



## LOUTH COUNTY COUNCIL

### APPROPRIATE ASSESSMENT SCREENING REPORT

FOR

PROPOSED PLAYGROUND,

THE GLEN PARK, DROGHEDA, CO. LOUTH

### VOLUME I. REPORT

31<sup>st</sup> March 2026

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## 1 INTRODUCTION

### 1.1 Project Background

It is understood that Louth County Council wish to install a new playground (c. 922m<sup>2</sup>) to be located on the northwestern corner of The Glen Park, Yellowbatter, Drogheda, County Louth (see Plate 1 below and Plate 2 following and site location maps, Figures 1 to 6).



**Plate 1. UAV Aerial photograph of the site at the Glen taken in April 2024 at 60m elevation to the north of the site facing in a south-easterly direction**

The Glen is a public park located in the centre of Drogheda town, County Louth, approximately 570m to the North of the Boyne River, which flows through Drogheda in an approximate west to east direction. Glen Park is bordered by Newfoundwell Road (R166) to the southeast, Ascal A Trí to the east and Flaxmill Lane to the North. An elevated railway runs along the east of the Glen, with Drogheda train station located approximately 1km south of the site to the south of the River Boyne. The Dublin to Belfast North train line passes across the Boyne Viaduct railway bridge, approximately 530m to the south of the site location. A bus stop is located at the southeastern corner of the park, and on the opposite side of Newfoundwell Road to the south. The park is surrounded by residential housing estates in each direction. The proposed playground is situated adjacent to the housing development of *Ardán an Bóther Ghlais*.

It is understood that this playground development is being applied for under Part 8 of the Planning and Development Regulations 2001, and that an Appropriate Assessment screening assessment is required. Mulroy Environmental Ltd. were appointed by Louth County Council to carry out screening for appropriate assessment for the afore-mentioned playground development (see Figures 11 and 12).



**Plate 2. UAV Aerial photograph of the proposed playground site at the Glen taken in March 2026 at 60m elevation to the southeast of the site facing in a north-easterly direction**

It should be noted that an Appropriate Assessment Screening Report was prepared in 2024 for a proposed playground development was to be located in the southwestern corner of The Glen Public Park. It is understood that, following consultation, it was decided by Louth County Council not to proceed with the Part 8 Application for that site as the northwestern site was deemed to be a more suitable location.

An Appropriate Assessment Screening Report was prepared by Mulroy Environmental Ltd. for this application.

During 2024, as part of the work for the proposed southwestern playground, a UAV photogrammetric survey was carried out on the 12<sup>th</sup> April, 2024. Following this, an ecological baseline study was carried out on the 11<sup>th</sup> and 12<sup>th</sup> April, 2024 with a habitat map prepared for the entire Glen Public Park.

This Appropriate Assessment Screening report was compiled on the basis of information gathered during the April of 2024 and during February and March of 2026.

### 1.2 Proposed Playground Construction Description

The works will be carried out within the site boundary as detailed in Figures 11 and 12 (see Plate 3 below). The following is a breakdown of the proposed works:

- Civil works regarding the upgrading of the existing junction along the main road adjacent to the park. Road markings are included;
- Upgrade existing paths to improve access to the proposed playground;
- Additional road gullies to aid road improvements to the west and north of the proposed development which will be fed into the existing Combined Municipal Sewer located along Ascal a Tri road which borders the Glen Public Park on its western side (see following Section 3.4 on Proposed Stormwater Drainage);
- Site clearance works to facilitate the new playground;
- Provision of new play equipment throughout;
- New fencing to playground;
- Inclusion of a large parking bay to facilitate a minibus or 3no cars;
- Provision of new bike stands;
- Provision for disable parking;
- Provision for playground signage;
- Proposed planting to entrance of Playground; and
- Re-seeding of embankments following earthworks.

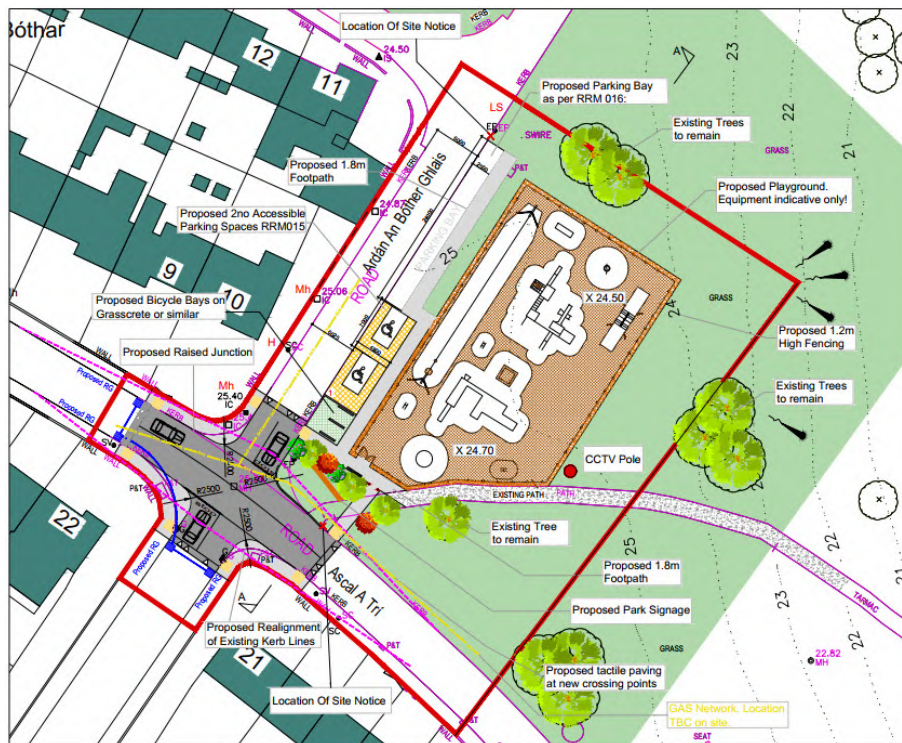


Plate 3. Extract of Figure 12 showing the proposed site layout for the playground and the surrounding ancillary works

### 1.3 Site Description

The total area of the playground site and the surrounding ancillary works (i.e., proposed road junction upgrade, stormwater upgrade, etc) is approximately 3,503m<sup>2</sup> with the proposed playground in the centre of the site approximately 922m<sup>2</sup> (see Figures 6-9). The proposed site is located within the northwestern corner of The Glen Park, Yellowbatter, Drogheda, County Louth (see Figures 6). The Glen Park through which the Glen Stream passes, is a large public green area, approximately 4 hectares (40,469m<sup>2</sup>) in total area which consists of maintained grassland, some scattered planted trees and flowerbeds, and a large strip of native hedgerow which runs between the park and the Newfield housing estate to the east of the site (see Plate 4 below). This hedgerow is located on a vegetated embankment which runs between the park and the Newfield Estate along the eastern boundary of the Glen. A pedestrian path runs through the park providing access to the western, northern, and northeastern areas. The development of the park and the re-routing of the Glen stream was carried out in the early 1980s. As part of these works, the banks of the Glen stream were strengthened, a number of stepped weirs were installed along the stream and a pedestrian bridge constructed in the middle of the park.



**Plate 4. Aerial photograph taken in April 2024 at 60m elevation over the southeastern corner of the Glen facing in a west-northwesterly direction**

The park is irregularly shaped with a giant fish fossil landscape feature incorporated in 1996 along the Glen stream, which runs from north to south through the centre of the Glen adjacent to the Glen Stream (see Plates 5 and 6 following). This fish shape was inspired by the Glen's origin as a valley that arose through glacial and water formations, and the historic connection between the area and fossil discovery, and prehistoric dinosaurs and fish.

The Glen stream, which runs through the length of the park, forms the 'backbone' of the fish shape. The fish 'fins', which run along the western side of the stream, were cut out of the grass, edged with aluminium and formed of resin bound gravel (see Plates 4 and 5 below). The fins have since been

overgrown by the grass and have been accentuated by the wildflower planting and slightly overgrown sections of grass along the trees. The trees planted along the centre also emphasise the fish shape. The ‘head’ of the fish has also been formed with aluminium wiring and tree/shrub planting within a small wetland area surrounding a section of the Glen stream towards the northern end of the park (see Plates 5 and 6 below).



**Plate 5. Aerial photograph taken at 60m elevation over the Glen facing in a south-southwestern direction overlooking the giant fish fossil shape along the Glen stream.**



**Plate 6. Aerial overhead photograph of the giant fish fossil shape along the Glen stream taken at 60m elevation at the mid-western section of St. Dominic’s Park facing in an easterly direction**

The Glen has been developed as a ‘Biodiversity Park’ following a project funded and led by Drogheda Tidy Towns, Louth County Council, the Red Door Project and Louth Leader Partnership. This involved

the introduction of new railings and entrances, maintenance of the pathways, biodiversity signage and a new planting scheme. The planting scheme incorporated native and flowering trees, wildflower meadows and native headrows to enhance the overall biodiversity in the Glen, and to support local wildlife. The landscape plans have followed *All-Ireland Pollinator Plan* recommendations in order to attract bees and other pollinators. Bee hotels and earth mounds have been incorporated to provide artificial nesting structures for insects (see below Plate 7). New biodiversity signage has been installed to provide an overview of the history and geology of the Glen, to inform the public of the pollinator-friendly measures that have been incorporated, and to relay the importance of pollinators for biodiversity (see Plate 8 following). Further plans to record the activity of fauna, animal and bird life have been put forward. A system of pollinator friendly hanging baskets have also been proposed throughout the recreational Glen area.

Further plans to develop the Glen include the children’s playground as proposed, and new outdoor gym equipment for senior citizens. Also, plans for tree and bush planting for fruits such as apples, cherries, plums, raspberries, and currants, have been initiated



**Plate 7. Ground photograph of a bee hotel (left) and the public information signage (right) incorporated within the Glen during the ‘Biodiversity Park’ project**

The Glen stream, which is located approximately 20m from the eastern boundary of the site, runs through the centre of the park, flowing in a north to southeasterly direction. It discharges into the River Boyne at a point approximately 1.02km to the southeast of the site. The stream has been highly modified as a canalised section within the park with a number of weirs, concrete base and walls. In some areas, large emplaced stones and gravel form the substratum. The stream is culverted under the R166 Newfoundwell road and reemerges underneath and to the west of the Newfoundwell Bridge which is a railway viaduct located approximately 225m to the east of the site boundary (see Plate 8 following).



**Plate 8. Aerial photograph taken in April 2024 at 60m elevation overlooking the Glen stream, which is culverted under the R166 and re-emerges under the Newfoundwell Bridge**

The Newfoundwell Railway Viaduct bridge, nearby the site, is a contemporary of the Boyne Viaduct railway bridge, which is located approximately 310m to the southeast of the site boundary (see below Plate 9). As mentioned in Section 1.1, the Dublin to Belfast North train line runs over the bridge, along an elevated railway which borders the east of the Glen. The Drogheda train station is located approximately 1.3km south of the site. The Newfoundwell Railway Viaduct is a 5-arch masonry stone bridge, which has been recently repointed and rebuilt in some sections.



**Plate 9. Ground photograph of the Newfoundwell Railway Viaduct bridge which is located approximately 103m east from the site boundary**

As mentioned in Section 1.1, the Glen Park is surrounded by residential housing estates and complexes on all sides. To the south of the Newfoundwell Road (R166), which forms the southern boundary of the Glen and the site location, are apartment blocks and the recently constructed *An Tobar* housing complex (see Plate 10 following ). Three residential estates known as Ascal a Haon, Ascal A Dó and Ascal A Trí are located along the northwest boundary of the Glen. Newly constructed apartment complexes are also located to the North of the Glen along to the north Flaxmill Lane. The Newfield estate borders the Glen along the East, which consists of housing duplexes (see Plate 11 following ).



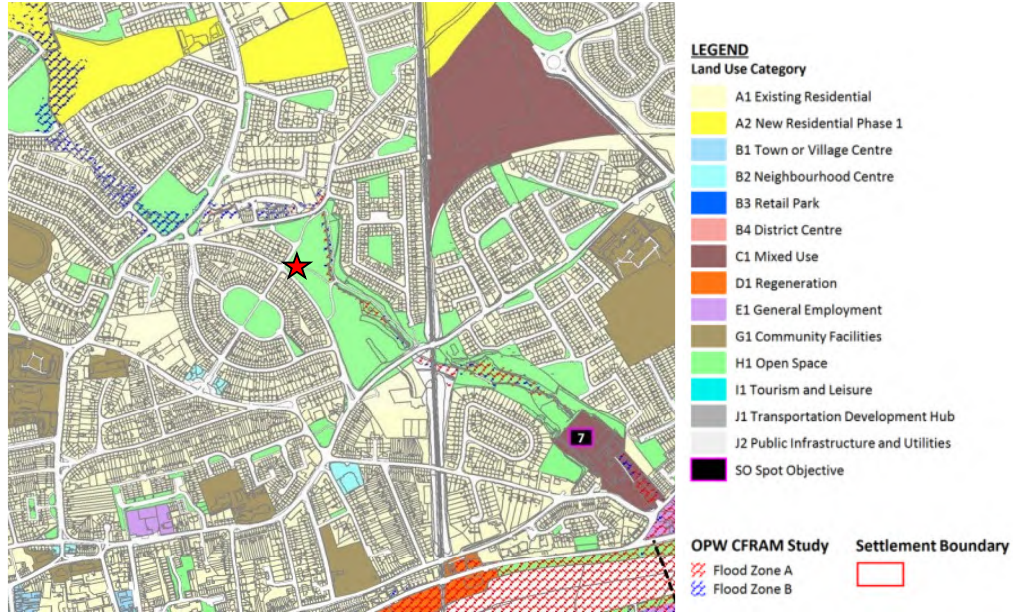
**Plate 10. Aerial photograph taken at 60m elevation at the northern half of the Glen facing in a southerly direction showing the Newfoundwell Railway Viaduct bridge and the surrounding apartment complexes and housing estates**



**Plate 11. Aerial photograph taken at 60m elevation at the southern half of the Glen facing north showing the surrounding residential complexes and housing estates**

### 1.4 Planning Background

No previous planning applications have been submitted for the site location. A review of the Louth County Development Plan Zoning Map for Drogheda indicates that the site has a ‘H1 Open Space’ Land Use Category (see Plate 12 below).



**Plate 12. Drogheda Zoning Map (note red star indicates the location of the proposed playground site)**

### 1.5 Appropriate Assessment Screening Report

The site is approximately 795m to the north of the River Boyne and River Blackwater Special Area of Conservation (SAC) (No. 002299), 1.27km northwest of the Boyne Estuary Special Protected Area (SPA) (004080), 2.28km northwest of the Boyne Coast and Estuary SAC (001957), 4.25km northeast of the River Boyne and River Blackwater SPA (004232), and 6.44km to the west of the Northwest Irish Sea Candidate Protected Area (cSPA) (No. 004236) (see Figures 1 to 4, Table 1 & Plate 13 below).



**Plate 13. Aerial photograph taken at 60m elevation on the southern boundary of the The Glen park facing in a southerly direction towards the River Boyne and River Blackwater Special Area of Conservation (SAC)**

A screening report for Appropriate Assessment was processed in order to determine if the aforementioned elements of this planning application (as laid out in Section 1.2), or in combination with other plans or projects, would be likely to have a significant effect on the designated Natura 2000 site(s) or any other European site, in view of the site's Conservation Objectives. This screening report for Appropriate Assessment was processed in order to determine the likelihood of any significant adverse effects on the integrity of the aforementioned European sites.

The site's stormwater and drainage system along with the hydrology and hydrogeology of the site were assessed with the purpose of identifying any potential pathways to the nearest Natura 2000 site(s).

The following is an Appropriate Assessment Screening report to address the afore mentioned.

**TABLE 1. NATURE CONSERVATION SITES WITHIN 15 KM OF THE PROPOSED PLAYGROUND DEVELOPMENT, THE GLEN, DROGHEDA, CO. LOUTH (INFORMATION OBTAINED FROM WWW.NPWS.IE IN & WWW.DAERA-NI.GOV.UK IN MARCH 2026)**

SITE NAME, SITE CODE, DISTANCE AND DIRECTION FROM SITE	SITE OR ORGANISM NAME AND/OR CODE GIVEN ACCORDING TO INTERPRETATION MANUAL OF EUROPEAN UNION HABITATS	THE POTENTIAL SOURCE-PATHWAY-RECEPTOR LINKS BETWEEN THE WORKS LOCATION AND THE ECOLOGICALLY DESIGNATED SITE
<b>SPECIAL AREAS OF CONSERVATION (SACs)</b>		
<p align="center">River Boyne and River Blackwater SAC [002299] 765m (S)</p>	<ul style="list-style-type: none"> <li>▪ [1099] River Lamprey (<i>Lampetra fluviatilis</i>)</li> <li>▪ [1106] Salmon (<i>Salmo salar</i>)</li> <li>▪ [1355] Otter (<i>Lutra lutra</i>)</li> <li>▪ [7230] Alkaline fens</li> <li>▪ [91E0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)*</li> </ul> <p>* denotes a priority habitat under the Habitats Directive.</p> <p align="center">Source: NPWS. (2021). <i>Conservation Objectives: River Boyne and River Blackwater SAC [002299]</i>. Version 1.0. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.</p>	<p>There will be no contaminated stormwater generated during the clearance phase, construction phase or the operational phase of the development and there are no proposals to generate a point discharge from the site. The material used for the ground covering will not generate leachate. As such, there is effectively no source of contamination which can migrate off site.</p> <p>The ground covering will facilitate the percolation of rainfall through the material into the underlying subsoil. As such, any stormwater generated on site will be free of contamination and will discharge to ground. Based on GSI records, there is significant depth of overburden on site, and as such there is significant attenuation capacity within the overburden.</p> <p>The Glen stream is located c.62m from the site boundary, however, due to the nature and scale of the works, no discharge is predicted to reach this hydrological pathway. There are no surface water bodies within the site boundary. There is no existing discharge from the site to the municipal stormwater system. As such, there is no viable pathway for possible contamination to exit the site and enter the Boyne River catchment and ultimately flow into the River Boyne and River Blackwater SAC or other relevant Natura 2000 sites.</p>
<p align="center">Boyne Coast and Estuary SAC [001957] 2.28km (E)</p>	<ul style="list-style-type: none"> <li>▪ [1130] Estuaries</li> <li>▪ [1140] Mudflats and sandflats not covered by seawater at low tide</li> <li>▪ [1310] Salicornia and other annuals colonizing mud and sand</li> <li>▪ [1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>)</li> <li>▪ [1410] Mediterranean salt meadows (<i>Juncetalia maritimi</i>)</li> <li>▪ [2110] Embryonic shifting dunes</li> <li>▪ [2120] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes')</li> <li>▪ [2130] Fixed coastal dunes with herbaceous vegetation ('grey dunes')*</li> </ul> <p>* denotes a priority habitat under the Habitats Directive.</p> <p align="center">Source: NPWS. (2021). <i>Conservation Objectives: River Boyne and River Blackwater SAC [002299]</i>. Version 1.0. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.</p>	<p>There will be no contaminated stormwater generated during the clearance phase, construction phase or the operational phase of the development and there are no proposals to generate a point discharge from the site. The material used for the ground covering will not generate leachate. As such, there is effectively no source of contamination which can migrate off site.</p> <p>The ground covering will facilitate the percolation of rainfall through the material into the underlying subsoil. As such, any stormwater generated on site will be free of contamination and will discharge to ground. Based on GSI records, there is significant depth of overburden on site, and as such there is significant attenuation capacity within the overburden.</p> <p>The Glen stream is located c.62m from the site boundary, however, due to the nature and scale of the works, no discharge is predicted to reach this hydrological pathway. There are no surface water bodies within the site boundary. There is no existing discharge from the site to the municipal stormwater system. As such, there is no viable pathway for possible contamination to exit the site and enter the Boyne River catchment and ultimately flow into the River Boyne and River Blackwater SAC or other relevant Natura 2000 sites.</p>
<p align="center">Clogherhead SAC [001459] 10.11km (NNE)</p>	<ul style="list-style-type: none"> <li>▪ [1230] Vegetated sea cliffs of the Atlantic and Baltic coasts</li> <li>▪ [4030] European dry heaths</li> </ul> <p align="center">Source: NPWS. (2017). <i>Conservation Objectives: Clogherhead SAC [001459]</i>. Version 1.0. NPWS, Department of Housing, Local Government and Heritage.</p>	<p>Due to distance and the absence of any hydrological or other potential impact pathways between the proposed development and the European site, there are no potential ecological impacts.</p>

**TABLE 1. NATURE CONSERVATION SITES WITHIN 15 KM OF THE PROPOSED PLAYGROUND DEVELOPMENT, THE GLEN, DROGHEDA, CO. LOUTH (INFORMATION OBTAINED FROM WWW.NPWS.IE IN & WWW.DAERA-NL.GOV.UK IN MARCH 2026) (CONTINUED)**

SITE NAME, SITE CODE, DISTANCE AND DIRECTION FROM SITE	SITE OR ORGANISM NAME AND/OR CODE GIVEN ACCORDING TO INTERPRETATION MANUAL OF EUROPEAN UNION HABITATS	THE POTENTIAL SOURCE-PATHWAY-RECEPTOR LINKS BETWEEN THE WORKS LOCATION AND THE ECOLOGICALLY DESIGNATED SITE
<b>Special Protection Areas (SPA)</b>		
<p>Boyne Estuary SPA [004080] 1.27km (E)</p>	<ul style="list-style-type: none"> <li>▪ Shelduck (<i>Tadorna tadorna</i>)*</li> <li>▪ Oystercatcher (<i>Haematopus ostralegus</i>)*</li> <li>▪ Golden Plover (<i>Pluvialis apricaria</i>) *</li> <li>▪ Grey Plover (<i>Pluvialis squatarola</i>)*</li> <li>▪ Lapwing (<i>Vanellus vanellus</i>)*</li> <li>▪ Knot (<i>Calidris canutus</i>)*</li> <li>▪ Sanderling (<i>Calidris alba</i>)*</li> <li>▪ Black-tailed Godwit (<i>Limosa limosa</i>)*</li> <li>▪ Redshank (<i>Tringa totanus</i>)*</li> <li>▪ Turnstone (<i>Arenaria interpres</i>)*</li> <li>▪ Little Tern (<i>Sterna albifrons</i>)**</li> <li>▪ Wetland and Waterbirds [A999]</li> </ul> <p>* denotes wintering birds at Boyne Estuary. ** denotes breeding birds at Boyne Estuary.</p> <p>Source: NPWS. (2013). <i>Conservation Objectives: Boyne Estuary SPA [004080]</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>There will be no contaminated stormwater generated during the clearance phase, construction phase or the operational phase of the development and there are no proposals to generate a point discharge from the site. The material used for the ground covering will not generate leachate. As such, there is effectively no source of contamination which can migrate off site.</p> <p>The ground covering will facilitate the percolation of rainfall through the material into the underlying subsoil. As such, any stormwater generated on site will be free of contamination and will discharge to ground. Based on GSI records, there is significant depth of overburden on site, and as such there is significant attenuation capacity within the overburden.</p> <p>The Glen stream is located c.62m from the site boundary, however, due to the nature and scale of the works, no discharge is predicted to reach this hydrological pathway. There are no surface water bodies within the site boundary. There is no existing discharge from the site to the municipal stormwater system. As such, there is no viable pathway for possible contamination to exit the site and enter the Boyne River catchment and ultimately flow into the River Boyne and River Blackwater SAC or other relevant Natura 2000 sites.</p>
<p>River Boyne and River Blackwater SPA [004232] 4.25km (W)</p>	<ul style="list-style-type: none"> <li>▪ Kingfisher (<i>Alcedo atthis</i>)**</li> </ul> <p>** denotes breeding birds at River Boyne and River Blackwater.</p> <p>Source: NPWS. (2022). <i>Conservation Objectives for River Boyne and River Blackwater SPA [004232]</i>. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.</p>	<p>Due to distance and the absence of any hydrological or other potential impact pathways between the proposed development and the European site, there are no potential ecological impacts.</p>

**TABLE 1. NATURE CONSERVATION SITES WITHIN 15 KM OF THE PROPOSED PLAYGROUND DEVELOPMENT, THE GLEN, DROGHEDA, CO. LOUTH (INFORMATION OBTAINED FROM WWW.NPWS.IE IN & WWW.DAERA-NL.GOV.UK IN MARCH 2026) (CONTINUED)**

SITE NAME, SITE CODE, DISTANCE AND DIRECTION FROM SITE	SITE OR ORGANISM NAME AND/OR CODE GIVEN ACCORDING TO INTERPRETATION MANUAL OF EUROPEAN UNION HABITATS	THE POTENTIAL SOURCE-PATHWAY-RECEPTOR LINKS BETWEEN THE WORKS LOCATION AND THE ECOLOGICALLY DESIGNATED SITE
<b>Special Protection Areas (SPA)</b>		
Northwest Irish Sea SPA [004236] 6.44km (E)	<ul style="list-style-type: none"> <li>▪ Common Scoter;</li> <li>▪ Red-throated Diver;</li> <li>▪ Great Northern Diver;</li> <li>▪ Fulmar;</li> <li>▪ Manx Shearwater;</li> <li>▪ Shag, Cormorant;</li> <li>▪ Little Gull, Kittiwake;</li> <li>▪ Black-headed Gull;</li> <li>▪ Common Gull;</li> <li>▪ Lesser Black-backed Gull;</li> <li>▪ Herring Gull;</li> <li>▪ Great Black-backed Gull;</li> <li>▪ Little Tern;</li> <li>▪ Roseate Tern;</li> <li>▪ Common Tern;</li> <li>▪ Arctic Tern;</li> <li>▪ Puffin;</li> <li>▪ Razorbill; and</li> <li>▪ Guillemot.</li> </ul> <p>Source: NPWS. (2013). <i>Site Synopsis: Northwest Irish Sea cSPA [004236]</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	Due to distance and the absence of any hydrological or other potential impact pathways between the proposed development and the European site, there are no potential ecological impacts.
River Nanny Estuary & Shore SPA [004458] 7.29km (SE)	<ul style="list-style-type: none"> <li>▪ Oystercatcher (<i>Haematopus ostralegus</i>) wintering</li> <li>▪ Ringed Plover (<i>Charadrius hiaticula</i>) wintering</li> <li>▪ Golden Plover (<i>Pluvialis apricaria</i>) wintering</li> <li>▪ Knot (<i>Calidris canutus</i>) wintering</li> <li>▪ Sanderling (<i>Calidris alba</i>) wintering</li> <li>▪ Herring Gull (<i>Larus argentatus</i>) wintering</li> <li>▪ Wetlands</li> </ul> <p>Source: NPWS. (2022). <i>Conservation Objectives: River Nanny Estuary &amp; Shore SPA [004458]</i>. Version 1.0. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.</p>	Due to distance and the absence of any hydrological or other potential impact pathways between the proposed development and the European site, there are no potential ecological impacts.



## 2 METHODOLOGY

### 2.1 Desk Study

A comprehensive GIS mapping and data review was carried out to identify all statutory protected areas and other non-statutory areas within 15km of the site. This involved a review of inland freshwater water ecosystems. All ecological, biological/Q-Index and hydrological/chemical monitoring data available from the websites of the National Parks and Wildlife Service (NPWS), National Biodiversity Data Centre (NBDC), Bat Conservation Ireland (BCI), Louth C.C., Environmental Protection Agency (EPA), Geological Survey Ireland (GSI), Office of Public Works (OPW) and Water Framework Directive (WFD) were assessed. Information on protected species of fauna and flora listed for protection under Annex II of the EU Habitats Directive (92/43/EEC), Annex I of the Birds Directive (79/409/EEC) and the Wildlife (Amendment) Act (2000) sourced from NPWS, NBDC and published sources were reviewed. The NPWS and the Department of Housing, Local Government and Heritage database of designated conservation areas and NPWS records of rare and protected plant species were examined with regard to the location of the site at the Glen Park.

The online database hosted by the Irish National Biodiversity Data Centre (NBDC) ([www.biodiversityireland.ie](http://www.biodiversityireland.ie)) was also utilised to assess the importance of the study area for mammals and bats. Other sources accessed to gather information on bats in the study area included The Bat Conservation Trust's report '*Distribution Atlas of Bats in Britain and Ireland 1980-1999*' (Richardson, 2000). The '*Irish Red Data Book 2: Vertebrates - Threatened Mammals, Birds, Amphibians and Fish in Ireland*' (Whilde, 1993) and the updated '*Irish Red List No.12: Terrestrial Mammals*' (Marnell *et al.* 2019) were also reviewed.

Recent, high resolution, colour aerial photographs were used to identify habitats of conservation value. Relevant mapping and field sheets were prepared for the AA Screening Report and field surveys through a combination of Autocad Map 2017 and ArcGIS Pro. Ornithological data submitted as part of previous EcIAs, NISs and AA screening reports for developments within the vicinity of site were also reviewed, alongside species data and reports issued by Birdwatch Ireland.

### 2.2 Unmanned Aerial Vehicle (Drone) Photogrammetry Survey & Video Survey

Mulroy Environmental Ltd. carried out a 4K photogrammetric drone survey, a 4K panoramic and a 4K video survey of the site using a DJI Mavic 3 Enterprise equipped with an RTK module on the 23<sup>rd</sup> of March 2026. It should be noted that UAV orthomosaics, 4K video and ground photographs which were derived from a survey completed by Mulroy Environmental Ltd. on the 11<sup>th</sup> and 12<sup>th</sup> of April 2024 were also used in the compilation of this report. An Emlid FS2+ GPS receiver was used for online RTK corrections during the drone's flight. The photogrammetric and ground survey data was processed using Dronedeploy into a single project with links to the project files circulated to the client.

Mulroy Environmental are licensed SOP holders with the Irish Aviation Authority/EASA and have drone specific insurance in addition to our normal Public and Employers Liability Insurance. The site is not in an IAA restricted flight zone and did not require SOP permission from the IAA. The purposes of the

drone survey were to familiarise Mulroy Environmental with the topography and vegetation of the site and to help in the production of drawings for report. Two-dimensional orthomosaics were generated for each survey which were used in the production of detailed drawings for the site and in the accurate calculation of habitat area through their use in ArcGIS Survey 123. In addition, 3D models of the site were produced which assisted in the calculation of building height, tree height and tree canopy that were required for the tree survey and in the mapping of habitats within the proposed development site.

### **2.3 ArcGIS Pro & Autocad Mapping**

GIS maps of different scales were produced using the ArcGIS Pro computer programme. These maps were used to identify the proximity of the site to Special Areas of Conservation (SACs) and Special Protected Areas (SPAs), and to surrounding surface waters. SAC and SPA data was imported from NPWS and added as a layer (NPWS, 2023). Orthomosaics developed through drone photogrammetric surveys were imported into ArcGIS Pro and Autocad 2017 added as a map surface layer. The site boundary was identified and outlined within this map. A 15km buffer was created around a centre point within the site boundary. All the Natura 2000 sites (SPAs & SACs) located within this 15km buffer of the site boundary were identified.

### **2.4 Ecological Surveys**

#### **2.4.1 Plant and Habitat Surveys**

Prior to field survey, a desk study was undertaken to identify habitats through 2D drone photogrammetric survey imagery (i.e., orthomosaics) and 3D mapping. Habitat types and data sets obtained from National Parks and Wildlife Service (NPWS), the National Biodiversity Data Centre (NBDC), the Environmental Protection Agency (EPA), and other sources were employed to assist in the drafting of field sheets and a habitat map using ArcGIS Pro in preparation of the field survey. A site-based habitat assessment and plant species identification survey was originally carried out across two site visits on the 11<sup>th</sup> and 12<sup>th</sup> April 2024. A 2<sup>nd</sup> habitat survey was carried out on the 11<sup>th</sup> and 23<sup>rd</sup> March, 2026. A tree survey was also carried out during the 2024 survey to identify the large trees within the park. The March 2026 survey indicated that no additional trees were planted within the park. Habitat surveys were carried out following the Heritage Council's *Best Practice Guidance* (Smith et al., 2011). Habitats were classified to Level 3 of the Heritage Council's classification (Fossitt, 2000), and according to the *Habitats Directive types* (European Commission, 2013) where appropriate. In addition to habitat mapping, notes on plant species composition, structure and management were collected in the field. Plant species were assigned a DAFOR abundance rating within each habitat. The DAFOR scale is presented in the following table, Table 2 which was modified from Smith et al. (2011) *Habitat Mapping Guidelines*.

**Table 2. DAFOR Abundance Rating**

RATING	DESCRIPTION
<b>Dominant (D)</b>	A Dominant species generally covers more than two-thirds of the habitat.
<b>Abundant (A)</b>	Abundant species typically cover between one-third and two-thirds of the habitat. A rule of thumb for evaluating Abundant species is ‘everywhere you look you see lots’.
<b>Frequent (F)</b>	Commonly encountered species seen when walking through the habitat. ‘Everywhere you look you see some’.
<b>Occasional (O)</b>	Occasional species generally have relatively low frequency and low cover. However, they do not have to be searched for to be found.
<b>Rare (R)</b>	Rare species are those that are only found once or a very few times during the survey, depending on the size of the habitat. Species cover is also very low where Rare species are found.
<b>Locally Abundant (LA)</b>	Used where overall occurrence of species is either occasional or rare, but species is abundant over a small area.

Plant nomenclature follows Stace (2010). Plant species identification was assisted by the PictureThis plant identification application with 98% accuracy (PictureThis, 2023). The identification and classification of these plants was also assisted by species records databases provided by the NBDC, the EPA, Teagasc, Biodiversity Ireland and the NPWS. Following the field surveys and the desk studies, a final habitat map was prepared in AutoCAD 2017 and can be seen in Figure 9.

#### 2.4.2 Mammal Survey

A mammal survey was originally carried out on the 25<sup>th</sup> April 2024 using the techniques as described in *Ecological Survey Techniques for Protected Flora and Fauna (NRA, 2008)*. This entailed searching for and identification of signs, tracks, and droppings of various mammals (including bats, otter, badger, pine marten, Irish stoat, Irish hare, red squirrel, hedgehog, and pygmy shrew along with non-native species such as American mink, grey squirrel, and rabbit) within the site and surrounding park area. Species specific guidelines, such as *Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes* and *Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes (TII, 2008)* were also adhered to in order to carry out the non-volant mammal surveys. A reassessment of the mammals was made during the March 2026 habitat survey and no changes were observed with regard to the previous survey findings. A desktop review of bat species records and site habitat suitability was also conducted.

#### 2.4.3 Bird Survey

The original walkover bird survey was carried out throughout the site and the adjacent park area at dawn on the 25<sup>th</sup> of April 2024. A 2<sup>nd</sup> dawn bird survey was carried out on the 24<sup>th</sup> and 25<sup>th</sup> of March, 2026.

Each species encountered was noted, birdsong recordings were taken, and any physical evidence of bird usage or nests was recorded throughout the site and within the surrounding Glen Park. The bird song surveys were conducted along the route to compliment the walkover surveys. These surveys were carried out using the Cornell Lab Merlin Bird ID software application installed on a Samsung Galaxy Tab Active 4 Pro tablet and an iPhone 14. The recordings and automatic species identifications gathered from this application were then analysed during the desk study component to confirm the results. The following guidelines were adhered to carry out bird surveys:

- Bird Survey & Assessment Steering Group. (2023) Bird Survey Guidelines for assessing ecological impacts; and
- JNCC (2004) Common Standards Monitoring Guidance for Birds.

### 3 SCREENING

Screening involves the following:

1. Description of the surrounding area, plan showing the elements of retention and proposed structures, the local site or plan area characteristics and its existing/proposed effluent discharge(s);
2. Identification of relevant Natura 2000 sites, and compilation of information on their qualifying interests and conservation objectives;
3. Assessment of likely effects (direct, indirect and cumulative) through the completion of a desk study or field survey; and
4. Screening statement including conclusions

#### 3.1 Site History

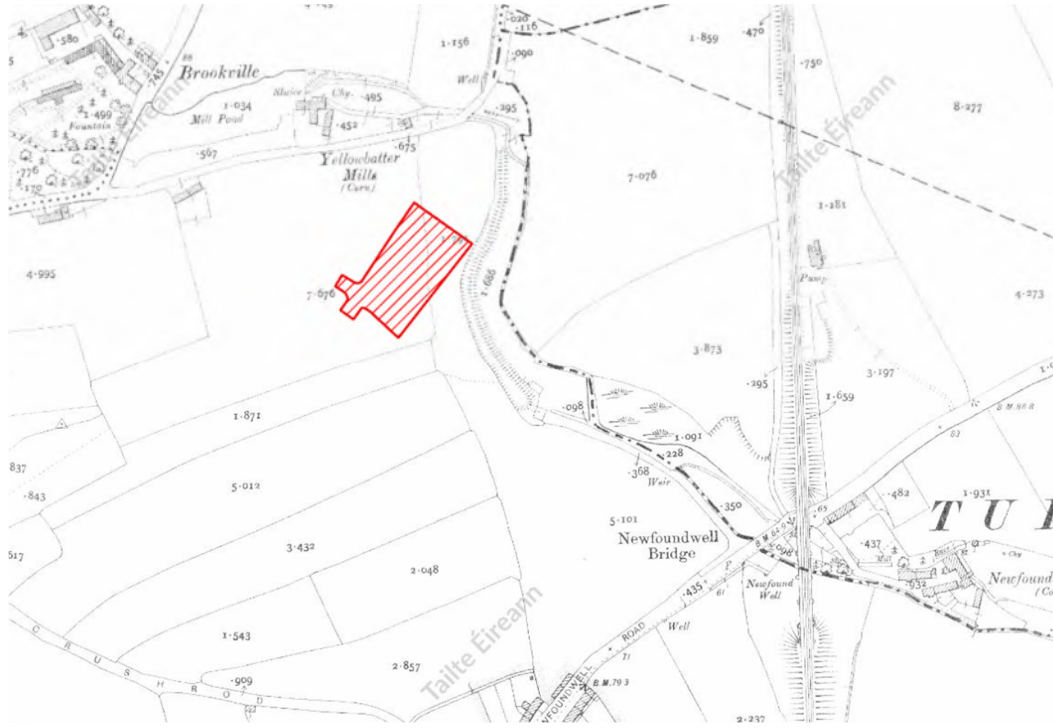
A review of 6-inch historical Ordnance Survey mapping which dates from the 1800s indicates that the site was located towards the northern end of an agricultural field. A number of corn mills are visible along the path of the Glen Stream to the north and east of the site (see Plate 14 below). It is likely that the remaining green areas were utilised as agricultural fields. Newfoundwell Road is visible to the south and southeast of the site (see Plate 14). This map pre-dates the construction of The Newfoundwell Viaduct and the Dublin to Belfast railway (see Plate 14). The Glen stream is shown running under the Newfoundwell Road a. There is also a noted absence of residential buildings in the surrounding area.



**Plate 14. Extract of last Edition of 6-inch historical OS Mapping showing site on southwestern corner of an agricultural field (note red star indicates the approximate location of the site)**

A review of 25-inch historical Ordnance Survey mapping from the early 1900s indicates that the site remained effectively unaltered (see Plate 15 following). The Glen stream runs along the same path as previous, however a weir has added (see Plate 15 following). A small marsh habitat is also indicated

below to the east of the stream along the centre of the Glen. A new connection across the Boyne was incorporated with the addition of the Boyne Viaduct in 1851. In 1876, the Great Northern Railway Line from Dublin to Belfast was completed. This is now shown in the map below (see below Plate 15). A closer inspection of the mapping shows new residences to the southeast of the site along the road which was then known as Newfoundwell Road.



**Plate 15. Extract of last Edition of 25-inch historical OS Mapping (note red star indicates the approximate location of the site)**

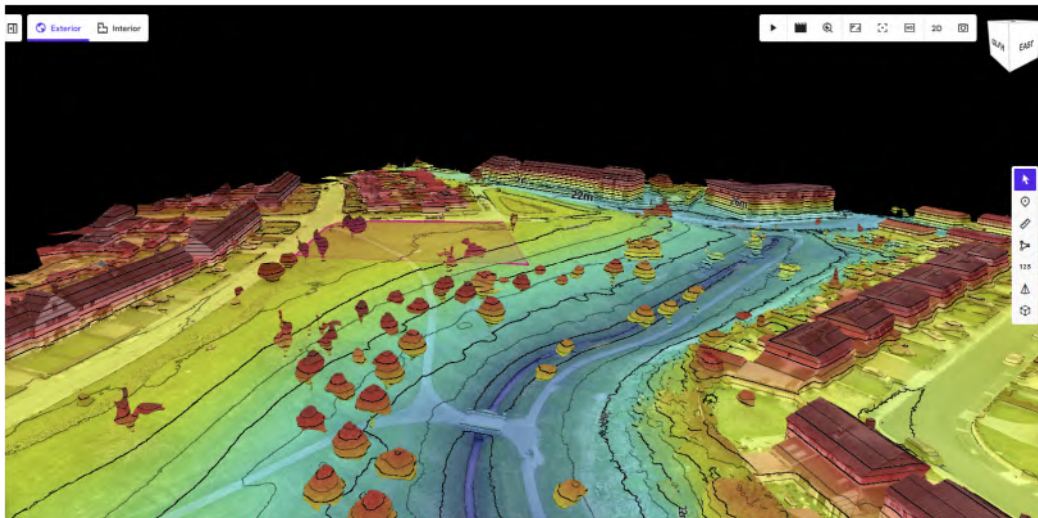
**3.2 Closest Designated Protected Sites**

As stated previously, the site is approximately 765m to the north of the River Boyne and River Blackwater Special Area of Conservation (SAC) (No. 002299), 1.27km northwest of the Boyne Estuary Special Protected Area (SPA) (004080), 2.28km northwest of the Boyne Coast and Estuary SAC (001957), 4.25km northeast of the River Boyne and River Blackwater SPA (004232), and 6.344km to the west of the Northwest Irish Sea Candidate Protected Area (cSPA) (No. 004236) (see Figures 1 to 4, Table 1 & previous Plate 13).

**3.3 Topography**

The topography of the ground within the playground site is characterised by a gentle slope from west to east with the highest point of the site at 25.71mAOD located in the northwestern corner and the lowest point at 22.79mAOD on the southeastern corner (see Figures 7 and 8). To the east of the site the land slopes steeply towards the Glen stream which is at an elevation of approximately 17.5mAOD.

The following plate, Plate 16 shows an extract of a 3D topographical model with a cross-section through the proposed playground site, the open park area, the Glen stream and the pedestrian path to the east. As can be seen from the section to the bottom of Plate 16, the elevation of the site is at approximately 25m AOD and varies considerably as the elevation drops further south towards the Newfoundwell road and east towards the Glen stream. The soccer pitch, to the south of the site, has been levelled out to approximately 24m AOD across its surface. The Glen has a unique topography which owes to its origin as a wide glacial valley as carved out by the Glen stream. Towards the northern half of the Glen, the elevation increases. However, the noticeable slope towards the stream continues along the eastern boundary of the park.



**Plate 16. Extract of Dronedeploy 3D Elevation Model**

### 3.4 Existing and Proposed Municipal Combined Drainage

The residences surrounding the proposed development site discharge their foulwater into Combined Municipal Sewers (see green pipeline indicated on Plate 17 below). The combined foulwater network surrounding the site feeds into 2 concrete sewers which run through the site from north to south. The aforementioned pipes are a 300mm concrete pipe and a 600mm concrete pipe. Both of these pipes feed into a larger 750mm pipe located on the southern edge of the Newfoundland Road to the south of the site.



Plate 17. Extract of Municipal drainage mapping illustrating the Combined Municipal drainage network in the vicinity of the site (note red rectangle represents the approximate outline of the site)

It is proposed to install additional road gullies to aid road improvements to the west and north of the proposed development (see Plate 18 below). These road gullies will be fed into the existing Combined Municipal Sewer located along the *Ascal a Tri* road which borders the Glen Public Park on its western side.

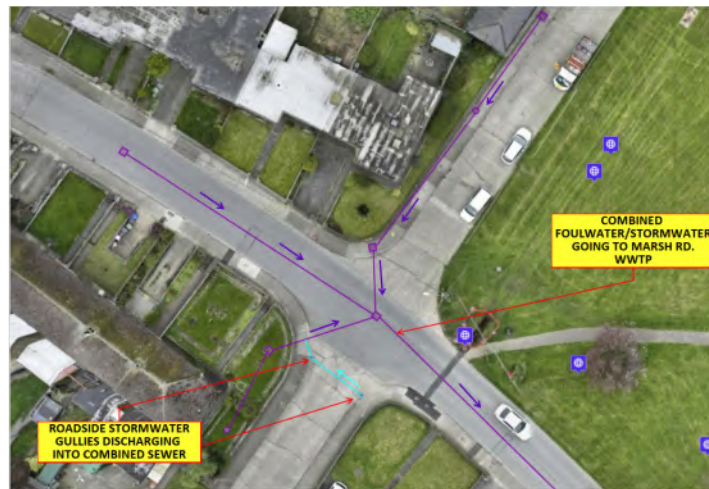


Plate 18. Location of Combined Municipal Sewer (magenta line) to west of site showing position of existing stormwater gullies (cyan line) which currently feed into the combined

### 3.5 Existing Municipal Stormwater Drainage

There are no surface water bodies or land drains within the playground site or along the perimeter of the playground site. The stormwater drainage for this area of north Drogheda area in the vicinity of the site is illustrated in a municipal services maps which is included in Appendix 3. The stormwater drainage in the vicinity of the site is represented in Plate 19 below. There are 3 stormwater discharge points entering the Glen Stream, one in the middle of the park to the north of the pedestrian bridge with the 2<sup>nd</sup> towards the northern end of the park and with the 3<sup>rd</sup> towards the southern end of the park. These stormwater drains are collecting stormwater generated on the eastern side of the park and from the roads in the housing estates to the north and east of the park. Other stormwater drains are located along the Newfoundwell Road to the south of the site.

There is no existing stormwater discharge from the current playground site area. As stated in Section 1.2 of this report, there are no requirements to discharge stormwater from the proposed playground to the existing municipal stormwater network and subsequently to the Glen Stream. As such, there will be no stormwater ‘point’ discharges from the site to a surface water catchment.

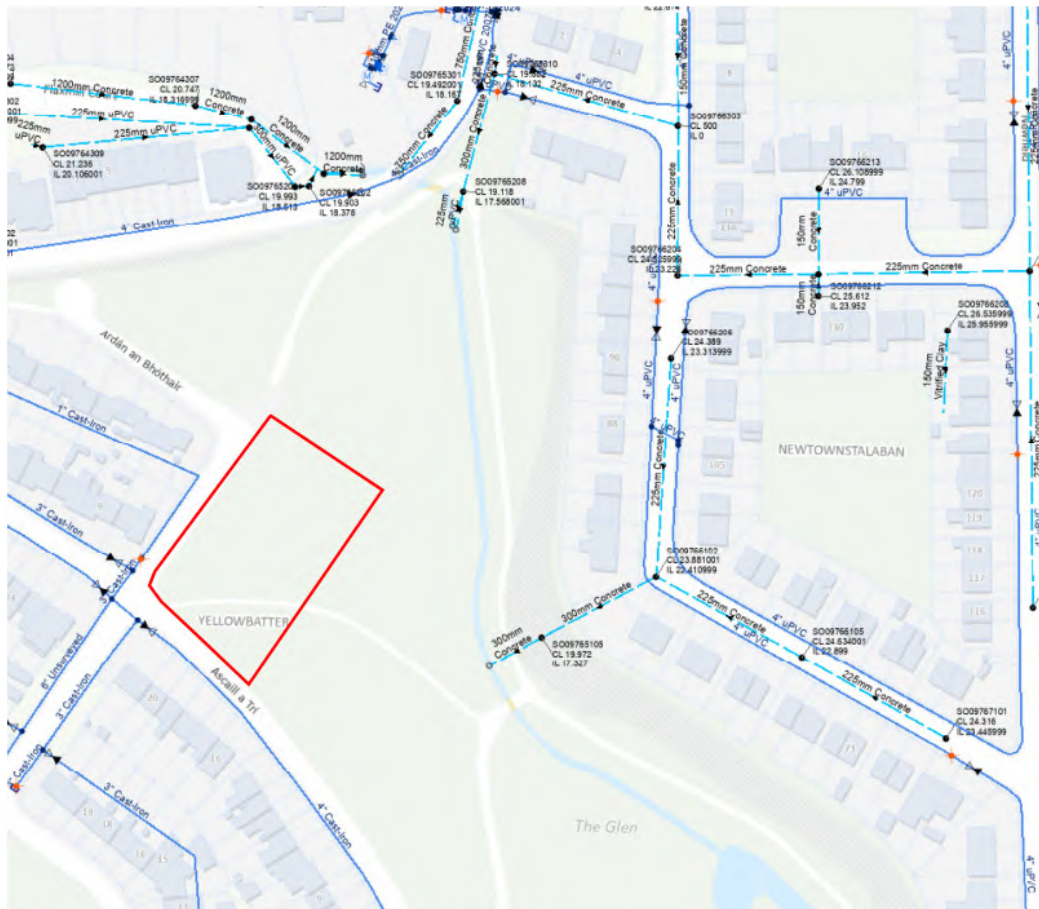


Plate 19. Extract of Municipal drainage mapping illustrating the stormwater drainage network in the vicinity of the site

### **3.6 Site Hydrology**

#### **3.6.1 Regional Hydrology**

The Boyne River is located approximately 765m to the south of the proposed development site (see Figure 4). The site is located within the Boyne Water Framework Directive (WFD) River Basin District (RBD). In Ireland, each RBD is sub-divided into a number of Water Management Units (WMU) (see Appendix 1). The site is within the WFD Subcatchment Boyne\_SC\_130. Beneath this Subcatchment the site is located within the WFD River Sub Basin Tullyeskar\_010 (see Appendix 1 for hydrological desk study information).

#### **3.6.2 Local Hydrology**

Following a comprehensive desk study of historical and current hydrological mapping, and of on-site and surrounding area inspections, it was concluded that there are surface water bodies and/or land drains in the vicinity of the playground site (see Appendix 1). The Glen stream, which is part of the Tullyeskar tributary, runs through the park in a southeasterly direction and discharges into the Boyne River. This stream is located c.20m east from the site's eastern boundary, and the Boyne is located 765m to the south of the site. As outlined in *Section 1.3* previously, the Glen stream is culverted under the R166 Newfoundwell road and reemerges underneath the Newfoundwell Bridge, a railway viaduct bridge which is located 326m southeast from the site boundary.

The playground site is a maintained grassed landscape approximately 25.72mAOD at its highest. The site is bordered by roads to the north and west, and by a grassed landscape on the eastern and southern boundaries. The topography of the ground within the playground site is characterised by a gentle slope from west to east with the highest point of the site at 25.72mAOD located in the northwestern corner and the lowest point at 22.79mAOD on the southeastern corner (see Figures 7 and 8). To the east of the site the land slopes steeply towards the Glen stream which is at an elevation of approximately 17.5mAOD.

No evidence of surface water ponding was observed within the site during a number of inspections by Mulroy Environmental. As such, rainfall falling on the site percolates through the ground cover into the underlying overburden.

### 3.7 Site Geology

#### 3.7.1 Introduction

This section addresses the soil and geology aspects of the environment and assesses the impacts of the proposed development on the existing soil, subsoil and bedrock environments. This section was prepared following a site audit and desk study work. Relevant documents that were accessed comprised geological maps and publications by the National Soil Survey of Ireland and the Geological Survey of Ireland (GSI).

#### 3.7.2 Soil

##### 3.7.2.1 Soil (Top Horizon)

The formation of topsoil is known as the ‘pedogenic’ process. Reference to the General Soil Map of Ireland, published by An Foras Talúntais (1980) indicates that the predominant or principal soil type in the vicinity of the site is Soil Association No. 38, *Grey Brown Podzol* (75%), with secondary *Gley* soils (25%).

A National Soil Mapping Project carried out jointly by the EPA and Teagasc have identified a number of soil types within the footprint of the site. The site location falls under the soil type *Made – Made Ground*, which includes the urban areas of north and south Drogheda (see Plate 20 below). The land surrounding the site is, as expected, also classed as *URBAN*, which is made ground. The surrounding suburban area of Drogheda is predominately comprised of *AminPD - Mineral poorly drained (Mainly acidic)* soil types. Other soils, *BminSW - Shallow well drained mineral (Mainly basic)* and *AlluvMIN - Alluvial (mineral)* are also located near the site location. Based on Mulroy Environmental’s local knowledge of the area, the general classification for the area is considered appropriate for the site (see Appendix 1).

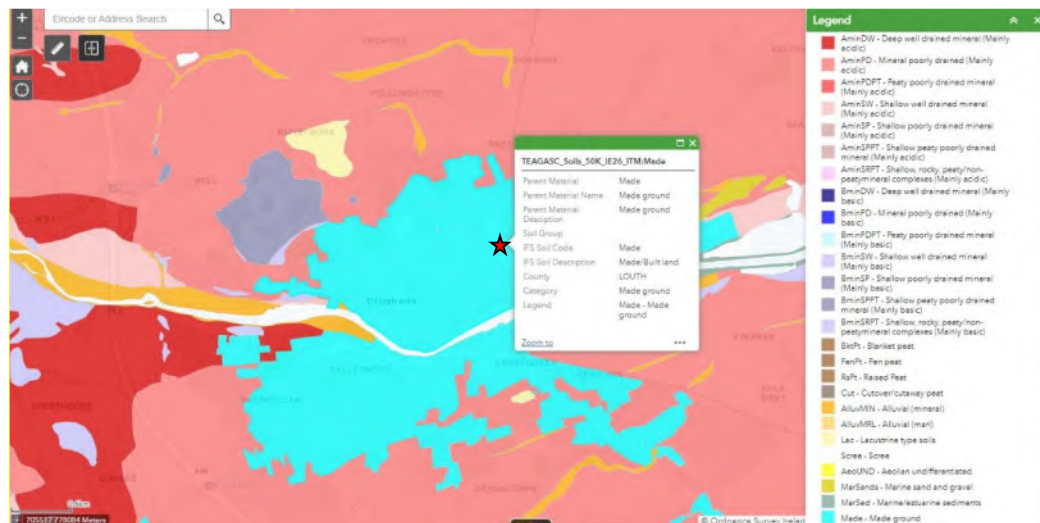


Plate 20. Extract of GSI Mapping showing soil types identified within the vicinity of the site

### 3.7.2.2 Subsoil (Quaternary) Geology

The origin of the subsoil material in this region is associated with the movement and deposition from glaciers during the last Ice Age. The ice sheets ground down the underlying bedrock, breaking the rock and grinding it to small sizes ranging from clays to boulders. The powerful erosive force of these ice sheets is considered to have moulded/sculpted the landscape in the area, with glacial features evident in the area. The Glen has a striking landform – a wide deep valley with a stream running along its base. The stream is thought to have carved out this valley. Similar to the Dale in Drogheda, the streams along the Boyne are overflow channels or glacial spillways.

Glacial deposits in the area consist of tills, which were deposited at the base of moving glaciers, and to a lesser extent fluvio-glacial sand and gravels, which were deposited by glacial meltwaters.

The National Soil Mapping Project carried out jointly by the EPA, GSI and Teagasc have identified several subsoil types in the vicinity of the site. The main subsoil type on the footprint of the site is *Man made (MADE)* soils (see Plate 21 below). Other subsoil types include *Alluvium (A)*, *Lower Paleozoic sandstone and shale tills with matrix of Irish Sea Basin origin (IrSTLPSsS)*, *Karstified Limestone Bedrock at Surface (KaRck)* and *Lower Paleozoic sandstone and shale tills (TLPSsS)*. A significant area of built ground (*MADE*) is located to the south, west and southwest of the site within the town of Drogheda.



**Plate 21. Extract of GSI Mapping showing subsoil types identified within the vicinity of the site**

### 3.7.2.3 Site Specific Soil & Subsoil Detail

No site-specific information is available on the site's soil and/or subsoil.

### 3.7.3 Geology

#### 3.7.3.1 Regional Bedrock Geology

Based on the Geological Survey of Ireland (GSI Bedrock 1:100,000 scale digital geological map series) the bedrock formation for the site is described as the Tullyallen Formation which is comprised of Pale micritised grainstone-wackestone (see Appendix 1).

#### 3.7.3.2 On-site Bedrock Geology

A review of GSI online records, indicates that there are GSI borehole records to the northwest and the northeast of the site with depth to bedrock information. One of these records, which has an acceptable location accuracy of 50m, shows a depth to bedrock of 29m (see Appendix 1). However, it should be noted that this borehole is approximately 1.2km to the northeast upgradient from the site and as such, it is likely that the depth to bedrock on site could be substantially different. The borehole approximately 600m to the northwest of the site has a lower location accuracy of 530m and shows a depth to bedrock of 42m (see Appendix 1).

### 3.7.4 Hydrogeology

#### 3.7.4.1 General Hydrogeological Classification

The GSI have classified the bedrock aquifer underlying the site as *Rkd - Regionally Important Aquifer - Karstified (diffuse)* (see Appendix 1). Regionally Important Karst Aquifers would generally have 'high' or 'moderate' well yields.

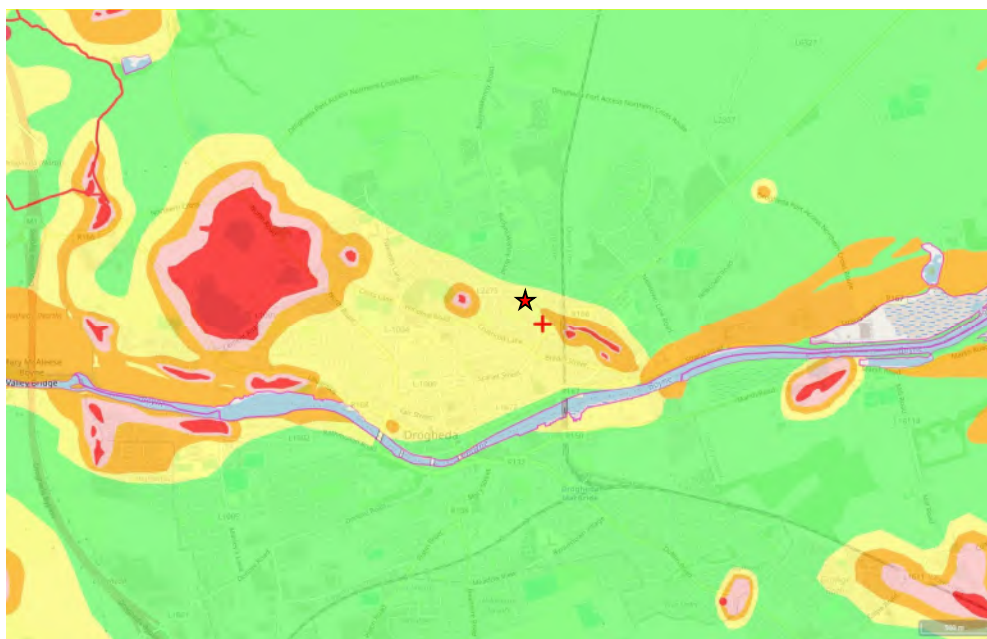
#### 3.7.4.2 Groundwater Vulnerability

Groundwater vulnerability is a term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease with which groundwater may be contaminated by human activities. The vulnerability category is based on the relative ease with which infiltrating water and potential contaminants may reach groundwater in a vertical or sub-vertical direction. The permeability and thickness of the subsoil, which influences the attenuation capacity, are important elements in determining the vulnerability of groundwater. The Irish GSI has produced guidelines on groundwater vulnerability mapping that aim to represent the intrinsic geological and hydrogeological characteristics that determine how easily groundwater may be contaminated by human activities. Vulnerability depends on the quantity of contaminants that can reach the groundwater, the time taken by water to infiltrate to the water table and the attenuating capacity of the geological deposits through which the water travels. These factors are controlled by the types of subsoils that overlie the groundwater, the way in which the contaminants recharge the geological deposits (whether point or diffuse) and the unsaturated thickness of geological deposits from the point of contaminant discharge. For vulnerability assessments with regard to bedrock aquifers the relevant geological layer is the subsoil between the release point of contaminants and the top of the bedrock. Any unsaturated bedrock layer is not considered as it is assumed that bedrock has little or no attenuation capacity due to its fissure flow characteristics. The entirety of the site has been given an aquifer vulnerability category rating of *Moderate (M)* by the GSI (see Table 3, Plate 20 following and

Appendix 1). The area to the southeast corner of The Glen Park, which is in close proximity to the site, been assigned an aquifer vulnerability category rating of *High (H)* (see Appendix 1).

**Table 3. Groundwater Vulnerability Mapping Guidelines**

Vulnerability rating	High permeability (sand/gravel)	Moderate permeability (sandy till)	Low permeability (clayey subsoil)
Extreme	0 – 3.0m	0-3.0 m	0 – 3.0m
High	>3.0m	3.0-10.0m	3.0 – 5.0m
Moderate	N/A	>10m	5.0 – 10.0m
Low	N/A	N/A	>10.0m



**Plate 20. EPA/Teagasc/GSI Aquifer Vulnerability Mapping in proximity of site (note red star is in the centre of the site)**

In addition, average annual recharge rates from rainfall in the vicinity of the site indicate that soil permeability is classed as moderate (see Appendix 1).

**3.7.4.3 Groundwater Source Protection**

The DoE-LG, EPA and GSI guidelines for Groundwater Protection Schemes allow for the combination of aquifer classification and vulnerability rating giving classifications of groundwater protection zones. The purpose of these zones is to place a control on the activities practised within a zone and thus provide protection to any underlying groundwater resources. Using DoE-LG, EPA and GSI criteria and the aquifer classification and vulnerability categories defined for the site, a vulnerability *Rkd/M* (*‘Moderate’*) would be assigned for the site.

### 3.8 Site Ecology

#### 3.8.1 Habitats and Flora

##### 3.8.1.1 Overview

The proposed site for the playground is located on the southern side of the Glen Park which is administered by Louth County Council. The proposed playground site is rectangular in shape, and is located within improved, managed grassland. The adjacent Newfoundwell road (R166) and associated pedestrian paths are located along the southern and southeastern boundaries of the site. A second road and pedestrian path runs along the western border the Glen Park and the proposed site. The southern boundary of the wider parkland area is divided from the Newfoundwell Road by a treeline as described below. The southwestern section of the Glen Park is bounded by a hedgerow, a metal wire fence, and concrete pillars along the road. A soccer field is located to the north of the site. The Glen stream runs through the Glen Park and is culverted under the R166 to the northeast of the site. As mentioned previously, the Glen has been developed as a ‘biodiversity park’, with initiatives to incorporate native and flowering trees, wildflower meadows and native hedgerows to enhance the overall biodiversity and to support local wildlife. The landscape plans for the park have followed *All-Ireland Pollinator Plan* recommendations in order to attract bees and other pollinators, and bee hotels and earth mounds have been incorporated to provide artificial nesting structures for such insects.

A site-based habitat and flora assessment was carried out on the 11<sup>th</sup> and 12<sup>th</sup> of April, 2024 and again on the 24<sup>th</sup> and 25<sup>th</sup> March, 2026. This involve an assessment of the entire site area of the proposed development site to the northwest of the park (4,353m<sup>2</sup>), and of the surrounding Glen Park which is approximately 3.6 hectares (i.e. excluding the playground). The habitat survey was carried out following the Heritage Council’s *Best Practice Guidance (Smith et al., 2011)*. Habitats were classified to Level 3 of the Heritage Council’s classification (*Fossitt, 2000*), and also according to the *Habitats Directive types (European Commission, 2013)* where appropriate. Following the field surveys and the desk studies, a final habitat map was prepared in BricsCAD 2026 and can be seen in the attached Figures 9 and 10. Any Invasive Alien Plant Species (IAPS) identified during the field surveys were noted and mapped.

Ten habitat types were found in the vicinity of the area proposed for the playground (see Figures 9 and 10). These habitats included: *Improved Amenity Grassland (GA2)*, *Treeline (WL2)*, *Hedgerow (WL1)*, *Buildings and Artificial Surfaces (BL3)*, *Stone Walls and other Stonework (BL1)*, *Earth Banks with elements of dry grassy verge GS2 and scrub WS1 habitats (BL2)*, *Scattered Trees and Parkland (WD5)*, *Flower Beds (BC4)*, *Wet Grassland (GS4)* and *Depositing/Lowland Rivers (FW2)*. Within the site boundary, two habitat types were identified i.e., an *Improved Amenity Grassland (GA2)* and part of a *Treeline (WL2)*. No Annex I habitats or habitats of conservation interest for the River Boyne and River Blackwater SAC (002299) were identified on site. A shoot of a Himalayan balsam (*Impatiens glandulifera*) IAPS, which is listed on the *Third Schedule of the Birds and Natural Habitats Regulations (S.I. No. 477/2011)*, was identified in the northeast corner of the Glen within the *Earth Banks scrub (BL2)* habitat in April 2024. This species has been described in a further section below on Invasive Species,

Section 3.7.4. However, it should be noted that this species was not present during the survey of March 2026. No IAPS were identified within the proposed development site boundary.

### 3.8.1.2 Scattered Trees and Parkland (WD5)

This habitat category includes areas with less than 30% cover of trees, which are either standing alone or in clusters, and are a prominent structural or visual feature of the area. The habitat on site was identified as an Scattered Trees and Parkland (WD5) (see Figures 9 and 10 and below Plate 21). This habitat typically occurs within stretches of cultivated grassland, particularly amenity grassland (GA2). In landscaped areas, such as parklands, the tree species incorporated are usually non-native trees which have been planted for aesthetic purposes. This is the dominant habitat within the Glen surrounding the site location (see Figures 9 and 10 and following Plate 24). The tree species in the area included both native and non-native broadleaved species of different ages. Larger trees included horse chestnut (*Aesculus hippocastanum*), sycamore (*Acer pseudoplatanus*), Norway maple (*Acer platanoides*), grey alder (*Alnus incana*), ash (*Fraxinus excelsior*), etc. Some more recently planted species included hornbeam (*Carpinus betulus*), sweet cherry (*Prunus avium*), pear (*Pyrus communis*) and European crab apple (*Malus sylvestris*) (see Figure 9). The majority of the trees planted were non-native, with a large number of hornbeam (*C. betulus*) trees, particularly those recently planted which run along the middle of the park.

The grass species composition along these areas were similar to that recorded within the GA2 habitat in the area as described previously. In some areas, particularly at the base of trees, wildflowers, such as purple dead nettle (*Lamium purpureum*) and bluebell (*Hyacinthoides non-scripta*), were planted and the grass was left to grow semi-unmaintained. Broadleaved herbs such as dandelion (*Taraxacum officinale*), buttercup (*Ranunculus repens*), curly dock (*Rumex crispus*), white clover (*Trifolium repens*), and sticky chickweed (*Cerastium glomeratum*) were also noted across the habitat. Daffodil (*Narcissus pseudonarcissus*) flowerbeds (BC4) were noted along the western edge of this habitat in an irregular curved shape as described in the following section (see Figures 9 and 10 and Plate 21 below and Plate 22 following).



**Plate 21.** Aerial photograph at 60m elevation over the Glen facing in a northwesterly direction towards the *Scattered Trees and Parkland (WD5)* habitat within the park. Note the presence of the pedestrian paths and the bridge (BL3), and the Glen stream (FW2).



**Plate 22. Ground panoramic photograph of the proposed playground site (WD5 Scattered Trees and Parkland habitat) at the western boundary of the site facing in a south-easterly direction**

#### 3.8.1.3 Improved Amenity Grassland (GA2)

This habitat was identified in the surrounding areas in the Glen Park, including the ‘Little Wembley’ soccer pitch, which is to the south of the site. This habitat category includes improved grassland areas, excluding farmland, which are usually species poor and regularly managed and mowed to maintain short swards (see Figure 9). They are rarely grazed by livestock. This category includes grassland areas in gardens, parks, grounds of various buildings or institutions, golf course fairways, grassy sports fields and racecourses. A variety of grasses, such as mown swards of orchard grass (*Dactylis glomerata*), annual bluegrass (*Poa annua*), Yorkshire fog (*Holcus lanatus*), and perennial ryegrass (*Lolium perenne*) were observed. Broadleaved herbs such as daisy (*Bellis perennis*), dandelion (*Taraxacum officinale*), spiny sowthistle (*Sonchus asper*), cow parsnip (*Heracleum sphondylium*), creeping buttercup (*Ranunculus repens*) and white clovers (*Trifolium repens*) were frequent throughout the habitat. Flowerbeds were also planted along the GA2 habitats to the southeast of the Glen and are within the BC4 habitat category as described further below.

#### 3.8.1.4 Treelines (WL2)

Treelines include narrow strips or lines of trees, less than 4 meters wide, which are usually planted as property or field boundary outlines. Typically, each tree is proportionally spaced apart. Tree species are often made up of non-native species such as beech (*Fagus sylvatica*), horse chestnut (*Aesculus hippocastanum*), lime trees (*Tilia* spp.) or conifers, etc. One tree line was recorded partially within the site along the southern and southeastern boundaries (see Figures 9 and 10). This treeline separates the southern boundary of the Glen Park from the Newfoundwell road (R166) (see Figure 9). The same tree species, the European ash (*Fraxinus excelsior*), was planted along this treeline. This is a native species which is commonly planted as a hedgerow or as a scattered tree within amenity areas. It is a common

and widespread species, typically found in wooded areas and rocky areas on limestone soils. No tree felling is proposed to accommodate the works.

#### 3.8.1.5 Hedgerows (WLI)

Hedgerows are linear lengths of shrubs, which may include occasional trees, and usually form boundaries around fields or properties (see Figures 9 and 10). They are typically less than 5m high and 4m wide, although dimension and species composition can vary. Most hedgerows are planted on earth embankments which may have originated from the excavation of drainage ditches. Hedgerows commonly support a high proportion of native or non-native spinose plants, such as hawthorn (*Crataegus monogyna*), in addition to many other native and non-native trees and shrubs including, for example, ash (*Fraxinus excelsior*) or hazel (*Corylus avellana*). Some of these may occur as scattered tall trees. A hedgerow forms the boundary between the Glen Park and the adjacent private road along the southwestern boundary of the park (see Figures 9 and 10 and Plate 23). This is a topped hedgerow and primarily consists of the same species, the non-native beech (*Fagus sylvatica*), throughout the habitat. The native elder (*Sambucus nigra*) shrub also occurs intermittently along the hedgerow. Old man's beard (*Clematis vitalba*), an invasive climbing shrub, was observed throughout the habitat blanketing across the hedge. Ivy (*Hedera helix*) and cleavers (*Galium aparine*) were also identified climbing along the hedgerow. Other native species such as the creeping buttercup (*Ranunculus repens*), nettle (*Urtica dioica*) and common ragwort (*Senecio jacobaea*) were also recorded.



**Plate 23.** Ground photograph of the hedgerow (WLI) along the western boundary of the Glen, which consists of beech (*Fagus sylvatica*) and elder (*Sambucus nigra*) shrubs.

### 3.8.1.6 Built Land (BL)

This category includes all artificial built land and structures. Built land and structures (excluding derelict stone buildings and ruins) which are composed of artificial structures such as cement, bricks, and tarmac, are further subdivided as *Buildings and artificial surfaces (BL3)*. The pedestrian paths within the Glen Park and the surrounding urban area outside of the park are included under this habitat description. They are built structures made with artificial materials and include less than 50% plant cover (see Figures 9 and 10). The stone bridge that runs across the middle of the Glen stream is also included in this category due to the mass cement block which forms the base. The proposed playground works consist of play equipment installations, safety surface resurfacing (wood chippings) and ancillary works, which include the addition of picnic benches, bins, seating, signs, and fencing. This will result in a conversion of the proposed site area from *GA2 Improved Grassland* to *BL3 Artificial Surfaces*.

The Newfoundwell railway bridge, located c.103m east from the site boundary, is composed of stone and is categorised as *stonework (BL1)* (see Figures 9 and 10 and previous Plate 9). *Stone walls and other stonework (BL1)* tend to support a higher degree of biodiversity, including bats (such as *Myotis daubentonii*), birds, (such as dippers *Cinclus cinclus*), or a diverse flora with abundant lichens, mosses, and ferns (particularly *Asplenium trichomanes*, *A. ruta-muraria* and *A. ceterach*).

*Earth banks (BL2)* are narrow, steep ridges which are commonly utilised as a boundary feature and are typically manmade constructions consisting of local materials such as peat, earth, gravel, or stone. An earth bank forms a border between the Glen and the Newfield housing estate along the eastern boundary of the park (see Figures 9 and 10 and following Plate 24). At its peak, the bank is followed by a mosaic of concrete walls and wooden fences on the eastern side which enclose the back garden of the houses. A native hedge, with species such as elder (*Sambucus nigra*), was incorporated at the top of the embankment to form an additional boundary along the back of the residences of the Newfield estate. The bank (*BL2*) is wide and increases in height easterly towards back of the houses. It is covered with vegetation, featuring elements of *scrub (WS1)* and *dry grassland (GS2)*. The open scrub habitat accounts for the majority of the vegetation along the bank and consists of aggregations of blackberry (*Rubus ulmifolius*), dewberry (*Rubus caesius*) and scrambling roses (*Rosa* spp.), in addition to several stunted willows (*Salix* spp.) and small hazels (*Corylus avellana*). Several broadleaved herb species, such as black medick (*Medicago lupulina*), sorrel (*Rumex acetosa*), and coltsfoot (*Tussilago farfara*), etc. were also noted within the habitat. Newly planted tree saplings, with species such as white willow (*Salix alba*) trees, were also dotted across the habitat. Some areas of escaped ornamental plants were evident but covered small proportions of the habitat. As mentioned previously, a shoot of a Himalayan balsam (*Impatiens glandulifera*) IAPS, which is listed on the *Third Schedule of the Birds and Natural Habitats Regulations (S.I. No. 477/2011)*, was identified in the east-northeast border of the Glen within the *Earth Banks scrub (BL2 WS1)* habitat. This species has been described in a further section below on Invasive Species, *Section 3.7.4*. Further southeast along this bank within the Glen, the vegetation is primarily a dry grassy verge bank, which are rarely fertilized, mowed, or grazed upon by livestock. This type of grassland is usually visible on grassy roadside verges, on the margins of tilled fields, on railway embankments, in churchyards and cemeteries, and in some neglected fields or gardens. Dry grassy areas (*GS2*) also appear along the lower portion of the eastern embankment as a transition between the

improved grassland (GA2) and scrub (WS1) habitats. Moreover, a grassy verge earth bank (BL2) habitat is also located along the southeastern half of the Glen stream, where it is culverted under the R166 (see Figure 9). These dry grassy areas (GS2) appear to have originated as improved grassland (GA2) which were rarely managed and have been allowed to grow wild. The grass species found were similar to those within the GA2 and WD5 habitats (as below), such as orchard grass (*D. glomerata*), Yorkshire fog (*H. lanatus*), and perennial ryegrass (*L. perenne*). Common broadleaved herbs encountered included such as common dandelion (*T. officinale*), white clover (*T. repens*), willowherbs (*Epilobium* spp.), nettle (*Urtica dioica*), bitter dock (*Rumex obtusifolius*) and hogweed (*Heracleum sphondylium*). The list of species recorded along the earth banks (BL2) can be seen in Table 4. A grassy bank also forms a boundary between the Glen and the R166 road immediately south of the site location. However, the treeline (WL2) is the predominant feature within the area. Additionally, a scrub railway embankment (BL2) was noted underneath and along the Newfoundwell Viaduct bridge at the southeast corner of the Glen, separated from the park behind a tall metal fence (see Figure 9). The plant species within this area were not assessed as it was not accessible.



**Plate 24. Ground photograph of the Earth bank (BL2) forms the eastern boundary along the Glen. Note the scrub features towards the top of the bank, and the dry grassy transition areas on the lower bank**

**Table 4. Plant Species identified in the *BL2 Earth Banks* Habitat at the Glen, Drogheda, County Louth**

Common Name	Taxon Name	Native/Alien/Invasive	Irish Status	Invasive Impact Score	DAFOR
Orchard grass	<i>Dactylis glomerata</i>	Native	Not protected	N/A	A
Tutsan	<i>Hypericum androsaemum</i>	Native	Not protected	N/A	O
Horseweed	<i>Erigeron canadensis</i>	Invasive	Established	Medium 14	O
English ivy	<i>Hedera helix</i>	Native	Not protected	N/A	A
Common hazel	<i>Corylus avellana</i>	Native	Not protected	N/A	F
Rosebay willow herb	<i>Epilobium angustifolium</i>	Native	Not protected	N/A	F
Coltsfoot	<i>Tussilago farfara</i>	Native	Not protected	N/A	F
Sycamore	<i>Acer pseudoplatanus</i>	Invasive	Established	Medium 15	A
Hairy bittercress	<i>Cardamine hirsuta</i>	Native	Not protected	N/A	F
Himalayan balsam	<i>Impatiens glandulifera</i>	Invasive	Established	High 18	R
Wood avens	<i>Geum urbanum</i>	Native	Not protected	N/A	F
Stinking iris	<i>Iris foetidissima</i>	Alien	Threatened:LC	N/A	O
Horse chestnut	<i>Aesculus hippocastanum</i>	Alien	Not protected	N/A	F
Elder	<i>Sambucus nigra</i>	Native	Not protected	N/A	A
Tansy ragwort	<i>Jacobaea vulgaris</i>	Native	Not protected	N/A	O
Red-osier dogwood	<i>Cornus sericea</i>	Alien	Not protected	N/A	A
Butterbur	<i>Petasites hybridus</i>	Alien	Established	Low 12	O
Lords and ladies	<i>Arum maculatum</i>	Native	Not protected	N/A	F
Oxeye daisy	<i>Leucanthemum vulgare</i>	Native	Not protected	N/A	O
Ribwort plantain	<i>Plantago lanceolata</i>	Native	Not protected	N/A	F
Common yarrow	<i>Achillea millefolium</i>	Native	Threatened: LC	N/A	O
Common dogwood	<i>Cornus sanguinea</i>	Native	Threatened: LC	N/A	F
Burnet rose	<i>Rosa spinosissima</i>	Native	Threatened: LC	N/A	O
Bush vetch	<i>Vicia sepium</i>	Native	Not protected	N/A	O
Bull thistle	<i>Cirsium vulgare</i>	Native	Not protected	N/A	O
Hedge mustard	<i>Sisymbrium officinale</i>	Alien	Established	Not assessed	O
White Dead-nettle	<i>Lamium album</i>	Invasive	Established	Not assessed	F
Square-stalked willowherb	<i>Epilobium tetragonum</i>	Invasive	Established	Not assessed	F
Common mullein	<i>Verbascum thapsus</i>	Native	Not protected	N/A	O
Field horsetail	<i>Equisetum arvense</i>	Native	Threatened:LC	N/A	F
Great willowherb	<i>Epilobium hirsutum</i>	Native	Threatened: LC	N/A	O

**Table 4. Plant Species identified in the BL2 Earth Banks Habitat at the Glen, Drogheda, County Louth**

Common Name	Taxon Name	Native/Alien/Invasive	Irish Status	Invasive Impact Score	DAFOR
Eared willow	<i>Salix aurita</i>	Native	Not protected	N/A	O
Elmleaf blackberry	<i>Rubus ulmifolius</i>	Native	Not protected	N/A	A
Bittersweet	<i>Solanum dulcamara</i>	Native	Threatened: LC	N/A	F
Common nettle	<i>Urtica dioica</i>	Native	Not protected	N/A	A
Wild teasel	<i>Dipsacus sylvestris</i>	Invasive	Established	Not assessed	O
Creeping buttercup	<i>Ranunculus repens</i>	Native	Not protected	N/A	A
Bitter dock	<i>Rumex obtusifolius</i>	Invasive	Not assessed	Not assessed	O
Cleavers	<i>Galium aparine</i>	Native	Threatened: LC	N/A	A
Dandelion	<i>Taraxacum officinale</i>	Native	Not protected	N/A	A
Creeping thistle	<i>Cirsium arvense</i>	Native	Not protected	N/A	O
Dog rose	<i>Rosa canina</i>	Native	Not protected	N/A	O
Red Dead-Nettle	<i>Lamium purpureum</i>	Invasive	Established	Not assessed	F
Upright hedgeparsley	<i>Torilis japonica</i>	Native	Threatened: LC	N/A	O
False-brome	<i>Brachypodium sylvaticum</i>	Natice	Threatned: LC	N/A	F
Black medick	<i>Medicago lupulina</i>	Native	Threatned: LC	N/A	O
Sorrel	<i>Rumex acetosa</i>	Native	Not protected	N/A	O
Charlock	<i>Sinapis arvensis</i>	Alien	Not protected	N/A	O
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	Native	Threatened: LC	N/A	O
Dewberry	<i>Rubus caesius</i>	Native	Not protected	N/A	F
Common vetch	<i>Vicia sativa</i>	Neophyte	Not protected	N/A	O
Yorkshire-fog	<i>Holcus lanatus</i>	Native	Threatened:LC	N/A	A
Osier	<i>Salix viminalis</i>	Alien	Not protected	N/A	A
Cuckooflower	<i>Cardamine pratensis</i>	Native	Threatened: LC	N/A	O
Cow parsley	<i>Anthriscus sylvestris</i>	Native	Threatned: LC	N/A	F
Old Man's beard	<i>Clematis vitalba</i>	Invasive	Established	Medium 17	O
Three-cornered Garlic	<i>Allium triquetrum</i>	Invasive	Not assessed	Medium 15	R
Bluebell	<i>Hyacinthoides non-scripta</i>	Native	Threatened:LC	N/A	O
Wood forget-me-not	<i>Myosotis sylvatica</i>	Invasive	Established	Not assessed	F
Red campion	<i>Silene dioica</i>	Native	Threatened: LC	N/A	F
Hoary willowherb	<i>Epilobium parviflorum</i>	Native	Threatened:LC	N/A	O

### 3.8.1.7 Flower Beds and Borders (BC4)

This habitat category includes ornamental flower beds and borders where the cover of dwarf shrubs and herbaceous plants dominate. These areas are typically planted for aesthetic landscaping purposes and are regularly managed and maintained. As such, non-native plants are usually incorporated. These features occur in gardens and parks, on roadsides and roundabouts, and in the grounds of various buildings and institutions. Scattered trees and small shrubs are included once the percentage cover does not exceed 25%. Daffodil (*N. pseudonarcissus*) flowerbeds were noted in the southeast corner of the Glen Park, and along the western edge in an irregular curved shape (see Figure 9). Adjacent to this flowerbed, a circular flower patch highlighting a garden sign for the Newfield housing estate was incorporated, which consisted of ornamental plants, wildflowers and weeds such as African lily (*Agapanthus praecox*), oxeye daisy (*Leucanthemum vulgare*), eyed tulip (*Tulipa agenensis*), pink sorrel (*Oxalis articulata*), and hedge veronica (*Veronica x franciscana*) etc. Planted borders have also been incorporated along the southeast edge of the Glen, consisting of small groups of scattered trees and shrubs, such as the common boxwood (*Buxus sempervirens*) and sweet cherry (*P. avium*), alongside ornamental flowers (see Figures 9 and 10). Both non-native and native species have been incorporated in this habitat in the Glen, and a full list of species in this habitat can be found in Table 5.

### 3.8.1.8 Wet Grassland (GS4)

Wet grassland occurs on wet or waterlogged flat or lowland ground. This habitat includes poorly drained grasslands which may regularly flood and have not recently been improved. Wet grasslands usually consist of rushes (*Juncus* spp.) and sedges (*Carex* spp.), in addition to grasses such as Yorkshire-fog (*Holcus lanatus*), creeping bent (*Agrostis stolonifera*), marsh foxtail (*Alopecurus geniculatus*), etc. The percentage of broadleaved herbs may be high, and common broadleaved herbs typically found on drier grasslands may also be present, depending on the degree of wetness. In the Glen, artificial wet grassland (GS4) was identified within the area of the fish ‘head’ along the stream on the east of the southern half of the park (see Figure 9). Some Marsh (GM1) gradients were noted; however, this area was included in the GS4 category due to the presence of a high proportion of drier grassland species in addition to a grass cover of over 50%. Grass species recorded included Yorkshire-fog (*H. lanatus*) and creeping bent (*A. stolonifera*), and reed grasses such as reed canary-grass (*Phalaris arundinacea*) and reed sweet-grass (*Glyceria maxima*). The broadleaved herb component comprised of wild Angelica (*Angelica sylvestris*), creeping buttercup (*Ranunculus repens*), willowherb species (*Epilobium* spp.), nettle (*Urtica dioica*), curly dock (*Rumex crispus*) etc. Planted trees included goat willow (*Salix caprea*), grey willow (*Salix cinerea*), and alder (*Alnus glutinosa*). A full list of species in this habitat is available in Table 6.

### 3.8.1.9 Depositing Lowland Rivers (FW2)

The Glen stream, located c.65.7m east-northeast from the site, is a highly modified flowing freshwater watercourse which deposits into the wide, deep River Boyne approximately 765m to the south of the site location (see Figures 4, 5, 9 and 10 and following Plate 25). Lowland rivers usually occur where gradients are low and waterflow is slow, however the water flow of the Glen stream is fast, likely due to the lack of riparian vegetation. The stream has been highly modified as a canalised section of the Tullyeskar tributary, with a number of minor weirs, artificial concrete base and walls along some sections. In other areas, large stone and gravel form the substratum and the stream rises to meet grassland and topsoil.

There are minimal plant and animal communities along the banks of the stream. The stream runs through the length of the park and forms the ‘backbone’ of the fish fossil shape landscape feature in the park. A review of historical mapping indicates that the flow path of the stream within the Glen has not been significantly rerouted. The aluminium fish ‘fins’, which consist of mesh wiring filled with stone, were placed on either side of the stream and a small wetland area with this aluminium wiring has been artificially designed to mimic the fish ‘head’. Like a lot of open streams located in urban areas, the stream has a history of accumulating debris such as plastic bottles, food wrappers, plastic bags, etc. A floating boom has been installed to collect such debris and prevent it blocking the culvert under the R166 further south and to prevent it entering the Boyne River (see below Plate 25). The hydrometric flow gauge station ‘Newfield’ has been installed by the EPA along the stream to monitor water levels.



**Plate 25. Ground photograph of the Glen stream (FW2) taken in April 2024 showing the floating boom, positioned downgradient of the stepped weirs, collecting debris before it enters the culvert. Note the grassy earth bank verge (BL2) along the edge of the stream.**

Table 5. Plant Species identified in the BC4 Flower Beds and Borders Habitat at the Glen, Drogheda, County Louth

Common Name	Taxon Name	Native/Alien/Invasive	Irish Status	Invasive Impact Score	DAFOR
Horse chestnut	<i>Aesculus hippocastanum</i>	Non-native	Not assessed	Not assessed	O
Wild cherry	<i>Prunus avium</i>	Native	Not protected	N/A	F
Silver birch	<i>Betula pendula</i>	Native	Not protected	N/A	F
Meadow foxtail	<i>Alopecurus pratensis</i>	Native	Not protected	N/A	A
Dandelion	<i>Taraxacum officinale</i>	Native	Not protected	N/A	F
Crab apple	<i>Malus sylvestris</i>	Native	Not protected	N/A	F
Cleavers	<i>Galium aparine</i>	Native	Not protected	N/A	F
Nettle	<i>Urtica dioica</i>	Native	Not protected	N/A	F
Creeping buttercup	<i>Ranunculus repens</i>	Native	Not protected	N/A	F
Common sowthistle	<i>Sonchus oleraceus</i>	Native	Not protected	N/A	O
Bluebell	<i>Hyacinthoides non-scripta</i>	Native	Not protected	N/A	F
Red fescue	<i>Festuca rubra</i>	Native	Not protected	N/A	F
English ivy	<i>Hedera helix</i>	Native	Not protected	N/A	F
Greater Periwinkle	<i>Vinca major</i>	Non-native	Established	Not assessed	O
Yorkshire fog	<i>Holcus lanatus</i>	Native	Not protected	N/A	A
Boxwood	<i>Buxus sempervirens</i>	Non-native	Established	Not assessed	O
French Crane's-bill	<i>Geranium endressii</i>	Non-native	Established	Not assessed	F
Bush vetch	<i>Vicia sepium</i>	Native	Not protected	N/A	F
Wild daffodil	<i>Narcissus pseudonarcissus</i>	Native	Not protected	N/A	A
Tansy ragwort	<i>Jacobaea vulgaris</i>	Native	Not protected	N/A	O
Lesser celandine	<i>Ficaria verna</i>	Native	Not protected	N/A	O
Bunch-flowered daffodil	<i>Narcissus tazetta</i>	Non-native	Not assessed	Not assessed	O
Seaside daisy	<i>Erigeron glaucus</i>	Non-native	Established	Not assessed	O
Tree spurge	<i>Euphorbia dendroides</i>	Non-native	Not assessed	Not assessed	O
Pink sorrel	<i>Oxalis articulata</i>	Non-native	Established	Not assessed	F
Speedwells 'heartbreaker'	<i>Veronica</i> spp.	Non-native	Not assessed	Not assessed	F
Eyed tulip	<i>Tulipa agenensis</i>	Non-native	Not assessed	Not assessed	O
Grey-leaved euryops	<i>Euryops pectinatus</i>	Non-native	Not assessed	Not assessed	O
Pendulous sedge	<i>Carex pendula</i>	Non-native	Not assessed	Not assessed	O
Oxeye daisy	<i>Leucanthemum vulgare</i>	Native	Not protected	N/A	O
African lily	<i>Agapanthus praecox</i>	Non-native	Not assessed	Not assessed	F
Black mondo grass	<i>Ophiopogon planiscapus</i>	Non-native	Not assessed	Not assessed	O
Pot marigold	<i>Calendula officinalis</i>	Non-native	Established	Not assessed	O
Wallflower	<i>Erysimum cheiri</i>	Non-native	Established	Not assessed	O
Willowherb spp.	<i>Epilobium</i> spp.	Native	Not protected	N/A	F
Curly dock	<i>Rumex crispus</i>	Native	Not protected	N/A	F
Lamb's ear	<i>Stachys byzantina</i>	Non-native	Occasional	Not assessed	O
Hedge veronica	<i>Veronica x franciscana</i>	Non-native	Established	Not assessed	O



**Table 6. Plant Species identified in the *GS4 Wet Grassland* Habitat at the Glen, Drogheda, County Louth**

<b>Common Name</b>	<b>Taxon Name</b>	<b>Native/Alien/Invasive</b>	<b>Irish Status</b>	<b>Invasive Impact Score</b>	<b>DAFOR</b>
Goat willow	<i>Salix caprea</i>	Native	Not protected	N/A	F
Willowherb spp.	<i>Epilobium</i> spp.	Native	Not protected	N/A	F
Nettle	<i>Urtica dioica</i>	Native	Not protected	N/A	A
Creeping buttercup	<i>Ranunculus repens</i>	Native	Not protected	N/A	A
Bitter dock	<i>Rumex obtusifolius</i>	Invasive	Not assessed	Not assessed	F
Dandelion	<i>Taraxacum officinale</i>	Native	Not protected	N/A	F
Cock's-foot	<i>Dactylis glomerata</i>	Native	Not protected	N/A	A
Wild Angelica	<i>Angelica sylvestris</i>	Native	Not protected	N/A	F
Curly dock	<i>Rumex crispus</i>	Native	Not protected	N/A	F
Marsh willowherb	<i>Epilobium palustre</i>	Native	Not protected	N/A	F
Great willowherb	<i>Epilobium hirsutum</i>	Native	Not protected	N/A	F
Dog rose	<i>Rosa canina</i>	Native	Not protected	N/A	F
Black alder	<i>Alnus glutinosa</i>	Native	Not protected	N/A	F
Grey willow	<i>Salix cinerea</i>	Native	Not protected	N/A	F
Creeping Bent	<i>Agrostis stolonifera</i>	Native	Not protected	N/A	A
Reed Canary-grass	<i>Phalaris arundinacea</i>	Native	Not protected	N/A	A
Yorkshire fog	<i>Holcus lanatus</i>	Native	Not protected	N/A	A
Reed Sweet-grass	<i>Glyceria maxima</i>	Native	Not protected	N/A	A



### 3.8.2 Mammal Survey

#### 3.8.2.1 Non-volant Mammals

A mammal walkover survey was carried out on the 25<sup>th</sup> April 2024 and again on the 24<sup>th</sup> and 25<sup>th</sup> of March 2026.. During this site assessment, no evidence of non-volant mammal activity was noted within the site location. Within the surrounding park area, some evidence of mammal digging was recorded along the Glen stream within the GS4 grassland (see Figure 9 and below Plate 26). It is possible that a small mammal was digging to forage for aquatic species or to access the water. Otters may dig a ‘couch’ to rest along freshwater riparian habitats, but it is unlikely that a holt, an underground denning site, is located within the Glen due to the lack of diverse freshwater animal and plant communities and the close proximity to humans. The riparian habitat along the Glen stream is not considered suitable for otters. Moreover, holts are usually formed closer to coastal areas. As the Glen is a public green space nearby residential properties, it is possible that rodents, cats or small dogs may have been digging in the area.



**Plate 26. Ground photograph of small holes noted on the bank of the Glen stream within the GS4 grassland habitat.**

The NBDC database was also examined as part of the desk study. No mammals were recorded within the proposed works area during the *Mammals of Ireland 2010-2015*, or *Mammals of Ireland 2016-2025* surveys. The closest species records were 2 No. records of the European hedgehog (*Erinaceus europaeus*), c. 400m to the west and c. 270m to the east of the site location within urban gardens as a part of the *Atlas Mammals of Ireland 2010-2015* dataset in 2015 (see Appendix 2). The west European hedgehog (*E. europaeus*) is protected under the Wildlife Acts 1976 to 2012. This species is not a Habitats

Directive (92/43/EEC) Annex II or Annex IV species, and they are listed as species of Least Concern (LC) within the Irish species' Red List No. 12 for Terrestrial Mammals (NPWS, 2019).

The NBDC species records datasets for the 1km grid reference squares O0976 and O0975, which the site is located within, was also analysed. The European hedgehog (*E. europaeus*) was also recorded in both areas, alongside two invasive mammals, the house mouse (*Mus musculus*) and the brown rat (*Rattus norvegicus*) (see Appendix 2). The NBDC species records for the 2km grid reference squares O07X and O07Y, wherein the site is located, was also assessed (see Appendix 2). Records for Eurasian badger (*Meles meles*), European otter (*Lutra lutra*), pine marten (*Martes martes*), and red fox (*Vulpes vulpes*) were listed within these 2km grids. The invasive European rabbit (*Oryctolagus cuniculus*) was also recorded within the 2km grid square O07X. Of these species, the badger (*M. meles*), otter (*L. lutra*), and pine marten (*M. martes*) are protected under the Irish Wildlife Acts (1976). The red fox is not currently protected in Ireland. Each species is of Least Concern (LC) in the Irish species' *Red List No. 12 for Terrestrial Mammals* (NPWS, 2019). The pine marten (*M. martes*) is listed as an Annex V species under the Habitats Directive (92/43/EEC). European otters (*L. lutra*) have been designated as species of conservation interest for the River Boyne and River Blackwater SAC (002299), and they are listed as Annex II and Annex IV species under the Habitats Directive (92/43/EEC). The overall status of otters in Ireland is *Favourable*, and they are listed as species is of *Least Concern (LC)* in the Irish species' *Red List No. 12 for Terrestrial Mammals* (NPWS, 2019). No otter sightings or evidence of spraints or footprints were noted on site.

No negative impacts are predicted for mammals in the near or adjacent areas as the site location is located within a man-made area which has been assessed as ecologically insignificant for mammals. The proposed construction works are minor, without significant noise or runoff pollution, and they will be short in duration.

### 3.8.2.2 Bats

During the mammal walkover surveys of 2024 and 2026, no evidence of volant mammal activity was noted within the site. Along the northern boundary of the Glen, some droppings were noted on a concrete block within the opening of the underground tunnel of the culverted Glen stream (see below Plate 27). The tunnel opens to a pedestrian bridge, which crosses the northeast corner of the Glen. Due to the nature of the location and the physical size, shape and colour of the droppings, it is possible that these droppings are from a bat species. However, it is also possible that they originate from another mammal species, such as *Rodentia* spp. Bat droppings are very similar to mice.



**Plate 27. Ground photograph of the droppings located under the pedestrian bridge which opens the culverted Glen stream in the northeast corner of the Glen.**

A dedicated bat survey was not required due to the nature of the works and the site location. However, a desk-based review of existing bat species records and bat suitability on site was undertaken during the ecological desk study. The National Biodiversity Data Centre (NBDC) map landscape suitability for bats based on Lundy *et al.*, (2011). The maps are a visualisation of the results of the analyses based on a habitat suitability index. The index ranges from 0 to 100, with 0 being least favourable and 100 most favourable for bats (see Table 7 below). The overall habitat suitability index of the proposed site was 37.44 which is considered as high suitability. For some species the suitability index figure is quite high, such as for the common pipistrelle and Leisler's bat.

**Table 7. Suitability of the study area for the bat species previously recorded in the study area (based on NBDC) along with their Irish Red List Status (from Marnell *et al.*, 2009)**

COMMON NAME	SCIENTIFIC NAME	SUITABILITY INDEX	IRISH RED LIST STATUS
All bats	-	37.44	-
Leisler's bat	<i>Nyctalus leisleri</i>	53	Least Concern
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	53	Least Concern
Brown long-eared bat	<i>Plecotus auritus</i>	49	Least Concern
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	49	Least Concern
Natterer's bat	<i>Myotis nattereri</i>	42	Least Concern
Whiskered bat	<i>Myotis mystacinus</i>	41	Least Concern
Daubenton's bat	<i>Myotis daubentonii</i>	40	Least Concern
Nathusius's pipistrelle	<i>Pipistrellus nathusii</i>	10	Least Concern
Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	0	Least Concern

No bat species records within the National Bat Database of Ireland were documented for the proposed playground works site or within the Glen Park area. At the Bridge of Peace, approximately 1.15km southwest of the site location, 12 No. records of Daubenton's bat (*Myotis daubentonii*), 1 No. soprano pipistrelle (*Pipistrellus pygmaeus*), 1 No. lesser noctule (*Nyctalus leisleri*), and 1 No. Pipistrelle (*Pipistrellus pipistrellus sensu lato*) records were documented during the All-Ireland Daubentons Bat Waterways Survey (see Appendix 2). No bat species were recorded on the NBDC database within the 1km grids reference squares O0976 and O0975. However, multiple records of Daubenton's bat (*Myotis daubentonii*), lesser noctule (*Nyctalus leisleri*), soprano pipistrelle (*Pipistrellus pygmaeus*) and another unknown pipistrelle (*Pipistrellus* spp.) species were recorded within the 2km grid square O07X (see Appendix 2). No other evidence of bat usage or bat boxes were recorded on site or within the Glen Park during the walkover survey.

All Irish bat species are protected under the Wildlife Act (1976) and Wildlife Amendment Acts (2000 and 2010). Also, the EC Directive on The Conservation of Natural habitats and of Wild Fauna and Flora (Habitats Directive 1992), seeks to protect rare species, including bats, and their habitats and requires that appropriate monitoring of populations be undertaken. All Irish bats are listed in Annex IV of the Habitats Directive and the lesser horseshoe bat *Rhinolophus hipposideros* is further listed under Annex II. Across Europe, they are further protected under the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1982), which, in relation to bats, exists to conserve all species and their habitats. The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention 1979, enacted 1983) was instigated to protect migrant species across all European boundaries. The Irish government has ratified both these conventions. Also, under existing legislation,

the destruction, alteration, or evacuation of a known bat roost is a notifiable action, and a derogation licence has to be obtained from the *National Parks and Wildlife Service* before works can commence.

The site area is not suitable for bat roosts, and as such, the proposed construction works for the proposed playground will not affect any roosts or potential bat habitats. Negative impacts for bats are not predicted within the site or the adjacent areas, as the site location is located within a man-made area which has been assessed as ecologically unimportant for bats. However, it is possible that the area may be used for foraging for some species, though the open plan of the Glen Park, the lack of dense connected vegetation and the highly modified nature of the stream decrease this likelihood significantly. The proposed works for the proposed playground within the site are minor, without significant noise or runoff pollution, and they will be short in duration. No bat species are listed as species of conservation interest for the relevant Special Areas of Conservation (SACs).

### **3.8.3 Bird Survey**

The original walkover bird survey was carried out throughout the site and the adjacent park area at dawn on the 25<sup>th</sup> of April 2024. A 2<sup>nd</sup> dawn bird survey was carried out in March 2026. This survey consisted of an evening survey on the 24<sup>th</sup> of March 2026 and a dawn survey on the 25<sup>th</sup> of March 2026. During these surveys, birdsong survey, bird song recordings, physical sightings of bird species and any evidence of bird usage was recorded. No nests were recorded within the proposed development site boundary, however, at least 2 No. nests were noted in the surrounding park in 2024 and again in 2026. Within the site, sightings of 2 No. jackdaw pairs (*Corvus monedula*) were noted. In the Glen park, starlings were commonly recorded throughout the Glen, particularly in the soccer field in 2024, and in trees west of the park bridge in 2026 (see below Plate 28).



**Plate 28. Ground photograph of starling (*Sturnus vulgaris*) at the southern end of the Glen**

Herring gulls (*Larus argentatus*), common wood pigeons (*Columba palumbus*), blackbirds (*Turdus merula*), hooded crows (*C. Cornix*), rooks (*C. frugilegus*) and jackdaws (*Corvus monedula*) were also observed frequently on land or flying over the area (see Plate 29 below).



**Plate 29. Ground photograph of Herring gulls (*Larus argentatus*) to the southeast of the site location**

In 2024, house sparrows (*Passer domesticus*) were recorded along the hedgerow on the southwest of the Glen in 2024, and 1 No. Bird was seen sitting on a branch within the hedge. No nests were visible along that hedgerow, however it is likely that sparrows are nesting here. In 2026, bird nests were visible in the trees west of the park bridge. Other birds recorded included a goldfinch (*Carduelis carduelis*), greenfinch (*Chloris chloris*), dunnoek (*Prunella modularis*), and great tit (*Parus major*) etc (see Plate 30 below).



**Plate 30. Ground photograph of a Great tit (*Parus major*) to the east of the park bridge**

All bird species recorded and observed within the Glen during the dawn survey in April 2024 have been listed in Table 8 and all bird species recorded and observed within the Glen during the evening and dawn survey in March 2026 have been listed in Table 9.

Most birds mentioned above are resident birds which are widespread across Ireland. Most species recorded in the Glen have been given a 'green' conservation status in Ireland as per the Birds of Conservation Concern in Ireland 2020-2026 (Colhoun & Cummins, 2013). The status of bird species in Ireland are signalled using a traffic light system. Species that have been appointed an 'amber' status, such as the house sparrow (*P. domesticus*), the gulls (*Larus* spp.) and the starlings (*S. vulgaris*), are birds of medium conservation concern (see Tables 8 and 9). No red listed species, which are of high conservation concern in Ireland, were recorded within the Glen. The conservation status of bird species, as above, is calculated based on criteria such as historical decline, trends in population and range, rarity, localised distribution, and international importance.

All bird species are protected by Irish National legislation. In 2024, the little egret (*Egretta garzetta*) was the only Annex I species of the Birds Directive (2009/147/EC) that was recorded within the Glen in 2024. No Annex I species were recorded within the site in 2026 (see Plate 31 below). Six of the bird species recorded are listed under Annex II of the Birds Directive (2009/147/EC), the jackdaw, rook, herring gull, wood pigeon, house sparrow, and blackbird. No species of conservation significance for either the Boyne Estuary SPA (004080) or the River Boyne and River Blackwater SPA (004232) were recorded during the evening and dawn bird survey of March 2026.



**Plate 31. Ground photograph of a little egret (*Egretta garzetta*) in flight after wading in the Glen stream**

During the bird surveys, a barn swallow (*Hirundo rustica*) was recorded within the Glen park. This species was also recorded in the NBDC database in the southern end of the park in 2018 during the *Birds of Ireland* survey, yet none were recorded during the *Irish Wetland Birds Survey* (I-WeBS), carried out between 1994-2001. Barn swallows are regular breeding visitors from southern Africa to Ireland between mid-March to September. They are currently an ‘amber’ bird species and are of medium conservation concern. They are not listed as species of conservation concern for the Boyne Estuary SPA (004080) or the River Boyne and River Blackwater SPA (004232).

Several bird species across the NBDC database have also been recorded within the 1km grid reference squares O0976 and O0975, in which the Glen park boundary is located (see Appendix 2). These species, excluding those mentioned previously or those listed in Table 8 and/or Table 9, were as follows:

- Chaffinch (*Fringilla coelebs*);
- Common buzzard (*Buteo buteo*);
- Common chiffchaff (*Phylloscopus collybita*);
- Common tern (*Sterna hirundo*);
- Common linnet (*Carduelis cannabina*);
- Common swift (*Apus apus*);
- Eurasian siskin (*Carduelis spinus*);
- Hedge accentor (*Prunella modularis*);
- Rock pigeon (*Columba livia*);
- Song thrush (*Turdus philomelos*);
- Yellowhammer (*Emberiza citrinella*);
- Swift (*Apus apus*);
- Stock Dove (*Columba oenas*);
- Oystercatcher (*Haematopus ostralegus*);
- Mute Swan (*Cygnus olor*);
- Magpie (*Pica pica*);
- Lesser Black-backed Gull (*Larus fuscus*);
- Grey Heron (*Ardea cinerea*);
- Cormorant (*Phalacrocorax carbo*);
- Black-headed Gull (*Chroicocephalus ridibundus*);
- Sparrowhawk (*Accipiter nisus*);
- Mediterranean Gull (*Ichthyæetus melanocephalus*);
- Kestrel (*Falco tinnunculus*);
- House Martin (*Delichon urbicum*);
- Goldcrest (*Regulus regulus*); and
- Common Redpoll (*Acanthis flammea*).

**Table 8. Bird Species Identified at the Glen During the Dawn Bird Survey on the 25<sup>th</sup> April 2024**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Resident status</b>	<b>Irish Red List Status</b>	<b>Conservation Status</b>	<b>Wintering</b>	<b>Breeding</b>
Common starling	<i>Sturnus vulgaris</i>	Resident	Amber	Annex II B	Yes	Yes
Mistle thrush	<i>Turdus viscivorus</i>	Resident	Green	Annex II B	Yes	Yes
Rook	<i>Corvus frugilegus</i>	Resident	Green	Annex II B	Yes	Yes
Herring gull	<i>Larus argentatus</i>	Resident	Amber	Annex II B	Yes	Yes
Common gull	<i>Larus canus</i>	Resident	Amber	Annex II B	Yes	Common
Wood pigeon	<i>Columba palumbus</i>	Resident	Green	Annex II A, Annex III A	Yes	Yes
Eurasian jackdaw	<i>Corvus monedula</i>	Resident	Green	Annex II B	Yes	Yes
House sparrow	<i>Passer domesticus</i>	Resident	Amber	N/A	Common	Yes
Eurasian blackbird	<i>Turdus merula</i>	Resident	Green	Annex II B	Yes	Yes
Eurasian wren	<i>Troglodytes troglodytes</i>	Resident	Green	N/A	Yes	Yes
European robin	<i>Erithacus rubecula</i>	Resident	Green	N/A	Yes	Yes
Eurasian blue tit	<i>Cyanistes caeruleus</i>	Resident	Green	N/A	Yes	Yes
Hooded crow	<i>Corvus cornix</i>	Resident	Green	N/A	Yes	Yes
Eurasian blackcap	<i>Sylvia atricapilla</i>	Not resident	Green	N/A	Rare	Widespread
European goldfinch	<i>Carduelis carduelis</i>	Resident	Green	N/A	Yes	Yes
Eurasian collared dove	<i>Streptopelia decaocto</i>	Resident	Green	Annex II B	Yes	Yes
Great tit	<i>Parus major</i>	Resident	Green	N/A	Yes	Yes
Dunnock	<i>Prunella modularis</i>	Resident	Green	N/A	Yes	Yes
Willow warbler	<i>Phylloscopus trochilus</i>	Breeding	Amber	N/A	No	Widespread
Long-tailed tit	<i>Aegithalus caudatus</i>	Resident	Green	N/A	Yes	Yes
Little egret	<i>Egretta garzetta</i>	Resident	Green	Annex I	Common	Common

**Table 9. Bird Species Identified at the Glen During the Evening 24/3/26 and Dawn 25/3/26 Bird Surveys**

Common Name	Scientific Name	Resident status	Irish Red List Status	Conservation Status	Wintering	Breeding
Eurasian jackdaw	<i>Corvus monedula</i>	Resident	Green	Annex II B	Yes	Yes
Rook	<i>Corvus frugilegus</i>	Resident	Green	Annex II B	Yes	Yes
Hooded crow	<i>Corvus cornix</i>	Resident	Green	N/A	Yes	Yes
Herring gull	<i>Larus argentatus</i>	Resident	Amber	Annex II B	Yes	Yes
Wood pigeon	<i>Columba palumbus</i>	Resident	Green	Annex II A, Annex III A	Yes	Yes
Common starling	<i>Sturnus vulgaris</i>	Resident	Amber	Annex II B	Yes	Yes
House sparrow	<i>Passer domesticus</i>	Resident	Amber	N/A	Common	Yes
Eurasian tree sparrow	<i>Passer montanus</i>	Resident	Amber	N/A	Yes	Yes
Eurasian blackbird	<i>Turdus merula</i>	Resident	Green	Annex II B	Yes	Yes
Eurasian wren	<i>Troglodytes troglodytes</i>	Resident	Green	N/A	Yes	Yes
European robin	<i>Erithacus rubecula</i>	Resident	Green	N/A	Yes	Yes
Eurasian blue tit	<i>Cyanistes caeruleus</i>	Resident	Green	N/A	Yes	Yes
Great tit	<i>Parus major</i>	Resident	Green	N/A	Yes	Yes
Coal tit	<i>Periparus ater</i>	Resident	Green	N/A	Yes	Yes
European goldfinch	<i>Carduelis carduelis</i>	Resident	Green	N/A	Yes	Yes
European greenfinch	<i>Chloris chloris</i>	Resident	Amber	N/A	Yes	Yes
Pied wagtail	<i>Motacilla alba yarrellii</i>	Resident	Green	N/A	Yes	Yes
Dunnock	<i>Prunella modularis</i>	Resident	Green	N/A	Yes	Yes
Barn swallow	<i>Hirundo rustica</i>	Breeding	Amber	N/A	No	Yes
Sand martin	<i>Riparia riparia</i>	Breeding	Amber	N/A	No	Yes

No species of conservation significance for the River Boyne and River Blackwater SPA (004232) were recorded within the 1km grid squares O0976 and O0975. Within the 1km grid square O0975, a Boyne Estuary SPA qualifying interest species, oystercatcher (*Haematopus ostralegus*) was recorded. However, none were ever recorded during Mulroy Environmental Ltd. site visits.

No bird nests were recorded within the proposed development site location. Moreover, the site is man-made, and it was assessed as ecologically insignificant for bird species. The site covers a small surface area in relation to the size of the park, and thus will not displace any bird species that may utilise the area. Due to the size and nature of the proposed construction works, the construction of the playground is not predicted to disturb birds or directly impact bird habitats. However, increased noise pollution and human activity may cause slight short-term disturbance to some birds in the area.

#### 3.8.4 Invasive Species

No species listed on the Third Schedule of the Birds and Natural Habitats Regulations (S.I. No. 477/2011) or as Invasive Alien Species of Union Concern by the European Commission were noted within the proposed site development location.

In the surrounding Glen Park area, during the habitat survey of April 2024 small shoots of Himalayan balsam (*Impatiens glandulifera*), also known as Indian balsam, were recorded along the *Earth bank (BL2)* and *Scrub (WS1)* habitat to the northeast of the Glen, within the grid reference No. O 09578 76217 (see following Plate 32). Multiple early shoots of this plant were also recorded within an approximate 2-3m<sup>3</sup> area, approximately 10 metres to the east of the stream. The area was relatively clear of vegetation with respect to surrounding areas. Himalayan balsam is listed on the *Third Schedule of the Birds and Natural Habitats Regulations (S.I. No. 477/2011)* and as an *Invasive Alien Species of Union Concern* by the European Commission. Native to the western Himalayas, this plant has now established as an IAPS in many European countries, including Ireland, where it was originally introduced as an ornamental herb. This plant can pose significant risk to native plants and biodiversity through competition for resources and space. It can spread rapidly and form dense monotypic stands, reducing the surrounding plant species diversity by up to 25%. The strands die back during the winter, and can cause increased soil erosion, particularly on riverbanks, due to increased exposure to harsh weather conditions. Moreover, this plant can alter the fungal communities and chemical composition of the soil. Dense strands of *I. glandulifera* along riverbanks can alter the water flow and increase the likelihood of flooding during high rainfall events. When the plant matures in the late summer to mid-autumn, the seed capsules ‘pop’ and disperse seeds up to 20 feet from the parent plant. They produce high volumes of seeds each year (up to 1,500), which are easily transported by wind or water.

Actions for the management of *I. glandulifera* are outlined in the TII guidance documentation “*The Management of Invasive Alien Plant Species on National Roads – Technical Guidance*” (December 2020). Other management documents have been prepared by the government, Inland Fisheries Ireland (IFI), Uisce Eireann, Invasive Species Northern Ireland, etc. The plant produces shallow roots, and consequently, can pulled from the ground by hand in mid-May to the end of June, before the plant flowers

and before the explosive seed capsules form. This method, known as ‘balsam bashing’, is the optimal method of control for this species to prevent damage to surrounding plants. Large stands may be cut or mowed below the lowest node. *I. glandulifera* can also be controlled by grazing or treated by herbicides; namely glyphosate or 2-4D amine. Post-control management and assessment is necessary to avoid re-growth, as seeds present in the soil can remain viable for up to two years. Site-specific control measures should be carried out by a suitably qualified, experienced ecologist or horticulturalist in accordance with legislation and guidance.

During the habitat survey of March, 2026, Himalayan balsam (*I. glandulifera*) was not recorded within or near the proposed site development location and therefore will not be impacted or accidentally spread during construction works. **It should be noted that it was not possible to find the stand of Himalayan balsam (*I. glandulifera*) in March 2026 that was originally identified in April 2024. This should not be interpreted as a confirmed absence and it is recommended that this area is inspected again in the summer of 2026.**

To prevent the spread of invasive species, the Contractor’s vehicles and equipment must be thoroughly cleaned before they enter or leave the site. High-pressure steam cleaning, with water with a temperature greater than 40°C, is recommended for vehicles and equipment where feasible. Disinfectants should be used in strict accordance with the manufacturer’s instructions. Other equipment and footwear should also be dipped in or scrubbed with a disinfectant solution (e.g. Virkon solution).



**Plate 32. Ground photograph of early growths of Himalayan balsam (*Impatiens glandulifera*) noted within the Earth bank (BL2) scrub (WS1) habitat along the east-northeastern boundary of the Glen (grid ref. O 09578 76217)**

#### 4 IDENTIFICATION OF NATURA 2000 SITES

It is general practice, when screening a plan or project for compliance with the Habitats Directive, to identify all Natura 2000 sites (SPAs & SACs) within the functional area of the plan/project itself and within 15km of the boundaries of the area the plan/project applies to. This approach is currently recommended in the Department of the Environmental, Heritage and Local Government’s document Guidance for Planning Authorities and as a precautionary measure, to ensure that all potentially affected Natura 2000 sites are included in the screening process.

A list of all the SPAs and SACs within 15km of the site are included in a comprehensive table, Table 1 at the start of the report. The following table, Table 9 represents a summary of Table 1. Please see Figures 1 to 7 for locations of the site at various mapping scales.

**Table 10. Summary of Natura 2000 sites within 15km of the Proposed Playground Site at The Glen, Drogheda**

SITE CODE	DESIGNATION	SITE NAME
002299	SAC	River Boyne and River Blackwater
004080	SPA	Boyne Estuary
001957	SAC	Boyne Coast & Estuary
004232	SPA	River Boyne and River Blackwater
004236	SPA	Northwest Irish Sea
004458	SPA	River Nanny Estuary & Shore
001459	SAC	Clogherhead

## 5 DESCRIPTION OF NATURA 2000 SITES

The conservation objectives, qualifying interests, vulnerability, and conservation status of individual sites is provided as follows.

### 5.1 River Boyne and River Blackwater SAC (002299)

This site comprises the freshwater element of the River Boyne as far as the Boyne Aqueduct, the Blackwater as far as Lough Ramor and the Boyne tributaries including the Deel, Stoneyford and Tremblestown Rivers. These riverine stretches drain a considerable area of Meath and Westmeath, and smaller areas of Cavan and Louth. The underlying geology is Carboniferous Limestone for the most part, with areas of Upper, Lower and Middle well represented. In the vicinity of Kells Silurian Quartzite is present while close to Trim are Carboniferous Shales and Sandstones. There are many large towns adjacent to but not within the site, including Slane, Navan, Kells, Trim, Athboy and Ballivor.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (\* = priority; numbers in brackets are Natura 2000 codes):

- [7230] Alkaline Fens;
- [91E0] Alluvial Forests\*;
- [1099] River Lamprey (*Lampetra fluviatilis*);
- [1106] Atlantic Salmon (*Salmo salar*); and
- [1355] Otter (*Lutra lutra*).

The main areas of alkaline fen in this site are concentrated in the vicinity of Lough Shesk, Freehan Lough and Newtown Lough. The hummocky nature of the local terrain produces frequent springs and seepages which are rich in lime. A series of base-rich marshes have developed in the poorly-drained hollows, generally linked with these three lakes. Open water is usually fringed by Bulrush (*Typha latifolia*), Common Club-rush (*Scirpus lacustris*) or Common Reed (*Phragmites australis*), and this last species also extends shoreward where a dense stand of Great Fen-sedge (*Cladium mariscus*) frequently occurs. This in turn grades into a sedge and grass community (*Carex spp.* and Purple Moor-grass, *Molinia caerulea*), or one dominated by Black Bog-rush (*Schoenus nigricans*). An alternative aquatic/terrestrial transition is a floating layer of vegetation. This is normally based on Bogbean (*Menyanthes trifoliata*) and Marsh Cinquefoil (*Potentilla palustris*). Other species gradually become established on this cover, especially plants tolerant of low nutrient status e.g. bog mosses (*Sphagnum spp.*). Diversity of plant and animal life is high in the fen and the flora includes many rarities. Plants of interest include Narrow-leaved Marsh-orchid (*Dactylorhiza traunsteineri*), Fen Bedstraw (*Galium uliginosum*), Cowbane (*Cicuta virosa*), Frogbit (*Hydrocharis morsus-ranae*) and Least Bur-reed (*Sparganium minimum*). These species tend to be restricted in their distribution in Ireland. Also notable is the abundance of aquatic stoneworts (*Chara spp.*) which are characteristic of calcareous wetlands.

## 5.2 Boyne Estuary SPA (004080)

This moderately-sized coastal site is situated west of Drogheda on the border of Counties Louth and Meath. The site comprises most of the estuary of the Boyne River, a substantial river which drains a large catchment. Apart from one section which is over 1 km wide, its width is mostly less than 500 m. The river channel, which is navigable and dredged, is defined by training walls, these being breached in places. Intertidal flats occur along the sides of the channelled river. The sediments vary from fine muds in the sheltered areas to sandy muds or sands towards the river mouth. The linear stretches of intertidal flats to the north and south of the river mouth are mainly composed of sand. One or more species of Eelgrass (*Zostera spp.*) occur in the estuary. Parts of the intertidal areas are fringed by salt marshes, most of which are of the Atlantic type, and dominated by Sea-purslane (*Halimione portulacoides*). Other species present include Common Saltmarsh-grass (*Puccinellia maritima*), Sea Plantain (*Plantago maritima*), Lax-flowered Sea-lavender (*Limonium humile*) and Glasswort (*Salicornia spp.*). Common Cord-grass (*Spartina anglica*) occurs frequently on the flats and salt marshes. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Shelduck, Oystercatcher, Golden Plover, Grey Plover, Lapwing, Knot, Sanderling, Black-tailed Godwit, Redshank, Turnstone and Little Tern. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

## 5.3 Boyne Coast & Estuary SAC (001957)

Boyne Coast and Estuary SAC is a coastal site which includes most of the tidal sections of the River Boyne, intertidal sand- and mudflats, saltmarshes, marginal grassland, and the stretch of coast from Bettystown to Termonfeekin that includes the Mornington and Baltray sand dune systems. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (\* = priority; numbers in brackets are Natura 2000 codes):

- [1130] Estuaries;
- [1140] Tidal Mudflats and Sandflats;
- [1210] Annual vegetation of drift lines;
- [1310] Salicornia Mud;
- [1330] Atlantic Salt Meadows;
- [2110] Embryonic Shifting Dunes;
- [2120] Marram Dunes (White Dunes); and
- [2130] Fixed Dunes (Grey Dunes).

## 5.4 River Boyne and River Blackwater SPA (004232)

The River Boyne and River Blackwater SPA is a long, linear site that comprises stretches of the River Boyne and several of its tributaries; most of the site is in Co. Meath, but it extends also into Cos Cavan, Louth and Westmeath. It includes the following river sections: the River Boyne from the M1 motorway bridge, west of Drogheda, to the junction with the Royal Canal, west of Longwood, Co Meath; the River Blackwater from its junction with the River Boyne in Navan to the junction with Lough Ramor in Co. Cavan; the Tremblestown River/Athboy River from the junction with the River Boyne at Kilnagross

Bridge west of Trim to the bridge in Athboy, Co. Meath; the Stoneyford River from its junction with the River Boyne to Stonestown Bridge in Co. Westmeath; the River Deel from its junction with the River Boyne to Cummer Bridge, Co. Westmeath. The site includes the river channel and marginal vegetation.

Most of the site is underlain by Carboniferous limestone but Silurian quartzite also occurs in the vicinity of Kells and Carboniferous shales and sandstones close to Trim. The site is a Special Protection Area (SPA) under the E.U. Birds Directive of special conservation interest for the Kingfisher.

#### **5.5 Northwest Irish Sea SPA (004236)**

The North-west Irish Sea SPA constitutes an important resource for marine birds. The estuaries and bays that open into it along with connecting coastal stretches of intertidal and shallow subtidal habitats, provide safe feeding and roosting habitats for waterbirds throughout the winter and migration periods. These areas, along with more pelagic marine waters further offshore, provide additional supporting habitats (for foraging and other maintenance behaviours) for those seabirds that breed at colonies on the north-west Irish Sea's islands and coastal headlands. These marine areas are also important for seabirds outside the breeding period.

This SPA extends offshore along the coasts of counties Louth, Meath and Dublin, and is approximately 2,333km<sup>2</sup> in area. This SPA is ecologically connected to several existing SPAs in this area. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Common Scoter, Red-throated Diver, Great Northern Diver, Fulmar, Manx Shearwater, Shag, Cormorant, Little Gull, Kittiwake, Black-headed Gull, Common Gull, Lesser Black backed Gull, Herring Gull, Great Black-backed Gull, Little Tern, Roseate Tern, Common Tern, Arctic Tern, Puffin, Razorbill and Guillemot.

#### **5.6 River Nanny Estuary and Shore SPA (004458)**

The site comprises the estuary of the River Nanny and sections of the shoreline to the north and south of the estuary (c. 3 km in length), in Co. Meath. The estuarine channel, which extends inland for almost 2 km, is narrow and well sheltered. Sediments are muddy in character and edged by saltmarsh and freshwater marsh/wet grassland. The saltmarsh is best developed in the eastern portion of the estuarine channel, with species such as Sea Plantain (*Plantago maritima*), Sea Aster (*Aster tripolium*), Red Fescue (*Festuca rubra*) and Sea Purslane (*Halimione portulacoides*) occurring. Further up the estuary, the marsh habitats support species such as Bulrush (*Typha latifolia*) and Yellow Flag (*Iris pseudacorus*). The shoreline, which is approximately 500 m in width to the low tide mark, comprises beach and intertidal habitats. It is a well-exposed shore, with coarse sand sediments. The well developed beaches, which are backed in places by clay cliffs, provide high tide roosts for the birds. The village of Laytown occurs in the northern side of the River Nanny estuary. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Oystercatcher, Ringed Plover, Golden Plover, Knot, Sanderling and Herring Gull. The E.U. Birds Directive pays particular attention to wetlands, and as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species:

- Oystercatcher *Haematopus ostralegus* wintering
- Ringed Plover *Charadrius hiaticula* wintering
- Golden Plover *Pluvialis apricaria* wintering
- Knot *Calidris canutus* wintering
- Sanderling *Calidris alba* wintering
- Herring Gull *Larus argentatus* wintering
- Wetlands

#### **5.7 Clogherhead SAC (001459)**

Clogherhead is a promontory of Silurian quartzite, located approximately 10 km north-east of Drogheda in Co. Louth. The rocks are covered with a thin layer of soil that, in places, supports a coastal heath community. Areas of sea cliff, bedrock shore and dry grassland also occur within the site. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (\* = priority; numbers in brackets are Natura 2000 codes):

- [1230] Vegetated sea cliffs of the Atlantic and Baltic coasts; and
- [4030] European dry heaths.

## **6 CONSERVATION OBJECTIVES, QUALIFYING INTERESTS, VULNERABILITY AND CONSERVATION STATUS OF NATURA 2000 SITES**

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

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

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

The favourable conservation status of a species is achieved when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Of the 7 sites located within 15km of the proposed site at the Glen, 4 No. potential *Source-Pathway-Receptor* links are present, the River Boyne and River Blackwater SAC, Boyne Estuary SPA, Boyne Coast and Estuary SAC, and the North-West Irish Sea SPA (see Figures 1 to 4 and Table 1). The Site Synopsis and the Qualifying Interests for these Natura 2000 sites are contained within Appendix 2.

## **7 IDENTIFICATION AND ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS ON NATURA 2000 SITES**

There are no Natura 2000 sites within or immediately adjacent to the site at the Glen. The site is approximately 765m to the north of the River Boyne and River Blackwater Special Area of Conservation (SAC) (No. 002299), 1.27km northwest of the Boyne Estuary Special Protected Area (SPA) (004080), 2.28km northwest of the Boyne Coast and Estuary SAC (001957), 4.25km northeast of the River Boyne and River Blackwater SPA (004232), and 6.44km to the west of the Northwest Irish Sea Candidate Protected Area (cSPA) (No. 004236) (see Figures 1 to 4, Table 1). As per the proposed playground development description outlined in Section 1.2, the potential direct and indirect impacts of each phase of the development and their likely effects on the conservation objectives of these Natura 2000 sites have been assessed below. The identification of significant effects on Natura 2000 sites will also consider all potential linkages from each phase of the proposed development. The potential impacts of the proposed playground development on Natura 2000 sites in combination with other significant permitted plans or projects from the past 5 years within 500 metres of the site location (as listed in Table 11) will also be assessed.

### **7.1 Impacts of the Proposed Playground Development on Natura 2000 sites**

#### **7.1.1 Site Clearance Phase**

The Site Clearance works will involve the removal and excavation of an area of improved grassland to facilitate the installation of a new safety surface consisting of engineered woodchip across the majority of the proposed footprint. No direct impacts on the conservation objectives of any Natura 2000 sites are predicted during the site clearance phase of the project. Given the nature of the proposed clearance works, there would be a short-term increase in disturbance and noise from plant, machinery, possible increased traffic, parking cars and contract workers compared with the baseline ecological conditions. The duration of the site clearance works will be short. The proximity of a busy regional road (i.e., Newfoundwell) to the south of the site, a busy access road to the west, the Glen public park, and the surrounding commercial and residential properties and nearby schools would indicate that the existing baseline noise levels are typical of a busy urban area and that any increase in noise and disturbance levels due to the site clearance works would be minor. The proposed playground site at the Glen is not within or adjacent to any Natura 2000 sites. The nearest Natura 2000 site, the River Boyne and River Blackwater SAC (002299), is approximately 765m south of the playground site. No dust emissions or contaminated stormwater will be generated during the site clearance works. As such, no direct or indirect impacts on the River Boyne and River Blackwater SAC, or on habitats or species for which the SAC is designated, are predicted during the Site Clearance Phase. No impacts are predicted for the ecology in the surrounding area, and appropriate steps will be taken to prevent the spread of invasive species as laid out in Section 3.8.4.

### **7.1.2 Construction Phase**

During the construction phase of the proposed playground development, it is expected that there will be a short-term increase in indirect impacts within the site (e.g., disturbance and noise from plant, vehicles, construction workers, etc) compared with the current baseline environmental conditions. It is expected that given the nature of the proposed construction works that there will be minimal dust and noise generated and the duration of the project will be of a short duration i.e., 2-3 weeks. If any construction waste is generated, it will be segregated on site and removed by a licensed waste contractor to a waste licensed recovery facility where it will be recycled.

These works are minor and will be carried out during dry weather to prevent run-off and as such, it will not represent a viable source of contamination. There will be no contaminated stormwater generated during the construction phase with any run-off from concrete expected to be very minor.

Following the completion of the construction phase, the material used for the ground covering will not generate leachate. As such, there will effectively be no ‘Source’ of contamination which can migrate off site. The development will require some limited use of concrete during the installation of the play equipment and fencing.

Based on GSI records, there is significant depth of overburden on site, and as such there is significant attenuation capacity within the overburden.

### **7.1.3 Operational Phase**

No sources of pollution are expected during the Operational Phase of the project. As stated in Section 1.2, the ground covering will facilitate the percolation of rainfall through the material into the underlying subsoil. As such, any stormwater generated on site will be free of contamination and will discharge to ground. There will be no contaminated stormwater generated during the post-construction phase of the development, and there are no proposals to generate a point discharge from the site.

The impacts from human presence following the completion of the playground development at The Glen will be very slightly increased and will be long-term. The proposed playground development will replace the existing low-value grassland on site.

The site is currently in close proximity to residential dwellings and a busy Regional Road (R166) to the south of the site which currently impacts the ecology on site. The site is located within a busy urban environment in North Drogheda town. During the lifetime of the playground (i.e., during its operation), the use of the playground will not generate any increased negative impacts more than are already present at the public site. The operational phase of the site will not negatively impact the conservation objectives for any protected species or habitats within the River Boyne and River Blackwater SAC (002299), or other nearby Natura 2000 sites.

**Table 11. Planning Permissions obtained with last 5 years and within 500m of the Proposed Development Site Boundary which could potentially result in 'In-combination Impacts' on Natura 2000 Sites**

Property Mapping ID No. (see Figure 14)	Planning Reference	Approx distance from development	Development Description	Potential In-Combination Impacts
1	19118	162m	<p><b>Site at Bredin Street, Drogheda, Co. Louth</b> - Permission for development to consist of amendments to part of the previously granted planning application reg. ref. 18280 consisting of the development of 3 no. 2 bed, 2 storey houses, alterations to the open space, landscaping and pedestrian and cycle access from Bredin Street, provision of 2 no. additional off-street car parking spaces at Bredin Street and all other ancillary site development works including lighting, boundary treatments and services. (includes protected structure DB 176 a viaduct and DB 400 a well) *Significant Further Information received on 20/08/2019, Unit 93 is now omitted from the proposal, 2 no. houses now proposed*</p>	<p>Works on the site commenced on 15/12/2020. The site of the proposed development was previously occupied by a dwelling house which had already been demolished in the past. Surface water drainage from the previous dwelling was discharged into a combined sewer network fronting the site. For the new development of 2 No. houses, is proposed to discharge surface water runoff into soakways and permeable paving using a Hydropave exfiltration system. This eliminates the requirement for drainage pipes, gullies, oil and silt traps, etc. It is proposed to discharge foulwater into the existing combined sewer system with separate 375mm pipes along Bredin street to the south of the proposed site. Therefore, there is no potential for In-combination Impacts with the proposed development at the Glen.</p>
2	21180	330m	<p><b>Flaxmill Lane, Yellowbatter, Drogheda, Co Louth</b> - Permission for the provision of 17 no. residential units for residents with general needs, comprising of a three storey apartment building with 7 no. one bedroom apartments, 7 no. two bedroom apartments and 3 no. three bedroom apartments. The development also includes the provision of a new access road and pedestrian access leading to public road, carparking spaces, covered bicycle spaces, playground and bin storage enclosure, site lighting and revised site boundary treatments, connection to council mains, sewage and storm sewers with associated site works. A Natura Impact Statement (NIS) will accompany the planning application</p>	<p>Works on the site commenced on 10/10/2022 and are currently ongoing. There is an existing 375mm foul network running adjacent to the site located along the public road at Flaxmill Lane, running towards Drogheda town. There is also an existing 150mm foul main that gravitates through the south-western side of the proposed site. It is proposed to discharge wastewater from the proposed development into the existing 375mm foul sewer located along Flaxmill Lane. A new surface water drainage system has been proposed to collect generated stormwater run-off and attenuate it before discharging to the existing surface water main located along Flaxmill Lane. The design includes impermeable surfaces running to permeable paving/infiltration systems and gullies. No surface water or rainwater will discharge into the foul sewer or the existing Glen stream watercourse. This system is in compliance with SUDs and as such, there is unlikely to be an adverse effect by the treated discharge on the SAC/SPA. The Environmental Baseline work carried out as part of the NIS does not indicate that the construction works carried out will have any impact on the Boyne SAC/SPA following the implementation of appropriate mitigation measures. Therefore, there is no potential for In-combination Impacts with the proposed development at the Glen.</p>
3	2360384	377m	<p><b>Crushrod Avenue, Drogheda, Co. Louth, A92 V20V</b> - Permission for minor modifications to existing permitted development (register reference 21950/An Bord Pleanala 312697-22) which included works to a protected structure (RPS ref: DB-042). The development consists of the modification and reduction in floor levels and overall roof height of the terraced block of houses (9 no units at 2 &amp; 3 Storey) to the north – eastern boundary of the site and the modification of the roof profile &amp; elevation of the units inclusive of associated site development works</p>	<p>Works commenced on 29/06/2021. No impacts were predicted on the Boyne SAC/SPA as a result of the development. Therefore, there is no potential for In-combination Impacts with the proposed development at the Glen.</p>

**Table 11. Planning Permissions obtained with last 5 years and within 500m of the Proposed Development Site Boundary which could potentially result in 'In-combination Impacts' on Natura 2000 Sites**

Property Mapping ID No. (see Figure 14)	Planning Reference	Approx distance from development	Development Description	Potential In-Combination Impacts
4	19164	445m	<b>No. 1 Forest Hill, Drogheda, Co Louth</b> - Permission for the provision of 2 no. residential dwellings as follows: 1 no. two storey 3 bedroom house and 1 no. two storey 4 bedroom house with vehicular access off Ballymakenny Road, new boundary treatments and associated site works. *Significant Further Information Received on 14/08/2019*	All runoff from the site will be managed 'at source' and there will be no discharge to the public sewer or surface water bodies. Runoff will be drained through ground via permeable membrane and filter drains. The roof of each property will drain into stone filled soakaways in each of the rear back gardens. Therefore, there is no potential for In-combination Impacts with the proposed development.
5	21950	447m	<b>Crushrod Avenue, Drogheda, Co Louth A92 V20V</b> - Permission for development that will consist of the construction of a mixed-use development (c. 5,712 sqm) on a site of c.0.91 ha. [A Protected Structure is located on the site, which is a Thatched House (RPS Ref. DB-042)] development will consist of: the demolition of a single storey store (c.34sq m) located on the western gable of the existing thatched house (RPS Ref. DB-042) and its replacement with a new single storey contemporary building extension (c.18sqm); demolition of a 2 no. existing single storey sheds (c. 108sqm in total), 2 no derelict hay sheds (c.300sqm), a barn (c.77sqm) and a lean-to (c.17sqm). The development will also comprise the refurbishment and modification of the thatched house to provide for a change of use to a café (c.91sqm), including; reinstatement of cob walls and patch work to the external render; repair and retention of the timber roof structure; conservation repairs to the historic thatched roof coverings; replacement of the existing front door (south elevation) with a timber sheeted replacement door; conservation repairs to the existing sash windows throughout the cottage, including the reinstatement of the currently blocked window on the north elevation. The development will also consist of modification to the part single storey part two storey farm building to provide for 2 no. retail units at ground floor level (c. 66sqm in total) and 1 no. one-bedroom apartment unit above (c. 73sqm), including repairs to existing external walls; construction of an additional floor level above the existing single storey (apartment unit); repair and replacement of timber roof elements; and the provision of new doors and windows. The proposed development will also consist of: construction of 55 no. dwelling units arranged in 5 no. building blocks, comprising; 8no one-bedroom and 18 no. two-bedroom apartment units (26 no. apartment units) in two 3 to 4 storey residential blocks ( Block A and Block B ); 10 no. ground floor two bedroom duplex apartments and 10 no. two bedroom duplex apartment units above ( 20 no apartments units in total) in two 3 storey residential blocks (Block C and Block D); 7 no. 2 storey two-bedroom houses and 2 no. 3 storey three-bedroom houses (9 no. terrace houses in total) in a terraced block (Block E) the development will also include: Demolition, relocation and reconstruction of the existing stone wall adjacent to Crushrod Avenue; PLEASE SEE NEWSPAPER NOTICE FOR FULL DISCRPTION	Works commenced on site on 08/08/2023. The construction of this project has been split into two phases - Phase 01 (Blocks A, C & D) which are due for completion end of November 2024, and Phase 02 (Blocks B & E), due for completion end of April 2025. Impacts may arise during the construction phase and the operational phase. In the Construction Phase impacts such as dust, run-off from the demolition process may occur. The works will require a road closure which may impact traffic levels and result in increased noise and fuel emission pollution in the area. Both foul wastewater and stormwater will be directed to existing public network located to the south-east of the subject site via the last foul sewer manhole. Foul and surface wastewater will then be transferred to the Drogheda Wastewater Treatment Plant (WwTP) for treatment. Given the distance to the nearest European site along this pathway and the fact that all the wastewater will undergo treatment at Drogheda WwTP, any pollutants or silt produced by the proposed development will be diluted within the public foul water network before being treated at Drogheda WwTP. Therefore, there is a very low potential for In-combination impacts with the development on the Boyne SAC/SPA. This project screened out for Appropriate Assessment.
6	21693	460m	<b>1 Forest Hill, Yellowbatter, Drogheda Co Louth</b> - Permission for development that will consist of the construction of a three storey detached house and detached single storey studio and associated site works	This development commenced on 04/07/2022. All runoff from the site will be managed 'at source' and there will be no discharge to the public sewer or surface water bodies. Runoff will be drained through ground via permeable membrane and filter drains. Stone filled soakaways will also be implemented. This design, and the small scale of the project, will result in no impact on the Boyne SAC/SPA, and no in-combination impacts with the proposed playground development.

## 7.2 Pathways for Off-site Migration to Natura 2000 Receptors

There are no surface water bodies within the site, however; the Glen Stream is located approximately 20m from the site boundary (see Figure 5). As such, there is a potential hydrological connection to the River Boyne and River Blackwater SAC (002299), and further downgradient, the Boyne Estuary SPA (004080), the Boyne Coast and Estuary SAC (001957), and the Northwest Irish Sea SPA (004236). However, due to the nature of the works and the localised scale of the project and the absence of a point discharge into the Glen Stream, the potential sources of risk are absent or separate and do not create a viable 'Pathway' for possible contamination to exit the site and move into the Boyne River catchment and ultimately enter the River Boyne and River Blackwater SAC (002299).

It is important to note that the existing stormwater gullies to the west of the site currently discharge into the Combined Municipal Sewer which receives both stormwater and foulwater from infrastructure and residences to the west of the Glen Park. It is proposed to upgrade this stormwater gullies. However, they will continue to discharge to the Combined Municipal Sewer which are in close proximity (see previous Plate 18). As such, given that any runoff from the western and northern end of the development is discharging to the Combined Municipal Sewer, there is no discharge to the Glen stream. Therefore, there are no viable *Source-Pathway-Receptor* linkages to the downgradient Natura 2000 sites.

## 7.3 Potential Natura 2000 Receptors

The nearest Natura 2000 site is the River Boyne and River Blackwater SAC (002299), which is 765m to the south of the site. However, there are no sources of contamination from the site nor are there viable pathways to the afore-mentioned SAC if a hypothetical source was to arise.

## 7.4 Other Sensitive Ecological Receptors

The proposed works will include a reduction of low value habitat on site, but no reduction of Natura 2000 habitat or Annex I habitat will occur. No plant species or habitats of conservation interest for River Boyne and River Blackwater SAC (002299) or the Boyne Coast and Estuary SAC (001957) were encountered during the habitat survey of the site. Similarly, no Annex I habitats were identified on site. No protected animal species listed as species of conservation interest within the River Boyne and River Blackwater SAC were recorded. No bird species listed as Qualifying Interests (QI's) for the Boyne Estuary SPA (004080) or for the Northwest Irish Sea SPA were recorded on site. The following bird species were recorded within the surrounding Glen, and are listed as Qualifying Interests (QI's) for the Northwest Irish Sea SPA (004236):

- Herring Gull (*Larus argentatus*); and
- Common Gull (*Larus canus*).

However, these birds were not observed within the site, or nesting within the Glen. Moreover, given the distance between the site and above SPA, and the nature of the surface water bodies on site, it can be concluded that the site is of little to no importance for the QIs listed above. The Glen stream is a highly modified watercourse that supports little to no plant or animal communities, and as such, is of little to no importance to such waders or waterbirds. Moreover, no natural wetland habitats were recorded on or

immediately adjacent to the site. No habitat loss or degradation in any SPA will occur as a result of the proposed development, and no impacts are predicted for designated bird species.

The operations of the playground site will not have any significant negative impact on flora and fauna within, or adjacent to the boundary of the site as there will not be any increase in indirect impacts (e.g., disturbance and noise from people, parking cars, etc) compared with the current baseline ecological conditions. The proximity of a busy regional road (i.e., the Rathmullan Road) to the site, local sports grounds and the adjacent secondary school would indicate that the existing baseline noise levels are typical of a busy suburban area and that any increase in noise levels due to the introduction of the playground would be negligible.

### **7.5 Potential In-Combination Effects with Other Plans or Projects Within 500m of the Site**

In-combination effects can result from individually insignificant but collectively significant actions taking place over a period of time or concentrated in a location (CIEEM, 2018). Different types of actions can cause cumulative impacts and effects. As such, these types of impacts may be characterised as:

- *Additive/incremental* – in which multiple activities/projects (each with potentially insignificant effects) add together to contribute to a significant effect due to their proximity in time and space (CIEEM, 2018); and
- *Associated/connected* – a Development activity ‘enables’ another Development activity e.g. phased Development as part of separate planning applications. Associated Developments may include different aspects of the project which may be authorised under different consent processes. It is important to assess impacts of the ‘project’ as a whole and not ignore impacts that fall under a separate consent process (CIEEM, 2018).

In-combination effects are required to be considered at Screening for Appropriate Assessment Stage, and within an Appropriate Assessment itself. The scope of plans or projects considered for ‘in-combination’ effects includes plans and projects that are completed, approved or proposed to take into account effects that occur over time (EC, 2002). According to the European Commission (2006):

*“[...] any element of a plan or project that has the potential to affect the conservation objectives of a Natura 2000 site, including its structure and function, should be considered significant”*

A review has been carried out of planning permissions granted by Louth County Council for the Drogheda area in the last 5 years that are located within 500m of the site’s boundary. Fifty-three planning permissions fit the afore-mentioned criteria (see Figure 14). Of these, 6 No. have been identified as of sufficient scale, and as such, have been listed in Table 11 (see Figure 14). Table 11 includes a description of each site plan, their location and distance from the proposed development at the Glen, and their potential in-combination impacts on the Natura 2000 sites in the area. As a result of this assessment, it was concluded that there was no potential for other projects to add to the impacts that the proposed playground development will have on the environment or relevant Natura 2000 sites in the area.

## 8 SCREENING CONCLUSION AND STATEMENT

A review of the likely significant effects of the Proposed Playground Development at the Glen, Drogheda indicates that individually, or in combination with other plans or projects, there will not be:

- Any impact on an Annex I habitat;
- Any reduction in the area of a Natura 2000 site;
- Direct or indirect damage to the physical quality of the environment in the Natura 2000 site;
- Serious or ongoing disturbance to species or habitats for which Natura 2000 is selected;
- Direct or indirect damage to the size, characteristics or reproductive ability of populations on the Natura 2000 site; and
- Interference with mitigation measures put in place for other plans/projects.

The findings and conclusions of the screening process are as follows:

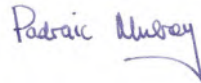
1. *No potential for significant effects/AA is not required.*

Screening established that there is **no potential for significant effects** and the project/plan can proceed as proposed. However, no changes may be made after this as this will invalidate the findings of the screening.

Yours sincerely,



Sam O'Donnell, BSc., MSc.  
Staff Ecologist,  
Mulroy Environmental Ltd.



Padraic Mulroy  
BSc., MSc., MIPSS, MIEI, C.Sci., BREEAM AP  
Managing Director  
Mulroy Environmental Ltd.

**MULROY ENVIRONMENTAL LTD.  
SERVICE CONSTRAINTS**

1. This report and the AA Screening Assessment carried out in connection with the report (together the "Services") were compiled and carried out for Louth County Council (the "client") in accordance with the terms of an emailed fee proposal agreement Fee Proposal PRP396.27.02.2026 between Mulroy Environmental Ltd. and the "client" dated the 27<sup>th</sup> February, 2026. Mulroy Environmental Ltd. received permission to proceed via a Letter of Authorisation by email on the 28<sup>th</sup> February, 2026. The Services were performed by Mulroy Environmental Ltd. with the skill and care ordinarily exercised by a reasonable Environmental consultant at the time the Services were performed. Further, and in particular, the Services were performed by Mulroy Environmental Ltd. taking into account the limits of the scope of works required by the client, the time scale involved and the resources, including financial and manpower resources, agreed between Mulroy Environmental Ltd. and the client.

2. Other than that expressly contained in paragraph 1 above, Mulroy Environmental Ltd. provides no other representation or warranty whether express or implied, in relation to the Services.

3. Unless otherwise agreed the Services were performed by Mulroy Environmental Ltd. exclusively for the purposes of the client. Mulroy Environmental Ltd. is not aware of any interest of or reliance by any party other than the client in or on the Services. Unless expressly provided in writing, Mulroy Environmental Ltd. does not authorise, consent or condone any party other than the client relying upon the Services. Should this report or any part of this report, or otherwise details of the Services or any part of the Services be made known to any such party, and such party relies thereon that party does so wholly at its own and sole risk and Mulroy Environmental Ltd. disclaims any liability to such parties. Any such party would be well advised to seek independent advice from a competent environmental consultant and/or lawyer.

4. It is Mulroy Environmental Ltd.'s understanding that this report is to be used for the purpose described in the introduction to the report. That purpose was a significant factor in determining the scope and level of the Services. Should the purpose for which the report is used, or the proposed use of the site change, this report may no longer be valid and any further use of or reliance upon the report in those circumstances by the client without Mulroy Environmental Ltd. be requested to review the report after the date hereof, Mulroy Environmental Ltd. shall be entitled to additional payment at the then existing rates or such other terms as agreed between Mulroy Environmental Ltd. and the client.

5. The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the report inaccurate or unreliable. The information and conclusions contained in this report should not be relied upon in the future without the written advice of Mulroy Environmental Ltd. In the absence of such written advice of Mulroy Environmental Ltd., reliance on the report in the future shall be at the client's own and sole risk. Should Mulroy Environmental Ltd. be requested to review the report in the future, Mulroy Environmental Ltd. shall be entitled to additional payment at the then existing rate or such other terms as may be agreed between Mulroy Environmental Ltd. and the client.

6. The observations and conclusions described in this report are based solely upon the Services which were provided pursuant to the agreement between the client and Mulroy Environmental Ltd. Mulroy Environmental Ltd. has not performed any observations, investigations, studies or testing not specifically set out or required by the contract between the client and Mulroy Environmental Ltd.. Mulroy

Environmental Ltd. is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the Services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this report, Mulroy Environmental Ltd. did not seek to evaluate the presence on or off the site of asbestos, electromagnetic fields, lead paint, heavy metals, radon gas or other radioactive or hazardous materials.

7. The Services are based upon Mulroy Environmental Ltd.'s observations of existing physical conditions at the Site gained from a walk-over survey of the site together with Mulroy Environmental Ltd.'s interpretation of information including documentation, obtained from third parties and from the client on the history and usage of the site. The Services are also based on information and/or analysis provided by independent testing and information services or laboratories upon which Mulroy Environmental Ltd. was reasonably entitled to rely. The Services clearly are limited by the accuracy of the information, including documentation, reviewed by Mulroy Environmental Ltd. and the observations possible at the time of the walk-over survey. Further Mulroy Environmental Ltd. was not authorised and did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the client or third parties, including laboratories and information services, during the performance of the Services. Mulroy Environmental Ltd. is not liable for any inaccurate information or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to Mulroy Environmental Ltd. and including the doing of any independent investigation of the information provided to Mulroy Environmental Ltd. save as otherwise provided in the terms of the contract between the client and Mulroy Environmental Ltd..

8. The environmental monitoring aspects of the Services is a limited sampling of the site at pre-determined borehole and soil vapour locations based on the operational configuration of the site. The conclusions given in this report are based on information gathered at the specific test locations and can only be extrapolated to an undefined limited area around those locations. The extent of the limited area depends on the soil and groundwater conditions, together with the position of any current structures and underground facilities and natural and other activities on site. In addition chemical analysis was carried out for a limited number of parameters [as stipulated in the contract between the client and Mulroy Environmental Ltd.] [based on an understanding of the available operational and historical information,] and it should not be inferred that other chemical species are not present.

9. Any site drawing(s) provided in this report is (are) not meant to be an accurate base plan, but is (are) used to present the general relative locations of features

