

Proposed Residential Development  
(Strategic Housing Development):  
Magee Barracks, Kildare  
Information for Screening for Appropriate  
Assessment

**BSM**

Est.  
1968

**Brady Shipman  
Martin**

**Built.  
Environment.**

Survey  
Assessment  
**Built  
Environment**

Client:

Ballymount Properties Ltd

Date:

20 March 2018

**DOCUMENT CONTROL SHEET**

**6362\_RP03\_Information for Screening for Appropriate Assessment**

**Project No.** 6362  
**Client:** Ballymount Properties Ltd  
**Project Name:** Proposed Residential Development (Strategic Housing Development): Magee Barracks, Kildare  
**Report Name:** Information for Screening for Appropriate Assessment  
**Document No.** RP03  
**Issue No.** 00  
**Date:** 20/03/2018

This document has been issued and amended as follows:

| <b>Issue</b> | <b>Status</b>      | <b>Date</b> | <b>Prepared</b> | <b>Checked</b> |
|--------------|--------------------|-------------|-----------------|----------------|
| 00           | Issue for planning | 20 Mar 2018 | MH              | TB             |
|              |                    |             |                 |                |
|              |                    |             |                 |                |
|              |                    |             |                 |                |
|              |                    |             |                 |                |
|              |                    |             |                 |                |
|              |                    |             |                 |                |
|              |                    |             |                 |                |



## Contents

|       |                                                                       |    |
|-------|-----------------------------------------------------------------------|----|
| 1     | Introduction and background .....                                     | 1  |
| 2     | Methodology.....                                                      | 1  |
| 2.1   | Baseline data collection and field visit.....                         | 1  |
| 3     | Screening for Appropriate Assessment.....                             | 3  |
| 3.1   | Background.....                                                       | 3  |
| 3.2   | Potential zone of influence.....                                      | 3  |
| 3.3   | Study area and surrounding environment.....                           | 4  |
| 3.3.1 | Site location and European sites.....                                 | 4  |
| 3.4   | Description of the proposed development.....                          | 5  |
| 3.5   | Links to European sites, including cumulative effects .....           | 6  |
| 3.5.1 | European sites and habitats with links to European sites .....        | 6  |
| 3.5.2 | Other designated conservation areas (other than European sites) ..... | 10 |
| 3.6   | Potential impacts during construction.....                            | 10 |
| 3.7   | Potential impacts during operation .....                              | 12 |
| 4     | Other issues .....                                                    | 13 |
| 5     | Mitigation specific to European sites.....                            | 13 |
| 6     | In-combination effects.....                                           | 13 |
| 7     | Screening conclusion .....                                            | 14 |
|       | Appendix I: Background .....                                          | 15 |
|       | Stages in the assessment.....                                         | 16 |
|       | Conservation Objectives of European sites .....                       | 16 |



## 1 Introduction and background

This document constitutes an Appropriate Assessment Screening Report. The purpose of the report is to provide the information required to assist An Bord Pleanála, the competent authority, to undertake a screening exercise for Appropriate Assessment (AA). This will determine the effects, if any, on European sites, also known as Natura 2000 Sites (Special Areas of Conservation (SAC) and Special Protection Areas (SPA), designated for nature conservation), of proposed residential development (Strategic Housing Development) at the former Magee Barracks, fronting onto Hospital Street, Kildare. The application is for Phase 1 of the overall development, which has been considered in the wider context of the overall Magee Barracks site and its surroundings.

Brady Shipman Martin was commissioned to undertake the study, which was carried out by Consultant Ecologist Matthew Hague CEnv MCIEEM. Additional survey work and research was undertaken by hydrogeologist and chartered engineer Niall Mitchell (BlueRock Environmental Ltd) and incorporated into Chapter 9 (Hydrogeology & Hydrology) of the accompanying Environmental Impact Assessment Report.

A desk study review and site visits were undertaken and the potential impacts on European sites, both as a result of the proposed works and in-combination with other plans and projects, are appraised in this report.

The requirements for an Appropriate Assessment are set out under Article 6 of the *EU Habitats Directive* (92/34/EEC), transposed into Irish law through the *European Communities (Birds and Natural Habitats) Regulations 2011* (SI No. 477 of 2011) and the *Planning and Development Act, 2000* (as amended).

## 2 Methodology

### 2.1 Baseline data collection and field visit

A desk-based assessment was undertaken of the site at Magee Barracks and the wider area. This focused on habitats and species that are listed as Qualifying Interests (QI) (in the case of SACs) and Special Conservation Interests (SCI) (in the case of SPAs) in the designations for the European sites. A survey to inform this Appropriate Assessment document was undertaken on 24<sup>th</sup> November 2016. Follow up visits were undertaken by staff of Brady Shipman Martin, most recently on 24<sup>th</sup> January 2018.

This report takes the following guidance documents into account:

- *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities* (Department of Environment, Heritage and Local Government, 2010 revision);
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities*. Circular NPWS 1/10 & PSSP 2/10;
- *Assessment of Plans and Projects Significantly Affecting European sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the*

## Proposed Residential Development (Strategic Housing Development): Magee Barracks, Kildare

### Information for Screening for Appropriate Assessment

*Habitats Directive 92/43/EEC* (European Commission Environment Directorate-General, 2001);

- *Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC*. Draft Guidance issued by the European Commission (April 2015).

Information was collated from the organisations and websites listed below:

- Data on European sites and rare and protected plant and animal species contained in the following databases:
  - The National Parks and Wildlife Service (NPWS) of the Department of Culture, Heritage and the Gaeltacht ([www.NPWS.ie](http://www.NPWS.ie));
  - The National Biodiversity Data Centre (NDBC) ([www.biodiversityireland.ie](http://www.biodiversityireland.ie));
  - BirdWatch Ireland ([www.birdwatchireland.ie](http://www.birdwatchireland.ie));
  - Bat Conservation Ireland ([www.batconservationireland.org](http://www.batconservationireland.org)).
- Information on land-use zoning from the online mapping of the Department of the Environment, Community and Local Government (<http://www.myplan.ie/en/index.html>);
- Recent and historical OSI mapping and aerial photography, including [www.geohive.ie](http://www.geohive.ie);
- Photographs taken at the site;
- Information on local watercourses from [www.catchments.ie](http://www.catchments.ie);
- Information on water quality in the area ([www.epa.ie](http://www.epa.ie));
- Information on soils, geology and hydrogeology in the area ([www.gsi.ie](http://www.gsi.ie));
- Information on the status of EU protected habitats in Ireland (NPWS, 2013);
- Third National Biodiversity Plan 2017 – 2021 (Department of Culture, Heritage and the Gaeltacht, 2017);
- Kildare County Development Plan 2017 – 2023, including the associated Natura Impact Report;
- Kildare Local Area Plan 2012 – 2018.

The report has regard to the following legislative instruments:

- Planning and Development, Act 2000, as amended;
- European Commission (EC) Habitats Directive 92/43/EEC;
- European Commission (EC) Birds Directive 2009/147/EC;
- European Communities (Birds and Natural Habitats) Regulations 2011 (SI no 477 of 2011).

The report takes full account of the design of the proposed development and a detailed examination of all relevant elements of the proposal was undertaken.

Given the amount of information available, including from the developer, NPWS and other sources, it has been possible to gather adequate information on the site and the adjacent area (in particular, the European sites), in order to make an informed, sound judgement as to the potential impacts of the proposed development on the qualifying interests of the European sites.

### 3 Screening for Appropriate Assessment

#### 3.1 Background

The first part of the Appropriate Assessment process is the Screening phase. Screening identifies the likely effects of the proposed development on European sites that could arise, either alone or in combination with other plans or projects, and considers whether these impacts are likely to have a significant effect on the European site in view of the site's conservation objectives.

Following Screening, if there is a possibility of there being a significant effect on a European site, this will generate the need for an appropriate assessment for the purposes of Article 6(3) of the Habitats Directive. This means that if the conclusions at the end of the screening exercise are that significant effects on any European sites, as a result of the proposed development, either alone or in combination with other plans and projects, are likely, uncertain or unknown, then an Appropriate Assessment must be carried out. This is in accordance with established precedent and case law.

#### 3.2 Potential zone of influence

For the risk of an adverse effect to occur there must be a 'source', such as a construction site; a 'receptor', such as a designated site for nature conservation; and a pathway between the source and the receptor, such as a watercourse that links the construction site to the designated site. Although there may be a risk of an impact it may not necessarily occur, and if it does occur, it may not be significant.

Identification of a risk means that there is a possibility of ecological or environmental damage occurring, with the level and significance of the impact depending upon the nature and exposure to the risk and the characteristics of the receptor.

There are no set recommended distances for projects to consider European sites as being relevant for assessment. Rather, NPWS (2010) recommends that *'the distance should be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects'*. As a general rule of thumb, it is often considered appropriate to include all European sites within 15km.

However, in some instances where there are hydrological connections a whole river catchment or a groundwater aquifer may need to be included. Similarly where bird flight paths are involved the impact may be on an SPA more than 15 km away. Taking this into account, as a starting point a search was carried out for all European sites within 15km of the site at Magee Barracks. This search was then extended in order to ensure that all European sites with any potential links to the proposed development were accounted for in the study.

### 3.3 Study area and surrounding environment

#### 3.3.1 Site location and European sites

Magee Barracks comprises a large area of land, totalling 20.78ha in area, to the east of Kildare Town centre. It is located between Hospital Street and Melitta Road and is surrounded by residential development. The existing residential estates of Ruanbeg and Rowanville lie to the east, Melitta Park and Melitta Road are to the north and Campion Crescent is to the west. Two recently completed schools also adjoin the western boundary. To the south and set back from Hospital street are commercial premises.

The overall Magee Barracks site is open in character and is divided into two separate areas. It gently slopes to the north and east while the southern portion is quite flat.

The southern half of the site, 11.24ha in area, which forms Phase 1 of the proposed development and which is the subject of the current application, is dominated by hard surfaces and abandoned military buildings. Areas of abandoned and unmanaged planting and lawns as well as groups of trees and hedges are also present in this area. In addition, the north eastern boundary of the Phase 1 site contains an area of Japanese knotweed (*Fallopia japonica*) and giant hogweed (*Heracleum mantegazzianum*). These are alien invasive species listed on the Third Schedule of the *European Communities (Birds and Natural Habitats) Regulations 2011* (S.I. 477/2011).

The northern half of the site, which will be the subject of a future planning application (Phase 2), is quite different in character, comprising a number of agricultural fields, grazed by sheep at the time of the survey, and divided by relatively unmanaged hedgerows.

There are a number of European sites located within a 15km radius of the proposed development (see Figure 1). These are:

- Pollardstown Fen SAC (Site code 000396);
- Mouds Bog SAC (002331);
- River Barrow and River Nore SAC (002162);

The following SACs fall just outside the 15km distance from the site and are included in the appraisal.

- Ballynafagh Lake SAC (001387);
- Ballynafagh Bog SAC (000391).

The nearest European designated sites are Pollardstown Fen SAC (4.3km to the north east) and Moud's Bog SAC (7.2km to the north east), with the River Barrow and River Nore SAC located 7.4km to the south at its closest point. Ballynafagh Lake SAC and Ballynafagh Bog SAC are approximately 15km and 16km to the north east respectively. The nearest SPA is Poulaphouca Bog SPA (004063), 22km to the east.

## Proposed Residential Development (Strategic Housing Development): Magee Barracks, Kildare

### Information for Screening for Appropriate Assessment

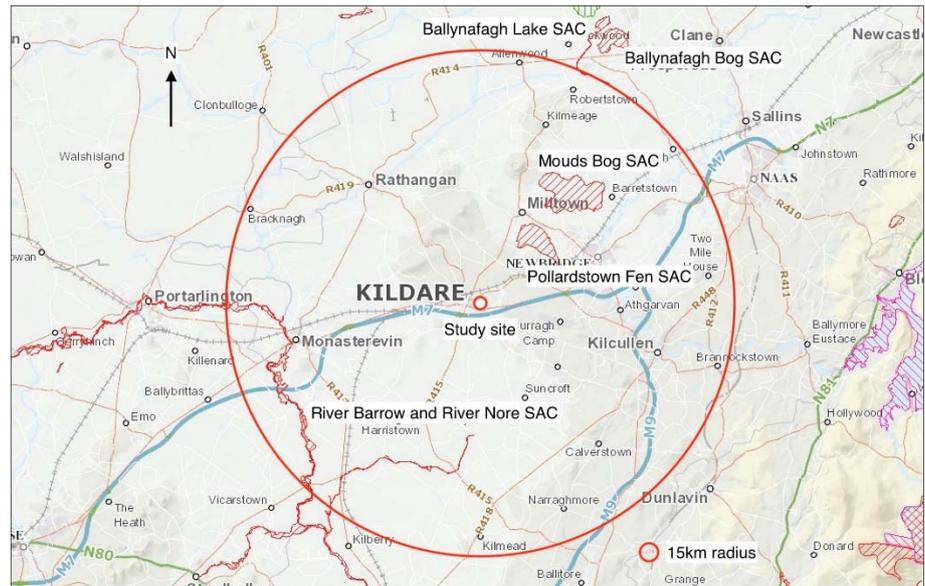


Figure 1: Study site at Magee Barracks showing European sites

### 3.4 Description of the proposed development

The proposed development will consist of the demolition of 16 no. existing buildings (including the Officer's Mess and Water Tower) with a GFA of 16,115 sq.m, and the construction of a development comprising of 264 no. residential units, a neighbourhood centre comprising of 3 no. retail units with a GFA of 115 sqm, 105 sqm and 100 sq.m, a café including gallery /exhibition area with a GFA of 300 sq.m, a childcare facility with a GFA of 680 sq.m and associated play area, all internal roads, car parking, pedestrian and cycle paths, public open space, and all associated site and infrastructural works on an application site of c. 11.24 ha.

The 264 no. residential units proposed consists of the following:

- 150 no. 3 bed semi-detached houses with a GFA of 117 sq.m (Type A)
- 16 no. 4 bed semi-detached houses with a GFA of 143 sq.m (Type B)
- 10 no. 4 bed detached houses with a GFA of 143 sq.m (Type C)
- 14 no. 3 bed terrace houses (semi-detached) with a GFA of 117 sq.m (Type E1)
- 8 no. 3 bed terrace houses with a GFA of 117 sq.m (Type E2)
- 2 no. 4 bed terrace houses (corner units) with a GFA of 143 sq.m (Type F)
- 26 no. 2 bed apartments (duplex blocks) with a GFA of 77 sq.m (Type G)
- 26 no. 3 bed duplex apartments (duplex blocks) with a GFA of 123 sq.m (Type G)
- 12 no. 1 bed apartments with a GFA of 54 sq.m (Type H)

The housing units are 2 to 3 storeys in height and the duplex/apartment units are 3 storeys in height. 1 no. electricity substation with a GFA of 13 sq.m and a bin store with a GFA of 13 sq.m are located at the proposed neighbourhood centre. The associated site and infrastructural works include foul and surface water drainage,

## Proposed Residential Development (Strategic Housing Development): Magee Barracks, Kildare

### Information for Screening for Appropriate Assessment

attenuation tanks, 540 no. car parking spaces comprising 482 no. residential spaces, 26 no. guest spaces and 32 no. spaces to serve the proposed retail, café and childcare units, and public open space measuring 2.6 hectares, bin and bike stores, landscaping, boundary walls and fences..

The proposed development comprises the first phase of the overall development of the applicant's c. 20.78 ha landholding at this location. This application is accompanied by an overall site masterplan drawing indicating future phases on the remainder of the lands, which include a supermarket, a cancer treatment clinic (proton therapy), and a Phase 2 residential development of c. 179 units, which will be subject to separate applications.

### 3.5 Links to European sites, including cumulative effects

#### 3.5.1 European sites and habitats with links to European sites

The proposed development site is not under any wildlife or conservation designation. Furthermore, no rare, threatened or legally protected plant species, as listed in the *Irish Red Data Book 1 – Vascular Plants (Curtis & McGough, 1988)*, the *Flora Protection Order, 2015* or the *EU Habitats Directive*, are known to occur within the site. None were recorded during the site surveys.

No features of ecological significance are present on or in the vicinity of the proposed development site (Magee Barracks Phase 1). None of the trees or buildings that are present within the site boundary, that are to be removed, contain any confirmed features with the potential to be used by roosting bats. The structures to be demolished are likewise of no significance for roosting bats. The site is of no more than Local Importance (Lower Value), in accordance with the ecological resource valuations presented in the National Roads Authority Guidelines for Assessment of Ecological Impacts of National Road Schemes (NRA, 2009 (Rev. 2)).

No evidence of any habitats or species with links to European sites was recorded during either the field surveys or desk study undertaken and no 'reservoir' type habitats are present. There will be no loss of any habitat or species listed as a Qualifying Interest or Special Conservation Interest of any designated site as a consequence of the works. There is, therefore, no potential for the cumulative effects of habitat loss or fragmentation to occur. There will be no significant effects on the European sites as a result of:

- Impacts to habitat structure;
- Mortality to species (such as roadkill);
- Noise pollution;
- Air pollution.

There is no surface water connection to any European site, including Pollardstown Fen SAC, Mouds Bog SAC or the River Barrow and River Nore SAC. The nearest watercourse, the Tully stream, is located 2.5 km to the south of the site. It flows in a southwesterly direction and ultimately into the River Barrow.

A flood risk assessment was recently undertaken for the site by Garland Engineers. The assessment concluded that based on all information reviewed relating to flood

## Proposed Residential Development (Strategic Housing Development): Magee Barracks, Kildare

### Information for Screening for Appropriate Assessment

risk, the site is located within a Flood Zone C (low risk) for all sources of flood risk (i.e. fluvial flood risk, pluvial/storm water flood risk and groundwater flood risk).

Pollardstown Fen SAC, as a significant, groundwater-dependant feature, is potentially sensitive to any changes in groundwater levels and water quality, including those caused by development at a distance. About 40 springs provide a continuous supply of water to the Fen, rising chiefly at its margins, along distinct seepage areas of mineral ground above the Fen level. The continual inflow of calcium-rich water from the south of the Fen, primarily from the Curragh, and from the limestone ground to the north, creates waterlogged conditions which lead to peat formation. There are layers of calcareous marl in this peat, reflecting inundation by calcium-rich water.

A potential impact 'pathway' is therefore via ground water and in order to address this potential issue BlueRock Environmental Ltd (BREL) was requested to undertake a hydrogeological study of the proposed development. This study has been incorporated into Chapter 9 of the accompanying EIAR.

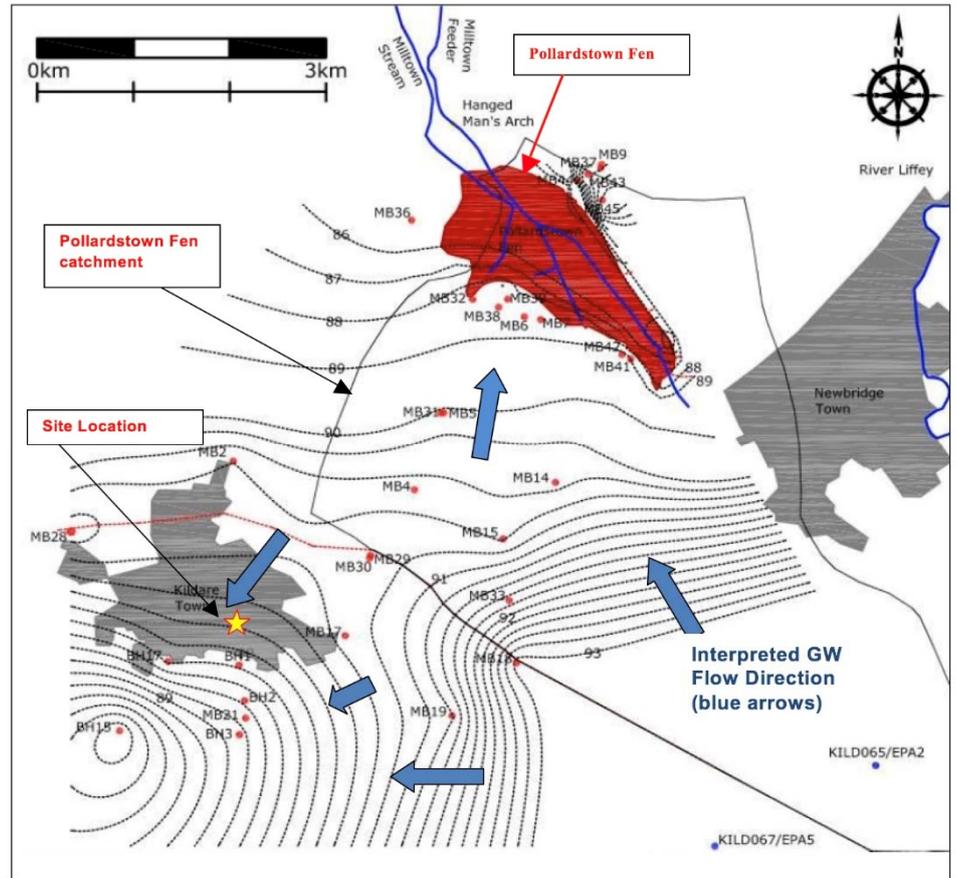
The hydrogeological assessment considered the potential impact of the proposed development on the hydrogeological environment, taking into consideration the hydrogeological regime across the entire Masterplan area as well as the general environs with particular emphasis on Pollardstown Fen.

A detailed desk study review of the site, its environs and previous hydrogeological assessment of the Kildare and Curragh region was undertaken. Significant hydrogeological investigations and monitoring have been undertaken as part of the current application and in the past in this area (for example prior to and post completion of the Kildare Bypass Motorway).

The hydrogeological assessment confirms the regional groundwater flow direction immediately south of Pollardstown Fen to be generally in a northeasterly direction towards the Fen. However a groundwater divide was confirmed and mapped to the northeast of Kildare town. South of this divide, groundwater is interpreted to flow in a southwesterly direction across Kildare town. The proposed development at Magee Barracks is located southwest of this divide and therefore groundwater is interpreted to flow locally in a southwesterly direction across the site and not towards Pollardstown Fen. This is consistent with the interpreted flows by Misstear et al., 2008 (as detailed in Section 9.3.5 of the EIAR).

Proposed Residential Development (Strategic Housing Development):  
Magee Barracks, Kildare

Information for Screening for Appropriate Assessment



**Figure 1:** Interpreted groundwater contours (Curragh Aquifer) and Pollardstown Fen catchment

The detailed assessment and evaluation of the hydrogeological regime at the site and its regional environs was based on the identification of potential sources, pathways and receptors across the site. If all three elements (source, pathway and receptor) are present, there is a linkage and there is a potential impact to the receptor(s).

In terms of groundwater, hydrology and ecology, there are no SACs or groundwater dependent terrestrial ecosystems (GWDTE) receptors, including Pollardstown Fen, downgradient or in close proximity to the site. Therefore without an environmental receptor being present, the risk is considered to be low. As detailed previously, the site is not located within the groundwater catchment of Pollardstown fen and therefore does not pose a risk to this highly sensitive groundwater dependent terrestrial ecosystem.

Regardless of distance, it is considered that no other sites have any connection (pathway) with the proposed development at Magee Barracks, due to their locations, topography and the features (qualifying interests) for which they are designated, as well as the scale of the development proposed.

Proposed Residential Development (Strategic Housing Development): Magee Barracks, Kildare  
Information for Screening for Appropriate Assessment

**Table 1** lists relevant European sites, outlines their reasons for designation and discusses potential source-pathway-receptor links and impacts or risks to these sites from the proposed development.

| European Site                                                   | Reasons for designation (information correct as of 11th September 2017) (*denotes a priority habitat)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Source – Pathway – Receptor link                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Pollardstown Fen (000396)</p> <p>4.3km to the north east</p> | <p>7210 Calcareous fens with <i>Cladium mariscus</i> and species of the Caricion davallianae*</p> <p>7220 Petrifying springs with tufa formation (Cratoneurion)*</p> <p>7230 Alkaline fens</p> <p>1013 Geyer's Whorl Snail <i>Vertigo geyeri</i></p> <p>1014 Narrow-mouthed Whorl Snail <i>Vertigo angustior</i></p> <p>1016 Desmoulin's Whorl Snail <i>Vertigo moulinsiana</i></p> <p>According this SAC's site Generic Conservation Objectives document (dated 15 August 2016), for each of the listed QIs, the Conservation Objective is to maintain or restore the favourable condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.</p> <p>The SAC comprises a large spring-fed fen situated in a shallow basin composed of up to 6m of marl/peat overlying clay. The fen contains the feeder channel of the Grand Canal and has survived several attempts at drainage and reclamation. Supports extensive areas of <i>Cladium</i> fen, <i>Schoenus</i> fen, reed and sedge swamp, <i>Molinia</i> grassland and species-rich seepage areas. Restoration of the central fen area, following partial reclamation in 1979, has caused re-flooding and allowed the re-establishment and expansion of aquatic and reedswamp vegetation and their associated fauna.</p> <p>Pollardstown Fen is the largest spring-fed fen in Ireland, largely intact and responding well to restoration measures. It supports one of the largest stands of <i>Cladium</i> fen and is one of the most studied examples of its kind in Ireland. It contains a significant number of rare and threatened species. A number of internationally important invertebrates have been recorded and rare sub-aquatic invertebrates are particularly well represented. Pollardstown is the only known site in Ireland (or Europe) to support all three Annex II <i>Vertigo</i> species (<i>V. geyeri</i>, <i>V. angustior</i>, <i>V. moulinsiana</i>) and thus provides unique opportunity to study their different habitat and hydrological requirements. Re-flooding of reclaimed areas has increased the ornithological value of the site.</p> | <p>No</p> <p>The detailed assessment of the hydrogeological regime at the site and its regional environs concluded the site is not located within the groundwater catchment of Pollardstown fen and the interpreted groundwater flow in the area is in the opposite direction. The proposed development therefore does not pose a risk to this highly sensitive groundwater dependent terrestrial ecosystem.</p> <p>Further, there are no surface water pathways between the SAC and the proposed development site.</p> <p>There are therefore no potential links between the proposed development site and Pollardstown Fen SAC. No impacts are predicted, either on surface water quality or via any other pathway (such as air quality, habitat loss and/or fragmentation, impacts to habitat structure, disturbance to species of conservation concern, mortality to species or noise pollution).</p> <p>The SAC is at a sufficient distance from the proposed development site to ensure that, given the scale of the development and the construction methodology proposed, which will not impact in any way upon the sub-surface geology, there will be no impacts on any of its Qualifying Interests as a result of any potential changes to the local hydrogeological regime.</p> |



### 3.5.2 Other designated conservation areas (other than European sites)

The nearest site designated for nature conservation is the Curragh (Kildare) (000392) a proposed Natural Heritage Areas (pNHA), approximately 1.3km to the east at its closest point. This site is selected for designation for its extensive open plain area of lowland acid grassland, with dry and wet heath in places. No impacts are expected to arise at this or any other non-European designated site. Pollardstown Fen pNHA, the only other non-European designated site within 5km, is approximately contiguous with Pollardstown Fen SAC and, as such, is not considered further in this report.

### 3.6 Potential impacts during construction

All **construction/demolition activities** pose a potential risk to watercourses as surface water arising at a site may contain contaminants. The main contaminants arising from construction and demolition activities may include suspended solids, hydrocarbons and concrete/cement products. If not properly managed, such pollutants could pose a temporary risk to surface water quality in local watercourses during the demolition and construction phases.

Given the nature, scale and duration of the construction phase for the proposed Phase 1 development, even in the event of a pollution incident significant enough to impact upon surface water quality locally, it is reasonable to assume that this would not be perceptible in any European sites. This is due to the separation between the proposed development site and the European sites (the nearest being Pollardstown Fen, 4.3km distant), with no surface or groundwater water pathway between the Magee Barracks site and this SAC.

The nearest stream, the Tully Stream, approximately 2.5km south of the site, is not considered at direct risk from the proposed development. However in the event that contaminated water should enter any drainage ditch, watercourse or sewer during the construction (or operation) of the proposed development, there is the theoretical potential for negative effects on the integrity of designated sites. It is considered that this possibility is remote, provided that – as recommended – standard best-practice water protection measures are adhered to during the construction phase of the project.

Detailed mitigation measures are set out Section 9.9 of the EIAR and are summarised as follows:

- Waste fuels and materials shall be stored in designated areas that are isolated from surface water drains or open waters (e.g. excavations). Skips will be closed or covered to prevent materials being blown or washed away and to reduce the likelihood of contaminated water leakage. Hazardous wastes such as waste oil, chemicals and preservatives, will be stored in sealed containers and kept separate from other waste materials while awaiting collection by a registered waste carrier. Fuelling, lubrication and storage areas and site offices will not be located within 25m of drainage ditches, surface waters or open excavations. Fuel interceptor tanks will be installed on the site to treat any runoff.

## Proposed Residential Development (Strategic Housing Development): Magee Barracks, Kildare

### Information for Screening for Appropriate Assessment

- Back-up plans to deal with the possibility of contamination or fuel spills, e.g. pumping of wells or sumps to collect contaminated groundwater for treatment shall be undertaken and included in an overall Construction & Demolition Waste Management Plan (C&DWMP) and Emergency Operation Plan (EOP).
- Special environmental and human health contingency plans and procedures, following best-practice guidance, shall be developed for the unexpected discovery of contaminated or illegally deposited waste materials. These may include a detailed environmental site investigation, contamination delineation, risk assessment and appropriate remediation under the design and supervision of an experienced contaminated land engineer/hydrogeologist.
- A number of potential sources of buried waste/contamination were identified that warrants further consideration as part of any redevelopment works for the site. These include a former gravel pit, a former well, and earthen embankments with C&D waste material evident. These areas will be investigated prior to the commencement of the redevelopment activities and suitable mitigation measures implemented under the direction of a contaminated land consultant/hydrogeologist.
- Monitoring prior to, during and post construction works of surface water and groundwater quality shall be undertaken to ensure minimum disturbance of water quality in the general vicinity of the site. During the construction phase, the monitoring programme will include daily checks, weekly inspections and monthly audits to ensure compliance with the Construction Environmental Management Plan. This will be undertaken in consultation with the wishes of Kildare County Council.
- All waste containers (including all ancillary equipment such as vent pipes and refuelling hoses) shall be stored within a secondary containment system (e.g. a bund for static tanks or a drip tray for mobile stores and drums). The bunds shall be capable of storing 110% of the tank capacity. Where more than one tank is stored, the bund shall be capable of holding 110% of the largest tank of 25% of the aggregate capacity (whichever is greater). Drip trays used for drum storage shall be capable of holding at least 25% of the drum capacity. Where more than one drum is stored the drip tray shall be capable of holding 25% of the aggregate capacity of the drums stored.
- Soil removal during the construction phase of the project will be an unavoidable consequence of the development and would apply for virtually any form of site redevelopment. Where possible the soils shall be reused on site.
- Chemical analysis will be carried out to assess whether the made ground or fill material presents a risk to human and/or environmental receptors and to determine a suitable on-site or off-site disposal routes.
- All waste material (both soils and other) generated will be temporarily stored in secure bunded areas thereby preventing the migration of

## Proposed Residential Development (Strategic Housing Development): Magee Barracks, Kildare

### Information for Screening for Appropriate Assessment

leachate or contaminating substances from impacting on the surrounding environment.

- All imported fill material will be sourced from approved and licenced/permitted facilities. All fill material will be confirmed to be inert prior to importation to the site including confirmation of the chemical testing and a visual assessment.
- Adequate security measures shall be installed on the construction site. Early assessment of the sensitivity of the project and identifying potential locations at risk will assist in the design of the site layout and security measures required. Security measures will include secure fencing, secure site access, securing site plant and equipment, secure storage of materials, sufficient warning signage, and security lighting.

### 3.7 Potential impacts during operation

The proposed site is not located within the groundwater catchment of Pollardstown Fen, with regional groundwater determined to be flowing on a southwesterly direction. Therefore the risk posed to this very sensitive habitat, for example from contamination or from reduced infiltration is considered to be imperceptible.

Full details of the surface water and foul drainage proposals are contained in the project Water Services Design Report and Chapter 9 of the EIAR that accompany the planning application. These were prepared by Garland Consulting and BlueRock Environmental Ltd.

The surface water collection and infiltration system for the entire site has been designed in accordance with the Greater Dublin Strategic Drainage Study (GDSDS), the CIRIA SUDS Manual 2015 and Recommendations for Site Development Works for Housing Areas published by the Department of the Environment and Local Government.

Garland Engineers have proposed the following drainage system for the Phase 1 development which comprises a combination of storm water discharge to mains network and infiltration to ground system:

- In the central area of the site (Storm Network Zone S1) where the infiltration rate is deemed to be suitable by the project engineers (based on interpolation of 3 no. tests in the location, to be validated on site during a Stage 2 site Investigation in accordance with Eurocode 7), the road drainage and overflows from the permeable paving system will discharge directly to ground via an infiltration tank/basin, sized to cater for the 100 year design storm event. An overflow of 2litres/second is provided to the surface water network from the tank/basin.
- Storm water from all roofs and parking areas (for Storm Networks S2 to S8) will discharge directly into permeable paving systems with stone below to provide quality control and some limited local storage. An impermeable membrane is proposed to “tank” the system as the infiltration rates of the sub-soil are insufficient to allow sufficient infiltration to ground. Outflows from permeable paving areas will be via “fin drains” and 110mm outfall pipes to the adjacent storm network at Ruanbeg Estate. Attenuation up to

## Proposed Residential Development (Strategic Housing Development): Magee Barracks, Kildare

### Information for Screening for Appropriate Assessment

the 100 year Return Period (RP) design storm event will be provided via an attenuation tank on the downstream mains pipe network.

- Storm water from the commercial areas will be collected using a traditional gully, catch pit and pipe network including an oil-water interceptor tanks before discharging to an underground geocellular attenuation tank with a controlled overflow at a rate of 2.75litres/second to a collector outfall on Hospital Street at a very low flow rate of 2.75l/s due to the topography of the site.

In relation to the overall area of the site i.e. approximately 11 hectares, the total area of hardstanding of the proposed development is approximately 4.2 hectares representing 38% of the total area of the Phase 1 site. The site in its current condition has at least 5.0 hectares of hardstanding where runoff predominantly discharges to an existing drainage system on site and the remainder of the site naturally infiltrating to ground. Therefore based on the above proposed drainage system for the development, it is not anticipated that there will be a net reduction of effective recharge to the underlying aquifer.

There are a number of existing sewers traversing the site which will be diverted into the **proposed foul drainage system** for the Phase 1 site. It is proposed to provide two new gravity sewer systems – a northern and a southern system – on the Phase 1 site. The southern system will discharge to the existing foul sewer on Hospital Street and the northern system will discharge to the existing 600 diameter foul sewer at the eastern boundary in adjacent Ruanbeg Housing Estate. No foul water discharge to ground is proposed.

## 4 Other issues

A specific, long-term management plan to permanently eradicate giant hogweed and Japanese knotweed plants from the site and prevent them from spreading to other sites will be developed. There will be no transfer of invasive plant material during the construction phase that could potentially lead to these species becoming further established in the area. The construction methodology will ensure that no invasive species are introduced, either deliberately or inadvertently, to the site.

No other potential environmental impacts (such as cultural heritage or landscape and visual receptors) are considered relevant to this report.

## 5 Mitigation specific to European sites

In relation to European sites, there will be no impacts as a result of the proposed development. Therefore no mitigation is proposed, other than standard best-practice methodologies and site management measures to be employed during construction and operation. These relate primarily to the protection of surface and ground water, and are described in **Section 3** of this report.

## 6 In-combination effects

It is a requirement of the *Birds and Natural Habitats Regulations, 2011* that when considering whether a plan or project will adversely affect the integrity of a European site the assessment must take into account in-combination effects with other current or reasonably foreseeable plans and projects.

## Proposed Residential Development (Strategic Housing Development): Magee Barracks, Kildare

### Information for Screening for Appropriate Assessment

- If it can be clearly demonstrated that the plan or project will not result in any effects at all that are relevant to the integrity of a European site then the plan or project should proceed without considering the in-combination test, further;
- If there are identified effects arising from the plan or project even if they are perceived as minor and not likely to have a significant effect on the integrity of a European site alone, then these effects must be considered 'in-combination' with the effects arising from other plans and projects.

In addition to the planned Strategic Housing Development (SHD) it is also proposed to develop a separate grocery store facility (Lidl) and a cancer treatment clinic on the site. These developments are also subject to Appropriate Assessment Screening.

Taking these other proposed developments at Magee Barracks into account, it is concluded in this report that the proposed residential development project under appraisal will not have any significant effects on any European sites. As such it can be concluded that the development either on its own or in-combination with other developments will have no impact on the European sites.

## 7 Screening conclusion

This report concludes on the best scientific evidence, including the hydrogeological assessment, that it can be clearly demonstrated that no elements of the project will result in any impact on the integrity or Qualifying Interests/Special Conservation Interests of any relevant European site, either on their own or in-combination with other plans or projects, in light of their conservation objectives.

It is considered that this report provides sufficient relevant information to allow the Competent Authority (An Bord Pleanála) to carry out an AA Screening, and reach a determination that the proposed development will not affect the integrity of any of the relevant European sites under Article 6 of the Habitats Directive (92/43/EEC) in light of their conservation objectives.

## Appendix I: Background

The European<sup>1</sup> network is a Europe-wide network of ecologically important sites (SPAs and cSACs – also known as ‘European Sites’ or ‘Natura 2000 sites’) that have been designated for protection under either the EU Birds Directive (Council Directive 79/409/EEC on the Conservation of Wild Birds) or the EU Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna).

The main aim of the Habitats Directive is “to contribute towards ensuring biodiversity through the conservation of natural habitats of wild fauna and flora in the European territory of the Member States to which the treaty applies”. Any actions taken must be designed to “maintain or restore, at a favourable conservation status, natural habitats and species of wild fauna and flora of Community interest”. Under Article 6 of the Habitats Directive, an assessment is required where a plan or project may give rise to significant effects upon a European site.

In addition, it is a matter of law that candidate SACs (cSACs) and Sites of Community Importance (SCI) are considered in this process;

Article 6 (paragraphs (3) and (4)) of the Habitats Directive states that:

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

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

The requirements of the Habitats Directive are transposed into Irish law by means of the *European Communities (Birds and Natural Habitats) Regulations 2011* (hereafter referred to as the *Birds and Habitats Regulations*)<sup>2</sup> and by the *Planning and Development Act 2000*, as amended.

In Ireland, the statutory agency responsible for the designated areas is NPWS.

---

<sup>1</sup> The EU Habitats Directive, Article 3.1, states “A Coherent European ecological network of Special Areas of Conservation and Special Protection Areas pursuant to Directive 79/409/EEC shall be set up under the title European”

<sup>2</sup> SI No. 477 of 2011

## Stages in the assessment

European Commission guidance (2001)<sup>3</sup> sets out the principles on how to undertake decision making in applying the Habitats Directive. The requirements of the Habitats Directive comprise four distinct stages:

**Stage 1: Screening** is the process which initially identifies the likely significant effects upon a European site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts may be significant. It is important to note that the burden of evidence is to show, on the basis of objective information, that there will be no significant effect; if the effect may be significant, or is not known, that would trigger the need for an Appropriate Assessment. There is European Court of Justice case law to the effect that unless the likelihood of a significant effect can be ruled out on the basis of objective information, then an Appropriate Assessment must be made.

**Stage 2: Appropriate Assessment** is the detailed consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's conservation objectives and its structure and function. This is to determine with scientific certainty whether or not there will be adverse effects on the integrity of the site in light of its conservation objectives. This stage also includes the development of mitigation measures to avoid or reduce any possible impacts.

**Stage 3: Assessment of alternative solutions** is the process which examines alternative ways of achieving the objectives of the project or plan that would avoid impacts on the integrity of the European site, should avoidance or mitigation measures be unable to cancel out adverse effects.

**Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain.** At Stage 4 an assessment is made with regard to whether or not the development is necessary for imperative reasons of overriding public interest (IROPI) and, if so, of the compensatory measures needed to maintain the overall coherence of the European network.

## Conservation Objectives of European sites

The conservation objectives for a European Site are intended to represent the aims of the Habitats and Birds Directives in relation to that site. To this end, habitats and species of European Community importance should be maintained or restored to 'favourable conservation status' (FCS), as defined in Article 1 of the Habitats Directive below:

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

- Its natural range and the area it covers within that range are stable or increasing;

---

<sup>3</sup> European Commission (2001) *Assessment of Plans and Projects Significantly Affecting European Sites: Methodological Guidance on the Provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC*

## Proposed Residential Development (Strategic Housing Development): Magee Barracks, Kildare

### Information for Screening for Appropriate Assessment

- 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;
- Conservation status of typical species is favourable as defined in Article 1(i).

The conservation status of a species will be taken as favourable when:

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

Guidance from the European Commission<sup>4</sup> indicates that the Habitats Directive intends FCS to be applied at the level of an individual site, as well as to habitats and species across their European range. Therefore, in order to properly express the aims of the Habitats Directive for an individual site, the conservation objectives for a site are essentially to maintain (or restore) the habitats and species of the site at (or to) FCS.

The European Commission guidance recommends that screening should fulfil the following steps:

1. Determine whether the plan (or policy) is directly connected with or necessary for the management of European sites;
2. Describe the plan and describe and characterise any other plans or projects which, in combination, have the potential for having significant effects on European sites;
3. Identify the potential effects on European sites;
4. Assess the likely significance of any effects on European sites.

---

<sup>4</sup> Managing European sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC. (European Commission 2000)

## Brady Shipman Martin

### **DUBLIN**

Canal House  
Canal Road  
Dublin 6  
+353 1 208 1900

### **CORK**

Penrose Wharf Business Centre  
Penrose Wharf  
Cork  
+353 21 242 5620

### **LIMERICK**

11 The Crescent  
Limerick  
+353 61 315 127

[mail@bradyshipmanmartin.com](mailto:mail@bradyshipmanmartin.com)  
[www.bradyshipmanmartin.com](http://www.bradyshipmanmartin.com)

