



Appropriate Assessment Screening Report

Proposed Playground Development

Blackditch, Newcastle, Co. Wicklow

October 2025

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DOCUMENT CONTROL

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LIMITATIONS

This report combines the outcomes of thorough desk study research and *in-situ* site assessment to inform a Stage 1 Appropriate Assessment for the proposed redevelopment of Newcastle Playground at Blackditch, Newcastle, Co. Wicklow.

Best practice was followed at all times and within the limitations stated. This report is the property of Verdé Environmental Consultants Limited (Verde) and cannot be used, copied or given to any third party without the explicit prior approval or agreement of Verde.

All information contained in this report is based on the information made available to Verde, either through publicly available records or in reports and drawings presented to us which we assume to have been provided in good faith. This report represents an assessment of the site and was performed in accordance with generally accepted standards regarding environmental assessment.

Verde makes no other representations whatsoever, including those concerning the legal significance of its findings or as to other legal matters touched on in this report, including, but not limited to ownership of any property or the application of any law to the facts set forth herein.

EXECUTIVE SUMMARY

Verdé Environmental Consultants Ltd. (Verdé) were commissioned by Wicklow County Council to complete an Appropriate Assessment (AA) Screening Report for the demolition of the existing playground and concrete bandstand, and construction of a new playground in Newcastle, Co. Wicklow.

This AA Screening exercise was completed to determine whether the proposed redevelopment works will have likely significant effects, either alone or in-combination with other developments, on Natura 2000 sites that may be located proximal to, or have direct / indirect connectivity with the proposed development site. This report contains information pertaining to the Appropriate Assessment (AA) Screening, undertaken by Verde, in respect of the ecological site assessment requirements of the proposed development.

The following summary applies to the completed screening exercise:

- The proposed development site does not overlap nor is proximal (< 100m) to any Natura 2000 sites nor any other protected habitats (as listed under the EU Habitats Directive).
- There is no nearby hydrological connectivity between the proposed works site and Natura 2000 sites further downstream.
- Water quality within the Newcastle stream is considered “moderate” (WFD 2019-2024).
- The site is located on the southern outskirts of Newcastle Village. Residential estates are located to the north and east of the site, while the local community centre is immediately south. The R761 is to the west, beyond which, there is another residential estate. Lands further to the south and west are primarily used for agricultural purposes.
- The typical topography of the site is considered flat (< 2% gradient).
- There are no protected or rare habitats within or near the site boundary.
- There are no supporting habitats for rare/protected bird species within or on lands adjacent to the Newcastle playground site.
- There are no alien invasive species listed under the First Schedule of the EU Habitats Directive within the boundaries of the site nor on land directly adjacent to the playground site.

This AA Screening assessment has concluded that the proposed redevelopment works will not result in likely significant effects on the conservation objectives of any Natura 2000 sites or the qualifying interests contained within. Similarly, there are no proposed developments within a 1km radius that have been approved that may have in-combination effects with the proposed operations.

This report concludes that a Stage 2 Appropriate Assessment (i.e., Natura Impact Statement) **is not required** for the proposed development to progress.

1 INTRODUCTION

1.1 Project Details

Verde Environmental Consultants Ltd. (Verde) were commissioned by Wicklow County Council to carry out an Appropriate Assessment (AA) Screening Report for the proposed redevelopment of the existing playground in Newcastle, Co. Wicklow.

The proposed development will consist of the following elements and works:

- Site clearance (incl. existing playground and circular band stand)
- Installation of perimeter railing
- Installation of play equipment
- Installation of safety surfacing
- Installation of new multi-use games area (MUGA) and fencing adjacent to existing MUGAs
- Provision of associated footpaths, kerbing and landscaping
- Inclusion of any existing trees within the site layout.

1.2 Site Location and Setting

The proposed development site is located within the southern portion of Newcastle Village. Residential housing estates dominate the landscape to the north and east of the site. Lands to the south and west of the playground are dominated by agricultural lands and natural habitats.

Figure 1.1, below, provides an overview of the location of the subject site, whilst Figure 1.2 and Figure 1.3, provide an overview of the development site layout and immediate surrounding landscape.

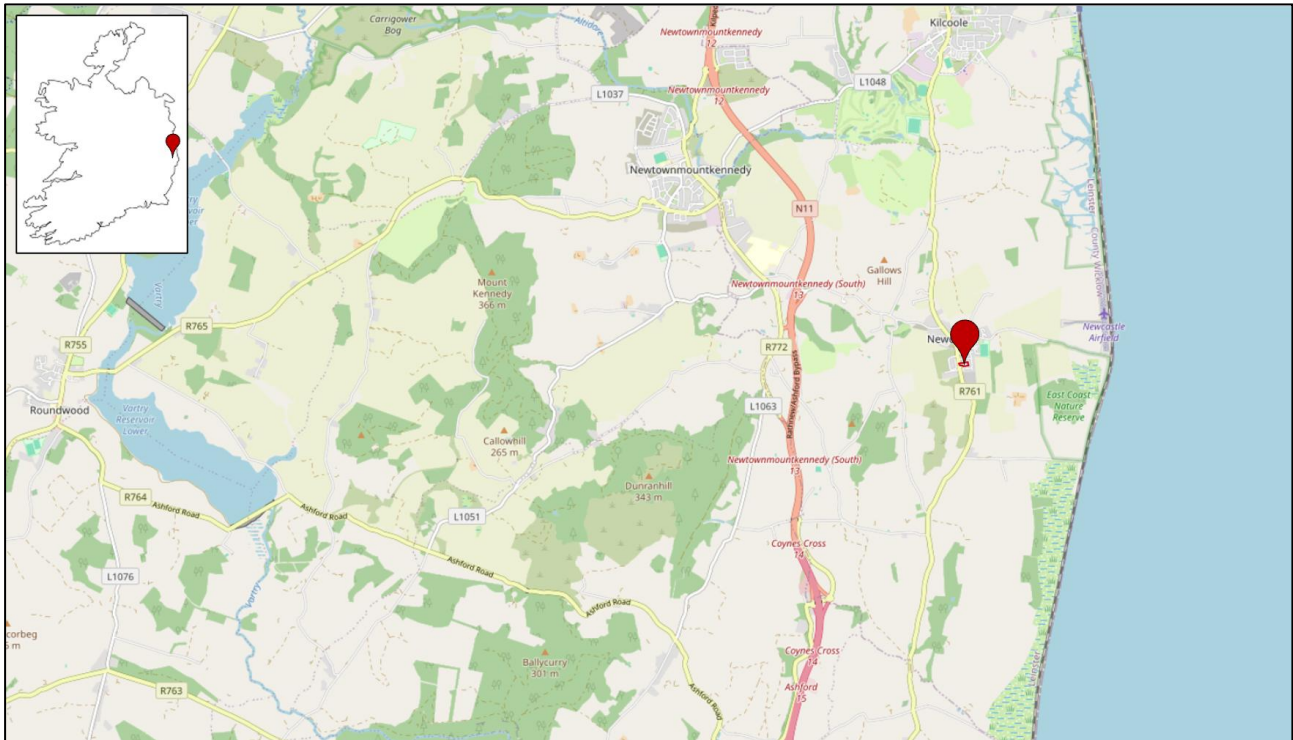


Figure 1.1 – Location of the playground site at Blackditch, Newcastle, Co. Wicklow.



Figure 1.2 – Overview of the site and surrounding area.



Figure 1.3 – Proposed Newcastle Playground redevelopment plans.

2 LEGISLATION BACKGROUND AND GUIDANCE DOCUMENTS

2.1 International Legislation

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as the “Habitats Directive” (EC, 1992), provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/ECC) as codified by Directive 2009/147/EC (EC, 2009).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to have a significant effect on or to adversely affect the integrity of European Sites (Annex 1.1). Article 6(3) establishes the requirement for AA:

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

Article 6(4) states,

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

2.1.2 The Requirement for AA Screening

Section 42 (1) of S.I. No. 477 of 2011, the European Communities (Birds and Natural Habitats) Regulations 2011 states (ISB, 2011):

“A screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site.”

Where the screening process cannot exclude the possibility that a plan or project, individually or in combination with other plans or projects, could have a significant effect on a European site, there is a requirement under Article 42 (9) of these Regulations for the preparation of a Natura Impact Statement to inform the Appropriate Assessment process.

2.1.3 Screening Determination

In accordance with Regulation 42(7) of the Birds and Natural Habitats Regulations 2011 (S.I. No. 477/2011) as amended (ISB, 2011):

“The public authority shall determine that an Appropriate Assessment of a plan or project is not required where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it can be excluded on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site.”

Further, under Regulation 42(8):

“(a) Where, in relation to a plan or project for which an application for consent has been received, a public authority makes a determination that an Appropriate Assessment is required, the public authority shall give notice of the determination, including reasons for the determination of the public authority, to the following —

- i. the applicant,*
- ii. if appropriate, any person who made submissions or observations in relation to the application to the public authority, or*
- iii. if appropriate, any party to an appeal or referral.*

(b) Where a public authority has determined that an Appropriate Assessment is required in respect of a proposed development it may direct in the notice issued under subparagraph (a) that a Natura Impact Statement is required.”

2.2 National Legislation

The Habitats Directive has been transposed into Irish law by Part XAB of the Planning and Development Act, 2000 – 2015 (Law Reform Commission, 2010) and the European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477/2011) as amended (ISB, 2011).

2.3 Guidance Documents on Appropriate Assessment

Where an AA is necessary, the AA requirements of Article 6(3) of the Habitats Directive 92/43/EEC (EC, 1992) follow a sequential approach as outlined in the following guidance documents:

- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 and PSSP 2/10 (NPWS, 2010).
- Appropriate Assessment of Plans and Projects in Ireland – guidance for Planning Authorities. Revised 2010. (DEHLG, 2009).

- Guidelines for Good Practice Appropriate Assessment of Plans Under Article 6(3) Habitats Directive (International Workshop on Assessment of Plans under the Habitats Directive, 2011).
- Managing Natura 2000 Sites: The provisions of Article 6 of the Habitat's Directive 92/43/EEC Commission Notice (EC, 2018).
- Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (EC, 2021a).
- ANNEX to the Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (EC, 2021b).
- The Department of the Environment, Heritage, and Local Government guidance “Appropriate Assessment of Plans and Projects in Ireland – guidance for Planning Authorities, 2009” and the European Commission (2001) 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.
- National Parks and Wildlife Service (NPWS) Protected Areas Maps & Metadata (accessible online at; <https://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=8f7060450de3485fa1c1085536d477ba>)
- National Parks and Wildlife Service (NPWS) Protected Areas Site Synopses and Conservation Objectives Documentation
- EPA maps (accessible online at; <https://gis.epa.ie/EPAMaps/?s=map>)

2.4 Overview of Methodology for Appropriate Assessment

2.4.1 Overview of the Stages of Appropriate Assessment

The AA process is a sequential process consisting of four potential stages. If at the first stage in the process it is determined that there will be no significant effect on a European Site, the process is effectively completed. The four stages are as follows:

- Stage 1 – Screening of the proposed plan or project for AA (current stage);
- Stage 2 – An AA of the proposed plan or project;
- Stage 3 – Assessment of alternative solutions; and
- Stage 4 – Imperative Reasons of Overriding Public Interest (IROPI)/ Derogation.

Stage 1 relates to Regulation 42 of the Birds and Natural Habitats Regulations (ISB, 2011); and Stage 2 relates to Article 6(3) of the Habitats Directive; and Stages 3 and 4 to Article 6(4) of the Habitats Directive (EC, 1992).

2.4.2 Stage 1: Screening (Current Stage)

The aim of screening is to assess if the plan or project is directly connected with or necessary to the management of European Site(s); or in view of best scientific knowledge, if the plan or project, individually or in combination with other plans or projects, is likely to have a significant effect on a European site. This is done by examining the proposed plan or project and the conservation objectives of any European Sites that might potentially be affected. If screening determines

that there are likely to be significant effects, or the significance of effects are uncertain or unknown then it will be recommended that a project is brought forward to full AA.

2.4.3 Stage 2: Appropriate Assessment

The aim of Stage 2 of the AA process is to identify any adverse impacts that the plan or project might have on the integrity of relevant European Sites. As part of the assessment, a key consideration is 'in combination' effects with other plans or projects. Where adverse impacts are identified, mitigation measures can be proposed that would avoid, reduce or remedy any such negative impacts and the plan or project should then be amended accordingly, thereby avoiding the need to progress to Stage 3.

2.4.4 Stage 3: Assessment of Alternative Solutions

If it is not possible during the stage 2 to reduce impacts to acceptable, non-significant levels by avoidance and/or mitigation, stage 3 of the process must be undertaken which is to objectively assess whether alternative solutions exist by which the objectives of the plan or project can be achieved. Explicitly, this means alternative solutions that do not have significant negative impacts on the integrity of a European Site. It should also be noted that EU guidance on this stage of the process states that, 'other assessment criteria, such as economic criteria, cannot be seen as overruling ecological criteria' (EC, 2002). In other words, if alternative solutions exist that do not have negative impacts on European Sites; they should be adopted regardless of economic considerations.

2.4.5 Stage 4: Imperative Reasons of Overriding Public Interest (IROPI)/Derogation

This stage of the AA process is undertaken when it has been determined that negative impacts on the integrity of a European Site will result from a plan or project, but that no alternatives exist. At this stage of the AA process, it is the characteristics of the plan or project itself that will determine whether the competent authority can allow the plan or project to progress. This is the determination of 'over-riding public interest'. It is important to note that in the case of European Sites that include in their qualifying features 'priority' habitats or species, as defined in Annex I and II of the Directive, the demonstration of 'overriding public interest' is not sufficient and it must be demonstrated that the plan or project is necessary for 'human health or safety considerations'. Where plans or projects meet these criteria, they can be allowed, provided adequate compensatory measures are proposed. Stage 4 of the process defines and describes these compensation measures.

3 METHODS

3.1 Desktop Assessment

Sources of data reviewed as part of the screening process for this project included:

- National Parks and Wildlife Service (NPWS); site synopses and conservation objectives for relevant Natura 2000 sites (accessible at <https://www.npws.ie/>)
- Bird of Conservation Concern, Ireland (BoCCI). Species list of bird species outlines for conservation efforts 2020-2026. <https://birdwatchireland.ie/birds-of-conservation-concern-in-ireland/>
- National Biodiversity Data Centre (NBDC) – 1km- and 2km-square species reports (accessed online on 02/08/2023)
- The status of EU Habitats and Species in Ireland 2013, NPWS, ed. D. Lynn
- Article 17 Reports (NPWS, The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview., 2019)
- GIS spatial data

3.2 Development Site Habitat Assessment Methods

A general assessment of the site was carried out by Verde on Monday 20th October 2025. The site assessment was in line with the Heritage Council's Best Practice Guidance for Habitat Survey and Mapping (Smith et al., 2011) and habitats were classified to level 3 of the Fossitt (2000) classification system. To illustrate the general habitat quality, photographs were taken using a digital camera. Site evaluation is based on the guidelines of the Chartered Institute of Ecology and Environmental Management (CIEEM 2019).

The site and immediate surroundings were inspected for the presence of invasive species, as listed in the First Schedule of the Birds and Natural Habitats Regulations (S.I. No. 477/2024). Regulation 49 (2) states that “any person who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow in any place any plant listed in the Third Schedule, shall be guilty of an offence”.

The determination of the presence or absence of Annex I habitats was carried out in consultation with the habitat descriptions provided in the most recent Article 17 Reports (NPWS, The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview., 2019). The Interpretation Manual of European Union Habitats (EUR 28, April 2013) was also consulted. In addition, the spatial GIS data for the Article 17 Reports were examined to determine the distribution of these habitats (as known to the NPWS) within the study area. All surveys were completed by qualified specialists and in accordance with relevant legislation, particularly the “Guidelines for Ecological Impact Assessment in the UK and Ireland” (CIEEM, 2018) through the additional recording of specific features indicating the presence, or likely presence, of protected species or other species of nature conservation significance.

3.3 Zone of Influence (Zoi)

The 'zone of influence' for a project is defined as "the area over which ecological features may be affected by biophysical changes because of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries" (CIEEM, 2019). Subsequently, the zone of influence will vary for different ecological features depending on their sensitivity to an environmental change (CIEEM, 2018).

Irish guidance (DoEHLG, 2010) states "*for the zone of influence, a distance of 15 km is currently recommended in the case of plans derives from UK guidance*" (Scott Wilson et al, 2006). The guidance goes on to state that "*for projects, the distance could be much less than 15 km, and in some cases less than 100 m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in-combination effects*".

Additionally, a practice note issued by the Office of the Planning Regulator (OPR, 2021) further states that "*The zone of influence of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. This should be established on a case-by-case basis using the Source-Pathway-Receptor framework and **not by arbitrary distances (such as 15 km)***".

The zone of influence for this project was identified through a review of the nature of the project, the type of impacts and effects that could arise as a result, the distance between the project and Natura 2000 sites, the qualifying interests of the Natura 2000 sites, as well as the consideration of the typical movement patterns of these QIs (i.e., sedentary vs highly mobile species).

Consequently, considering the volume, extent and nature of the proposed development, whilst considering the landscape immediate surrounding the playground site, a Zoi of 4km was utilised.

3.4 Source-Pathway-Receptor (SPR) Model

The likely effects of the proposed development on any European site have been assessed using a source-pathway-receptor model, where:

- A 'source' is defined as the individual element of the proposed works that has the potential to impact on a European site, its qualifying features and its conservation objectives.
- A 'pathway' is defined as the means or route by which a source can affect the ecological receptor.
- A 'receptor' is defined as the SCI of SPAs or QI of SACs for which conservation objectives have been set for the European sites being screened.

Where a source-pathway-receptor link between the proposed development and a European Site exists and there is a potential negative impact, further assessment is required.

In accordance with EC Article 6 Guidance Document (EC, 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, 2018), in order to ensure all impacts upon the site are identified, including those direct and indirect impacts that are a result of cumulative impacts, the following steps were completed:

- Identify all projects/ plans which might act in combination: Identify all possible sources of effects from the project or plan under consideration, together with all other sources in the existing environment and any other effects likely to arise from other proposed projects or plans.
- Impacts identification: Identify the types of impacts that are likely to affect aspects of the structure and functions of the site vulnerable to change.
- Define the boundaries for assessment: define boundaries for examination of cumulative effects which will be different for different types of impact and may include remote locations.
- Pathway identification: Identify potential cumulative pathways (e.g., via water, air etc.; accumulations of effects in time or space).
- Prediction: Prediction of magnitude/extent of identified likely cumulative effects.
- Assessment: Comment on whether or not the potential cumulative impacts are likely to be significant.

3.5 Screening Assessment of European Sites

This chapter provides a Preliminary Screening Assessment to identify SACs and SPAs to be assessed fully in the Screening of Potential Impacts (Section 7). As per the outcomes of the Judgement in Case C-721/21: Keegan Land Holdings vs. An Bord Pleanála, this screening assessment has been completed with consideration of “Article 6(3) of Directive 92/43 must be interpreted as meaning that: in order to determine whether it is necessary to carry out an appropriate assessment of the implications of a plan or project for a site, **account may be taken of the features of that plan or project which involve the removal of contaminants and which therefore may have the effect of reducing the harmful effects of the plan or project on that site**, where those features have been incorporated into that plan or project as standard features, inherent in such a plan or project, irrespective of any effect on the site”.

3.6 Cumulative and In-combination Impacts

It is a requirement of screening for Appropriate Assessment that the cumulative or in-combination effects of the proposed development together with other plans or projects are assessed. Cumulative impacts can be defined as a project/plan/programme likely to have a significant effect thereon, either individually or in combination with other plans or projects.

4 RESULTS

4.1 The AA Zone of Influence

The determination of the Zone of Influence (Zoi) is based on the following considerations:

- The volume, size and extent of the proposed development during construction.
- The timeframe for the construction of the proposed development to be completed.
- Noise and air emissions during operation.
- Records of rare and protected species known to occur on lands proximal to the proposed development.
- Hydrological connectivity of the site to moderate and / or major river systems.

There are 2 Natura 2000 sites within the 4km Zoi from the proposed works at the Newcastle playground site, with the nearest watercourse being located c. 300m north of the playground site.

4.2 Natura 2000 Sites within the 4km Zone of Influence

The following Natura 2000 sites occur within the 4 km Zoi designated for this proposed development site.

- The Murrough Wetlands SAC (002249)
- The Murrough SPA (004186)

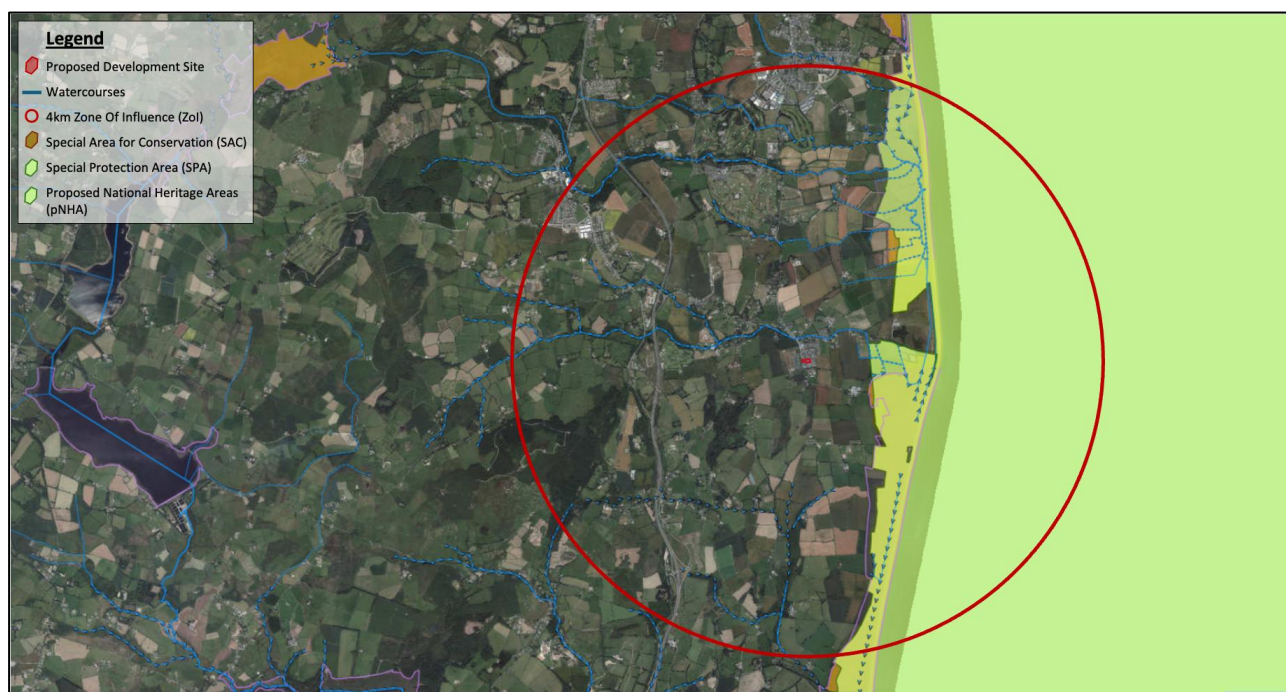


Figure 4.1 – Natura 2000 Sites within the 4km Zone of Influence.

4.3 Habitats

The following habitats were observed within the boundaries of the playground site:

- Hedgerows (WL1)
- Dry Meadow and Grassy Verges (GS2)
- Amenity Grasslands (GA2)
- Buildings and Artificial Surfaces (BL3)

The following habitats were observed on lands adjacent to the playground site:

- Buildings and Artificial Surfaces (BL3)
- Amenity Grasslands (GA2)
- Dry Calcareous and Neutral Grassland (GS1)
- Arable Cropland (BC1)
- Improved Agricultural Grassland (GA1)

The site is primarily comprised of amenity grasslands (GA1) and buildings and artificial surfaces, exemplified by typical playground infrastructure, walkways, fencing and other ancillary structures. Common floral species observed within amenity grasslands included meadow grass (*Poa spp.*) with dandelions (*Taraxacum spp.*), plantain (*Plantago spp.*), clovers (*Trifolium spp.*) and Daisy (*Bellis perennis*).

The playground site lies adjacent to the R761 roadway, which itself is bounded by hedgerows (WL1), grassy verges (GS1) and footpaths (BL3). Typical species within grassy verges along the R761 roadway included meadow grass (*Poa spp.*), Cow Parsley (*Anthriscus sylvestris*), clovers (*Trifolium spp.*), plantain (*Plantago spp.*), and thistle (*Cirsium vulgare*).

Similarly, hedgerows were observed along the northern boundary of the site. Typical floral species observed within hedgerows include hawthorn (*Crataegus monogyna*), bramble (*Rubus fruticosus*), ash (*Fraxinus excelsior*), ivy (*Hedera spp.*), hedge bindweed (*Hypericum Calystegia sepium*), and nettle (*Urtica dioica*).

Adjacent lands to the west, north, and east of the playground site are entirely comprised of residential housing estates, with amenity grasslands and a local community centre dominating lands to the south. Further afield, the landscape to the east of the playground site is dominated by arable cropland, whilst lands to the south and west are dominated by improved agricultural land with patches of scrub habitat (WS1) interspersed throughout the landscape.

Images 4.2 – 4.4, overleaf, provide an overview of habitats observed on and near the proposed development site.

4.4 Invasive Species

No alien invasive species were observed within the boundaries of the subject site.



Image 4.2 – Views hedgerows (WL1) and dry verges (GS2) observed along the western boundary of the site.



Image 4.3 – Views of the amenity grassland (GA2) that makes up the eastern portion of the site.



Image 4.4 – Examples of buildings and artificial surfaces (BL3) that make up the western half of the playground.

4.5 Hydrology

4.5.1 Surface Water

The Newcastle stream (FW2) is located c. 300m north of the playground site. This watercourse traverses through Newcastle Village and flows eastwards, where it flows into the Murrough SPA c. 1.2km downstream. There are no other watercourses identified on or near the playground site. Figure 4.5, below, provides an overview of the hydrology of the landscape surrounding the site.



Figure 4.5 – Hydrological connectivity of the area.

4.5.2 Water Framework Directive Status

According to the 2019-2024 Water Framework Directive (WFD) assessment, the Newcastle stream (IE_EA_10N010600) is currently classified as having “*moderate*” water quality status along its length. Similarly, according to the latest Q-value water quality monitoring, the Newcastle stream exhibits “*moderate*” water quality (Q-value = 3-4; 2024). According to the WFD Coastal Waterbody status (2019-2024), the Southeastern Irish Sea – Killiney Bay is currently in a “*good*” status. Figure 4.6, overleaf, provides an overview of the WFD status of watercourses and coastal water near the playground site.



Figure 4.6 – Water quality statuses of watercourses proximal to the site.

5 Source-Pathway-Receptor Model

The Source-Pathway-Receptor (SPR) model provides a standardised approach for describing the flow of environmental pollutants from a source through different pathways to potential receptors and provides a basis for the determination of environmental risk assessments. The SPR model considers sources, transport routes (pathways) and receptors of environmental pollution as separate entities. By defining these sections, the application of the SPR model can be better structured and gradually expanded to suit each individual project. A major advantage of the SPR model is its simplicity and flexibility, and the ability of the SPR model to identify relations in complex systems.

A key aspect of the SPR model is that the definition of pathways and receptors is relative to the project. For example, components of the environment surrounding a given project location may act as pathways as well as receptors, such as watercourses and/or drainage lines can act as receptors but can also act as direct pathways to other sensitive receptor habitats. Consequently, the components of the SPR model as they pertain the proposed development (this project) are detailed in the sections hereunder. It must be noted that the sections hereunder portray the potential significant effects of various sources in worse case scenarios, and do not explicitly depict the specific sources and / or volumes of specific sources from the proposed development.

5.1 Sources

5.1.1 Sediment and Pollutant Influxes and Dust Emissions

Construction and / or development works can result in sediment influx into adjacent environments, which can have various environmental impacts. This is particularly concerning when rivers, streams or marine habitats are the potential receptors of sediment run-off influxes. Although sedimentation is a natural process that forms a key component of nutrient transfer between terrestrial and marine habitats, excessive sedimentation can result in is the alteration of water quality, as sediment can reduce water clarity, reduce water quality through nutrient influxes, and in worse case scenarios disrupt aquatic plant growth, and result in the deterioration of habitats for aquatic mammals, fish, crustaceans and invertebrates.

The proposed works include site clearance but primarily encompass the installation of playground equipment, fencing, footpaths and landscaping works. Consequently, construction-type works on the site will be minor, low volume and short-term.

In applying this information in the context of the proposed works, consideration was given to the following:

- The typography of the landscape of the proposed playground works site and immediate surrounding landscape is flat (<2% gradient), whereby surface run-off will be slow.
- The immediate landscape surrounding the development site is urban in nature.
- The nearest hydrological pathway, the Newcastle Stream, is located c. 300m north of the playground site.

- The construction and renovation works can be considered minor and short-term.

5.1.2 Hydrocarbons

Hydrocarbon spills into adjacent terrestrial and aquatic habitats can have severe environmental impacts. Hydrocarbon spills are particularly toxic to biota, including aquatic fauna such as fish, crustaceans, amphibians and insects. Hydrocarbon spills can impact the physical and chemical properties of water, leading to significant changes in water quality, which can result in the death of aquatic plants and fauna. Influxes of hydrocarbon in significant amounts (e.g., > 1L) into the aquatic ecosystem may result in deterioration of water quality, including low dissolved oxygen and altered pH, resulting in aquatic fauna die-offs. Toxins from hydrocarbon spills can potentially accumulate in food webs, whereby unlike suspended sediment, which (depending on particle size) can drop out of solution in areas of reduced flow velocities, petroleum-range hydrocarbons are largely insoluble in water and will float on the surface, thereby allowing for greater potential for downstream transport (see Brown et al, 2017). Hydrocarbons may absorb onto soil particles on the bankside or riverbed, which can lead to delayed leaching into the environment and localised effects on soil-dwelling organisms (e.g., Pu et al, 2022).

Sources of hydrocarbons include fuels, hydraulic fluids and oils from construction machinery, excavators, and/ or construction vehicles used to undertake the proposed development works, and although infrequent and rare, improper maintenance and/or on-site incidents may result in the discharge of hydrocarbons from construction machinery. However, the redevelopment works proposed for the Newcastle playground do not encompass major excavation or construction works, whereby the use of heavy machinery on site will be limited. Consequently, the potential for incidents of hydrocarbon spills during typical works is considered minimal.

5.1.3 Noise and Vibration

The proposed redevelopment works consist of site clearance (e.g., removal of existing playground equipment and the circular band stand), and the installation of new playground infrastructure. As such, the use of heavy machinery during the works can be considered minimal.

The de facto daytime noise limit, as recommended by most local authorities in Ireland, is a sound pressure level (SPL) of 55 decibels (dB) (see British Standard BS 5228:2009+A1:2014). It must be noted that the playground site is surrounded by residential housing estates and municipal roads that exhibit persistent daily vehicle traffic. Consequently, noise and vibration emissions of the immediate surrounding landscape are already elevated above ambient levels.

5.2 Pathways

There are no watercourses on or proximal (within 100m) of the proposed works site. The Newcastle Stream is located c. 300m north of the proposed works site and flows eastwards where it flows into the Murrough SPA c. 1.2km downstream. Moreover, the proposed development site does not overlap nor is proximal to any Natura 2000 sites nor any Natural

Heritage sites. However, the proposed development will produce noise, vibration and dust emissions, which may affect habitats nearby that may support migratory or highly mobile species. As such, further screening assessment of the likelihood of significant effects to Natura 2000 sites and their qualifying interests (QIs) and species of conservation interest (SCIs) within the 4km ZOI is warranted.

5.3 Receptors

The connectivity of each Natura 2000 site to the proposed development site through hydrological connectivity is provided, below. Habitats and species detailed in Natura 2000 sites identified within the 4km ZOI that are likely to receive impacts from the proposed development are provided in the sections hereunder.

5.3.1 The Murrough Wetlands SAC (002249)

According to the site synopsis (NPWS, 2014), *“The Murrough is a coastal wetland complex which stretches for 15 km from Ballygannon to north of Wicklow town, and in parts, extends inland for up to 1 km. This site is of importance as it is the largest coastal wetland complex on the east coast of Ireland. Although much affected by drainage, it still contains a wide range of coastal and freshwater habitats, including six listed on Annex I of the E.U. Habitats Directive, some of which contain threatened plants. Areas on the site contain a rich invertebrate fauna, including several rarities. It is an important site for both wintering and breeding birds and supports a variety of species listed on Annex I of the E.U. Birds Directive.”*

The following are listed as QIs/SCIs of the Murrough Wetlands SAC:

- 1210 Annual vegetation of drift lines
- 1220 Perennial vegetation of stony banks
- 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- 1410 Mediterranean salt meadows (*Juncetalia maritimi*)
- 7210 Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae**
- 7230 Alkaline fens

5.3.2 The Murrough SPA (004186)

According to the site synopsis (NPWS, 2015), *“The Murrough SPA comprises a coastal wetland complex that stretches for 13 km from Kilcoole Station, east of Kilcoole village in the north to Wicklow town in the south, and extends inland for up to 1 km in places. The site includes an area of marine water to a distance of 200m from the low water mark. The Murrough SPA is an important site for wintering waterbirds, being internationally important for Light-bellied Brent Goose and nationally important for Red-throated Diver, Greylag Goose, Wigeon, Teal, Black-headed Gull and Herring Gull. It is probably the most important site in the country for nesting Little Tern.”*

The following are listed as QIs/SCIs of the Murrough SPA

- A001 Red-throated Diver (*Gavia stellata*)
- A043 Greylag Goose (*Anser anser*)
- A046 Light-bellied Brent Goose (*Branta bernicla hrota*)
- A050 Wigeon (*Anas penelope*)
- A052 Teal (*Anas crecca*)
- A179 Black-headed Gull (*Chroicocephalus ridibundus*)
- A184 Herring Gull (*Larus argentatus*)
- A195 Little Tern (*Sterna albifrons*)

5.4 Assessment of Likely Effects

Table 5.1, below, provides a summary of the assessment of the likelihood of significant effects on the Natura 2000 sites identified within the 4km ZoI. Specifically, the assessment of likely significant effects considers whether the construction and /or operational phase of the proposed playground are likely or unlikely to have significant negative effects on the conservation objectives of habitats and species identified for each Natura 2000 site, alone or in-combination with other plans / project. In this instance, although the proposed playground site does not overlap or encroach on the boundaries of any of the identified Natura 2000 sites, there is nearby connectivity through surface water and air pathways linking the site and nearby Natura 2000 sites. The full assessment of likely significant effects on each QI identified for each nearby Natura 2000 site can be found in the appendices.

Table 5.1 – Summary of Connectivity between the Proposed Development site and nearby Natura 2000 Sites.

Natura 2000 Site	Distance From Development Site	Connectivity to Development Site
The Murrough Wetlands SAC (002249)	0.87 km	Hydrological – No
		Air – No
		Land – No
		Mobile Species – No
The Murrough SPA (004186)	0.82 km	Hydrological – No
		Air – No
		Land – No
		Mobile Species – Yes

Table 5.2 – Summary of Assessment of Likelihood of Significant Effects to Natura 2000 Sites within the 4km ZoI.

SPA / SAC	Significant Effects through Surface Water / Pollutant Pathways?	Significant Effects through Noise & Vibration Emissions?	Significant Effects through Habitat loss / Loss of Habitat Connectivity?
The Murrough Wetlands SAC (002249)	No	No	No
The Murrough SPA (004186)	No	No	No

5 IN-COMBINATION EFFECTS

It is a requirement of AA that the cumulative or in-combination effects of the proposed development together with other plans or projects are assessed. Cumulative impacts can be defined as a project/plan/programme likely to have a significant effect thereon, either individually or in combination with other plans or projects.

The following sources were consulted in order to determine if there were any other plans or projects in the area which could result in cumulative impacts:

- DHPLG EIA Portal <https://www.housing.gov.ie/planning/environmental-assessment/environmental-impact-assessment-eia/eia-portal>
- Wicklow County Council - Planning System <https://maps.wicklow.ie/planningenquiry>

Only moderate to large applications which may give rise to potential impacts to the habitats and species within the corresponding Natura 2000 sites have been considered. All other committed/approved developments are for individual residential properties, all of which are not considered to be a risk of in-combination effects given that none will involve further modification of nearby Natura 2000 sites.

There are currently two medium to large developments with approved planning permission within 1km radius of the site that should be considered for in-combination effects. Table 5.3 provides a summary assessment of these planning applications to have in-combination effects with the proposed playground development.

Applicant [Application Number]	Status {Approval Date}	Development Description	Likelihood for in-Combination Effects
Newcastle GAA [2560809]	New Application [10/10/2025]	Demolition of existing clubhouse comprising 371 sq.m; provision of new clubhouse building comprising 816 sq.m; new carparking layout; new pitch floodlights; new ball netting; all associated ancillary works to facilitate the above.	The proposed development has potential to generate low-moderate volumes of dust, sediment and surface water run-off, as well as noise and vibration emissions. As such, the following should be considered: • The proposed development is located c. 365m northeast of the site. • The landscape between the playground and the planning application is urban in nature, dominated by residential housing estate, retail outlets and municipal roads. As such, ambient noise levels can be considered elevated. • Municipal drainage and stormwater management infrastructure will be found along roadways, further reducing uncontrolled surface water and sediment influx into watercourses. Consequently, it is determined that the proposed planning development has low likelihood for in-combination effects with the Newcastle playground redevelopment works to nearby Natura 2000 sites during the construction or operational phases of the projects.
Jonathan Watchorn. [2527]	Approved - Conditional [31/03/2025]	Extension of existing retail outlet including retail space, café, and seating area; New toilet facilities; outdoor seating area; Alterations to front elevation of service station; revised car parking including the provision of a service area and electric vehicle charging points; New electric access gates; New security fence; Alterations to roadside boundaries.	The proposed development has potential to generate low-moderate volumes of dust, sediment and surface water run-off, as well as noise and vibration emissions. As such, the following should be considered: • The proposed development is located c. 165m northwest of the site. • The landscape between the playground and the planning application is urban in nature, dominated by residential housing estate, retail outlets and municipal roads. As such, ambient noise levels can be considered elevated. • Municipal drainage and stormwater management infrastructure will be found along roadways, further reducing uncontrolled surface water and sediment influx into watercourses. Consequently, it is determined that the proposed planning development has low likelihood for in-combination effects with the Newcastle playground redevelopment works to nearby Natura 2000 sites during the construction or operational phases of the projects.

6 SCREENING STATEMENT

The screening exercise was completed in compliance with the relevant EC and national guidelines. Article 42 (7) of the European Communities (Birds and Natural Habitats) Regulations 2011 states that: *“The public authority shall determine that an Appropriate Assessment of a plan or project is not required [...] if it can be excluded on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site.”*

The potential impacts from the proposed redevelopment of Newcastle Playground, on lands adjacent to the R761 roadway, at Blackditch, Newcastle, Co. Wicklow, alone and in-combination with other developments, have been considered in the context of the European Sites potentially affected and the conservation objectives of their Qualifying Interests/Special Conservation Interests.

Considering the extent, nature, type, duration, and location of the proposed works, and the nature of the current state of the proposed site, it has been determined that it is **unlikely** that the proposed redevelopment works at the site will have a significant impact on Natura 2000 sites or to QIs or SCIs that may occur within the landscape surrounding the development works.

A Natura Impact Statement (NIS) is therefore **not required** for this project.

7 REFERENCES

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8 APPENDICES – ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS TO THE CONSERVATION OBJECTIVES OF QIS AND SCIS OF NATURA 2000 SITES WITHIN THE ZOI.

THE MURROUGH WETLANDS SAC (002249)		
QI/SCI	CONSERVATION OBJECTIVES	ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS
Annual vegetation of drift lines [1210]	The conservation objectives (NPWS, 2021) of Annual vegetation of drift lines are achieved when: - The total area of drift line habitat (c. 5.2ha) is stable or increasing. - There is no decline in habitat distribution, subject to natural processes, including erosion and succession. - The natural circulation of sediment and organic matter, without any physical obstructions is restored. - The range of coastal habitats including transitional zones, subject to natural processes including erosion and succession is maintained. - The presence of species-poor communities is maintained. - Native negative indicator species cover in any individual monitoring stop should not be more than 25% is maintained. - Non-native species should not be present in more than 20% of monitoring stops	The Newcastle stream is located c. 300m north of playground site. The proposed redevelopment works will occur within the boundaries of the existing site, whilst the proposed works do not encompass major excavation works, resulting in lower potential for sediment and/or contaminated surface water run-off. Similarly, stormwater is expected to be predominantly contained within the works site, owing to the flat topography of the site and typical surrounding landscape. Although the Newcastle stream ultimately flows into the Murrough Wetlands SAC c. 2km downstream from Newcastle Village, drift line habitats are located > 10km from the subject site via hydrological pathways, affording a significant dilution effect. Consequently, significant effects to the conservation objectives of annual vegetation of drift lines through surface and groundwater pathways are determined to be unlikely. Noise and vibration emissions are typical sourced from construction works including excavations, earthmoving and landscaping, operation of plant, and movement of vehicles, but the proposed redevelopment works do not include typical construction works. Moreover, the playground site is located >800m from the Murrough Wetlands SAC (at the nearest point), whilst drift line habitats are located > 5km from the site via air pathways. Additionally, the majority of noise and vibration effects are dissipated at 200m. It must also be considered that the playground site is located within an urban setting, where the local area exhibits persistent vehicle and human traffic throughout the day, whereby ambient noise levels for the area can be considered above ambient (i.e., 55dB). As such, any incidental noise and vibration emissions from the proposed redevelopment works would ultimately be short-term and very localised. Consequently, significant effects to the conservation objectives of annual vegetation of drift lines through noise and vibration pathways are determined to be unlikely. The proposed development is located c. 870m from the Murrough Wetlands SAC (at the nearest point), whereby the proposed redevelopment works will not overlap nor infringe on the boundary of the SAC, and will therefore not infringe on the distribution, extent, connectivity or other natural processes of drift line habitats.

		Consequently, significant effects to the conservation objectives of annual vegetation of drift lines through habitat loss or physical connectivity pathways are determined to be unlikely.
QI/SCI	CONSERVATION OBJECTIVES	ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS
Perennial vegetation of stony banks [1220]	The conservation objectives (NPWS, 2021) of Perennial vegetation of stony banks are achieved when: - The permanent habitat area is stable or increasing, subject to natural processes. - No decline, or change in habitat distribution, subject to natural processes. - Maintain the natural circulation of sediment and organic matter, without any physical obstructions. - Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession. - Maintain the typical vegetated shingle flora including the range of sub- communities within the different zones. - Negative indicator species (including non-natives) to represent less than 5% cover.	The Newcastle stream is located c. 300m north of playground site. The proposed redevelopment works will occur within the boundaries of the existing site, whilst the proposed works do not encompass major excavation works, resulting in lower potential for sediment and/or contaminated surface water run-off. Similarly, stormwater is expected to be predominantly contained within the works site, owing to the flat topography of the site and typical surrounding landscape. Although the Newcastle stream ultimately flows into the Murrough Wetlands SAC c. 2km downstream from Newcastle Village, stony bank habitats are located > 10km from the proposed development site via hydrological pathways, affording a significant dilution effect. Consequently, significant effects to the conservation objectives of perennial vegetation of stony banks through surface and groundwater pathways are determined to be unlikely. Noise and vibration emissions are typical sourced from construction works including excavations, earthmoving and landscaping, operation of plant, and movement of vehicles, but the proposed redevelopment works do not include typical construction works. Moreover, the playground site is located > 800m from the Murrough Wetlands SAC (at the nearest point), whilst drift line habitats are located > 5km from the site via air pathways. Additionally, the majority of noise and vibration effects are dissipated at 200m. It must also be considered that the playground site is located within an urban setting, where the local area exhibits persistent vehicle and human traffic throughout the day, whereby ambient noise levels for the area can be considered above ambient (i.e., 55dB). As such, any incidental noise and vibration emissions from the proposed redevelopment works would ultimately be short-term and very localised. Consequently, significant effects to the conservation objectives of perennial vegetation of stony banks through noise and vibration pathways are determined to be unlikely. The proposed development is located c. 870m from the Murrough Wetlands SAC (at the nearest point), whereby the proposed redevelopment works will not overlap nor infringe on the boundary of the SAC, and will therefore not infringe on the distribution, extent, connectivity or other natural processes of drift line habitats.

Consequently, significant effects to the conservation objectives of perennial vegetation of stony banks through habitat loss or physical connectivity pathways are determined to be unlikely.

QI/SCI	CONSERVATION OBJECTIVES	ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS
Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]	The conservation objectives (NPWS, 2021) of Atlantic and Mediterranean salt meadows are achieved when: - The area of habitat distribution (119ha) is stable or increasing, subject to natural processes, including erosion and succession. - There is no decline or change in habitat distribution, subject to natural processes. - The natural circulation of sediments and organic matter, without any physical obstructions is maintained. - The creek and pan structure, subject to natural processes, including erosion and succession is maintained. - The natural tidal regime and structural variation within sward is maintained. - The range of coastal habitats including transitional zones, subject to natural processes including erosion and succession is maintained. - More than 90% of the saltmarsh area remains vegetated. - There is no significant expansion of common cordgrass (<i>Spartina anglica</i>), with an annual spread of less than 1%.	The Newcastle stream is located c. 300m north of playground site. The proposed redevelopment works will occur within the boundaries of the existing site, whilst the proposed works do not encompass major excavation works, resulting in lower potential for sediment and/or contaminated surface water run-off. Similarly, stormwater is expected to be predominantly contained within the works site, owing to the flat topography of the site and typical surrounding landscape. Although the Newcastle stream ultimately flows into the Murrough Wetlands SAC c. 2km downstream from Newcastle Village, salt meadow habitats are located > 10km from the proposed redevelopment site via hydrological pathways, affording a significant dilution effect. Consequently, significant effects to the conservation objectives of salt meadows through surface and groundwater pathways are determined to be unlikely. Noise and vibration emissions are typical sourced from construction works including excavations, earthmoving and landscaping, operation of plant, and movement of vehicles, but the proposed redevelopment works do not include typical construction works. Moreover, the playground site is located > 800m from the Murrough Wetlands SAC (at the nearest point), whilst salt meadow habitats are located > 5km from the playground redevelopment site via air pathways. Additionally, the majority of noise and vibration effects are dissipated at 200m. It must also be considered that the playground site is located within an urban setting, where the local area exhibits persistent vehicle and human traffic throughout the day, whereby ambient noise levels for the area can be considered above ambient (i.e., 55dB). As such, any incidental noise and vibration emissions from the proposed redevelopment works would ultimately be short-term and very localised. Consequently, significant effects to the conservation objectives of salt meadows through noise and vibration pathways are determined to be unlikely. The proposed development is located c. 870m from the Murrough Wetlands SAC (at the nearest point), whereby the proposed redevelopment works will not overlap nor infringe on the boundary of the SAC, and will therefore not infringe on the distribution, extent, connectivity or other natural processes of salt meadow habitats.

Consequently, significant effects to the conservation objectives of salt meadows through habitat loss or physical connectivity pathways are determined to be unlikely.

QI/SCI	CONSERVATION OBJECTIVES	ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS
Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> *[7210]	The conservation objectives (NPWS, 2021) of Calcareous fens are achieved when: • The area of extent is stable or increasing, subject to natural processes. • There is no decline in extent of distribution, subject to natural processes. • Soil pH and nutrient status within natural ranges is maintained. • Active peat formation, where appropriate is maintained. • Appropriate natural hydrological regimes necessary to support the natural structure and functioning of the habitat is maintained or restored. • Drainage conditions are maintained. • Appropriate water quality, particularly pH and nutrient levels, to support the natural structure and functioning of the habitat is maintained. • Adequate cover of typical vascular plant species is maintained. • Cover of native negative indicator species at insignificant levels is maintained. • Cover of scattered native trees and shrubs less than 10%, with algae cover < 2%. • Cover of disturbed bare ground not more than 10%.	The Newcastle stream is located c. 300m north of playground site. The proposed redevelopment works will occur within the boundaries of the existing site, whilst the proposed works do not encompass major excavation works, resulting in lower potential for sediment and/or contaminated surface water run-off. Similarly, stormwater is expected to be predominantly contained within the works site, owing to the flat topography of the site and typical surrounding landscape. Although the Newcastle stream ultimately flows into the Murrough Wetlands SAC c. 2km downstream from Newcastle Village, drift line habitats are located > 20km from the proposed redevelopment site via hydrological pathways, affording a significant dilution effect. Consequently, significant effects to the conservation objectives of Calcareous fens through surface and groundwater pathways are determined to be unlikely. Noise and vibration emissions are typical sourced from construction works including excavations, earthmoving and landscaping, operation of plant, and movement of vehicles, but the proposed redevelopment works do not include typical construction works. Moreover, the playground site is located > 800m from the Murrough Wetlands SAC (at the nearest point), whilst calcareous fen habitats are located > 8km from the playground site via air pathways. Additionally, the majority of noise and vibration effects are dissipated at 200m. It must also be considered that the playground site is located within an urban setting, where the local area exhibits persistent vehicle and human traffic throughout the day, whereby ambient noise levels for the area can be considered above ambient (i.e., 55dB). As such, any incidental noise and vibration emissions from the proposed redevelopment works would ultimately be short-term and very localised. Consequently, significant effects to the conservation objectives of Calcareous fens through noise and vibration pathways are determined to be unlikely. The proposed development is located c. 870m from the Murrough Wetlands SAC (at the nearest point), whereby the proposed redevelopment works will not overlap nor infringe on the boundary of the SAC, and will therefore not infringe on the distribution, extent, connectivity or other natural processes of calcareous fen habitats

	No decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat.	Consequently, significant effects to the conservation objectives of Calcareous fens through habitat loss or physical connectivity pathways are determined to be unlikely.
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QI/SCI	CONSERVATION OBJECTIVES	ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS
Alkaline fens [7230]	The conservation objectives (NPWS, 2012) of Molinia meadows are achieved when: - The area of extent is stable or increasing, subject to natural processes. - There is no decline in extent of distribution, subject to natural processes. - Soil pH and nutrient status within natural ranges is maintained. - Active peat formation, where appropriate is maintained. - Appropriate natural hydrological regimes necessary to support the natural structure and functioning of the habitat is maintained or restored. - Drainage conditions are maintained. - Appropriate water quality, particularly pH and nutrient levels, to support the natural structure and functioning of the habitat is maintained. - variety of vegetation communities, subject to natural processes is maintained. - adequate cover of typical brown moss species and vascular plants. - Cover of non-native species less than 1% - Cover of scattered native trees and shrubs less than 10% and algae < 2%.	The Newcastle stream is located c. 300m north of playground site. The proposed works will occur within the boundaries of the existing site, whilst the proposed works do not encompass major excavation works, resulting in lower potential for sediment and/or contaminated surface water run-off. Similarly, stormwater is expected to be predominantly contained within the works site, owing to the flat topography of the site and typical surrounding landscape. Although the Newcastle stream ultimately flows into the Murrough Wetlands SAC c. 2km downstream from Newcastle Village, drift line habitats are located > 20km from the proposed redevelopment site via hydrological pathways, affording a significant dilution effect. Consequently, significant effects to the conservation objectives of Alkaline fens through surface and groundwater pathways are determined to be unlikely. Noise and vibration emissions are typical sourced from construction works including excavations, earthmoving and landscaping, operation of plant, and movement of vehicles, but the proposed redevelopment works do not include typical construction works. Moreover, the playground site is located > 800m from the Murrough Wetlands SAC (at the nearest point), whilst alkaline fen habitats are located > 8km from the playground site via air pathways. Additionally, the majority of noise and vibration effects are dissipated at 200m. It must also be considered that the playground site is located within an urban setting, where the local area exhibits persistent vehicle and human traffic throughout the day, whereby ambient noise levels for the area can be considered above ambient (i.e., 55dB). As such, any incidental noise and vibration emissions from the proposed redevelopment works would ultimately be short-term and very localised. Consequently, significant effects to the conservation objectives of Alkaline fens through noise and vibration pathways are determined to be unlikely. The proposed development is located c. 870m from the Murrough Wetlands SAC (at the nearest point), whereby the proposed redevelopment works will not overlap nor infringe on the boundary of the SAC, and will

	There is no decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat; maintain features of local distinctiveness, subject to natural processes.	therefore not infringe on the distribution, extent, connectivity or other natural processes of alkaline fen habitats Consequently, significant effects to the conservation objectives of Alkaline fens through habitat loss or physical connectivity pathways are determined to be unlikely.
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THE MURROUGH SPA (004186)		
QI/SCI	CONSERVATION OBJECTIVES	ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS
Red-throated Diver (<i>Gavia stellata</i>) [A001] Greylag Goose (<i>Anser anser</i>) [A043] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Wigeon (<i>Anas penelope</i>) [A050] Teal (<i>Anas crecca</i>) [A052] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Herring Gull (<i>Larus argentatus</i>) [A184] Little Tern (<i>Sterna albifrons</i>) [A195]	The conservation objectives (NPWS, 2012) of avifauna are achieved when: - The long-term population trends are stable or increasing. - There is no significant decrease in the numbers or range of areas used by bird species, other than that occurring from natural patterns of variation.	The Newcastle stream is located c. 300m north of playground site. The proposed works will occur within the boundaries of the existing site, whilst the proposed works do not encompass major excavation works, resulting in lower potential for sediment and/or contaminated surface water run-off. Similarly, stormwater is expected to be predominantly contained within the works site, owing to the flat typography of the site and typical surrounding landscape. Although the Newcastle stream ultimately flows into the Murrough SPA c. 1.3km downstream from Newcastle Village, whilst typical supporting habitats for marine birds are located > 10km from the proposed redevelopment site via hydrological pathways, affording a significant dilution effect. Consequently, significant effects to the conservation objectives of avifauna species through surface and groundwater pathways are determined to be unlikely. Noise and vibration emissions are typical sourced from construction works including excavations, earthmoving and landscaping, operation of plant, and movement of vehicles, but the proposed redevelopment works do not include typical construction works. Moreover, the playground site is located > 800m from the Murrough Wetlands SAC (at the nearest point), whilst marine avifauna habitats are located > 5km from the playground redevelopment site via air pathways. Additionally, the majority of noise and vibration effects are dissipated at 200m. It must also be considered that the playground site is located within an urban setting, where the local area exhibits persistent vehicle and human traffic throughout the day, whereby ambient noise levels for the area can be considered above ambient (i.e., 55dB). As such, any incidental noise and vibration emissions from the proposed redevelopment works would ultimately be short-term and very localised. Consequently, significant effects to the conservation objectives of avifauna species through noise and vibration pathways are determined to be unlikely.

		The proposed development is located c. 870m from the Murrough Wetlands SAC (at the nearest point), whereby the proposed redevelopment works will not overlap nor infringe on the boundary of the SAC, and will therefore not infringe on the distribution, extent, connectivity or other natural processes of supporting habitats for avifauna. Consequently, significant effects to the conservation objectives of avifauna species through habitat loss or physical connectivity pathways are determined to be unlikely.
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