilities: A (excellent), B (good), C (average or reduced).

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1220	Perennial Vegetation of Stony Banks	А	С	В	52.4	А
1310	Salicornia Mud	В	С	В	35.0	В
1330	Atlantic Salt Meadows	А	С	В	380.0	А
1410	Mediterranean Salt Meadows	С	С	В	0.04	С
Conserva	ation Objectives					
1130	Estuaries	To maintain the favourable conservation condition of Estuaries in Dundalk Bay SAC (as defined by attributes and targets set out in the published conservation objectives).				
1140	Tidal Mudflats and Sandflats	To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide at Dundalk Bay SAC (as defined by attributes and targets set out in the published conservation objectives).				
1220	Perennial Vegetation of Stony Banks	To maintain the favourable conservation condition of Perennial vegetation of stony banks in Dundalk Bay SAC (as defined by attributes and targets set out in the published conservation objectives).		etation of stony ut in the		
1310	Salicornia Mud	To restore the favourable conservation condition of <i>Salicornia</i> and other annuals colonizing mud and sand in Dundalk Bay SAC (as defined by attributes and targets set out in the published conservation objectives).				
1330	Atlantic Salt Meadows	To maintain the favourable conservation condition of Atlantic salt meadows in Dundalk Bay SAC (as defined by attributes and targets set out in the published conservation objectives).		eadows in published		
1410	Mediterranean Salt Meadows	To maintain the favourable conservation condition of Mediterranean salt meadows Dundalk Bay SAC (as defined by attributes and targets set out in the published conservation objectives).		n salt meadows in published		



### **3.** SCREENING FOR APPROPRIATE ASSESSMENT

- 3.1 The project is not necessary for the management of Dundalk Bay SAC or Dundalk Bay SPA.
- 3.2 Given the proximity of the site to Dundalk Bay and the scale of the development proposals, significant effects on the Natura 2000 sites cannot be excluded at the screening stage.
- 3.3 Detailed consideration has been given, through iterative project design and assessment, to environmental control and management measures, now integrated into the development proposals, intended to avoid significant adverse impacts on the coastal and intertidal habitats within Dundalk Bay SAC and Dundalk Bay SPA. After *People Over Wind*, it is clear that screening must conclude that appropriate assessment is required.
- 3.4 However, it is instructive to examine the characteristics of the project and the potential mechanisms for adverse effects through the formal screening process [Tables 3.1 & 3.2].<sup>18</sup>
- 3.5 A general conservation objective encapsulating an overall aim of maintaining *'favourable conservation status'* has been applied for the SPA and SAC, and for the feature species and habitats, for the purposes of initial analysis and screening.

#### Table 3.1: Screening Matrix – Dundalk Bay SPA

Brief description of the project or plan:			
Comprehensive, sustainable housing development, to provide a total of 485 residential units of various types (apartments, duplexes, townhouses, terraced, semi-detached and detached houses), a crèche (677 sqm) and includes access and egress points, pedestrian and cyclist facilities, car parking, stormwater SuDS and attenuation as required, foul and potable water services and all associated ancillary works and infrastructure, open space provision and landscaping.			
Full details of the project are set out in Ch. 2 of the EIAR.			
Brief Description of the Natura 2000 site:			
Dundalk Bay SPA			
• Red-Throated Loon <i>Gavia stellata</i> (A001)			
Common Loon <i>Gavia immer</i> (A003)			
Great Crested Grebe <i>Podiceps cristatus</i> (A005)			
Great cormorant <i>Phalacrocorax carbo</i> (A017)			
Greylag Goose Anser anser (A043)			
Light-bellied Brent Goose Branta bernicla hrota (A046)			
Shelduck Tadorna tadorna (A048)			
Eurasian Wigeon Anas penelope (A050)			
Teal Anas crecca (A052)			
Mallard Anas platyrhynchos (A053)			
Pintail Anas acuta (A054)			
Common Goldeneye Bucephala clangula (A067)			
Red-breasted Merganser Mergus serrator (A069)			

<sup>&</sup>lt;sup>18</sup> As provided within official EC guidance: 'Assessment of plans and projects significantly affecting Natura 2000 sites, Methodological guidance on the provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC' (Annex 2; Figure 1).



- Oystercatcher Haematopus ostralegus (A130)
- Ringed Plover Charadrius hiaticula (A137)
- Golden Plover Pluvialis apricaria (A140)
- Grey Plover *Pluvialis squatarola* (A141)
- Lapwing Vanellus vanellus (A142)
- Knot Calidris canutus (A143)
- Dunlin Calidris alpina (A149)
- Ruff Philomachus pugnax (A151)
- Black-tailed Godwit Limosa limosa (A156)
- Bar-tailed Godwit Limosa lapponica (A157)
- Curlew Numenius arquata (A160)
- Redshank *Tringa totanus* (A162)
- Common Greenshank Tringa nebularia (A164)
- Ruddy Turnstone Arenaria interpres (A169)
- Black-headed Gull Chroicocephalus ridibundus (A179)
- Common Gull Larus canus (A182)
- Greenland White-Fronted goose Anser albifrons flavirostris (A395)
- Wetlands & Waterbirds (A999)

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 site.

- *Ex-Situ* impacts on SPA feature and assemblage species loss of supporting (non-designated) semi-natural habitat within the site.
- *Ex-Situ* impacts on SPA feature and assemblage species during the construction phase disturbances due to construction works and activities at the site during the construction phase (noise, vibration, presence and visibility, artificial lighting).
- *Ex-Situ* impacts on SPA feature and assemblage species during the construction phase risk of collisions between birds and tall machinery at the site during the construction phase.
- Ex-Situ impacts on SPA feature and assemblage species during the occupation phase disturbances due to
  increased traffic on the R172 Blackrock Road, increased use of the site and, potentially, increased use of coastal
  areas (noise, presence and visibility, artificial lighting).
- Pollution of the SPA during the construction phase contamination of the local receiving environment through the mobilisation of silt and sediments and transfer to the SPA through surface water drainage during earthworks and construction.
- Pollution of the SPA during the construction phase contamination of the local receiving environment through uncontrolled disposals of fuels and construction materials etc. and transfer to the SPA through surface water drainage.
- Pollution of the SPA during the occupation phase contamination of surface/storm runoff (silt, hydrocarbons etc.) and transfer to the SPA through drainage infrastructure.
- Pollution of the SPA during the occupation phase disposal of foul sewage.
- Degradation of natural habitats within the SPA during the occupation phase erosion etc. due to surface water disposal to Dundalk Bay from site drainage infrastructure.

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:		
size and scale:	This is a relatively large greenfield site which is for the most part physically separated	
	from (although ecologically connected to) the SPA. In the context of the scale of	
	existing development in the surrounding peri-urban landscape, development of this	
	site does not, in itself, present potential for significant adverse effects on the SPA as	
	a result of size and scale.	
land-take:	The project does not require any land take from within the SPA. There are no works	
	proposed within the boundaries of the SPA and no outfalls or other structures	



	required on the foreshore within the SPA boundary.
distance from Natura 2000 site or	This is a relatively large greenfield site which is close to but outside and physically
key features of the site:	separated from the SPA.
	All wintering populations are susceptible to increased disturbance from
	anthropogenic sources. Overwintering birds operate at marginal energetic levels
	where increased movements forced by disturbances, particularly repeated
	disturbances, can result in energy deficits and localised population displacements
	which can in turn compromise winter survival. Disturbances may occur during the
	construction phase (as detailed below).
	Habitat loss to the wintering SPA assemblage as a result of the development of the
	site (i.e. loss of habitat within the site) is unlikely to be a significant issue.
resource requirements (water	
abstraction etc.):	No resources are required from within the SPA.
emissions (disposals to land,	This is a substantial site which is close to, and drains into, Dundalk Bay. Lands are in
water or air):	agricultural use and no significant land contamination is present.
	Earthworks and construction activities will mobilise silts and sediments which
	present a risk of contamination to the SPA through surface water drainage.
	Construction activities will generate waste streams which present a risk of
	contamination (fuels and other hydrocarbons, cements and other construction
	materials etc.) to the SPA through surface water drainage.
	Occupation of the site will generate surface and stormwater runoff which is to be
	disposed of to Dundalk Bay via drainage infrastructure - this presents a risk of
	contamination (silts, hydrocarbons etc.) to the SPA.
	Occupation of the site will generate surface and stormwater runoff which is to be
	disposed of to Dundalk Bay via drainage infrastructure - this presents a risk of
	degradation of natural habitats within the SPA through erosion etc.
	Occupation of the site will generate foul sewage for disposal.
excavation requirements:	No excavation is required within the SPA.
	Rock breaking or blasting may be required to install services, the wastewater
	pumping station and excavate underground carparks into the bedrock; potential
	impacts from disturbance are identified below.
	Potential for impacts on the SPA resulting from the mobilisation of silts and
	sediments during earthworks and construction within the site are identified above.
transportation requirements:	All transportation requirements will be achieved using the existing public road
	network and will not result in significant effects on the SPA.
duration of construction:	The site will be built and occupied indefinitely with no plans for decommissioning.
operation, de-commissioning etc.:	The temporal scale of the project is substantial but does not in itself present potential
	for significant adverse effects on the SPA.
other:	n/a
Describe any likely changes to the s	ite arising as a result of:
reduction of habitat area:	No reduction in habitat area within the SPA and no significant reductions in non-
	designated supporting natural or semi-natural habitat will occur as a direct result of
	the development of the site.
disturbance to key species:	All wintering populations are susceptible to increased disturbance from
	anthropogenic sources. Overwintering birds operate at marginal energetic levels
	where increased movements forced by disturbances, particularly repeated
	disturbances, can result in energy deficits and localised population displacements
	which can in turn compromise winter survival.
	The site is not within the SPA, but the main site access is to be taken from the
	Blackrock Road, which runs alongside the designated area. This busy road has been
	present for several decades and serves a significant level of traffic associated with
	local transit and housing in the area. It is not expected that traffic increases on the
	R172 will result in any appreciable increase in disturbance to feature species.



Similarly, it is not expected that any increased use of the foreshore of Dundalk Bay for recreation etc., or any consequent increase in anthropogenic disturbance to SPA feature species, particularly during the winter, will occur.

Noise and vibration from piling, rock-breaking/blasting, and other intensive construction activities can result in significant disturbances to avifauna, even over a distance of several hundred metres. It is highly unlikely that piling will be required during the construction of the site. The existing ground conditions where the new units will be constructed are favourable, with rock prevalent in the area. The construction of the initial section of the new main access from the R172 will require some consideration due to the poor ground conditions but it is likely that the solution will be to provide a stiff sub-grade and pavement foundation layers rather than piling. Rock breaking or blasting may be required to install services, the wastewater pumping station and excavate underground carparks into the bedrock.

Discrete elements of site development which must take place close to the shore, such as the creation of the main site access on the R172 Blackrock Road and the installation of the drainage outfall, may result in localised disturbances and must be considered individually.

Otherwise, it is unlikely that construction operations within the main section of the site will result in increased anthropogenic disturbance to SPA feature species within the SPA.

From an assessment of habitat suitability, preference and availability (as per the consideration presented in Ch. 4 of the EIAR and in the PEA at Appendix 4.1) it was considered very unlikely that the development site was regularly used by significant numbers of target species during the winter. The interior of the site provides very little, if any, suitable habitat for wintering birds. Arable fields overwintered with stubbles can provide useful foraging resources for some species but generally not the coastal and estuarine ducks, divers and waders which form the majority of the SPA feature list and rarely venture inland during the winter. Some species of waterfowl, such as gulls and geese, and including those listed as SPA feature species, do exploit terrestrial habitats such as open pasture and arable stubbles in coastal locations during the winter and may be present within the site from time to time. However, it is highly unlikely that any SPA target species are ever present in significant numbers within the site during the winter, or that it is relied upon for foraging, high-tide roosts or any other purpose.

This was confirmed through walkover surveys of the site completed during the wintering season. No SPA target or assemblage species were noted within the site during site walkover surveys completed in February, October and December 2018 or in January and February 2019. Occasional individual birds were recorded in flight in the general area.

The small area of rough, marshy habitat to the east of the site (main access road) is unsuitable for foraging or high-tide roosting due to scrub encroachment (habitat structure and the availability of cover and vantage for predators). Tall construction machinery, such as cranes, and tall buildings present some collision risk to commuting and migratory birds, particularly if those structures are within or close to habitual commuting and migrating routes. Habitual inland commuting and migratory routes are likely to follow river corridors to the north and south; the site is unlikely to be regularly overflown by commuting or migrating SPA species. Further, there are no particularly tall buildings proposed (the tallest being 3 and 4 storey apartments blocks) and it is very unlikely that any particularly tall cranes or will be required. Interactions between target species and tall machinery/buildings are very unlikely to occur.

As noted, no significant numbers of target species were noted within or above the site during walkover surveys completed during the wintering season (EIAR Ch. 4 &



	Appendix 4.1)	
habitat or species fragmentation:	Habitat fragmentation within the SPA may occur as a result of pollution and/or	
	erosion from uncontrolled surface water drainage during the construction and	
	occupational phases (as detailed above).	
reduction in species density:	Species fragmentation and reductions in density may occur as a result of	
	disturbances (as detailed above).	
changes in key indicators of	The key indicators of conservation value of the SPA that are at risk of significant	
conservation value (water quality	adverse impact are the population numbers and coherence of SPA feature species,	
etc.):	the integrity of marginal/inundation habitats (such as saltmarsh) within the SPA and	
	overall ecological and water quality within Dundalk Bay. Deteriorations in water	
	quality can adversely impact the foraging resource available to SPA feature species	
	and other wildlife.	
Describe any likely impacts on the I	Natura 2000 site as a whole in terms of:	
interference with the key	Habitat fragmentation within the SPA may occur as a result of pollution and/or	
relationships that define the	erosion from uncontrolled surface water drainage during the construction and	
structure and function of the site:	occupational phases (as detailed above).	
	Species fragmentation and reductions in density may occur as a result of	
	disturbances (as detailed above).	
	Pollution of the SPA may occur through the mobilisation of silts and sediments during	
	the construction phase and contamination of surface water discharging to Dundalk	
	Bay during the construction and occupation phases (as detailed above).	
Provide indicators of significance as	a result of the identification of effects set out above in terms of:	
loss:	No reduction in habitat area within the SPA and no overall loss or reduction in species	
	numbers or density will occur as a direct result of the development of the site.	
fragmentation:	Habitat fragmentation within the SPA may occur as a result of pollution and/or	
	erosion from uncontrolled surface water drainage during the construction and	
	occupational phases (as detailed above).	
	Species fragmentation and reductions in density may occur as a result of	
	disturbances (as detailed above).	
disruption:	All wintering populations are susceptible to increased disturbance from	
disturbance:	anthropogenic sources. Overwintering birds operate at marginal energetic levels	
	where increased movements forced by disturbances, particularly repeated	
	disturbances, can result in energy deficits and localised population displacements	
	which can in turn compromise winter survival. Disturbances may occur during the	
	construction phase (as detailed above).	
change to key elements of the site	The key indicators of the conservation value of the SPA that are at risk of significant	
(e.g. water quality etc.):	adverse impact are the population numbers and coherence of SPA feature species,	
	the integrity of marginal/inundation habitats (such as saltmarsh) within the SPA and	
	overall ecological and water quality within Dundalk Bay. Deteriorations in water	
	quality call adversely impact the foraging resource available to SPA feature species	
Describe from the above these elec	and other wildlife.	
are likely to be significant or whore	the scale or magnitude of impacts are not known	
are likely to be significant of where	the scale of magnitude of impacts are not known.	
Farthworks and construction activit	ies will mohilise silts and sediments which present a risk of contamination to the SPA	
through surface water drainage	ics with mobilise sites and sequiments which present a risk of containingtion to the SPA	
an ough surface water and huger		
Construction activities will generate waste streams which present a risk of contamination (fuels and other hydrocarbons		
cements and other construction materials etc.) to the SPA through surface water drainage		
,		
Occupation of the site will generate	surface and stormwater runoff which is to be disposed of to Dundalk Bay via drainage	
infrastructure – this presents a risk of contamination (silts, hydrocarbons etc.) to the SPA.		



Occupation of the site will generate surface and stormwater runoff which is to be disposed of to Dundalk Bay via drainage infrastructure – this presents a risk of degradation of natural habitats within the SPA through erosion etc.

Occupation of the site will generate foul sewage for disposal.

Noise and vibration from piling, rock-breaking, blasting and other intensive construction activities can result in significant disturbances to avifauna, even over a distance of several hundred metres. It is highly unlikely that piling will be required during the construction of the site. The existing ground conditions where the new units will be constructed are favourable, with rock prevalent in the area. The construction of the initial section of the new main access from the R172 will require some consideration due to the poor ground conditions but it is likely that a solution providing a stiff sub-grade and pavement foundation layers rather than piling will be adopted. Rock breaking or blasting may be required to install services, the wastewater pumping station and excavate underground carparks into the bedrock.

Discrete elements of site development which must take place close to the shore, such as the creation of the main site access on the R172 Blackrock Road and the installation of the drainage outfall, may result in localised disturbances and must be considered individually.

#### Table 3.2: Screening Matrix – Dundalk Bay SAC

#### Brief description of the project or plan:

Comprehensive, sustainable housing development, to provide a total of 485 residential units of various types (apartments, duplexes, townhouses, terraced, semi-detached and detached houses), a crèche (677 sqm) and includes access and egress points, pedestrian and cyclist facilities, car parking, stormwater SuDS and attenuation as required, foul and potable water services and all associated ancillary works and infrastructure, open space provision and landscaping.

Full details of the project are set out in Ch. 2 of the EIAR.

#### Brief Description of the Natura 2000 site:

#### Dundalk Bay SAC

- Estuaries (1130)
- Tidal Mudflats and Sandflats (1140)
- Perennial Vegetation of Stony Banks (1220)
- Salicornia Mud (1310)
- Atlantic Salt Meadows (1330)
- Mediterranean Salt Meadows (1410)

# 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 site.

- Pollution of the SAC during the construction phase contamination of the local receiving environment through the mobilisation of silt and sediments and transfer to the SAC through surface water drainage during earthworks and construction.
- Pollution of the SAC during the construction phase contamination of the local receiving environment through uncontrolled disposals of fuels and construction materials etc. and transfer to the SAC through surface water drainage.
- Pollution of the SAC during the occupation phase contamination of surface/storm runoff (silt, hydrocarbons etc.) and transfer to the SAC through drainage infrastructure.
- Pollution of the SAC during the occupation phase disposal of foul sewage.



• Degradation of natural habitats within the SAC during the occupation phase – erosion etc. due to surface water				
disposal to Dundalk Bay from site drainage infrastructure.				
Describe any likely direct indirect or secondary increases of the present (sither slave or in combination with other slave				
or projects) on the Natura 2000 site	by virtue of:			
size and scale:	This is a relatively large greenfield site which is for the most part physically separated			
	from (although ecologically connected to) the SAC. In the context of the scale of			
	existing development in the surrounding peri-urban landscape, development of this			
	site does not, in itself, present potential for significant adverse effects on the SAC as			
	a result of size and scale.			
land-take:	The project does not require any land take from within the SAC. There are no works			
	proposed within the boundaries of the SAC and no outfalls or other structures			
	required on the foreshore within the SAC boundary.			
distance from Natura 2000 site or	This is a relatively large greenfield site which is close to but outside and physically			
key features of the site:	separated from the SAC. Hydrological linkages do exist which may result in adverse			
	effects during the construction and occupation phases (as detailed below).			
resource requirements (water	No recourses are required from within the CAC			
abstraction etc.):	No resources are required from within the SAC.			
emissions (disposals to land,	This is a substantial site which is close to, and drains into, Dundalk Bay. Lands are in			
water or air):	agricultural use and no significant land contamination is present.			
	Earthworks and construction activities will mobilise silts and sediments which			
	present a risk of contamination to the SAC through surface water drainage.			
	Construction activities will generate waste streams which present a risk of			
	contamination (fuels and other hydrocarbons, cements and other construction			
	materials etc.) to the SAC through surface water drainage.			
	Occupation of the site will generate surface and stormwater runoff which is to be			
	disposed of to Dundalk Bay via drainage infrastructure - this presents a risk of			
	contamination (silts, hydrocarbons etc.) to the SAC.			
	Occupation of the site will generate surface and stormwater runoff which is to be			
	disposed of to Dundalk Bay via drainage infrastructure – this presents a risk of			
	degradation of natural habitats within the SAC through erosion etc.			
	Occupation of the site will generate foul sewage for disposal.			
excavation requirements:	No excavation is required within the SAC. Notwithstanding the potential for impacts			
	on the SAC resulting from the mobilisation of silts and sediments (as identified			
	above), earthworks and construction within the site are unlikely to result in			
	significant effects on the SAC via other mechanisms.			
transportation requirements:	All transportation requirements will be achieved using the existing public road			
	network and will not result in significant effects on the SAC.			
duration of construction:	The site will be built and occupied indefinitely with no plans for decommissioning.			
operation, de-commissioning etc.:	The temporal scale of the project is substantial but does not in itself present potential			
	for significant adverse effects on the SAC.			
other:	n/a			
Describe any likely changes to the s	ite arising as a result of:			
reduction of habitat area:	No reduction in habitat area within the SAC and no significant reductions in non-			
	designated supporting natural or semi-natural habitat will occur as a direct result of			
	the development of the site.			
disturbance to key species:	n/a – SAC designated for habitats only; SPA species considered separately (as above).			
habitat or species fragmentation:	Habitat fragmentation within the SAC may occur as a result of pollution and/or			
	erosion from uncontrolled surface water drainage during the construction and			
	occupational phases (as detailed above).			
	SAC designated for habitats only; SPA species considered separately (as above).			
reduction in species density:	n/a – SAC designated for habitats only; SPA species considered separately (as above).			
changes in key indicators of	The key indicators of conservation value of the SAC that are at risk of significant			



conservation value (water quality	adverse impact are the integrity of feature and supporting marginal/inundation		
etc.):	habitats (such as saltmarsh) within the SAC and overall ecological and water quality		
	within Dundalk Bay. Deteriorations in water quality can adversely impact the		
	foraging resource available to SPA feature species and other wildlife.		
Describe any likely impacts on the I	Natura 2000 site as a whole in terms of:		
interference with the key	Habitat fragmentation within the SAC may occur as a result of pollution and/or		
relationships that define the	erosion from uncontrolled surface water drainage during the construction and		
structure and function of the site:	occupational phases (as detailed above).		
	Pollution of the SAC may occur through the mobilisation of silts and sediments during		
	the construction phase and contamination of surface water discharging to Dundalk		
	Bay during the construction and occupation phases (as detailed above).		
	SAC designated for habitats only; SPA species considered separately (as above).		
Provide indicators of significance as a result of the identification of effects set out above in terms of:			
loss	No reduction in habitat area within the SAC will occur as a direct result of the		
	development of the site.		
	Habitat fragmentation within the SAC may occur as a result of pollution and/or		
fragmentation:	erosion from uncontrolled surface water drainage during the construction and		
	occupational phases (as detailed above).		
disruption:	n/a – SAC designated for babitats only: SPA species considered separately (as above)		
disturbance:			
	The key indicators of the conservation value of the SAC that are at risk of significant		
change to key elements of the site	adverse impact are the integrity of feature and supporting marginal/inundation		
(e.g. water quality etc.):	habitats (such as saltmarsh) within the SAC and overall ecological and water quality		
	within Dundalk Bay. Deteriorations in water quality can adversely impact the		
	foraging resource available to SPA feature species and other wildlife.		
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 are not known		

Earthworks and construction activities will mobilise silts and sediments which present a risk of contamination to the SAC through surface water drainage.

Construction activities will generate waste streams which present a risk of contamination (fuels and other hydrocarbons, cements and other construction materials etc.) to the SAC through surface water drainage.

Occupation of the site will generate surface and stormwater runoff which is to be disposed of to Dundalk Bay via drainage infrastructure – this presents a risk of contamination (silts, hydrocarbons etc.) to the SAC.

Occupation of the site will generate surface and stormwater runoff which is to be disposed of to Dundalk Bay via drainage infrastructure – this presents a risk of degradation of natural habitats within the SAC through erosion etc.

Occupation of the site will generate foul sewage for disposal.

#### Screening Conclusions

- 3.6 The screening process has identified the key indicators of the conservation value of the SPA and SAC that are at risk and the mechanisms by which significant effects may occur. The main areas of concern are pollution of the SAC/SPA, degradation of SAC/SPA habitats and *ex-situ* impacts on SPA feature and assemblage species.
- 3.7 After *People Over Wind*, screening must conclude that Appropriate Assessment is required. The Natura Impact Statement (NIS) is provided in the following section this collates all of the information necessary



to assist the competent authority in the completion of the formal Appropriate Assessment.



# 4. NATURA IMPACT STATEMENT (NIS)

4.1 Appropriate Assessment is the second stage of the assessment process, where the overall effects on the integrity of the Natura 2000 sites are examined. This NIS is provided to assist the competent authority in the completion of the formal Appropriate Assessment.

## **Conservation Objectives & 'Favourable Conservation Status'**

- 4.2 The purpose of designating and managing Natura 2000 sites is to maintain at, or restore to, *'favourable conservation status'* the habitats and species for which the sites are notified. The individual conservation objectives for habitats and species identified for each site therefore encapsulate an overall aim of maintaining or achieving favourable conservation status for each feature species or habitat and maintaining the integrity of the site as a whole. The Habitats Directive requires that appropriate assessment is conducted with regard to the established conservation objectives for each designated site.
- 4.3 The purpose of appropriate assessment is to determine whether a plan or project will adversely impact site integrity. The critical consideration is not the extent or degree of an impact, or whether an impact is direct or indirect, but whether the implications, either individually or in combination with other plans or projects, are likely to affect the site's ability to meet the conservation objectives and achieve or maintain favourable conservation status (EC, 2012).
- 4.4 Article 1(e) of the Habitats Directive defines *'conservation status'* and *'favourable conservation status'*, in the context of habitats as follows:
  - (e) conservation status of a natural habitat means the sum of the influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species within the territory referred to in Article 2.

The conservation status a natural habitat will be taken as 'favourable' when:

- its natural range and areas it covers within that range are stable or increasing, and
- he specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable as defined in (i);
- 4.5 Article 1(i) of the Habitats Directive defines *'conservation status'* and *'favourable conservation status'*, in the context of species as follows:
  - (i) conservation status of a species means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations within the territory referred to in Article 2;

The conservation status will 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, and
- 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 probably continue to be, a sufficiently large habitat to maintain its populations on a longterm basis;
- 4.6 Site level conservation objectives are a set of specified objectives that must be met to ensure that the site contributes to maintaining or achieving favourable conservation status of the site feature(s) at the national and biogeographic level. Conservation objectives for Dundalk Bay SAC and Dundalk Bay are set out above [Tables 2.1 & 2.2] and below [Table 4.1] and are reproduced in full [at Annex A].



## Impact Assessment & Mitigation

- 4.7 Impacts are assessed alone and in combination with other plans or projects with respect to the structure and function of the Natura 2000 sites and their conservation objectives. Where adverse impacts are expected an assessment of the measures envisioned to avoid, mitigate or otherwise reduce their significance is carried out, both in terms of their effectiveness and in terms of any further effects that may attach to the measures themselves.
- 4.8 For the purposes of assessment, consideration of SPA feature and assemblage species is assumed to encapsulate consideration of the Ramsar and pNHA species and assemblages; and consideration of SAC habitats is assumed to encapsulate consideration of pNHA and Ramsar/SPA supporting habitats.

#### Analysis of Significance – Mechanisms for Impacts on the Integrity of the Natura 2000 Sites

- 4.9 The main areas of concern are pollution of the SAC/SPA, degradation of SAC/SPA habitats and *ex-situ* impacts on SPA feature and assemblage species:
  - <u>Pollution of the SAC/SPA</u> earthworks and construction activities will mobilise silts and sediments which present a risk of contamination to the SAC and SPA through surface water drainage.
  - <u>Pollution of the SAC/SPA</u> construction activities will generate waste streams which present a risk of contamination (fuels and other hydrocarbons, cements and other construction materials etc.) to the SAC and SPA through surface water drainage.
  - <u>Pollution of the SAC/SPA</u> occupation of the site will generate surface and stormwater runoff which is to be disposed of to Dundalk Bay via drainage infrastructure – this presents a risk of contamination (silts, hydrocarbons etc.) to the SAC and SPA.
  - <u>Pollution of the SAC/SPA</u> occupation of the site will generate foul sewage for disposal.
  - <u>Degradation of natural habitats within the SAC/SPA</u> occupation of the site will generate surface and stormwater runoff which is to be disposed of to Dundalk Bay via drainage infrastructure this presents a risk of degradation of natural habitats within the SAC and SPA through erosion etc.
  - <u>Ex-Situ impacts on SPA feature and assemblage species</u> noise and vibration from piling, rock-breaking, blasting and other intensive construction activities can result in significant disturbances to avifauna, even over a distance of several hundred metres. It is unlikely that piling will be required but rock breaking or blasting may be required to install services, the wastewater pumping station and excavate underground carparks into the bedrock.
  - <u>Ex-Situ impacts on SPA feature and assemblage species</u> discrete elements of site development which must take place close to the shore, such as the creation of the main site access on the R172 Blackrock Road and the installation of the drainage outfall, may result in localised disturbances and must be considered individually.
- 4.10 A full and detailed consideration of the potential impacts on the water environment, including the transitional waters od Dundalk Bay, is set out in the EIAR (Ch. 10). A full consideration of potential *ex-situ* impacts on SPA feature species is set out in the EIAR (Ch. 4).
- 4.11 Three broad approaches are adopted to the mitigation of impacts on Dundalk Bay SAC and Dundalk Bay SPA:
  - Pollution Control in the Construction Phase
  - Pollution Control in the Operational Phase
    - Prevention of Disturbance to SPA Species in the Construction Phase.



#### 4.12 These broad approaches to mitigation are implemented through:

- Construction Environmental Management Plan (CEMP)
- Construction Programme
- Sustainable Urban Drainage (SUDS) System
- Silt Traps & Hydrocarbon Interceptors
- Foul Disposal
- Site-Specific Environmental Management Plan (EMP)

### **Construction Environmental Management Plan (CEMP)**

- 4.13 A Construction Environmental Management Plan (CEMP), based on the schedule of commitments presented in the EIAR (including this NIS), will be prepared for the construction phase. An Outline CEMP<sup>19</sup> has been prepared for submission with the planning application.
- 4.14 The CEMP collates and sets out the environmental control measures required to minimise, and control adverse environmental impacts associated with the development. It is intended that the CEMP will be a live document, which will capture all construction-phase environmental mitigation measures included within the EIAR and any other measures which become apparent through the EIA consultation process and/or are prescribed through planning conditions etc. The CEMP will include enabling decommissioning works. The outline document provides a framework for the contractor to develop further as the project moves into the construction phase.
- 4.15 The specific measures required for the protection of Dundalk Bay SPA & SAC, as set out in the EIAR (Ch. 4 & Ch. 10), are as follows:
  - All construction and operations are to be carefully planned and implemented with a series of environmental management and control procedures. The CEMP details the general pollution prevention principles and measures which are to be implemented, water and sediment management measures to prevent pollution during the construction phase and measures to ensure the potential for pollution fuel, oil, chemicals and other construction materials is minimised.
  - The Contractor shall engage a suitably experienced ecologist, the Project Ecologist, who will be a full member of a relevant professional institute such as the Chartered Institute of Ecology and Environmental Management (CIEEM), have relevant experience in the management of ecological constraints during construction, and hold or have held a protected species licence(s). The Project Ecologist shall be appointed sufficiently in advance of construction to arrange for any mitigation requirements to be incorporated into the CEMP and any site-specific method statements.
  - In advance of commencement of the construction phase, the disused existing onsite well, securely
    located within a pump house in the north-western portion of the site will be fully decommissioned by
    an experienced borehole specialist in accordance with relevant guidelines, 'Good practice for
    decommissioning redundant boreholes and wells' (UK Environment Agency, 2012). This will ensure that
    redundant well is made both safe and structurally stable and will be suitably backfilled or sealed to
    prevent groundwater pollution and flow of water between different aquifer units.
  - The construction management of the site will take account of the recommendations of the Construction Industry Research and Information Association (CIRIA) guides 'Control of Water Pollution from Construction Sites' and 'Groundwater control design and practice' to minimise as far as possible the risk of pollution.
  - All of the mitigation measures (for the protection of soils and geology) listed in Chapter 9 will be implemented onsite during the construction phase.

<sup>&</sup>lt;sup>19</sup> 'Strategic Housing Development, Blackrock, Dundalk, Co. Louth. Outline Construction Environmental Plan. Kingsbridge Consultancy Ltd.' (Atkins, December 2018)



- The Contractor shall take all necessary precautions to prevent pollution or silting from construction activities. The following management, control and mitigation measures will be implemented:
  - Any groundwater temporarily dewatered during the construction of the attenuation basin, wastewater pumping station and any deep building foundations in localised areas in the eastern portion of the site will be treated via. the installation of a temporary in-situ water treatment system;
  - This system should be designed and sized to ensure that all pumped groundwater water is treated prior to discharge to a selected onsite location (via. a temporary soakaway).
  - The Contractor will be required to provide a site-specific dewatering plan, clearly setting out proposed excavation methodology, estimated dewatering rates, details of the proposed treatment system, and discharge location.
  - Surface water attenuation measures are to be designed which will not be overwhelmed by one-off adverse precipitation events.
  - Where practical, cut-off V drains will be utilised to divert water entering site and reduce the amount of water to be managed on-site. Attention will be given to the maintenance and protection of all drains and temporary channels to minimise scour and the mobilisation of suspended solids (e.g. lining with hessian or clean stone, check dams, silt fencing etc.).
  - Mud will be controlled at entry and exits to the site using wheel washes and/or road sweepers, and tools and plant will be washed out and cleaned in designated areas. Wheel washings will be contained and treated prior to discharge.
  - Runoff will be directed to and intercepted by temporary settlement lagoons. The size of the settlement lagoon will be determined from predicted flow rates and retention times based on sediment particle size and density.
  - Neither groundwater nor surface water runoff from the working areas will be permitted to discharge directly to the environment. Runoff generated within the site during construction will be filtered and treated to remove hydrocarbons and sediment. Total Suspended Solids (TSS), pH/EC and colour will be monitored daily and outlets from sedimentation ponds will incorporate a turbidity monitor with alarm at a high level.
  - Subject to consent, water that is unpolluted, aside from its silt content, may be pumped out over adjacent vegetated ground, where appropriate, with consideration given to groundwater level and saturation, wildlife importance and proximity to drainage channels.
  - In the event of surface water failing to meet the required standards water will be recirculated to the inlet of the sediment pond to provide further time for settlement. A penstock will be provided on the outlet from the sediment pond to control discharge from the site.
  - The performance of the surface water drainage network will be maintained and monitored throughout the construction of the proposed development, noting that the proposed storm system will include permanent hydrocarbon separators.
  - Where the Contractor utilises pumping to drain works areas, a back-up pump and generator must be provided on site for use in the event of the primary pump failing.
  - Procedures are to be put in place to ensure the identification, remediation and correct reporting of any silt or other pollution incidents that may occur.
- During localised construction works around the northern and eastern drainage channels (to facilitate the
  installation of the proposed 2no. outfalls/headwalls), any minor volumes of stripped soils should be
  stockpiled a minimum distance of 10m from each channel and should be appropriately covered. A
  temporary stormwater management system should be implemented by the Contractor.
- Areas should be designated where stockpiles will be established in order to facilitate the efficient transfers of material within the site. Stockpiles will be stabilised as soon as possible (e.g. sealed, closed over, seeded or covered using geotextile mats), and bunded by earth or silt fences at the toe to intercept silt-laden runoff during rainfall events.



- Appropriate working practices to avoid the repetitive handling of excavated substrates, minimise vehicle
  movements, limit the size, number and frequency of stockpiles, reduce the compaction and erosion of
  soils etc. and control the generation of dust. The implementation of a construction traffic management
  plan and controls on the locations of plant and materials will minimise the compaction and erosion of
  soil. Excavation is to be restricted during high winds and heavy rainfall to minimise dust generation and
  contaminated surface runoff.
- Excavated materials are to be inspected for signs of possible contamination, such as staining or strong odours. Should any be noticed, substrates are to be segregated and samples analysed for contaminants to determine an appropriate means of disposal to licensed/permitted facilities appropriate for the waste classification.
- In order to prevent any potential surface water/groundwater impacts via. release of hydrocarbon/chemical contaminants the following standard measures will be implemented:
  - The Contractor will ensure all site personnel are trained in the handling of materials, the sensitive nature of the receiving environment, the drainage system and the consequences of accidental spillages.
  - Fuels, lubricants and hydraulic fluids for equipment used on the construction site, as well as any solvents, oils, and paints, will be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism, and provided with spill containment according to best codes of practice;
  - Waste oils and hydraulic fluids will be collected in leak-proof containers and removed from the proposed development for disposal or recycling;
  - Any spillage of fuels, lubricants or hydraulic oils will be immediately contained and the contaminated soil removed from the proposed development and properly disposed of;
  - All site vehicles used will be refuelled in bunded and adequately sealed and covered areas in the construction compound area.
  - Strict supervision of contractors will be adhered to in order to ensure that all plant and equipment utilised on-site is in good working condition. Any equipment not meeting the required standard will not be permitted for use within the site. This will minimise the risk of groundwater becoming contaminated through site activity.
  - All oil stored on site for construction vehicles will be kept in a locked and bunded area;
  - Generators, pumps and similar plant will be placed on drip-trays to prevent contamination;
  - All site vehicles used will be refuelled in bunded areas;
  - All temporary construction fuel tanks will also be located in a suitably bunded area and all tanks will be double skinned. Relevant Material Safety Data Sheets along with oil absorbent materials will be kept on site in close proximity to any fuel storage tanks or bowsers during proposed site development works; and,
  - All fuel/oil deliveries to on-site oil storage tanks will be supervised, and records will be kept of delivery dates and volumes.
  - Fixed plant shall be self-bunded; mobile plant shall be in good working order, kept clean, fitted with drip trays where appropriate and subject to regular inspection. Drip trays will be covered, emptied regularly as required and disposed of off-site having regard for waste management legislation.
  - Spill kits and oil absorbent material shall be carried with mobile plant and located at vulnerable locations around the site to reduce the risk of spillages entering the sub-surface or groundwater environment; booms shall be held on-site for works near drains or dewatering points.
  - Procedures are to be put in place to ensure the identification, remediation and correct reporting of any fuel, oil, chemical or other pollution incidents that may occur.
- In order to prevent any potential surface water/groundwater impacts via. release of cementitious materials the following measures will be implemented:
  - No mixing of concrete will be carried out on site. The measures detailed below will be employed where poured concrete is being used in the construction process;



- The production, transport and placement of all cementitious materials will be strictly planned and supervised. Site batching/production of concrete will not be carried out on site and therefore these aspects will not pose a risk to the waterbodies present, namely any temporarily exposed groundwater, or local drainage channels, wetlands or Dundalk Bay;
- Shutters will be designed to prevent failure. Grout loss will be prevented from shuttered pours by ensuring that all joints between panels achieve a close fit or that they are sealed;
- $\circ$   $\quad$  Any spillages will be cleaned up and disposed of correctly;
- Where concrete is to be placed by means of a skip, the opening gate of the delivery chute will be securely fastened to prevent accidental opening;
- Where possible, concrete skips, pumps and machine buckets will be prevented from slewing over water when placing concrete; and,
- Surplus concrete will be returned to batch plant after completion of a pour.
- The Contractor will dispose of all alkaline wastewaters and contaminated stormwater offsite having regard for waste management legislation.
- The Contractor will implement procurement procedures to ensure that aggregate, fill material and topsoil are acquired from reputable sources with suitable environmental management systems as well as regulatory and legal compliance.
- The Contractor will vet the source of aggregate, fill material and topsoil imported to the site in order to ensure that it is of a reputable origin and that it is "clean" (i.e. it will not contaminate the environment).
- All material to be disposed of off-site to a facility licensed having regard for waste management legislation. Where material is to be stockpiled on site prior to disposal, the Contractor will control all run-off to prevent contamination of surrounding watercourses.
- The CEMP will include an Emergency Response Plan (ERP) based on the Contractor's Risk Assessment, to be reviewed and approved by the Project Ecologist. The ERP will include (but not limited to):
  - training of relevant staff, including cover staff, in the implementation of the ERP and the use of spill kits;
  - procedures to be undertaken in the event of the release of any sediment into a watercourse, or any spillage of chemicals, fuel, oil or other hazardous materials or wastes;
  - procedures to be undertaken in the event of any non-compliance incidents with any permit or licence, or other such risks that could lead to a pollution incident, including flood risks;
  - $\circ$  the number, specification and location of all spill kits which shall be carried/kept on the site;
  - information on clean-up and reporting procedures; etc.
- 4.16 While it is expected that the site drainage system will be installed and commissioned early in the site construction programme, and will therefore be operational for much of the construction phase, there will be a period of the construction phase during which the site drainage system will not be operational. The Construction Environmental Management Plan (CEMP) is required to cover this period and to deal with other issues during the construction phase.

#### **Construction Programme**

- 4.17 The CEMP will include a section setting out the construction programme and will include all the environmental control measures required to avoid disturbance to SPA species, as set out in the EIAR (Ch. 10) and below. The CEMP also sets out general measures to manage noise and vibration from construction activities that may be employed at the site.
- 4.18 All rock breaking, blasting and other high-intensity construction activities as may be required within the site are to be programmed to take place outside the wintering season for SPA feature species (i.e. to take place between May and September) to ensure that disturbance to wintering species is avoided.
- 4.19 All discrete elements of site construction close to the shore of Dundalk Bay (establishment of the main



site access and installation of infrastructure for site drainage and discharge) are to be programmed to take place outside the wintering season for SPA feature species (i.e. to take place between May and September) to ensure that disturbance to wintering species is avoided.

# Sustainable Urban Drainage Systems (SUDS)

- 4.20 The storm/surface drainage system for the occupation phase has been designed from Sustainable Urban Drainage Systems (SUDS) principles and incorporated into the development proposals. The specific aspects of the drainage design required for the protection of Dundalk Bay SPA & SAC, as set out in the EIAR (Chs. 4 & 10), are as follows:
- 4.21 The SUDS scheme has been designed, through iterative project design and assessment, with the habitat features and conservation objectives of the SPA and SAC in mind. Storm and surface water arising from the site will ultimately discharge to the SPA/SAC; the SUDS system has been designed to collect and attenuate storm/surface water arising from the site and conduct the allowable greenfield runoff to the discharge points alongside the R172, on the edge of Dundalk Bay and to the degraded wetland alongside the main site entrance. No outfalls are proposed within the designated area and maximum discharges are limited to pre-development greenfield runoff rates, further reduced, retarded and diffused through additional measures designed into the system.
- 4.22 The system includes four separate networks, an infiltration basin, a box culvert at the outlet and a several other features designed to reduce the velocity of the discharge flow in the receiving channel and therefore prevent any erosion or degradation of semi-natural habitat areas within Dundalk Bay. The design of the discharge, into an existing open channel from a box culvert, is such that there will be no structures or development on the foreshore and no direct discharge to any area within the SAC/SPA boundaries.
- 4.23 Two of the four networks serve that part of the development site where the new residential units will be constructed. Networks 1 & 2, which serve 96% of the new development, collect surface water to the stormwater infiltration basin, from where it can be retained prior to discharge (or diverted in an emergency, as detailed further below). Network 3 is the gravity pipeline which conveys the allowable greenfield runoff to the discharge channel along the R172. Network 4 is a separate drainage network that serves the main site access roadway; the topography of this area of the site is such that the runoff will discharge to the degraded wetland alongside the main site entrance. The north-eastern section of the site, which contains 20 no. units includes a stormwater infiltration basin. Site investigations have confirmed capacity in the sub-soil for surface water runoff infiltration in this area this will have the effect of reducing the volume of surface water runoff from the developed site. Network 3 also conducts runoff from this area to the box culvert outfall.
- 4.24 The overall capacity of the stormwater infiltration basin is c. 3,690 m<sup>3</sup> (required storage for a maximum 1 in 100-year storm event is c. 2,979 m<sup>3</sup>). The volume of surface water runoff held within the infiltration basin will vary in response to preceding precipitation; the provision of a penstock valve on the outlet allows discharge flow to the box culvert and receiving channel to be controlled and limited.
- 4.25 The section of the box culvert (1.0 m wide x 0.75 m high), which conducts the discharge flow to the existing receiving channel, will be laid at a flat gradient and will be partially submerged, to provide a depth of water within the base. This will ensure that the velocity of water flow from the outlet will be less than 0.5 ms<sup>-1</sup>. Discharge velocity will be further reduced by stone riprap at the outlet, which will also diffuse the flow into the receiving channel.

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4.26 The ultimate transfer of storm/surface water arising from the site will occur via infiltration, at a rate of flow less than 0.5 ms<sup>-1</sup>, to semi-natural habitats within Dundalk Bay, on the shore side of the R172, but well outside the SAC and SPA boundaries. There will therefore be no outfall or any appreciable flow of water directly to natural habitats within Dundalk Bay SPA/SAC, and no potential for any habitat loss or fragmentation through degradation or erosion.

## Silt Traps & Hydrocarbon Interceptors

- 4.27 The SUDS design includes silt removal traps and Class 1 hydrocarbon separators within each of the four networks. This is the primary mechanism for preventing contaminated surface water runoff entering Dundalk Bay during the occupation phase.
- 4.28 For Networks 1 & 2, the silt traps and hydrocarbon separators are to be installed prior to discharge to the stormwater infiltration basin. For Network 3, a separate silt trap and interceptor is provided to treat runoff from the north-eastern section of the site. Similarly, for Network 4, a separate silt trap and hydrocarbon separator will be installed on the line before discharge to the wetland area.
- 4.29 The traps and separators have been designed specifically to the capacity/flow for each network with a minimum retention time of 6 minutes to allow immiscible hydrocarbon pollutants to accumulate on the surface and suspended solids to sink to the bottom of the unit.
- 4.30 The most likely sources of contamination of the surface and storm runoff are general grit and silt arising from gardens and hard surfaces, hydrocarbons from vehicle exhausts and fuels or oil spills and leaks, vehicle tyre wear, burning plastics, wastewater from washing cars, pesticides etc. used for gardening and materials used in home maintenance. While the risks to the designated sites from these forms of contamination is significant, the likely volumes are expected to be low and to remain within the design capacity of the traps and interceptors, maintained and cleaned in line with the manufacturer's recommendations.
- 4.31 All storm/surface water will therefore be treated prior to discharge. As the Network 1 & 2 traps and separators are to be installed in line before the infiltration basin, 96% of surface/stormwater arising from the development will also be subject to the contingency arrangements detailed below for failure and overloading. These arrangements will ensure that any contamination within surface water that may arise on the site will be removed and prevented from discharging to Dundalk Bay SPA/SAC. All surface and storm waters discharging to ground or more directly to Dundalk Bay will be clean and clear.
- 4.32 For the occupation phase, the SUDS drainage system includes several measures for maintenance and management and contingency for emergencies and failure.
- 4.33 The overall capacity of the stormwater infiltration basin is c. 3,690 m<sup>3</sup> where the required storage for a maximum 1 in 100-year storm event is c. 2,979 m<sup>3</sup>, leaving 711 m<sup>3</sup> spare capacity.
- 4.34 The Drainage Assessment sets out a detailed schedule for inspection and maintenance/cleaning of the silt traps and hydrocarbon separators through the construction phase, the initial occupation phase and thereafter, with the longer-term schedule to be defined following the first 6 months of site experience. All silt traps and hydrocarbon separators will be located in areas where they will be easily accessible for maintenance and cleaning. All will be fitted with an alarm system that will activate when the level of hydrocarbon pollutants reach a pre-determined level where maintenance and cleaning will then be required.



4.35 While the risk of contamination from expected/design volumes of contamination will be removed by the traps and interceptors, functioning normally and maintained and cleaned in line with the manufacturer's recommendations, larger scale incidents such as a property fire will generate larger volumes of contaminated water which will enter the drainage system. As the traps and separators are unlikely, in such cases, to remove all the contaminants it is proposed that a pipeline is installed, connecting the infiltration basin to the nearby foul sewerage pumping station, and fitted with a penstock valve. This would allow larger volumes of contaminated surface water runoff to be held in the infiltration basin (which is designed with considerable additional capacity) while a decision to be made on how to satisfactorily deal with the incident and the option to divert to the public foul sewerage network for treatment in the municipal plant before discharge. A second penstock valve would also be fitted on the outlet pipeline (Network 3) to close the discharge to Dundalk Bay while contaminated flows are diverted. These procedures will ensure that in emergency situations larger volumes of contaminated water can be prevented from discharging to Dundalk Bay SAP/SAC.

## Foul Disposal

- 4.36 Mains infrastructure for foul sewage disposal has been designed in accordance with Irish Water Code of Practice.
- 4.37 All wastewater streams will be collected within a gravity network and will be transferred to public mains via an on-site foul sewerage pumping station with rising main from where it will connect to the public gravity mains at a stand-off manhole located at the N52 junction with the Crowne Plaza Hotel/Dundalk IT entrance, and to the municipal Dundalk Wastewater Treatment Plant (WWTP). The proposed onsite wastewater pumping station which will be a closed system, located along the eastern boundary of the site, with capacity for minimum 12-hour emergency storage.
- 4.38 Irish Water has confirmed that the existing foul network has sufficient capacity to meet the combined wastewater discharge volumes expected from the proposed development, once operational.

#### Site-Specific Environmental Management Plan (EMP)

- 4.39 The following mitigation measures, which should form part of a site-specific Environmental Management Plan (EMP) during the operational phase, are proposed:
  - All plant and equipment utilised onsite during maintenance works should be checked and in good working condition. Any equipment not meeting the required standard will not be permitted for use within the site;
  - Any minor volumes of fuel, oil or chemicals required during routine maintenance works will be brought to and from the site by the maintenance contractor. While temporarily onsite all chemicals will be kept in secure and bunded areas, with relevant Material Safety Data Sheets available onsite. Any fuel/oil tanks temporarily stored on site will be located in a suitably bunded area and all tanks will be double skinned, with oil/chemical absorbent materials held onsite in close proximity to the tanks;
  - In the unlikely event of a fuel/oil or chemical spill/leak during routine maintenance works, emergency spill response measures will be implemented with the aim of limiting the volume spilled and recovering as much of the lost product as possible;
  - A detailed Site Management Plan should be put in place for the operational phase of the development. This plan should clearly outline standard operating procedures for each of the following:
    - Maintenance of newly installed stormwater drainage system including all newly installed gullies, silt trap and Class 1 petrol/oil separators, attenuation basin, emergency penstock valves, and outfalls. Routine inspections of all silt traps and silt trap and Class 1 petrol/oil separators will minimise the potential risk of equipment failure;



- Maintenance of newly installed foul drainage system including the newly commissioned wastewater pumping station, rising main, pump (and back-up pump), and emergency storage tank;
- Emergency response in the unlikely event of a major fuel/oil spill onsite;
- Emergency response in the unlikely event of a major fire at any of the newly constructed properties;
- Action response in the unlikely event of a deterioration in stormwater quality discharging from the site; and,
- Waste management.
- The management plan should include all health and safety and environmental management procedures
  associated with the above tasks and should also identify when routine equipment maintenance and
  checks will be carried out (as per the relevant manufacturer's requirements and industry standards).
- A nominated person (site maintenance manager) should be responsible for ensuring that all required equipment maintenance, checks and repairs are carried out as and when required and will keep an up to date maintenance record for the site. Contact details of an alternative site maintenance contact should be included within the management plan.
- The roles, responsibilities, and contact details for all site maintenance operators and emergency services should be contained within the management plan, along with reporting and notification procedures for management, regulators and stakeholders.
- The site maintenance manager will be responsible for ensuring that, in the unlikely event of either a SuDs failure (e.g. overloading of silt trap and Class 1 petrol/oil separator) or a major onsite contamination incident (e.g. fire water run-off following major property fire) all emergency penstock valves will be immediately closed, resulting in all stormwater from the site being either diverted, or held within the onsite attenuation basin, as per the engineering design.
- All contaminated water should be disposed of to a suitably licenced offsite waste facility, in accordance with all relevant waste management legislation. This will ensure that there is no risk of any contaminated stormwater impacting Dundalk Bay SAC/ SPA. Procedures and checks would have to be put in place to ensure that the valves are returned to their normal states once the contaminated volume of stormwater is removed from the basin and storm drainage network.

# **Cumulative & In-Combination Effects**

4.40 Cumulative effects are either interactive effects between aspects of the project/development or the combination of impacts with those arising from other projects/developments which act on the same ecological receptors.

#### <u>Cumulative Effects – Project</u>

- 4.41 Aspects of ground conditions and hydrogeology could interact with site drainage and surface water management proposals for the construction or occupation phases to create a surface water environment whereby permitted discharges (volume, rate, quality) to the local environment were exceeded.
- 4.42 These issues are addressed in the SUDS design and CEMP, as detailed above. Control and emergency response procedures are specified to ensure that the potential for such interactions is minimised and that sufficient contingency is in place. On the basis of the information provided with respect to sustainable urban drainage, foul disposal, silt interception, hydrocarbon interception and construction phase pollution prevention, it can be ascertained that cumulative pathways are not operational and that cumulative effects are not likely to arise as a result of aspects of the project operating interactively in this manner.
- 4.43 As the potential for disturbance to SPA feature species is limited to discrete aspects of construction methodology, which can be controlled and programmed to avoid significant disturbance, it can be



ascertained that cumulative pathways are not operational and that cumulative *ex-situ* effects on wintering birds are not likely to arise.

## Cumulative Effects – Other Projects/Developments

- 4.44 The cumulative assessment has included the approved and still implementable planning applications identified within the EIAR:
  - Planning permission has been granted for 125 housing units 200m south of the site to Shannon Homes under planning reference number 16/151. This development is currently under construction.
  - There is a planning application submitted for 16 housing units for Michael White immediately north of Bothar Maol under planning reference number 18/157.
  - There is currently planning permission to convert outbuildings into a domestic dwelling immediately east of the site and outline planning permission granted for two domestic houses north of Bothar Maol under planning reference number 11/462 and 12/213.
- 4.45 Cumulative effects are only likely to occur during the construction phase via the water environment where one or more other active development projects might affect the same watercourses, drainage channels or receiving waters. As is set out in the EIAR (Ch. 10), based on the nature of the proposed developments identified above and and taking account of the proposed phasing and nature of this residential development, no significant cumulative impacts on the water environment (i.e. surface water or groundwater) are anticipated during the construction or operational phases. No potential cumulative flood risks have been identified.
- 4.46 Conservation objectives and management guidance published for the Natura 2000 sites identify a range of on-going activities which are considered to represent sources of existing impacts on Natura 2000 sites specifically and/or environmental degradation generally. Such activities have an influence on conservation and must therefore be considered cumulatively, as background or on-going diffuse sources of impact, with effects attached to the development proposals.
- 4.47 All relevant development projects in the environs of the site, which have been approved but are not yet built or operational, have been reviewed as part of the assessments presented in the EIAR. The relevant sectional assessments (ecology, hydrology, land/soils/geology etc.) found that no significant cumulation of impact is anticipated during the construction or operation phases.
- 4.48 For built and operational development, condition assessment and monitoring of the Natura 2000 sites and Water Framework Directive (WFD) classifications for watercourses and waterbodies provides a quantitative method for assessing changes in background levels of ecological and hydrological quality with time. As per the detailed consideration set out in the hydrology section of the EIA, there is no data available regarding surface water quality in the vicinity of the site due to the lack of surface water features. The two local named watercourses the Haggardstown River and the Marshes Upper River have not been assigned a water quality status in accordance with the WFD for the period 2010 to 2015. Inner Dundalk Bay, a transitional waterbody, is reported to have 'Moderate' status for the 2010 to 2015 monitoring period (EPA, 2018). The overall objective of the WFD is to restore good ecological status for Inner Dundalk Bay by 2021.
- 4.49 As is detailed within the hydrology section of the EIAR, and summarised above, the site does not contain any surface water features and seems to be isolated, in terms of surface water flow, from the surrounding urbanised catchments. The Haggardstown River, the Marshes Upper River and an unnamed drainage ditch are the only watercourses within 2 km, and none are hydraulically connected to the site.



Development of the site will result in the collection of surface water from the site into discrete discharges to the fringes of Dundalk Bay, a change from the current diffuse discharge regime; however, the environmental management and mitigation measures set out in the EIAR and assessed herein, will ensure that changes will remain localised to the immediate environs of the site and will result in insignificant (*de-minimis*) ecological and hydrological effects on Dundalk Bay. No measurable effects, in terms of the integrity of the Natura 2000 sites, will occur as a result of the project. The hydrological regime within the site will remain self-contained and isolated, with controlled discharges of attenuated and treated waters to semi-natural areas outside the SPA/SAC.

4.50 It is considered therefore, following assessment, that there is no additive effect for significant cumulative or in-combination impacts on the Natura 2000 network as a result of the proposed development when considered in conjunction with other plans and projects and/or in the context of the background ecological and hydrological condition of Dundalk Bay and overall trends.

#### Conclusions – Cumulative Impact Assessment

4.51 It is concluded, following assessment, that significant cumulative impacts on the Natura 2000 network are unlikely to occur as a result of the project.

#### **NIS Assessment**

4.52 The development proposals are subject to appropriate assessment for their likely impact on the integrity of Dundalk Bay SPA and Dundalk Bay SAC (and underlying designations). The results of the NIS Assessment are presented a *NIS Report*<sup>20</sup> [Table 4.1] and a *Design & Mitigation Measures* table<sup>21</sup> [Table 4.2].

<sup>&</sup>lt;sup>20</sup> Adapted for use from official EC guidance: 'Assessment of plans and projects significantly affecting Natura 2000 sites, Methodological guidance on the provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC' (Annex 2; Figure 4).

<sup>&</sup>lt;sup>21</sup> Adapted for use from official EC guidance: 'Assessment of plans and projects significantly affecting Natura 2000 sites, Methodological guidance on the provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC' (Annex 2; Figure 3).

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Table 4.1: NIS Report – Dundalk Bay SPA & Dundalk Bay SAC (and associated/underlying pNHA & Ramsar designations)

Assessment of the Effects of the Project or Plan on the Integrity of Dundalk Bay SPA & SAC					
Elements of the project or plan (alone or in combination) likely to give rise to significant effects on the site: (from screening assessment).	The main ar	areas of concern are pollution of the SAC/SPA, degradation of SAC/SPA habitats and ex-situ impacts on SPA feature and assemblage species: Pollution of the SAC/SPA – earthworks and construction activities will mobilise silts and sediments which present a risk of contamination to the SAC and SPA through surface water drainage. Pollution of the SAC/SPA – construction activities will generate waste streams which present a risk of contamination (fuels and other hydrocarbons, cements and other construction materials etc.) to the SAC and SPA through surface water drainage. Pollution of the SAC/SPA – occupation of the site will generate surface and stormwater runoff which is to be disposed of to Dundalk Bay via drainage infrastructure – this presents a risk of contamination (silts, hydrocarbons etc.) to the SAC and SPA. Pollution of the SAC/SPA – occupation of the site will generate foul sewage for disposal. Degradation of natural habitats within the SAC/SPA – occupation of the site will generate surface and vibration of natural habitats within the SAC and SPA through erosion etc. Ex-Situ impacts on SPA feature and assemblage species – noise and vibration from piling, rock-breaking, blasting and other intensive construction activities can result in significant disturbances to avifauna, even over a distance of several hundred metres. It is unlikely that piling will be required but rock breaking or blasting may be required to install services, the wastewater pumping station and excavate underground carparks into the bedrock. Ex-Situ impacts on SPA feature and assemblage species – discrete elements of site development which must take place close to the shore, such as the creation of the main site access on the R172 Blackrock Road and the installation of the drainage outfall, may result in localised disturbances and must be considered individually.			
Conservation Objectives:	Dundalk Bay S	PA	Overall Objective – Favourable Conservation Status.		
	A054	Pintail Anas acuta	To maintain the favourable conservation condition of Pintail in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).		
	A052	Teal Anas crecca	To maintain the favourable conservation condition of Teal in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).		
	A053	Mallard Anas platyrhynchos	To maintain the favourable conservation condition of Mallard in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).		
	A043	Greylag Goose Anser anser	To maintain the favourable conservation condition of Greylag Goose in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).		
	A046	Light-bellied Brent Goose Branta bernicla hrota	To maintain the favourable conservation condition of Light-bellied Brent Goose in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).		
	A149	Dunlin Calidris alpina	To maintain the favourable conservation condition of Dunlin in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).		



		Calidris canutus	out in the published conservation objectives).
4127	4407	Ringed Plover	To maintain the favourable conservation condition of Ringed Plover in Dundalk Bay SPA (as defined by attributes and
	A137	Charadrius hiaticula	targets set out in the published conservation objectives).
	4120	Oystercatcher	To maintain the favourable conservation condition of Oystercatcher in Dundalk Bay SPA (as defined by attributes and
	A130	Haematopus ostralegus	targets set out in the published conservation objectives).
	4402	Common Gull	To maintain the favourable conservation condition of Common Gull in Dundalk Bay SPA (as defined by attributes and
	A182	Larus canus	targets set out in the published conservation objectives).
	4170	Black-headed Gull	To maintain the favourable conservation condition of Black-headed Gull in Dundalk Bay SPA (as defined by attributes
	A179	Chroicocephalus ridibundus	and targets set out in the published conservation objectives).
	A157	Bar-tailed Godwit	To maintain the favourable conservation condition of Bar-tailed Godwit in Dundalk Bay SPA (as defined by attributes
	A157	Limosa lapponica	and targets set out in the published conservation objectives).
	A150	Black-tailed Godwit	To maintain the favourable conservation condition of Black-tailed Godwit in Dundalk Bay SPA (as defined by attributes
	A150	Limosa limosa	and targets set out in the published conservation objectives).
	1000	Red-breasted Merganser	To maintain the favourable conservation condition of Red-breasted Merganser in Dundalk Bay SPA (as defined by
	A069	Mergus serrator	attributes and targets set out in the published conservation objectives).
	A160	Curlew	To maintain the favourable conservation condition of Curlew in Dundalk Bay SPA (as defined by attributes and targets
	A100	Numenius arquata	set out in the published conservation objectives).
	A140	Golden Plover	To maintain the favourable conservation condition of Golden Plover in Dundalk Bay SPA (as defined by attributes and
	A140	Pluvialis apricaria	targets set out in the published conservation objectives).
	A141	Grey Plover	To maintain the favourable conservation condition of Grey Plover in Dundalk Bay SPA (as defined by attributes and
	A141	Pluvialis squatarola	targets set out in the published conservation objectives).
	A00E	Great Crested Grebe	To maintain the favourable conservation condition of Great Crested Grebe in Dundalk Bay SPA (as defined by attributes
	A005	Podiceps cristatus	and targets set out in the published conservation objectives).
	1049	Shelduck	To maintain the favourable conservation condition of Shelduck in Dundalk Bay SPA (as defined by attributes and targets
1	AU48	Tadorna tadorna	set out in the published conservation objectives).
	A160	Redshank	To maintain the favourable conservation condition of Redshank in Dundalk Bay SPA (as defined by attributes and
	A102	Tringa totanus	targets set out in the published conservation objectives).
	A142	Lapwing	To maintain the favourable conservation condition of Lapwing in Dundalk Bay SPA (as defined by attributes and targets
	A142	Vanellus vanellus	set out in the published conservation objectives).
	A0E0	Eurasian Wigeon	n/a – assumed – to maintain the favourable conservation condition of Eurasian Wigeon in Dundalk Bay SPA (as defined
Ľ	A030	Anas penelope	by attributes and targets set out in the published conservation objectives).
	A 205	Greenland White-Fronted goose	n/a – assumed – to maintain the favourable conservation condition of Greenland White-Fronted goose in Dundalk Bay
_	A393	Anser albifrons flavirostris	SPA (as defined by attributes and targets set out in the published conservation objectives).
	A160	Ruddy Turnstone	n/a – assumed – to maintain the favourable conservation condition of Ruddy Turnstone in Dundalk Bay SPA (as defined
	A103	Arenaria interpres	by attributes and targets set out in the published conservation objectives).
	A067	Common Goldeneye	n/a – assumed – to maintain the favourable conservation condition of Common Goldeneye in Dundalk Bay SPA (as
	A007	Bucephala clangula	defined by attributes and targets set out in the published conservation objectives).
	A003	Common Loon	n/a – assumed – to maintain the favourable conservation condition of Common Loon in Dundalk Bay SPA (as defined
_	A003	Gavia immer	by attributes and targets set out in the published conservation objectives).
	A001	Red-Throated Loon	n/a – assumed – to maintain the favourable conservation condition of Red-Throated Loon in Dundalk Bay SPA (as
	AU01	Gavia stellata	defined by attributes and targets set out in the published conservation objectives).
	A017	Great cormorant	n/a – assumed – to maintain the favourable conservation condition of Great cormorant in Dundalk Bay SPA (as defined
		Phalacrocorax carbo	by attributes and targets set out in the published conservation objectives).

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	A151 Ruff Philomachus puanax		n/a – assumed – to maintain the favourable conservation condition of Ruff in Dundalk Bay SPA (as defined by attributes			
	A164	Common Greenshank Trinaa nebularia	n/a – assumed – to maintain the favourable conservation condition of Common Greenshank in Dundalk Bay SPA (as defined by attributes and targets set out in the published conservation objectives).			
	Wetlands & Waterbirds		To maintain the favourable conservation condition of the wetland habitat in Dundalk Bay SPA as a resource for the regularly-occurring migratory waterbirds that utilise it (as defined by attributes and targets set out in the published conservation objectives).			
	Dundalk Bay SAC		Overall Objective – Favourable Conservation Status.			
	1130	Estuaries	To maintain the favourable conservation condition of Estuaries in Dundalk Bay SAC (as defined by attributes and set out in the published conservation objectives).			
	1140	Tidal Mudflats and Sandflats	To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide at Dundalk Bay SAC (as defined by attributes and targets set out in the published conservation objectives).			
	1220	Perennial Vegetation of Stony Banks	To maintain the favourable conservation condition of Perennial vegetation of stony banks in Dundalk Bay SAC (as defined by attributes and targets set out in the published conservation objectives).			
	1310	Salicornia Mud	To restore the favourable conservation condition of Salicornia and other annuals colonizing mud and sand in Dundalk Bay SAC (as defined by attributes and targets set out in the published conservation objectives).			
	1330	Atlantic Salt Meadows	To maintain the favourable conservation condition of Atlantic salt meadows in Dundalk Bay SAC (as defined by attributes and targets set out in the published conservation objectives).			
	1410	Mediterranean Salt Meadows	To maintain the favourable conservation condition of Mediterranean salt meadows in Dundalk Bay SAC (as defined by attributes and targets set out in the published conservation objectives).			
How the project or plan will affect key species and key habitats:	Earthworks and construction activities will mobilise silts and sediments and will generate waste streams (fuels and other hydrocarbons, cements and ot construction materials etc.) which present a risk of contamination to the SAC and SPA through surface water drainage.					
(acknowledge uncertainties and any gaps in information).	Occupation of the site will generate surface and stormwater runoff which is to be disposed of to Dundalk Bay via drainage infrastructure – this presents a risk of contamination (silts, hydrocarbons etc.) to the SAC and SPA and risks degradation of natural habitats within the SAC and SPA through erosion etc. Foul sewage will also be generated, for disposal to mains infrastructure.					
	Noise and vibration from piling and other intensive construction activities can result in significant disturbances to avifauna, even over a distance of several hundred metres. Although it is highly unlikely that piling will be required, some uncertainty remains. Discrete elements of site development which must take place close to the shore, such as the creation of the main site access on the R172 Blackrock Road and the installation of the drainage outfall, may result in localised disturbances.					
How the integrity of the site is likely to be affected by the project or plan:	'Integrity' of a site refers to the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.					
(acknowledge uncertainties and any gaps in information).	The extent to which the mechanisms identified might give rise to adverse impacts on the SPA/SAC (and Ramsar/pNHA) which may or may not be significant in terms of site integrity would depend entirely on the magnitude of a single pollution event or the frequency and duration of diffuse pollution or discrete minor pollution events.					



Mitigation measures to be introduced to avoid or reduce the adverse effects on the integrity of the site: (acknowledge uncertainties and any gaps in information).	<ul> <li>Three broad approaches are adopted to the mitigation of impacts on Dundalk Bay SAC and Dundalk Bay SPA:</li> <li>Pollution Control in the Construction Phase</li> <li>Pollution Control in the Operational Phase</li> <li>Prevention of Disturbance to SPA Species in the Construction Phase.</li> </ul> These broad approaches to mitigation are implemented through the following (set out in detail above):			
	<ul> <li>Construction Environmental Management Plan (CEMP)</li> <li>Construction Programme</li> <li>Sustainable Urban Drainage (SUDS) System</li> <li>Silt Traps &amp; Hydrocarbon Interceptors</li> <li>Foul Disposal &amp; Site-Specific Environmental Management Plan (EMP)</li> </ul>			

#### Table 4.2: Design & Mitigation Measures - Dundalk Bay SPA & Dundalk Bay SAC (and associated/underlying pNHA & Ramsar designations)

Proposed Measure	How measure will avoid adverse effects on site integrity.	How measure will reduce adverse effects on site integrity.	Implementation – how and by whom (provide evidence).	Implementation – timescale relative to the project or plan.	Degree of confidence in likely success (provide evidence).	Monitoring & contingency for mitigation failure.
<u>Construction</u> <u>Environmental</u> <u>Management Plan</u> ( <u>CEMP</u> )	CEMP addresses construction-phase issues including mobilised silts and sediments and other waste streams which present a risk of contamination to the SAC and SPA. The CEMP sets out pollution prevention and water/sediment management measures etc. as detailed above.	n/a	Implementation by the Developer. To be finalised following completion of the primary EIA and consenting processes. To be agreed with the Council/NPWS prior to works commencing. To be secured by way of a planning condition.	The CEMP is a live document. It details all construction-phase environmental mitigation measures from the EIAR, NIS and the EIA and consenting processes. To be implemented throughout the construction phase.	HIGH. Standard requirement for site development and environmental protection.	SUDS System CEMP includes all measures for monitoring, contingency and mitigation failure.
Construction Environmental Management Plan	n/a	CEMP sets out measures to manage noise and vibration from piling or	Implementation by the Developer.	The CEMP is a live document. It details all construction-phase	HIGH. Standard requirement for	CEMP includes all measures for monitoring, contingency and

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Proposed Measure	How measure will avoid adverse effects on site integrity.	How measure will reduce adverse effects on site integrity.	Implementation – how and by whom (provide evidence).	Implementation – timescale relative to the project or plan.	Degree of confidence in likely success (provide evidence).	Monitoring & contingency for mitigation failure.
(CEMP)		other intensive construction activities and measures to avoid disturbances to SPA feature species as a result of discrete elements of site development which must take place close to the shore.	To be finalised following completion of the primary EIA and consenting processes. To be agreed with the Council/NPWS prior to works commencing. To be secured by way of a planning condition.	environmental mitigation measures from the EIAR, NIS and the EIA and consenting processes. To be implemented throughout the construction phase.	site development and environmental protection.	mitigation failure.
Construction Programme	The CEMP will include a section setting out the construction programme and will include all the environmental control measures required to avoid disturbance to SPA species.	The CEMP also sets out general measures to manage noise and vibration from construction activities that may be employed at the site	Implementation by the Developer. To be finalised following completion of the primary EIA and consenting processes. To be agreed with the Council/NPWS prior to works commencing. To be secured by way of a planning condition.	The CEMP is a live document. It details all construction-phase environmental mitigation measures from the EIAR, NIS and the EIA and consenting processes. To be implemented throughout the construction phase.	HIGH. Standard requirement for site development and environmental protection.	CEMP includes all measures for monitoring, contingency and mitigation failure.
Sustainable Urban Drainage Systems (SUDS)	SUDS, with attenuation and controlled discharges, will restrict surface and stormwater discharges to Dundalk Bay to less than pre- development rates and volumes.	n/a	Implementation by the Developer. Design is fully detailed within the development proposals for which planning permission is sought.	To be implemented at an early stage during the construction phase and operated and maintained throughout the occupation of the development.	HIGH. Standard civil engineering process.	Arrangements for monitoring and maintenance, and contingency for failure, overloading and emergencies are fully detailed and designed into the system.



Proposed Measure	How measure will avoid adverse effects on site integrity.	How measure will reduce adverse effects on site integrity.	Implementation – how and by whom (provide evidence).	Implementation – timescale relative to the project or plan.	Degree of confidence in likely success (provide evidence).	Monitoring & contingency for mitigation failure.
<u>Silt Traps &amp; Hydrocarbon</u> <u>Interceptors</u>	n/a	The SUDS design includes silt removal traps and Class 1 hydrocarbon separators – the primary mechanism for removing contaminants from surface/stormwater runoff.	Implementation by the Developer. Design is fully detailed within the development proposals for which planning permission is sought.	To be implemented at an early stage during the construction phase and operated and maintained throughout the occupation of the development.	HIGH. Standard civil engineering process.	Arrangements for monitoring and maintenance, and contingency for failure, overloading and emergencies are fully detailed and designed into the system.
<u>Foul Disposal</u>	The foul drainage system has been designed in accordance with Irish Water Code of Practice IW-CDS-5030-03 (Revision 1 – December 2017). All wastewater streams will be collected and transferred to public mains via an on-site pumping station from where it will discharge to the municipal treatment plant for treatment.	n/a	All on-site installations will be constructed by the developer where the section of the foul sewer rising main to be constructed outside the site boundary shall be undertaken by an approved Irish Water contractor. Design is fully detailed within the development proposals for which planning permission is sought.	To be implemented during the initial construction stage where the system shall be operated and maintained by the developer until the entire system is vested to Irish Water	HIGH. Standard civil engineering process.	The system shall be constructed to the required standards and incorporate the necessary safety measures. When the completed system is vested to Irish Water it shall be maintained and monitored by the Local Authority on behalf of the public body.
<u>Site-Specific</u> <u>Environmental</u> <u>Management Plan (EMP)</u>	EMP addresses operational-phase issues including maintenance, emergency procedures and waste streams which present a risk of contamination to the SAC and SPA. The EMP sets	n/a	Implementation by the Developer. To be finalised prior to handover of the completed development. To be agreed with the Council/NPWS.	The EMP details all operational-phase environmental mitigation measures from the EIAR, NIS and the EIA and consenting processes. To be implemented throughout the	HIGH. Standard requirement for site development and environmental protection.	SUDS System EMP includes all measures for monitoring, contingency and failure.



Proposed Measure	How measure will avoid adverse effects on site integrity.	How measure will reduce adverse effects on site integrity.	Implementation – how and by whom (provide evidence).	Implementation – timescale relative to the project or plan.	Degree of confidence in likely success (provide evidence).	Monitoring & contingency for mitigation failure.
	out pollution prevention and water/sediment management measures etc. as detailed above.		To be secured by way of a planning condition.	occupation of the development.		



## **NIS Conclusions**

- 4.53 The assessment has demonstrated that the required measures to avoid, mitigate and otherwise reduce the significance of adverse impacts on the integrity of the Natura 2000 sites are technically feasible and attach and a high level of confidence in implementation and success.
- 4.54 Significant adverse impacts on the integrity of the Natura 2000 sites of Dundalk Bay, in so far as they attach to the development proposals, can be excluded on the basis of precautionary, objective scientific assessment at the second stage (appropriate assessment). The proposed development will not interfere with any key relationships or elements within the environment which define and control the structure and function of any Natura 2000 sites and will not result in significant adverse impacts on the integrity of the Natura 2000 network or any associated/underlying designations.
- 4.55 The development proposals can, subject to appropriate planning conditions, be consented without causing significant adverse effects on the integrity of Dundalk Bay SAC or Dundalk Bay SPA to arise.



# ANNEX A: NATURA 2000 DOCUMENTATION

- A1: Dundalk Bay SAC Standard Natura 2000 Data Form (September 2017)
- A2: Dundalk Bay SPA Standard Natura 2000 Data Form (September 2017)
- A3: Dundalk Bay SAC Conservation Objectives Dundalk Bay SAC 000455 Dundalk Bay SPA 004026 (July 2011)


# NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA), Proposed Sites for Community Importance (pSCI), Sites of Community Importance (SCI) and NATURA 2000 for Special Areas of Conservation (SAC)

SITE IE0000455

SITENAME **Dundalk Bay SAC** 

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- <u>1. SITE IDENTIFICATION</u>
- 2. SITE LOCATION
- <u>3. ECOLOGICAL INFORMATION</u>
- 4. SITE DESCRIPTION
- 5. SITE PROTECTION STATUS
- 6. SITE MANAGEMENT
- 7. MAP OF THE SITE

## **1. SITE IDENTIFICATION**

1.1 Туре	1.2 Site code	Back to top
В	IE0000455	

#### 1.3 Site name

Dundalk Bay SAC						
1.4 First Compilation data						
1.4 First Compliation date	1.5 Update date					

#### 1.6 Respondent:

Name/Organisation:	National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht
Address:	7 Ely Place, Dublin 2, Ireland
Email:	datadelivery@ahg.gov.ie

Date site proposed as SCI:	2002-01
Date site confirmed as SCI:	No data
Date site designated as SAC:	No data
National legal reference of SAC designation:	No data

## 2. SITE LOCATION

2.1 Site-centre location [decimal degrees]:

Longitude -6.338446145 Latitude 53.95856651

area [%]

2.2 Area [ha]:	2.3 Marine
5234.045183	92.641

#### 2.4 Sitelength [km]:

0.0

#### 2.5 Administrative region code and name

#### NUTS level 2 code

**Region Name** 

IEZZ	Extra-Regio
IE01	Border, Midland and Western

#### 2.6 Biogeographical Region(s)

Atlantic (%)

## 3. ECOLOGICAL INFORMATION

#### 3.1 Habitat types present on the site and assessment for them

Annex I Habitat types						Site assessment							
Code	ode PF NP Cover Cave Data [ha] [number] quality				Data quality	A B C D	A B C						
						Representativity	Relative Surface	Conservation	Globa				
11308			2798.9715		М	В	В	В	В				
11408			4374.8559		м	A	A	В	A				
1220			52.36		М	A	С	В	A				
13108			35.0037		М	В	С	В	в				
13308			379.9836		М	A	С	В	A				
1410			0.0447		М	С	С	В	С				

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- NP: in case that a habitat type no longer exists in the site enter: x (optional)
- Cover: decimal values can be entered
- **Caves:** for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.

• **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

# 3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species				Population in the site						Site assessment				
G	Code	Scientific Name	s	NP	т	T Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Рор.	Con.	lso.	Gl
в	A054	Anas acuta			w	100	100	i		G	В	А	С	А
В	A052	Anas crecca			w	359	359	i		G	С	В	С	С
В	A050	Anas penelope			w	565	565	i		G	С	В	С	С
В	A053	<u>Anas</u> platyrhynchos			w	657	657	i		G	С	А	С	в
В	A043	Anser anser			w	312	312	i		G	В	В	С	В
В	A169	Arenaria interpres			w	51	51	i		G	С	В	С	С
В	A046	<u>Branta</u> bernicla			w	366	366	i		G	С	А	С	A
В	A149	Calidris alpina			w	9112	9112	i		G	В	А	С	Α
В	A143	<u>Calidris</u> <u>canutus</u>			w	11948	11948	i		G	А	A	С	A
В	A137	<u>Charadrius</u> <u>hiaticula</u>			w	133	133	i		G	С	A	С	В
в	A130	<u>Haematopus</u> ostralegus			w	6940	6940	i		G	В	А	С	A
В	A157	<u>Limosa</u> Iapponica			w	2313	2313	i		G	В	А	С	A
В	A156	<u>Limosa</u> <u>limosa</u>			w	754	754	i		G	В	A	С	A
В	A070	<u>Mergus</u> merganser			w	148	148	i		G	В	A	С	В
В	A160	<u>Numenius</u> <u>arquata</u>			w	1593	1593	i		G	С	A	С	В
В	A017	<u>Phalacrocorax</u> <u>carbo</u>			w	91	91	i		G	С	В	С	с
В	A140	Pluvialis apricaria			w	4266	4266	i		G	В	А	С	В
В	A141	<u>Pluvialis</u> squatarola			w	218	218	i		G	В	А	С	A
в	A005	<u>Podiceps</u> <u>cristatus</u>			w	193	193	i		G	В	А	С	A
В	A048	<u>Tadorna</u> tadorna			w	463	463	i		G	В	A	С	В
в	A164	<u>Tringa</u> <u>nebularia</u>			w	20	20	i		G	В	A	С	В
		<u>Tringa</u>												

В	A162	totanus	w	1455	1455	i	G	В	A	С	Α
В	A142	<u>Vanellus</u> vanellus	w	4822	4822	i	G	В	A	С	в

- Group: A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- S: in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- NP: in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- Unit: i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see <u>reference portal</u>)
- Abundance categories (Cat.): C = common, R = rare, V = very rare, P = present to fill if data are deficient (DD) or in addition to population size information
- Data quality: G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

Species	cies				Population in the site				Motivation						
Group	CODE	Scientific Name	S	NP	Size		Size Unit Cat.		Species Annex		Other categories				
					Min	Max		C R V P	IV	v	Α	в	С	D	
В		Ardea cinerea			38	38							Х		
Р		<u>Crambe</u> <u>maritima</u>						Ρ			х				
В		Cygnus olor			48	48							Х		

#### 3.3 Other important species of flora and fauna (optional)

- **Group:** A = Amphibians, B = Birds, F = Fish, Fu = Fungi, I = Invertebrates, L = Lichens, M = Mammals, P = Plants, R = Reptiles
- **CODE:** for Birds, Annex IV and V species the code as provided in the reference portal should be used in addition to the scientific name
- S: in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- NP: in case that a species is no longer present in the site enter: x (optional)
- Unit: i = individuals, p = pairs or other units according to the standard list of population units and codes in accordance with Article 12 and 17 reporting, (see <u>reference portal</u>)
- **Cat.:** Abundance categories: C = common, R = rare, V = very rare, P = present
- Motivation categories: IV, V: Annex Species (Habitats Directive), A: National Red List data; B: Endemics; C: International Conventions; D: other reasons

## **4. SITE DESCRIPTION**

#### 4.1 General site character

# Habitat class % Cover N09 1.0 N10 1.0 N05 1.0 N02 91.0 N03 2.0

N15	1.0
N07	1.0
N04	1.0
N14	1.0
Total Habitat Cover	100

#### **Other Site Characteristics**

The site is a large bay-like estuarine complex, extending c.15 km from north to south and on average between 2-3 km in width. It contains the estuaries of a number of moderately sized rivers, principally the Castletown, the Flurry, the Fane and the Glyde/Dee. These rivers drain fairly intensive agricultural catchments, and the Castletown flows through Dundalk town and serves the port. The site has a marked tidal range. The estuaries of the Castletown and Flurry rivers are well sheltered and have extensive salt marshes. Post-glacial raised beaches are a feature of the shoreline. Some agricultural fields which adjoin the bay are included in the site for ornithological interests.

#### 4.2 Quality and importance

Estuaries and particularly intertidal sand and mud flats are well represented at this site. The site contains the largest expanse of intertidal flats on the east coast. The bay is fringed in places by salt marshes, with good examples of Salicornia sand flats, Atlantic salt meadows and, to a lesser extent, Mediterranean salt meadows. The quality of estuarine habitats is generally good. The site has excellent examples of perennial vegetation of stony banks with the Red Data Book plant Crambe maritima. The site is of high importance for wintering waterfowl, with internationally important populations of Branta bernicla hrota, Calidris canutus and Limosa lapponica. It also supports nationally importance as it regularly has in excess of 20,000 wintering waterfowl.

#### 4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts								
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]					
Μ	J03.02		b					
М	H05.01		b					
L	H05		b					
Н	E03.03		i					
М	H02.06		b					
М	K04.01		i					
Н	101		b					
Μ	J02.12.01		b					
Н	F02.03.01		b					
Μ	J02.04		b					
М	J02.01.03		b					
Н	E03.01		i					
L	G02		b					
L	H04.02		b					
М	K01.01		b					
М	H01.06		i					
М	J02.01.02		b					
M	G01		b					
M	K02		i					
M	G05.02		b					
Н	H01		b					
M	J02.04.01		b					
I								

Positive Impacts								
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]					
М	M02.04		b					
L	G02.09		i					

Μ	F05	b
L	G01.01.01	b
Μ	J03.01	b

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification, T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions i = inside, o = outside, b = both

#### 4.5 Documentation

Bowman, J.J., Clabby, K.J., Lucey, J., Mc Garrigle, M.L. and Toner, P.H. (1996). Water Quality in Ireland 1991-1994. Environmental Protection Agency, Wexford. Colhoun, K. (1998). I-WeBS Report 1996-97.
BirdWatch Ireland, Dublin. Curtis, T.G.F. and Sheehy Skeffington, M.J. (1998). The salt marshes of Ireland: an inventory and account of their geographical variation. Biology and the Environment, Proceedings of the Royal Irish Academy 98B: 87-104. Fahy, E. (1972). A preliminary report on areas of scientific interest in County Louth. An Foras Forbartha, Dublin. Hunt, J., Derwin, J., Coveney, J. & Newton, S. (2000). Republic of Ireland. Pp. 365-416 in M.F. Heath & M.I. Evans, eds. Important Bird Areas in Europe: Priority sites for conservation 1: Northern Europe. Cambridge, UK: BirdLife International (BirdLife Conservation Series No. 8).
Merne, O.J. (1989). Important bird areas in the Republic of Ireland. In: Grimmett, R.F.A. and Jones, T.A. (eds) Important Bird Areas in Europe. ICBP Technical Publication No. 9. Cambridge. Moore, D. & Wilson, F. (1999). National Shingle Beach Survey of Ireland 1999. Unpublished report to National Parks & Wildlife Service, Dublin. Praeger, R.L. (1934). The Botanist in Ireland. Hodges, Figgis & Co, Dublin. Sheppard, R. (1993). Ireland's Wetland Wealth. IWC, Dublin. White, J. (1981). Notes on Irish vegetation: No. 1 The vegetation of shingle in Co. Louth. Bulletin of the Irish Biogeographical Society 5: 1-4.

## 5. SITE PROTECTION STATUS (optional)

5.1 Designation types at national and regional level:								
Code	Cover [%]	Code	Cover [%]	Code	Cover [%]			
IE05	19.0							

#### 5.2 Relation of the described site with other sites:

designated at national or regional level:

Type code	Site name	Туре	Cover [%]
IE05	Ballymascanlan Estuary Wildfowl Sanctuary	+	2.0
IE05	Lurgan Green Wildfowl Sanctuary	*	17.0

designated at international level:

Туре	Site name	Туре	Cover [%]
Other	Dundalk Bay	*	90.0

## 6. SITE MANAGEMENT

#### 6.2 Management Plan(s):

An actual management plan does exist:

## 7. MAP OF THE SITES

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INSPIRE ID:

IE.NPWS.PS.NATURA2000.SAC.IE0000455

Map delivered as PDF in electronic format (optional)

Yes X No

Reference(s) to the original map used for the digitalisation of the electronic boundaries (optional).



# NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA), Proposed Sites for Community Importance (pSCI), Sites of Community Importance (SCI) and for Special Areas of Conservation (SAC)

SITE IE0004026

SITENAME Dundalk Bay SPA

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- 2. SITE LOCATION
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- 4. SITE DESCRIPTION
- <u>5. SITE PROTECTION STATUS</u>
- 6. SITE MANAGEMENT
- 7. MAP OF THE SITE

## **1. SITE IDENTIFICATION**

1.1 Туре	1.2 Site code	Back to top
A	IE0004026	

#### 1.3 Site name

Dundalk Bay SPA						
1.4 First Compilation date	1.5 Update date					
2003-11	2017-09					

#### 1.6 Respondent:

Name/Organisation:	National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht
Address:	7 Ely Place, Dublin 2, Ireland
Email:	datadelivery@ahg.gov.ie

#### 1.7 Site indication and designation / classification dates

Date site classified as SPA:	1994-03
National legal reference of SPA designation	No data

## 2. SITE LOCATION

2.1 Site-centre location [decimal degrees]:

#### 2.2 Area [ha]:

13237.90122

**2.3 Marine area [%]** 97.583

#### 2.4 Sitelength [km]:

0.0

#### 2.5 Administrative region code and name

#### NUTS level 2 code Region Name

IEZZ	Extra-Regio
IE01	Border, Midland and Western

#### 2.6 Biogeographical Region(s)

Atlantic (%)

## **3. ECOLOGICAL INFORMATION**

# 3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Sp	ecies				Р	opulatio	n in the	site			Site asse								
G Code S		Scientific Name	Scientific Name	Scientific Name	Scientific Name	Scientific Name	Scientific Name	s	NP	т	Size		Unit	Cat.	D.qual.	A B C D	A B C	;	
						Min	Max				Рор.	Con.	lso.	Gle					
В	A054	Anas acuta			w	117	117	i		G	В	A	С	А					
В	A052	Anas crecca			w	488	488	i		G	С	А	С	С					
в	A050	<u>Anas</u> penelope			w	394	394	i		G	С	В	С	С					
В	A053	Anas platyrhynchos			w	763	763	i		G	С	A	с	С					
В	A395	<u>Anser</u> <u>albifrons</u> <u>flavirostris</u>			w	18	18	i		G	С	В	с	с					
В	A043	Anser anser			w	435	435	i		G	В	В	С	Α					
в	A169	<u>Arenaria</u> interpres			w	56	56	i		G	С	В	С	С					
в	A046	<u>Branta</u> bernicla			w	337	337	i		G	С	A	С	в					
в	A067	<u>Bucephala</u> clangula			w	36	36	i		G	С	в	С	С					
В	A149	Calidris alpina			w	11515	11515	i		G	В	А	С	A					
		<u>Calidris</u>																	

В	A143	<u>canutus</u>	w	9710	9710	i	G	A	А	С	Α
в	A147	<u>Calidris</u> ferruginea	с	16	16	i	G	С	В	С	В
в	A137	<u>Charadrius</u> <u>hiaticula</u>	w	147	147	i	G	С	A	С	В
В	A003	<u>Gavia immer</u>	w	9	9	i	G	С	В	С	С
В	A001	Gavia stellata	w	9	9	i	G	С	В	С	С
В	A130	<u>Haematopus</u> ostralegus	w	8712	8712	i	G	В	A	С	A
В	A182	Larus canus	w	555	555	i	G	С	А	С	В
В	A179	<u>Larus</u> ridibundus	w	6630	6630	i	G	С	A	С	В
В	A157	<u>Limosa</u> Iapponica	w	1950	1950	i	G	В	A	С	A
В	A156	<u>Limosa</u> limosa	w	1067	1067	i	G	В	A	С	A
В	A069	<u>Mergus</u> <u>serrator</u>	w	121	121	i	G	В	A	С	A
В	A160	<u>Numenius</u> arquata	w	1234	1234	i	G	С	A	С	В
В	A017	Phalacrocorax carbo	w	97	97	i	G	С	А	С	С
В	A151	<u>Philomachus</u> pugnax	w	4	4	i	G	С	В	С	В
В	A151	<u>Philomachus</u> pugnax	с	9	9	i	G	С	В	С	В
В	A140	Pluvialis apricaria	w	5967	5967	i	G	В	А	С	A
В	A141	<u>Pluvialis</u> squatarola	w	204	204	i	G	В	А	С	A
В	A005	Podiceps cristatus	w	302	302	i	G	В	А	С	A
В	A048	<u>Tadorna</u> tadorna	w	492	492	i	G	В	А	С	A
В	A161	<u>Tringa</u> erythropus	с	3	3	i	G	С	В	С	С
В	A164	<u>Tringa</u> nebularia	w	16	16	i	G	С	В	С	С
В	A162	<u>Tringa</u> totanus	w	1489	1489	i	G	В	А	С	A
В	A142	<u>Vanellus</u> vanellus	w	14850	14850	i	G	В	A	С	A

• Group: A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles

• S: in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes

- NP: in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- Unit: i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see <u>reference portal</u>)
- Abundance categories (Cat.): C = common, R = rare, V = very rare, P = present to fill if data are

deficient (DD) or in addition to population size information

• Data quality: G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

#### 3.3 Other important species of flora and fauna (optional)

Species				Population in the site			Motivation							
Group	CODE	Scientific Name	S	NP	Size		Unit	Cat.	Spe Anr	ecies nex	Oth cat	ner egor	ies	
					Min	Мах		C R V P	IV	v	Α	В	С	D
В		Ardea cinerea			28	28							Х	
Р		<u>Crambe</u> <u>maritima</u>									х			
В		Cygnus olor			61	61							Х	

- **Group:** A = Amphibians, B = Birds, F = Fish, Fu = Fungi, I = Invertebrates, L = Lichens, M = Mammals, P = Plants, R = Reptiles
- **CODE:** for Birds, Annex IV and V species the code as provided in the reference portal should be used in addition to the scientific name
- S: in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- NP: in case that a species is no longer present in the site enter: x (optional)
- Unit: i = individuals, p = pairs or other units according to the standard list of population units and codes in accordance with Article 12 and 17 reporting, (see reference portal)
- Cat.: Abundance categories: C = common, R = rare, V = very rare, P = present
- Motivation categories: IV, V: Annex Species (Habitats Directive), A: National Red List data; B: Endemics; C: International Conventions; D: other reasons

## 4. SITE DESCRIPTION

#### 4.1 General site character

Habitat class	% Cover
N03	1.0
N05	1.0
N01	40.0
N02	58.0
Total Habitat Cover	100

#### **Other Site Characteristics**

The site is a large bay-like estuarine complex, extending c.15 km from north to south and on average of 4-5 km in width. It contains the estuaries of a number of moderately sized rivers, principally the Castletown, the Flurry, the Fane and the Glyde/Dee. These rivers drain fairly intensive agricultural catchments, and the Castletown flows through Dundalk town and serves the port. The site contains the largest expanse of intertidal flats on the east coast and has a very marked tidal range. The sediments are predominantly sands though fine muds or muddy sands occur in the sheltered areas at Dundalk and Ballymascanlan. Salt marshes are well represented, especially in the more sheltered areas such as the estuaries of the Castletown and Flurry rivers. Spartina is frequent in parts. Post-glacial raised beaches are a feature of the shoreline.

#### 4.2 Quality and importance

Estuaries and particularly intertidal sand and mud flats are very well represented at this site and support the

largest concentration of wintering waterfowl on the east coast (regularly in excess of 20,000 wintering waterfowl). The bay has internationally important populations of Branta bernicila hrota, Calidris canutus, Limosa limosa and Limosa lapponica. It is the top site in the country for Calidris canutus, with over 38% of the national total. A further 13 species have populations of national importance, with particular notable numbers for Haematopus ostralegus (12.4% of national total), Calidris alpina (8.4% of national total) and Vanellus vanellus (7.4% of national total). Dundalk Bay is an important roost site for Anser anser and small numbers of Anser albifrons flavirostris. Shallow bay waters support divers, grebes and diving duck, with nationally important populations of Podiceps cristatus and Mergus serrator. This bay is a regular site for passage waders such as Philomachus pugnax, Calidris ferruginea and Tringa erythropus. It is also an important site for wintering gulls, especially Larus ridibundus and Larus canus. The site provides both feeding and roosting areas for the waterfowl species and habitat quality for most of the estuarine habitats is very good. Wintering bird populations have been well monitored in recent years.

#### 4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts					
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]		
Н	D01.02		0		
М	G01.02		i		
М	E02		0		
М	D03.02		i		
М	J02.12		i		
М	E03		i		
М	F02.03		i		
Н	101		i		
Н	E01		0		
L	A04		i		
М	E01.03		0		
М	A08		0		
М	G01.01		i		
М	J02.11		i		

Positive Impacts					
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i 0 b]		
М	G01.01		i		
М	D03.02		i		
L	A04		i		
М	F02.03		i		
Μ	E01.03		0		
Н	D01.02		0		

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

#### 4.5 Documentation

Colhoun, K. (2001). I-WeBS Report 1998-99. BirdWatch Ireland, Dublin. Curtis, T.G.F. and Sheehy Skeffington, M.J. (1998). The salt marshes of Ireland: an inventory and account of their geographical variation. Biology and Environment, Proceedings of the Royal Irish Academy 98B: 87-104. Fahy, E. (1972) A preliminary Report on Areas of Scientific Interest in County Louth. An Foras Forbartha, Dublin. Hunt, J., Derwin, J., Coveney, J. and Newton, S. (2000). Republic of Ireland. Pp. 365-416 in Heath, M.F. and Evans, M.I. (eds). Important Bird Areas in Europe: Priority Sites for Conservation 1: Northern Europe. Cambridge, UK: BirdLife International (BirdLife Conservation Series No. 8). Irish Wetland Birds Survey (I-WeBS) Database, 1994/95-2000/01. BirdWatch Ireland, Dublin. McGarrigle M.L., Bowman J.J., Clabby K.J., Lucey J., Cunningham P., MacCarthaigh M., Keegan M., Cantrell B., Lehane M., Clenaghan C. and Toner P.F. (2002). Water Quality in Ireland 1998-2000. Environmental Protection Agency, Wexford. Merne, O.J. (1989). Important bird areas in the Republic of Ireland. In: Grimmett, R.F.A. and Jones, T.A. (eds). Important Bird Areas in Europe. ICBP Technical Publication No. 9. Cambridge. Moore, D. and Wilson, F. (1999). National Shingle Beach Survey of Ireland 1999. Unpublished report to National Parks and Wildlife Service, Dublin. Praeger, R.L. (1934). The Botanist in Ireland. Hodges, Figgis and Co. Dublin. Sheppard, R. (1993). Ireland's Wetland Wealth. IWC, Dublin. White, J. (1981). Notes on Irish vegetation: No. 1 The vegetation of shingle in Co. Louth. Bulletin of the Irish Biogeographical Society 5: 1-4.

## 5. SITE PROTECTION STATUS (optional)

#### 5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
IE05	9.0				

#### 5.2 Relation of the described site with other sites:

designated at national or regional level:

Type code	Site name	Туре	Cover [%]
IE05	Ballymascanlon Estuary Wildfowl Sanctuary	+	1.0
IE05	Lurgangreen Wildfowl Sanctuary	+	8.0

designated at international level:

Туре	Site name	Туре	Cover [%]
Other	Dundalk Bay	+	44.0

## 6. SITE MANAGEMENT

#### 6.2 Management Plan(s):

An actual management plan does exist:

Yes	
No, but in preparation	
X No	

## 7. MAP OF THE SITES

INSPIRE ID:

IE.NPWS.PS.NATURA2000.SPA.IE0004026

Map delivered as PDF in electronic format (optional)

Yes X No

Reference(s) to the original map used for the digitalisation of the electronic boundaries (optional).

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# National Parks and Wildlife Service

# **Conservation Objectives**

# Dundalk Bay SAC 000455 Dundalk Bay SPA 004026



An Roinn Ealaíon, Oidhreachta agus Gaeltachta Department of Arts, Heritage and the Gaeltacht

#### Introduction

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

A site-specific conservation objective aims to define favourable conservation condition for a particular habitat or species at that site.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

• population dynamics data on the species concerned indicate that it is maintaining itself on a longterm basis as a viable component of its natural habitats, and

• 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 probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

#### Notes/Guidelines:

1. The targets given in these conservation objectives are based on best available information at the time of writing. As more information becomes available, targets for attributes may change. These will be updated periodically, as necessary.

2. An appropriate assessment based on these conservation objectives will remain valid even if the targets are subsequently updated, providing they were the most recent objectives available when the assessment was carried out. It is essential that the date and version are included when objectives are cited.

3. Assessments cannot consider an attribute in isolation from the others listed for that habitat or species, or for other habitats and species listed for that site. A plan or project with an apparently small impact on one attribute may have a significant impact on another.

4. Please note that the maps included in this document do not necessarily show the entire extent of the habitats and species for which the site is listed. This should be borne in mind when appropriate assessments are being carried out.

5. When using these objectives, it is essential that the relevant backing/supporting documents are consulted, particularly where instructed in the targets or notes for a particular attribute.

## Qualifying Interests

* indicates	* indicates a priority habitat under the Habitats Directive				
000455	Dundalk Bay SAC				
QI	Description				
1130	Estuaries				
1140	Mudflats and sandflats not covered by seawater at low tide				
1220	Perennial vegetation of stony banks				
1310	Salicornia and other annuals colonizing mud and sand				
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)				
1410	Mediterranean salt meadows (Juncetalia maritimi)				
004026	Dundalk Bay SPA				
QI	Description				
A005	Great Crested Grebe Podiceps cristatus	wintering			
A043	Greylag Goose Anser anser	wintering			
A046	Light-bellied Brent Goose Branta bernicla hrota	wintering			
A048	Shelduck Tadorna tadorna	wintering			
A052	Teal Anas crecca	wintering			
A053	Mallard Anas platyrhynchos	wintering			
A054	Pintail Anas acuta	wintering			
A065	Common Scoter Melanitta nigra	wintering			
A069	Red-breasted Merganser Mergus serrator	wintering			
A130	Oystercatcher Haematopus ostralegus	wintering			
A137	Ringed Plover Charadrius hiaticula	wintering			
A140	Golden Plover Pluvialis apricaria	wintering			
A141	Grey Plover Pluvialis squatarola	wintering			
A142	Lapwing Vanellus vanellus	wintering			
A143	Knot Calidris canutus	wintering			
A149	Dunlin Calidris alpina	wintering			
A156	Black-tailed Godwit Limosa limosa	wintering			
A157	Bar-tailed Godwit Limosa lapponica	wintering			
A160	Curlew Numenius arquata	wintering			
A162	Redshank Tringa totanus	wintering			
A179	Black-headed Gull Chroicocephalus ridibundus	wintering			
A182	Common Gull Larus canus	wintering			
A184	Herring Gull Larus argentatus	wintering			
A999	Wetlands & Waterbirds				

Suppo Supportin	rting documents, relevant reports & publications (listed by date) g documents, NPWS reports and publications are available for download from: www.npws.ie/Publications
Title:	Dundalk Bay SPA (004026): Conservation objectives supporting document [Version 1]
Year:	2011
Author:	NPWS
Series:	Unpublished Report to NPWS
Title:	Dundalk Bay SAC (000455): Conservation objectives supporting document - marine habitats [Version 1]
Year:	2011
Author:	NPWS
Series:	Unpublished Report to NPWS
Title:	Dundalk Bay SAC (000455): Conservation objectives supporting document - coastal habitats [Version 1]
Year:	2011
Author:	NPWS
Series:	Unpublished Report to NPWS
Title:	A subtidal soft sediment survey of Dundalk Bay
Year:	2009
Author:	Aquatic Services Unit
Series:	Unpublished Report to NPWS
Title:	Saltmarsh Monitoring Report 2007-2008
Year:	2009
Author:	McCorry, M.; Ryle, T.
Series:	Unpublished Report to NPWS
Title:	A survey of mudflats and sandflats in Ireland. An intertidal soft sediment survey of Dundalk Bay
Year:	2008
Author:	Aquatic Services Unit
Series:	Unpublished Report to NPWS
Title:	A survey of mudflats and sandflats [Dundalk Bay]
Year:	2007
Author:	Aquatic Services Unit
Series:	Unpublished Report to NPWS
Title:	Saltmarsh Monitoring Report 2006
Year:	2007
Author:	McCorry, M.
Series:	Unpublished Report to NPWS
Title:	National Shingle Beach Survey of Ireland 1999
Year:	1999
Author:	Moore, D.; Wilson, F.
Series:	Unpublished Report to NPWS

## Spatial data sources

Year:	2010				
Title:	EPA transitional waterbody data				
GIS operations:	Clipped to SAC boundary				
Used for:	1130				
Year:	Interpolated 2011				
Title:	Mudflat and sandflat surveys 2007, 2008; subtidal soft sediment survey 2009				
GIS operations:	<ul> <li>Polygon feature classes from marine community types base data sub-divided based on interpolation of marine survey data</li> </ul>				
Used for:	Marine community types, 1140				
Year:	2005				
Title:	OSi Discovery series vector data				
GIS operations:	<b>s:</b> High water mark (HWM) and low water mark (LWM) polyline feature classes converted into polygon feature classes and combined; Saltmarsh and Sand Dune CO datasets erased out				
Used for:	Marine community types base data				
Year:	Revision 2010				
Title:	Saltmarsh Monitoring Project 2007-2008. Version 1				
GIS operations:	QIs selected; clipped to SAC boundary				
Used for:	1310, 1330, 1410				
Year:	2005				
Title:	OSi Discovery series vector data				
GIS operations:	High water mark (HWM) and low water mark (LWM) polyline feature classes converted into polygon feature classes and combined; saltmarsh data for site combined to HWM and LWM polygon feature class; resulting polygon feature class unioned with SPA boundary; resulting polygon feature class clipped to SPA boundary; bird use zone attributes assigned to each polygon				
Used for:	Bird use zones (map 6)				

#### 1130 Estuaries

# To maintain the favourable conservation condition of Estuaries in Dundalk Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes. See map 2	Habitat area was estimated at 2799ha using OSI data and the defined Transitional Water Body area under the Water Framework Directive. See marine habitats supporting document for further information
Community distribution	Hectares	The Subtidal fine sand community complex should be conserved in a natural condition. See map 4	Habitat structure was elucidated from intertidal core and dig sampling undertaken in 2007 and 2008 combined with data obtained from subtidal grab samples obtained in 2009. See marine habitats supporting document for further information

#### 1140 Mudflats and sandflats not covered by seawater at low tide

To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide at Dundalk Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes. See map 3	Habitat area was estimated at 4375ha using OSI data. See marine habitats supporting document for further information
Community distribution	Hectares	The Muddy fine sand community and Intertidal fine sand community complex should be conserved in a natural condition. See map 4	Habitat structure was elucidated from intertidal core and dig sampling undertaken in 2007 and 2008 combined with data obtained from subtidal grab samples obtained in 2009. See marine habitats supporting document for further information

#### 1220 Perennial vegetation of stony banks

To maintain the favourable conservation condition of Perennial vegetation of stony banks in Dundalk Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable, subject to natural processes, including erosion and succession	Exact current area unknown, but shingle is known to occur almost continuously from Salterstown to Lurgan White House in the south bay and from Jenkinstown to east of Giles Quay in the north bay. Shingle is estimated to cover 12ha. Probably less than 25% of this would be vegetated. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, subject to natural processes	See coastal habitats supporting document for further details
Physical structure: Functionality and sediment supply	Presence/absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions	Based on data from the national shingle beach survey conducted in 1999 (Moore and Wilson, 1999). See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain range of habitat zonations including transitional zones, subject to natural processes including erosion and succession. See map 5	Based on data from Moore and Wilson (1999). See coastal habitats supporting document for further details
Vegetation composition: typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain the presence of species-poor communities with characteristic species: Honckenya peploides, Beta vulgaris ssp. maritima, Crithmum maritimum, Tripleurospermum maritimum, Glaucium flavum and Silene uniflora	Based on data from Moore and Wilson (1999). See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-natives) to represent less than 5% cover	Based on data from Moore and Wilson (1999). See coastal habitats supporting document for further details

#### 1310 Salicornia and other annuals colonizing mud and sand

To restore the favourable conservation condition of *Salicornia* and other annuals colonizing mud and sand in Dundalk Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site surveyed: 35.00ha. See map 5	Based on data from the Saltmarsh Monitoring Project (McCorry and Ryle, 2009). One sub-site (Dundalk Bay) was mapped, giving a total estimated area of 35ha for Salicornia mudflat, which is one of the largest areas of this habitat in the country. NB further unsurveyed areas maybe present within the site. See coastal habitats supporting document for further details.
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 5 for known distribution	See coastal habitats supporting document for further details
Physical structure: sediment supply	Presence/absence of physical barriers	Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions	See coastal habitats supporting document for further details
Physical structure: creeks and pans	Occurrence	Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession	Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details
Physical structure: flooding regime	Hectares flooded; frequency	Maintain natural tidal regime	See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession. See map 5	Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward	Based on data from McCorry and Ryle (2009)
Vegetation structure: vegetation cover	Percentage cover at a representative sample of monitoring stops	Maintain more than 90% of area outside creeks vegetated	Based on data from McCorry and Ryle (2009)
Vegetation composition: typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of sub- communities with characteristic species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009)	See coastal habitats supporting document for further details
Vegetation structure: negative indicator species - Spartina anglica	Hectares	No significant expansion of <i>Spartina</i> . No new sites for this species and an annual spread of less than 1% where it is already known to occur	Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details

#### 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)

# To maintain the favourable conservation condition of Atlantic salt meadows in Dundalk Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For the sub-site (357.57ha) and potential areas (22.42ha) mapped: 379.98ha. See map 5	Based on data from the Saltmarsh Monitoring Project (McCorry and Ryle, 2009). One sub-site (Dundalk Bay) was mapped and additional areas of potential saltmarsh were identified from an examination of aerial photographs, giving a total estimated area for Atlantic salt meadow of 379.98ha. NB further unsurveyed areas maybe present within the site. See coastal habitats supporting document for further information
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 5 for known distribution	See coastal habitats supporting document for further details
Physical structure: sediment supply	Presence/absence of physical barriers	Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions	See coastal habitats supporting document for further details
Physical structure: creeks and pans	Occurrence	Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession	Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details
Physical structure: flooding regime	Hectares flooded; frequency	Maintain natural tidal regime	See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession. See map 5	Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward	Based on data from McCorry and Ryle (2009)
Vegetation structure: vegetation cover	Percentage cover at a representative sample of monitoring stops	Maintain more than 90% of area outside creeks vegetated	Based on data from McCorry and Ryle (2009)
Vegetation composition: typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of sub- communities with characteristic species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009)	See coastal habitats supporting document for further details
Vegetation structure: negative indicator species- Spartina anglica	Hectares	No significant expansion of <i>Spartina</i> . No new sites for this species and an annual spread of less than 1% where it is already known to occur	Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details

#### 1410 Mediterranean salt meadows (Juncetalia maritimi)

To maintain the favourable conservation condition of Mediterranean salt meadows in Dundalk Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: 0.045ha. See map 5	Based on data from the Saltmarsh Monitoring Project (McCorry and Ryle, 2009). One sub-site (Dundalk Bay) was mapped, giving a total estimated area of 0.045ha for Mediterranean salt meadow. NB further unsurveyed areas maybe present within the site. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 5 for known distribution	See coastal habitats supporting document for further details
Physical structure: sediment supply	Presence/absence of physical barriers	Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions	See coastal habitats supporting document for further details
Physical structure: creeks and pans	Occurrence	Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession	Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details
Physical structure: flooding regime	Hectares flooded; frequency	Maintain natural tidal regime	See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession. See map 5	Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward	Based on data from McCorry and Ryle (2009)
Vegetation structure: vegetation cover	Percentage cover at a representative sample of monitoring stops	Maintain more than 90% of area outside creeks vegetated	Based on data from McCorry and Ryle (2009)
Vegetation composition: typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of sub- communities with characteristic species listed in Saltmarsh Monitoring Project (McCorry & Ryle, 2009)	See coastal habitats supporting document for further details
Vegetation structure: negative indicator species- Spartina anglica	Hectares	No significant expansion of <i>Spartina</i> . No new sites for this species and an annual spread of less than 1% where it is already known to occur	Based on data from McCorry and Ryle (2009). See coastal habitats supporting document for further details

#### A005 Great Crested Grebe *Podiceps cristatus*

# To maintain the favourable conservation condition of Great Crested Grebe in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A043 Greylag Goose Anser anser

# To maintain the favourable conservation condition of Greylag Goose in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys.See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in section 5 of the SPA conservation objectives supporting document

#### A046 Light-bellied Brent Goose Branta bernicla hrota

# To maintain the favourable conservation condition of Light-bellied Brent Geese in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A048 Shelduck Tadorna tadorna

# To maintain the favourable conservation condition of Shelduck in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A052 Teal Anas crecca

# To maintain the favourable conservation condition of Teal in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A053 Mallard Anas platyrhynchos

# To maintain the favourable conservation condition of Mallard in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A054 Pintail Anas acuta

#### To maintain the favourable conservation condition of Pintail in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A065 Common Scoter Melanitta nigra

# To maintain the favourable conservation condition of Common Scoter in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment using (Generalised Additive Modelling (GAM)) could not be undertaken for this species due to an incomplete dataset. A measure of population change was calculated using the 'generic threshold' method. See Section 4 of the SPA conservation objectives supporting document for more details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A069 Red-breasted Merganser *Mergus serrator*

# To maintain the favourable conservation condition of Red-breasted Merganser in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A130 Oystercatcher *Haematopus ostralegus*

# To maintain the favourable conservation condition of Oystercatcher in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

### A137 Ringed Plover *Charadrius hiaticula*

To maintain the favourable conservation condition of Ringed Plover in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A140 Golden Plover Pluvialis apricaria

To maintain the favourable conservation condition of Golden Plover in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document
# A141 Grey Plover *Pluvialis squatarola*

# To maintain the favourable conservation condition of Grey Plover in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

# A142 Lapwing Vanellus vanellus

# To maintain the favourable conservation condition of Lapwing in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A143 Knot *Calidris canutus*

#### To maintain the favourable conservation condition of Knot in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A149 Dunlin *Calidris alpina*

#### To maintain the favourable conservation condition of Dunlin in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A156 Black-tailed Godwit *Limosa limosa*

# To maintain the favourable conservation condition of Black-tailed Godwit in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A157 Bar-tailed Godwit *Limosa lapponica*

# To maintain the favourable conservation condition of Bar-tailed Godwit in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A160 Curlew *Numenius arquata*

# To maintain the favourable conservation condition of Curlew in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A162 Redshank *Tringa totanus*

# To maintain the favourable conservation condition of Redshank in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment (Generalised Additive Modelling (GAM)) was undertaken using waterbird count data collected through the Irish Wetland Bird Survey and other surveys. See the the SPA conservation objectives supporting document for further details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A179 Black-headed Gull Chroicocephalus ridibundus

# To maintain the favourable conservation condition of Black-headed Gull in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment using (Generalised Additive Modelling (GAM)) could not be undertaken for this species due to an incomplete dataset. A measure of population change was calculated using the 'generic threshold' method. See Section 4 for more details of the SPA conservation objectives supporting document
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A182 Common Gull *Larus canus*

# To maintain the favourable conservation condition of Common Gull in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment using (Generalised Additive Modelling (GAM)) could not be undertaken for this species due to an incomplete dataset. A measure of population change was calculated using the 'generic threshold' method. See Section 4 of the SPA conservation objectives supporting document for more details
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A184 Herring Gull *Larus argentatus*

# To maintain the favourable conservation condition of Herring Gull in Dundalk Bay SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trend assessment using (Generalised Additive Modelling (GAM)) could not be undertaken for this species due to an incomplete dataset. A measure of population change was calculated using the 'generic threshold' method. See Section 4 for more details of the SPA conservation objectives supporting document
Distribution	Number and range of areas used by waterbirds	No significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	As determined by regular low tide and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in Section 5 of the SPA conservation objectives supporting document

#### A999 Wetlands & Waterbirds

To maintain the favourable conservation condition of the wetland habitat in Dundalk Bay SPA as a resource for the regularly-occurring migratory waterbirds that utilise it. This is defined by the following attribute and target:

Attribute	Measure	Target	Notes
Habitat area	Hectares	The permanent area occupied by the wetland habitat is stable and not significantly less than the areas of 8136, 4374 and 649 hectares respectively for subtidal, intertidal, and supratidal habitats, other than that occurring from natural patterns of variation. See map 6	As defined by SPA boundary to MLWM; MLWM to MHWM; and MHWM to SPA boundary (the latter value is minus the area of Lurgangreen Fields)





		Z		
	R		Legend SAC 000455 1130 Estuaries OSi Discovery Series Co	ounty Boundary
An Roinn Ealaíon, Oidhreachta agus Gaeltachta Department of Arts, Heritage and the Gaeltacht	MAP 2: DUNDALK BAY CONSERVATION OBJECTIVES ESTUARIES Map to be read in conjunction with the NPWS Conservation Objectives Document.	CO. LOUTH	<ul> <li>The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision.</li> <li>Reproduced from Ordnance Survey material by permission of the Government (Permit number EN 0059208).</li> <li>Nil sna teorainneacha ar na léarscáileanna ach nod garshuiomhach ginearálta Féadfar athbhreithnithe a déanamh ar theorainneacha na gceantar comharthaithe. Macasamhail d'ábhar na Suirbhéarachta Ordonáis le chead ón Rialtas (Ceadunas Uimh. EN 0059208)</li> </ul>	SITE CODE SAC 000455 Version 1.02 Map Version 1 Date: March 2011



			Lege	end SAC 000455	
				1140 Mudflats and sandflats not covered by seaw	vater at low tide
				OSi Discovery Series County Boundary	
An Roinn Falaíon, Oidhreachta agus Gaeltachta	MAP 3: DUNDALK BAY	CO. LOUTH		The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision. Reproduced from Ordnance Survey material by permission	SITE CODE SAC 000455
Department of Arts, Heritage and the Gaeltacht	CONSERVATION OBJECTIVES MUDFLATS AND SANDFLATS	0 0.5 1 1.5 2	km 💧	or the Government (Permit number EN 0059208). Nil sna teorainneacha ar na léarscáileanna ach nod garshuiomhach ginearálta Féadfar athbhreithnithe a déanamh ar theorainneacha na gceantar comharthaithe. Macasamhail d'ábhar na Suirbhéarachta Ordonáis le chead ón Rialtas (Ceadunas Uimh, EN 0059208)	Version 1.02 Map Version 1
	Map to be read in conjunction with the NPWS Conservation Objectives Document.		$\sim$		Date: March 2011



An Roinn Falaíon Oidhreachta agus Gaeltachta	MAP 4: DUNDALK BAY	CO. LOUTH	The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision. Reproduced from Ordnance Survey material by permission	SITE CODE SAC 000455 Version 1.02
Department of Arts, Heritage and the Gaeltacht	CONSERVATION OBJECTIVES MARINE COMMUNITY TYPES	0 0.5 1 1.5 2 km	or the Government (Permit number EN 0059208). Níl sna teorainneacha ar na léarscáileanna ach nod garshuiomhach ginearálta Féadfar athbhreithnithe a déanamh ar theorainneacha na gceantar comharthaithe. Macasamhail d'ábhar na Suirbhéarachta Ordonáis le chead ón Rialtas (Ceadunas Uimh. EN 0059208)	SPA 004026 Version 1.02 Map Version 1



			Legend         SAC 000455         OSi Discovery Series County Boundary         Saltmarsh Habitats         1310 Salicornia and other annuals colonising mud         1330 Atlantic salt meadows (Glauco-Puccinellietalia         1410 Mediterranean salt meadows (Juncetalia mar	and sand a maritimae) ritimi)
			Potential Annex Habitat	SITE CODE
An Roinn Ealaíon, Oidhreachta agus Gaeltachta Department of Arts, Heritage and the Gaeltacht	MAP 5: DUNDALK BAY CONSERVATION OBJECTIVES SALTMARSH HABITATS	CO. LOUTH 0 0.5 1 1.5 2 km	N         Nil sna teorainneacha ar na léarscáileanna ach nod garshuiomhach a gearatar comharthaithe. Macasamhail d'ábhar na Suirbhéarachta Ordonáis le chead ón Rialtas (Ceadunas Uimh. EN 0059208)	SAC 000455 Version 1.02 Map Version 1 ate: March 2011



An Roinn       MAP 6:       CO. LOUTH       The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision. Reproduced from Ordnance Survey memterila by permission of the Government (Permin number Edatachta agus Gaeltachta Department of Arts, Heritage and the Gaeltacht       NI sna teorainneacha ar na léarscáileanna ach nod garshuiomhach ginearálta. Féadfar athbhreithnithe a déanamh ar theorainneacha na gceantar comharthaithe. Macasamhai d'ábhar na Surbé araus Limit Feadquagas Limit Processon       SITE CODE         0       0.5       1       1.5       2 km       NI       SITE CODE       SPA 004026         Version 1.02       Version 1.02       NI sna teorainneacha ar na léarscáileanna ach nod garshuiomhach ginearálta. Féadfar athbhreithnithe a déanamh ar theorainneacha na gceantar comharthaithe. Macasamhai d'ábhar na Suirbhéaratha Ordonáis       Map Version 1					
Image: Conservation of the Government of the Governme	An Roinn	MAP 6: DUNDALK BAY	CO. LOUTH	The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision. Reproduced from Ordnance Survey material by permission	SITE CODE SPA 004026
	Department of Arts, Heritage and the Gaeltacht	WETLANDS AND WATERBIRDS BIRD USE ZONES	0 0.5 1 1.5 2 km	of the Government (Permit number EN 0059208). Nil sna teorainneacha ar na léarscáileanna aoch nod garshuiomhach ginearáll Féadfar athbhreithnithe a déanamh ar theorainneacha na gceantar comharthaithe. Macasamhail d'ábhar na Suirbhéarachta Ordonáis le chead ón Riaitas (Ceadunas Uimh, EN 0059208)	a. Version 1.02 Map Version 1



An Roinn Ealaíon, Oidhreachta agus Gaeltachta

**Department of** Arts, Heritage and the Gaeltacht

Produced by: National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, 7 Ely Place, Dublin 2, Ireland. Web: www.npws.ie E-mail: natureconservation@environ.ie

#### Citation:

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# Series Editors: Rebecca Jeffrey & Naomi Kingston ISSN 2009-4086



# Appendix C. Pre-Application Consultation

C.1. Consultation Record and Complete Set of Responses

Consultee	Contact Name	Contact Address	Date of Correspondence	Method of Correspondence
An Bord Pleanala	The Manager	64 Marlborough Street, Dublin 1, D01V902.	NA Separate PreAp Process	
An Taisce	Mr. Ian Lumley	The National Trust for Ireland, Tailors' Hall, Back Lane, Dublin, D08 X2A3, Ireland	09/08/2018	Letter via. post
Birdwatch Ireland	Olivia Crowe	Unit 20, Block D, Bullford Business Campus, Kilcoole, Greystones, Co. Wicklow, A63 RW83, Ireland	09/08/2018	Letter via. post
Department of Agriculture, Food and the Marine	The Manager	Agriculture House, Kildare St, Dublin	09/08/2018	Letter via. post
Department of Communications, Climate Action and Environment	The Manager	29-31 Adelaide Road, Saint Kevin's, Dublin, D02 X285	09/08/2018	Letter via. post
Department of Housing, Planning, Community and Local Government	The Manager	Custom House, Dublin 1, D01 W6X0	09/08/2018	Letter via. post
Department of Housing, Planning, Community and Local Government - Marine Planning and Foreshore	The Manager	Foreshore Unit, Marine Planning and Foreshore, Department of the Environment, Community and Local Government, Newtown Road, Wexford, Co. Wexford.	09/08/2018	Letter via. post
Bus Eireann	The Manager	Busárus (Central Bus Station), Store Street, Dublin 1	09/08/2018	Letter via. post
Louth County Council (LCC) - Planning	The Manager	County Hall Milennium Centre Dundalk Louth A91 KFW6	NA Separate PreAp Process	
Environment Protection Agency (EPA)	The Manager	Environmental Licensing Programme, Office of Environmental Sustainability, Environmental Protection Agency, Regional Inspectorate, Inniscarra, Co Cork	09/08/2018	Letter via. post
Failte Ireland	Mr Paddy Mathews	88-95 Amiens Street, Dublin 1, D01 WR86	09/08/2018	Letter via. post
Louth County Council - Environment	Frank Magee	County Hall Milennium Centre Dundalk Louth A91 KFW6	09/08/2018	Letter via. post
Louth County Council - Drainage / Operations	Frank Magee	County Hall Milennium Centre Dundalk Louth A91 KFW6	09/08/2018	Letter via. post
Louth County Council - Heritage	Frank Magee	County Hall Milennium Centre Dundalk Louth A91 KFW6	09/08/2018	Letter via. post
Geological Survey of Ireland	The Manager	Beggars Bush Haddington Road Dublin D04 K7X4	09/08/2018	Letter via. post
lamród Éireann (Irish Rail)	The Manager	Connolly Station, Dublin 1.	09/08/2018	Letter via. post
Inland Fisheries Ireland (IFI)	Ms Gretta Hannigan	Inland Fisheries Ireland, 3044 Lake Drive, Citywest Business Campus, Dublin D24 Y265 Ireland	09/08/2018	Letter via. post
Irish Wildlife trust	The Manager	The Irish Wildlife Trust, Sigmund Business Centre, 93A Lagan Road, Dublin Industrial Estate, Glasnevin, Dublin 11. D11 EP9P, Ireland	09/08/2018	Letter via. post
National Parks and Wildlife Service (NPWS)	Minister for Culture, Heritage and the Gaeltacht, c/o The Manager, Development Applications Unit, Department of Culture, Heritage and the Gaeltacht, Newton Road, Wexford, Y35 AP90	National Parks & Widlife Services, 90 North King Street, Dublin 7, D07 N7CV	09/08/2018	Letter via. post
National Transport Authority (NTA)	Mick MacAree	Dun Scéine, Harcourt Lane, Dublin 2, D02 WT20.	09/08/2018	Letter via. post
The Department of Culture, Heritage and the Gaeltacht,	The Manager	23 Kildare Street, Dublin, D02 TD30.	09/08/2018	Letter via. post
The Eastern & Midland Regional Assembly	The Manager	3rd Floor North, Ballymun Civic Centre, Main Street, Ballymun, Dublin 9, Ireland	09/08/2018	Letter via. post
The Health Services Executive, Environmental Health	The Manager	10 Corrig Ave, Dún Laoghaire, Dublin, A96 PX72	09/08/2018	Letter via. post

Consultee	Contact Name	Contact Address	Date of Correspondence	Method of Correspondence
The Heritage Council	The Manager	The Heritage Council Åras na hOidhreachta Church Lane Kilkenny RX95 X264	09/08/2018	Letter via. post
Transport Infrastructure Ireland (TII)	Tara Spain	Parkgate Business Centre, Parkgate Street, Dublin 8, D08 DK10.	09/08/2018	Letter via. post
The Health and Safety Authority	The Manager	Metropolitan Building, James Joyce Street, Dublin 1, D01 KY08	09/08/2018	Letter via. post
Irish Water	The Manager	Colvill House, 24-26 Talbot St., Mountjoy, Dublin	09/08/2018	Letter via. post
Department of Transport, Tourism and Sport	The Manager	Department of Transport, Tourism and Sport, Leeson Lane, Dublin 2, Ireland D02TR60	09/08/2018	Letter via. post
National Monuments / Architecture	The Manager	Minister for Culture, Heritage and the Gaeitacht, c'o The Manager, Development Applications Unit, Department of Culture, Heritage and the Gaeitacht, Newton Road, Ya5 AP90	09/08/2018	Letter via. post

Our Ref: ABP-303256-18

PA Reg Ref:

Your Ref:



Declan Brassil Declan Brassil and Company Ltd. Lincoln House Phoenix Street Smithfield Dublin 7

Date: 15 February 2019

Re: 10 year permission for 485 no. residential units (260 no. houses, 225 no. apartments), two new vehicular access points and associated site works. Blackrock Road, Blackrock, Dundalk , Co. Louth.

#### Dear Sir

I have been asked by An Bord Pleanála to refer further to the above-mentioned consultation request under section 5 of the Planning and Development (Housing) and Residential Tenancies Act 2016.

Please find enclosed An Bord Pleanála's pre-application consultation Opinion, which includes a list of the prescribed bodies to which a copy of the planning application should be sent. The prescribed bodies are to be advised that submissions or observations may be made to An Bord Pleanála during a specified 5-week period. Also enclosed is a copy of the record of the consultation meeting, the report of the Planning Inspector and draft notices. Please note that the record of the consultation meeting and the report of the Planning Inspector are to be treated as confidential until a planning application is made.

If you have any queries in relation to the matter, please contact the undersigned. Please mark in block capitals "STRATEGIC HOUSING UNIT" and quote the above mentioned reference number in any correspondence or telephone contact with An Bord Pleanála.

Yours faithfully,

Cora Cunningham Executive Officer Direct Line: 01-8737246

Encls. SHA10

Teil Glao Áitiúil Facs Láithreán Gréasáin Ríomhphost Tel LoCall Fax Website Email (01) 858 8100 1890 275 175 (01) 872 2684 www.pleanala.ie bord@pleanala.ie

64 Sráid Maoilbhríde Baile Átha Cliath 1 D01 V902 64 Marlborough Street Dublin 1 D01 V902



# DP/ADP Direction ABP-303256-18

# **Proposed Development:**

I have had regard to the documentation on file from the prospective applicant, the submission from the planning authority and the Record of the Consultation Meeting. I have also considered the Inspector's Report and recommendation.

I hereby direct that an Opinion, pursuant to section 6(7) of the Planning and Development (Housing) and Residential Tenancies Act 2016, should issue generally in accordance with the Inspector's recommendation.

**Rachel Kenny** 

Director of Planning



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Case Reference: ABP-303256-18

Planning and Development (Housing) and Residential Tenancies Act 2016 Notice of Pre-Application Consultation Opinion

Proposed Development: 10-year permission for 485 no. residential units (260 no. houses, 225 no. apartments), two new vehicular access points and associated site works.

Blackrock Road, Blackrock, Dundalk, Co. Louth.

An Bord Pleanála has considered the issues raised in the pre-application consultation process and, having regard to the consultation meeting and the submission of the planning authority, is of the opinion that the documents submitted with the request to enter into consultations require further consideration and amendment to constitute a reasonable basis for an application for strategic housing development.

An Bord Pleanála considers that the following issues need to be addressed in the documents submitted that could result in them constituting a reasonable basis for an application for strategic housing development.

# 1. Timing and Phasing of Development

Further consideration and/or justification of the documents as they relate to the development of Phase II residential lands as set out in the Dundalk Environs development plan and the possible prematurity of development at this location pending the completion of the review of this plan. Where it is proposed to

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**Pre-Application Consultation Opinion** 

develop the subject lands prior to the adoption of the new development plan a planning rationale/justification for the release of these Phase II residential lands should be submitted which has due regard to all Phase I residential lands which remain undeveloped and the provisions of the County Development Plan 2015-2021. The duration of permission sought should also be considered in this context.

An appropriate statement in relation to section 8(1)(iv) of the Planning and Development (Housing) and Residential Tenancies Act 2016, as amended by Section 53 of the Act of 2018, that outlines consistency with the relevant development plan and that specifically address any matter that maybe considered to materially contravene the said plan should be provided. The further consideration of this issue may require an amendment to the documents and/or design proposals submitted.

# 2. Surface water management and Risk of Flooding

Further consideration of documents as they relate to surface and storm water management for the development lands and the risk of displaced or increased discharge of waters downstream to the Dundalk Bay SAC, including the risk of flooding to the site entrances. This further consideration should be considered within the Environmental Impact Assessment report. Regard should be given to the requirements of the Local Authority in respect of surface water treatment and disposal and SUDS measures proposed for the scheme. Any surface water management proposals should be considered in tandem with any Flood Risk Assessment, which should in turn accord with the requirements of 'The Planning System and Flood Risk Management Guidelines' (including the associated 'Technical Appendices') and include hydraulic modelling where considered appropriate. Further consideration of these issues may require an amendment to the documents and/or design proposals submitted.

ABP-303256-18

**Pre-Application Consultation Opinion** 

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Furthermore, Pursuant to article 285(5)(b) of the Planning and Development (Strategic Housing Development) Regulations 2017, the prospective applicant is hereby notified that, in addition to the requirements as specified in articles 297 and 298 of the Planning and Development (Strategic Housing Development) Regulations 2017, the following specific information should be submitted with any application for permission:

- In the context of ancillary or associated enabling infrastructure (roads and carparking) being located on lands zoned 'Recreation, Amenity and Open Space' and thereby reducing the quantum of open space, a design rationale/planning justification in respect of the open space provision, and built/urban edge surrounding it should be submitted.
- 2. An Environmental Impact Assessment Report.
- A layout plan with the zoning objectives overlain on the proposed residential scheme to provide clarity regarding location of residential units and road infrastructure including parking vis-à-vis the lands zoned open space.
- 4. Photomontages and cross sections at appropriate intervals for the proposed development including how the development will interface with contiguous land-uses. Proposed boundary treatments should be specified.
- 5. Details of existing and proposed levels across the development site relative to adjoining lands in particular contiguous residential properties and where connections to adjoining lands are proposed Full details of any changes in levels proposed should be provided.
- 6. Having regard to the local road network serving the site and adjoining lands, and its ability to accommodate additional traffic and/or accesses, the prospective applicant should demonstrate the suitability of the proposed vehicular access arrangements for the subject site and to consider or address any issues in respect of access to adjoining lands, in particular ensuring that the proposed development subject of this SHD pre-app does not unduly prejudice the future development of adjoining zoned lands.

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**Pre-Application Consultation Opinion** 

- 7. A site layout plan which clearly identifies the full extent of works to the proposed entrances and road junctions whether in public or private ownership. Relevant consents to carry out works on lands that are not included within the red-line boundary. The prospective applicant is advised that all works should as far as possible be included within the red-line boundary.
- 8. All existing watercourses and utilities that may traverse the site including any proposal to culvert/re-route/underground existing drains/utilities should be clearly identified on a site layout plan.
- A Building Life Cycle Report in respect of the proposed apartments as per section 6.13 of Sustainable Urban Housing: Design Standards for New Apartments- Guidelines for Planning Authorities (2018).
- 10. A construction and demolition waste management plan.
- 11.A phasing plan for the proposed development which includes the phasing arrangements for the delivery of the public open spaces, surface water management proposals having regard to sub-catchments within the scheme and Part V provision.
- 12. A site layout plan indicating all areas to be taken in charge.

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Also, pursuant to article 285(5)(a) of the Planning and Development (Strategic Housing Development) Regulations 2017, the prospective applicant is informed that the following authorities should be notified in the event of the making of an application arising from this notification in accordance with section 8(1)(b) of the Planning and Development (Housing) and Residential Tenancies Act 2016:

1. Irish Water

. . 1

- 2. Transport Infrastructure Ireland
- 3. Minister for Culture, Heritage, and the Gaeltacht
- 4. Heritage Council
- 5. An Taisce the National trust for Ireland
- 6. Louth County Childcare Committee

# PLEASE NOTE:

Under section 6(9) of the Planning and Development (Housing) and Residential Tenancies Act 2016, neither the holding of a consultation under section 6, nor the forming of an opinion under that section, shall prejudice the performance by the Board, or the planning authority or authorities in whose area the proposed strategic housing development would be situated, of any other of their respective functions under the Planning and Development Acts 2000 to 2016 or any other enactment and cannot be relied upon in the formal planning process or in legal proceedings.

Rachel Kenny Director of Planning رع February, 2019



S. 6(7) of Planning and Development (Housing) and Residential Tenancies Act 2016

Inspector's Report on Recommended Opinion ABP-303256-18

10 year permission for 485 residential

Blackrock Road, Blackrock, Dundalk,

# **Strategic Housing Development**

Location

**Planning Authority** 

**Prospective Applicant** 

**Date of Site Inspection** 

**Date of Consultation Meeting** 

Louth Co. Council

units and creche

Co. Louth

Kingsbridge Consultancy Ltd.

31<sup>st</sup> January 2019

2<sup>nd</sup> and 18<sup>th</sup> January 2019

Inspector

Joanna Kelly

ABP-303256-18

**Inspector's Report** 

Page 1 of 15

# 1.0 Introduction

Having regard to the consultation that has taken place in relation to the proposed development and also having regard to the submissions from the planning authority, the purpose of this report is to form a recommended opinion as to whether the documentation submitted with the consultation request under section 5(5) of the Planning and Development (Housing) and Residential Tenancies Act 2016 - (i) constitutes a reasonable basis for an application under section 4, or (ii) requires further consideration and amendment in order to constitute a reasonable basis for an application under section 4.

# 2.0 Site Location

- 2.1 The development site has a stated site area in the application form of 17.6ha and is located on zoned lands identified within the settlement boundary for Dundalk. The lands are agricultural in nature and are bounded by the one-off housing to the north which have access directly onto Bothar Maol, a narrow country lane which is gated further west. Dundalk Golf club is located on lands to the west and south of the development site. There are one-off housing located to the eastern boundary with a proposed access road into the lands proposed from Blackrock Road, opposite the coast-line which forms part of the Dundalk SPA and SAC.
- 2.2 The development site lands are elevated from the Blackrock Road and consist primarily of two agricultural fields with a level difference of approx. 20m across the site. There are existing overhead utility lines traversing the lands. The area of the site from which the primary access to the site is proposed, is notably wet. A secondary access to serve a small number of units is proposed from Bothar Maol. It is unclear whether this is a public or private road. It is noted that there is a gate to this road which prevents access via this road in the westerly direction. It was noted at time of inspection that some trees have been felled on the site close to where the secondary access is proposed.

# 3.0 **Description of proposed development**

The applicant is proposing a residential development comprising of 485 residential units including a childcare facility.

The unit mix as indicated by the prospective applicant is as follows:

	Apartments	Housing units	Total Units
1 bed	82		82
2 bed	137		137
3 bed	6	119	125
4 bed		101	101
5 bed		40	40
Total Units	225	260	485

# Table 1: Unit Mix

# 4.0 **Planning History**

The most relevant history associated with the site is noted as follows:

**File Ref. No. 08/520141** Permission granted to W.J.Construction (no. 1) limited for the construction of a foul pumping station and pumping main for connection to the Dundalk Town Trunk Sewer, a storm sewer, realignment of R-172 and the realigned and provision of a site access off Bóthar Maol.

File Ref. No. 08/752 / ABP PL.15.233263 Application for construction of a foul pumping station and pumping main for connection to the Dundalk Town Trunk Sewer, a storm water, the realignment of the R-172 and the realigned and provision of a site access off Bóthar Maol. Permission to grant permission issued in March 2009 and Leave to Appeal was granted by ABP to two parties. Documentation submitted indicates that the Application was withdrawn in July 2009.

**Inspector's Report** 

# 5.0 National and Local Planning Policy

# 5.1. National

Having considered the nature of the proposal, the receiving environment, the documentation on file, including submission from the planning authority, I am of the opinion, that the directly relevant section 28 Ministerial Guidelines are:

- 'Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas' (including the associated 'Urban Design Manual')
- 'Design Manual for Urban Roads and Streets' (DMURS)
- 'The Planning System and Flood Risk Management' (including the associated 'Technical Appendices')
- 'Childcare Facilities Guidelines for Planning Authorities'
- 'Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities'
- Urban Development and Building Height, Guidelines for Planning Authorities.
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, August 2018.

Other relevant national guidelines include:

- Project Ireland 2040, National Planning Framework.
- Framework and Principles for the Protection of the Archaeological Heritage Department of Arts, Heritage, Gaeltacht and the Islands 1999.

# 5.2. Local Policy

# 5.2.1 Louth County Development Plan 2015-2021

Dundalk is identified as a 'Large Growth Town 1'. Relevant policies include:

Policy CS3To require that a Core Strategy Population and Phasingstatement will be submitted with all planning applications for residential developmenton zoned land detailing how the application complies with the core strategyhousehold allocations and phasing proposals included in the settlement plan.

Chapter 4 of the Louth CDP deals with Residential and Community Facilities. Of note:

**RES 4** Require that 12% of all private residential development on lands zoned for residential or mixed uses (where residential is included) be provided for social/and or specialist housing under the provisions of Part V of the Planning Acts.

**RES 6** To encourage and promote the creation of attractive mixed use sustainable communities which contain a variety of housing types and tenures with supporting community and residential amenities, and where Part V is visually and otherwise integrated into the overall development, thus counteracting undue segregation.

**RES 10** To ensure all new residential developments are consistent with the guidelines and best practice manuals issued by the DECLG in the planning for and provision of sustainable communities within new residential areas.

# 5.2.2 Dundalk and Environs Development Plan 2009-2015

The site has a land use zoning objective 'Residential 2' and the central portion of the lands are zoned 'Recreation, Amenity and Open Space'.

A variation to the Development Plan in August 2011 provided for a variation to the Core Strategy Phasing Map indicating that the site was identified as 'Phase 3' for development. However, a Core Strategy and Land Use plan provided also as part of this variation identifies the site as 'Residential 2'.

# 6.0 Forming of the Opinion

Pursuant to section 6(7) of the Act of 2016, regard is had in the forming of the opinion to the documentation submitted by the prospective applicant; the planning authority submission and the discussions which took place during the tripartite consultation meeting. I will provide a brief detail on each of these elements hereunder.

# 6.1 **Documentation Submitted**

- 6.1.1 The prospective applicant has submitted information pursuant to section 5(5)(a) of the Planning and Development (Housing) and Residential Tenancies Act 2016 and article 285 of the Planning and of the Planning and Development (Strategic Housing Development) Regulations 2017.
- 6.1.2 The information submitted included *inter alia*: a completed SHD Application form and cover letter including but not limited to, Schedule of documents; Statement of Consistency including Urban Design and Architectural statement of consistency and DMURS statement; ElAr non-technical summary; NIS; Engineering and Services Report including IW letter re pre-connection; Traffic and Transport Assessment; Flood Risk Assessment, MEP design statement, Street lighting proposals, Construction and demolition waste proposals, plans and particulars.
- 6.1.3 I have reviewed and considered all of the documents and drawings submitted.

# 6.2 Planning Authority Submission

- 6.2.1 In compliance with section 6(4)(b) of the Act of 2016 the planning authority for the area in which the proposed development is located, Louth County Council, submitted a note of their section 247 consultations with the prospective applicant and also submitted their opinion in relation to the proposal. These were received by An Bord Pleanála on 25<sup>th</sup> January 2019.
- 6.2.2 The planning authority's opinion refers to key planning considerations as follows:

- It is the opinion of the planning authority that the proposal adheres to the policies and objectives of the National Planning Framework through providing compact urban growth, enabling people to live closer to employment and amenity/recreational opportunities and providing higher densities and mixed tenure community.
- The proposal adheres to the policies and objectives of the draft RSES.
- The development is consistent with the zoning objective.
- Residential accommodation within walking distance of large multinational and indigenous industry promotes modal shift and creates an environment where there is less dependency on the car. The development is well placed and provides for typology of residential accommodation not readily available within the Dundalk market.
- The core strategy for Dundalk is an outdated document and has not been updated to accord with the Core Strategy of the County Development Plan.
- The applicant has undertaken a robust assessment of the Core Strategy. The NPF prioritises Dundalk for growth.
- The lands represent a suitable sustainable location for consolidation.
- The prospective applicant has entered into discussions with housing to provide for Part V.
- The height and location of the taller structures are sensitive to the adjoining and established pattern of development on Bothar Maol. The layout and density is reflective of the advice during section 247 meetings.
- The scheme provides a good mix of units to cater for varying demographics.
- The development is consistent with the Design Manual. The council will require 10% of housing apartment units to be designed to Lifetime Home Standards.
- The development has been laid out to take account of adjoining and established residential areas.
- The quantum of public and private open space meets and exceeds the development plan requirements.
- Layout of the scheme allows for connectivity to adjoining lands and in particular given its location and proximity to employment generating lands.
- Infrastructure has no objection to the development subject to conditions.
- Welcome the landscape strategy and open space strategy is well thought out.
- Site is well serviced for the development of a childcare facility.
- All mitigation measures will need to be implemented as detailed in section 7.0 of the flood risk assessment.
- No concerns regarding archaeology in this area.
- PA note that the development is below threshold for the need for the preparation of an EIAr however given the scale of development it is considered that that the best approach is the cautionary approach.
- There are no protected habitats or structures on site.
- Conclusion refers to previous comments and notes further consideration required in respect of phasing.

## 6.4 Submission from Irish Water

As stated in the Confirmation of Feasibility, the applicant must install a water network extension and upgrade existing mains along with a wastewater network extension to facilitate the connection of the development to Irish Water Infrastructure. The network extensions and upgrades will not require statutory or third-party consents other than road opening licences from the local authority. IW confirms that subject to a compliant water and wastewater layout and a valid connection agreement being put in place the proposed connections to the IW network can be facilitated.

# 7.0 Consultation Meeting

- 7.1 A Section 5 Consultation meeting took place at the offices of Louth County Council on 31st January 2019, commencing at 11.30 am. Representatives of the prospective applicant, Louth County Council and An Bord Pleanála were in attendance. An agenda was issued by An Bord Pleanála prior to the meeting.
- 7.2 The main topics raised for discussion at the tripartite meeting were as follows:
  - 1. Phasing of development having regard to the local policy context
  - 2. Zoning having regard to the location of roads/parking on Recreation, amenity and open space lands
  - 3. Access, connections and permeability

- 4. Surface water management to include risk of flooding and AA considerations
- 5. Visual Impact

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- 6. Public realm to include boundary treatment
- 7. Any other matters
- 7.3 In relation to the Phasing of development having regard to the local policy context ABP representatives sought further discussion/elaboration on the justification for the release of the lands having regard to the phased release of lands identified in the Dundalk Environs Plan and also the justification for a 10 year permission in this context.
- 7.4 In relation to zoning having regard to the location of roads/parking on recreation, amenity and open space lands, ABP representatives sought further discussion/elaboration on this issue.
- 7.5 In relation to Access, Connections and Permeability, ABP representatives sought further discussion/elaboration on this issue particularly the need to include all lands where works are proposed within the red line boundary, consideration of proposed connections to adjoining lands and interface of new access roads with adjoining lower lying lands.
- 7.6 In relation to Surface Water Management to include Flood Risk and AA considerations, ABP representatives sought further elaboration/discussion on potential for displaced waters, flood risk associated with both entrances and potential impact for future residents, potential AA issues as a result of any changes to current discharge outfall to the SAC.
- 7.7 In relation to Visual Impact, ABP representatives sought further elaboration/discussion on this issue having particular regard to longer range impacts e.g. across the bay and the need for photomontages at application stage.

- 7.8 In relation to Public Realm to include boundary treatment, ABP representatives sought further elaboration/discussion on this issue having regard to in particular the proposed interface of proposed development with adjoining lands and creation of stronger passive surveillance over open space.
- 7.9 In relation to Any Other Matters, ABP representatives sought further elaboration/discussion regarding the protected trees/woodland as identified on the Development plan map, inclusion of maps/plans where they are referred to in documentation submitted, consideration of existing residential amenity.
- 7.10 Both the prospective applicant and the planning authority were given an opportunity to comment and respond to the issues raised by the representatives of ABP. Those comments and responses are recorded in the 'Record of Meeting ABP-303256-18' which is on file. I have fully considered the responses and comments of the prospective applicant and planning authority in preparing the Recommended Opinion hereunder.

# 8.0 Conclusion and Recommendation

- 8.1 Based on the entirety of the information before me, it would appear that the proposed development falls within the definition of Strategic Housing Development, as set out in section 3 of the Planning and Development (Housing) and Residential Tenancies Act 2016 and as amended by Section 50 of the Planning and Development (Amendment) Act 2018.
- 8.2 I have examined all of the information and submissions before me including the documentation submitted by the prospective applicant, the submissions of the planning authority and the discussions which took place at the tripartite meeting. I have had regard to both national policy, via the section 28 Ministerial Guidelines, and local policy via the statutory plans for the area.

- 8.3 Having regard to all of the above, I recommend that further consideration and/or possible amendment of the documents submitted are required at application stage as set out in the recommended Opinion below.
- 8.4 Having regard to the above, I recommend that the Board serve a notice on the prospective applicant, pursuant to Section 6(7)(b) of the Planning and Development (Housing) and Residential Tenancies Act 2016, stating that it is of the opinion that the documentation submitted with the consultation request under section 5(5) of the Act **requires further consideration and amendment** in order to constitute a reasonable basis for an application under section 4 of the Planning and Development (Housing) and Residential Tenancies Act 2016.
- 8.5 I would also recommend that the prospective applicant be notified, pursuant to article 285(5)(b) of the 2017 Regulations, that specified information (as outlined hereunder) be submitted with any application for permission that may follow. I believe the specified information will assist the Board at application stage in its decision-making process. I am also recommending that a number of prescribed bodies (as listed hereunder) be notified by the prospective applicant of the making of the application.

# 9.0 Recommended Opinion

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- 9.1 An Bord Pleanála refers to your request pursuant to section 5 of the Planning and Development (Housing) and Residential Tenancies Act 2016. Section 6(7)(a) of the Act provides that the Board shall form an opinion as to whether the documents submitted with the consultation request (i) constitute a reasonable basis for an application under section 4 of the Act, or (ii) require further consideration and amendment in order to constitute a reasonable basis for an application under section 4.
- 9.2 Following consideration of the issues raised during the consultation process, and having regard to the opinion of the planning authority, An Bord Pleanála is of the opinion, that the documentation submitted **requires further consideration and amendment to constitute a reasonable basis for an application for strategic housing development to An Bord Pleanála.**
- 9.3 In the opinion of An Bord Pleanála, the following issues need to be addressed in the documents submitted to which section 5(5) of the Act of 2016 relates that could result

**Inspector's Report** 

in them constituting a reasonable basis for an application for strategic housing development.

# 1. Timing and Phasing of Development

Further consideration and/or justification of the documents as they relate to the development of Phase II residential lands as set out in the Dundalk Environs development plan and the possible prematurity of development at this location pending the completion of the review of this plan. Where it is proposed to develop the subject lands prior to the adoption of the new development plan a planning rationale/justification for the release of these Phase II residential lands should be submitted which has due regard to all Phase I residential lands which remain undeveloped and the provisions of the County Development Plan 2015-2021. The duration of permission sought should also be considered in this context.

An appropriate statement in relation to section 8(1)(iv) of the Planning and Development (Housing) and Residential Tenancies Act 2016, as amended by Section 53 of the Act of 2018, that outlines consistency with the relevant development plan and that specifically address any matter that maybe considered to materially contravene the said plan should be provided. The further consideration of this issue may require an amendment to the documents and/or design proposals submitted.

# 2. Surface water management and Risk of Flooding

Further consideration of documents as they relate to surface and storm water management for the development lands and the risk of displaced or increased discharge of waters downstream to the Dundalk Bay SAC, including the risk of flooding to the site entrances. This further consideration should be considered within the Environmental Impact Assessment report. Regard should be given to the requirements of the Local Authority in respect of surface water treatment and disposal and SUDS measures proposed for the scheme. Any surface water management proposals should be considered in tandem with any Flood Risk Assessment, which should in turn accord with the requirements of 'The Planning System and Flood Risk Management Guidelines' (including the associated 'Technical Appendices') and include hydraulic modelling where considered appropriate. Further consideration of these issues may require an amendment to the documents and/or design proposals submitted.

- 8.4 Pursuant to article 285(5)(b) of the Planning and Development (Strategic Housing Development) Regulations 2017, the prospective applicant is hereby notified that, in addition to the requirements as specified in articles 297 and 298 of the Planning and Development (Strategic Housing Development) Regulations 2017, the following specific information should be submitted with any application for permission
  - In the context of ancillary or associated enabling infrastructure (roads and carparking) being located on lands zoned 'Recreation, Amenity and Open Space' and thereby reducing the quantum of open space, a design rationale/planning justification in respect of the open space provision, and built/urban edge surrounding it should be submitted.
  - 2. An Environmental Impact Assessment Report.
  - A layout plan with the zoning objectives overlain on the proposed residential scheme to provide clarity regarding location of residential units and road infrastructure including parking vis-à-vis the lands zoned open space.
  - 4. Photomontages and cross sections at appropriate intervals for the proposed development including how the development will interface with contiguous land-uses. Proposed boundary treatments should be specified.
  - 5. Details of existing and proposed levels across the development site relative to adjoining lands in particular contiguous residential properties and where connections to adjoining lands are proposed Full details of any changes in levels proposed should be provided.

> #

- 6. Having regard to the local road network serving the site and adjoining lands, and its ability to accommodate additional traffic and/or accesses, the prospective applicant should demonstrate the suitability of the proposed vehicular access arrangements for the subject site and to consider or address any issues in respect of access to adjoining lands, in particular ensuring that the proposed development subject of this SHD pre-app does not unduly prejudice the future development of adjoining zoned lands.
- 7. A site layout plan which clearly identifies the full extent of works to the proposed entrances and road junctions whether in public or private ownership. Relevant consents to carry out works on lands that are not included within the red-line boundary. The prospective applicant is advised that all works should as far as possible be included within the red-line boundary.
- 8. All existing watercourses and utilities that may traverse the site including any proposal to culvert/re-route/underground existing drains/utilities should be clearly identified on a site layout plan.
- A Building Life Cycle Report in respect of the proposed apartments as per section 6.13 of Sustainable Urban Housing: Design Standards for New Apartments- Guidelines for Planning Authorities (2018).
- 10. A construction and demolition waste management plan.
- 11. A phasing plan for the proposed development which includes the phasing arrangements for the delivery of the public open spaces, surface water management proposals having regard to sub-catchments within the scheme and Part V provision.

12. A site layout plan indicating all areas to be taken in charge.

Pursuant to article 285(5)(a) of the Planning and Development (Strategic Housing Development) Regulations 2017, the prospective applicant is informed that the following authorities should be notified in the event of the making of an application arising from this notification in accordance with section 8(1)(b) of the Planning and Development (Housing) and Residential Tenancies Act 2016:

- 1. Irish Water
- 2. Transport Infrastructure Ireland
- 3. Minister for Culture, Heritage, and the Gaeltacht
- 4. Heritage Council
- 5. An Taisce the National trust for Ireland
- 6. Louth County Childcare Committee

## PLEASE NOTE:

Under section 6(9) of the Planning and Development (Housing) and Residential Tenancies Act 2016, neither the holding of a consultation under section 6, nor the forming of an opinion under that section, shall prejudice the performance by the Board, or the planning authority or authorities in whose area the proposed strategic housing development would be situated, of any other of their respective functions under the Planning and Development Acts 2000 to 2018 or any other enactment and cannot be relied upon in the formal planning process or in legal proceedings.

-Kell Joanna Kellv

Senior Planning Inspector

12th February 2019





Case Reference / Description	10-year permission for 485 no. residential units (260 no. houses, 225 no. apartments), two new vehicular access points and associated site works. Blackrock Road, Blackrock, Dundalk, Co. Louth.		
Case Type	Section 5 Pre-Application Consultation Request		
1 <sup>st</sup> /2 <sup>nd</sup> /3 <sup>rd</sup> Meeting	1 <sup>st</sup> Meeting		
Date:	31 <sup>st</sup> January, 2019	Start Time	11.30 am
Location	Offices of Louth County Council	End Time	12.30 pm
Chairperson	Rachel Kenny	Executive Officer	Cora Cunningham

## **Representing An Bord Pleanála:**

Rachel Kenny, Director of Planning

Joanna Kelly, Senior Planning Inspector

Cora Cunningham, Executive Officer

## **Representing Prospective Applicant:**

Brigid O'Donnell, Development Director, Kingsbridge Consultancy Limited

Adam Simpson, Kingsbridge Consultancy Limited

Tom Sweetman, OMP

Rejane Nery, OMP

Tony Finn, Finn Consulting Engineers

Kieran Boyle, Atkins Consulting Engineers

Declan Brassil, DBCL Planning Consultants

Pete Mullen, Mullen Design

## **Representing Planning Authority**

Emer O'Callaghan, Senior Executive Planner
Toronoo Loono Accistant Disease
referice Loane, Assistant Planner
Paddy Connolly, Senior Executive Engineer
Aoife Lawlor, Senior Executive Officer
Martina Sheeran, Senior Engineer
Sinead McVerry, Senior Staff Officer
Anthony Abbott King, Senior Planner

## Introduction

The representatives of An Bord Pleanála (ABP) welcomed the prospective applicant, Planning Authority (PA) and introductions were made. The procedural matters relating to the meeting were as follows:

- The written record will be placed on the pre-application consultation file and will be made public, along with that file, should an application arise following the conclusion of this consultation process,
- ABP received a submission from the PA on 22<sup>nd</sup> January, 2019 providing the records of consultations held pursuant to section 247 and its written opinion of considerations related to proper planning and sustainable development that may have a bearing on ABP's decision,
- The consultation meeting will not involve a merits-based assessment of the proposed development,
- The meeting will focus on key site-specific issues at strategic overview level, and whether the documents submitted require further consideration and/or amendment in order to constitute a reasonable basis for an application.
- Key considerations will be examined in the context of the statutory development plan for the area and section 28 Ministerial Guidelines where relevant,
- A reminder that neither the holding of a consultation or the forming of an opinion shall prejudice ABP or the PA concerned in relation to any other of their respective functions under the Planning Acts or any other enactments and cannot be relied upon in the formal planning process or in legal proceedings.

The ABP representatives acknowledged the letter dated 8<sup>th</sup> January, 2019 formally requesting pre-application consultations with ABP. Prospective applicant advised of the need to comply with definition of SHD as set out in the Act of 2016, in relation to thresholds of development. It was also noted that the Inspector dealing with the pre-application consultation request would be different to who would deal with the application when it was submitted. Recording of the meeting is prohibited.

## Agenda

- 1. Phasing of development having regard to the local policy context
- 2. Zoning having regard to the location of roads/parking on Recreation, amenity and open space lands
- 3. Access, connections and permeability
- 4. Surface water management to include risk of flooding and AA considerations
- 5. Visual Impact
- 6. Public realm to include boundary treatment
- 7. Any other matters
- 1. Phasing of development having regard to the local policy context

#### ABP further elaboration/discussion on:

- Justification for release of lands having regard to the identification of the lands as Phase 2 in the Dundalk Environs Development Plan 2009-2015
- > Whether the proposal is considered by the prospective applicant to be a material contravention of the current plan
- > Justification for the duration of permission sought i.e. 10 years

#### **Prospective Applicant's response:**

- Satisfied that a rationale for release of lands can be provided given the lack of development on the phase 1 lands to date
- > Site is strategically located adjacent employment generating lands
- PA has indicated that the proposed development may contravene but not necessarily materially contravene the development plan
- No infrastructural constraints, hoped that development would be completed in 5-7 years

#### **Planning Authority's comments:**

- PA do not consider proposed development to be a Material Contravention of Development Plan but contravenes zoning strategy of the Dundalk Environs plan which pre-dates the CDP
- Development on the phase 1 lands has been limited mainly due to infrastructural constraints

#### ABP further comments:

Where proposal is considered a material contravention, prospective applicant to have regard to the statutory provisions of the regulations in this regard

# 2. Zoning having regard to the location of roads/parking on Recreation, amenity and open space lands

## ABP sought further elaboration/discussion on:

- Proximity of proposed apartments to open space zoning and need to ensure no units encroach onto this zoning
- Whether the planning authority considered the location of roads/parking on the open space zoning to be acceptable with regards the zoning objective

## **Prospective Applicant's response:**

- No houses proposed on open space area only parking/roads
- Location of apartments adjacent open space maximises passive surveillance
- Quality and accessible urban design considered, will address in more detail at application

#### Planning Authority's comments:

- Satisfied that the units do not encroach on open space
- Consider the layout with regards to roads and parking provision acceptable and of high quality

#### Further ABP comments:

Useful if zoning objectives were overlain on the proposed development to ensure no encroachment onto the open space areas

### 3. Access, connections and permeability

## ABP sought further elaboration/discussion on:

- Redline boundary which appears to encroach onto 3<sup>rd</sup> party lands near location of proposed main entrance
- Right of Way near Bothar Maol entrance
- Whether it is proposed to upgrade the junction at Bothar Maol with Blackrock Road
- Proposed connections to adjoining lands and the interface and treatment to lower lying lands having regard to level changes
- Planning authority's opinion regarding the acceptability of junction proposal with Blackrock road and potential for this entrance to cater for additional residential units in the future

#### **Prospective Applicant's response:**

- Have all relevant consents for proposed works on lands outside their ownership
- Bother Maol in private ownership, prospective applicant has right of way to access proposed site
- Upgrades to this junction are shown on drawing
- Proposed main entrance junction currently acceptable, will have regard to future development on adjoining lands, future proof regarding mitigation of junction

## Planning Authority's comments:

- > Bothar Maol is a public right of way, not taken in charge
- Have regard to comments in PA Opinion
- Need for Traffic Impact Assessment to be reassessed if future development is to be taken into account

#### Further ABP comments:

- Ensure all works are included within the red-line boundary as far as possible.
- Consider the qualitative nature of future connections and ensure passive surveillance through appropriate orientation/design of residential units.
- Ensure all proposed connections are brought right up to the boundary to avoid ransom strips

- Be definitive regarding boundary treatments especially where lands fall to front of site
- Consideration public lighting proposals, particularly impacts to existing properties along Bothar Maol
- Have regard to taking in charge especially open space areas

## 7. Any other matters

## ABP comments:

- No reference in documents to protected woodland symbol contained in the Dundalk Environs plan
- > Noted that tree felling has taken place on subject site
- Traffic Impact Assessment references maps/tables which are not contained in report, ensure they are included in application documentation
- Have regard to existing residential properties and how development may impact upon them
- > Liaise with Irish Water in relation to revised number of units proposed
- No verbal direction given by ABP as referenced in PA Opinion in respect of this development

## **Applicants Comments**

- > Trees felled illegally, reported to Gardaí
- Tree protection line in landscape plan

#### ABP further comments

Suggest documentation should reference removal of trees

#### Conclusions

## The representatives of ABP emphasised the following:

- There should be no delay in making the planning application once the public notice has been published
- Sample notices, application form and procedures are available on the ABP website
- Irish Water would like prospective applicants to contact Irish Water at <a href="mailto:cdsdesignqa@water.ie">cdsdesignqa@water.ie</a> between the Pre-Application Consultation and Application stages, to confirm details of their proposed development and their proposed design.
- The email address to which applicants should send their **applications** to Irish Water as a prescribed body is <u>spatialplanning@water.ie</u>

Rachel Kenny Director of Planning / February, 2019

ABP-303256-18

An Bord Pleanála

Louth County Council – Written Opinion on a proposed Strategic Housing Development on lands at Inner Relief Road (R215), Dundalk.

Applicant:	Kingsbridge Consultancy Limited
Development Description:	The proposed development is to provide for 485 no. new dwellings, a creche and a public park. Planning permission is sought for a period of 10 years.
Development Address:	Blackrock, Dundalk, Co. Louth
Receipt of details pursuant to S.5(7):	Pursuant to validation letter dated 8 <sup>th</sup> January 2019.
Due Date pursuant to S.6(4)(b):	22 <sup>nd</sup> January 2019
Date:	21 <sup>st</sup> January 2019

## 1.0 Introduction

This report has been prepared by Louth County Pursuant to Section 5 of the Planning & Development (Housing) and Residential Tenancies Act, 2016 and the Planning & Development (Strategic Housing Development) Regulations 2017.

Section 6(4)(b) of the Planning & Development (Housing) and Residential Tenancies Act, 2016 states that:

6. (1)(a) Within 2 weeks of the date of the receipt by the Board of the request of a prospective applicant under Section 5(1) to enter into consultations, the Board shall either

(i) accept the request of the prospective applicant to enter into consultations where it decides that the request has complied with Section 5, including any regulations made for the purposes of *subsection* (5)(a)(vi) of that section, or

(ii) refuse the request of the prospective applicant to enter consultations where -

- (i) The prospective applicant has not complied with subsection (2) of section 5 or *paragraph* (a) or (b) of *subsection* (7) of that section, or
- (ii) The Board decides that the request does not include some or all of the information, statements or appropriate fee to which *subsections* (5) and (6) of *section* 5 relates.

# Section 6(4) (a) states:

- (a) Where subsection (1)(a)(i) applies, then within 2 weeks from the date of the receipt by the Board of the request under Section 5(1), the Board shall notify in writing the prospective applicant and the appropriate planning authority or planning authorities, as the case may be --
  - (i) That the Board has accepted the request made under Section 5(1), and
  - (ii) That the Board will convene a consultation meeting between the parties so notified and the Board in the manner provided for by subsection (5).

# Section 6(4) (b) states:

- (b) Within 2 weeks of the date of the notification under paragraph (a), each planning authority concerned shall submit to the Board
  - (i) Copies of all records of the consultation or consultations held with prospective applicant by that authority pursuant to section 5(2), and
  - (ii) That planning authority's opinion in writing (including the reasons for its opinion) of what considerations, related to proper planning and sustainable development of the area concerned, may have a bearing on the Board's decision in relation to the proposed strategic housing development, in particular, that authority's opinion on the proposed development having regard to the provisions of the relevant development plan or local area plan, as the case may be, and shall submit to that prospective applicant copies of all records and the opinion so submitted.

Correspondence from An Bord Pleanála dated 24<sup>th</sup> October 2018 states that in accordance with Section 6 of the Act, the Board has decided to accept the request to enter into consultations. Item number 2 of the letter requests provision of the planning authority's opinion in writing, having regard to Section 6(4)(b) of the Act. The documentation is required by 5.30 on the 9<sup>th</sup> November.

## 1.1 Competency

Louth County Council is the Planning Authority for the whole area of the subject site.

## **1.2** Status of S.247 Consultation and Requirements of Section 5(2) which states:

A prospective applicant shall, prior to making a request to the Board under subsection (1), have consulted the appropriate planning authority or authorities in whose area or areas the proposed development would be situated, comprising at least one meeting, as if the consultations with the planning authority or authorities concerned were for the purpose of making a planning application to it or to each of them, as the case may be, and for that purpose –

- (a) Subject to subsection (3), section 247 of the Act of 2000 applies, with any necessary modifications to those consultations, and
- (b) Those consultations shall have regard to so much of Part V of the Act of 2000 as would be relevant to the proposed strategic housing development.

## Section 5(3) of the Act states;

Consultations under section 247 of the Act of 2000 in relation to proposed development referred to in subsection (2) shall be held within 4 weeks of the date of receipt by the planning authority, or planning authorities, as the case may be, of a request by the prospective applicant for such a consultation, unless the prospective applicant requests that the period be extended by a specified period, in which case –

- (a) The period shall be extended by the planning authority, or planning authorities, as the case may be, by such specified period upon the first such request, and
- (b) The period may be extended, at the discretion of the planning authority or planning authorities, as the case may be, by such specified period upon a second or subsequent request.

Pre-planning consultation meetings have been held between the applicant and Louth County Council under Section 5(2) of the Planning and Development (Housing) and Residential Tenancies Act, 2016. Records of the aforementioned meetings are attached at Appendix A of this report. A meeting took place on the following dates at the offices of Louth County Council, Town Hall, Crowe Street, Dundalk on the 19<sup>th</sup> April 2018, minutes attached.

## 2.0 Description of the Development

#### 2.1 Site Location and description

The site extends to 17.6 hectares are located off the Blackrock Road and Bothar Maol in the area of Blackrock south of the town centre. It is irregular in size and shape and it is effectively a back land site. At present the lands are in agricultural use and is undulating. The site is 3 km from the core of Dundalk town centre. The site is located 1.3 km north of Blackrock village.

To the north the site adjoins the rear of the existing dwellings that front onto Bothar Maol and to the east the site primarily bound the rear of dwellings fronting onto the Blackrock Road. Bothar Maol is characterised as a narrow laneway which runs eastwards from the Blackrock Road and runs west to connect with Finnabair South area adjacent to the XEROX/ DKIT junction. To the southwest the subject site bounds lands that are zoned for residential development but are currently in agricultural use. To the southwest and west is located Dundalk Golf Club.

The site is strategically located within close proximity to Finnabair industrial Estate, DKIT campus, the Retail Park.

The primary vehicular, cyclist and pedestrian access point will be via a new entrance onto the Blackrock Road. A secondary access to serve 20 units is proposed off Bothar Maol. A third pedestrian and cyclist access point is located off Bothar Maol.

## 2.2 Relevant Planning History

There are four relevant planning permissions that relate to the site as follows:

#### Planning reg ref: 07/749 - WJ Law - PA deemed withdrawn

**Planning reg. Ref. 08/520141:** Permission granted subject to 11 conditions for the construction of foul pumping station and pumping main for connection to the Dundalk Town Trunk Sewer, a storm sewer, the realignment of R172 and the realigned and provision of a site access off Bothar Maol.

**Planning Reg Ref.08/752 (ABP Ref. PL15.233263):** A planning application lodged for construction of a foul pumping station and pumping main for connection to the Dundalk Town Trunk Sewer, a storm sewer, the realignement of R172 and the realigned and provision of a site access off Bothar Maol. LCC PA issued their notification of Decision to grant planning permission on the 5<sup>th</sup> March 20-09 subject to 10 no. conditions. An application for leave to appeal on the basis that condition 2.2 altered the scheme and would affect the adjoining landowners enjoyment was made.

The planning application was withdrawn:

Louth County Council Reg Ref. 09/180: A PA was lodged by Jim Coyle and Declan Muckian in respect of part of the subject site for a vehicular entrance off the Blackrock Road and the provision of foul water

infrastructure including a pumping station and rising mains to service 17.25 hectares of land. On the 14<sup>th</sup> May Louth County Council issued a request for 4 no. items of further information. The applicant did not respond within the 6 month deadline and the application was deemed to be withdrawn.

## 2.3 Proposed Development

The proposed development provides for 485 no. new residential units on a site of 17.6 hectares. The proposed development comprises 64 no. 1 bedroom units, 149 no. 2 bedroom units, 6 no. 3 bedroom duplex units over 6 no. 3 bedroom apartment units, 119 no. 3 bed units, 101 no. 4 bed units and 40 no. 5 bedroom units. There is a range of apartments, duplexes, terraced, semi detached and detached houses.

Proposed building heights vary from 1 storey to 4 storey across the site. At the edges of the site the proposed units are 2 storey in height. The taller apartment building is in the central open space area.

There are 7 no. apartment blocks proposed on site. Blocks A, B, C, E F and G are 4 storeys in height and Block D is 3 storey.

Included is a 2 storey child care facility which extends to 6777 sq m.

## 2.4 Internal Reports

- Housing Department -
- Infrastructure -- Report Received 16<sup>th</sup> January 2019 As attached.
- Irish Water(IW) A letter has accompanied the application dated 10<sup>th</sup> February 2018 advising that IW has reviewed the pre-connection enquiry form and to advise that subject to valid connection agreement being put in place a proposed connection to the IW network can be facilitate.

# **3.0** Assessment of Proposed Development

## 3.1 Policy Context

# 3.1.1 National Policy

The applicant has submitted a 'Statement of Consistency' for the following guidelines issued under Section 28 of the Planning and Development Act 2000 (as amended):

- Project Ireland 2040 National Planning Framework;
- Project Ireland 2040 National Development Plan 2018-2027;
- Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (2009);

- Delivering Homes, Sustaining Communities (2008);
- Quality Housing for Sustainable Communities (2007);
- Childcare Facilities; Guidelines for Planning Authorities (2001);
- Urban Design Manual: A best practice design guide (2009);
- The Planning System and Flood Risk Management (2009);
- Design Manual for Urban Roads and Streets (2013);
- Smarter Travel A New Transport Policy for Ireland (2009-2020)
- Sustainable Urban House Design Standards for New Apartments (Guidelines for Planning Authorities) March 2018
- Rebuilding Ireland Action Plan for Housing and Homelessness (2016)
- Department of Housing, Planning, Community and Local Government (July 2016): Circular PL8/2016 "Identifying Planning Measures to Enhance Housing Supply.

The publication of the National Planning Framework (hereafter NPF) and National Development Plan 2018-2027 (hereafter NDP) in February 2018 has highlighted both Dundalk and Drogheda as *"key centres on the Drogheda-Dundalk-Newry cross-border network and in the context of the Dublin-Belfast economic corridor"* and indeed their importance for regional development. The NPF further emphasises the importance of Dundalk and Drogheda within Chapter 3 where it states that *"it will be necessary to prepare co-ordinated strategies for Dundalk and Drogheda at both regional and town level to ensure that they have the capacity to grow sustainably and secure investment as key centres on the Drogheda-Dundalk-Newry cross-border network."* 

Given the close proximity of Dundalk, Drogheda and indeed Ardee to Dublin, these areas in particular have become attractive places for commuters to reside owing to the short distance to the motorway. In recent times the County has been successful in attracting investment from significant employers such as Paypal, National Pen, Prometric and most recently in the form of a number of Pharma companies, including Wasdell, who in November 2017 announced a €30m investment which will result in 300 jobs in Dundalk and WuXi Biologics who in April 2018 announced a €325m investment which is a new biopharmaceutical company in Dundalk which will result in up to 700 jobs during construction and 400 jobs once complete. Such significant investment, together with the regional growth within the county, will result in population growth in County Louth however at present the housing stock to accommodate continued increase in population figures is not available.

As per the targeted pattern of growth outlined within Table 2.1 of the NPF, "30% of all new housing 9 within the eastern and midland region) should be within urban footprints". The NPF highlights the need for "compact development...focusing on reusing previously developed, 'brownfield' land, building up infill sites,

which may not have been built on before and either reusing or redeveloping existing sites and buildings". The NPF targets a significant proportion of future urban development on infill/brownfield sites within the built footprint of existing urban areas and this is an aspect of planning which Louth County Council have endeavoured to emphasis through the Strategic Housing Development (SHD) process.

**PA Opinion:** It is the opinion of Louth County Council that the proposed development **Bothar Maol**, **Dundalk** adheres to the policies and objectives of the National Planning Framework through providing compact urban growth, enabling people to live closer to employment and amenity/recreational opportunities, and providing higher densities and a mixed-tenure community.

The proposed site for development is located in environs of Dundalk and the subject lands are in close proximity to employment, commercial and education lands.

Among the reasons for the decision of recent investors to locate in Dundalk was the availability of educated workforce, the existence of an established biopharmaceutical companies.

# 3.1.2 Regional Context

The draft Regional Spatial and Economic Strategy (RSES) was published on the 6<sup>th</sup> November 2018. The RSES is a strategic plan which "identifies regional assets, opportunities and pressures and provides appropriate policy responses in the form of Regional Policy Objectives."

Dundalk is identified as a growth centre to be a driver of regional growth. The draft RSES define regional growth centres "are large towns with a high level of sustaining employment and services that act as regional economic drivers and play a significant role for a wide catchment area".

Dundalk is located along the Dublin Belfast Corridor. It is identified the growth enablers include compact and focused growth in Dundalk and Drogheda to grow to City Scale. Dundalk has also been identified as one of the fastest growing towns in the country in the inter census period. The RSES recognises that Dundalk has a strong economic and employment base between resident workers and jobs. The vision provided for in the draft RSES is that Dundalk will act as a Regional Growth Centre to achieve a target population in the region of 50,000 by 2031.

With regard to employment regional Policy RPO 4.17 is relevant where it states" Enhance Dundalk's role as a strategic employment centre on the Dublin-Belfast Economic Corridor and provide for employment opportunities through the identification of suitable sites for new industry including FDI".

**PA Opinion:** It is the opinion of Louth County Council that the proposed development at Blackrock Road/ Bothar Maol adheres to the policies and objectives of the draft RSES through providing compact urban growth, enabling people to live closer to employment and amenity/recreational opportunities, and supporting Dundalk as a growth centre.

## 3.1.3 Local Policy

## Louth County Development Plan 2015 – 2021

The vision for Louth into the future is of a place "where people want to live, work, visit and invest now and in the future".

#### Economic

It is a strategic objective to:

"Realise the potential and promote the development and growth of County Louth through harnessing the economic and employment potential of the competitive advantages of the County. This includes its strategic location, connectivity and accessibility to external markets and having regard to the role of Dundalk Gateway and Drogheda Primary development centres as catalyst for developments within the region and to forge strong economic links on a cross border basis with Northern Ireland and adjoining counties in a sustainable manner".

It is economic policy of the plan as set out In ED1 "to work in partnership with national and local economic development and employment promoting agencies to support employment generating initiatives within the County".

#### Residential

Chapter 4 of the LCDP sets out policies as they relate to residential and community facilities.

Policy RES 6 seeks "to encourage and promote the creation of attractive mixed use sustainable communities which contain a variety of housing types and tenures with supporting community and residential amenities, and where Part V is visually and other wise integrated into an overall development thus counteracting undue segregation.

Policy RES 10 seeks "To ensure all new residential developments are consistent with guidelines and best practice manuals issued by the DECLG in the planning for and provision of sustainable communities within new residential area.

## Dundalk and Environs Development Plan 2009 – 2015 (as extended).

The application site is identified in the Dundalk and Environs Development Plan Land Use Zoning Map (Map as falling within lands zoned as residential 2 with the objective "To provide for new residential communities and supporting community facilities subject to the availability of services" and part of the site is zoned recreation, amenity and open space with the objective "to provide for the provision of public parks, open spaces, amenity and recreational facilities".

**PA Opinion** – The development is consistent with the Zoning Objective. The development of a housing scheme on lands in such close proximity to employment generating lands in addition to a third level institute promotes and supports employment in the area, Residential accommodation within walking distance of large multinational and indigenous industry promotes modal shift and creates an environment whereby there is less dependency on the motor vehicle. The PA is of the opinion that the development is well placed and provides for a typology of residential accommodation not readily available within the Dundalk market.

The coming on stream of apartment type development provides choice of a different type, size and tenure of dwelling unit and this is welcome.

There is a critical shortage of accommodation to serve the growing needs of the investment taking place by multi nationals in meeting the needs and demands of their workforce. It has been highlighted through discussions with Council officials, newspaper adverts, letters from multi nationals and discussions with the IDA.

The development meets with the principles of the Design Guidelines for New Apartment 2018. It is recognised in the guidelines that apartment living is an increasingly attractive and desirable housing option for a range of households and tenures. The PA would support the guidelines in the provision of apartments at appropriate locations and it is the PA opinion that apartment as part of a mixed use development scheme would be attractive to investors, and home owners and would support the needs of IDA and indigenous investors in providing quality accommodation in close proximity to the work place.

#### 3.1.4 Core Strategy

On 29<sup>th</sup> August 2011, Variation No. 1 to the Dundalk & Environs Development Plan 2009-2015 (as extended) introduced a Core Strategy, providing a phasing strategy for the promotion of brownfield and infill development and an additional 54ha of Greenfield lands sufficient to accommodate a target growth in population of 4,100 lending to a total population of 42,300 up to the year 2016 for the Plan Area.

The Phasing Strategy is informed by Table 2.3 of the Plan (Variation No.1) and as depicted in Core Strategy Map B (Variation No.1). Policy CS2 of the Dundalk & Environs Plan 2009-2015 (as extended) has the objective "To apply the phasing of new residential development as per the phasing strategy set out, whereby residential development, other than infill, Brownfield or mixed use development shall only be permitted in the identified area within Phase 1. Only on completion of the development of 75% of these lands shall subsequent phasing be considered for additional residential development".

Section 2.3 'Housing Land Requirement' of the Core Strategy states that an oversupply in the housing market required the designation of strategic sites to accommodate sustainable growth with Dundalk and Environs.

**PA Opinion** –The core strategy as set out for Dundalk is an outdated document. The core strategy of the Dundalk and Environs Plan has not been updated to accord with the Core Strategy of the County Development Plan or allocate the additional 57 hectares for residential lands up to 2021. The principles and objectives of the core strategy have not served to deliver the quantum of housing required on phase 1 lands. This has been due to a number of impediments including infrastructure deficits, land ownership, financing and so on.

In addition Louth County Council received verbal direction from An Bord Pleanála confirmation that lands outside of Phase 1 Core Strategy would be considered where it can be demonstrated that there is a housing need and that the demographic is not/cannot be accommodated elsewhere. There are no phase 1 lands directly adjacent to the employment generating lands which have seen as set out substantial investment over recent years and since the putting in place of the core strategy. The lack of accommodation within this quadrant of the town is of huge concerns to prospective investors and/ or potential expansions.

The applicant has undertaken a robust assessment of the Core Strategy. Variation 1 of the Core Strategy was based in a housing Survey undertaken in 2010. At this point there were 2,296 with planning permission across phased 1, 2 and 3 lands. The assessment undertaken demonstrates that only 322 no. units have been permitted in Dundalk and Environs since 2010 67 no. of these are on phase 1 residential lands. The assessment would also indicated under provisions of units discounting 2010 committed sites would indicate that there is an under provision of c. 3,018 no. units. The review would also indicate that commencement notices for 573 no. units have issued since 2010 of which only 15 no. units are on phase 1 lands.

THE NPF prioritises Dundalk for growth. The implementation of Policy Cs 2 is superseded and out of date and this is acknowledged by the PA. The policy is inconsistent with the Government policies and objectives

to tackle the national housing crisis as set out in Rebuilding Ireland Action Plan for Housing and Homelessness.

It is the opinion of the PA that the lands represent a suitable sustainable location for consolidation. At a regional level it is acknowledged as set out in the assessment undertaken by the applicants that Dundalk is a national and regional employment and that the population growth has lagged behind employment growth in Dundalk and housing supply shortages represent a significant constraint to economic and employment growth. Reference is made in the particular to newspaper articulates in talk of the town, the independent, Irish Mirror, Dundalk Leader.

## 3.2 Part V

The applicant has undertaking discussions with the Housing Department of Louth County Council with whom they have agreed the provision units to be provided to meet with Part V requirements. These units will be universally designed.

**PA Opinion** – The Planning Authority are satisfied the applicant has entered into discussions with housing to provide for Part V requirement. The applicant has designed a specialist 4 bedroom unit in addition the proposal to provide 48 no. dwelling units in the form of 6 no. four bedroom houses, 18 no. three bedroom houses, 10 no. one bedroom apartments 14 no. two bedroom apartments.

A letter had issued from the Housing Department dated 14<sup>th</sup> December 2018 stating the net monetary value has been agreed.

## 3.3 Density and Height

Policy HC18 of the Dundalk & Environs Development Plan 2009-2015 (as extended) sets out the Planning Authority's requirements in respect of residential densities. HC18 has the objective to *"ensure proposed development complies with the provision of "Sustainable Residential Development in Urban Areas, 2008 and other DoEHLG Guidelines"*. For "outer suburban/Greenfield" sites, the Guidelines state that *"the greatest efficiency in land usage on such lands will be achieved by providing net residential densities in the general range of 35-50 dwellings per hectare and such densities (involving a variety of housing types where possible) should be encouraged generally. Development at net densities less than 30 dwellings per hectare should generally be discouraged in the interests of land efficiency, particularly on sites in excess of 0.5 hectares" (Section 5.11).* 

The layout of the scheme and in particular the height strategy was determined by:

- Response to existing and future patterns of residential development on adjoining site.
- Topographic conditions and the opportunity to catch views.
- A response to the scale of open space zoning within the site.

The layout proposed five character areas to reflect and respond to specific landscape, topographical and boundary considerations and mixing housing typologies within each of the character areas.

There are 7 apartment buildings throughout the site; however the height rises towards the centre of the development. The taller apartment buildings are in the centre of the site to adjoin and passively survey the large central open space area. Block A, B, C, E, F and G are 4 stories in height and Block D is 3 storeys. The proposed development has a density of 35.1 units per hectare and has been designed in compliance with the urban design manual.

The 2 storey houses our located at the edges of the site and are designed to reflect and respect the heights of adjoining buildings and to create transition zones.

**PA Opinion** – The Planning Authority are of the opinion that the site is a central and accessible urban location as defined by the Sustainable Urban Housing Design Guidelines, 2018. The site is located within a walking distance of significant employment lands and a third level institution. 35.1 units to the hectare represents good use of urban serviced lands. The site has been set out to incorporate 5 character areas:

- Cooley View at the south east of the site which will act as a gatweqway
- Mill End at the north west which will draw from the character of the adjoining farmland
- Bothar Maol at the North of the site seeks to respond to the existing character of Bothar Maol
- Meadow and Field is the centre of the site is the largest character area and is dominated by the central open space.
- The Birches and Pine at the west and south west of the site to interact with the Gold Course and the existing mature trees.

The height and location of the heights are sensitive to the adjoining and established pattern of development on Bothar Maol. The PA is of the opinion that the layout and density is reflective of the PA advice during the section 247 meetings.

## 3.4 Housing Mix

Policy HC3 in the Dundalk & Environs Development Plan 2009-2015 (as extended) has the objective to "Secure greater social integration and preservation and community ties through the provision of an appropriate mix of house types within residential areas".

There has been a shift in housing policy in recent years. Rebuilding Ireland sets out five pillars of development and the aim is the doubling of the annual level output of houses over the period 2017-2021. This is coupled with the publication of the Sustainable Urban Housing: Design standards for Apartments 2017. Minister Murphy said *if we learned anything from the so-called Celtic Tiger era, it was that our future does not lie in our people living in one location and commuting up to 100 km to work. There is clear evidence in the rental market that 1 - 2 person households are required. "So we need a broader range of urban living solutions:* 

- More studio and 1- and 2-bedroom apartments, and not just for build-to-rent.
- Family apartments to encourage Living Cities.
- Specialist housing for older people, downsizers and the less able-bodied enabling people to remain in the communities that they know and love.

The scheme provides a good mix of units to cater for varying demographics. The proposed development consists of 485 no. residential units comprising:

- 64 no. 1 bedroom units
- 149 no. 2 bedroom units
- 6 no. 3 bed duplex units above 6 no. 2 bed ground floor level apartments
- 119 no. 3 bedroom dwelling units
- 101 no. 4 bedroom units
- 40 no. 5 bedroom units

**PA Opinion** – The scheme provides a good mix of units to cater for varying demographics. The proposed mix, having regard to the established pattern of development in the surrounding areas will create a more sustainable new residential area which would be consistent with Policy HC3. It is the PA opinion that the development of apartments in this location is needed to satisfy the housing need in this area. Concerns have been raised from major FDI employers in the Dundalk area. The CEO of a numbers of companies have raised concerns about the rental crisis in Dundalk.

The Planning Authority is satisfied the applicant has entered into discussions with housing to provide for Part V requirement and houses have been designed accordingly and to universal design standards.

# 3.5 Design Manual – A Best Practice Guide (2009) & Sustainable Residential Development in Urban Areas, 2008 (Chapter 7 – The Home and its Setting).

Policy HC 9 in the Dundalk & Environs Development Plan 2009-2015 (as extended) has the objective to "Implement the guidelines and best practice manuals issued by the Department of Environment, Heritage and Local Government in the planning for and provision of sustainable communities within new residential areas".

This application has been assessed having regard to the "Design Manual – A Best Practice Guide (2009)" and also Chapter 7 of the "Sustainable Residential Development in Urban Areas Guidelines" (2008) – "The Home and its Setting" in order to ensure that best practice is incorporated into the design of the residential development

The applicant has submitted as part of the planning pack and Urban Design and Architectural Statements from O'Mahoney Pike which are very detailed and robust in format.

The dwellings have been arranged in a series of character areas which respond to the open space and landscaping strategy. A sustainable residential density of 35 units to the hectare has been achieved by using a variety of housing typologies.

Neighbourhood Context	The design principles have taken account of the neighbourhood setting 485 no units have been proposed and designed and laid out following the principles set out below:	
	<ul> <li>Topography, views and adjacent dwellings.</li> <li>Responding to adjacent dwellings to the north.</li> <li>Rear gardens backing onto residential zoned lands to the south.</li> <li>Consolidation of open space with existing mature trees and hedgerows and field divisions.</li> <li>Basic Urban Design Principles</li> </ul>	
Neighbourhood Connections	The development is well placed and connected to excising services and amenities. There are a number of schools located within a close radius of the site including a third level campus of DKIT. The development also allows for future connectivity to lands further south.	

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Inclusivity	The proposed residential units, open spaces, entrances and car par have all been designed to encourage access and use of the developm as per the National Disability Authority "Building for Everyone" universal design approach and "Universal Design Guidelines for Ho in Ireland".		
	requirement for Part V houses to be designed to LCC needs.		
	Home zones area a feature of the development.		
	Disabled parking is provided within the scheme in addition to bicycle parking in appropriate locations.		
Variety	There is a huge mix of variety of houses type, size layout and form which are suitable for all types of tenure.		
Site efficiency	The landscaping and engineering design of the development incorporates sustainable urban drainage systems measures including swales, bio retention areas, wetlands and permeable paving.		
Distinctiveness	<ul> <li>The site in its location is unique taking account of the sites topography and views over Dundalk Bay. The scheme has two elements in the character areas formed as part of the layout.</li> <li>Cooley View at the south east of the site which will act as a gateway</li> <li>Mill End at the north west which will draw from the character of the adjoining farmland</li> <li>Bothar Maol at the North of the site seeks to respond to the existing character of Bothar Maol</li> <li>Meadow and Field is the centre of the site is the largest character</li> </ul>		
	<ul> <li>area and is dominated by the central open space.</li> <li>The Birches and Pine at the west and south west of the site to interact with the Gold Course and the existing mature trees.</li> </ul>		
Layout	The proposed layout has been developed to allow permeability, legibility and connectivity. Throughout all discussion with the PA a clear and legible hierarchy of roads, streets and spaces and cycle and pedestrian links was required. This has been taken on board by the design team.		

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	The development draws on the principles of home zones and to provide links and visual connections with the amenity spaces. The central open spaces area effectively is the arrival area as described by the architectural team. There is a main distributor road designed around the main open space block. The principle layout form and permeability is acceptable within the scheme.
Public Realm	The key public realm spaces as they relate to the development are set out as follows:    Roads and entrances  Large landscape spaces including the zoned open space area.  Pocket Open spaces  Street frontages and home zone areas  Pedestrian and cycle routes.  The spaces work well together to avail of the topography, views and vistas and the visual links with the adjoining land uses such as the gold course.  The playground is a focal point for family orientated facilities within the development.
Adaptability	A number of the houses have been designed to universal standards in line with the housing requirement of the Housing Department of Louth County Council. In relation to floor plate areas the dwellings exceed the minimum standards for residential unit size.
Privacy and Amenity	Each dwelling unit provides private amenity space which is in line or exceeds the development plan requirement. Adequate separation distance of 22 metres has been provided between dwelling units. 10% of the development area is delivered through a series of open

	spaces and the proposed landscape design on site relicts the existing hedgerows which form boundaries between fields.
Parking	A total of 828 car parking spaces has been provided for within the development2 spaces per dwelling have been provided for in most cases. With 1 space per duplex unit/ apartment and an additional visitor space for every 4 no. duplexes/ apartments. A total of 512 no bicycle parking spaces have been provided.
Detailed Design	The development on the site evolved from a number of years of discussions, changes in the multi discipline design team, the preparation of a Masterplan.

**PA Opinion** – The development is consistent with the "Design Manual – A Best Practice Guide (2009)". The development is also consistent with the 8-point checklist outlined in Chapter 7 of the "Sustainable Residential Development in Urban Areas Guidelines". The PA is also of the opinion that the development is compliant with Rebuilding Ireland Action Plan. The development is appropriately located in close proximity to employment and a third level campus. The Development meets with the change in demographic trends which illustrates that two thirds of households added to those in Ireland since 1996 comprises 1 - 2 persons, yet only 21% of dwellings completed in Ireland comprise apartments. Section 4.10 and in particular policy RES 26 of the LCDP relates to Lifetime home. The Council will require 10% of housing apartment units to be designed to Lifetime Home Standards.

## **3.6 Residential Amenity**

The development has been laid out to take account of Bothar Maol and the two storey dwelling houses along bother Maol. Adequate separation distance of 22 metres has been provided between dwelling units.

10% of the development area is delivered through a series of open spaces and the proposed landscape design on site relicts the existing hedgerows which form boundaries between fields.

**P.A. Opinion** – The development has been laid out to take account of adjoining and established residential area. The quantum of public and private open space meets and exceeds the development plan requirements.

## **3.7 Access and transport**

A Traffic and Transport Assessment Report (TTA) has been prepared by Atkins consulting engineers in respect of the proposed development. The TTA contains illustrations of the 6 minute, 12 minute and 24 minute walking and cycling radius. What is of particular relevance is that IDA lands, Dundalk Retail Park and Blackrock Village are within walking distance from the site.

Dundalk Town Centre, Xerox Technology Park and Dundalk Institute of Technology are all within comfortable cycling distance of the site. Halpenny, Matthews and Bus Eireann run bus services in the vicinity of the site.

The site is served by the R172 which is the main link between Blackrock Village and Dundalk Town Centre. To informal the TTA junction turning counts were taken at 9 no. locations and volume and speed surveys were also undertaken.

The scheme had been designed to DMRUS standards. A report had been prepared by Tony Finn Consulting Engineer to illustrate that the scheme has been designed to comply with the requirements of the Design Manual for Urban Roads and Streets and therefore does not pose a traffic risk. Central to the design of the scheme is a road hierarchy with features to establish desirable speed limits and to improve legibility.

The scheme has also been laid out to ensure maximum connectivity to adjoining lands to allow for pedestrian and cycling links to be developments.

## P.A opinion:

The scoping for the traffic assessments were all undertaken in conjunction with the PA and engineering staff. The PA accept the assessment that the TTA states that the proposed development will only have a slight to moderate effect at key junction locations but remain consistent with baseline trends.

The PA is satisfied that the layout of the scheme allows for connectivity to adjoining lands and in particular given its location and proximity to employment generating and this level lands allows for modal slit of vehicles and promotes pedestrian links and cycle links to be established.

The assessment undertaken by the Infrastructure section is that there is no objection to the development subject to conditions as follows being put in place:

• Adequate visibility shall be made available and maintained at the Main Entrance Roadway as indicated on the submitted Drawing No: 17034 100 for a minimum of 65 metres on either side of the entrance from a point 2.4 metres back in from the edge of the road carriageway over a height of 1.05 metres above road level and no impediment to visibility shall be placed, planted or allowed to

remain within the visibility triangle. Prior to the commencement of the development, the applicant shall also submit revised details indicating the above sightline provision at the existing junction with Bothar Maol and the R172. Where it is necessary to remove hedges/banks/walls to provide adequate sightline visibility, this must be completed prior to the development on site and any new boundary wall/fence/hedge shall be located behind the visibility splay. Any pole, column, tree or sign materially affecting visibility must also be removed.

- No work shall commence on site until the visibility splays have been provided. The area within the visibility splay shall be cleared to provide a level surface no higher than 250mm above the level of the adjoining carriageway and shall be retained and kept clear thereafter.
- The applicant has proposed provision of right turning lanes on the R172 at the Main Entrance Roadway and at the existing junction with Bothar Maol and the R172. As the R172 AADT is between 5,000 – 10,000, (AADT 6,584, LCC Survey, June 2016), the applicant shall submit details demonstrating compliance with Table 4.1 of the TII Publication DN-GEO-03060, "Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions)", June 2017. The applicant shall submit full design details for provision of a right turning lane, in compliance with DN-GEO-03060, including all dimensions, road marking details, signage etc. Revised details to be submitted shall also demonstrate adequate queuing length provision at both entrances for the assessment years considered in the submitted Traffic and Transport Assessment Report.
- The applicant shall also prepare and submit a Combined Stage 1 & 2 Road Safety Audit for the proposed right turning lanes.
- All shared surfaces and home zone areas within the development shall be surfaced with bituminous material, e.g. HRA or CL942 material etc. Proposed surfacing colours shall be agreed prior to the commencement of the development.
- The applicant shall fully implement all mitigation measures as detailed in Section 7.0 of the Flood Risk Assessment Report received from the Finn Design Partnership issued on the 30<sup>th</sup> November 2018.
- Surface water from the site shall be disposed of within the boundaries of the site and shall not discharge onto the public road or adjoining property. Surface water drainage attenuation and disposal to be in accordance with the submitted Engineering & Services Report from the Finn Design Partnership issued on the 30<sup>th</sup> November 2018 and as indicated on submitted Overall Storm Drainage Layout Drawing No. 115 - 1703.
- Design and Construction of all proposed Surface Water Drainage and SuDS devices shall be supervised and certified by a Competent Independent Civil Engineer.

- The applicant has submitted a Landscape Masterplan Drawing No. 18.120.100 which indicates
  provision of trees planted along footpaths and roads throughout the development. Prior to the
  commencement of the development, the applicant shall be requested to submit details of a root
  barrier system or root cell system to be implemented to prevent any root damage to adjacent
  footpaths and roads.
- The applicant shall implement the Landscape Management Plan as detailed on submitted Landscape Masterplan Drawing No. 18.120.100.
- Design and Construction of all proposed Retaining Walls shall be supervised and certified by a Competent Independent Structural Engineer.
- All hard standing areas shall be covered with an impermeable surface (e.g. concrete, dense bitumen macadam, etc.) and drained via patent type surface water lockable gullies or surface water drainage channels to a separate surface water drainage system. Gully chambers, where proposed, shall be provided at the minimum rate of one gully chamber per 200m<sup>2</sup>. No road gully chamber to be built directly "on line" on any drainage pipeline and shall be connected to main drainage pipelines via separate 150mm diameter branch connections. Manhole covers and frames, located in areas subject to vehicular traffic, shall be heavy-duty type to I.S.261, Grade A. Only clean uncontaminated water from all hard standing areas, including roofs, within the site shall be discharged to the surface water drainage system. Gully chambers to be lockable and located and constructed in such a manner as to prevent ponding occurring.
- All raised tables, ramps and uncontrolled pedestrian crossing points are to be constructed in accordance with "Traffic Management Guidelines", 2003, issued by the Department of the Environment and Local Government, (DOELG), The Department of Transport (DOT) and the Dublin Transportation Office (DTO).
- All traffic signs and road markings shall be in accordance with the 'Traffic Signs Manual', published by the Department of Transport.
- Table 7.7 of the "Guidelines for setting and managing speed limits in Ireland", March 2015, indicate 30 km/h as an appropriate speed limit in a housing estate such as this proposed development. Within 3 months of the construction of the proposed traffic calming devices, i.e. raised tables and ramps, an independent speed survey shall be carried out within the development and submitted to the Planning Authority clearly demonstrating compliance with an 85<sup>th</sup> percentile speed of 30 km/h or details of further proposals to achieve compliance.
- Within 3 months of the grant of this permission, the applicant shall demonstrate that all proposed traffic calming devices comply with the Louth County Council Policy on Traffic Calming, adopted 2015, i.e. all raised tables and ramps are within 5m of a public light.

- Prior to the commencement of the development, the applicant shall submit revised details of the proposed speed reduction measure indicated on submitted Main Entrance Roadway Drawing No. 100 – 1703, clearly showing direction of priority and shall include all appropriate signage and road markings.
- Public Lighting design within the development shall be carried out by a competent person with experience in the design of public lighting installations and shall be as indicated in the submitted Street Lighting Proposals Report submitted by Caldwell Consulting. All public lighting shall comply with BS 5489-1 & BS EN 13201-2. Lanterns to comply with SEAI "LED Lantern Specification for Public Sector Exterior Lighting". Lighting columns shall be of tapered octagonal construction with a minimum wall thickness of 3mm and shall comply with the requirements of BS 5649 or EN40. Octagonal Columns shall be a minimum of 6 meters above ground with a 1 metre long root (7m total length), of folded steel, gradually tapered at a constant rate from the base and terminating with a dimension of 68mm across flats at the top.
- Prior to the commencement of the development, the applicant shall prepare and submit for agreement a Construction Management Plan for the development. This Plan shall fully detail
  - A Traffic Management Plan for all phases of the proposed development including Construction Traffic Access arrangements.
  - The delivery and routing of materials to the site during the construction phase shall be organised so that deliveries do not conflict with the morning or evening periods of peak school traffic flow.
  - The removal and routing of surplus material off site shall be so organised that haulage vehicles do not conflict with morning or evening periods of peak school traffic flow.
  - If the Construction Management Plan should indicate that access over third party lands is required, evidence of appropriate landowner's Consent shall be submitted.
- The applicant shall liaise with statutory bodies and the Public Utility Authorities and carry out all diversions, re-routing, modifications, etc. as required during the construction of the works. The applicant shall arrange to carry out any works required by statutory bodies and the Public Utility Authorities.
- The applicant shall make all necessary arrangements to apply for and obtain a Road Opening License(s) from Louth County Council in respect of all openings in public areas and shall pay Road Opening License Fees and road restoration costs. The applicant shall abide by the conditions as set out in the said license(s).
- The applicant shall be responsible for the full cost of repair in respect of any damage caused to the adjoining public road/footpath arising from the construction work and shall either make good any such damage forthwith to the satisfaction of Louth County Council or pay to the Council the cost of making good any such damage on a demand thereof being issued by the Council.

 All necessary measures, as may be determined by the Planning Authority, shall be taken by the developer/contractor/servants/agents to prevent the spillage or deposit of clay, rubble or other debris on adjoining public roads or footpaths during the course of the development works. The developer shall ensure that all vehicles leaving the development are free from any material that would be likely to deposit on the road and in the event of any such deposition; immediate steps shall be taken to remove the material from the road surface. The developer shall be responsible for the full cost of carrying out of road/footpath cleaning work

#### 3.8 Open Space Provision

Public and private amenity a space has been provided through the scheme.

Key Site statistics are set out as follows:

Public Open Space on zoned amenity space:	3.7 ha
Public Open Space within Residential lands:	1.4 ha

Quality open spaces has been provided in the form of pocket and linear parks distributed throughout the scheme, all of which are overlooked by housing. The spaces have pedestrian routes designed through the spaces to allow for connectivity and desire lines of movement.

The central block of open spaces will accommodate a NEAP area of 500 sq m, a local area of play, a grassed informal kick about area, a trim trail of outdoor gym equipment and a SUDS wetland area. It is proposed to provide two number LEAP areas and a kick about area.

**PA Opinion.** The development does exceed the open space requirement. The PA welcomes the landscape strategy and is of the opinion that the strategy for open space has been well thought out. The open spaces and landscape strategy forms an integral form to the layout and character areas within the development. The open spaces strategy would need to be tightly aligned with the phasing strategy so that quality open space is delivered in tandem with the housing delivery. There needs to be a consistency in apaproach to all street furniture including bollards, lighting, fixtures and seating.

### 3.9 Audit of Existing Community Facilities

Policy HC 25 of the Dundalk & Environs Development Plan 2009-2015 (as extended) has the objective to "Require applicants for residential developments on sites of 1 hectare or over or for more than 50 residential units to provide an audit of existing community facilities in the locality and where a shortfall in facilities exist, demonstrate how this should be made good, either through provision on site or such other means as are acceptable to the planning authority". This Policy is replicated in RES38 of the Louth County Development Plan 2015-2021.

A 2 storey child care facility which extends to 6777 sq m. has been designed in accordance with the Childcare Act 1991. The site is unquestionably a good site.

**PA Opinion** – The PA is of the opinion that the site is a well serviced site for the development of a childcare facility. The crèche facility is well designed and sited within the scheme. In addition the PA has noted that with the introduction of the second preschool year there has been pressure put on existing services to cater for the growing demand in the Dundalk area in general.

#### 3.10 Flooding

The proposed development is located in the Dundalk AFA, within the Neagh Bann CFRAMS and Flood maps for this AFA area available. The applicant has submitted a flood risk assessment.

A flood risk assessment had been prepared and submitted by the applicant.

**PA Opinion** – The applicant will need to fully implement all mitigation measures as detailed in section 7.0 of the flood risk assessment.

#### 3.11 Archaeology

Policy CH7 of the Dundalk & Environs development Plan 2009-2015 (as extended) has the objective to "Safeguard the archaeological heritage of Dundalk and its environs by protecting designated archaeological sites, Local Archaeological Heritage Site, and Special Archaeological Interest areas and requiring that applicants for planning permission for development in areas known to contain archaeological features, carry out an archaeological assessment of the site".

**PA Opinion – The** planning searches undertaken on the site do not indicate any archaeological monument in or abutting the site boundaries. The PA is not concerned about archaeology in this area.

#### 3.12 Environmental Impact Assessment Report (EIAR)

The need for the preparation of an EIAR had been considered. Schedule 5 (Part 2) of the Planning & Development Regulations 2001 (as amended) set mandatory thresholds for each project class. Sub-section 10(b) (iii) and (iv) addresses 'Infrastructure Projects' and requires that the following class of project be subject to EIA: • (b) (i) Construction of more than 500 dwelling units.
The proposed development does not exceed the relevant quantity, are or limits specified in the classes set out in Part 2 of Schedule 5 of the Planning and Development Regulations as amended.

Given the scale and nature of the development it is the intent that the application would be accompanied by an NIS and An EIAR. The applicant is intending taking the precautionary approach and assessing the development over a 10 year life span. The applicant has submitted the draft non technical summary of the EIAR as prepared by Atkins.

Directive 2014/52/EU defines 'environmental impact assessment' as a process, which includes the responsibility of the developer to prepare an Environmental Impact Assessment Report (EIAR), and the responsibility of the competent authority to provide reasoned conclusions following the examination of the EIAR and other relevant information.

Article 1(2)(g) 4 of Directive 2014/52/EU states that "environmental impact assessment" means a process consisting of: (i) the preparation of an environmental impact assessment report by the developer, as referred to in Article 5(1) and (2); (ii) the carrying out of consultations as referred to in Article 6 and, where relevant, Article 7; (iii) the examination by the competent authority of the information presented in the environmental impact assessment report and any supplementary information provided, where necessary, by the developer in accordance with Article 5(3), and any relevant information received through the consultations under Articles 6 and 7; (iv) the reasoned conclusion by the competent authority on the significant effects of the project on the environment, taking into account the results of the examination referred to in point (iii) and, where appropriate, its own supplementary examination; and (v) the integration of the competent authority's reasoned conclusion into any of the decisions referred to in Article 8a.

The amended Directive (Directive 2014/52/EU) uses the term environmental impact assessment report (EIAR) rather than environmental impact statement (EIS). Where current national guidelines and regulations refer to an environmental impact statement or EIS, this can be taken to be the same as an environmental impact assessment report (EIAR). A definition of Environmental Impact Assessment Report (EIAR) has not been included in the revised directive however the EPA Guidelines (2017)1 provide the following definition; "A statement of the effects, if any, which proposed development, if carried out, would have on the environment. The EIAR is prepared by the developer and is submitted to a CA (Competent Authority) as part of a consent process. The CA uses the information provided to assess the environmental effects of the project and, in the context of other considerations, to help determine if consent should be granted. The

information in the EIAR is also used by other parties to evaluate the acceptability of the project and its effects and to inform their submissions to the CA.

The central purpose of the EIA process is to undertake an assessment of the likely and significant impact on the environment of the proposed development in parallel with the project design process, and to document this process in an Environmental Impact Assessment Report (EIAR); which is then submitted to the competent/ consent authority, in order to inform the subsequent decision as to whether the development should be permitted to proceed.

In accordance with the work in the preparation of the EIAR is ongoing.

**PA Opinion** – The PA note that the development is below threshold for the need for the preparation of an EIAR, however given the scale of the development it is considered that the best approach is the cautionary approach as such support an EIAR. The Planning Authority note that the EIAR is still in preparation stage. The PA support the necessity for an EIAR given the scale of the development and the potential impacts of the development of 485 no. units.

It is considered prudent that the EIAR evaluates the proposal over a maximum of 10 years as the development is sought for a period of then years in the interest of the proper planning and development of the area.

## 3.12 Natura Impact Statement (NIS)

Policy CH3 of the Dundalk & Environs development Plan 2009-2015 (as extended) has the objective to "Protect the designated SAC, SPA and pNHA in Dundalk Bay from any adverse impacts of development and to require Appropriate Assessment of any development likely to have an impact on the integrity of Natura 2000 sites".

The site is not within any Natura 2000 site however it is on the western shore of Dundalk Bay. Dundalk Bay has SPA and SAC designations and is also designated a Ramsar Site and pNHA. The NIS concludes in section 4 that on the basis of precautionary, objective scientific assessment, the development proposals can be consented without causing significant adverse effects on the integrity of Dundalk Bay SAC or Dundalk Bay SPA. This would be subject to any planning application having appropriate planning conditions attached.

Dundalk Bay was classified in November 2003. It is one of the most important wintering waterfowl sites in Ireland. Dundalk Bay SAC was classified as a site of significant conservation value because it supports a good range of coastal habitats.

PA Opinion: The PA notes the NIS conclusions which state:

- 1. The assessment has demonstrated that the required measures to avoid, mitigate and otherwise reduce the significance of adverse impacts on the integrity of the Natura 2000 sites are technically feasible.
- 2. Significant impacts on the integrity of the Natura 2000 sites of Dundalk Bay can be excluded on the basis of precautionary. The proposal will not interfere with any relationships or elements within the environment which define structure and function of any Natura 2000 sites.
- 3. The development proposal proposals can subject to appropriate planning conditions be consented without causing significant effects on the integrity of Dundalk Bay SAC or Dundalk Bay SPA to arise.

# **3.13** Sustainable Residential Development in Urban Areas, 2008 (Chapter 4 – Planning for Sustainable Neighbourhoods).

Chapter 4 of the Guidelines outlines a 6-point checklist for new residential developments in relation to the provision of community facilities, efficient use of resources, amenity / quality of life issues, recommended qualitative standards, recommended quantitative standards and conservation of the built and natural environment.

## **PA Opinion**

- The proposed site is zoned and sequential and forms part of a master planned area. With development extending southwards from the built up area.
- An audit of community facilities has been provided and the application is in close proximity to commercial and community facilities and convenience retail.
- The application site has good walking cycling and bus links.
- The development has sufficient public amenity space which could be further improved upon by adequate adult equipment at appropriate locations.
- There are no protective habitats or structures on site. The development has been designed to meet with SUDS although revised details need to be submitted in order to demonstrate that the Surface Water Attenuation System has adequate loading capacity for the Access Road and parking areas.

## 4.0 Conclusion on Details of Proposed Development

In summary the Planning Authority are satisfied with the development subject to the following:

- 1. It is considered prudent that the EIAR evaluates the proposal over a maximum of 10 years as the development is sought for a period of then years in the interest of the proper planning and development of the area.
- 2. A report which specifically addresses the proposed materials and finishes and the requirement to provide high quality sustainable finishes and details.
- 3. A long term management and maintenance structures plan (life cycle report) in accordance with section 6 of the Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities 2018.
- 4. Detailed photomontage report which includes the detailing of finishes from the Backrock Road and Bothar Maol.
- 5. Further consideration/ amendments of the documents as they relate to the phasing of the development. A phasing plan should indicate the mix/ apartments types to be delivered and show a reasoned explanation regarding the supporting infrastructure, open space and community facilities for each phase of development.
- 6. A site layout plan showing what areas are to be taken in charge by the Planning Authority.
- 7. A childcare demand report outlining anticipated demand likely to be generated by the proposal and the capacity of the existing and proposed facilities in the vicinity to cater for such demand.
- 8. Further consideration / amendment of document in line with the requirements of the infrastructure section as set out below:
- (i) Adequate visibility shall be made available and maintained at the Main Entrance Roadway as indicated on the submitted Drawing No: 17034 100 for a minimum of 65 metres on either side of the entrance from a point 2.4 metres back in from the edge of the road carriageway over a height of

1.05 metres above road level and no impediment to visibility shall be placed, planted or allowed to remain within the visibility triangle. **Prior to the commencement of the development,** the applicant shall also submit revised details indicating the above sightline provision at the existing junction with Bothar Maol and the R172. Where it is necessary to remove hedges/banks/walls to provide adequate sightline visibility, this must be completed prior to the development on site and any new boundary wall/fence/hedge shall be located behind the visibility splay. Any pole, column, tree or sign materially affecting visibility must also be removed.

- (ii) No work shall commence on site until the visibility splays have been provided. The area within the visibility splay shall be cleared to provide a level surface no higher than 250mm above the level of the adjoining carriageway and shall be retained and kept clear thereafter.
- (iii) The applicant has proposed provision of right turning lanes on the R172 at the Main Entrance Roadway and at the existing junction with Bothar Maol and the R172. As the R172 AADT is between 5,000 – 10,000, (AADT 6,584, LCC Survey, June 2016), the applicant shall submit details demonstrating compliance with Table 4.1 of the TII Publication DN-GEO-03060, "Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions)", June 2017. The applicant shall submit full design details for provision of a right turning lane, in compliance with DN-GEO-03060, including all dimensions, road marking details, signage etc. Revised details to be submitted shall also demonstrate adequate queuing length provision at both entrances for the assessment years considered in the submitted Traffic and Transport Assessment Report.
- (iv) The applicant shall also prepare and submit a Combined Stage 1 & 2 Road Safety Audit for the proposed right turning lanes.
- (v) All shared surfaces and home zone areas within the development shall be surfaced with bituminous material, e.g. HRA or CL942 material etc. Proposed surfacing colours shall be agreed **prior to the commencement of the development**.
- (vi) The applicant shall fully implement all mitigation measures as detailed in Section 7.0 of the Flood Risk Assessment Report received from the Finn Design Partnership issued on the 30<sup>th</sup> November 2018.
- (vii) Surface water from the site shall be disposed of within the boundaries of the site and shall not discharge onto the public road or adjoining property. Surface water drainage attenuation and disposal to be in accordance with the submitted Engineering & Services Report from the Finn Design Partnership issued on the 30<sup>th</sup> November 2018 and as indicated on submitted Overall Storm Drainage Layout Drawing No. 115 - 1703.
- (viii) Design and Construction of all proposed Surface Water Drainage and SuDS devices shall be supervised and certified by a Competent Independent Civil Engineer.
- (ix) The applicant has submitted a Landscape Masterplan Drawing No. 18.120.100 which indicates provision of trees planted along footpaths and roads throughout the development. **Prior to the commencement of the development,** the applicant shall be requested to submit details of a root barrier system or root cell system to be implemented to prevent any root damage to adjacent footpaths and roads.

- (x) The applicant shall implement the Landscape Management Plan as detailed on submitted Landscape Masterplan Drawing No. 18.120.100.
- (xi) Design and Construction of all proposed Retaining Walls shall be supervised and certified by a Competent Independent Structural Engineer.
- (xii)All hard standing areas shall be covered with an impermeable surface (e.g. concrete, dense bitumen macadam, etc.) and drained via patent type surface water lockable gullies or surface water drainage channels to a separate surface water drainage system. Gully chambers, where proposed, shall be provided at the minimum rate of one gully chamber per 200m<sup>2</sup>. No road gully chamber to be built directly "on line" on any drainage pipeline and shall be connected to main drainage pipelines via separate 150mm diameter branch connections. Manhole covers and frames, located in areas subject to vehicular traffic, shall be heavy-duty type to I.S.261, Grade A. Only clean uncontaminated water from all hard standing areas, including roofs, within the site shall be discharged to the surface water drainage system. Gully chambers to be lockable and located and constructed in such a manner as to prevent ponding occurring.
- (xiii) All raised tables, ramps and uncontrolled pedestrian crossing points are to be constructed in accordance with "Traffic Management Guidelines", 2003, issued by the Department of the Environment and Local Government, (DOELG), The Department of Transport (DOT) and the Dublin Transportation Office (DTO).
- (xiv) All traffic signs and road markings shall be in accordance with the 'Traffic Signs Manual', published by the Department of Transport.
- (xv) Table 7.7 of the "Guidelines for setting and managing speed limits in Ireland", March 2015, indicate 30 km/h as an appropriate speed limit in a housing estate such as this proposed development. Within 3 months of the construction of the proposed traffic calming devices, i.e. raised tables and ramps, an independent speed survey shall be carried out within the development and submitted to the Planning Authority clearly demonstrating compliance with an 85<sup>th</sup> percentile speed of 30 km/h or details of further proposals to achieve compliance.
- (xvi) Within 3 months of the grant of this permission, the applicant shall demonstrate that all proposed traffic calming devices comply with the Louth County Council Policy on Traffic Calming, adopted 2015, i.e. all raised tables and ramps are within 5m of a public light.
- (xvii) Prior to the commencement of the development, the applicant shall submit revised details of the proposed speed reduction measure indicated on submitted Main Entrance Roadway Drawing No. 100 – 1703, clearly showing direction of priority and shall include all appropriate signage and road markings.
- (xviii) Public Lighting design within the development shall be carried out by a competent person with experience in the design of public lighting installations and shall be as indicated in the submitted Street Lighting Proposals Report submitted by Caldwell Consulting. All public lighting shall comply with BS 5489-1 & BS EN 13201-2. Lanterns to comply with SEAI "LED Lantern Specification"

for Public Sector Exterior Lighting". Lighting columns shall be of **tapered octagonal construction** with a minimum wall thickness of 3mm and shall comply with the requirements of BS 5649 or EN40. Octagonal Columns shall be a minimum of 6 meters above ground with a 1 metre long root (7m total length), of folded steel, gradually tapered at a constant rate from the base and terminating with a dimension of 68mm across flats at the top.

(xix) **Prior to the commencement of the development,** the applicant shall prepare and submit for agreement a Construction Management Plan for the development. This Plan shall fully detail

- a. A Traffic Management Plan for all phases of the proposed development including Construction Traffic Access arrangements.
- b. The delivery and routing of materials to the site during the construction phase shall be organised so that deliveries do not conflict with the morning or evening periods of peak school traffic flow.
- c. The removal and routing of surplus material off site shall be so organised that haulage vehicles do not conflict with morning or evening periods of peak school traffic flow.
- d. If the Construction Management Plan should indicate that access over third party lands is required, evidence of appropriate landowner's Consent shall be submitted.
- (xx) The applicant shall liaise with statutory bodies and the Public Utility Authorities and carry out all diversions, re-routing, modifications, etc. as required during the construction of the works. The applicant shall arrange to carry out any works required by statutory bodies and the Public Utility Authorities.
- (xxi) The applicant shall make all necessary arrangements to apply for and obtain a Road Opening License(s) from Louth County Council in respect of all openings in public areas and shall pay Road Opening License Fees and road restoration costs. The applicant shall abide by the conditions as set out in the said license(s).
- (xxii) The applicant shall be responsible for the full cost of repair in respect of any damage caused to the adjoining public road/footpath arising from the construction work and shall either make good any such damage forthwith to the satisfaction of Louth County Council or pay to the Council the cost of making good any such damage on a demand thereof being issued by the Council.
- (xxiii) All necessary measures, as may be determined by the Planning Authority, shall be taken by the developer/contractor/servants/agents to prevent the spillage or deposit of clay, rubble or other debris on adjoining public roads or footpaths during the course of the development works. The developer shall ensure that all vehicles leaving the development are free from any material that would be likely to deposit on the road and in the event of any such deposition; immediate steps shall be taken to remove the material from the road surface. The developer shall be responsible for the full cost of carrying out of road/footpath cleaning work.

(xxiv) As part of the landscaping plan further details on street furniture, including bollards, lighting, fixtures and seating shall be provided. Areas of exercise/ street furniture shall be included as part of the development of the open space area. The applicant shall therefore be requested to submit revised details

allafon

Emer O'Callaghan Senior Executive Planner

Anthony Abbott King Senior Planner

**Frank Pentony** 

Director of Services

Attached:

Minute of meeting Infrastructure Report Internal Email from Housing IW Report **An Roinn Cultúir, Oidhreachta agus Gaeltachta** Department of Culture, Heritage and the Gaeltacht



Our Ref: **G Pre00196/2018** (Please quote in all related correspondence)

11 September 2018

Deirdre Larkin, Senior Environmental Consultant / Hydrogeologist Ireland Environment Atkins, Atkins House, 150 Airside Business Park, Swords, Co. Dublin

Via email: <u>deirdre.larkin@atkinsglobal.com</u> cc:garethcorvus@gmail.com,gareth.grindle@corvusconsulting.com,tony@finn.ie, Colin.Wilson@atkinsglobal.com, adam.simpson@mcaleer-rushe.co.uk and <u>sinead@dbcl.ie</u>

# Re: Meeting Request re Proposed Strategic Housing Development (SHD) in Dundalk, Co. Louth

A chara

On behalf of the Department of Culture, Heritage and the Gaeltacht, I refer to correspondence received in connection with the above.

Outlined below are heritage-related observations/recommendations of the Department under the stated heading.

## Nature Conservation

This Department is in receipt of a meeting request to discuss proposals to discharge surface water to Dundalk Bay European sites. It appears the meeting request is because of advice from Louth County Council to meet with this Department. As this planning application is to be a SHD, then An Bord Pleanála is the competent authority for such scoping. This Department also notes it is in receipt of a separate Environmental Impact Assessment Report (EIAR)/Natura Impact Statement (NIS) scoping request for the same development.

Before finalising whether a meeting is required or not please consult the pre-application consultation/engagement section of our recently updated website which is accessible at <a href="https://www.npws.ie/development%20consultations">https://www.npws.ie/development%20consultations</a>.



Should you then determine a meeting is still required please give more specific details and options under consideration in advance, as it is unlikely the relevant staff would attend any meeting without knowing whether it will impact on their work area or not. Without such detail it is unclear for example:

- 1. Whether there will be any structures on the foreshore or marine areas
- 2. Whether a foreshore licence is required
- 3. Whether there will be any permanent loss of habitat in a European site
- 4. Whether there will be any deterioration of water quality
- 5. Whether there will be any construction on or near areas important for birds leading to loss of feeding/roosting habitat or disturbance

It is also unclear why either the existing urban storm sewers are not being linked into or alternatively why SUDS is not being employed.

The above observations/recommendations are based on the papers submitted to this Department on a pre-planning basis and are made without prejudice to any observations that the Minister may make in the context of any consultation arising on foot of any development application referred to the Minister, by the planning authority/ies, in her role as statutory consultee under the Planning and Development Act, 2000, as amended.

You are requested to send further communications to this Department's Development Applications Unit (DAU) at <u>manager.dau@chg.gov.ie</u> (team monitored); if this is not possible, correspondence may alternatively be sent to:

The Manager Development Applications Unit (DAU) Department of Culture, Heritage and the Gaeltacht Newtown Road Wexford Y35 AP90

Is mise, le meas

Sineed o' Sie

Sinéad O' Brien Development Applications Unit

An Roinn Cultúir, Oidhreachta agus Gaeltachta Department of Culture, Heritage and the Gaeltacht



Your Ref: 5167910-21-CO-00030 Our Ref: **G Pre00201/2018** (Please quote in all related correspondence)

25 September 2018

Deirdre Larkin,

Atkins, Atkins House, 150 Airside Business Park, Swords, Co. Dublin

Via email: Deirdre.larkin@atkinsglobal.com

## Re: Consultation for EIA Scoping Report Stage for a proposed Strategic Housing Development (SHD) consisting of approximately 500 no. residential units in Blackrock, Dundalk, Co. Louth.

A chara

On behalf of the Department of Culture, Heritage and the Gaeltacht, I refer to correspondence received in connection with the above.

Outlined below are heritage-related observations/recommendations of the Department under the stated headings.

#### **Archaeology**

This Department notes that the proposed development site is located in an area of very high archaeological potential and is in close proximity to monuments that were uncovered in the course of previous developments.

This Department recommends, therefore, that the developers engage the services of a suitably qualified archaeologist to conduct an Archaeological Impact Assessment of the lands where the development is to take place.

The Archaeological Impact Assessment should include the results of an archaeological geophysical survey and the results of subsequent test excavations at the location.

The archaeological report should be included in any Environmental Impact Assessment Report (EIAR) that is submitted as part of the Strategic Housing Development (SHD) process.



## Nature Conservation

Please note that you should consult the requirements of this Department in relation to preplanning at <u>https://www.npws.ie/development%20consultations</u>, in particular the section entitled pre-application consultation/engagement.

This particular proposed strategic housing development (SHD) is close to Dundalk Bay Special Area of Conservation (SAC) (site code 000455) designated under the EC Habitats Directive (Council Directive 92/43/EEC) and Dundalk Bay Special Protection Area (SPA) (site code 004026 designated under the EC Birds Directive (Directive 2009/147 EC). Issues to be assessed will therefore include any ex-situ impacts on birds should they roost or feed on the proposed development that surface water runoff may end up in Dundalk Bay. Any deterioration in water quality could impact adversely on habitats and on the food species of birds.

Please find below some general scoping comments for Environmental Impact Assessment Report (EIAR), appropriate assessment (AA) screening and appropriate assessment / Natura Impact Statement (NIS), and for licensing requirements which may assist.

#### EIAR

## Ecological Survey

With regard to scoping for an EIAR for a proposed development, in order to assess impacts on biodiversity, fauna, flora and habitats, an ecological survey should be carried out of the site of the proposed development site including the route of any access roads, pipelines or cables etc. to survey the habitats and species present.

Where ex-situ impacts are possible survey work may be required outside of the development sites.

Surveys should be carried out by suitably qualified persons at an appropriate time of the year depending on the species being surveyed for. The EIAR should include the results of the surveys, and detail the survey methodology and timing of such surveys. It is expected by this Department that in any survey methodology used that best practice will be adhered to and if necessary non Irish methodology adapted for the Irish situation. The EIAR should cover the whole project, including construction, operation and, if applicable, restoration or decommissioning phases. Alternatives examined should also be included in the EIAR. Inland Fisheries Ireland (IFI) should be consulted with regard to fish species if applicable. For information on Geological and Geomorphological sites the Geological Survey of Ireland should be consulted.



## Baseline data

With regard to the scope of baseline data, details of designated sites can be found at <u>www.npws.ie/</u>. For flora and fauna the data of the National Parks and Wildlife Service (NPWS) should be consulted at <u>www.npws.ie/</u>. Where further detail is required on any information on the website, a data request form should be submitted. This can be found at <u>https://www.npws.ie/maps-and-data/open-data-policy</u>. Further information may be found at <u>http://dahg.maps.arcgis.com/home/index.html</u>. Other sources of information relating to habitats and species include that of the National Biodiversity Data Centre (<u>www.biodiversityireland.ie</u>), Inland Fisheries Ireland (<u>www.fisheriesireland.ie</u>), BirdWatch Ireland (<u>www.birdwatchireland.ie</u>) and Bat Conservation Ireland (<u>www.batconservationireland.org</u>). Data may also exist at a County level within the Planning Authority.

## Impact assessment

The impact of the development on the flora, fauna and habitats present should be assessed. In particular the impact of the proposed development should be assessed, where applicable, with regard to:

- Natura 2000 sites, i.e. Special Areas of Conservation (SAC) designated under the EC Habitats Directive (Council Directive 92/43/EEC) and Special Protection Areas (SPA) designated under the EC Birds Directive (Directive 2009/147 EC),
- Other designated sites, or sites proposed for designation, such as Natural Heritage Areas and proposed Natural Heritage Areas, Nature Reserves and Refuges for Fauna or Flora, designated under the Wildlife Acts 1976 to 2018,
- Species protected under the Wildlife Acts including protected flora,
- 'Protected species and natural habitats', as defined in the Environmental Liability Directive (2004/35/EC) and European Communities (Environmental Liability) Regulations, 2008, including Birds Directive – Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur) and Habitats Directive – Annex I habitats, Annex II species and their habitats, and Annex IV species and their breeding sites and resting places (wherever they occur),
- Important bird areas such as those identified by Birdlife International,
- Features of the landscape which are of major importance for wild flora and fauna, such as those with a "stepping stone" and ecological corridors function, as referenced in Article 10 of the Habitats Directive.
- Other habitats of ecological value in a national to local context (such as those identified as locally important biodiversity areas within Local Biodiversity Action Plans and County Development Plans).
- Red data book species,
- and biodiversity in general.



Reference should be made to the National Biodiversity Action Plan 2017-2021 and any relevant County Biodiversity Plan, as well as the All-Ireland Pollinator Plan 2015-2020.

It should be noted that the National Biodiversity Action Plan sets out Government policy on nature conservation and includes as Objective 1 to "mainstream biodiversity into decision making", including for all public authorities to move towards no net loss of biodiversity. It also requires Local Authorities to develop policies and objectives for the protection and restoration of biodiversity.

Any losses of biodiverse habitat associated with this proposed development (including access roads and cabling) such as woodland, scrub, hedgerows and other habitats should be mitigated for.

In order to assess the above impacts it may be necessary to obtain hydrological and/or geological data. In particular any impact on water table levels or groundwater flows may impact on wetland sites some distance away. The EIAR should assess cumulative impacts with other plans or projects if applicable. Where negative impacts are identified suitable mitigation measures should be detailed if appropriate. As EU Member States have to report every 6 years on the National resource of habitats and species listed under the Habitats Directive it is important that any impact on such habitats and species both inside and outside of Natura 2000 sites is recorded.

#### Alien invasive species

The EIAR should also address the issue of invasive alien plant and animal species, such as Japanese Knotweed, and detail the methods required to ensure they are not accidentally introduced or spread during construction. Information on alien invasive species in Ireland can be found at <a href="http://invasives.biodiversityireland.ie/">http://invasives.biodiversityireland.ie/</a> and at

#### Hedgerows and protected species

Hedgerows form important wildlife corridors and provide areas for birds to nest in. In addition badger setts may be present. If suitable trees are present bats may roost there and they use hedgerows as flight routes. Hedgerows also provide a habitat for woodland flora. Where a hedgerow forms a townland or other historical boundary it is usually an old hedgerow. Such hedgerows will contain more biodiversity than a younger hedgerow. Hedgerows should be maintained where possible. The EIAR should provide an estimate of the length of hedgerow that will be lost, if any. Where trees or hedgerows have to be removed there should be suitable planting of native species in mitigation. Hedgerows and trees should not be removed during the nesting season (i.e. March 1<sup>st</sup> to August 31<sup>st</sup>).

#### **Bats**

Bat roosts may be present in trees, buildings and bridges. Bat roosts can only be destroyed under licence under the Wildlife Acts and a derogation under the Birds and Natural Habitats Regulations and such a licence would only be given if suitable mitigation measures were



implemented. Where so called bat friendly lighting is proposed as mitigation then it should be proven to work as mitigation.

#### **Rivers and Wetlands**

Wetlands are important areas for biodiversity. Any watercourse or wetland impacted on should be surveyed for the presence of protected species and species listed on Annexes II and IV of the Habitats Directive. These species could include otters (*Lutra lutra*), which are protected under the Wildlife Acts and listed on Annexes II and IV of the Habitats Directive, Salmon (*Salmo salar*) and Lamprey species listed on Annex II of the Habitats Directive, and White-clawed Crayfish (*Austropotamobius pallipes*) which are protected under the Wildlife Acts and listed on Annex II of the Habitats Directive, and IN the Habitate on Annex II of the Habitate Directive, and White-clawed Crayfish (*Austropotamobius pallipes*) which are protected under the Wildlife Acts and listed on Annex II of the Habitate Directive, Frogs (*Rana temporaria*) and Newts (*Trituris vulgaris*) protected under the Wildlife Acts and Kingfishers (*Alcedo atthis*) protected under the Wildlife Acts and listed on Annex I of the Birds Directive (Council Directive 79/409 EEC).

One of the main threats identified in the threat response plan for otter is habitat destruction (see <a href="http://www.npws.ie/sites/default/files/publications/pdf/2009\_Otter\_TRP.pdf">www.npws.ie/sites/default/files/publications/pdf/2009\_Otter\_TRP.pdf</a>).

In addition a 10 m riparian buffer on both banks of a waterway is considered to comprise part of the otter habitat. Therefore any proposed development should be located at least 10 m away from the waterway.

A suitable riparian habitat should be left along each watercourse. Construction work should not be allowed impact on water quality and measures should be detailed in the EIAR to prevent sediment and/or fuel runoff from getting into watercourses which could adversely impact on aquatic species. Flood plains, if present, should be identified in the EIAR and left undeveloped to allow for the protection of these valuable habitats and provide areas for flood water retention. If applicable the EIAR should take account of the guidelines for Planning Authorities entitled "The Planning System and Flood Risk Management" and published by the Department of the Environment, Heritage and Local Government in November 2009.

IFI should be consulted with regard to impacts on fish species and the applicant may find it useful to consult their publication entitled "Planning for watercourses in the urban environment" which can be downloaded from their website at

https://www.fisheriesireland.ie/fisheries-management-1/86-planning-for-watercourses-in-the-urban-environment-1.

#### Water quality

Ground and surface water quality should be protected during the construction and operation of the proposed development and if applicable the applicant should ensure that adequate sewage treatment facilities are or will be in place prior to any development. The applicant should also ensure that adequate water supplies are present prior to development.



#### <u>Marine</u>

Marine information is available at <u>www.npws.ie/marine/</u>. In particular the best practice guidelines at <u>www.npws.ie/marine/best-practice-guidelines</u> should be adhered to.

## Construction Management Plans (CMPs)

Complete project details including outline construction management plans (CMPs) need to be provided in order to allow an adequate assessment to be undertaken. Applicants need to be able to demonstrate that CMPs and other such plans are adequate and effective mitigation, supported by scientific information and analysis, and that they are feasible within the physical constraints of the site. The positions, locations and sizes of construction infrastructure and mitigation, such as settlement ponds, disposal sites and construction compounds, may significantly affect European sites, other designated sites, habitats, and species in their own right and could have an effect for example on drainage, water quality, habitat loss, and disturbance. If these are undetermined at time of the assessment, all potential effects of the development on the site are not being considered. If applicants are not in a position to decide the exact location and details of these at time of application, then they need to consider the range of options that may be used in their assessment so that all issues are covered.

## Appropriate Assessment (AA)

## <u>Guidance</u>

Guidance on AA is available in the Departmental guidance document on Appropriate Assessment, which is available on the NPWS website at <u>www.npws.ie/sites/default/files/publications/pdf/NPWS\_2009\_AA\_Guidance.pdf</u> and in the EU Commission guidance entitled "Assessment of plans and projects significantly affecting Natura 2000 sites Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC" which can be downloaded from http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura\_2000\_assess\_en.pdf. However CJEU and Irish case law has clarified some issues and should also be consulted.

## Conservation objectives

In order to carry out the appropriate assessment screening, and/or prepare the Natura Impact Statement (NIS), information about the relevant Natura 2000 sites including their conservation objectives will need to be collected. Details of designated sites and species and conservation objectives can be found on <u>www.npws.ie/</u>. Site-specific, as opposed to generic, conservation objectives are now available for some sites. Each conservation objective for a qualifying interest (QI) is defined by a list of attributes and targets and is often supported by further documentation. Where these are not available for a site, an examination of the attributes that are used to define site-specific conservation objectives for the same QIs in other sites can be usefully used to ensure the full ecological implications of a proposal for a site's conservation objective and its integrity are analysed and assessed. It is advised, as per the notes and guidelines in the site-specific conservation objectives, that any reports quoting conservation objectives should give the version number and date, so



that it can be ensured and established that the most up-to-date versions are used in the preparation of Natura Impact Statements and in undertaking appropriate assessments.

Where further detail is required on any information on the website a data request form should be submitted. This can be found at <a href="https://www.npws.ie/maps-and-data/open-data-policy">https://www.npws.ie/maps-and-data/open-data-policy</a>.

#### Cumulative and ex situ impacts

A rule of thumb often used is to include all Natura 2000 sites within a distance of 15 km. It should be noted however that this will not always be appropriate. In some instances where there are hydrological connections a whole river catchment or a groundwater aquifer may need to be included. Similarly where bird flight paths are involved the impact may be on an SPA more than 15 km away.

Other relevant Local Authorities should be consulted to determine if there are any projects or plans which, in combination with this proposed development, could impact on any Natura 2000 sites.

#### Water and wastewater

If this development is not on mains sewerage then impacts from wastewater, including cumulative impacts, on groundwater and any nearby surface waters or wetland habitats should be assessed. In addition if it is not on mains water supply then impacts, including cumulative impacts, relating to water abstraction should be assessed. This may require hydrogeological information. Where connection will be to existing infrastructure the impact of the demand for additional potable water, waste water treatment, and additional surface runoff should be assessed.

#### Alien invasive species

If the proposed development is adjacent to a Natura 2000 site and involves construction, landscaping or a garden, care should be taken to ensure that no terrestrial or aquatic invasive species are used which could impact negatively on these sites. Information on alien invasive species in Ireland can be found at <u>http://invasives.biodiversityireland.ie/</u> and at <u>http://invasivespeciesireland.com/</u>.

#### <u>CMPs</u>

Complete project details including outline construction management plans (CMPs) need to be provided in order to allow an adequate appropriate assessment to be undertaken. Applicants need to be able to demonstrate that CMPs and other such plans are adequate and effective mitigation, supported by scientific information and analysis, and that they are feasible within the physical constraints of the site. The positions, locations and sizes of construction infrastructure and mitigation, such as settlement ponds, disposal sites and construction compounds, may significantly affect European sites, designated sites, habitats, and species in their own right and could have an effect for example on drainage, water quality, habitat loss, and disturbance. If these are undetermined at time of the



assessment, all potential effects of the development on the site are not being considered. If applicants are not in a position to decide the exact location and details of these at time of application, then they need to consider the range of options that may be used in their assessment so that all issues are covered. The CMP should also include methods to ensure invasive alien species are not introduced or spread.

## Licences

Where there are impacts on protected species and their habitats, resting or breeding places, licences may be required under the Wildlife Acts or derogations under the Habitats Regulations. In particular bats and otters and cetaceans are strictly protected under annex IV of the Habitats Directive. A copy of Circular Letter NPWS 2/07 entitled "Guidance on Compliance with Regulation 23 of the Habitats Regulations 1997 – strict protection of certain species/applications for derogation licences" can be found on the Departmental website at

www.npws.ie/sites/default/files/general/circular-npws-02-07.pdf.

It should be noted however that the Regulations of 1997 have since been revoked and that Part 6 of the European Communities (Birds and Natural Habitats) Regulations 2011-2015 is now the relevant part dealing with the protection of flora and fauna. In particular reference to Regulation 23 in the circular letter should be taken to mean Regulation 51 in the current Regulations.

In addition the planning authority will be required to take account of species protected under sections 21, 22 and 23 of the Wildlife Acts if there are any impacts on other protected species or their resting or breeding places, such as on protected plants, badger setts or birds' nests. They will also need to be cognisant of article 5 (d) of the Birds Directive. For that reason vegetation, including hedges and trees, should not be removed during the nesting season (i.e. March 1<sup>st</sup> to August 31<sup>st</sup>).

In order to apply for any such derogation as mentioned above the results of a survey should be submitted to the National Parks and Wildlife Service of this Department. Such surveys are to be carried out by appropriately qualified person/s at an appropriate time of the year. Details of survey methodology should also be provided. Such licences should be applied for in advance of planning to avoid delays and in case project modifications are necessary.

Should this survey work take place well before construction commences, it is recommended that an ecological survey of the development site should take place immediately prior to construction to ensure no significant change in the baseline ecological survey has occurred. If there has been any significant change mitigation may require amendment and where a licence has expired, there will be a need for new licence applications for protected species.



The above observations/recommendations are based on the papers submitted to this Department on a pre-planning basis and are made without prejudice to any observations that the Minister may make in the context of any consultation arising on foot of any development application referred to the Minister, by the planning authority, in her role as statutory consultee under the Planning and Development Act, 2000, as amended.

You are requested to send further communications to this Department's Development Applications Unit (DAU) at <u>manager.dau@chg.gov.ie</u> (team monitored); if this is not possible, correspondence may alternatively be sent to:

The Manager Development Applications Unit (DAU) Department of Culture, Heritage and the Gaeltacht Newtown Road Wexford Y35 AP90

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Sinéad O' Brien Development Applications Unit

**An Roinn Cultúir, Oidhreachta agus Gaeltachta** Department of Culture, Heritage and the Gaeltacht



Our Ref: **G Pre00196/2018** (Please quote in all related correspondence)

28 September 2018

Deirdre Larkin, Senior Environmental Consultant / Hydrogeologist Ireland Environment Atkins, Atkins House, 150 Airside Business Park, Swords, Co. Dublin

Via email: <u>deirdre.larkin@atkinsglobal.com</u> cc: <u>gareth.grindle@corvusconsulting.com</u>; <u>garethcorvus@gmail.com</u>; <u>sinead@dbcl.ie</u>; <u>adam.simpson@mcaleer-rushe.co.uk</u>; <u>brigid.odonnell@mcaleer-rushe.co.uk</u>; <u>tony@finn.ie</u>

# Re: FI for meeting request for storm water drainage proposal in relation to Proposed Strategic Housing Development (SHD) in Dundalk, Co. Louth

A chara

On behalf of the Department of Culture, Heritage and the Gaeltacht, I refer to correspondence received in connection with the above.

Outlined below are heritage-related observations/recommendations of the Department under the stated heading.

## Nature Conservation

This Department notes that Atkins has submitted further information clarifying the proposed discharge of water into Dundalk Bay and that a meeting is no longer required.

This Department does not currently have the entire resident expertise to comment in any detail on drainage methodology but notes from the answers to the previous queries, our ref Gpre00196/2018, that it is envisaged that the discharged water will not be contaminated and that no foreshore licence will be needed etc.

It appears from the documentation provided and the telephone discussion with Dr. Linda Patton that any impacts on the designated sites of Dundalk Bay Special Area of Conservation (SAC) (site code 000455) designated under the EC Habitats Directive (Council Directive 92/43/EEC), and Dundalk Bay Special Protection Area (SPA) (site code 004026 designated under the EC Birds Directive (Directive 2009/147 EC), will relate to water quality and ex-situ impacts on birds.



As previously stated in response to your scoping request, our ref G Pre00201/2018, issues to be assessed should include any ex-situ impacts on birds should they roost or feed on the proposed development lands or lands adjacent to them. Details of bird usage of the site throughout the year, including the drainage/ SUDS sites, should be provided in the Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS).

In addition, should there be a failure in the SUDS proposals this could lead to a deterioration in water quality that could impact adversely on habitats and on the food species of birds. Any NIS and EIAR therefore will need to include details of proposed water quality monitoring and details of emergency procedures should there be any failure of SUDS and/or any decrease in water quality.

It should be noted that as this planning application is to be a Strategic Housing Development (SHD), then An Bord Pleanala is the competent authority for scoping requests.

The above observations/recommendations are based on the papers submitted to this Department on a pre-planning basis and are made without prejudice to any observations that the Minister may make in the context of any consultation arising on foot of any development application referred to the Minister, by the planning authority, in her role as statutory consultee under the Planning and Development Act, 2000, as amended.

You are requested to send further communications to this Department's Development Applications Unit (DAU) at <u>manager.dau@chg.gov.ie</u> (team monitored); if this is not possible, correspondence may alternatively be sent to:

The Manager Development Applications Unit (DAU) Department of Culture, Heritage and the Gaeltacht Newtown Road Wexford Y35 AP90

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Sinéad O' Brien Development Applications Unit

From: Sent:	Michaela Kirrane <michaela.kirrane@fisheriesireland.ie> 2018-08-27 12:00</michaela.kirrane@fisheriesireland.ie>
To:	Larkin, Deirdre
Subject:	Consultation for EIA Scoping Report Stage – Strategic Housing Development, Blackrock, Co. Louth
Attachments:	Strategic_Housing_Development_Blackrock_EIA_Scoping.pdf
Follow Up Flag:	Follow up
Flag Status:	Flagged

Dear Deirdre,

I refer to your letter dated 9<sup>th</sup> August last in relation to Consultation for EIA Scoping Report Stage – Strategic Housing Development, Blackrock, Co. Louth. Attached please find our observations.

Regards, Michaela

Michaela Kirrane Senior Fisheries Environmental Officer Inland Fisheries Ireland - Dublin

#### Iascach Intíre Éireann Inland Fisheries Ireland

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lascach Intíre Éireann Inland Fisheries Ireland

Deirdre Larkin, Atkins, Atkins House, 150 Airside Business Park, Swords, Co. Dublin.

27<sup>th</sup> August, 2018

#### Re: Consultation for EIA Scoping Report Stage – Strategic Housing Development, Blackrock, Dundalk, Co. Louth

Dear Ms Larkin,

We refer to your letter dated 9<sup>th</sup> August last in relation to EIA Scoping for a Strategic Housing Development at Blackrock, Co. Louth.

Inland Fisheries Ireland (IFI) is a Statutory Body established on the 1<sup>st</sup> July 2010. Under section 7(1) of the Inland Fisheries Act 2010 (No. 10 of 2010) *the principal function of IFI is the protection, management and conservation of the inland fisheries resource*.

The site is located in the Castletown catchment and is in close proximity to Inner Dundalk Estuary.

The Ecological status of the Castletown Estuary is Moderate. The estuary supports many species of fish, including flounder, sprat and eels (listed as critically endangered in the Irish Red Data Book (King et al, 2011)). A number of rivers flow into the Castletown Estuary, most notable being the Castletown and Flurry Rivers. These rivers contain valuable fisheries habitats and support a number of species, which migrate through the estuary namely sea trout, eels, Atlantic salmon and lamprey (the latter two listed as Annex II Species under the European Habitats Directive).

The Ecological status of Inner Dundalk Estuary is Moderate. It is valuable from a fisheries perspective as it supports stocks of sprat, cod, plaice, flounder and five bearded rockling among other species.

Given the size of the proposed development it would be important to ensure that mitigation measures are in place in relation to the management of storm water and wastewater from the site in order to protect and conserve these valuable aquatic habitats.

Yours faithfully,

Michaelo Kinare

Michaela Kirrane, Senior Fisheries Environmental Officer, IFI Dublin

From: Liz M OBrien <LizM.OBrien@housing.gov.ie>
Sent: 2018-08-31 16:27
To: Larkin, Deirdre <deirdre.larkin@atkinsglobal.com>
Subject: Observations of the Water Marine Adviory Unit, Dept Houing, Planning & Local Govt

Good afternoon Deirdre,

Please see attached the observations of the Department's Water Services Adviser re : Consultation for EIA Scoping Report Stage- Strategic Housing Development, Blackrock, Dundalk, Co Louth as requested in your letter of 9 August 2018.

Regards,

Liz O'Brien

Marine Environment & Foreshore, Department of Housing, Planning, & Local Government Newtown Road, Wexford 053 9117465

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An Roinn Tithíochta, Pleanála agus Rialtais Áitiúil Department of Housing, Planning and Local Government

Ms Deirdre Larkin, Senior Environmental Consultant / Hydrogeologist, Atkins, Atkins House, 150 Airside Business Park, Sword, Co Dublin

Re : Consultation for EIA Scoping Report Stage- Strategic Housing Development, Blackrock, Dundalk, Co Louth

Dear Ms Larkin,

I refer to the EIA Report above.

Please see the comments of the Department's Water Services Adviser below.

Atkins Consultants are in the process of preparing an EIS and NIS for the development of approximately 500 no residential units in Blackrock, Dundalk, Co Louth. A proposed planning application will be lodged with ABP before the end of September 2018 as a Strategic Housing Development in accordance with the Planning and Development (Strategic Housing Development) Regulations 2017. Atkins seek the views of DHPLG as part of the Scoping exercise in the preparation of the EIS.

On first look it seems that the parcel of land on which the houses themselves will be built is a bit away from the foreshore. However the 'Site Boundary' on one of the maps shows a small narrow segment of land bounding onto the foreshore. This is likely to be used for surface water outfall purposes in which case if any element of this is to extend beyond the HWM it will require a Foreshore Licence/Lease under the Foreshore Acts. On the assumption that a Surface Water outfall to marine environment will be required I comment as follows :

Any proposed Surface Water Outfall needs to be designed and sized pertaining to the potential run off from the overall site area in accordance with standard engineering design practice.

In terms of potential impacts to the Marine Environment the potential impacts on Water Quality, Marine Environment, Marine Ecology need to be examined. Cognisance will need to be taken as appropriate of:

- Marine Strategy Framework Directive
- River Basin Management Plans and associated Programme of Measures in compliance with the requirements of the EC (Water Policy) Regulations (SI No722 of 2003) (amended in 2005 and 2008)

• E.C Environmental Objectives (Surface Waters) Regulations 2009(S.I. No 272 of 2009)

It would be advisable to liaise with the IFI in terms of potential impacts to fisheries interests.

Mitigation Measures commensurate to the requirements of IFI would need to be adopted to minimise any impacts as relevant to Water Quality/Fisheries interests.

Any proposed surface water discharge to the marine environment should be subject to detailed Sediment Transport/Deposition /Sea- bed erosion studies as appropriate.

The E.I.S. should address, determine and mitigate against any potential adverse impacts that may be caused to other beneficial users of the foreshore (where applicable). This must address among other issues, the following topics where relevant:

- Marine tourism
- Amenity uses
- Fisheries interests/Angling
- Bathing/Walking (if applicable)

Adequate mechanisms (such as grit traps, swales, hydrocarbon interceptors) will need to be factored into the overall scheme as appropriate subject to best design procedure such that any potential impacts from any surface water outfall to the marine environment are minimised.

I hope you find this information suitable.

Yours sincerely,

Liz O'Brien Marine Environment and Foreshore, DHPLG, Newtown Road, Wexford Tel : 0539117465 Email : lizm.obrien@housing.gov.ie



# RE: EIAR Scoping Request for approx. 500 residential units at Blackrock, Dundalk, Co. Louth to form part of a Strategic Housing Development application on behalf of Kingsbridge Consultancy Ltd.

#### Dear Ms. Larkin,

Thank you for your correspondence of 9 August 2018 regarding the above EIAR scoping request. The position in relation to your correspondence is as follows.

National Strategic Outcome 2 of the National Planning Framework includes the objective to maintain the strategic capacity and safety of the national roads network. It is also an investment priority of the National Development Plan, 2018 – 2027, to ensure that the extensive transport networks, which have been greatly enhanced over the last two decades, are maintained to a high level to ensure quality levels of service, accessibility and connectivity to transport users.

The issuing of this correspondence is provided as best practice guidance only and does not prejudice TII's statutory right to make any observations, requests for further information, objections or appeals following the examination of any valid application referred.

The approach to be adopted by TII in making such submissions or comments will seek to uphold official policy and guidance as outlined in the Spatial Planning and National Roads Guidelines for Planning Authorities (2012). Regard should also be had to other relevant guidance available at <u>www.TII.ie</u>.

In this instance TII notes that the proposal is to consist of a stated approx. 500 residential units and provided is a google earth site location extract and an indicative site layout plan of 400 no. units at Haggardstown, Blackrock, Co. Louth, on the eastern side of the town and its national road bypass. There are 3 no. accesses indicated; one pedestrian and the remaining two vehicular; in the northern eastern corner of the site onto a local road indicated as Bothar Maol and the 'main site access' indicated in the south eastern corner of the site onto the R172 (Blackrock Road).

With respect to EIAR Scoping issues, the recommendations indicated below provide only general guidance for the preparation of EIAR, which may affect the National Roads Network. The developer should have regard, *inter alia*, to the following:

1. As outlined in the Spatial Planning and National Roads Guidelines, it is in the public interest that, in so far as is reasonably practicable, that the national road network continues to serve its intended strategic purpose. TII would be specifically concerned as to potential significant impacts the development would have on the national road network (and junctions with national roads) in the proximity of the proposed development.

info@tii.ie

www.tll.le

+353 (0)1 646 3600

+353 (0)1 646 3601





- 2. Consultations should be had with the relevant Local Authority/National Roads Design Office with regard to locations of existing and future national road schemes.
- 3. TII Traffic and Transport Assessment Guidelines (2014). The EIAR should demonstrate that the development can proceed complementary to safeguarding the capacity, safety and operational efficiency of the national road network, including associated junctions. In this regard the traffic and transportation analysis shall include capacity analysis of the national road network and associated junctions, including an analysis of the cumulative impacts of other existing and planned developments. The scheme promoter is also advised to have regard to Section 2.2 of the NRA/TII TTA Guidelines which addresses requirements for sub-threshold TTA.
- 4. The designers are asked to consult TII Publications to determine whether a Road Safety Audit is required.
- 5. Assessments and design and construction and maintenance standards and guidance are available at <u>TII Publications</u> that replaced the NRA Design Manual for Roads and Bridges (DMRB) and the NRA Manual of Contract Documents for Road Works (MCDRW).
- 6. Environmental Impact Assessment shall include provision for travel planning / mobility management planning in the interests of protecting national roads capacity in the interests of sustainable travel policy.
- 7. The developer, in conducting Environmental Impact Assessment, should have regard to TII Environment Guidelines that deal with assessment and mitigation measures for varied environmental factors and occurrences. In particular;
  - a. TII's Environmental Assessment and Construction Guidelines, including the *Guidelines for the Treatment* of Air Quality During the Planning and Construction of National Road Schemes (National Roads Authority, 2006),
  - b. The EIAR should consider the Environmental Noise Regulations 2006 (SI 140 of 2006) and, in particular, how the development will affect future action plans by the relevant competent authority. The developer may need to consider the incorporation of noise barriers to reduce noise impacts (see *Guidelines for the Treatment of Noise and Vibration in National Road Schemes* (1<sup>st</sup> Rev., National Roads Authority, 2004)).
- 8. The EIAR should should identify the methods/techniques proposed for any works traversing/in proximity to the national road network in order to demonstrate that the development can proceed complementary to safeguarding the capacity, safety and operational efficiency of that network.
- 9. The Environmental Assessment should have regard to previous Environmental Assessment Statements/Reports and conditions and/or modifications imposed by An Bord Pleanála regarding road schemes in the area.

Notwithstanding, any of the above, the developer should be aware that this list is non-exhaustive, thus site and development specific issues should be addressed in accordance with best practice.

I hope that this information is of assistance to you.

Yours sincerely,

Mark Byrne / Regulatory and Administration Unit

From: Sent: To: Cc: Subject:	Brendan McSherry <brendan.mcsherry@louthcoco.ie> 2018-08-15 11:51 Larkin, Deirdre John O'Hagan Consultation for EIA scoping report stage - strategic housing development, Blackrock, Dundalk, County Louth</brendan.mcsherry@louthcoco.ie>
Follow Up Flag:	Follow up
Flag Status:	Flagged

Hello Deirdre,

Thank you for consulting with me on this proposed application to ABP for a strategic housing development at Blackrock.

Obviously the proposed site is very close to the Dundalk Bay SAC/SPA so a full Natura Impact Assessment will be required (don't forget that there may be Natura sites within the North that may fall within the potential field of influence).

There is also the issue of the (allegedly) ancient Bóthar Maol road immediately adjacent it. In fact the proposed northern site access is off this track. The trees along the route have been identified as significant in the 'Ecology of Blackrock' study: <u>https://www.louthcoco.ie/en/Services/Heritage/Publications/TheEcologyofBlackrock.pdf</u>

The Bóthar Maol is believed by many local people to be a route referred to in An Táin Bó Cuailgne and I think there was a famous legal case over it some years ago (though I cannot find any reference to this). It is spoken of as an approach route to a long ford that crossed the bed of Dundalk Bay between Blackrock and Bellurgan (an áth leathan) at very low tides.

"Bóthar Maol (Map 2) is a partially abandoned byroad connecting the Dublin road out of Dundalk with the coast road to Blackrock village. From its east–west trajectory and situation overlooking the former coastal marshlands (the Loakers), it appears to have been a medieval routeway. The residents of Bóthar Maol nurture a vivid tradition that Medb followed this route to the coast on her way to Cooley."

From: https://www.louthcoco.ie/en/Services/Heritage/Publications/BoTainRoute.pdf

Blackrock as a whole is very low-lying and sea-level rise (which will also result in changes to ground water and to drainage patterns) should also be considered.

I hope this is helpful,

Best wishes,

Brendan McSherry Louth Heritage Officer Email: <u>mailto:heritage@louthcoco.ie</u> Direct dial: 042 9392969 Mobile: 086 601 3839

From: John O'Hagan Sent: 15 August 2018 09:40 To: Brendan McSherry Subject: FW: scanned document

#### Brendan See attached, from a biodiversity side of things is there any comment / info you would have? John

From: John O'Hagan [mailto:John.O'Hagan@louthcoco.ie]Sent: 15 August 2018 09:50To: John O'HaganSubject: scanned document

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From:	David Hanratty <david.hanratty@louthcoco.ie></david.hanratty@louthcoco.ie>
Sent:	2018-08-13 16:04
То:	Larkin, Deirdre
Subject:	EIA Scoping SHD Blackrock, Louth
Attachments:	Guide-to-Connect-Business-WEB.PDF
Follow Up Flag:	Follow up
Flag Status:	Flagged

Hi Deirdre,

I received your query regarding the proposed development of 500no. residential units in Blackrock County Louth.

## RE: CONSULTATION FOR EIA SCOPING REPORT STAGE - STRATEGIC HOUSING DEVELOPMENT DUNDALK, CO. LOUTH.

From a water services perspective I would advise you to follow the Irish Water Guide, as attached. I have forwarded your query to the Louth County Council Operations section, who may contact you on land drainiage issues.

Regards, David Hanratty Senior Exec. Engineer Water Services Louth County Council Ph: 042 9324373

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Le do thoil cuimhnigh ar an imshaol roimh priontáil an ríomhphost seo. Tá an ríomhphost seo (agus aon iatán a ghabhann leis) príobháideach agus rúnda agus d'fhéadfadh go mbeadh eolas inti atá faoi phribhléid dlíthúil. Ní ceadmhach úsáid an ríomhphoist seo d'éinne ach don té ar seoladh chuige é. Munar duit an ríomhphost seo nó an té atá freagrach as é a sheoladh, tá cosc ar chóipeáil agus ar sheachadadh an ríomhphoist seo agus aon iatán a ghabhann leis chuig éinne nó úsáid a bhaint as a bhfuil ann; ní ceart an ríomhphost seo nó aon iatán a léamh. D'fhéadfadh do mbeadh cosc iomlán dlíthiúil ar sceitheadh nó comhfhreagras nó aon úsáid eile gan chead ar a bhfuil sa ríomhphost seo agus d'fhéadadh sé a bheith ina chion coiriúil.

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# **Guide to connect**

## Water and wastewater Large business, housing and mixed use developments



## **Contact details**

Web:www.water.ie/connectionsTwitter:@IWCareBoards:www.boards.ie/irishwaterEmail:newconnections@water.ie

Irish Water PO Box 860 South City Delivery Office Cork City

Telephone: 1850 278 278 or + 353 1 707 2828

**Connections and Developer Services enquiries** 8am-4.30pm, Mon-Fri

Water supply and emergencies 24 hours a day, 7 days a week

Please note that the rates charged for calls to 1850 (CallSave) numbers may vary across different service providers. Calls made using mobiles may be more expensive.

Safeguarding our water for our future.

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#### Disclaimer

This booklet presents general information about Irish Water's connection process and is provided for information purposes only. The information contained in this booklet is not intended to be legal advice or to be construed as an offer or invitation to treat for connection to the Irish Water network.
# **1. Introduction**

# 1.1 Connections to the Irish Water water and wastewater network

Any person or entity who needs to get a **new or upgraded connection** to public water or wastewater infrastructure should contact Irish Water. You can make a pre-connection enquiry in order to establish the feasibility of a connection to the Irish Water network. This can be followed by an application for a connection.

Where the connection application is for a proposed development, we advise you to make a pre-connection enquiry at an early stage of your project, as the outcome of this pre-connection enquiry may influence your plans. The connection application may run in parallel with, or following the planning process. Connection applications for existing developments that require a first time connection, or that are looking to cater for increased demand or discharge, can be made at any time.

We have developed this booklet to explain how you can get a connection, and to help you understand what you need to do in order to apply for a connection. The booklet also details the different types of connection assets and explains how they can be installed. Also included are details of how designs are vetted by Irish Water.

Please read this booklet carefully, together with the Irish Water Codes of Practice, pre-connection enquiry and application forms, all of which are available at **www.water.ie** 

For further information, please contact us on **1850 278 278**, Monday to Friday, 8am-4.30pm.

# 1.2 How to apply

The table below outlines the forms you should use when enquiring about the feasibility of a connection and when applying to Irish Water for a connection. The Guide to connect and forms listed are available at **www.water.ie/connections** or by calling us on **1850 278 278**.

Connection type	Guide to connect	Pre-connection enquiry form	Application forms
Housing development	Guide to connect Water and wastewater Large business, housing and mixed use developments	Pre-connection enquiry form – Large industrial and commercial developments, mixed use developments, housing developments, business developments	Application form – Housing development water and/or wastewater connection
Large business			Application form – Business water and/or wastewater connection
Mixed use developments*			Application form – Mixed use development water and/or wastewater connection
Temporary connection**			Application form – Temporary water and/or wastewater connection

- \* A mixed use development is one that includes both domestic development and also any trade, industry or business development.
- \*\* A temporary connection is typically used for providing a water supply and/or wastewater discharge during construction or an event. It is removed when no longer required and should not be used to supply water to permanent premises.

# 1.3 Steps for getting a connection

#### **Pre-connection enquiry phase**

#### **Pre-connection enquiry**

You are encouraged to contact Irish Water as early as possible to establish the feasibility of a connection, and where applicable, prior to finalising the design of your proposed development and in advance of seeking planning permission. **Confirmation of feasibility** Following assessment, Irish Water will tell you if a connection is technically feasible, and will provide you with confirmation of feasibility. This may then be submitted with your planning application.

#### Design vetting

Irish Water will engage with you to vet the design of local infrastructure if necessary ahead of you finalising your planning application (for housing estates, to ensure compliance with our Codes of Practice and Standard Details).



### Development of planning application

You are responsible for completing your planning application which should include the confirmation of feasibility issued by Irish Water and, where applicable, details of the local infrastructure as vetted.

#### Planning application to your Local Authority

If you need to, you should seek planning permission from your Local Authority for your proposed development following the pre-connection enquiry phase and prior to the connection application phase.

#### **Connection application phase**

#### Applying for a connection

When you are ready to apply to Irish Water for a connection, please complete and submit a connection application form.

#### Assessment of new connection application

Irish Water will assess your application to confirm that it is still feasible, and will calculate the least cost design solution that is technically acceptable to Irish Water.

#### **Design vetting**

Irish Water will engage with you to vet the design of local infrastructure if necessary (for housing estates, to ensure compliance with our Codes of Practice and Standard Details).

#### **Getting an offer**

Following further assessment, Irish Water will issue you with an offer to connect, detailing costs and the works required to enable your connection.

#### Accepting the offer

You can enter into a connection agreement with Irish Water by accepting the terms and conditions as set out in the offer, and by making the required payment.

#### **Construction phase**

After you accept the offer, the connection assets required in order to facilitate your connection are constructed.

#### **Physical connection**

The physical works required to connect your development to the Irish Water network currently varies across the country. Further details about what works are required of you will be outlined in your connection offer.

#### **Meter installation**

On completion of connection works, Irish Water will install meter(s) as required.

#### **Connected to the Irish Water network**

Once connected you can fully avail of our services.

# **2** Connections: Pipework responsibilities

### 2.1 Connection assets – description

For the purposes of connections, the types of connection assets are classified as follows:

#### Private supply infrastructure

This includes a water supply pipe or drain within the boundary of the premises which facilitates the connection of that premises to the pipe associated with the service connection. The customer is responsible for funding and installing, and retains ownership and maintenance responsibility of, all private supply infrastructure associated with the connection.

#### Service connection infrastructure

This includes the infrastructure associated with a service connection.

#### Local infrastructure

For some developments including housing developments, this is the infrastructure that is located within the boundary of the new development and which will be constructed to facilitate water supply and/or wastewater collection from the development.

#### **Public infrastructure**

For water, this includes assets such as water mains, water pumping stations, and associated accessories that are in the ownership of Irish Water.

For wastewater, this includes assets such as sewers, wastewater pumping stations, and associated works that are in the ownership of Irish Water.

#### Strategic infrastructure

For water, this includes assets such as raw water intake systems, raw water reservoirs and aqueducts, water treatment works, service reservoirs, pumping stations, strategic trunk mains and their accessories.

For wastewater, this includes assets such as trunk sewer systems, main pumping stations, rising mains, wastewater treatment works and treated effluent outfalls and their accessories. All these strategic assets are in the ownership of Irish Water.



### 2.3 Ownership of connection assets

Irish Water owns, and is responsible for, the public water mains, the water meter, and (if it has previous to 1 January 2014 been taken in charge by the Local Authority) the service connection pipework from the public water mains to within 225mm of the outer edge of the property boundary.



Single detached property water

Irish Water owns, and is responsible for, the public sewer, but not the wastewater service connection running from the sewer to your property, or its accessories.

#### Single detached property wastewater



Irish Water may take in charge local infrastructure within proposed housing estates subject to certain criteria being satisfied. This means that Irish Water takes on the sole control and responsibility for the pipework.

### 2.4 Connection charges

The Commission for Energy Regulation (CER) is the economic regulator of Irish Water. The provision of connections requires the payment of certain costs and fees by the customer in line with the CER approved Irish Water Charges Plan. Irish Water applies the equivalent fee for providing a connection that your Local Authority would have charged on 31 December 2013. We will advise the customer of any charges that will be incurred before they arise.

Further details are available on www.water.ie

# 3. Pre-connection enquiry phase

### 3.1 Introduction

Irish Water will aim to provide your new or upgraded connection in co-ordination with your project timelines. The earlier that you engage with us, the more likely it is that we will be in a position to meet your timelines.

You are strongly advised to contact Irish Water with a pre-connection enquiry as early as possible in the project. Initial contact can be made before any application for planning permission has been made to the relevant Local Authority.

The pre-connection enquiry process enables you to obtain upfront knowledge of whether a connection is technically feasible or not, as well as an explanation of the work needed in order to facilitate the connection. The outcome of the pre-connection enquiry may influence your planning permission application; for example, a connection may require an on-site pumping station which itself might need planning permission.

### 3.2 Pre-connection enquiry form

To commence the pre-connection enquiry process, you must complete a pre-connection enquiry form. To get the form by post, please contact us on **1850 278 278**. Alternatively, you can visit **www.water.ie** and download the form. The pre-connection enquiry form will be accompanied by guidance notes for completing the form. Forms can be returned via post to Irish Water, PO Box 860, South City Delivery Office, Cork City, or by email to **newconnections@water.ie** 

Please note that if you are sending us your pre-connection enquiry form and any associated documentation by email, the maximum file size that we can receive in any one email is 35MB. Within five working days of receiving a completed pre-connection enquiry form, Irish Water will acknowledge receipt of the form and will provide you with a unique reference ID. The unique reference ID should be quoted in the letter or email subject line in future correspondence with Irish Water, and stated when contacting us by telephone. We will always try to work with you to complete missing information on forms, but occasionally, we may have to return incomplete forms to customers. In this case, we will always ensure to include details of the missing information in order to assist in re-submission of the form.

Once we receive a fully completed pre-connection enquiry form, we will then assess whether the proposed development can be accommodated within the capacity of the existing infrastructure, or if upgrades are required in order to facilitate the connection.

If you are seeking information about public water services infrastructure, contact Irish Water on **1850 278 278**.

## 3.3 Confirmation of feasibility

Following an assessment of the pre-connection enquiry, we will revert to you with the findings of our assessment.

Where Irish Water can accommodate a connection, you will receive correspondence from us with:

- Confirmation of feasibility: a statement which confirms that a connection to Irish Water infrastructure is possible at the time of assessment; and
- > Details of any water and/or wastewater infrastructure upgrades that are required outside of the development site in order to facilitate the water/wastewater connection.

Where Irish Water does not have any existing network infrastructure in the vicinity of your development in order to facilitate your connection, or if it is not technically feasible to upgrade the existing infrastructure in order to facilitate a connection at that time, for example due to limited assimilative capacity in the receiving waters, we will inform you of this. We will also advise of any relevant plans we may have of developing or upgrading infrastructure in the area in the future.

In this case, should you have alternative options for the proposed site, Irish Water will assess any additional pre-connection enquiries that you submit in order to investigate the possibility of development at an alternative location. Where this is not possible, you may wish to consider alternative water services such as a private well or a private wastewater treatment. These will be subject to approval by the Planning Authority.

### 3.4 Planning permission

Unless it is exempt, all development will require planning permission. It should be noted that planning permission is unrelated to Irish Water's pre-connection enquiry process. Confirmation of feasibility is not connected with an application for planning permission. However, a confirmation of feasibility may be submitted with your planning application in order to indicate that engagement with Irish Water has taken place.

Furthermore, at pre-connection enquiry stage for housing estates and mixed use developments in particular, Irish Water will engage with you to vet your design and agree the layout of the water services infrastructure within the proposed housing or mixed use development before you submit your planning application. This will ensure compliance with our Codes of Practice and Standard Details for water and wastewater infrastructure, and will help to avoid any potential planning issues arising at a later date.

The Planning and Development (Amendment) (No. 2) Regulations 2013 (S.I. 520 of 2013), prescribe Irish Water as a statutory consultee for the purpose of plans under the Planning and Development Act, 2000 (as amended) and in relation to applications for development consent. Because of this, we may be approached by the Planning Authority to comment on how a proposed development may affect Irish Water assets. Matters that may need to be addressed include proposals to build over Irish Water infrastructure or within zones of influence of water abstraction points. In such cases, we may wish to discuss these issues and the Planning Authority will contact us directly in this regard.

At this time, no application for a water and/or wastewater connection will have been submitted to Irish Water. Any questions or concerns regarding your planning application should be directed to the Planning Authority.

# 4. Connection application phase

### 4.1 Applying for a connection

To help us meet your project timelines, we advise customers to submit a pre-connection enquiry as early as possible. We will respond to you outlining if we can facilitate a connection to our networks.

To apply for a new or upgraded connection, you must complete the relevant application form. The relevant form can be obtained via post by calling us on **1850 278 278**. Alternatively, you can visit **www.water.ie** and download the form. The application form will be accompanied by guidance notes for completing the form. Completed forms can be returned via post to Irish Water, PO Box 860, South City Delivery Office, Cork City, or by email to **newconnections@water.ie** 

The information we require includes contact details, details of the site and the property/development to be connected, and information on the water and/or wastewater connection which is being sought. Your application must be supported by appropriate design documentation for local infrastructure (where applicable). You can find details of these on the application form.

Please note that if you are sending us your application form and any associated documentation by email, the maximum file size that we can receive in any one email is 35MB.

The connection application process may in some instances run concurrently with the planning process for the proposed development, where applicable.

It should be noted that the connection application process is unrelated to other Irish Water processes which may need to be completed by you in order to avail of water services. For example, if appropriate, you may need to apply separately for a Trade Effluent Discharge to Sewer Licence at www.water.ie/tradeeffluent for the discharge of trade effluent to sewer.

### 4.2 Assessment of connection application

When applying to Irish Water for a connection, you must submit appropriate documentation as outlined in the application form and as further described in the latest Irish Water Codes of Practice (available at **www.water.ie**). This documentation can either be provided by you, or by an agent on your behalf.

Your responsibility extends to all necessary consultations with roads authorities, fire authorities and other relevant statutory bodies and utility providers.

The application should outline how local infrastructure is to be installed – whether self-lay or Irish Water installation. These options are detailed in the Irish Water Codes of Practice. Connection assets are described earlier in this booklet.

When we receive your completed connection application form, we will validate the form, issue you with confirmation of receipt, and provide you with a unique reference ID. You should quote this reference in the letter or email subject line in future contact with us, and stated when contacting us by telephone. We may seek additional information if there are any incomplete sections in your submitted application, and we will work with you in order to obtain any further details required. However, on some occasions, we may have to return incomplete forms.

Once we have a fully completed connection application form, we will review your submitted application and supporting design details in order to determine the least cost design solution technically acceptable to us. While we may previously have assessed your development at the pre-connection enquiry stage, a reassessment will be required in order to confirm that circumstances have not changed during any elapsed time. We will determine what Irish Water infrastructural upgrades (if any) are required outside of the development site in order to facilitate the connection, and we will specify timing for the delivery of any such upgrades. We reserve the right to increase the size of any infrastructural upgrades, beyond what is required to cater for your development, in order to cater for future domestic growth in the area. In such a case, we will pay any additional costs associated with the upsizing, that is, the additional costs over and above what is required to cater for your connection.

Where Irish Water does not have any existing water services infrastructure in the vicinity of your development in order to facilitate your connection, or if it is not technically feasible to upgrade existing infrastructure in order to facilitate a connection at that time, for example, due to limited assimilative capacity in the receiving waters, we will write to inform you of this, and we will advise of any plans we may have of developing or upgrading infrastructure in the area in the future.

### 4.3 Project Works Services Agreement

In some cases, it may not be possible to identify the solution required to facilitate your connection without completing additional detailed designs, modelling or investigative works. In such circumstances, a Project Works Services Agreement (PWSA) may be required. This is an agreement between the customer and Irish Water which allows for the completion of such works.

The advantage to you of entering into a PWSA is that greater certainty regarding the connection costs will become available following completion of the required design/modelling/investigative works. A customer can enter into a PWSA with us without committing to a connection, however it should be noted that there will be upfront costs associated with the PWSA that will have to be paid by the customer.

In circumstances where a PWSA will be required, we will contact you in advance to inform you of the need for the agreement, and to discuss the details of the agreement with you and the scope of work required.

### 4.4 Getting a connection offer

When we have assessed your connection application and confirmed its feasibility, we will determine the estimate of the costs attributable to you for the connection.

We will then issue a connection offer to you in line with the connection policy providing details of any upgrade works required along with the associated cost estimate and estimated timeframe for completion of the works.

### 4.5 Accepting an offer

You can accept a connection offer by returning a signed copy of the counterpart to the connection offer and by paying the connection charge. In addition, where appropriate, you will be required to show that planning permission and any other statutory requirements have been obtained. These are known as the acceptance requirements.

Where significant upgrades are needed in order to facilitate your connection, there may be additional requirements, for example wayleaves across third party lands. These will be outlined in your connection offer, and no connection works can proceed until Irish Water receives the acceptance requirements.

### 4.6 Temporary connections

Temporary connections are typically required during construction of a development or for an event. These are time bound and are removed when no longer required. A connection agreement is required for a temporary connection.

Any person who requires a temporary connection to Irish Water's existing water and/or wastewater infrastructure should submit a temporary connection application form which is available at **www.water.ie/connections** and should ensure that the application complies with the temporary connections section of the Irish Water Codes of Practice.

In some instances, a temporary connection may be converted to a permanent connection. In order for this to happen, a new application to Irish Water for a permanent connection, as outlined above, would be required. Additional costs may apply in this situation in line with the Irish Water Charges Plan and as per the charges that your Local Authority would have applied on 31 December 2013.

# 5 Construction of connection works

### 5.1 Construction of connection assets by Irish Water

#### Strategic and public infrastructure

Where Irish Water cannot accommodate the proposed connection within the capacity of the existing network, upgrades to Irish Water infrastructure will be carried out in order to enable the connection. We will agree a programme of works with you to ensure that the upgrades are delivered to you in a timely manner.

We will work with you in this regard, ensuring updates are communicated to you and that progress meetings are held when necessary.

#### Local infrastructure

If Irish Water is installing local infrastructure, we will agree a programme of works with you in order to ensure that the infrastructure is delivered in a timely manner and with all efforts being made to meet your site project plan. Irish Water's installation of local infrastructure may at times require a collaborative approach between Irish Water and the customer, in particular so that all works on site are carried out in a safe manner.

### 5.2 Construction of connection assets by the customer

#### Private supply and service infrastructure

The installation of private supply and services infrastructure is your responsibility, and should be carried out in accordance with current legislation governing such work.

#### Local infrastructure

If you are installing local infrastructure using the self-lay installation method, the work should be carried out in compliance with Irish Water's current Codes of Practice which are available at **www.water.ie** These Codes of Practice describe the process by which local infrastructure can be installed by the customer. You will agree a programme with Irish Water for construction of the local infrastructure in order to facilitate supervision of the works by Irish Water. This will allow Irish Water to take in charge the local infrastructure, as further described below.

### 5.3 Physical connection

Subject to all the obligations of the connection agreement being met, we will work with you to ensure that the physical connection is carried out at a suitable time to fit in with the timelines for your development plan.

Further details will be outlined in your connection offer. Note that any connection will be for your premises only, and no additional properties may connect to it.

### 5.4 Meter installation

Irish Water will supply and install its water meter(s) and any ancillary devices such as radio transmitters (for automatic reading) in chambers, cabinets or boundary boxes constructed as part of the service connection infrastructure (either by the customer or by Irish Water, as set out in the connection offer). Larger developments (typically greater than 20 m<sup>3</sup>/day demand) will require a chamber for a bulk meter at the point of connection to the public mains infrastructure. Each individual user or premises within the development will also require its own cabinet or boundary box in which Irish Water may install a smaller meter locally.

Irish Water will require that the pipework within the development has regard for the installation of water meters at appropriately accessible locations that are sized according to typical daily demand. We will engage with you about the meter specifications and the required accommodation works; it is preferable that this takes place prior to the completion of the internal pipework design.

After your water service connection is complete, we will contact you at least 14 days before the meter installation, and will provide you with further information about the water meter.

## 5.5 Taking in charge

Taking in charge is a process whereby Irish Water takes sole control, and responsibility for, infrastructure that has been constructed by others. This is relevant for local infrastructure.

Irish Water's Codes of Practice and your connection offer will set out the requirement conditions so that Irish Water may take in charge local infrastructure in your development, where relevant. To ensure compliance with these conditions, Irish Water will initially review the design of the infrastructure and will subsequently audit its construction, including the witnessing of critical construction activities such as pressure testing and sterilisation of water mains. We will liaise with you as required during the connection application process in order to manage any queries as they arise.

# **6** Connected to the Irish Water network

Once connected, either directly or indirectly, to the Irish Water network, you are a customer of Irish Water. Your obligations in this regard, as well as our obligations to you, are referenced in your connection agreement, and are outlined fully at www.water.ie

When co-ordinates for each individual premises are submitted to Irish Water (this must be done through a form which is available by calling us on **1850 278 278**), individual accounts will be created for each premises. Note that initially, each account will be in the name of the customer who has applied for the connection.

Section 48 of the Environment (Miscellaneous Provisions) Act 2015 applies to dwellings (private residences) being sold since 1 January, 2016. Since this date, the responsibility lies with the seller (vendor) of a dwelling to ensure that the water charges for the dwelling are paid before the sale of the dwelling can be completed. Further information relating to this is available at www.water.ie/for-home/selling-a-home

As and when occupants move into the new premises, they can apply to Irish Water for a change of account name by calling us on **1850 278 278**.

# **Frequently asked questions**

**Does Irish Water charge for assessing pre-connection enquiry forms?** No, we do not charge for assessing pre-connection enquiry forms.

#### Can Irish Water give me confirmation of feasibility to connect to private water services infrastructure, i.e. water service infrastructure not owned or controlled by Irish Water?

No, we will only issue confirmation of feasibility for providing a connection to the Irish Water network.

### Does confirmation of feasibility guarantee me planning permission?

No. Confirmation of feasibility is simply a statement that at the time of issue, a connection to Irish Water infrastructure is feasible. It is unconnected with your planning application, and any questions or concerns regarding your planning application should be directed to the Planning Authority.

# I have confirmation of feasibility – does this guarantee me a connection?

No. Confirmation of feasibility cannot be regarded as a commitment to provide a connection. A connection application and completion of the acceptance requirements is always required in order to guarantee a connection.

#### I have planning permission – does this guarantee me a connection?

No. Any customer seeking a connection must obtain agreement from Irish Water for their water and/or wastewater service connection. Planning permission does not guarantee you a connection.

#### What is the application fee for a connection?

There is no application fee. However, should any investigative or detailed design works be required in order to process an application for a business connection, the customer may be liable to pay associated costs through a Project Works Services Agreement (PWSA). Irish Water will advise you of any such costs in advance, and fees become due when an offer is issued.

#### How much will Irish Water charge me for my connection?

The Commission for Energy Regulation (CER) is the economic regulator of Irish Water, and it has approved the charging structure that Irish Water will use. This is set out in the Irish Water Charges Plan and is equivalent to what your Local Authority would have charged on 31 December 2013.

Details of any applicable charges will be set out in your connection offer.

#### Who can carry out the required connection works?

Only Irish Water or agents acting on our behalf can carry out works on strategic or public infrastructure.

Local infrastructure in housing and mixed use developments may be constructed by either the customer, or by Irish Water or our agents. The connection agreement will set out who is to construct the local infrastructure.

#### Are there any other requirements that I need to be aware of?

The guidance provided in this booklet is for an application for a connection. Other requirements, such as planning permissions or Trade Effluent Discharge to Sewer Licence are distinct processes which must be completed separately. Details of the Trade Effluent Discharge to Sewer Licence process are available at www.water.ie/tradeeffluent

# **Appendix 1 - Glossary of terms**

Accessories: for water supply infrastructure means all chambers, fittings, valves, or any machinery or other apparatus which is designed or adapted for use in connection with the use or maintenance of private water supply infrastructure, public water supply infrastructure, service connection infrastructure, strategic infrastructure or other pipe.

For wastewater infrastructure, Accessories means all manholes, ventilating shafts, inspection chambers, overflow weirs or structures, fittings, valves, tanks, sluices, culverts or any machinery or other apparatus which is designed or adapted for use in connection with the use or maintenance of private drain, public wastewater collection infrastructure, service connection infrastructure, strategic infrastructure or other pipe.

The Act: means the Water Services Act 2007-2014.

**Boundary:** means the delineation between curtilage of the Customer's Premises and any other Premises.

**Business Connection:** means any water or wastewater connection used for:

- (a) agriculture or horticulture,
- (b) any trade, industry or business,
- (c) any purpose incidental to a household or private garden (including washing a private vehicle) if the water is drawn otherwise than from a tap inside the household or if a hosepipe or similar apparatus is used,
- (d) central heating other than central heating of a household,
- (e) apparatus depending while in use upon a supply of continuously running water, not being an apparatus used solely for heating water.

References to **Business** and **Business Development(s)** shall relate to the use of a Premises or part of a Premises by a person or entity in connection with the activities outlined above.

**Commission for Energy Regulation (CER):** means the body established pursuant to Section 8 of the Electricity Regulation Act 1999, as amended.

**Connection:** means the physical Connection of a Customer's Premises to the Network to facilitate the provision of Water Services to the Customer's Premises.

**Connection Agreement:** means the written agreement signed between the Customer and Irish Water setting out the commercial and technical terms governing the Connection.

**Connection Assets:** means the infrastructure required to provide the Connection, excluding Storm Water infrastructure.

**Connection Offer:** means the letter that is issued to the Customer by Irish Water and which details the Connection terms that are offered to the Customer.

**Customer:** means the party which has entered into a Connection Agreement, or potential customers who are seeking to enter into a Connection Agreement, with Irish Water.

**Domestic:** means the use of a Premises or part of a Premises by a person as their place of private residence (whether as his or her principal place of such residence or not), and includes accommodation provided in such a residence to one or more students to enable them to pursue their studies on a full-time basis, but does not include any part of the Premises used for the purposes or reward, with a view to profit or otherwise in the course of business, of accommodation, including self-catering accommodation, (other than accommodation provided in a place of private residence aforesaid to one or more students for the purposes aforesaid), unless the person to whom the accommodation is so provided uses the accommodation as his or her principal place of private residence.

**Domestic Connection:** means a Connection which provides Water Services for primarily Domestic use.

**Drain:** means a drainage pipe, or system of such pipes and related fittings for collection of wastewater, that is not owned by, vested in or controlled by Irish Water, and that is not a Service Connection, which is used, or to be used as the case may be, to convey wastewater from one or more Premises or to any wastewater treatment system on a Premises where the wastewater is generated.

**Irish Water:** means Irish Water (Uisce Éireann), a designated activity company, limited by shares with registration number 530363, established pursuant to the Act and having its registered office at Colvill House, 24-26 Talbot Street, Dublin 1, Ireland.

**Irish Water Installation:** means where Irish Water provides the Service Connections and Local Infrastructure, on behalf of the Customer, that are required for the purposes of supplying water and/or providing drainage to the Customer's Premises.

**Large Business Connection:** means a Business Connection which does not qualify as a Small Business Connection.

Least Cost Design Solution Technically Acceptable to Irish Water: means the method of Connection determined by Irish Water (based on the Customer's load requirements, characteristics and distance from the Network) that results in the overall least cost to the Customer and meets Irish Water's operational, planning and technical standards, considering the full lifetime of the asset.

**Local Authority:** means the County Council or City Council (as defined in the Local Government Act 2001) responsible for the functional area in which the Premises is located.

**Local Infrastructure:** means local water mains and sewers constructed within the Boundary of some developments, including housing developments, which facilitates the connection of properties to the Public Infrastructure.

**Network:** means the Irish Water assets and associated infrastructure for water supply and for wastewater collection, including pipework, pumping plant, treatment plants and all infrastructure within the control of Irish Water required to deliver water services.

Premises: has the meaning assigned to it in Section 2 of the Act.

**Private Supply Infrastructure:** means a water supply pipe or drain within the boundary of the Premises which facilitates the connection of that Premises to the pipe associated with the Service Connection. The Customer is responsible for funding and installation, and retains ownership and maintenance responsibility of all private supply infrastructure associated with the Connection.

**Project Works Services Agreement:** means a written agreement signed between the Customer and Irish Water setting out the scope of detailed design, modelling, investigative or other works that are required, as may be applicable, in advance of issuing a Connection Offer to the Customer. The scope of works is agreed between the Customer and Irish Water as required. It also includes the commercial and technical terms governing the agreement.

**Public Infrastructure:** means assets such as water mains, water pumping stations, sewers, wastewater pumping stations and associated Accessories that are in the ownership of Irish Water.

**Self-Lay:** means where the Customer elects to install water supply and/or wastewater collection infrastructure and they do so within the development, but without installing a Connection to the Irish Water network.

**Service Connection:** means a water supply pipe or drainage pipe, together with any Accessories and related fittings, extending from a waterworks or waste water works to the outer edge of the boundary to the curtilage of a Premises, and used, or to be used as the case may be, for the purpose of connecting one or more Premises with a waterworks or waste water works, and, where used or to be used for connecting more than one such Premises, it shall extend to the outer edge of the boundary to the curtilage of the Premises which is furthermost from the said waterworks or waste water works, as defined in Section 2 of the Water Services Act 2007.

**Service Connection Infrastructure:** means all the infrastructure associated with a Service Connection.

**Single Domestic Connection:** means the Connection of a one-off Domestic Premises.

**Small Business Connection:** means a Connection to a single business Premises only where the external diameter of the pipe connecting to the Irish Water water main does not exceed 32mm, the diameter of the drain connecting to the Irish Water sewer does not exceed 150mm, and the wastewater is consistent with domestic wastewater and is not considered by Irish Water to be trade effluent (refer to www.water.ie/tradeeffluent for further information). Storm Water: means run-off rainwater that enters any pipe.

**Strategic Infrastructure:** means raw water intakes, raw water reservoirs and aqueducts, water treatment works and waste water treatment works, service reservoirs, pumping stations, strategic trunk mains, trunk sewers, combined sewer overflows, treated effluent outfalls, and their Accessories.

**Trade Effluent Discharge to Sewer Licence:** means a licence required pursuant to Section 16 of the Local Government (Water Pollution) Act, 1977-1990.

**Water Services:** has the meaning assigned to it by Section 2 of the Water Services Act 2007 and means all services, including the provision of water intended for human consumption, which provide storage, measurement, treatment or distribution of surface water, ground water, or wastewater collection, storage, measurement, treatment or disposal, with the exceptions as outlined in the Act.

### Notes:

### Notes:

From:	Mark Johnston <mark.johnston@louthcoco.ie></mark.johnston@louthcoco.ie>
Sent:	2018-08-20 12:21
To:	Larkin, Deirdre
Cc:	Paddy Connolly; Vincent Toner
Subject:	FW: new 500 hse dev. at Blackrock R172 - Bothar Maol
Follow Up Flag:	Follow up
Flag Status:	Flagged

Dear Deirdre, Further to your letter of 13 august. Please see our comments below; if you could factor these 3No engineering needs into the proposal and revert with solution at some stage.

Regards,

Mark

| Mark Johnston CEng MICE CEnv CWEM | Senior Engineer |

| Operations & Local Services |

| Louth County council | County Hall Millennium Centre Dundalk, Co.Louth A91 KFW6 042-9324251 | 🗠 mark.johnston@louthcoco.ie|



Method in the second se

From: Vincent Toner
Sent: 20 August 2018 10:29
To: Mark Johnston
Cc: Aenat NicGabhann; Pat Brady
Subject: RE: new 500 hse dev. at Blackrock R172 - Bothar Maol

Mark

The proposed storm water system would be of interest to Operations

- 1. we could do with existing/new road gullies on the R172. (new storm outfall to sea?)
- 2. Also tidy town have a grant this year to extend the kerbing past the proposed entrance on the seaward side.
- 3. The question of the entrance onto the R172 and not unto the adjacent Bothar Maol, (Note Bothar Maol not in charge from PMS system) arises.

Thank you Vincent

Approx Location for A.





From: Mark Johnston Sent: 17 August 2018 09:55 To: Vincent Toner Cc: Conor Sloan Subject: new 500 hse dev.

Vincent, Any comment on this? I sent to infra. For comment already.

Mark

From: David Hanratty
Sent: 13 August 2018 15:37
To: Mark Johnston; Martin McCreesh
Cc: Marguerite Quinn; Anthony Abbott King; Martina Sheeran
Subject: FW: scanned document

All,

Please find attached a request which landed on my desk today regarding a Strategic Housing Development in Blackrock. This is for 500no. residential units.

From a water services point of view, I will ask them to contact Irish Water to complete a pre-connection enquiry, but I think they should be able to connect directly to the Dundalk network for waste water.

@Mark, the heading of the letter is 'drainage', so operations may wish to send comments to Atkins.

@Marguerite / Anthony – sent for information purposes.

Regards, David Hanratty Senior Executive Engineer Water Services Louth County Council

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#### **Environmental Health Services**

HSE Dublin North East Unit 1.02, First Floor, Southgate, Dublin Road, Drogheda, Co. Louth.

Tel: +353 (0) 41 2152011 Fax: +353 (0) 41 2152091

Date: 28<sup>th</sup> August 2018

Deirdre Larkin Senior Environmental Consultant/ Hydrogeologist Atkins House 150 Airside Business Park Swords Co Dublin

**Re:** Consultation foe EIA Scoping Report Stage- Strategic Housing Development, Blackrock, Dundalk Co Louth

**Proposed Development**: Development of 500no. Residential Units in Blackrock, Dundalk, Co Louth

Dear Ms Larkin,

The documents in relation to the above application have been reviewed and the HSE wish to make no comments at this time.

All correspondence or any queries with regard to this report including acknowledgement of this report should be forwarded to Tara Woods Principal Environmental Health Officer, Environmental Health Service, Unit 1.02, First Floor Southgate, Dublin Rd, Drogheda Co Louth . Who will refer your query to the appropriate person.

Yours Sincerely

Clara Dosdes

Tara Woods Principal Environmental Health Officer

No. XIS	Reply	
150	ATKINS ATKINS HOUSE AIRSIDE BUSINESS PARK SW CO. DUBLIN	ORDS
	2 9 AUG 2018	
To Act	2 9 AUG 2018	
To Act To See	2 9 AUG 2018	

Building a Better Health Service Service



### Larkin, Deirdre

From:	Manager Dau <manager.dau@chg.gov.ie></manager.dau@chg.gov.ie>
Sent:	2018-08-14 11:26
To:	Larkin, Deirdre
Subject:	G Pre00201/2018 - EIA Scoping Report Stage
Follow Up Flag:	Follow up
Flag Status:	Flagged

Your Ref: 5167910-21-CO-00030 / 41

Our Ref: G Pre00201/2018 (Please quote in all related correspondence)

A Chara

On behalf of the Department of Culture, Heritage and the Gaeltacht, I acknowledge receipt of your recent consultation. In the event of observations, you will receive a response by email from Development Applications Unit (DAU) on behalf of the Department.

The normal target turnaround is six weeks from date of receipt. If observations are received before this time, DAU will be in contact at that stage.

If you have not heard from DAU and wish to receive an update, please telephone the direct line number below or email <u>manager.dau@chg.gov.ie</u>.

Le meas Diarmuid Buttimer

Diarmuid Buttimer Executive Officer

An Roinn Cultúir, Oidhreachta agus Gaeltachta Department of Culture, Heritage and the Gaeltacht

Aonad na nlarratas ar Fhorbairt Development Applications Unit

Bóthar an Bhaile Nua, Loch Garman, Contae Loch Garman, Y35 AP90 Newtown Road, Wexford, County Wexford, Y35 AP90

T +353 (0)53 911 7326 manager.dau@chg.gov.ie www.chg.gov.ie

\*\*\*\*\*\*\*\*\*\*\*\*\*

Is faoi rún agus chun úsáide an té nó an aonán atá luaite leis, a sheoltar an ríomhphost seo agus aon comhad atá nasctha leis. Má bhfuair tú an ríomhphost seo trí earráid, déan teagmháil le bhainisteoir an chórais.

Deimhnítear leis an bhfo-nóta seo freisin go bhfuil an teachtaireacht ríomhphoist seo scuabtha le bogearraí frithvíorais chun víorais ríomhaire a aimsiú.

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### Larkin, Deirdre

From: Sent:	Frank Magee <frank.magee@louthcoco.ie> 2018-08-14 12:10</frank.magee@louthcoco.ie>
То:	Larkin, Deirdre
Cc:	Paddy Connolly; Tony Finn
Subject:	SHD Blackrock Co Louth
Follow Up Flag:	Follow up
Flag Status:	Flagged

Deirdre,

My colleague Paddy Connolly will be looking after this file.

Regards,

Frank Magee

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# Appendix D. Landscape and Visual

- D.1. Landscape and Visual Figures
- D.2. Landscape Plan
- D.3. Boundary Treatment Plan
- D.4. Photomontages





## Location and Context

fig. 5.0

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## Haggardstown, Blackrock







#### Landscape Character Type

The subject site is within Landscape Character Area - **Dundalk Bay** Louth County Coucil - Landscape Character Assessment 2002

The landscape context and character of Dundalk Bay LCA is described in greater detail within the report - however for context its key characteristics are listed below:

Key Characteristics

- Land is relatively flat and not higher than 20m O.D
- Seashore is mainly of marsh at the Northern end, which gives way to sand beaches in the south. Coastal erosion is evident.
- Well defined hedgerows with larger fields. Some examples of old county house estates with broadleaf planting.
- Main settlements are Blackrock, Drumiskin, Castlebellingham/Kilsaran, and Annagassan .
- Motorway to the west has reduced the traffic on the old N1
- The area is rich in archaeological features
- Dundalk Bay is a designated Special Protection Area (SPA)
- Isolated housing is very evident

Louth Development Plan 2015-2021 Map 11, App 11 Volume 2B Appendices

'Scenic Routes and Views & Prospects'

A number of specific 'views and prospects' of special amenity value are identified in the Development Plan and listed in Table 1 App 11. These views and prospects are reflective of Louth's unique scenic quality and are notable for their natural scenery and striking landscapes.

Although over 8km from the subject site on the Cooley peninsula  $\,$  - 3No View & Prospects are noted within this figure, namely:-

- VP 9 Glenmore mountains and valley
- VP 8 Barnavave and Carlingford mountain
- VP 10 Jenkinstown Hill towards Dundalk Bay

A number of important scenic routes which require protection are listed in the Development Plan and listed in its table 6.4

Any development that would interfere with or adversely affect these scenic routes will not be permitted.

Although over 8km from the subject site on the Cooley peninsula  $\,$  - 3No Scenic are noted within this figure, namely:-

- SR11 Piedmont Benagh -Spellickanee
- SR 9 Jenkinstown to Piedmont
- SR 7 Jenkinstown (Minor and Hill)

### Landscape Analysis

fig. 5.1

### Haggardstown, Blackrock



## mullin design associates

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### Viewpoint 1a Northerly from the highest elevation within the application area. (Intervisibility Image)

This image was taken in a northerly direction from the application area to illustrate visibility from the site, conversely this illustrates points within the surrounding landscape from which the site may be seen. This is known as intervisibility and forms the basis of a ZVI (the site's Zone of Visual Influence or Visual Envelope). The approximate visual envelope is reflected in Figure 5.3.



Viewpoint 1b Easterly from the highest elevation within the application area. (Intervisibility Image)

This image was taken in an Easterly direction from the application area to illustrate what is visible from the site, conversely this illustrates points within the surrounding landscape from which the site may be seen. This is known as intervisibility and forms the basis of a ZVI (the site's Zone of Visual Influence or Visual Envelope). The approximate visual envelope is reflected in Figure 5.3.

images to illustrate approximate extent of visual envelope (Refer to Figure 5.3 Visual Analysis for ZVI)			notes Lines of Intervisibility
images for illustrative purposes			intervisibility lines (IV) exist where a terrain reature, such as a ridgeline or nill interrupts the line of sight along the ground and prevents observation of the lands beyond.
images for illustrative purposes			both directions. However, although observers positioned at either Point A or B can see Point C they will not be able to see each other.
client Kingsbridge Consultancy Ltd	date Dec. 18	by pjm	a b







### **Visual Catchment**

The visibility assessment concentrates on publicly accessible areas such as roads, access lanes and public rights of way, along with residential properties; and sites of public significance.

When establishing the extent of site visibility and identifying key visual receptors, a high point within the proposed development was visited. The purpose of this is to establish what may be visible from this location and therefore establish from which points in the wider landscape the site may be visible. This is known as intervisibility and forms the basis of the site's visual envelope. (Refer to Figure 5.2 for images)

As a basic visual principal, any type of development in the landscape will become less perceptible with distance. This simply equates to a reduction of the significance of potential visual impacts as one moves further away.

<u>Viewpoint Distance 0-2km</u> Although this is difficult to quantify, it is acceptable to state that a site located approx 2km or less from a viewer is considered close enough to allow identification of significant detail. Any positions in this range with open uninterrupted views of the site would generally receive the greatest visual impacts.

<u>Viewpoint Distance 2-5km</u> The visibility of the site becomes more general, with viewers in open uninterrupted positions able to identify general form, occasionally colour/tone and textural contrast, but losing the more focused detail achievable closer.

#### Viewpoint Distance 5-15km

Visual prominence quickly diminishes. In certain circumstances/light conditions etc have potential to allow certain types of development and material finishes to be perceived. The development increasingly becomes part of the general background/distance views.

#### Viewpoint Distance15km+

Upwards of this distance the development quickly becomes a minor feature within the landscape and considered imperceptible to the average human eye. The development in effect becomes part of the general background/distance views.

### Visual Analysis (Field ZVI)



### Haggardstown, Blackrock



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Viewpoint 2 West from R172 Blackrock Road. Photo viewpoint taken from R172 Blackrock Road. There are limited locations along the R172 where views into the site will be achieved. The most visible would be at the proposed junction of site access road and R172 to the east.

Predicted R	esidual Landso	cape & Visual Effect of Application	from this Viewpoi	int 🛛					Mitigation	
Viewpoint	Duration	Landscape & Visual Sensitivity	Magnitude (Construction Phase	Predicted Effect (Construction Phase)	Magnitude (Post Construction)	Predicted (Post Const	d Effect truction)	Effect Type (Post Construction)	From this viewpoint it will be important to respect & reflect	
2	Phased & Permanent	Medium - Low (Landscape) Medium -Low (Visual)	High High	Moderate - Major Moderate	Medium Medium	Moder Minor	erate	Neutral	stone walls, natural appearance & wetland feel. The access road should not dominate, but integrate with the context.	
client King	sbridge C	Consultancy Ltd		date Dec. 18	scale NTS@A3	3	by	pjm	notes Image represents an eyelevel impression of view at monocular distance of 30cm	





Predicted R	esidual Lands	cape & Visual Effect of Application	from this Viewpoi	nt 🔽		•			Mitigation
Viewpoint	Duration	Landscape & Visual Sensitivity	Magnitude (Construction Phase	Predicted Effect (Construction Phase)	Magnitude (Post Construction)	Predicted (Post Constru	Effect ruction)	Effect Type (Post Construction)	From this viewpoint it will be important to maintain an open
3	Phased & Permanent	Medium - Low(Landscape) High-Medium (Visual)	High High	Moderate - Major Moderate	Medium Medium	Moder Moder	ate ate	Neutral	between Bothar Maol & the centre of the site. Advanced landscape treatment including new trees & hedging.
client King	ısbridge C	Consultancy Ltd		date Dec. 18	scale NTS@A3	3	by 	ojm	notes Image represents an eyelevel impression of view at monocular distance of 30cm



Viewpoint 4 Junction of Bothar Maol. Views southward from Bothar Maol offer relatively restricted visibility of the development area due to topographical level change and existing trees. From this location the nearest proposed residential property would be approximately 45m south, with new intervening landscape treatment established. Proposed pedestrian & vehicular access to Bothar Maol would be established with finishes & furnishings in keeping with context.

Predicted R	esidual Landso	cape & Visual Effect of Application	from this Viewpoi	nt 👘				1	Mitigation
Viewpoint	Duration	Landscape & Visual Sensitivity	Magnitude (Construction Phase)	Predicted Effect (Construction Phase)	Magnitude (Post Construction)	Predicte (Post Cor	ed Effect nstruction)	Effect Type (Post Construction)	From this point it will be important to maintain the character
4	Phased & Permanent	Medium - Low(Landscape) Medium (Visual)	High Low	Moderate - Major Minor	Medium Very Low	Mod Negl	lerate ligible	Neutral	including new semi mature trees & hedging, earthworks and 'Louth Wall' hedgebank maintained & improved.
client King	sbridge C	Consultancy Ltd		date Dec. 18	scale NTS@A	3	by	pjm	notes Image represents an eyelevel impression of view at monocular distance of 30cm







Viewpoint 5 North from Dundalk Golf Clubhouse View North from the car drop off area at the front of Dundalk golf club. The elevated position of the clubhouse offers dramatic panoramic views across Dundalk Bay to the Cooley Peninsula. The site is beyond the maintained hedgeline which bounds the practice range (Centre of image). The land falls away beyond the boundary, however the upper portions of properties proposed along this boundary would be visible

Predicted R	esidual Landso	cape & Visual Effect of Applicatior	n from this Viewpoir	nt				Mitigation
Viewpoint	Duration	Landscape & Visual Sensitivity	Magnitude	Predicted Effect	Magnitude	Predicted Effect	t Effect Type	Existing screen planting along practice range boundary to be
Thempoint	Beranon		(Construction Phase)	(Construction Phase)	(Post Construction) (Post Constru		) (Post Construction)	encouraged to grow taller. This combined with additional
5	Phased & Permanent	Medium - Low(Landscape)	High High	Moderate - Major Moderate	Medium	Moderate Moderate	Neutral	advanced tree planting and phased development means that proposed planting along this boundary could have c.3+
			riigi	Moderate	MedioIII	Moderdie		years growth before construction.
client King	sbridge C	Consultancy Ltd		date Dec. 18	scale NTS@A3	by }	pjm	notes Image represents an eyelevel impression of view at monocular distance of 30cm





vegerunon	scieen nie nie	ajointy of potential views north prop		011.				
Predicted R	esidual Lands	cape & Visual Effect of Applicatior	n from this Viewpoir	nt 🔽				Mitigation
Viewpoint	Duration	Landscape & Visual Sensitivity	Magnitude (Construction Phase)	Predicted Effect (Construction Phase)	Magnitude (Post Construction)	Predicted Effe (Post Construction	ect Effect Type (Post Construction)	Advanced landscape treatment associated with the subject
6	Phased & Permanent	Medium - Low(Landscape) Medium (Visual)	High Low	Moderate - Major Minor	Medium Low	Moderate Minor	Neutral	
client King	sbridge C	Consultancy Ltd		date Dec. 18	scale NTS@A	3 <b>by</b>	pjm	notes Image represents an eyelevel impression of view at monocular distance of 30cm







Viewpoint 7West from Giles Quay.View west from Giles Quay approx 8km from the subject site. From this location the site will be partially visible although distance reduces the potential effect.

Predicted R	esidual Landso	cape & Visual Effect of Application	from this Viewpoi	nt				Mitigation
Viewpoint	Duration	Landscape & Visual Sensitivity	Magnitude (Construction Phase	Predicted Effect ) (Construction Phase)	Magnitude (Post Construction)	Predicted Effect (Post Construction)	Effect Type (Post Construction)	Advanced planting to reinforce sites eastern boundary.
7	Phased & Permanent	Medium - Low(Landscape) High - Medium (Visual)	High Low	Moderate - Major Minor	Medium Very Low	Moderate Negligible	Neutral	the development massing. Careful consideration of proposed building finishes to minimise contrasting tones.
client King	ısbridge C	Consultancy Ltd		date Dec. 18	scale NTS@A	3 <b>by</b>	pjm	notes Image represents an eyelevel impression of view at monocular distance of 30cm







Viewpoint 8 Southwest from R173. View from the R173, Carlingford Road approximately 6.2km from the subject site. From this open section of regional road the proposed development would be partially visible although distance reduces the potential effect.

Predicted R	esidual Landso	cape & Visual Effect of Application	from this Viewpoi	int 🛛					Mitigation	
Viewpoint	Duration	Landscape & Visual Sensitivity	Magnitude (Construction Phase	Predicted Effect (Construction Phase)	Magnitude (Post Construction)	Predicted I (Post Constru	Effect uction)	Effect Type (Post Construction)	Advanced planting to reinforce sites eastern boundary.	
8	Phased & Permanent	Medium - Low(Landscape) Medium - Low (Visual)	High Low	Moderate - Major Minor	Medium Very Low	Moderc Negligik	ate ble	Neutral	the development massing. Careful consideration of proposed building finishes to minimise contrasting tones.	
client King	ısbridge C	Consultancy Ltd		date Dec. 18	scale NTS@A3	3	by 	ojm	notes Image represents an eyelevel impression of view at monocular distance of 30cm	





Viewpoint 8 Southwest minor road within the Cooley peninsular. View from a scenic minor road on the boundary of an area of high scenic quality and and Area of Outstanding Natural Beauty. Whilst the proposed development would be partially visible from this location, its distance of 7.5km reduces potential effects experienced.

			·						
Predicted R	esidual Landso	cape & Visual Effect of Application	n from this Viewpoli	nt I					Mitigation
Viewpoint	Duration	Landscape & Visual Sensitivity	Magnitude (Construction Phase)	Predicted Effect (Construction Phase)	Magnitude (Post Construction)	Predicted Effe (Post Construction	ect on)	Effect Type (Post Construction)	Advanced planting to reinforce sites eastern boundary.
8	Phased & Permanent	Medium - Low(Landscape) High - Medium (Visual)	High Low	Moderate - Major Minor	Medium Very Low	Moderate Negligible		Neutral	the development massing. Careful consideration of proposed building finishes to minimise contrasting tones.
client King	ısbridge C	Consultancy Ltd		date Dec. 18	scale NTS@A	3 <b>by</b>	ķ	ojm	notes Image represents an eyelevel impression of view at monocular distance of 30cm















	0		Grass
<ul> <li>necessary. Where trees are in around the base free of were maintenance machinery. Reprint of the properties of the prune, shape and raise crow Replace damaged or failed specification. A method stere and remove dead, dying or define prune, shape and raise crow Replace damaged or failed specification. A method stere and remove basic-level inspection professional-level inspection professional reduction and reduction and reduction reduction and reduction professional-level inspection professional-level inspection professional-level inspection professional-level inspection professional-level professional-level professional reduction and reductin the automation and reduc</li></ul>	5       Coryllus avellana         10       Pinus sylvestris         5       Prunus avium         5       Viburnum opulus         5       Fagus sylvatica         Schedule 6 - TYPICAL HEDGEROW         %       SPECIES         75       Crataegus monogyna         10       Coryllus avellana         5       Ilex aquifolium         5       Ilex aquifolium         5       Prunus spinosa         5       Frangula alnus         LANDSCAPE MANAGEME         GENERAL NOTES:         Following handover of plant         maintenance period. All gen         listed 'Annual Ongoing Lanc         EXISTING MATURE TREES:         All retained trees to be inspe         accordance with best arbo         execution of remedial work.         AVENUE AND SPECIMEN TREE         Years 1-3 (Establishment)         Inspect on each maintenan         and adjust as required to maintenan         and adjust as required to promote	KEYSPECIESSPStipa 'Pony Tails'GCornus sanguineaPIPhotinia x fraseri' red robin'FPPhotinia x fraseri' red robin'FPPhotinia x fraseri' red robin'FPPennisetumxadvena 'RubruC1Choisya ternataHhHedera helix 'hibernica'VmVinca majorHaHebe albicansHm/VHakonechloa macra AlboauCeCarex elata 'Aurea'Carex elata 'Aurea'HfHeuchera 'Fire Chief'MnWeigela nain rougeCcCaryopteris x clandonensisLaLavandula angustifoliaVmVeigela nain rougeCarponus betulusCarex elata 'Aurea'G1Griselinia littoralisMLugustruim vulgarisMLugustruim vulgarisMLugustruim vulgarisMLonicera periclymenumMPyracantha coccineaNVPcSchedule 5 - WOODLAND / WOODL%SPECIES20Quercus robur20Crataegus monogyna10Ilex aquifolium	PLANT SCHEDULES         Schedule 1 - AVENUE & SPECIMEN         KEY       SPECIES         OR       Quercus robur         ORFF       Quercus robur 'Fastigiata'         ORFF       Cuercus robur 'Fastigiata'         ORFF       Carpinus betulus (Frans Fon         OTCG'       TCG'         ND       APC'         APC'       Acer platanoides 'Crimson K         APC'       Salix alba 'Tristis'         ABP       Betula pendula         ABP       Betula pendula         ABP       Porunus aucuparia         AC       Amelanchier canadensis         AC       Amelanchier canadensis         AC       Amelanchier canadensis         AC       Prus calleryana 'Fastigiata'         PS       Pinus mugo         Schedule 2 - TYPICAL SHRUB/ GR
in grass verge: eds and take place dama provide the place dama provide the place dama provide the place dama planted the place or as instructed planted to the planted in the tumn rain. Pla planted in the planted in the tumn rain. Pla single row of g electrical or converted the planted the planted in the tumn rain. Pla single row of g electrical or cer. Cut Hedge the unaccu	Hazel Scots Pine Cherry Birch Birch Beech Hazel Hazel Hazel Halder Rose Beach Hazel Hazel Hazel Halder Buckthorn Alder Buckthorn Blackthorn Blackthorn Blackthorn Blackthorn Scape Mainten scape Mainten	m' rea Firethorn Alder Holly	COMMON         Oak         Wilt         Apple         Wild         Apple         Wild         Callery         Scots         Dwarf         Dwarf         Dwarf
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all. It is best to

AMENITY GRASS: Schedule 9
The Grass Seed Mixture shall contain the following varieties in the percent
30% Festuca Rubra Ssp Litoris (Slender creeping Red Fescue)
25% Festuca Rubra Commutata (Chewings Fescue)
15% Poa Pratensis (Smooth stalked meadow grass)
10% Agrostis Castellana (Brown Cultivar Highland)
20% Lolium Perenne (Perennial Rye grass) To be one of the followi
Elka, Erno, Majestic, Loretta, Barry, Lorina or Lucretia.

**S OF YEAR FOR PLANTING** uous trees and shrubs: ers and evergreens: ainer grown plants:

are favourable. ntrol is provided.

bulbs, s Seed:

ANNUAL ONGOING LA Amenity grass

Late October to late March. September/ October or April/ May. At any time if ground and weather conditions ar Ensure that adequate watering and weed contro September/ October. Spring -April to May or Late Summer August to

LANDSCAPE MAINTENANCE 12 cuts during growing season /2 fertiliser applications herbicide/ 2 spike aerations. 6 weedings/2 firm ups/ 1 fertiliser/ 1 trim to shape 6 weedings/ 2 firm ups/ 1 fertiliser/ 1 prune if directec

Ν

Hedging Groundcover Planting Staked Trees

6 visits for stakes, ties and firming/ 1 fertiliser/ 1 crown prune (when direc field capacity/ cut stakes down to half height at end of third year or as dir ed 8 vected.

NOTES:

Somm bark mulch over all plant beds
Weed barrier under all proposed hedging areas finished with 50mm of mulch
Refer to Tree Report for all Arboricultural requirements to existing trees
Use Reroot 1000 root barrier (or equivalent) were trees are proposed within 2m of services and 5m of all wall foundations.
Refer to MDA Landscape Specification
Refer to Softworks Planting Drawing 18.130.200
Refer to Boundary Plan & Details 18.130.400
Landscape Proposals to be cross referenced with Architecture and Engineering Drawings

Dwg.18.120.100.1 Fig. 5.18 (LVIA)

Landscape Masterplan Haggardstown, Blackrock

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mullin design associates

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ss some to protect	Re	Sheet 2 - Dwg.18.130.102.1		Image: Segetum       Common Knapweed         cata       Common Knapweed         common Sorrel       Self-Heal         Common Sorrel       Cessed Rest         common Sorrel       Self-Heal         common Sorrel       Cessed Rest         common Kopweed       For Common Rome         common Kopweed       Common Sorrel         common Kopweed       For Common Kopweed         common Kopweed       For Common Kopweed         common Kopweed       Ref Sheet 2 - Dwg.18.130.102.1
Landscape Plan - Detail Plan Sh 1 of 4Dwg.18.130.101.1Haggardstown, Blackrock, DundalkFig. 5.19 (LVIA)Mullin design associates 559 Ormeau Road, Rosetta, Belfast BT7 3JA t. 02890 296843 m. 0044 777 575 2010chartered landscape architects	TIMES OF YEAR FOR PLANTING       Late October to late March.         Confiers and evergreens:       At any time if ground and weather conditions are favourable.         Pride bulbs, corms and tubers:       Ensure that adequate watering and weed control is provided.         Dried bulbs, corms and tubers:       Spring -April to May or Late Summer August toSeptember         Annual Condonid LandsCAPE MAINTENANCE       Spring -April to May or Late Summer August toSeptember         Amenity grass       6 weedings/2 firm ups/1 fertiliser/1 trim to shape         Groundcover       6 weedings/2 firm ups/1 fertiliser/1 trim to shape         Groundcover       6 weedings/2 firm ups/1 fertiliser/1 trim to shape         Baked Trees       6 wisits for stakes, ites and firming/1 fertiliser/1 crown prune (when directed 8 watering to field capacity/ cut stakes down to half height at end of third year or as directed.         NOTES:       - Somm bark mulch over all plant beds         - Weed barrier under all proposed hedging areas finished with 50mm of mulch         - Refer to Softworks Planting Drawing 18.130.200         - Refer to Existing Tree Protection Drawing 18.130.200         - Refer to Existing Tree Proposals to be cross referenced with Architecture and Engineering Drawing s	<ul> <li>Hedge Maintenance</li> <li>The hedge should ideally be planted in the autumn when the soil is warm after the summer and damp from autumn rain. Planted a double or triple row of trees to create width. If space is restricted a single row of plants zig-zagged slightly to allow root space. Do not cut top leader growth until plants has reached 1.1m high. Prune hedge in the autumn when there is no chance of disturbing nesting birds. It is best to prune deciduous varieties in late autumn when they are dormant. Cut back quite hard in the first couple of years so the hedge thickens up at the base.</li> <li>Deciduous species are usually pruned twice annually, first in winter while dormant and as soon as possible to reduce the unaccustomed weight. Woody prunings can attract fungal diseases such as coral spot if they are left to decay where they fall. It is best to clear them up when you finish hedge trimming.</li> <li>AMENITY GRASS: Schedule 9</li> <li>The Grass Seed Mixture shall contain the following varieties in the percentages stated by weight:</li> <li>25% Festua Rubra Sp Litoris (Slender creeping Red Fescue)</li> <li>25% Festua Rubra Sp Litoris (Slender creeping Red Fescue)</li> <li>20% Lolum Perennei (Perennial Rye grass) To be one of the following dwarf cultivars:- Elka, Emo, Majestic, Loretta, Barry, Lorina or Lucretia.</li> </ul>	<ul> <li>Avecution of remedicil work.</li> <li>Avecution of remedicil and interactive development.</li> <li>Carry out pruving to remove and adjust as required to maintain healthy development.</li> <li>Carry out pruving to remove and adjust as required to maintain healthy development.</li> <li>Carry out pruving to remove and adjust as required to maintain a minimum diameter of one metre around the base free of weeds and take every precaution to avoid bark damage by maintain a minimum given and bark of the subject to cable bracing, staking or other mechanical support should be inspection intervals by qualified arbaical which fitm as necessary.</li> <li>Veor 4:10</li> <li>In no. basic-level inspection per annum. (Irrees subject to cable bracing, staking or other mechanical support should be inspectian take every other year many be subject to longer inspection per annum by qualified arbaical which fith a support should be prepared branches every other year further.</li> <li>Nemping/Syning of the base in Appl and August to contail weed growth stakes removed at year 5 or as instructed to the original planting specification. A method statement should be prepared for these operations.</li> <li>Year 1: 0</li> <li>In the basic-level inspection per annum by qualified arboriculturist (in autumn to coincide with fungal truling) to check physiological and biological condition prove and raise crown years 15 and 20</li> <li>Year 2: 1</li> <li>In the basic-level inspection considered thy are cycle)</li> <li>Prune and remove basal growth (3 year cycle)</li> <li>Prune and remove bas</li></ul>	PLAT SCHEDULES         Notes           Series - Arren Ce Series         Notes           Series - Se

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rone to protect				R MIX         Common Knapweed Beat         Stender Creep. Red Fesc. ea         Crested Dogstail Tall Fescue         Common Knapweed Bender Trefoli Ragged Robin Com Poppy Ribwort Plantain Self-Heal Meadow Buttercup Yellow Buttercup Yellow Buttercup Self-Heal Meadow Fescue         Common name Siender Creeping Red F Crested Dogstail Meadow Fescue         Sindle Creeping Red F Crested Dogstail Golden Opf-Grass Tuffed Headow Grass Meadow Fordial Golden Opf-Grass Common Sorrel Needow Sweet Self Heal Red Clover Write Clover Meadow Sweet Self Heal Red Clover Meadow Vetching Autumn Howkbit Dandelion Common Fiecbane
Landscape Plan - Detail Plan Sh 2 of 4Dwg.18.130.102.1Haggardstown, Blackrock, DundalkFig.5.20 (LVIA)S59 Ormeau Road, Rosetta, Belfast BT7 3JA559 Ormeau Road, Rosetta, Belfast BT7 3JA500 Dreau Road, No.44 777 575 20101.02890 296843 m. 0044 777 575 2010	TIMES OF YEAR FOR PLANTING Deciduous trees and shrubs: Container grown plants:       Late October to late March. September/ October or April/ May. At any time if ground and weather conditions are favourable. Ensure that adequate watering and weed control is provided.         Dried bulbs, corms and tubers: Grass Seed:       September/ October. Spring -April to May or Late Summer August toSeptember         Annenity grass       12 cuts during growing season /2 fertiliser applications/2 edgings with iron/ selective herbicide/2 spike aerations.         Hedging Groundcover       6 weedings/2 firm ups/1 fertiliser/1 trum to shape Groundcover         6 weedings/2 firm ups/1 fertiliser/1 prune if directed Planting       6 visits for stakes, ties and firming/1 fertiliser/1 crown prune (when directed 8 watering tt field capacity/ cut stakes down to half height at end of third year or as directed.         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All general maintenance will be undertaken according to the listed 'annual Orgoing Landscape Maintenance'</li> <li><b>EXISTING MATURE TREES:</b></li> <li><b>All</b> retained trees to be inspected annually for defects or disease and managed in accordance with best arboricultural practices current at the time of assessment and execution of remedial work.</li> <li><b>AVENUE AND SPECIMEN TREES:</b> (All staked trees):</li> <li><b>Years 1-3 (Establishment)</b></li> <li>Inspect on each maintenance visit to ensure that stakes, ties etc are in good condition and adjust as required to maintain healthy development. Carry out pruving to remove minor damage, to promote a shapely well-balanced head and wind-firm as necessary. Where trees are in grass verges maintain to avoid bark damage by maintenance machinery. Replace admaged or failed trees in accordance with the original planting specification.</li> <li><b>Year 4-10</b></li> <li>I no. basic-level inspection per annum, (Trees subject to cable bracing, staking or other mechanical support should be inspection intervals by qualified arboriculturist (in spring to identify fold risues) to check physiological and biological condition.</li> <li><b>Year 1-20</b></li> <li>I no. basic-level inspection per annum to a barbe exery other year Prune, shape and raise arown years 5 and 10</li> <li>Replace damaged of railed trees in accordance.</li> <li><b>Year 11-20</b></li> <li>I no. basic-level inspection per annum by qualified arboriculturist (in autumn to basic-level inspections and arboricultural works as necessary arising from basic-level inspections and arboricultural works as necessary arising from page.</li> <li>I no. basic-level inspections and arboricultural works as necessary arising from basic-level inspections and arboricultural works as necessary arising from page.</li> <li>I no. basic-level inspections and arboricultural works as necessary arising from basic-level inspections</li></ul>	

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<b>mullin design associates</b> 559 Ormeau Road, Rosetta, Belfast BT7 3JA t. 02890 296843 m. 0044 777 575 2010	Landscape Plan - Detail Plan Sh 3 of 4Dwg.18.130.103.1Haggardstown, Blackrock, DundalkFig.5.21 (LVIA)	<ul> <li>NOTES:</li> <li>Somm bark mulch over all plant beds</li> <li>Weed barrier under all proposed hedging areas finished with 50mm of mulch</li> <li>Refer to Tree Report for all Arboricultural requirements to existing trees</li> <li>Use Reroot 1000 root barrier (or equivalent) were trees are proposed within 2m of services and 5m of all wall foundations.</li> <li>Refer to MDA Landscape Specification</li> <li>Refer to Softworks Planting Drawing 18.130.200</li> <li>Refer to Boundary Plan &amp; Details 18.130.400</li> <li>Landscape Proposals to be cross referenced with Architecture and Engineering Drawings</li> </ul>	herbicide/ 2 spike aerations. 6 weedings/2 firm ups/ 1 fertiliser/ 1 trim to shape 6 weedings/ 2 firm ups/ 1 fertiliser/ 1 prune if directed Planting 6 visits for stakes, ties and firming/ 1 fertiliser/ 1 crown prune (when directed 8 watering tc field capacity/ cut stakes down to half height at end of third year or as directed.	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Grass Seed:       Spring -April to May or Late Summer August toSeptember         AnnuAL ONGOING LANDSCAPE MAINTENANCE       12 cuts during growing season /2 fertiliser applications/ 2 edgings with iron/ selective	<ul> <li>30% Festuca Rubra Ssp Litoris (Slender creeping Red Fescue)</li> <li>25% Festuca Rubra Commutata (Chewings Fescue)</li> <li>15% Poa Pratensis (Smooth stalked meadow grass)</li> <li>10% Agrostis Castellana (Brown Cultivar Highland)</li> <li>20% Lolium Perenne (Perennial Rye grass) To be one of the following dwarf cultivars:- Elka, Erno, Majestic, Loretta, Barry, Lorina or Lucretia.</li> </ul> TIMES OF YEAR FOR PLANTING Deciduous trees and shrubs: Late October to late March.	as soon as possible to reduce the unaccustomed weight, woody prunings can annaci fungal diseases such as coral spot if they are left to decay where they fall. It is best to clear them up when you finish hedge trimming. AMENITY GRASS: Schedule 9 The Grass Seed Mixture shall contain the following varieties in the percentages stated by weight :-	best to prune deciduous varieties in late autumn when they are dormant. Cut back quite hard in the first couple of years so the hedge thickens up at the base. Deciduous species are usually pruned twice annually, first in winter while dormant and again in mid-summer. If using electrical or fuel powered shears, exercise all precautions as instructed by manufacturer. Cut Hedge in an A profile (Tapered sides) Heavy snowfall lying on top of a hedge can cause serious damage. Ensure snow is removed as soon as possible to reduce the unaccustomed weight Woody prunings can attract	<b>Hedge Maintenance</b> The hedge should ideally be planted in the autumn when the soil is warm after the summer and damp from autumn rain. Planted a double or triple row of trees to create width. If space is restricted a single row of plants zig-zagged slightly to allow root space. Do not cut top leader growth until plants has reached 1.1m high. Prune hedge in the autumn when there is no chance of disturbing nesting birds. It is	Prune and remove basal growth (3 year cycle) Pollard and crown reduction considered at year 21 would be carried out to maintain attractive form, regular and compact crown architecture, prevent the development of heavy branches and reduce the overall requirement of the trees' rooting systems. This operation would be repeated as necessary to prevent crown interference in adjacent trees, typically every 10 years. 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AVENUE AND SPECIMEN TREES: (All staked trees ): Years 1-3 (Establishment) Inspect on each maintenance visit to ensure that stakes, ties etc are in good condition	<b>GENERAL NOTES:</b> Following handover of planting works at the end of the agreed establishment maintenance period. All general maintenance will be undertaken according to the listed 'Annual Ongoing Landscape Maintenance' <b>EXISTING MATURE TREES:</b> All retained trees to be inspected annually for defects or disease and managed in	75       Crataegus monogyna       Hawthorn       40-60cm       CG       1 + 1 Branched         10       Coryllus avellana       Hazel       40-60cm       CG       1 + 1 Branched         5       Ilex aquifolium       Holly       40-60cm       CG       1 + 1 Branched         5       Prunus spinosa       Blackthorn       40-60cm       CG       1 + 1 Branched         5       Frangula alnus       Alder Buckthorn       40-60cm       CG       1 + 1 Branched         Alder Buckthorn       40-60cm       CG       1 + 1 Branched       1 + 1 Branched	10       Betula Pendula       Birch       40-60cm       CG       1 + 1 Branched         5       Viburnum opulus       Guelder- Rose       40-60cm       CG       1 + 1 Branched         5       Fagus sylvatica       Beech       40-60cm       CG       1 + 1 Branched         %       SPECIES       COMMON       SIZE       SIZE       GROW       HEIGHT/TRAN	20Quercus roburOak40-60cmCG1 + 1 Branched20Crataegus monogynaHawthorn40-60cmCG1 + 1 Branched10Alnus glutinosaAlder40-60cmCG1 + 1 Branched10Ilex aquifoliumHolly40-60cmCG1 + 1 Branched5Coryllus avellanaHazel40-60cmCG1 + 1 Branched10Pinus sylvestrisScots Pine40-60cmCG1 + 1 Branched5Prunus aviumCherry40-60cmCG1 + 1 Branched	Ave 3 No. Plants Per Lin M       KEY SPECIES     SIZE (girth)     NO.m2     HABIT       vvv     Pr     Lonicera periclymenum     Hydrangea     PG 3L     3/m2     Branched (3)       vvv     Pr     Lonicera periclymenum     Honeysuckle     PG 3L     3/m2     Branched (3)       vvv     Pr     Pyracantha coccinea     Firethorn     PG 3L     3/m2     Branched (3)       vvv     Pr     Pyracantha coccinea     Firethorn     PG 3L     3/m2     Branched (3)       vvv     Pr     Pyracantha coccinea     Firethorn     PG 3L     3/m2     Branched (3)       vvv     Pr     Pyracantha coccinea     Firethorn     PG 3L     3/m2     Branched (3)       vvv     Pr     Pyracantha coccinea     Firethorn     PG 3L     3/m2     Branched (3)       vvv     Pr     Pyracantha coccinea     Firethorn     PG 3L     3/m2     Branched (3)       vvv     Pr     Processor     Common     SIZE     GROW/HEIGHT/TRAN	SPECIES       COMMON       SIZE       GROW       HABIT         ce       Carpinus betulus       Hornbeam       60-90cm       BR       Feathered         cv       Lv       Lugustruim vulgaris       Privet       60-90cm       BR       Feathered         rb       Taxus baccata       Yew       60-90cm       BR       Feathered         r       Er       Escallonia rubra' Crimson'       Escallonia       60-90cm       BR       Feathered	Infinite       Construction       FOR SL       FUIL       Distriction (S)         Ce       Carex elata 'Aurea'       PG 3L       PG 3L       6/m2       Bushy         Hr       Heuchera 'Fire Chief'       PG 3L       5/m2       Branched (3)         Vn       Weigela nain rouge       PG 3L       4/m2       Bushy (3)         Ce       Caryopteris x clandonensis       PG 3L       5/m2       Bushy (3)         La       Lavandula angustifolia       PG 3L       4/m2       Bushy (3)         Cistus 'Silver Pink'       PG 3L       4/m2       Bushy	cs       Cornus sanguinea       PG 3L       3/m2       Branched (3)         Pf       Photinia x fraseri' red robin'       PG 3L       3/m2       Branched (3)         Ep       Echinacea purpurea       PG 3L       3/m2       Branched (3)         Pa       Pennisetumxadvena 'Rubrum'       PG 3L       3/m2       Branched (3)         ct       Choisya ternata       PG 5L       3/m2       Branched (3)         Hh       Hedera helix 'hibernica'       PG 5L       3/m2       Bushy         Vm       Vinca major       PG 3L       6/m2       Sev Shoots         Ha       Hebe albicans       PG 3L       6/m2       Bushy         Ha       Hebe albicans       PG 3L       6/m2       Bushy	Ministry       France       Wind Cherry       Franched         Ministry       Ministry       Franched       BR       Branched         Ministry       PP       Pinus sylvestris       Shadbush       10-12cm       BR       Clear Stem         Ministry       PP       Pinus sylvestris       Callery Pear       16-18cm       BR       Clear Stem         Ministry       PM       Pinus mugo       Dwarf Pine       6-8cm       BR       Clear Stem         Schedule 2 - TYPICAL SHRUB/ GROUNDCOVER       Species       Dwarf Pine       6-8cm       BR       Clear Stem         Species       Species       Species       Difference       Species       Species       No.m2       HABIT	O Troid Tilia cordata Greenspire'       Lime       16-18cm       BR       Clear Stem         O APro Acer platanoides Crimson K       Norway Maple       16-18cm       BR       Clear Stem         O SAT Salix alba Tristis'       White Willow       16-18cm       BR       Clear Stem         O AG Alnus glutinous       Alder       16-18cm       BR       Clear Stem         O BP Betula pendula       Birch       16-18cm       BR       Clear Stem         SA Sorbus aucuparia       Mountain Ash       16-18cm       BR       Clear Stem         MD Malus domestica       Apple       12-14cm       BR       Clear Stem	Avenue 1 - Avenue & Specimen Trees       As Shown         Key       Species       Common       SiZe (girth)       GROW       HABIT         Or       Or       Quercus robur       Oak       18-20cm       BR       Clear Stem         Or       Orr       Quercus robur 'Fastigiata'       Oak - Columner       18-20cm       BR       Clear Stem         Orr       Currinus betulus (Frans Font)       Hornbeam       18-20cm       BR       Clear Stem

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Landscape Plan - Detail Plan Sh 4 of 4 Haggardstown, Blackrock, Dundalk

Plan Sh 4 of 4Dwg.18.130.104.1ck, DundalkFig 5.22 (LVIA)style="text-align: center;">S59 Ormeau Road, Rosetta, Belfast BT7 3JAt. 02890 296843 m. 0044 777 575 2010

	See Inset			Concelion Fleabane	iosa Tuffed Hair-Grass Small Leaved Timothy Rough Stalk Meadow Grass Meadow Foxtail Golden Oat-Grass Common Knapweed Lady's Bedstraw Oxeye Daisy Ribwort Plantain Meadow Buttercup Creeping Buttercup Common Sorrel Yarrow Agrimopy Creeping Bent Creeping Bent Creeping Bent Self Heal Meadow Sweet Meadow Vetchling	<b>1 Wet Meadow</b> s - Open woodland - River and Lake banks - to encourage insects and support birds. to encourage insects and support birds. Slender Creeping Red F Crested Dogstall Meadow Fescue Yorkshire Fog	WER MIX       Common Crested Dogstail Slender Creep.Red Fesc. Tall Fescue         a       Crested Dogstail Slender Creep.Red Fesc. Tall Fescue         a       Common Knapweed Corn Marigold Catqs Ear Ox-eye Daisy Marsh Trefoil Ragged Robin Self-Heal         vuliata       Self-Heal Red Common Sorrel Red Campion Devilqs Bit Scabious Tufted Vetch
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Spring -April to May or Late Summer August toSeptemberAnnuAL ONGOING LANDSCAPE MAINTENANCE Amenity grass Groundcover Planting Staked Trees12 cuts during growing season /2 fertiliser applications/ 2 edgings with iron/ selective 6 weedings/2 firm ups/ 1 fertiliser/ 1 trim to shape 6 weedings/2 firm ups/ 1 fertiliser/ 1 prune if directed 6 wisits for stakes, ties and firming/ 1 fertiliser/ 1 crown prune (when directed 8 watering field capacity/ cut stakes down to half height at end of third year or as directed.	<ul> <li>width. It space is restricted a single row of plants zig-zagged slightly to allow root space. Do not cut top leader growth until plants has reached 1. Im high.</li> <li>Prune hedge in the autumn when there is no chance of disturbing nesting birds. It is best to prune deciduous varieties in late autumn when they are dormant. Cut back quite hard in the first couple of years so the hedge thickens up at the base. 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This operation would be repeated as necessary to prevent crown interference in adjacent trees, typically every 10 years. A method statement should be prepared.for these operations</li> <li>Hedge Maintenance</li> <li>The hedge should ideally be planted in the autumn when the soil is warm after the summer and damp from autumn rain. Planted a double or triple row of trees to create</li> </ul>	<ul> <li>execution of remedial work.</li> <li>AVENUE AND SPECIMEN TREES: (All staked trees):</li> <li>Years 1-3 (Establishment)</li> <li>Inspect on each maintenance visit to ensure that stakes, ties etc are in good condition and adjust as required to maintain healthy development. Carry out pruning to remove minor damage, to promote a shapely well-balanced head and wind-firm as necessary. Where trees are in grass verges maintain a minimum diameter of one metre around the base free of weeds and take every precaution to avoid bark damage by maintenance machinery. Replace damaged or failed trees in accordance with the original planting specification.</li> <li>Year 4-10</li> <li>I no. basic-level inspection per annum. (Trees subject to cable bracing, staking or other mechanical support should be inspected twice each year). Trees in lower-risk areas may be subject to longer inspection intervals by qualified arboriculturist (in spring to identify foliar issues) to check physiological and biological condition.</li> <li>Strimming/spraying of tree base in April and August to control weed growth Stakes removed at year 5 or as instructed</li> <li>Remove dead, dying or deformed branches every other year Prune, shape and raise crown years 5 and 10</li> <li>Replace damaged or failed trees in accordance with the original planting specification. A method statement should be prepared for these operations.</li> </ul>	10       Berula       Perula       Birch       40-60cm       CG       1 + 1 Branched         5       Fagus sylvatica       Beech       40-60cm       CG       1 + 1 Branched         %       SPECIES       COMMON       SIZE       GROW HEIGHT/TRAN         %       SPECIES       COMMON       SIZE       GROW HEIGHT/TRAN         %       SPECIES       COMMON       SIZE       GROW HEIGHT/TRAN         %       SPECIES       GROW HAWtom       40-60cm       CG       1 + 1 Branched         5       Frangula avellana       Hazel       40-60cm       CG       1 + 1 Branched         5       Frangula alnus       Alder Buckhorn       40-60cm       CG       1 + 1 Branched         5       Frangula alnus       Alder Buckhorn       40-60cm       CG       1 + 1 Branched         Following handover of planting works at the end of the agreed establishment       maintenance period. All general maintenance will be undertaken according to the         Isted 'Annual Ongoing Landscape Maintenance will be undertaken according to the       the         Isted 'Annual Ongoing Landscape Maintenance istablishment       accordance with best arboricultural practices current at the time of assessment and	PG 3L         SECEIS         Feathered           in         Taxus baccata         Privet         Feathered         Feathered         Feathered           in         Taxus baccata         Privet         Second         BR         Feathered           in         Unus splutingea         Privet         Second         BR         Feathered           in         Printus splutingea         Pritethorn         NO.m         Seco	PLANT SCHUEN       Streture 1 - AVENUE & SPECIMEN TREES     As The Specime Specim Specim Specime Specime Specime Specime Specime Specime Specime S

![](_page_313_Figure_0.jpeg)

![](_page_313_Picture_3.jpeg)

![](_page_313_Figure_4.jpeg)

![](_page_313_Figure_6.jpeg)

![](_page_314_Figure_0.jpeg)

![](_page_314_Figure_1.jpeg)

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Apr

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<sup>notes</sup> For Planning

and found	compleme	0.9 - 1.2m	Bothai	Betwe	BOUN
ations to be approved by project engineer.	int adjacent housing. Capping to be selected stone finish. Pier cei	high blockwork wall with selected render & or stone finish to	Maol & Mill End Character Areas	en individual properties - (Front gardens)	DARY TYPE C

![](_page_314_Figure_4.jpeg)

HA	
	 <i>}</i>

![](_page_314_Figure_6.jpeg)

![](_page_314_Figure_7.jpeg)

![](_page_314_Figure_8.jpeg)

![](_page_314_Figure_9.jpeg)

![](_page_314_Figure_10.jpeg)

![](_page_314_Figure_11.jpeg)

![](_page_314_Figure_12.jpeg)

![](_page_314_Figure_13.jpeg)

# Residential Development at Blackrock Dundalk, Co. Louth

## Introduction

Digital dimensions was established in 2000 and specialise in the area of Architectural Visualisation and presentation.

## Method Statement - Photo-montage production.

1. Photographs are taken from locations as advised by client with a full frame SLR digital camera and prime lens. The photographs are taken horizontally with a survey level attached to the camera. The photographic positions are marked (for later surveying), the height of the camera and the focal length of the image recorded.

2. In each photograph, a minimum of 3no. visible fixed points are marked for surveying. These are control points for model alignment within the photograph. All surveying is carried out by a qualified topographical surveyor using Total Station / GPS devices.

3. The photographic positions and the control points are geographically surveyed and this survey is tied in to the site topographical survey supplied by the Architect / client.

4. The buildings are accurately modelled in 3D cad software from cad drawings supplied by the Architect. Material finishes are applied to the 3D model and scene element are place like trees and planting to represent the proposed landscaping.

5. Virtual 3D cameras are positioned according to the survey co-ordinates and the focal length is set to match the photograph. Pitch and rotation are adjusted using the survey control points to align the virtual camera to the photograph. Lighting is set to match the time of day the photograph is taken.

6. The proposed development is output from the 3D software using this camera and the image is then blended with the original photograph to give an accurate image of what the proposed development will look like in its proposed setting.

7. In the event of the development not being visible, the roof line of the development will be outlined in red if re-quested.

8. The document contains:

- Site location map with view locations plotted. a)
- b) Photo-montage sheet with existing or proposed conditions.
- C) Reference information including field of view/focal length, range to site / development, Date of photograph.

John Healy

Close views location map

Dip Arch Tech, MSc Environmental Design of Buildings, PG Dip Digital Media

![](_page_315_Picture_20.jpeg)

![](_page_315_Picture_21.jpeg)

![](_page_316_Picture_0.jpeg)

Long views location map

![](_page_316_Picture_4.jpeg)

architectural visualisation

![](_page_317_Picture_0.jpeg)

reference information					
location	View 1 Existing				
date	24-04-2019				
field of view	72°				
35mm equivalent	24mm				
distance to site	222m				

![](_page_317_Picture_4.jpeg)

![](_page_318_Picture_0.jpeg)

reference information				
location	View 1 Proposed			
date	24-04-2019			
field of view	72°			
35mm equivalent	24mm			
distance to site	222m			

![](_page_318_Picture_4.jpeg)

![](_page_319_Picture_0.jpeg)

reference information					
location	View 2 Existing				
date	10-04-2019				
field of view	54°				
35mm equivalent	35mm				
distance to site	5m				

![](_page_319_Picture_4.jpeg)

![](_page_320_Picture_0.jpeg)

reference information				
location	View 2 Proposed			
date	10-04-2019			
field of view	54°			
35mm equivalent	35mm			
distance to site	5m			

![](_page_320_Picture_4.jpeg)

![](_page_321_Picture_0.jpeg)

reference information				
location	View 3 Existing			
date	10-04-2019			
field of view	43°			
35mm equivalent	45mm			
distance to site	9m			

![](_page_321_Picture_4.jpeg)

![](_page_322_Picture_0.jpeg)

reference information				
location	View 3 Proposed			
date	10-04-2019			
field of view	43°			
35mm equivalent	45mm			
distance to site	9m			

![](_page_322_Picture_4.jpeg)

![](_page_323_Picture_0.jpeg)

reference information	
location	View 4 Existing
date	24-04-2019
field of view	72°
35mm equivalent	24mm
distance to site	5m

![](_page_323_Picture_4.jpeg)


reference information	
location	View 4 Proposed
date	10-04-2019
field of view	72°
35mm equivalent	24mm
distance to site	5m





reference information	
location	View 5 Existing
date	10-04-2019
field of view	28°
35mm equivalent	70mm
distance to site	8226m





reference information	
location	View 5 Proposed
date	10-04-2019
field of view	28°
35mm equivalent	70mm
distance to site	8226m





reterence information	
location	View 6 Existing
date	10-04-2019
field of view	28°
35mm equivalent	70mm
distance to site	7568m





reterence information	
location	View 6 Proposed
date	10-04-2019
field of view	28°
35mm equivalent	70mm
distance to site	7568m





## Appendix E. Air Quality

- E.1. Relevant Standards, Guidelines and Legislation
- E.2. Model Parameters
- E.3. Dust Minimisation Plan

## **APPENDIX E.1**

National standards for ambient air pollutants in Ireland have generally ensued from Council Directives enacted in the EU (& previously the EC & EEC). The initial interest in ambient air pollution legislation in the EU dates from the early 1980s and was in response to the most serious pollutant problems at that time. In response to the problem of acid rain, sulphur dioxide, and later nitrogen dioxide, were both the focus of EU legislation. Linked to the acid rain problem was urban smog associated with fuel burning for space heating purposes. Also apparent at this time were the problems caused by leaded petrol and EU legislation was introduced to deal with this problem in the early 1980s.

In recent years the EU has focused on defining a basis strategy across the EU in relation to ambient air quality. In 1996, a Framework Directive, Council Directive 96/62/EC, on ambient air quality assessment and management was enacted. The aims of the Directive are fourfold. Firstly, the Directive's aim is to establish objectives for ambient air quality designed to avoid harmful effects to health. Secondly, the Directive aims to assess ambient air quality on the basis of common methods and criteria throughout the EU. Additionally, it is aimed to make information on air quality available to the public via alert thresholds and fourthly, it aims to maintain air quality where it is good and improve it in other cases.

As part of these measures to improve air quality, the European Commission has adopted proposals for daughter legislation under Directive 96/62/EC. The first of these directives to be enacted, Council Directive 1999/30/EC, was passed into Irish Law as S.I. No 271 of 2002 (Air Quality Standards Regulations 2002), and has set limit values which came into operation on 17<sup>th</sup> June 2002. The Air Quality Standards Regulations 2002 detail margins of tolerance, which are trigger levels for certain types of action in the period leading to the attainment date. The margin of tolerance varies from 60% for lead, to 30% for 24-hour limit value for PM<sub>10</sub>, 40% for the hourly and annual limit value for NO<sub>2</sub> and 26% for hourly SO<sub>2</sub> limit values. The margin of tolerance commenced from June 2002, and started to reduce from 1 January 2003 and does so every 12 months by equal annual percentages to reach 0% by the attainment date. A second daughter directive, EU Council Directive 2000/69/EC, details limit values for both carbon monoxide and benzene in ambient air. This has also been passed into Irish Law under the Air Quality Standards Regulations 2002.

The most recent EU Council Directive on ambient air quality was published on the 11/06/08. Council Directive 2008/50/EC combines the previous Air Quality Framework Directive and its subsequent daughter directives. This has also been passed into Irish Law under the Air Quality Standards Regulations 2011 (S.I. 180 of 2011). Provisions were also made for the inclusion of new ambient limit values relating to PM<sub>2.5</sub>. In regards to existing ambient air quality standards, it is not proposed to modify the standards but to strengthen existing provisions to ensure that non-compliances are removed. In addition, new ambient standards for PM<sub>2.5</sub> are included in Directive 2008/50/EC. The approach for PM<sub>2.5</sub> is to establish a target value of 25  $\mu$ g/m<sup>3</sup>, as an annual average (to be attained everywhere by 2010) and a limit value of 25  $\mu$ g/m<sup>3</sup>, as an annual average (to be attained everywhere by 2018), coupled with a target to reduce human exposure generally to PM<sub>2.5</sub> between 2010 and 2020. This exposure reduction target will range from 0% (for PM<sub>2.5</sub> concentrations of less than 8.5  $\mu$ g/m<sup>3</sup> to 20% of the average exposure indicator (AEI) for concentrations of between 18 - 22  $\mu$ g/m<sup>3</sup>. Where the AEI is currently greater than 22  $\mu$ g/m<sup>3</sup> all appropriate measures should be employed to reduce this level to 18  $\mu$ g/m<sup>3</sup> by 2020. The AEI is based on measurements taken in urban background locations averaged over a three year period from 2008-2010 and again from 2018-2020.

Although the EU Air Quality Limit Values are the basis of legislation, other thresholds outlined by the EU Directives are used which are triggers for particular actions. The Alert Threshold is defined in Council Directive 2008/50/EC as "a level beyond which there is a risk to human health from brief exposure and at which immediate steps shall be taken as laid down in Directive 2008/50/EC". These steps include undertaking to ensure that the necessary steps are taken to inform the public (e.g. by means of radio, television and the press).

The Margin of Tolerance is defined in Council Directive 2008/50/EC as a concentration which is higher than the limit value when legislation comes into force. It decreases to meet the limit value by the attainment date.

The Upper Assessment Threshold is defined in Council Directive 2008/50/EC as a concentration above which high quality measurement is mandatory. Data from measurement may be supplemented by information from other sources, including air quality modelling.

An annual average limit for both NO<sub>x</sub> (NO and NO<sub>2</sub>) is applicable for the protection of vegetation in highly rural areas away from major sources of NO<sub>x</sub> such as large conurbations, factories and high road vehicle activity such as a dual carriageway or motorway. Annex III of EU Directive 2008/50/EC identifies that monitoring to demonstrate compliance with the NO<sub>x</sub> limit for the protection of vegetation should be carried out distances greater than:

- 5 km from the nearest motorway or dual carriageway
- 5 km from the nearest major industrial installation
- 20 km from a major urban conurbation

As a guideline, a monitoring station should be indicative of approximately 1000 km<sup>2</sup> of surrounding area.

Under the terms of EU Framework Directive on Ambient Air Quality (96/62/EC), geographical areas within member states have been classified in terms of zones. The zones have been defined in order to meet the criteria for air quality monitoring, assessment and management as described in the Framework Directive and Daughter Directives. Zone A is defined as Dublin and its environs, Zone B is defined as Cork City, Zone C is defined as 23 urban areas with a population greater than 15,000 and Zone D is defined as the remainder of the country. The Zones were defined based on among other things, population and existing ambient air quality.

EU Council Directive 96/62/EC on ambient air quality and assessment has been adopted into Irish Legislation (S.I. No. 33 of 1999). The act has designated the Environmental Protection Agency (EPA) as the competent authority responsible for the implementation of the Directive and for assessing ambient air quality in the State. Other commonly referenced ambient air quality standards include the World Health Organisation. The WHO guidelines differ from air quality standards in that they are primarily set to protect public health from the effects of air pollution. Air quality standards, however, are air quality guidelines recommended by governments, for which additional factors, such as socio-economic factors, may be considered.

## **APPENDIX E.2**

The inputs to the Design Manual for Roads and Bridges model consist of information on road layouts, receptor locations, annual average daily traffic movements, annual average traffic speeds and background concentrations. Using this input data the model predicts ambient ground level concentrations at the worst-case sensitive receptor using generic meteorological data.

The Design Manual for Roads and Bridges underwent an extensive validation exercise as part of the UK's Review and Assessment Process to designate areas as Air Quality Management Areas (AQMAs). The validation exercise was carried out at 12 monitoring sites within the UK Department for Environment, Food and Rural Affairs national air quality monitoring network. The validation exercise was carried out for NO<sub>x</sub>, NO<sub>2</sub> and PM<sub>10</sub>, and included urban background and kerbside/roadside locations, "open" and "confined" settings and a variety of geographical locations.

In relation to NO<sub>2</sub>, the model generally over-predicts concentrations, with a greater degree of over-prediction at "open" site locations. The performance of the model with respect to NO<sub>2</sub> mirrors that of NO<sub>x</sub> showing that the over-prediction is due to NO<sub>x</sub> calculations rather than the NO<sub>x</sub>:NO<sub>2</sub> conversion. Within most urban situations, the model overestimates annual mean NO<sub>2</sub> concentrations by between 0 to 40% at confined locations and by 20 to 60% at open locations. The performance is considered comparable with that of sophisticated dispersion models when applied to situations where specific local validation corrections have not been carried out.

The model also tends to over-predict  $PM_{10}$ . Within most urban situations, the model will over-estimate annual mean  $PM_{10}$  concentrations by between 20 to 40%. The performance is comparable to more sophisticated models, which, if not validated locally, can be expected to predict concentrations within the range of  $\pm$ 50%.

Thus, the validation exercise has confirmed that the model is a useful screening tool for the Second Stage Review and Assessment, for which a conservative approach is applicable.

## **APPENDIX E.3**

A dust minimisation plan will be formulated for the construction phase of the project, as construction activities are likely to generate some dust emissions. The potential for dust to be emitted depends on the type of construction activity being carried out in conjunction with environmental factors including levels of rainfall, wind speeds and wind direction. The potential for impact from dust depends on the distance to potentially sensitive locations and whether the wind can carry the dust to these locations. The majority of any dust produced will be deposited close to the potential source and any impacts from dust deposition will typically be within two hundred metres of the construction area.

In order to ensure mitigation of the effects of dust nuisance, a series of measures will be implemented. Site roads shall be regularly cleaned and maintained as appropriate, dry sweeping of large areas should be avoided. Hard surface roads shall be swept to remove mud and aggregate materials from their surface while any un-surfaced roads shall be restricted to essential site traffic only. Furthermore, any road that has the potential to give rise to fugitive dust must be regularly watered, as appropriate, during dry and/or windy conditions.

Vehicles using site roads shall have their speeds restricted where there is a potential for dust generation. Vehicles delivering material with dust potential to an off-site location shall be enclosed or covered with tarpaulin at all times to restrict the escape of dust. Access gates to be located at least 10m from receptors where possible.

Public roads outside the site shall be regularly inspected for cleanliness, and cleaned as necessary. Before entrance onto public roads, trucks will be adequately inspected to ensure no potential for dust emissions. Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable. Record should be kept of all inspections of the haul routes and any subsequent action in a site log book.

Material handling systems and site stockpiling of materials shall be designed and laid out to minimise exposure to wind. Sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place. Water misting or sprays shall be used as required if particularly dusty activities are necessary during dry or windy periods, activities such as scabbling should be avoided. Bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.

At all times, the procedures put in place will be strictly monitored and assessed by the contractor. In the event of dust nuisance occurring outside the site boundary, satisfactory procedures will be implemented to rectify the problem. Dust monitoring should be put in place to ensure dust mitigation measures are controlling emissions. Dust monitoring should be conducted using the Bergerhoff method in accordance with the requirements of the German Standard VDI 2119. The Bergerhoff Gauge consists of a collecting vessel and a stand with a protecting gauge. The collecting vessel is secured to the stand with the opening of the collecting vessel located approximately 2m above ground level. The TA Luft limit value is 350 mg/(m<sup>2\*</sup>day) during the monitoring period between 28-32 days.

The Dust Minimisation Plan shall be reviewed at regular intervals during the construction phase to ensure the effectiveness of the procedures in place and to maintain the goal of minimisation of dust through the use of best practice and procedures. The name and contact details of a person to contact regarding air quality and dust issues should be displayed on the site boundary, this notice board should also include head/regional office contact details. Community engagement before works commence on site should be put in place, including a communications plan. All dust and air quality complaints should be recorded and causes identified, along with the measures taken to reduce emissions. This complaints log should be available for viewing by the local authority, if requested. Daily on and off site inspections should occur for nuisance dust and compliance with the dust management plan. This should include regular dust soiling checks of surfaces such

as street furniture, windows, and cars within 100m of the site boundary. Cleaning should be provided if necessary.