REPORT

Gallowshill Project

Ecological Impact Assessment

Submitted to:

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Submitted by:

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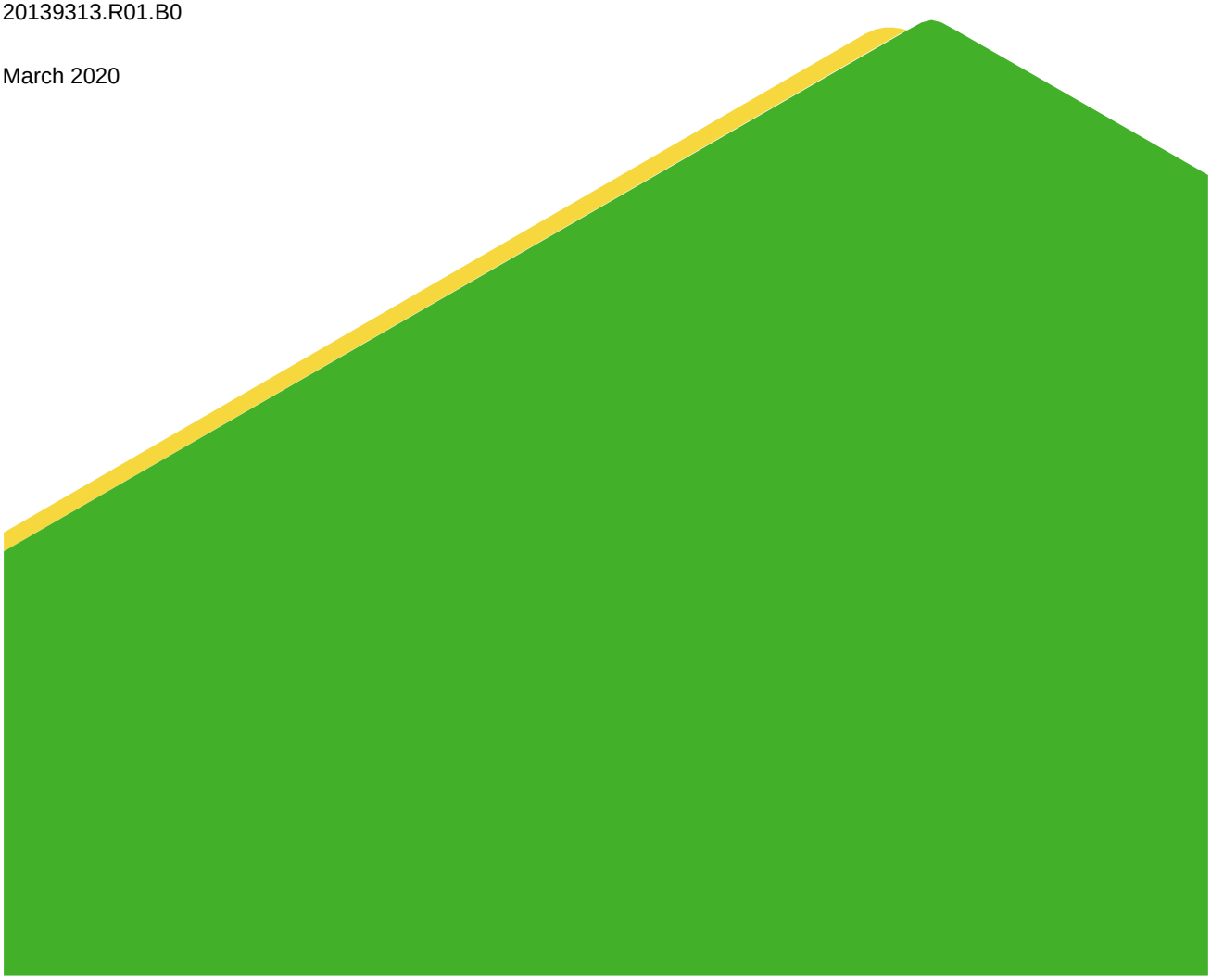

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1.0 INTRODUCTION

Golder Associates Ireland Limited (Golder) was requested by Kildare County Council (KCC) to carry out an ecological impact assessment (EcIA) of the Gallowshill site (the Site) in Gallowshill, Athy, Co. Kildare in support of a planning application for the development of welfare facilities at the Site (the Project).

This assessment presents a summary of ecological features which are, or have the potential to be, ecological constraints to the Project (details of which are given in Section 4.0, as applicable). It evaluates the importance of the ecological resources present and defines the degree of significance of potential impacts resulting from the Project proposals. The report also identifies appropriate mitigation measures and defines residual impacts.

A Screening for Appropriate Assessment (Appendix A) has been carried out by Golder and is included in the application. The Screening concluded no significant impacts to the defined Natura 2000 sites as a result of the proposed Project.

1.1 Proposed Development Site

For the purposes of the EcIA, the Site assessed is indicated in Drawing 1 (Appendix A). The redline boundary for the planning application lies within the assessed Site. The Site is part of a larger site operated by KCC for the distribution and storage of materials related to maintenance of the local road infrastructure network. The Site and larger KCC site are part of a former sand and gravel quarry, the historical quarry pit is located to the north of the Site. To the south the Site is bounded by the Athy Civic Amenity site which is a recycling centre that also accepts commercial and domestic waste for landfills.

1.2 Proposed Development

The proposed development involves the construction and operation of a welfare facility on the Site. The facility would provide a canteen, training room, office, toilets, changing facilities and an amenity patio seating area. The welfare facility would be serviced by new connections to the existing water mains, surface water and foul water system and by a new connection to the existing electricity supply located on the larger KCC site.

2.0 ASSESSMENT METHODOLOGY

2.1 Desktop Survey

A Desktop review was conducted of available published and unpublished information, and review of data available on the National Parks and Wildlife Services (NPWS) and National Biodiversity web-based databases was conducted in order to identify key habitats and species that may be present, particularly those protected by legislation. A radius of 10 km from the Site was considered as part of the desktop assessment.

2.2 Ecological Survey

A walkover survey of the Site was conducted on the 24 February 2020 to record the habitats currently present on and adjacent to the Site. Habitats are named and described following Fossitt (2000). Habitat Assessment follows the Joint Nature Conservation Committee (JNCC) Phase One Habitat Survey methodology (JNCC, 1990, revised 2010). Additionally, aerial photographs (satellite imagery) and Site mapping (including surface water) assisted the habitat survey.

This Phase 1 Habitat survey was carried out by Golder Geo-environmental Scientist Hannah McGillycuddy and Ecologist Fiona Johnson.

2.3 Impact Assessment Methods

Habitats and species were assessed in accordance with the guidance contained in the document *Guidelines for Ecological Impact Assessment for the United Kingdom and Ireland* (CIEEM, 2018) which recommends that the value of an ecological resource be determined within a defined geographical context, Figure 1.1.

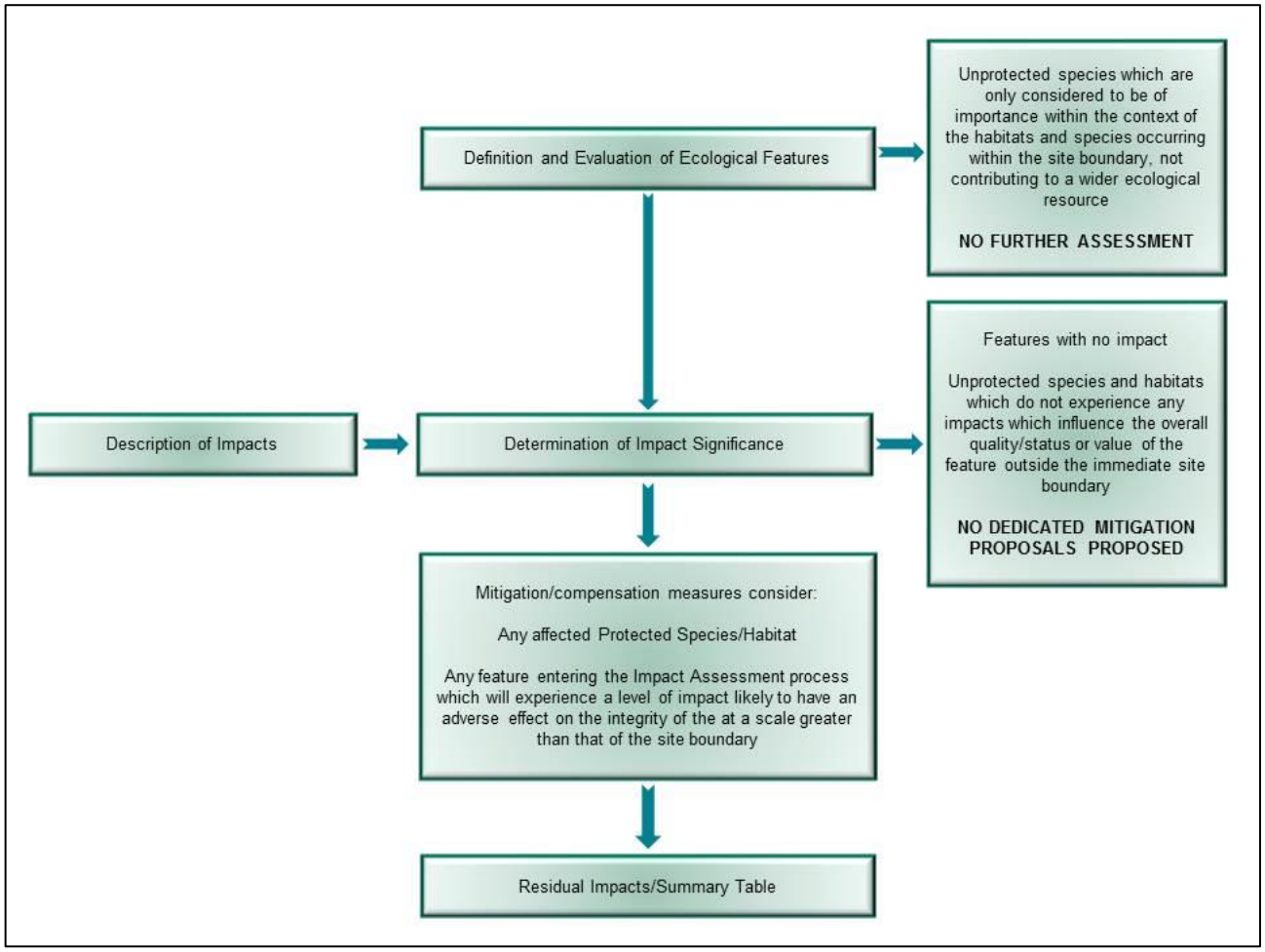

Figure 1.1: The EcIA process

Defining importance: The relative importance of each ecological feature has been defined on a geographical scale, from international importance, to having relevance only in the context of the Site boundary. The definitions employed for the basis of the evaluation are presented in Table 1.1. It should be noted that professional judgement has been employed in the allocation of a level of importance to each feature **as it occurs on the Site**. In other words, the value of the feature is presented in the context of its actual status within the Site. **Therefore, a single individual of a species which is protected under the EU Habitats Directive would not automatically be considered to be of European (international) Importance, but would be evaluated in the context of its relationship to the overall population.**

Table 1.1: Criteria for establishing receptor sensitivity/importance

Importance	Ecological Valuation
International	Sites, habitats or species protected under international legislation e.g. Habitats and Species Directive. These include, amongst others: SAC's, SPA's, Ramsar Sites, Biosphere Reserves, including sites proposed for designation, plus undesignated sites that support populations of internationally important species.
National	Sites, habitats or species protected under national legislation e.g. Wildlife Act 1976 and amendments. Sites include designated and proposed NHAs, Statutory Nature Reserves, National Parks, plus areas supporting resident or regularly occurring populations of species of national importance (e.g. 1% national population) protected under the Wildlife Acts, and rare (Red Data List) species.
Regional	Sites, habitats or species which may have regional importance, but which are not protected under legislation (although Local Plans may specifically identify them) e.g. viable areas or populations of Regional Biodiversity Action Plan habitats or species.
Local/County	Areas supporting resident or regularly occurring populations of protected and red data listed-species of county importance (e.g. 1% of county population), Areas containing Annex I habitats not of international/national importance, County important populations of species of habitats identified in county plans, Areas of special amenity or subject to tree protection constraints.
Local	Areas supporting resident or regularly occurring populations of protected and red data listed-species of local importance (e.g. 1% of local population), Undesignated sites or features which enhance or enrich the local area, Sites containing viable area or populations of local Biodiversity Plan habitats or species, local Red Data List species etc.
Low Local	Undesignated sites or features, which enhance or enrich the wildlife resource at a Parish or neighbourhood level.
Within Site	Very low importance and rarity. Ecological feature of no significant value beyond the Site boundary.

Defining impact: The impacts to ecological features are defined by their geographical significance in terms of the likely effect and the defined importance of the feature being affected. It is not possible in this system to have an impact greater than the overall geographical importance of the feature (e.g. the maximum possible impact to a feature of regional importance would be one which is of regional significance). Impacts which do not have significance beyond the immediate area (the Site) will be managed through the implementation of construction and habitat management plans. One exception to this is the case of impacts on Protected Species, where **any** impact would result in the implementation of mitigation measures.

Defining Magnitude of Change: Considering the potential for impacts as defined above**,** an assessment of the magnitude of change is arrived at. This is based on Table 1.2 below and relies on professional subjective judgement in deciding the level of magnitude of change.

Table 1.2: Defining magnitude of change

Magnitude of Change	Description
High	Major changes, which would irreversibly alter the integrity or nature conservation status of the feature. Examples may include more than 25% loss or damage to a habitat; disturbance to more than 25% of a population of a species; loss / degradation of a key wildlife corridor and resultant fragmentation.
Medium	Changes that are detectable in the short to medium term and could have the potential to alter the long-term viability of the feature (its integrity or nature conservation status). Examples may include: 10 - 25% loss or damage to a habitat; disturbance to 10 - 25% of a population of a species; partial loss / degradation of a key wildlife corridor and resultant fragmentation.
Low	Minor changes, either of sufficiently small-scale or of short duration to cause no long-term harm to the integrity or conservation status of the feature. Examples may include: less than 10% loss or damage to a habitat at its periphery; disturbance to less than 10% of a population of a species; minor loss / degradation of a key wildlife corridor.
Negligible	Potential changes that are not expected to affect the integrity or conservation status of the feature; therefore no changes are predicted (e.g. <1% population / habitat loss).

Defining mitigation, compensation and enhancement measures: Receptors subject to significant impacts (those which have the potential to affect the ecological resource outside of the immediate Site boundary) are the focus of provision of mitigation measures which have been formulated according to the mitigation hierarchy (avoid, reduce/minimise, compensate). All proposed mitigation measures follow industry best practice. Those for protected species follow the prescribed regulatory protocols.

Defining residual impact: Following the application of mitigation measures, impacts to each ecological feature are reassessed, and any residual impacts are reported.

As stated by the CIEEM (2018), *'the value or potential value of a feature/receptor should be determined within a defined geographical context*'. Accordingly, each feature has been assessed based on the scale described in Table 1.1.

3.0 BASELINE ECOLOGY

The walkover survey examined the area of the proposed Site and adjacent area as defined by Figure 1.2.

The Site is part of the existing KCC site which is used for the storage and distribution of road infrastructure in the County. The Site is dominated by buildings and artificial surfaces. No fauna was observed during the walkover survey.

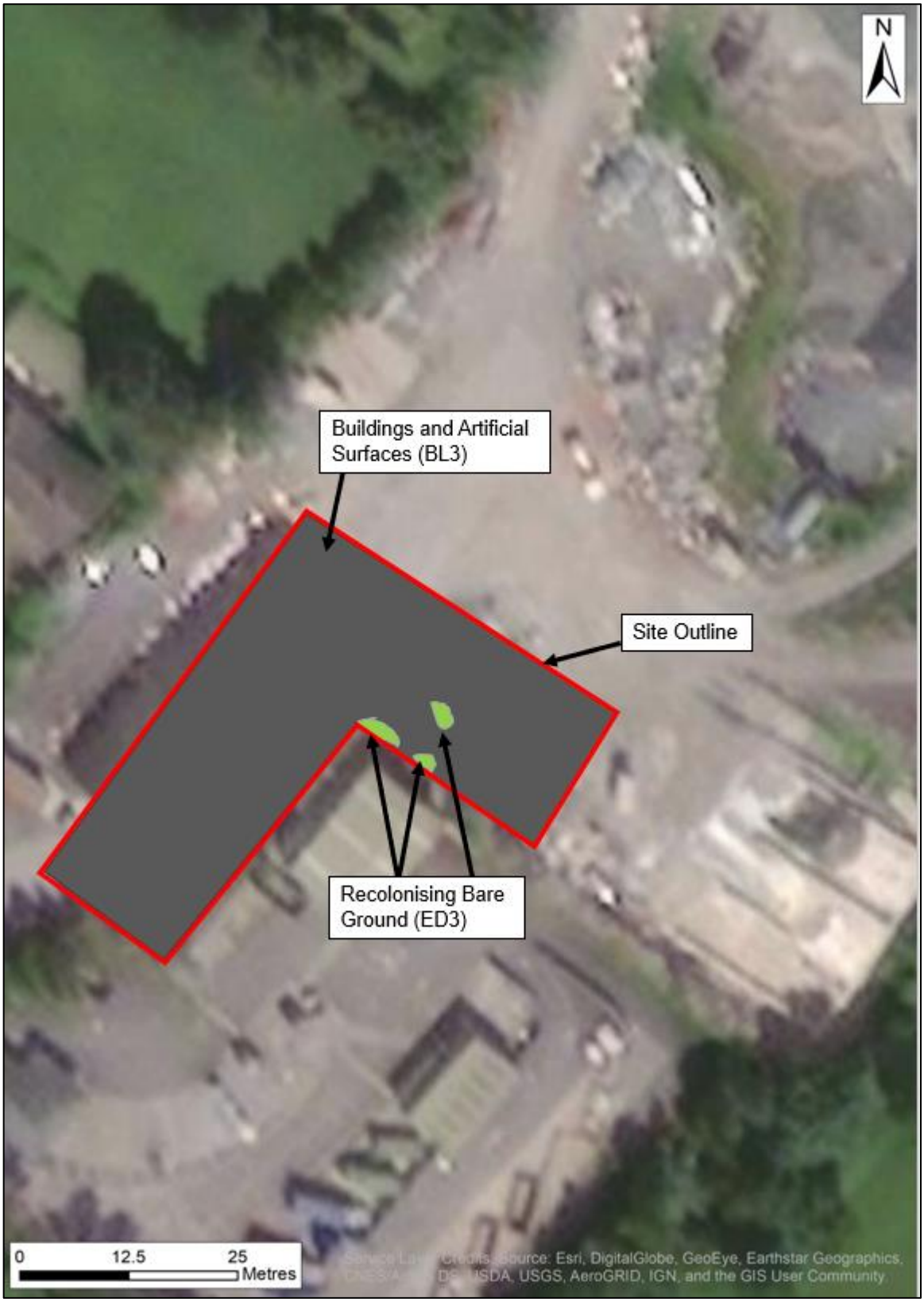

Figure1.2: Habitat map of the Site in accordance with Fossitt (2000)

3.1 Habitat Assessment

The proposed Project footprint is principally composed of buildings and artificial surfaces with a thin linear strip of recolonising bare ground along the border of the Site with the Athy Civic Amenity site. The recorded habitats onsite are listed in Table 1.3 and a habitat map of the Site and surrounds is shown in Figure 1.2.

Table 1.3: Habitats recorded on Site (Fossitt, 2000)

Habitat	Habitat code	Location and prevalence
Buildings and Artificial Surfaces	BL3	Dominates the Project footprint.
Recolonising Bare Ground	ED3	Occurs along the south eastern boundary of the Site and in limited patches between the shipping containers. This habitat is fragmented and patchy throughout.

Buildings and Artificial Surfaces (BL3)

An asphalt accessway with a thin loose gravel overlayer is present in the south and west of the Site while the east and north of the Site is dominated by hardcore with three shipping containers and two cabins, Figure 1.3.

Figure 1.3: View of the Site looking to the south with the predominance of built structures evident onsite

Recolonising Bare Ground (ED3)

Along the southeastern boundary of the Site is a thin linear strip of recolonising bare ground, Figure 1.4. An additional small section of recolonising bare ground was seen between two of the shipping containers, Figure 1.5. The hardcore surface here is patchy and plants such as cat's ear (*Hypochoeris radicata*), Nipplewort (*Lapsana communis*) and moss (*Grimmia sp.*) are widespread throughout.

Figure 1.4: View looking to the east along the boundary of the Site and Athy Civic Amenity site with areas of recolonising ground present

Figure 1.5: View looking to the west showing small patches of recolonising bare ground between the buildings onsite

3.2 Flora and Fauna Assessment (Desk Study)

As part of the Desk Study, consideration was given to the National Parks and Wildlife Services' (www.npws.ie mapviewer) list of protected or notable floral and faunal species which have been recorded within the 10 km (from the Site) Desk Study area during the last 30 years. The desk study results should not be considered definitive data sets for the desk study area. An absence of desk study data does not necessarily correspond that a site is absent of notable flora or fauna.

3.3 Flora and Fauna Assessment

The presence, or potential presence, of species on the Site was identified from the desk study and Phase 1 Habitat survey. Table 1.4 lists the species which were considered likely to occur within the Site, on the basis of the presence of suitable habitat and/or the occurrence of recent records in the vicinity. No floral species of note have been recorded by the NPWS within 10 km of the Site in ca. 75 years. Floral species which were noted onsite during the habitat survey have been included in the table below. Additionally, legislative status of the floral and faunal species is listed where relevant. The source(s) of information relating to each species could include:

- Existing records from desk study;
- Presence of suitable habitat identified during the Phase 1 survey; and/or
- Direct observation.

For each species with the potential to occur on Site, the final column of Table 1.4 presents a brief summary of the status of the species in relation to the Site itself. If the site walkover has failed to record the species identified by the NPWS as occurring within 10 km of the Site and habitats onsite are unsuitable, then it is concluded that the species is unlikely to occur and it is not considered further within the assessment. If a species is confirmed as present, an indication of the likely population size/status within the Site is provided and this is carried on to the evaluation (Section 3.5) below.

Table 1.4: List of protected or notable floral and faunal species within the Desk Study

Species/ Group	Protection Status	Recorded Date	Source	Summary of status on site
Red Squirrel	Wildlife Acts (1976 – 2010)	1991 within 10 km of Site (NPWS)	Sub-optimal - Survey (suitability)	Unlikely to occur within the Site owing to a lack of habitat (mixed woodland) and resource for this species. Not considered further within this assessment.
Hedgehog	Wildlife Acts (1976 – 2010)	1991 within 10 km of Site (NPWS)	Sub-optimal - Survey (suitability)	Unlikely to occur within the Site owing to a lack of habitat (no cover) and resource for this species. Not considered further within this assessment.
Pygmy Shrew	Wildlife Acts (1976 – 2010)	1991 within 10 km of Site (NPWS)	Sub-optimal - Survey (suitability)	Unlikely to occur within the Site owing to a lack of habitat and resource (rich plant cover) for this species. Not considered further within this assessment.
Stoat	Wildlife Acts (1976 – 2010)	1991 within 10 km of Site (NPWS)	Sub-optimal - Survey (suitability)	Unlikely to occur within the Site owing to an unfavourable habitat (avoids open spaces) and resource for this species. Not considered further within this assessment.
Otter	Wildlife Acts (1976 – 2010) – EU Habitat Directive.	1991 within 10 km of Site (NPWS)	Sub-optimal - Survey (suitability)	Unlikely to occur within the Site owing to a lack of aquatic habitat and resource for this species. Not considered further within this assessment.
Moss	-	Feb 2020	Phase 1 habitat survey (direct observation)	Present along a thin linear strip to the southeast of the Site and in small patches between shipping containers. Recolonising minor areas of degraded hardcore or loose gravel. This species is not protected by legislation and is ubiquitous therefore not considered further within this assessment.

Species/ Group	Protection Status	Recorded Date	Source	Summary of status on site
Cat's Ear	-	Feb 2020	Phase 1 habitat survey (direct observation)	Present along a thin linear strip to the southeast of the Site and in small patches between shipping containers. Recolonising minor areas of degraded hardcore or loose gravel. This species is not protected by legislation and is ubiquitous therefore not considered further within this assessment.
Nipplewort	-	Feb 2020	Phase 1 habitat survey (direct observation)	Present along a thin linear strip to the southeast of the Site and in small patches between shipping containers. Recolonising minor areas of degraded hardcore or loose gravel. This species is not protected by legislation and is ubiquitous therefore not considered further within this assessment.

3.4 Natura 2000 Protected Sites

The potential impact of the project on Natura 2000 sites is dealt with in the accompanying Appropriate Assessment Screening report (Appendix A).

3.5 Evaluation

The evaluation of ecological features (habitats) which could be affected by the Project is summarised in Table 1.5. The table includes:

- Any statutory designated areas, with the exception of Natura 2000 sites, which are situated within 10 km of the Project Site that have potential ecological connection (s) with the Site; and
- Any habitat type recorded within the Site.

No floral or faunal species of conservation importance has been confirmed as occurring within the Site (refer to Section 3.3), as such fauna or individual flora species have not been considered for further evaluation.

The value of the habitats considered here is based upon how important the feature is in relation to its geographical context. In other words, at what level of geographical resolution would the habitat contained within the Site be recognised as contributing to biodiversity to a significant degree. The evaluation takes into account any statutory or non-statutory conservation status, its extent (or population size) within the Site compared to the resource elsewhere and whether it has characteristics which either elevate or depress its importance in comparison with a 'typical' example (for example, whether a habitat is particularly species rich, or depleted in species).

Common and widespread habitats, therefore, only have a level of importance in respect to the biodiversity of their immediate area (taken in this case to be represented by the boundary of the Site). Table 1.5 presents each feature occurring, together with the rationale for its evaluation.

Table 1.5: Classifying the Geographical Importance of Key Ecological Features

Key Ecological Features	Importance	Rationale
Habitats		
Buildings and artificial surfaces	Site	No species of conservation concern were identified using this habitat nor does this habitat support unique floral or faunal species. This feature is not considered further within this assessment.
Recolonising bare ground	Site	Permanent land take will occur to this habitat. However, this habitat is considered to be ubiquitous within the larger KCC site and at the local and regional level and not inherently biodiverse or rare in accordance with ecological value based upon the criteria defined by Ratcliffe (1977), namely: naturalness, size, rarity and diversity. Additionally, the Project proposes landscaping by the planting of small native shrubbery, trees and a small lawn area which has the potential to increase the habitat potential of the Site on a long-term – permanent scale. This feature is not considered further within this assessment.

4.0 DESIGN MITIGATION

No noteworthy biodiversity is present, or likely to occur within the Site, as such, biodiversity specific design mitigation measures are not warranted for the proposed project.

5.0 IMPACT ASSESSMENT

No noteworthy biodiversity is present, or likely to occur within the Site, as such, no significant impacts are likely on biodiversity due to the nature of the works.

6.0 MITIGATION, COMPENSATION AND ENHANCEMENT MEASURES

As has been previously stated no noteworthy biodiversity is present, or likely to occur within the Site, as such, no significant impacts are likely on biodiversity due to the nature of the works and no specific biodiversity mitigation measures are required.

However, as part of the Project design it is proposed that areas of the Site will be landscaped (one-off native tree planting, native shrubbery and grass landscaping around the patio area). This future landscaped area has to potential to support limited habitat for species such as breeding birds and small mammals which would increase the overall biodiversity value of the Site.

7.0 RESIDUAL IMPACTS AND RECOMMENDATIONS

Given the nature of the Site and lack of biodiversity, no negative residual impacts are likely due to the loss of existing habitats. A positive residual impact is likely from the Project due to the creation of landscaped areas which may support limited but increased species and habitat.

8.0 CONCLUSIONS

The Site is of low biodiversity value as the majority of the Site is occupied by buildings and artificial structures. Limited areas of recolonising bare ground are present where the hardcore surface has degraded. However, only floral species (moss, nipplewort and cat's eye) were observed onsite. None of these floral species are uncommon within the larger surrounding KCC site nor are they considered protected or noteworthy species which have a high biodiversity value.

Records from the NPWS of species within 10 km of the Site, which were considered for their potential to occur within the Site, have not identified any floral species within 30 years in the area and these species are not likely to be present within the Site owing to an absence of suitable habitat. Faunal species such as hedgehogs, stoats, red squirrel, pygmy shrew and otter were recorded within 10 km of the Site in the last 30 years. However, the habitats within the Site are unlikely to support any of these species as they are considered unfavourable.

While the habitats onsite will be impacted by the proposed Project, given the low biodiversity value of these habitats no significant impact is likely from the loss of these habitats, in particular of the recolonising bare ground. Similarly given that no significant impact is likely and these habitats are of low value, no mitigation measures are proposed. Given that no faunal species were identified within the Site, nor are the habitats favourable for faunal species, no significant impact is likely and no mitigation is proposed.

Additionally, landscaping proposals may result in an increase of biodiversity value at the Site scale over the medium to long term.

REFERENCES

CIEEM (2018) *Guidelines for Ecological Impact Assessment in the United Kingdom*. CIEEM, 2018.

Fossitt, J.A. (2000) A Guide to Habitats in Ireland. The Heritage Council, Kilkenny.

Joint Nature Conservation Committee (2010) *Handbook for Phase 1 Habitat Survey: A Technique for Environmental Audit.* Revised reprint 2010.

Ratcliffe, D.A. (1977) *A Nature Conservation Review*. Cambridge: Cambridge University Press.

NPWS (2019) *Checklists of Protected and Threatened Species in Ireland.* Irish Wildlife Manuals 116.

Signature Page

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APPENDIX A

AA Screening Report

REPORT

Gallowshill Project

Screening for Appropriate Assessment

Submitted to:

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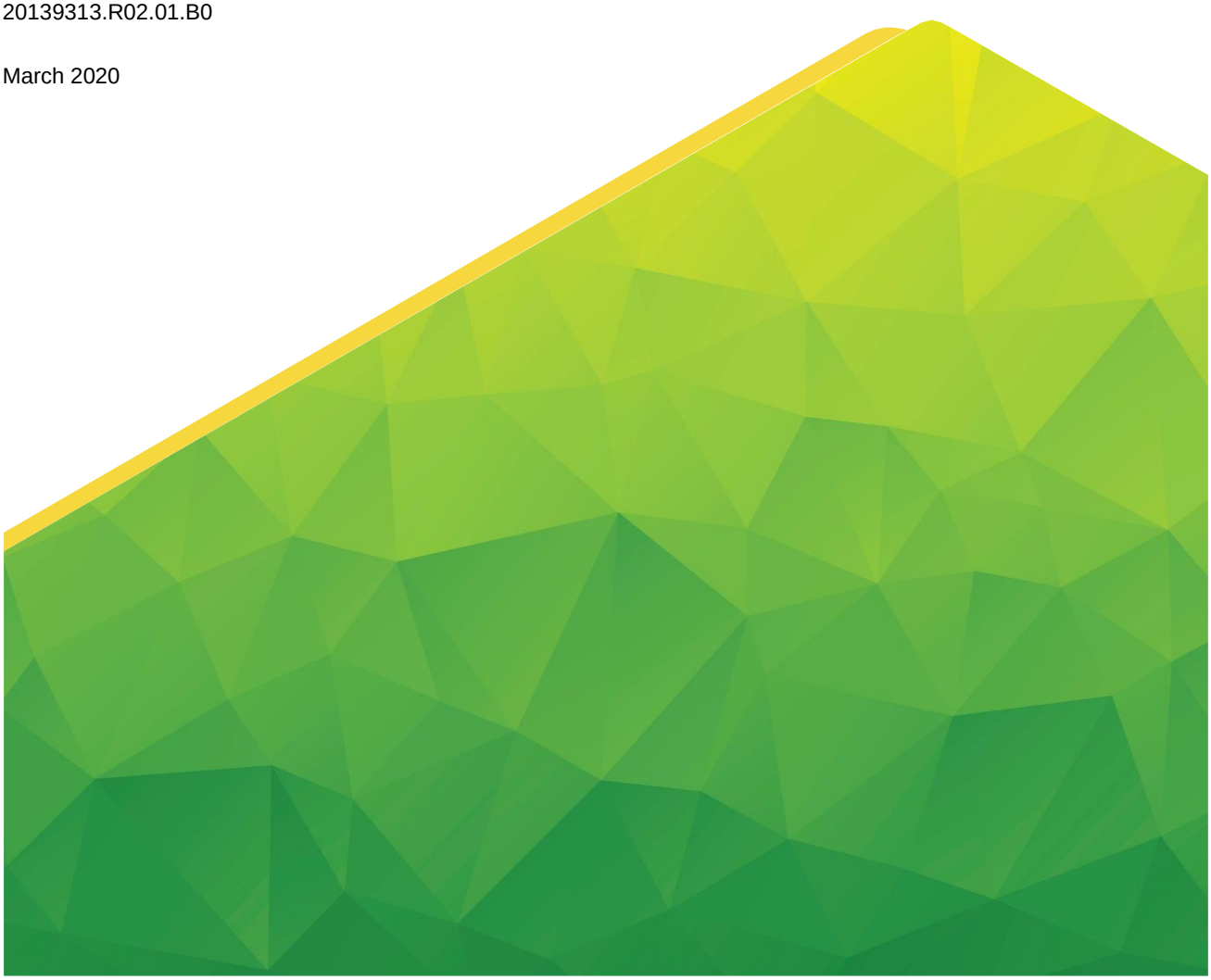

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FIGURES

1.0 INTRODUCTION

Golder Associates Ireland Limited (Golder) was requested by Kildare County Council (KCC) to carry out a Screening for Appropriate Assessment (AA) for their Gallowshill Civic Amenity Site (the Site) in Gallowshill, Athy, Co. Kildare in support of a planning application for the development of welfare facilities at the Site.

The Screening for Appropriate Assessment comprises an appraisal of potential impacts on European designated conservation sites within a 15 km radius of the Site. This AA screening has been prepared by **Hannah McGillycuddy, Geo-Environmental Scientist,** Golder Associates and reviewed by **Freddy Brookes MSc., MCIEEM – Senior Ecologist,** Golder Associates.

The terms of reference of this report are set out below.

1.1 Terms of Reference

This screening has been undertaken in accordance with the requirements of the EU Habitats Directive (Directive 92/43/EEC). Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora – the 'Habitats Directive' - provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 - 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as *Natura 2000*. Natura 2000 sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment:

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

Article 6(4) deals with the steps that should be taken when it is determined, as a result of Appropriate Assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case.

Article 6(4) states:

> *"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 a social or economic nature, the Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.*
>
> *Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest."*

The requirements of Articles 6(3) and 6(4) of the Habitats Directive have been transposed into Irish legislation by means of the Habitats Regulations, 1997 (S.I. No. 94 of 1997) and the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011).

2.0 METHODS

2.1 Desktop Review and Data Collation

A desktop review was conducted of available published and unpublished information, together with a review of data available on the NPWS http://www.npws.ie/en/, National Biodiversity Data Centre http://maps.biodiversityireland.ie/, and Environment Protection Agency web-based databases.

2.2 Screening for Appropriate Assessment

This report has been prepared with reference to the following documents:

- Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC (European Communities, 2002);
- Managing Natura 2000 sites: the provisions of Article of the 'Habitats Directive' 92/43/EC; and
- Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. (DOE, 2009, Revision Notes 2010).

Appropriate Assessment is carried out in stages, as recommended by the above-referenced Guidance Documents. There are four stages as follows:

2.2.1 Stage 1: Screening

This initial stage aims to identify the likely impacts of the project on a Natura 2000 site, either alone or in combination with other projects or plans. The impacts are examined to establish whether these impacts are likely to be significant. Assessment of the significance of effects is carried out in consultation with the relevant nature agencies.

2.2.2 Stage 2: Appropriate Assessment

The aim of this stage is to identify the conservation objectives of the site and to assess whether or not the project, either alone or in combination with other projects or plans will result in adverse effects on the integrity of the site, as defined by the conservation objectives and status of the site. Stage 2 is carried out in consultation with the relevant nature agencies. Where it cannot be demonstrated that there will be no adverse effects on the site, it is necessary to devise mitigation measures to avoid, where possible, any adverse effects.

2.2.3 Stage 3: Assessment of Alternative Solutions

This stage examines alternative ways of implementing the project that, where possible, avoid any adverse impacts on the integrity of the Natura 2000 site. If alternative solutions have been identified that will either avoid any adverse impacts or result in less severe impacts on the site, it will be necessary to assess their potential impact by recommencing the assessment at Stage One or Stage Two as appropriate. However, if it can be reasonably and objectively concluded that there is an absence of alternatives, it will be necessary to proceed to Stage Four of this assessment methodology.

2.2.4 Stage 4: Assessment where Adverse Impacts Remain

For sites that host priority habitats and species, it is necessary to consider whether or not there are human health or safety considerations or environmental benefits flowing from the project. If such considerations do exist, then it will be necessary to carry out the Stage Four assessments of compensatory measures. If no such considerations exist, then establish whether there are other imperative reasons of overriding public interest (IROPI) before carrying out the Stage Four assessments.

Where IROPI exist, an assessment to consider whether compensatory measures will or will not effectively offset the damage to the site will be necessary before the project or plan can proceed.

This report is for Screening (Stage 1) for Appropriate Assessment only.

3.0 PROJECT LOCATION

The Site is located within the town of Athy, ca. 8 km from the M9 (Figure 1.1 below). The Site itself is situated within a larger site operated by KCC Roads and Transport division for the storage and distribution of road infrastructure materials.

Due to its location on the eastern side of Athy, the setting of the Site is mixed use. In the immediate vicinity of the Site, the area is industrial with residential housing estates located to the north and west. Industrial land is located to the immediate east of the Site (Athy Civic Amenity facility borders the east) with agricultural land and one-off housing located further east. To the south is commercial land.

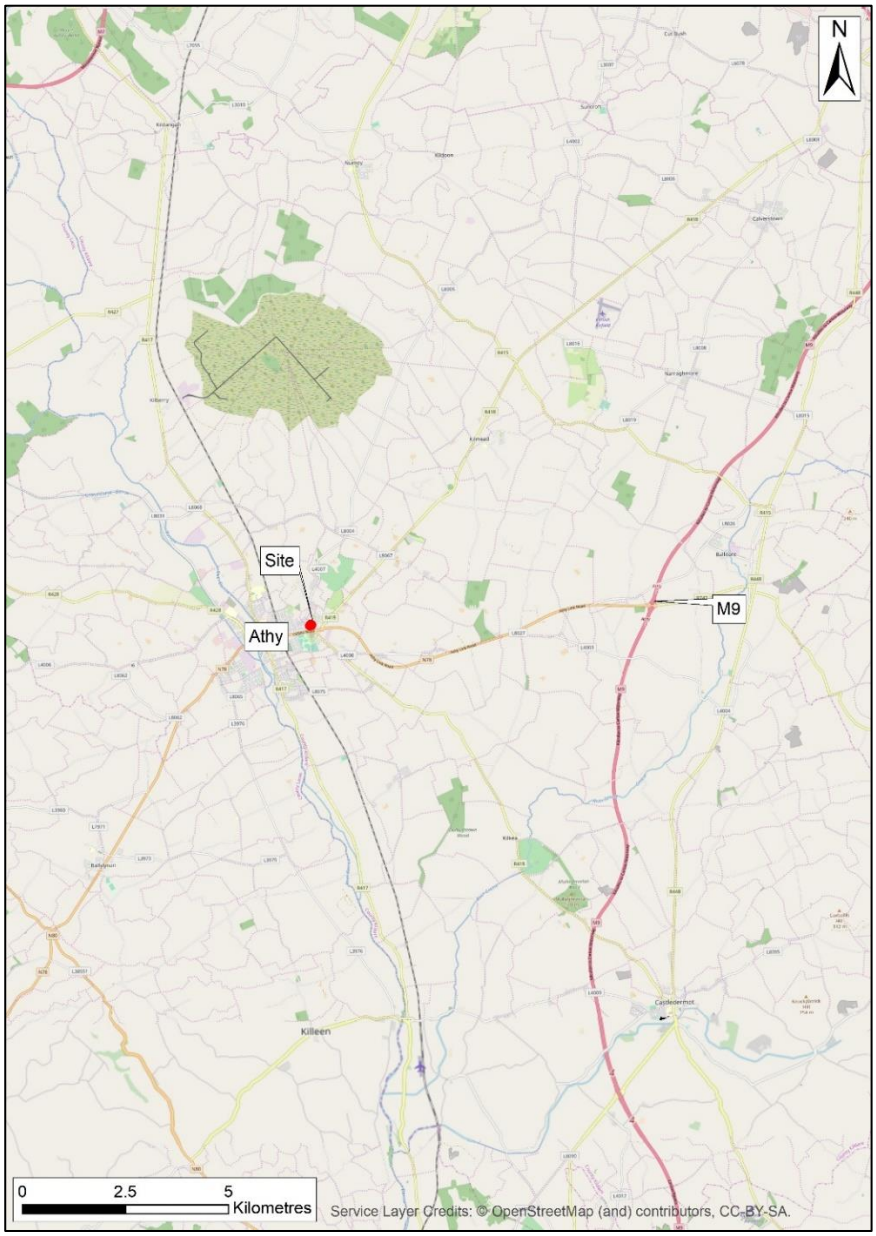

Figure 1.1: Site Location Plan

3.1 Proposed Development

The proposed development involves the construction and operation of a welfare facility on the Site. The facility would provide a canteen, training room, office, toilets, changing facilities and an amenity patio seating area. The welfare facility would be serviced by new connections to the existing water mains and surface water system, foul water supply and by a new connection to the existing electricity supply located on the larger KCC site.

3.2 Description of the Site, Baseline Conditions

A walkover survey of the Site was conducted on the 24th February 2020 to record the habitats currently present on, and adjacent to, the Site. Habitats are named and described following Fossitt (2000). Habitat Assessment follows the Joint Nature Conservation Committee (JNCC) Phase One Habitat Survey methodology (JNCC, 1990, revised 2010). Additionally, aerial photographs (satellite imagery) assisted the habitat survey.

The proposed Project footprint is comprised predominantly of buildings and artificial surfaces with small patchy areas of recolonising bare ground.

Buildings and Artificial Surfaces (BL3)

An asphalt accessway with a thin loose gravel overlayer is present in the south and west of the Site while the east and north of the Site is dominated by hardcore with three shipping containers and two cabins, Figure 1.2.

Figure 1.2: View of the Site looking to the south with the predominance of built structures evident onsite

Recolonising Bare Ground (ED3)

Along the south eastern boundary of the Site,a thin linear strip of recolonising bare ground is present, Figure 1.3. An additional small section of recolonising bare ground was seen between two of the shipping containers. The hardcore surface here is patchy and plants such as cat's ear (*Hypochoeris radicata*), Nipplewort (*Lapsana communis*) and moss (*Grimmia sp*) are widespread throughout.

Figure 1.3: View looking to the east along the boundary of the Site and Athy Civic Amenity site with areas of recolonising ground present

3.3 Aquatic Receptors (on and off Site)

Aquatic receptors are a key focus for the AA screening process as there are no habitat or species synergies between Natura sites and the Project Site.

As part of the Project it is proposed that the proposed welfare system will be connected to the existing services which currently serve the larger KCC site. It is not proposed that there will be any discharge or abstraction from a surface or groundwater feature due to the proposed development. As such, there is no connection between with any potential aquatic receptors such as local streams or ditches and these are unlikely to be impacted by the proposed development.

3.4 Natura 2000 Sites

Sites of international importance including Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are collectively known as Natura 2000 sites. These sites contain examples of some of the most important natural and semi-natural ecosystems in Europe. The designated search area was 15 km from the Project for Natura 2000 sites.

In total, two Natura 2000 sites (sites of international importance) have been identified as occurring within 15 km of the project (Figure 1.4). These are as follows:

- River Barrow and River Nore SAC (ca. 1.1 km west); and
- Ballyprior Grassland SAC (ca. 10.9 km west).

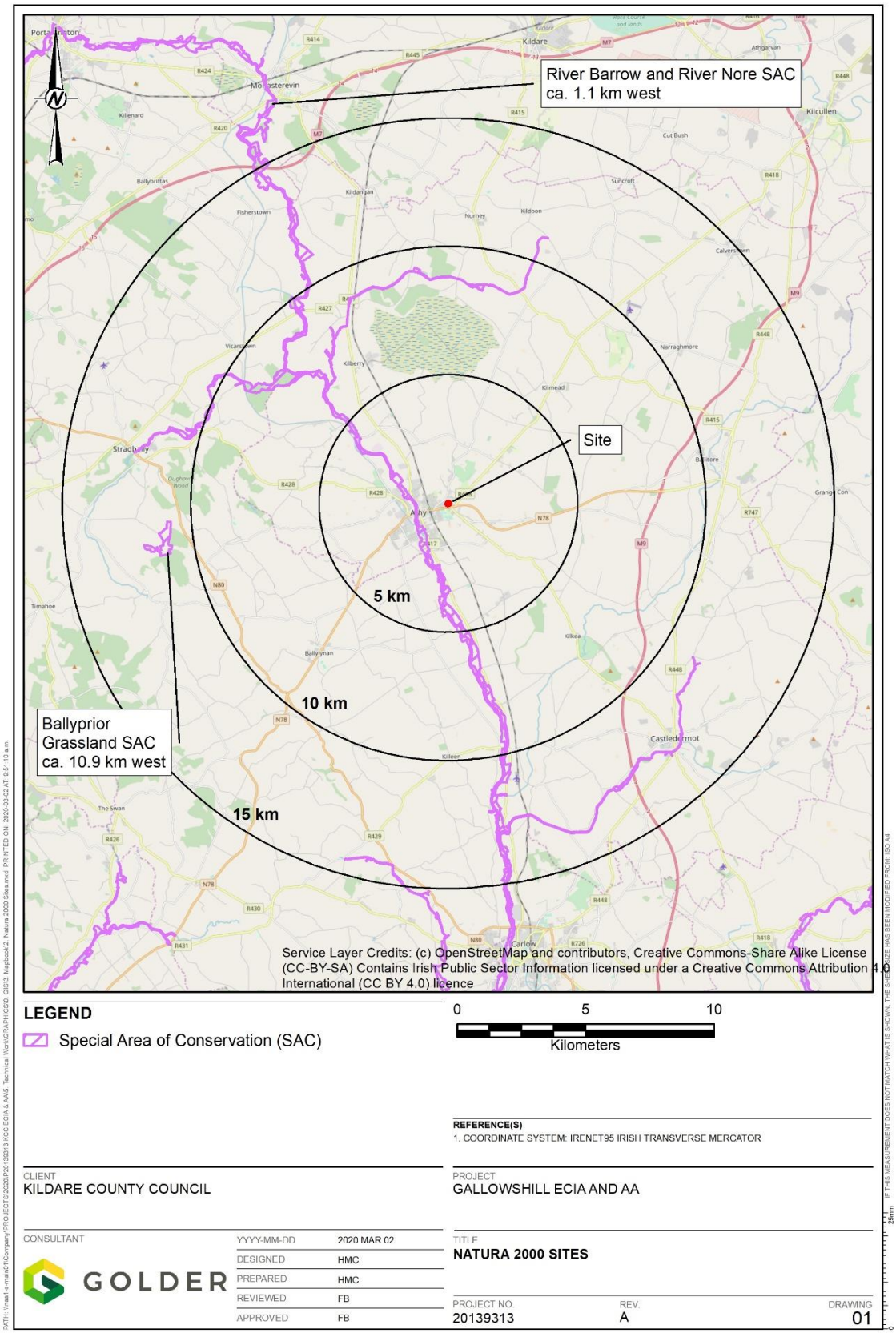

Figure 1.4: Natura 2000 sites within the desk study area

The citations for the sites that may be potentially affected by Project proposals are provided below verbatim as sourced from the National Parks and Wildlife Service (NPWS) website[1]:

3.5 River Barrow and River Nore SAC

This site consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. The site passes through eight counties – Offaly, Kildare, Laois, Carlow, Kilkenny, Tipperary, Wexford and Waterford. Major towns along the edge of the site include Mountmellick, Portarlington, Monasterevin, Stradbally, Athy, Carlow, Leighlinbridge, Graiguenamanagh, New Ross, Inistioge, Thomastown, Callan, Bennettsbridge, Kilkenny and Durrow. The larger of the many tributaries include the Lerr, Fushoge, Mountain, Aughavaud, Owenass, Boherbaun and Stradbally Rivers of the Barrow, and the Delour, Dinin, Erkina, Owveg, Munster, Arrigle and King's Rivers on the Nore.

Both rivers rise in the Old Red Sandstone of the Slieve Bloom Mountains before passing through a band of Carboniferous shales and sandstones. The Nore, for a large part of its course, traverses limestone plains and then Old Red Sandstone for a short stretch below Thomastown. Before joining the Barrow it runs over intrusive rocks poor in silica. The upper reaches of the Barrow also run through limestone. The middle reaches and many of the eastern tributaries, sourced in the Blackstairs Mountains, run through Leinster Granite. The southern end, like the Nore runs over intrusive rocks poor in silica. Waterford Harbour is a deep valley excavated by glacial floodwaters when the sea level was lower than today. The coast shelves quite rapidly along much of the shore.

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;
- [1170] Reefs;
- [1310] Salicornia Mud;
- [1330] Atlantic Salt Meadows;
- [1410] Mediterranean Salt Meadows;
- [3260] Floating River Vegetation;
- [4030] Dry Heath;
- [6430] Hydrophilous Tall Herb Communities;
- [7220] Petrifying Springs*;
- [91A0] Old Oak Woodlands;
- [91E0] Alluvial Forests*;
- [1016] Desmoulin's Whorl Snail (Vertigo moulinsiana);
- [1029] Freshwater Pearl Mussel (Margaritifera margaritifera)
- [1092] White-clawed Crayfish (Austropotamobius pallipes);

[1] http://www.npws.ie/protected-sites

- [1095] Sea Lamprey (Petromyzon marinus);
- [1096] Brook Lamprey (Lampetra planeri);
- [1099] River Lamprey (Lampetra fluviatilis);
- [1103] Twaite Shad (Alosa fallax);
- [1106] Atlantic Salmon (Salmo salar);
- [1355] Otter (Lutra lutra);
- [1421] Killarney Fern (Trichomanes speciosum); and
- [1990] Nore Freshwater Pearl Mussel (Margaritifera durrovensis).

3.6 Ballyprior Grassland SAC

Ballyprior Grassland, 4 km south of the village of Stradbally in Co. Laois, is located at the north end of the Castlecomer Plateau on largely limestone bedrock. The soils of the area are generally thin and well drained, varying from a deeper sandy loam in lower places (10-20 cm depth), to thin or stony soil over local drift (5- 10 cm depth) on the elevated plateau.

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):

- [6210] Orchid-rich Calcareous Grassland*

Ballyprior Grassland SAC contains old grassland habitat of high quality and the site is important due to the loss of similar habitat in surrounding areas. The site has an exceptionally rich myco-flora (fungi) which is a good indication of grassland quality (in terms of continuity, lack of disturbance and low nutrient status).

4.0 STAGE 1 SCREENING ASSESSMENT CRITERIA

4.1 Describe any likely direct, indirect or secondary impacts of the Project (either alone or in combination with other plans or projects) on the Natura 2000 sites by virtue of:

Size and Scale	The proposed development site is c. 0.2 ha in size and currently is part of an existing industrial site.
Land-take	None from Natura 2000 sites. The closest Natura 2000 site is ca. 1.1 km in distance.
Distance from Natura 2000 site or key features of the site	■ The closest Natura site is 1.1 km west and is known as the River Barrow and River Nore SAC. The next closest Natura 2000 site is the Ballyprior Grassland SAC ca. 10.9 km west.
Connectivity with the Natura 2000 site and Site	■ The Site is within the same groundwater aquifer as the River Barrow and River Nore SAC, however, the project does not propose discharging to or abstracting from the groundwater body. As such, these sites are not considered to be connected hydrogeologically. There is also no direct hydrological connection between the sites; and

	■ The Site and the Ballyprior SAC are not considered to be hydrogeologically or hydrologically connected as they sit in separate groundwater bodies, geological units and have no surface water connection.
Resource requirements (water abstraction etc.)	No resources from a Natura site are required.
Emissions (disposal to land, water or air)	**Air Emissions** Air emissions from the project Site are unlikely to cause impacts on the Natura 2000 sites due to the nature of project proposals and relative lack of proximity or emissions. **Surface and Groundwater** The proposed development will involve connecting to the existing water services which currently service the larger KCC site. There is no proposal for the discharge to or abstraction of surface or groundwater due to the proposed development.
Excavation requirements	There are no excavation requirements within the Natura 2000 sites.
Transportation requirements	No traffic movements will affect Natura 2000 sites.
Duration of construction, operation, decommissioning etc.	The development of the Site is likely to extend over the long-term e.g. 15 to 60 years or become permanent. However, this will not cause any likely effect on the Natura 2000 site.
Other	None.

4.2 Describe any likely changes to the Site arising as a result of:

Reduction of habitat area	None to Natura 2000 sites.
Disturbance to key species	Disturbance to Natura qualifying species is considered to be highly improbable.
Habitat or species fragmentation	There will be no habitat or species fragmentation. The Site is not part of the Natura 2000 sites in question and no resources are required from it. Designated habitats

Reduction of habitat area	None to Natura 2000 sites.
	and species of the SACs will not be impacted given their distance and lack of connectivity with the Site.
Reduction in species density	No reduction in species density is anticipated.
Changes in key indicators of conservation value (water quality etc.	None.
Climate change	No measurable contribution.

4.3 Describe any likely impacts on the Natura 2000 sites as a whole in terms of:

Interference with the key relationships that define the structure of the site:	No impacts are likely.
Interference with key relationships that define the function of the site	No impacts are likely.

4.4 Provide indicators of significance as a result of the identification of effects set out above in terms of:

Loss (Estimated percentage of lost area of habitat)	There will be no habitat loss.
Fragmentation	There will be no habitat fragmentation.
Disruption and disturbance	Disturbance and disruption to species is considered highly unlikely. Species for which the Natura 2000 sites have been designated for are highly unlikely to utilise the Site or be influenced by the Site in terms of water quality due to distance and a lack of environmental connectivity between sites.

Loss (Estimated percentage of lost area of habitat)	There will be no habitat loss.
Change to key elements of the site (e.g. water quality etc.)	None.

4.5 Cumulative Impact

Cumulative impacts are defined as impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project (European Communities, 1999). A review of the relevant County Council planning website was undertaken for details of other developments in the area which may lead for the potential for cumulative impacts to arise.

The proposed project will connect up to the existing foul/sewage pipework, given the scale of the Project it is considered unlikely that this additional contribution of waste would amount to a measurable cumulative impact.

4.6 Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is unknown

The proposed Project is not located within, or directly adjacent to, any European site. The Appropriate Assessment screening process considered potential impacts which may arise during the construction, operational, closure and restoration works for the proposed development. Through an assessment of the pathways for effects and an evaluation of the Project, taking account of the processes involved and the significant distance of separation between European sites in the wider study area, it has been evaluated that there are no likely significant adverse effects on the qualifying interests or the conservation objectives of any designated European site. In conclusion, it has been evaluated that there are no likely significant adverse effects arising from the proposed Project to any European site, whether direct, indirect, or in-combination, to the conservation objectives of the habitats or species for which it was designated, either alone or in combination with other plans or projects. Consequently, this proposed development does not need to advance in the Appropriate Assessment process or require a Natura Impact Statement.

5.0 DATA COLLECTED TO CARRY OUT THE ASSESSMENT

The assessment was carried out by:

Hannah McGillycuddy MSc., Geo-Environmental Scientist.

Reviewed by:

Freddy Brookes MSc., MCIEEM – Senior Ecologist Golder Associates.

Sources of Data:

Existing information from published and unpublished reports, project description and records, NPWS, GSI, EPA and MyPlan.ie.

Level of assessment completed:

Field Survey, Desktop study and Screening report.

6.0 REFERENCES

Environmental Protection Agency, 2019a: Unified GIS Application “EPA Maps”, https://gis.epa.ie/EPAMaps/, accessed 2 March 2020.

Environmental Protection Agency, 2019b: https://www.epa.ie/water/wm/groundwater/, accessed 2 March 2020.

Geological Survey Ireland, 2019a: Geological Survey Ireland Groundwater Data Viewer, https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228, accessed 2 March 2020.

Geological Survey Ireland, 2019b: Source Protection Area Data Viewer, https://data.gov.ie/dataset/gsi-source-protection-areas, accessed 2 March 2020.

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