ALTEMAR

Marine & Environmental Consultancy

Appropriate Assessment Screening for the proposed Strategic Housing Development at Lands South of Stocking Ave., Stocking Avenue, Woodstown, Dublin 16.

12th May 2021

Prepared by: Bryan Deegan (MCIEEM) of Altemar Ltd.
On behalf of: Ardstone Homes Limited.

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Introduction

The following Appropriate Assessment (AA) (Screening Stage) has been prepared by **Altemar Ltd.** at the request of Ardstone Homes Limited. The project relates to a proposed Strategic Housing Development at a site of 2.2 Ha, at Lands South of Stocking Ave., Stocking Avenue, Woodstown, Dublin 16. The proposed development is detailed in the Stage I assessment of the AA Screening.

An Appropriate Assessment is an assessment of the potential effects of a proposed project or plan, on its own, or in combination with other plans or projects, on one or more NATURA 2000 sites. Natura 2000 sites are those sites designated as Special Areas of Conservation (SAC) or Special Protection Areas (SPA).

The AA (screening stage) examines the likely significant effects of a plan or project, either on its own, or in combination with other plans and projects, upon a Natura 2000 site and considers whether, on the basis of objective scientific evidence, it can be concluded that there are not likely to be significant effects on any European site, in view of best scientific knowledge and the conservation objectives of the relevant European sites.

Altemar Ltd.

Since its inception in 2001, Altemar has been delivering ecological and environmental services to a broad range of clients. Operational areas include: residential; infrastructural; renewable; oil & gas; private industry; Local Authorities; EC projects; and, State/semi-State Departments. Bryan Deegan, the managing director of Altemar, is an Environmental Scientist and Marine Biologist with 26 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. He is currently contracted to Inland Fisheries Ireland as the sole "External Expert" to environmentally assess internal and external projects. He is also chair of an internal IFI working group on environmental assessment. Bryan Deegan (MCIEEM) holds a MSc in Environmental Science, BSc (Hons.) in Applied Marine Biology, NCEA National Diploma in Applied Aquatic Science and a NCEA National Certificate in Science (Aquaculture). Bryan Deegan carried out all elements of this Appropriate Assessment Screening.

Background to the Appropriate Assessment

The Habitats Directive (92/43/EEC), together with the Birds Directive (2009/1477/EC), forms the cornerstone of European nature conservation policy. The Directive protects over 1000 animals and plant species and over 200 *"habitat types"* which are of European importance. In the Directive, Articles 3 to 9 provide the legislative means to protect habitats and species of European Community interest through the establishment and conservation of an EU-wide network of conservation sites (NATURA 2000).

These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Birds Directive. Article 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect NATURA 2000 sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment:

"Any plan or project not directly connected with or necessary to the management of the [NATURA 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implication for the site and subject to the provisions of paragraph 4, the component 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."

Furthermore, as outlined in the EC guidance document on Article 6(4) (January 2007)[1]:

"Appropriate assessments of the implications of the plan or project for the site concerned must precede its approval and take into account the cumulative effects which result from the combination of that plan or project with other plans or projects in view of the site's conservation objectives. This implies that all aspects of the plan or project which can, either individually or in combination with other plans or projects, affect those objectives must be identified in the light of the best scientific knowledge in the field.

Assessment procedures of plans or projects likely to affect NATURA 2000 sites should guarantee full consideration of all elements contributing to the site integrity and to the overall coherence of the network, both in the definition of the baseline conditions and in the stages leading to identification of potential impacts, mitigation measures and residual impacts. These determine what has to be compensated, both in quality and quantity. Regardless of whether the provisions of Article 6(3) are delivered following existing environmental impact assessment procedures or other specific methods, it must be ensured that:

- *Article 6(3) assessment results allow full traceability of the decisions eventually made, including the selection of alternatives and any imperative reasons of overriding public interest.*
- *The assessment should include all elements contributing to the site's integrity and to the overall coherence of the network as defined in the site's conservation objectives and Standard Data Form, and be based on best available scientific knowledge in the field. The information required should be updated and could include the following issues:*
    - *Structure and function, and the respective role of the site's ecological assets;*
    - *Area, representativity and conservation status of the priority and nonpriority habitats in the site;*
    - *Population size, degree of isolation, ecotype, genetic pool, age class structure, and conservation status of species under Annex II of the Habitats Directive or Annex I of the Birds Directive present in the site;*

[1] European Commission. (2007).Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission.

- *Role of the site within the biographical region and in the coherence of the NATURA 2000 network; and,*
- *Any other ecological assets and functions identified in the site.*

- *It should include a comprehensive identification of all the potential impacts of the plan or project likely to be significant on the site, taking into account cumulative impacts and other impacts likely to arise as a result of the combined action of the plan or project under assessment and other plans or projects.*
- *The assessment under Article 6(3) applies the best available techniques and methods, to estimate the extent of the effects of the plan or project on the biological integrity of the site(s) likely to be damaged.*
- *The assessment provides for the incorporation of the most effective mitigation measures into the plan or project concerned, in order to avoid, reduce or even cancel the negative impacts on the site.*
- *The characterisation of the biological integrity and the impact assessment should be based on the best possible indicators specific to the NATURA 2000 assets which must also be useful to monitor the plan or project implementation."*

Methodology

This Appropriate Assessment screening was undertaken in accordance with the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC, 2001), Part XAB of the Planning and Development Act 2000, as amended, in addition to the December 2009 publication from the Department of Environment, Heritage and Local Government; 'Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities' and the European Communities (Birds and Natural Habitats) Regulations 2011 and the provision of Article 6 of the Habitats Directive 92/43/EEC (European Commission, 21 November 2018).

In order to comply with the above Guidelines and legislation, the Appropriate Assessment Screening process must be structured as follows:

- Description of the proposed project or plan;
- Identification of NATURA 2000 sites potentially affected;
- Identification and description of individual in combination effects likely to result from the proposed project;
- Assessment of the likely significance of the effects identified above. Exclusion of sites where it can be objectively concluded that there will be no likely significant effects; and,
- Conclusions.

Stage 1 Screening Assessment

Management of the Site

The plan or project is not directly connected with, or necessary to, the management of Natura 2000 sites.

Description of the Proposed Project

Ardstone Homes Ltd. intend to apply for permission for a strategic housing development at a site of 2.2 Ha, at Lands South of Stocking Ave., Stocking Avenue, Woodstown, Dublin 16 (Figures 1 and 2).

The proposed residential development will provide for 114 No. build to rent units in a mix of 1, 2 and 3 bed apartment and duplex units, across 6 No. separate blocks;

- Block A is a part 6 part 4 storey apartment block comprising 47 No. 1 and 2 bed units;
- Block B is a 3 storey duplex block comprising 11 No. 1, 2 and 3 bed units;
- Block C1 is 3 storey duplex block comprising 15 No. 1, 2 and 3 bed units;
- Block C2 is a 3 storey duplex block comprising 19 No. 1, 2 and 3 bed units;
- Block D is a 3 storey duplex block comprising 18 No. 2 and 3 bed units; and
- Block E is a 3 storey duplex block comprising 4 No. 2 and 3 bed units.

The proposed development will also consist of the provision of: 110 sqm residential amenity space in the lower ground floor of Block A; waste storage facilities; 98 No. car parking spaces and 238 No. bicycle parking spaces; boundary treatments and street lighting; the provision of Sustainable Urban Drainage systems (SUDs); 1 No. ESB substation; plant and switch rooms and all ancillary works and services necessary to facilitate construction and operation; changes in levels across the site; associated hard and soft landscaping; and all other associated site excavation; and infrastructural and site development works above and below ground. The development will be served by a vehicular access from Stocking Avenue via White Pines South on the western side of the site.

No Natura 2000 sites are within the potential Zone of Influence (ZoI). The ZoI of the proposed project would be seen to be restricted to the site outline with potential for minor localised noise, dust and light impacts during construction. Drainage from site, both foul and surface water, would be seen as the outputs form the site during construction and operation that could potentially extend the potential ZoI. However, it should be noted that the proposed development is not directly hydrologically linked to a Natura 2000 site.

***Figure 1**. Site outline and location*

Figure 2. *Site outline*

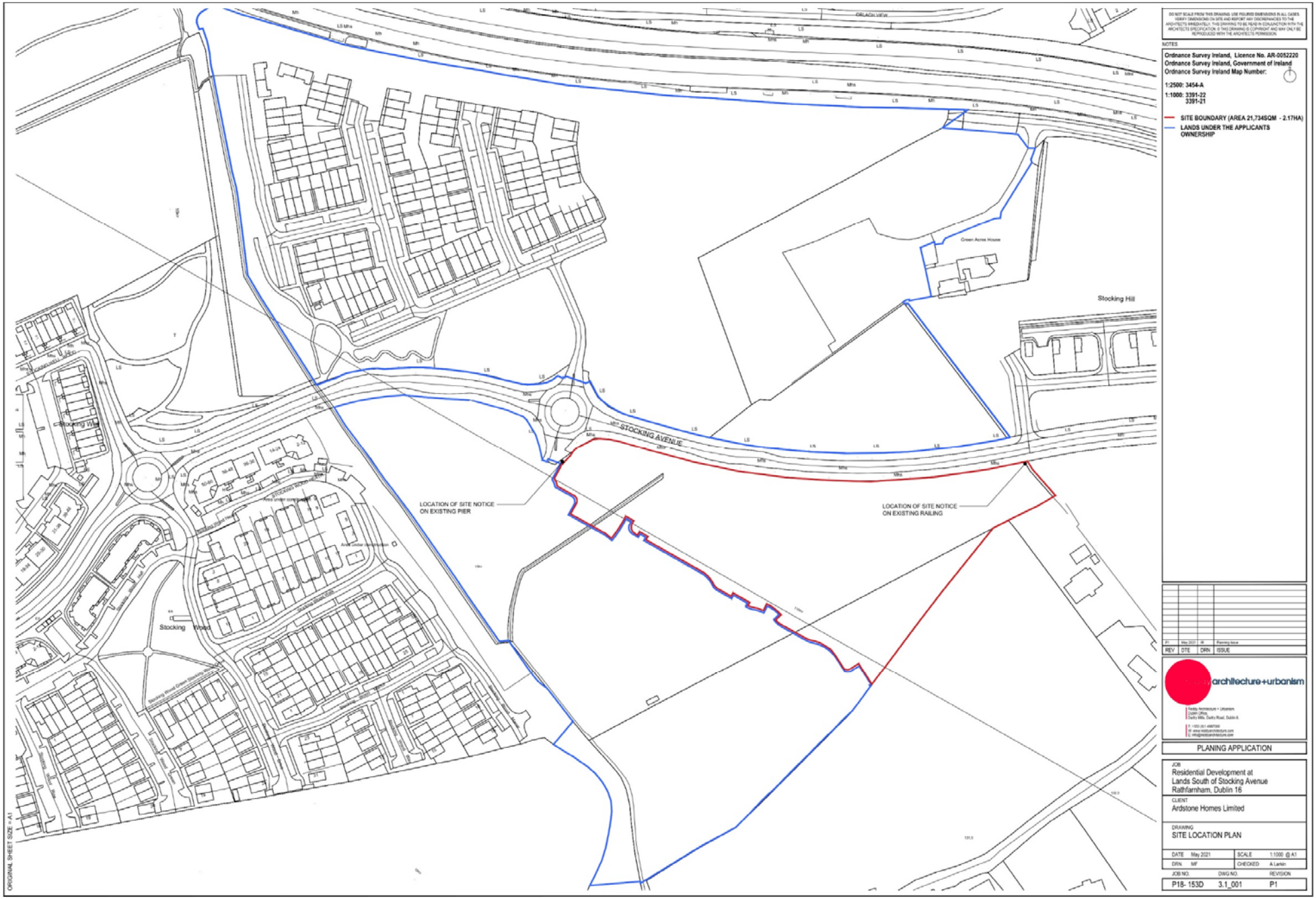

Figure 3. *Site Location Map*

Figure 4. *Proposed Site Plan*

2 WEST ELEVATION
SCALE 1:200

1 SECTION A-A
SCALE 1:200

2 SOUTH ELEVATION
SCALE 1:200

2 NORTH ELEVATION
SCALE 1:200

1 EAST ELEVATION
SCALE 1:200

DO NOT SCALE FROM THIS DRAWING. USE FIGURED DIMENSIONS IN ALL CASES. VERIFY DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECTS IMMEDIATELY. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE ARCHITECTS SPECIFICATION. © THIS DRAWING IS COPYRIGHT AND MAY ONLY BE REPRODUCED WITH THE ARCHITECTS PERMISSION.

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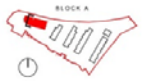

KEY PLAN
NTS

Finishes Legend - Proposed

1. Glazing. Selected aluminium/ PVC window system. Colour by architect.
2. Self coloured render. Colour by architect.
3. Selected 2 tone speckled brick colour by architect.
4. Powdercoated milled steel louvred grilles for ventilation/smoke extract. Colour by architect.
5. Powdercoated mild steel balconies. Colour by architect.
6. Powdercoated mild steel gates. Colour by architect.
7. Brise soleil fins. Colour by architect.
8. Cassette aluminium cladding. Colour by architect.
9. Brushed stainless steel signage.
10. Entrance Canopy.
11. Green wall by Landscape architect.
12. Powder coated, mild steel vertical blades, privacy screen.

REV	DTE	DRN	ISSUE
P1	May 2021	IR	Planning Issue

architecture+urbanism

PLANNING APPLICATION

JOB
Residential Development at Lands South of Stocking Avenue

CLIENT
Ardstone Homes Limited

DRAWING
PROPOSED BLOCK A
ELEVATIONS & SECTION

DATE	May 2021	SCALE	1:200 @ A1
DRN.	JR	CHECKED	AL

JOB NO.	DWG NO.	REVISION
P18-153D	3.1_201	P1

ORIGINAL SHEET SIZE = A1

Figure 5. *Proposed Block A Elevations and Section*

Figure 6. *Landscape Masterplan*

Figure 7. *Arboricultural Impact Plan*

Drainage

An Infrastructure Design Report has been prepared by DBFL Consulting Engineers for the proposed development and it contains details on the foul water and surface water drainage strategies.

Surface Water Drainage

The proposed development forms part of a larger series of developments collectively known as "White Pines", with the proposed development identified as "White Pines Central". The surface water drainage network for the "White Pines South" development has been constructed and designed to serve and accommodate additional flow from "White Pines Central".

In terms of existing surface water drainage systems, the report outlines the following:

'*The existing surface water drainage network constructed to serve "White Pines South" has been designed to accommodate additional flow from the subject application site.*

A spur has been left from the "White Pines South" surface water network adjacent to the site's western boundary. The site falls from its eastern boundary towards its western boundary.

The surface water network constructed to serve "White Pines South" outfalls via an existing surface water drain (225mm diameter) under Stocking Avenue.

The surface water drain under Stocking Avenue facilitates attenuated flows (38 l/sec) from all "lands under the applicant's ownership" south of Stocking Avenue in accordance with previously granted planning permissions SD10A/0041.

The surface water drain under Stocking Avenue outfalls to the surface water drainage network constructed by Ardstone under SD14A/0222 (which serves "White Pines North" and ultimately outfalls to an existing 600mm diameter surface water drain which crosses under the M50 motorway).'

The report continues to outline the Surface Water Design of the proposed development site:

'The surface water network is expected to provide a suitable surface water discharge point for the proposed development.

The site will be divided into two catchments and upper and a lower. The upper catchment will discharge into the lower catchment. The lower catchment will then discharge into the existing surface water network.

Surface water discharge rates from the proposed surface water drainage network will be controlled by a vortex flow control device (Hydrobrake or equivalent) and associated underground attenuation tanks (Stormtech Chambers).

Underground attenuation tanks are sized to attenuate the 1 in 100 year storm event. Surface water discharge will also pass via a full retention fuel / oil separator (sized in accordance with permitted discharge from the site).

The proposed surface water drainage network will collect surface water runoff from the site via a piped network prior to discharging off site via the attenuation tank, flow control device and separator arrangement as noted above.

Surface water runoff from the site's road network will be directed to tree pits via conventional road gullies (with high level overflow to the piped surface water network).

Surface water runoff from in curtilage parking areas will be captured by permeable paving.

Surface water runoff from apartment roofs will be captured by green roofs (sedum blanket) prior to being routed to the piped surface water drainage network.

Surface water runoff from the roofs of duplexes will be routed to the proposed surface water pipe network via the porous aggregates beneath permeable paved driveways (providing an additional element of attenuation).'

It should be noted than an existing retention hydrocarbon separator is in place within the existing downstream drainage infrastructure in White Pines.

Sustainable Urban Drainage Systems (SuDS)

In terms of Sustainable Urban Drainage Systems, the report outlines the following:

'*The following methodologies are being implemented as part of a SuDS treatment train approach:*

- *Permeable paving in parking spaces / in curtilage areas.*
- *Typically, road gullies discharge to tree pits (with high level overflow to the piped surface water network)*
- *Surface water runoff from duplex roofs will be routed to the proposed surface water pipe network via the stone reservoir beneath permeable paved parking. Note, this detail does not rely on infiltration, the stone reservoir is intended to provide an additional element of attenuation storage.*
- *Surface water runoff from apartment roofs will be captured by green roofs (sedum blanket) prior to being routed to piped surface water drainage network.*
- *Attenuation of the 1 in 100 year return period storms in underground attenuation chambers (Stormtech). Provision of above ground storage for the 100 year less the 30 year storm volume is not feasible due to steep site gradients. Note: Our calculation has not allowed for any infiltration when calculating the attenuation volume.*
- *Installation of a vortex flow control device (Hydrobrake or equivalent).*
- *Surface water discharge will also pass via a Class 1 full retention fuel / oil separator (sized in accordance with permitted discharge as set out in SD10A/0041).*'

Foul Drainage Strategy

In terms of the foul drainage strategy for the proposed development, the report outlines the following:

'The existing foul drainage network constructed to serve White Pines South has been designed to accommodate additional flow form the subject application site.

A spur has been left from the "White Pines South" foul drainage network adjacent to the site's western boundary. The site falls from its eastern boundary towards its western boundary facilitating a gravity drainage solution. The foul drainage network constructed to serve "White Pines South" outfalls via an existing surface water drain (225mm diameter) under Stocking Avenue which in turn outfalls northwards via the foul drainage network constructed by Ardstone under SD14A/0222 (which serves "White Pines North" and ultimately discharging to an existing 450mm diameter foul drain which crosses under the M50 motorway).

The proposed foul drainage network within the site comprises of a series of 225mm diameter pipes discharging by gravity via the foul drainage network.

Duplex units located will be services by individual 100mm diameter connections.'

Flood Risk Assessment

A separate Site Specific Flood Risk Assessment has been prepared by DBFL Consulting Engineers to support the planning application for the proposed development. The report outlines the following:

- No flood events are located in the immediate vicinity of the site.
- No fluvial flooding is indicated in the vicinity of the site.
- No groundwater wells or springs are identified within the site.
- The site is significantly elevated above the predicted 0.1% APE fluvial flood event as shown in the Dodder Catchment Flood Risk Assessment and Management Study Maps.
- No open drain or drainage channel was identified during walkover survey of the site.
- The site is considered to be located in Flood Zone C and therefore, the proposed development is considered appropriate

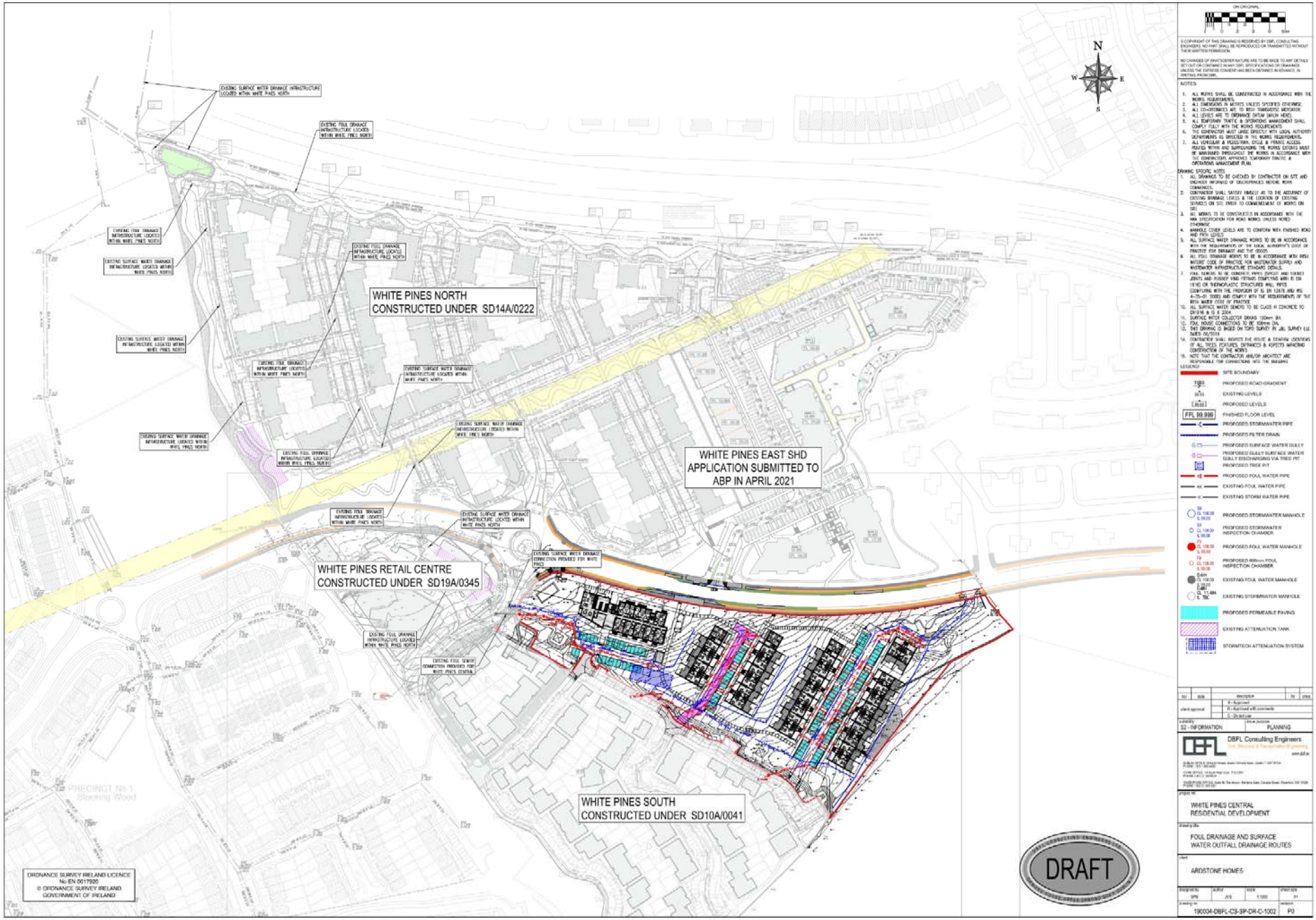

Figure 8. *Foul Drainage and Surface Water Outfall Routes*

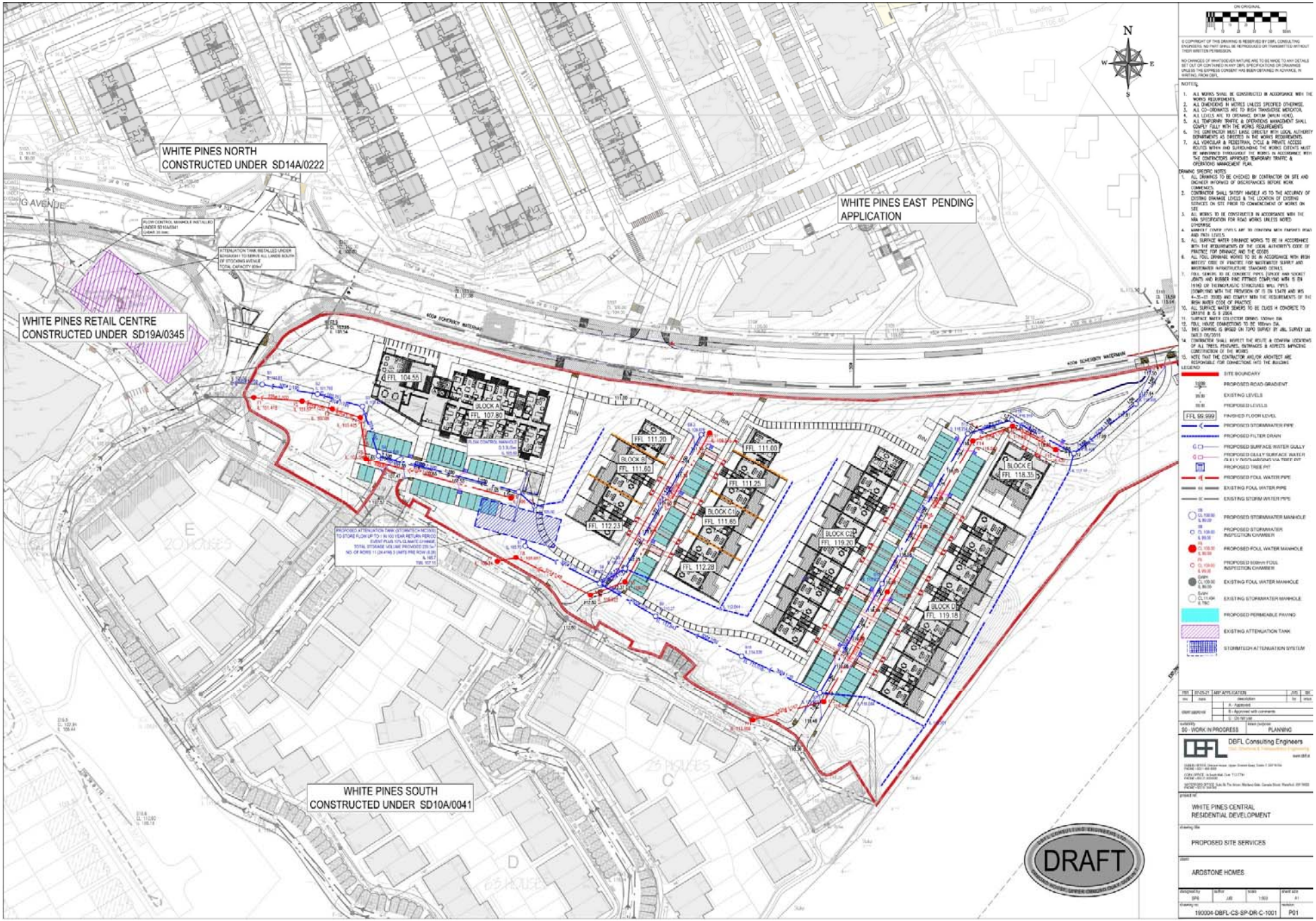

Figure 9. *Proposed Site Services*

Identification of Relevant Natura 2000 Sites

The proposed works are not located within a Natura 2000 site. The Natura 2000 sites within 15 kilometres of the subject site are detailed in Table 1, Figures 10 and 11. Their qualifying interests and the potential impact of the works on these qualifying interests are showcased in Table 2. As can be seen from the EPA Water Framework Directive (WFD) data in Figure 12, there are two tributaries of the River Dodder (Dodder_040 & Owenadoher_010) that run within 1km of the subject site. However, there is no direct pathway to these waterbodies or a Natura 2000 site.

The proposed development site is located in a suburban environment surrounded by recently constructed residential developments and brownfield sites. There is no intact biodiversity corridor to Natura 2000 sites. No Natura 2000 sites are deemed to be in the potential Zone of Influence (ZoI). However, following the precautionary principle, screening of all Natura 2000 sites within 15km and those with a direct/indirect pathway beyond 15km is carried out. It is found there are no Natura 2000 sites with a direct/indirect pathway beyond 15km of the subject site.

***Table 1**. Proximity to designated sites of conservation importance*

NATURA 2000 Site	Distance
Special Areas of Conservation	
Glenasmole Valley SAC	3.9 km
Wicklow Mountains SAC	3.9 km
South Dublin Bay SAC	8.5 km
Knocksink Wood SAC	9.2 km
North Dublin Bay SAC	12.9 km
Ballyman Glen SAC	11.9 km
Rockabill to Dalkey Island SAC	14.6 km
Special Protection Areas	
Wicklow Mountains SPA	3.8 km
South Dublin Bay and River Tolka Estuary SPA	8.5 km
North Bull Island SPA	12.9 km
Dalkey Islands SPA	14.3 km

The initial screening of NATURA 2000 sites within 15km of the subject site, their qualifying interests and the Source/Pathway/Receptor links between the works and the Natura 2000 site, with the potential to result in adverse effects (without mitigation measures) on each NATURA 2000 site and qualifying interest, are seen in Table 2. There is no direct or indirect hydrological pathway from the proposed development site to the Natura 2000 sites beyond 15km and no impact is foreseen on these sites.

***Table 2**. Initial screening of NATURA 2000 sites within 15km and NATURA 2000 sites within 15km with potential of hydrological connection to the proposed development*

NATURA Code	Name	Screened IN/OUT	Details/Reason
Special Areas of Conservation			
IE001209	Glenasmole Valley SAC	**OUT**	**Conservation Objectives:** To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected. **Qualifying Interests** Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) [6410] Petrifying springs with tufa formation (*Cratoneurion*) [7220] **Potential Impact** The proposed development site is located at a minimum of 3.9 km from this SAC (Figure 10). No potential impact is foreseen. There is no direct or indirect pathway from the proposed development site to the SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects are likely**
IE0002122	Wicklow Mountains SAC	**OUT**	**Conservation Objectives:** 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. **Qualifying Interests** Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*) [3110] Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with *Erica tetralix* [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Calaminarian grasslands of the *Violetalia calaminariae* [6130] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] Blanket bogs (* if active bog) [7130] Siliceous scree of the montane to snow levels (*Androsacetalia alpinae* and *Galeopsietalia ladani*) [8110] Calcareous rocky slopes with chasmophytic vegetation [8210] Siliceous rocky slopes with chasmophytic vegetation [8220] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Otter (*Lutra lutra*) [1355]

			Potential Impact The proposed development site is located at a minimum of 3.9 km from this SAC (Figure 10). No potential impact is foreseen. There is no direct or indirect pathway from the proposed development site to the SAC. The features of interest of this SAC are terrestrial and aquatic habitats. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects are likely**
IE0000210	South Dublin Bay SAC	**OUT**	**Conservation Objectives** 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. **Qualifying Interests** Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Embryonic shifting dunes [2110] **Potential Impact** The proposed development site is located within an urban area approximately 8.5 km from the South Dublin Bay SAC (Figure 10). There is no 'direct' Source-Pathway linkage between the proposed development site and this SAC. There is an indirect hydrological pathway to this SAC via foul and surface water drainage networks. Foul wastewater from the development will be direct to an existing public foul wastewater network. Foul wastewater will then be processed in the existing Ringsend Treatment works. Surface water drains to the existing White Pines South drainage infrastructure and public surface water network to the River Dodder, located 2km from the site, which then flows to the River Liffey and into Dublin Bay. Due to the existing infrastructure in White Pines South, distance via the indirect pathway, any pollutants or silt produced by the proposed development will settle, be dispersed, or diluted within the public drainage networks. The indirect pathway of surface water or, foul water to Ringsend will not result in a significant effect on the Natura 2000 site. No potential impact is foreseen. There is no direct pathway from this site to the SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects are likely**
IE000725	Knocksink Wood SAC	**OUT**	**Conservation Objectives:** To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

			Qualifying Interests Petrifying springs with tufa formation (*Cratoneurion*) [7220] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (*Alno-Padion, Alnion incanae, Salicion albae*) [91E0] **Potential Impact** The proposed works are located a minimum of 9.2 km from this SAC (Figure 10). No potential impact is foreseen. There is no direct or indirect pathway from the proposed development site to the SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects are likely**
IE0000206	North Dublin Bay SAC	**OUT**	**Conservation Objectives:** 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. **Qualifying Interests** Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330] Mediterranean salt meadows (*Juncetalia maritimi*) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with white dunes (*Ammophila arenaria*) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190] Petalwort (*Petalophyllum ralfsii*) [1395] **Potential Impact** The development site is located within an urban area approximately 12.9 km from the North Dublin Bay SAC (Figure 10). There is no 'direct' Source-Pathway linkage between the proposed development site and the SAC. There is an indirect hydrological pathway to this SAC via foul and surface water drainage networks. Foul wastewater from the development will be direct to an existing public foul wastewater network. Foul wastewater will then be processed in the existing Ringsend Treatment works. Surface water drains to the existing White Pines South drainage infrastructure and public surface water network to the River Dodder, located 2km from the site, which then flows to the River Liffey and into Dublin Bay. Due to the existing infrastructure in White Pines South, distance via the indirect

			pathway, any pollutants or silt produced by the proposed development will settle, be dispersed, or diluted within the public drainage networks. The indirect pathway of surface water or, foul water to Ringsend will not result in a significant effect on the Natura 2000 site. No potential impact is foreseen. There is no direct pathway from this site to the SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects likely**
IE000713	Ballyman Glen SAC	**OUT**	**Conservation Objectives** 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. **Qualifying Interests** Petrifying springs with tufa formation (*Cratoneurion*) [7220] Alkaline fens [7230] **Potential Impact** The development site is located within a suburban area 11.9 km from the Ballyman Glen SAC (Figure 10). No potential impact is foreseen. There is no direct or indirect pathway from the proposed development site to the SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects are likely**
IE0003000	Rockabill to Dalkey Island SAC	**OUT**	**Conservation Objectives:** 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. **Qualifying Interests** 1170 Reefs 1351 Harbour porpoise (*Phocoena phocoena*) **Potential Impact** The development site is located within an urban area approximately 14.6 km from the Rockabill to Dalkey Island SAC (Figure 10). There is no 'direct' Source-Pathway linkage between the proposed development site and the SAC. There is an indirect hydrological pathway to this SAC via foul and surface water drainage networks. Foul wastewater from the development will be direct to an existing public foul wastewater network. Foul wastewater will then be processed in the existing Ringsend Treatment works. Surface water drains to the existing White Pines South drainage infrastructure and public surface water network to the River Dodder, located 2km from the site, which then flows

			to the River Liffey and into Dublin Bay. Due to the existing infrastructure in White Pines South, distance via the indirect pathway, any pollutants or silt produced by the proposed development will settle, be dispersed, or diluted within the public drainage networks. The indirect pathway of surface water or, foul water to Ringsend will not result in a significant effect on the Natura 2000 site. No potential impact is foreseen. There is no direct pathway from this site to the SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects are likely**
Special Protection Areas			
IE004040	Wicklow Mountains SPA	**OUT**	**Conservation Objectives** To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA. **Qualifying Interests** A098 Merlin *(Falco colombarius)* A103 Peregrine *(Falco peregrinus)* **Potential Impact** The proposed works on the subject site are a minimum of 3.8 km from the Wicklow Mountains SPA (Figure 11). No potential impact is foreseen. There is no direct or indirect pathway from the proposed development site to the SPA. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects are likely**
IE0004024	South Dublin Bay and River Tolka Estuary SPA	**OUT**	**Conservation Objectives:** 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. **Qualifying Interests** Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] Oystercatcher (*Haematopus ostralegus*) [A130] Ringed Plover (*Charadrius hiaticula*) [A137] Grey Plover (*Pluvialis squatarola*) [A141] Knot (*Calidris canutus*) [A143] Sanderling (*Calidris alba*) [A144] Dunlin (*Calidris alpina*) [A149] Bar-tailed Godwit (*Limosa lapponica*) [A157] Redshank (*Tringa totanus*) [A162] Black-headed Gull (*Chroicocephalus ridibundus*) [A179] Roseate Tern (*Sterna dougallii*) [A192] Common Tern (*Sterna hirundo*) [A193] Arctic Tern (*Sterna paradisaea*) [A194] Wetland and Waterbirds [A999]

			Potential Impact The proposed development site is located within a highly urbanised and developed area. The subject site where the proposed works will take place is a minimum of 8.5 km from the South Dublin Bay and River Tolka Estuary SPA (Figure 11). There is no 'direct' Source-Pathway linkage between the proposed development site and the SPA. There is an indirect hydrological pathway to this SPA via foul and surface water drainage networks. Foul wastewater from the development will be direct to an existing public foul wastewater network. Foul wastewater will then be processed in the existing Ringsend Treatment works. Surface water drains to the existing White Pines South drainage infrastructure and public surface water network to the River Dodder, located 2km from the site, which then flows to the River Liffey and into Dublin Bay. Due to the existing infrastructure in White Pines South, distance via the indirect pathway, any pollutants or silt produced by the proposed development will settle, be dispersed, or diluted within the public drainage networks. The indirect pathway of surface water or, foul water to Ringsend will not result in a significant effect on the Natura 2000 site. No potential impact is foreseen. There is no direct pathway from this site to the SPA. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects are likely**
IE0004006	North Bull Island SPA	**OUT**	**Conservation Objectives:** 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. **Qualifying Interests** Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] Shelduck (*Tadorna tadorna*) [A048] Teal (*Anas crecca*) [A052] Pintail (*Anas acuta*) [A054] Shoveler (*Anas clypeata*) [A056] Oystercatcher (*Haematopus ostralegus*) [A130] Golden Plover (*Pluvialis apricaria*) [A140] Grey Plover (*Pluvialis squatarola*) [A141] Knot (*Calidris canutus*) [A143] Sanderling (*Calidris alba*) [A144] Dunlin (*Calidris alpina*) [A149] Black-tailed Godwit (*Limosa limosa*) [A156] Bar-tailed Godwit (*Limosa lapponica*) [A157] Curlew (*Numenius arquata*) [A160] Redshank (*Tringa totanus*) [A162] Turnstone (*Arenaria interpres*) [A169] Black-headed Gull (*Chroicocephalus ridibundus*) [A179] Wetland and Waterbirds [A999]

			Potential Impact The proposed development site is located within a highly urbanised and developed area. The subject site where the proposed works will take place is a minimum of 12.9 km from the North Bull Island SPA (Figure 11). There is no 'direct' Source-Pathway linkage between the proposed development site and the SPA. There is an indirect hydrological pathway to this SPA via foul and surface water drainage networks. Foul wastewater from the development will be direct to an existing public foul wastewater network. Foul wastewater will then be processed in the existing Ringsend Treatment works. Surface water drains to the existing White Pines South drainage infrastructure and public surface water network to the River Dodder, located 2km from the site, which then flows to the River Liffey and into Dublin Bay. Due to the existing infrastructure in White Pines South, distance via the indirect pathway, any pollutants or silt produced by the proposed development will settle, be dispersed, or diluted within the public drainage networks. The indirect pathway of surface water or, foul water to Ringsend will not result in a significant effect on the Natura 2000 site. No potential impact is foreseen. There is no direct pathway from this site to the SPA. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects are likely**
IE004172	Dalkey Islands SPA	**OUT**	**Conservation Objectives** To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA. **Qualifying Interests** A192 Roseate Tern (*Sterna dougallii)* A193 Common Tern (*Sterna hirundo)* A194 Arctic Tern *(Sterna paradisaea)* **Potential Impact** The proposed development site is located within a highly urbanised and developed area. The subject site where the proposed works will take place is a minimum of 14.3 km from the Dalkey Islands SPA (Figure 11). There is no 'direct' Source-Pathway linkage between the proposed development site and the SAC. There is an indirect hydrological pathway to this SPA via foul and surface water drainage networks. Foul wastewater from the development will be direct to an existing public foul wastewater network. Foul wastewater will then be processed in the existing Ringsend Treatment works.

			Surface water drains to the existing White Pines South drainage infrastructure and public surface water network to the River Dodder, located 2km from the site, which then flows to the River Liffey and into Dublin Bay. Due to the existing infrastructure in White Pines South, distance via the indirect pathway, any pollutants or silt produced by the proposed development will settle, be dispersed, or diluted within the public drainage networks. The indirect pathway of surface water or, foul water to Ringsend will not result in a significant effect on the Natura 2000 site. No potential impact is foreseen. There is no direct pathway from this site to the SPA. The construction and operation of the proposed development will not impact on the conservation interests of the site. **No significant effects are likely**

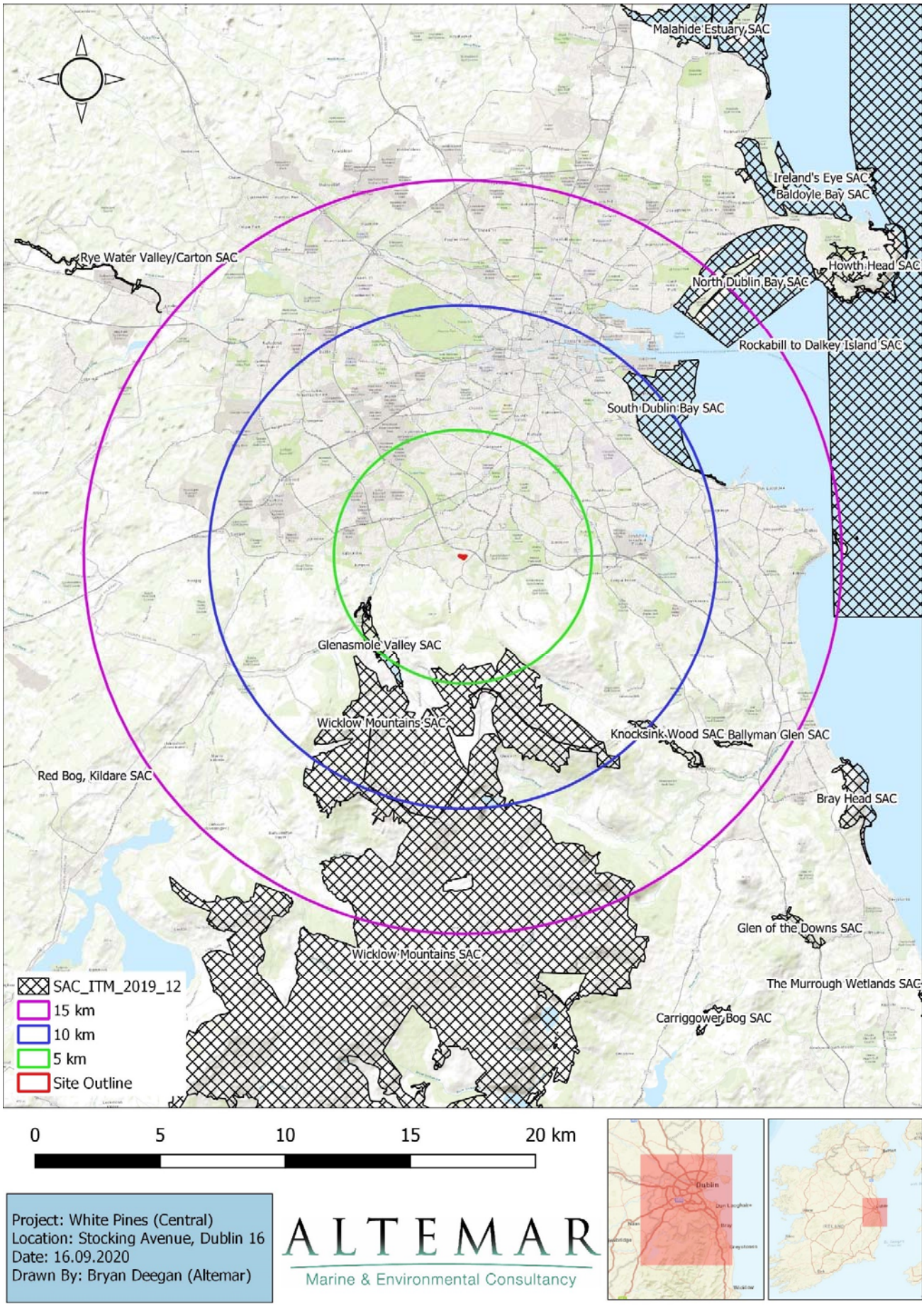

Figure 10. *Special Areas of Conservation located within 15km of the proposed development*

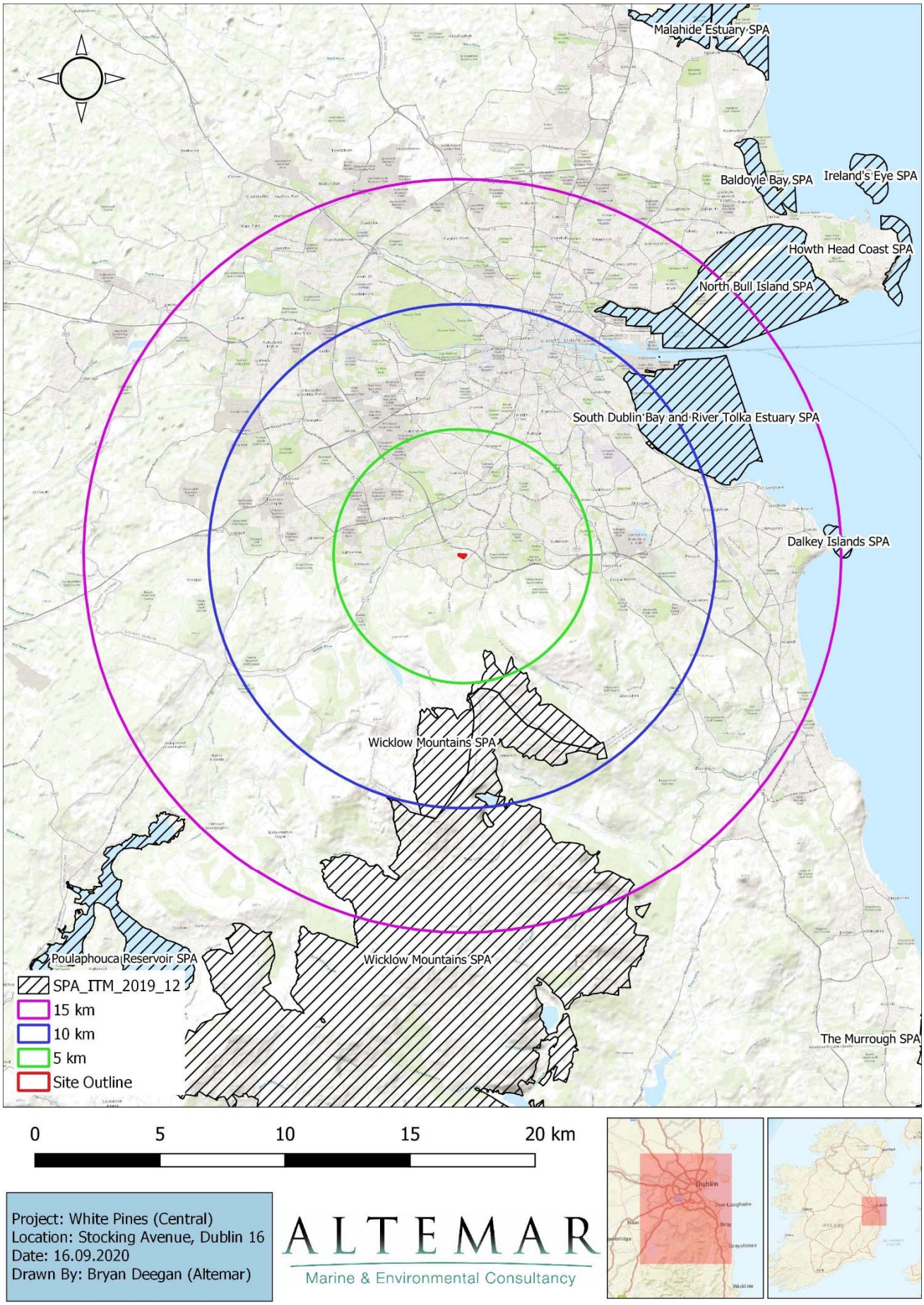

Figure 11. *Special Protected Areas located within 15km of the proposed development*

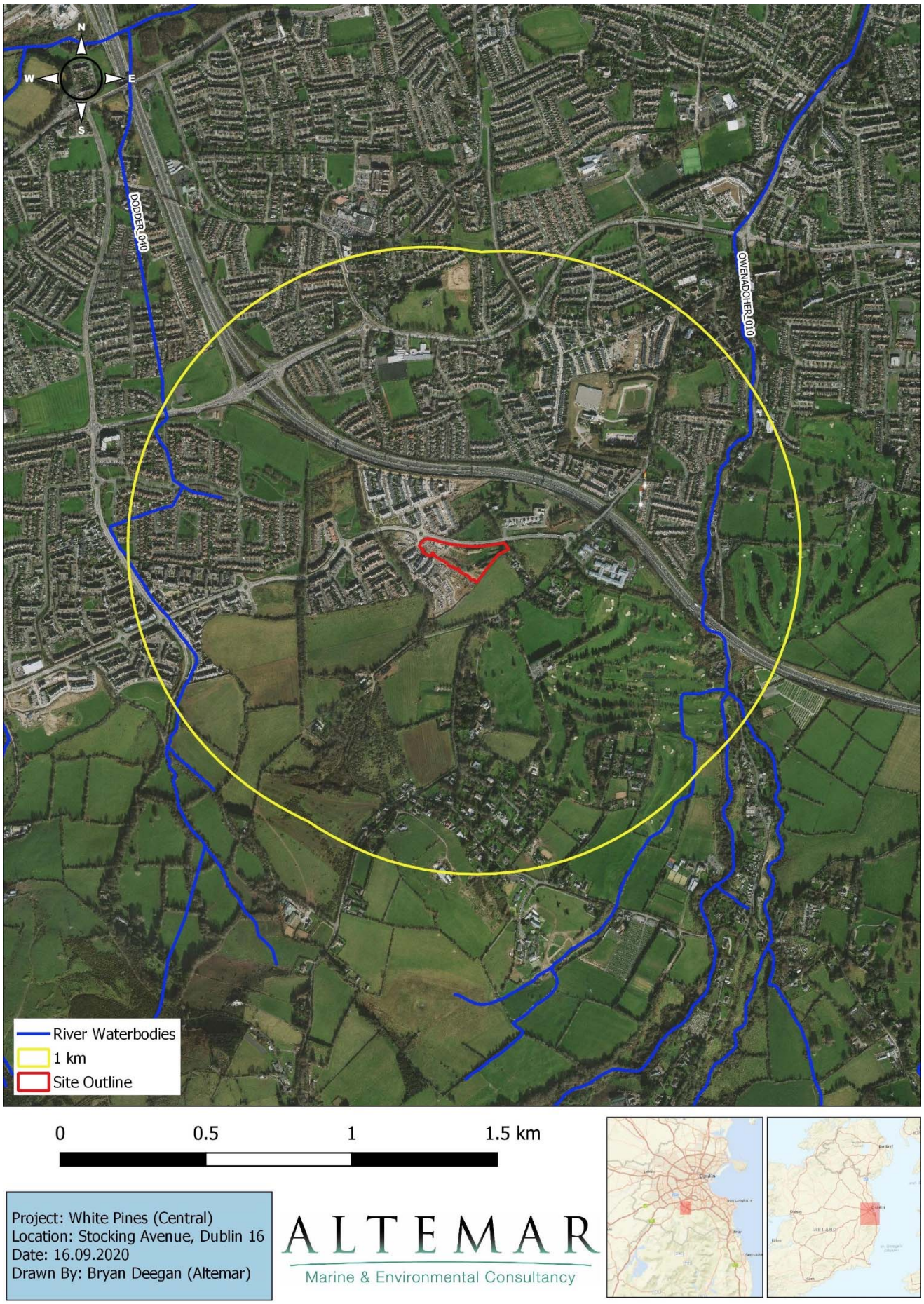

Figure 12. Watercourses in proximity to the proposed development

In-Combination Effects

There are several proposed developments located in the area immediately surrounding the subject site. The following is a list of planning applications as identified on the Department of Housing, Local Government and Heritage's 'National Planning Application Database' portal[2]:

Ref. No.	Address	Proposal
SD21A/ 0071	Stocking Avenue, Woodtown, Dublin 16.	Modification and relocation of permitted ESB MV sub-station (unconstructed) as permitted under Reg. SD19A/0345 and Reg. SD20A/0322 from the northern site boundary to a location adjacent to the north western elevation of the approved retail building; reconfiguration of 8 car parking spaces and all associated site development works with no change to the amount of car parking provision proposed as part of the overall development on a site principally bounded by Stocking Avenue to the north, an internal access road associated with the White Pines residential development to the east and Stocking Wood residential scheme to the south and west.
SD19A/ 0099	Lands south of Stocking Avenue, Woodtown, Dublin 16	Permission and Retention for development on this site of c. 2.29 ha, identified as nos. 1-39 (consecutive) White Pines Park, nos. 1-15 (consecutive) White Pines Dale, nos. 16-40 (even) White Pines Dale, nos. 16-50 (even) White Pines Crescent and nos. 1-27 (odd) White Pines Crescent located south of Stocking Avenue; The development/proposed development specifically relates to 99 houses permitted under Ref. SD17A/0359 (and earlier permissions as appropriate) (on a larger site of 3.35 ha that included public roads), namely 38 three bedroom houses; 47 four bedroom houses and 14 five bedroom houses; development on foot of that permission has commenced; Permission is sought for works proposed to 34 houses, nos. 33-39 (consecutive) White Pines Park; nos. 1-27 (odd) White Pines Crescent and nos. 20-40 (even) White Pines Dale; Retention permission is sought for works proposed to 65 houses, nos. 1-32 (consecutive) White Pines Park; nos. 1-15 (consecutive) White Pines Dale; nos. 16-18 (even) White Pines Dale and nos. 16-50 (even) White Pines Crescent; The house variations are identified as follows, Block Type A, nos. 30-36 (even) White Pines Dale; nos. 13-19 (odd) White Pines Crescent; nos. 16-22 White Pines Crescent (even); nos. 18-21 (consecutive) White Pines Park and nos. 24-27 (consecutive) White Pines Park; Block Type AA, nos. 7-13 (odd) White Pines Dale; Block Type B, nos. 24-30 (even) White Pines Crescent; Block Type C, nos. 32-38 (even) White Pines Crescent; Block Type D, nos. 40-46 (even) White Pines Crescent; Block Type E, nos. 21-27 (odd) White Pines Crescent; Block Type G, nos. 14-17 (consecutive) White Pines Park; Block Type H, nos. 4-7 (consecutive) White Pines Park and 4-10 (even) White Pines Dale; Block Type I, nos. 1-7 (odd) White Pines Crescent; Block Type J, nos. 9-12 (consecutive) White Pines Park; Block Type K, nos. 12-16 (even) White Pines Dale; Block Type L, nos. 30-32 (consecutive) White Pines Park; Block Type M, nos. 37-39 (consecutive) White Pines Park; Block Type O, nos. 38 and 40 White Pines Dale and nos. 48 and 50 White Pines Crescent; Block Type P, nos. 1 and 2 White Pines Park and nos. 35 and 36 White Pines Park; Block Type Q, nos. 20 and 22 White Pines Dale and nos. 9 and 11 White Pines Crescent; Block Type R, nos. 3 and 5 White Pines Dale; Block Type T, nos. 22 and 23 White Pines Park; Block Type U, nos. 28 and 29 White Pines Park; Block Type V, nos. 33 and 34 White Pines Park; Block Type W, no. 1 White Pines Dale; Block Type X, nos. 3, 8 and 13 White Pines Park and no. 15 White Pines Dale; Block Type Y, nos. 2, 18, 24, 26 and 28 White Pines Dale. The proposed development will consist of the provision of

[2] https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=9cf2a09799d74d8e9316a3d3a4d3a8de

		modifications to 34 of the permitted houses including, reduction in brickwork (all Block Types); removal of canopies (all Block Types); alteration of windows (Block Types A, E, I, M and O); removal of windows (Block Types A, E, I and P); addition of a window (Block Type Q); alteration of roof lights (Block Types A, E, I, M, O, Q and Y); non-provision of part of the second floor accommodation and the removal of the associated dormer windows (Block Types I and R); the latter renders the permitted 5 bedroom units as 4 bedroom units; The development for which Retention is sought consists of provision of modifications to 65 of the permitted houses including, reduction in brickwork (all Block Types); removal of canopies (all Block Types); alteration of windows (Block Types A, AA, B, C, D, G, H, I, J, K, M, O, W and X; removal of windows (Block Types A, C, D, G, I, J, T and U); alteration of roof lights (Block Types A, AA, B, C, D, G, H, I, J, K, M, O, T, U, W and Y); non-provision of part of the second floor accommodation and the removal of the associated dormer windows (Block Types H, I, K, and R); the latter renders the permitted 5 bedroom as 4 bedroom units; The scheme of 99 units would therefore provide 38 three bedroom houses; 56 four bedroom houses and 5 five bedroom houses; The development/proposed development (as appropriate) consist of/will also consist of provision of PVC windows and doors; provision of concrete slates; adjustment of cill heights; addition of mullions to windows and all other associated site development works above and below ground.
SD18A /0300	Lands to the north side of Stocking Avenue (east end), Rathfarnham, Dublin 16	Construction of 8 dwellings in total, with 4 dwellings on each site. The dwellings will form part of the 'White Pines' housing development currently under construction (permitted under Reg. Ref. SD14A/0222 as amended by Reg. Ref. SD17A/0132, SD17A,0355, SD17A,0376, SD17A,0465 and SD18A/0196) upon their completion. It is proposed that Site A will contain a total of 4 detached dwellings, each two storeys high with habitable attic over 2 dwellings (house type Dd-D) will be 5 bed dwellings and 2 dwellings (house type Fs-D) will be 4 bed dwellings. All associated site works including car parking, boundary treatment and landscaping. Vehicular access will be off a local access road within 'White Pines'. The permitted childcare bin store and cycle parking will be relocated as part of the proposed development. The permitted childcare looped set down arrangement will be omitted. It is proposed that Site B will contain a total of 4 two storey dwellings including house type at (4 bed end of terrace); house type Agt (4 bed end of terrace) and house type Bm (2 3-bed terrace). All associated site works including car parking, boundary treatment and landscaping. Vehicular access will off a permitted local access road in 'White Pines'
SD17A/ 0443/EP	Lands located to the south of Stocking Avenue, Woodtown, Dublin 16.	Amend a permitted residential scheme (SDCC Reg. Ref. SD10A/0041; (ABP Ref. PL06S.237857) (a 10 year permission, which itself amended a number of permissions (the original Reg. Ref. SD04A/04393 (ABP Ref. PL06S.212191); as amended under Reg. Ref. SD05A/1013; Reg. Ref. SD07A/0628; Reg. Ref. SD08A/0105; SD09A/0016 (ABP Ref. PL06S.233251); and SD09A/0318) at this site of c.0.39 ha (lands initially identified as part of the permitted Precinct 3 'Stocking Heath'), which itself is part of a larger site of c.6.20 ha. The proposed development specifically relates to 7 houses of the 122 permitted under application Reg. Ref. SD10A/0041 (and earlier permissions as appropriate) namely: 3 three bedroom houses; 2 four bedroom houses and 2 five bedroom houses. (The permission for Reg. Ref. SD10A/0041 (ABP ref. PL06S.237857) and SD09A/0016 (ABP Ref. PL06S.233251) expires on 6th September 2019 (Condition no. 3 of Ref. Ref SD10A/0041).) The proposed development will consist of: modifications to the permitted elevation (AOD) of houses to respond to existing topography; and the construction of associated changes to the permitted access roads, and ancillary works. The proposed development will also consist of: the

		provision of (minor) alterations to permitted house types including façade alterations; the provision of waste storage facilities, car parking spaces, boundary treatments and street lighting; the provision of waste storage facilities, car parking spaces, boundary treatments and street lighting; the provision of Sustainable Urban Drainage systems (SUDs); changes in level; associated hard and soft landscaping and all other associated site excavation and infrastructural and site development works above and below ground.

The area to the west has undergone development following the granting of Planning SD14A/0222 (Ardstone Lands north of Stocking Avenue), and a surface water drainage network has been constructed connecting the existing surface water drain under Stocking Avenue to the existing 600mm diameter surface water drain which crosses under the M50 motorway. The majority of other planning applications in the vicinity of the proposed project are small scale projects involving individual houses and small-scale developments, but it would be expected that the area would undergo development in the coming years.

The assessment has considered the effect of cumulative and in combination effects, such as release of sediment-laden and hydrocarbon leak on site in the absence of proposed controls. As there are existing measures downstream of the development, adequate assimilation and dilution between the site and Dublin Bay, it is concluded that no perceptible impact on water quality would occur from the proposed development. It can also be concluded that the cumulative or in-combination effects of effluent arising from the proposed development with that of other developments discharging to Ringsend WwTP will not be significant having regard to the size of the calculated discharge from the proposal. No potential in combination effects are foreseen.

Conclusions

The proposed development site is located within a suburban environment 3.9 km from the nearest Natura 2000 site. Watercourses and surface runoff are seen as the main potential pathway for impacts on Natura 2000 sites. The site is not proximate to, and does not have a direct pathway to, watercourses that could act as potential vectors for impact on Natura 2000 sites. There is no direct hydrological pathway from the proposed development site a Natura 2000 site. However, there is an indirect pathway to Dublin Bay and marine-based Natura 2000 sites via the surface water connection to Dublin Bay, and via foul wastewater networks directed to Ringsend WWTP. Foul wastewater from the development will be processed in the Ringsend Treatment works, whilst the surface water will be connected to existing White Pines drainage infrastructure with existing mitigation.

No Natura 2000 sites are within the zone of influence of this development. Having taken into consideration the effluent discharge from the proposed development works, the distance between the proposed development site to designated conservation sites, lack of direct hydrological pathway or biodiversity corridor link to conservation sites and the dilution effect with other effluent and surface runoff, it is concluded that this development that would not give rise to any significant effects on designated sites. The construction and operation of the proposed development will not impact on the conservation objectives of Natura 2000 sites. In addition, no in-combination effects are foreseen.

This report presents a Stage 1 Appropriate Assessment Screening for the Proposed Development, outlining the information required for the competent authority to screen for appropriate assessment and to determine whether or not the Proposed Development, either alone or in combination with other plans and projects, in view of best scientific knowledge, is likely to have a significant effect on any European or Natura 2000 site.

On the basis of the content of this report, the competent authority is enabled to conduct a Stage 1 Screening for Appropriate Assessment and consider whether, in view of best scientific knowledge and in view of the conservation objectives of the relevant European sites, the Proposed Development, individually or in combination with other plans or projects is likely to have a significant effect on any European site.

Findings of No Significant Effects Report

Details of Project	Appropriate Assessment Screening for a proposed Strategic Housing Development at Stocking Avenue, Woodtown, Dublin 16.
Name and Location of NATURA 2000 Sites Within 15km	Glenasmole Valley SAC Wicklow Mountains SAC South Dublin Bay SAC Knocksink Wood SAC North Dublin Bay SAC Ballyman Glen SAC Rockabill to Dalkey Island SAC Wicklow Mountains SPA South Dublin Bay and River Tolka Estuary SPA North Bull Island SPA Dalkey Islands SPA
Project Description	A proposed Strategic Housing Development at Stocking Avenue, Dublin 16.
Is the Project directly connected with the management of the NATURA 2000 site?	No
Details of any other projects or plans that together with this project could affect the NATURA 2000 site	None
The assessment of significant effects	
Describe how the project is likely to affect the NATURA 2000 site	No Impact Predicted
Response to consultation	N/A
Data collected to carry out the assessment	Site Visit and Supporting NPWS data.
Who carried out the assessment	Altemar Ltd.
Sources of data	NPWS website, standard data form, conservation objectives data of the site and references outlined in the AA Screening Report.
Explain why the effects are not considered significant	Having taken into consideration the effluent discharge from the proposed development works, existing mitigation in place downstream of the works, lack of direct hydrological pathway or biodiversity corridor link to conservation sites and the dilution effect with other effluent and surface runoff, it is concluded that this development that would not give rise to any significant effects on designated sites.
Level of assessment completed	Stage 1 Screening
Overall conclusions	On the basis of the content of this report, the competent authority is enabled to conduct a Stage 1 Screening for Appropriate Assessment and consider whether, in view of best scientific knowledge and in view of the conservation objectives of the relevant European sites, the Proposed Development, individually or in combination with other plans or projects is likely to have a significant effect on any European site.

Data Used for AA Screening

NPWS site synopses and Conservation objectives of sites within 15km were assessed. The most recent SAC and SPA boundary shapefiles were downloaded and overlaid on ESRI road maps and satellite imagery. A site visit was carried out on the 20th August 2019 and the 16th April 2020 to determine if the site contained possible threats to a Natura 2000 site or species/habitats of conservation importance. An EIAR is submitted in conjunction with the AA Screening and the chapters were reviewed in preparation of this AA Screening.

References

The following references were used in the preparation of this AA screening report.

1. Department of Environment Heritage and Local Government Circular NPW 1/10 and PSSP 2/10 on Appropriate Assessment under Article 6 of the Habitats Directive – Guidance for Planning Authorities March 2010.
2. Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government 2009; http://www.npws.ie/publications/archive/NPWS_2009_AA_Guidance.pdf
3. Managing NATURA 2000 Sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC, European Commission 2000; http://ec.europa.eu/environment/nature/Natura2000/management/docs/art6/provision_of_art6_en.pdf
4. 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; http://ec.europa.eu/environment/nature/Natura2000management/docs/art6/Natura_2000_assess_en.pdf
5. Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission; http://ec.europa.eu/environment/nature/Natura2000/management/docs/art6/guidance_art6_4_en.pdf
6. Guidance document on the implementation of the birds and habitats directive in estuaries and coastal zones with particular attention to port development and dredging; http://ec.europa.eu/environment/nature/Natura2000/management/docs/guidance_doc.pdf
7. The Status of EU Protected Habitats and Species in Ireland. http://www.npws.ie/publications/euconservationstatus/NPWS_2007_Conservation_Status_Report.pdf
8. NPWS (2021) Conservation objectives for Glenasmole Valley SAC [001209]. Generic Version 8.0. Department of Housing, Local Government and Heritage.
9. NPWS (2017) Conservation Objectives: Wicklow Mountains SAC 002122. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.
10. NPWS (2013) Conservation Objectives: South Dublin Bay SAC 000210. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
11. NPWS (2021) Conservation objectives for Knocksink Wood SAC [000725]. Generic Version 8.0. Department of Housing, Local Government and Heritage.

12. NPWS (2013) Conservation Objectives: North Dublin Bay SAC 000206. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
13. NPWS (2019) Conservation Objectives: Ballyman Glen SAC 000713. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht
14. NPWS (2013) Conservation Objectives: Rockabill to Dalkey Island SAC 003000. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
15. NPWS (2021) Conservation objectives for Wicklow Mountains SPA [004040]. Generic Version 8.0. Department of Housing, Local Government and Heritage.
16. NPWS (2015) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
17. NPWS (2015) Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
18. NPWS (2021) Conservation objectives for Dalkey Islands SPA [004172]. Generic Version 8.0. Department of Housing, Local Government and Heritage.