

# Appropriate Assessment Screening Report

**Re: Planning application for the construction of  
a Data Storage Facility at Cruiserath, Dublin 17.**

**February 2017**

Screening Assessment as required under Article 6(3) of the Habitats Directive (Council Directive 92/43/EEC)

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# Table of Contents

Introduction .....	3
Legislative background .....	3
Appropriate Assessment Methodology.....	4
Stage 1 of Appropriate Assessment Process: Appropriate Assessment Screening .....	6
Description of the proposed project .....	6
Description of the existing environment.....	9
Identification of Natura 2000 sites .....	16
Elements of the Project Likely to Give Rise to Impacts.....	20
Screening Matrices for Appropriate Assessment .....	20
Description of any Likely Direct, Indirect or Secondary Impacts on Natura 2000 sites .....	20
Description of any Likely Changes to Natura 2000 sites .....	21
Description of any Likely Impacts on Natura 2000 sites as a whole.....	22
Indicators of Significance as a Result of the Identification of Effects.....	22
Description of any Likely Impacts of the Project on Natura 2000 sites.....	23
Conclusions on the Screening Process.....	25
References .....	26

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## Introduction

This Appropriate Assessment Screening Report presents the results of screening of a plan to construct a Data Storage Facility at Cruiserath, Dublin 15.

Article 6(3) of the EU Habitats Directive requires that all plans and projects must be screened to determine if there are any potential impacts on Natura 2000 sites i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). The screening process aims to establish whether a full Appropriate Assessment (and Natura Impact Statement) is required in a particular case.

A screening report provides the information necessary for the Competent Authority to complete an Appropriate Assessment Screening. Dr Janice Fuller MCIEEM is a Consultant Ecologist with over ten years' experience of ecological survey, habitat assessment and monitoring. She was commissioned to conduct the Appropriate Assessment Screening Report for the proposed development at Cruiserath, Dublin 15.

### Legislative background

The introduction of the Birds Directive (1979) and the Habitats Directive (1992) required member states in the European Union to establish the Natura 2000 network of sites of highest biodiversity importance for rare and threatened habitats and species across the EU. In Ireland the Natura 2000 network is comprised of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). SACs are selected for the conservation of Annex I habitats (including priority types) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The annexed habitats and species for which each site is selected correspond to the Qualifying Interests/ Special Conservation Interests of the sites (for SACs and SPAs respectively); from these the conservation objectives of the site are derived.

A key mechanism to protect Natura 2000 sites is the requirement to consider the possible nature conservation implications of any plan or project on the Natura 2000 network, before any decision is made to allow that plan or project to proceed. Competent authorities are required to undertake an Appropriate Assessment to determine any effects a plan or project, alone or in combination with other plans and projects, may have on any Natura 2000 sites, in accordance with Article 6(3) and 6(4) of the Habitats Directive.

**Screening** is **Stage 1** of the Appropriate Assessment process and it aims to determine whether plans, policies or projects are likely to have significant effects on Natura 2000 sites (SACs or SPAs). The Appropriate Assessment Screening Report concludes whether the proposed plan/ project will have any impacts on Natura 2000 site(s) in the surrounding area, either on its own or in combination with other plans or projects, and the significance of those impacts; it records agencies consulted and the response to consultation; references used are also listed. If the conclusion is that there are likely impacts on Natura 2000 sites the process proceeds to Stage 2. If not, no further action is required in this process. This Screening Reports is Stage 1 of the Appropriate Assessment Process. The other Stages are described below but are not relevant to this report.

**Stage 2-** If a full Appropriate Assessment is recommended in the conclusion of Stage 1 (i.e. there are likely impacts on Natura 2000 sites), a Natura Impact Statement should be produced, which includes the description of the NATURA 2000 sites that will be considered further; description of significant impacts on the conservation feature of these sites likely to occur from the project; and, mitigation/recommendations/Conclusions.

**Stage 3-** If mitigation is possible that enables a risk to be avoided fully, then, subject to other necessary approvals, the project or plan may proceed. If mitigation measures are insufficient, or are not actually practicable and

achievable to avoid the risk entirely, then, in the light of a negative assessment, the plan or project may not proceed. A wider search for alternative solutions may need to be considered in Stage 3.

**Stage 4-** This stage is the main derogation process of Article 6(4) which examines whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project that will have adverse effects on the integrity of a NATURA 2000 site to proceed in cases where it has been established that no less damaging alternative solution exists. The extra protection measures for Annex I priority habitats come into effect when making the IROPI case.

The Article 6(3) process does not apply to projects that are directly connected to or necessary for the management of European Sites. This screening report is for a proposed development that is not directly connected to or necessary for the management of European sites and therefore the Article 6(3) process does apply.

### **Appropriate Assessment Methodology**

This report documents the process and results of a Stage 1 Appropriate Assessment screening exercise. It is intended that this document will provide the basis for the Article 6(3) Appropriate Assessment process to be completed by the competent consent authority.

The aim of Stage 1 Appropriate Assessment screening is to establish whether a Natura Impact Statement (NIS- Stage 2 of the AA process) is required. Screening seeks to determine whether the proposed development, along and in combination with other plans or projects, could have significant effects on any Natura 2000 sites in relation to the conservation objectives of the relevant sites and overall integrity. According to Circular NPW 1/10, the precautionary principle must be applied in determining the requirement for Appropriate Assessment in accordance with European Court of Justice case law. Where significant effects are likely, possible or uncertain at the screening state, a NIS must be prepared to allow the consent authority to conduct the Appropriate Assessment.

Screening examines the likely effects of the proposed development, both alone and in combination with other projects and plans, on the receiving environment in terms of the Natura 2000 sites within 15km of the proposed development site and considers whether any possible impacts on any of these Natura 2000 sites could be characterized as significant.

This report was prepared in accordance with the European Commission guidance document 'Assessment of Plans and Projects Significantly affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC' (EC 2001) and the Department of the Environment's 'Guidance on the Appropriate Assessment of Plans and Projects in Ireland' (2009, revised 2010), as well as the requirements of the Circular NPW 1/10 and PSSP 2/10.

Screening includes: describing the project, identifying Natura 2000 sites that may be affected by the project or plan, identifying and describing individual and cumulative impacts likely to result from the project or plan, assessing the significance of the impacts identified on the conservation objectives of the site(s), and excluding sites where it can be objectively concluded that there will be no significant impacts on the conservation objectives.

A walkover survey of the proposed development site was conducted by ecologist, Dr Janice Fuller, on the 2<sup>nd</sup> of March 2016. Habitats within the site were identified (as per the Heritage Council 'Guide to Habitats in Ireland', Fossitt 2000), and the main species for each habitat were noted. Birds were recorded in a walkover survey of the site on the 24<sup>th</sup> of October 2016 by Shane O Neill. Three transects were walked for the bird survey; one on both sides of

the hedgerow, one around the entire site boundary and one over and back across the large tilled field. Signs of mammals were also recorded in both walkover surveys. In addition, any trees and large hedgerow shrubs on site were visually inspected for potential bat roosts using binoculars.

### **Data Sources**

Sources of information that were used to collate data on the Natural 2000 network of sites are listed below:

- Online data available on Natura 2000 sites, other protected sites, species and habitats as held by the National Parks and Wildlife Service (NPWS) [www.npws.ie](http://www.npws.ie), accessed October 2016.
- NPWS (2008) Status of EU Protected Habitats and Species Ireland. NPWS, Dublin.
- Relevant Development Plans
  - Fingal County Development Plan 2011-2017
  - Dublin City Development Plan 2011- 2017

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## Stage 1 of Appropriate Assessment Process: Appropriate Assessment Screening

### Description of the proposed project

The proposed development comprises a data storage facility at Cruiserath, Dublin 17 (see Figure 1 Site Location and Figure 2 Site Layout). The development (to which this planning application and Appropriate Assessment Screening Report relate) will primarily comprise a single storey Data Storage building along the southern boundary of the site. Full details are provided in the planning application documentation.

The Data Storage building will be 363m long x 84.4m wide (including the generator farm to the rear). The building will be approximately 12m high. The administrative area and supporting storage areas etc. will be located within the main building. The building comprises 12 individual data halls – each hall with its own dedicated electrical room, generators and AHUs. The main data building will be supported by a security control building, 110Kv Substation building and related electrical buildings and an on-site attenuation pond.

A construction workforce of c. 250+ (is anticipated during peak construction times. Once operational an anticipated 30+ employees will staff the facility on a shift basis with additional maintenance and support service visitors as required. Full details of the proposed development are contained in the planning application.

Access to the site will be via the the Cruiserath Road R121 with access from the central roundabout opposite Tyrellstown residential area.

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**Figure 1.** Location of proposed Data Storage Facility at Cruise Rath (red dot), north of Mulhuddart. The locations of European sites within the Zone of Influence (15km) outlined in blue (Special Areas of Conservation in red shading and Special Protection Areas in blue shading) are also shown ([www.bingmaps.com](http://www.bingmaps.com)).

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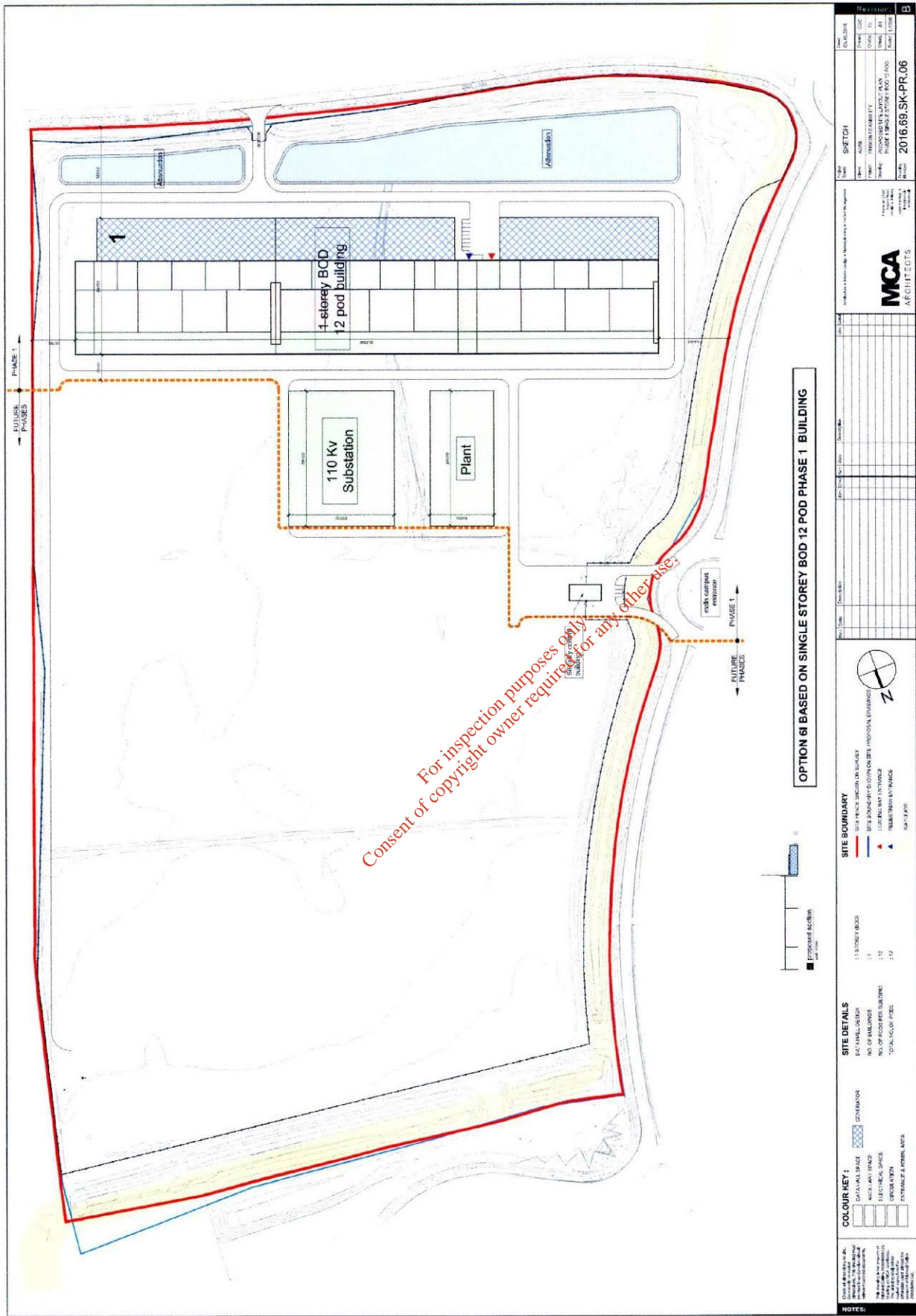


Figure 2 Proposed layout of Data Service Facility development at Cruiserrath.



### Description of the existing environment

The proposed development site at Cruiserath is located in west County Dublin, just north of Mulhuddart Village. The site is a large area of unenclosed land with industrial sites to the east and south, and residential/ commercial developments to the north and west (Figure 3). The land within the site is relatively flat with the exception of an earthen embankment that was built along the western and northern boundaries of the site, much of which was planted with trees and shrubs. Trees and shrubs were also planted along the southern boundary of the site. The interior of the site consists mainly of cultivated land. There is a small length of hedgerow that runs along a field drain within the site. Habitats within the site are described in more detail below. Habitat classification follows Fossitt (2000).



Figure 3. Aerial view of the site, outlined in red, at Cruiserath (www.bingmaps.com)

### Scrub (WS1)/ Tree line (WL2)

The constructed earthen mound that runs along two sides of the site (northern and western boundaries), appears to have been planted with shrubs and trees as part of a landscaping scheme. This area is mainly classified as 'scrub' (WS1) but there are some trees present that form tree lines (WL2) in places e.g. along the southern boundary of the site. Some natural establishment of trees and shrubs has also occurred. Many of the woody species present are non-native e.g. Dogwood (*Cornus* spp.), Beech (*Fagus sylvatica*), Butterfly bush (*Buddleja davidii*), Monterey pine (*Pinus radiata*) but there are some native species present including Briars (*Rubus fruticosus*), Ivy (*Hedera helix*), Alder (*Alnus glutinosa*), Downy Birch (*Betula pubescens*) and occasional Gorse (*Ulex europaeus*).



**Photo 1.** Track running along western edge of site and mound to the right with scrub

### **Grassland (GS2/GS1/GS4)**

The interior slopes of the constructed mound are covered with tall grassland, as well as some scrub. Tall grassland also occurs on flatter ground, around the western edge of the site. This grassland is rank (hasn't been cut or grazed in some time) and is dominated by Fescue grasses (*Festuca* spp.), with Cock's Foot Grass (*Dactylis glomerata*), Ragweed (*Senecio jacobea*), Knapweed (*Centaurea nigra*), Thistle (*Cirsium* spp.), Dock (*Rumex* spp.) and False oat-grass (*Arrhenatherum elatius*). This grassland appears to correspond to 'GS2 Dry meadows and grassy verges'.



**Photo 2.** Tall grassland on mound (GS2)





**Photo 3.** Tall grassland on level ground on western edge of site (GS2)

Grassland with a much shorter turf occurs on flatter ground. The shorter turf may be as a result of grazing from Rabbits and/or Hares, or may be because the vegetation has recently recolonized the area. No Rabbits were recorded during the walkover survey but lots of droppings and burrows were noted. A few Hares were observed on the site in the October walkover survey.

Mosses are abundant within this grassland and the soil appears to have poor drainage (possibly from soil compaction). Species present include Creeping Bent (*Agrostis stolonifera*), Couch grass (*Elytrigia repens*), Ribwort Plantain (*Plantago lanceolata*), White clover (*Trifolium repens*) and the mosses *Hylocomium splendens*, *Thuidium tamariscinum* and *Brachythecium rutabulum*. Carnation sedge (*Carex panicea*), Soft rush (*Juncus effuses*) and the moss, *Calliergonella cuspidata* occurs in damp spots. This grassland appears to correspond to an intimate mosaic of 'GS1 Dry calcareous and neutral grassland/ GS4 Wet grassland'.



**Photo 4.** Short turf grassland

### Cultivated land/ Tilled land (BC3)

The majority of the interior of the site is cultivated land that has been tilled. It appears to have been reseeded at the time of survey in March 2016.



**Photo 5.** Large tilled field which comprises much of the site.

### Hedgerow (WL1)

There is a length of hedgerow in the south-western corner of the site, which runs along a drainage ditch. The species present in the hedgerow include Hawthorn (*Crataegus monogyna*), Ivy (*Hedera helix*), Briars (*Rubus fruticosus* agg.), Blackthorn (*Prunus spinosa*), Elder (*Sambucus nigra*), Dog rose (*Rosa canina*), Nettle (*Urtica dioica*), Rosebay willowherb (*Chamerion angustifolium*) and Thistles (*Cirsium* spp.). The hedgerow has many gaps and no emergent trees.



**Photo 6.** Section of hedgerow that runs mainly north-south on either side of a field drain.



#### **Drainage ditches (FW4)**

An artificial field drain occurs in the south-western corner of the site, with hedgerow along most of its length. Surface water was present at the time of survey in much of the drain. The drainage ditch was mostly devoid of aquatic or wetland vegetation but was choked with grass along much of its length (mainly Common Bent).



**Photo 7.** Section of field drain with no hedgerow

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**Table 1.** Ecological value of the habitats recorded at the proposed development site in Cruiserath.

Habitat	Ecological value*	Basis
Grassland (GS2/ GS1/ GS4)	Local (high)	Tall and wet grassland has some value for birds, small mammals invertebrates (food and cover)
Hedgerow (WL1)	Local (high)	Hedgerow has value for birds and small mammals (food and cover); there are few hedgerows in the adjacent landscape
Cultivated land (BC3)	Local (low)	Little value for wildlife due to disturbance and lack of cover although may be used by birds and small mammals for foraging
Scrub (WS1)	Local (high)	Scrub has value for birds and small mammals (food and cover)
Treeline (WL1)	Local (high)	Treeline has value for birds and small mammals (food and cover)

\*NRA 2009. *Guidelines for Assessment of Ecological Impact of National Roads Schemes.*

No Badger signs (feeding or latrines) or setts were observed on the site. There is limited habitat suitable for Badgers on the proposed development site although they have been recorded on adjacent sites (David McDermott pers. comm.). There is little tree or shrub cover within the site, which is very open, apart from the length of hedgerow in the south-western corner and the planted shrubs and treeline along the boundary of the site. No evidence of Hedgehogs was recorded although they may be present. Badgers and Hedgehogs are protected under the Wildlife Acts.

Fox scat was recorded on the site in multiple locations. A possible a Fox den was also recorded. There were no signs of prints or fur around the entrance suggesting that it was a disused den. Several Hares (c. 5) were observed in the grassland habitat. Several Rabbit burrows were also noted and abundant droppings.

No evidence of Otters was observed on the site, which contains no features suitable for this species. Otters are protected under the Wildlife Acts and Annex II of the EC Habitats Directive.

In relation to potential roost sites for Bats, there are no mature or large trees within the proposed development site (although there are some to the north of the site). There are mature shrubs within the hedgerow (Hawthorn primarily) on the site. These were assessed visually at daytime to determine if PRFs (potential roost features) were present. It was considered that there were negligible habitat features on the site likely to be used by roosting bats (Collins 2016).

There was no stonework or built structures with bat roost potential within the proposed development site. The hedgerow, tree line and adjacent grassland may offer feeding potential to some species of Bat based on known Bat habitat preferences (Lundy *et al.* 2011). The site may have limited value for commuting Bats, along the hedgerow or boundary tree lines. All Bats are protected under the Wildlife Acts. There is no record of Lesser Horseshoe Bats in the 10km square in which the site occurs.

No amphibians (Newts or Frogs) or reptiles (Common Lizard) were observed during the surveys. This site contains features of limited value for these species although there is a small field drain. Amphibians and reptiles are protected under the Wildlife Acts.



A limited range of birds were recorded in the bird survey walkover (Table 2). All species noted are relatively common in an Irish context and widespread, apart from the Red-listed Black-headed Gull. The hedgerow and treelines are likely to be of importance for nesting and breeding birds. All birds are protected under the Wildlife Acts.

**Table 2.** Birds recorded during walkover survey

Common name	Scientific name	Conservation status <sup>1</sup>
Black-headed Gull	<i>Larus ridibundus</i>	Red
Starling	<i>Sturnus vulgaris</i>	Amber
Mistle Thrush	<i>Turdus viscivorus</i>	Amber
Robin	<i>Erithicus rubecula</i>	Amber
Stone Chat	<i>Saxicola torquata</i>	Amber
Tree Sparrow	<i>Passer montanus</i>	Amber
Skylark	<i>Alauda arvensis</i>	Amber
Common Gull	<i>Larus canus</i>	Amber
Great Black-Back Gull	<i>Larus marinus</i>	Amber
Rook	<i>Corvus frugelicus</i>	Green
Jackdaw	<i>Corvus monedula</i>	Green
Magpie	<i>Pica pica</i>	Green
Woodpigeon	<i>Columba palumbus</i>	Green
Wren	<i>Troglodytes troglodytes</i>	Green
Blackbird	<i>Turdus merula</i>	Green
Dunnock	<i>Prunella modularis</i>	Green
Hooded Crow	<i>Corvus cornix</i>	Green
Reed Bunting	<i>Emberiza schoeniculus</i>	Green
Common Buzzard	<i>Buteo buteo</i>	Green
Chaffinch	<i>Fringilla coelebs</i>	Green
Meadow Pipit	<i>Anthus pratensis</i>	Green

Black-headed Gulls (Red-listed) are coastal birds that utilise ploughed fields in winter. Much of the proposed development site is tilled and may provide feeding ground in winter. Black-headed Gulls are on the Red list due to rapidly declining breeding populations. Ireland has a small breeding population (breeds mainly on islands in large lakes in western Ireland), which swells in winter when significant numbers arrive from continental Europe.

A Skylark (Amber-listed) was recorded on the site. Skylark may breed within the site in the rank grassland. A Buzzard was recorded in flight but Buzzards are unlikely to nest within the site due the lack of suitable habitat (i.e. mature trees and large hedgerows). The proposed development site is in a relatively built up area and therefore not ideal for breeding Buzzards. Evidence of a plucked Wood Pigeon was recorded during the October walkover survey suggesting that Peregrine Falcon was hunting over the site. Several other birds were recorded (Table 2) but none that are likely to depend significantly on any features within the site.

The proposed development site as a whole is considered to be of Local Importance (Lower Value) as per the NRA Guidance (NRA 2009). The majority of the site is a large cultivated field. There is a small area of semi-natural grassland (GS), a relatively short-stretch of hedgerow (WL1) and associated drainage ditch, planted shrubs (WS1) and treeline (WL2) that may have some local value for wildlife. The tilled field may have limited value as foraging ground

<sup>1</sup> <http://www.birdwatchireland.ie/OurWork/SpeciesHabitatConservationinIreland/BirdsofConservationConcern/> Accessed October 2016

for birds and small mammals. The hedgerow may have value for nesting birds and possible for commuting or roosting bats but it has a poor structure and low vigour. Other small mammals may also utilise the site but the lack of hedgerow and tree cover reduces the value of the site for mammals and birds.

### Identification of Natura 2000 sites

The proposed development site at Cruiserath does not occur within or directly adjacent to a Natura 2000 site or a site under consideration as a Natura 2000 site (i.e. Special Area of Conservation or Special Protection Area) (Figure 1). Special Areas of Conservation (SACs) are sites of international importance due to the presence of listed habitats or species that are of European importance. Special Protection Areas (SPAs) for Birds are designated for the protection of endangered species of wild birds. SPAs are selected for one or a combination of the following: listed rare and vulnerable species (as listed in Annex I of EU Birds Directive 2009/147/EC); regularly occurring migratory species, such as ducks, geese and waders; wetlands, especially those of international importance, which attract large numbers of migratory birds each year.

Seven Natura 2000 sites [Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)] were identified within the potential Zone of Influence (15km) using QGIS version 2.14 (Table 3, Figure 1). Table 4 provides a summary of each Natura site within the zone of influence including Qualifying Interests or Special Conservation interests, for which the sites were selected and the Conservation Objectives. Site synopsis information for each site is provided in [www.npws.ie](http://www.npws.ie).

The nearest Natural Heritage Area (NHA) or proposed Natural Heritage Area (pNHA) (which isn't also a European Site) to the proposed development site is the Royal Canal pNHA (Site Code 002103) located c.4km to the south. There is no hydrological link between this pNHA and the proposed development site. Other NHAs in the wider landscape include Santry Demesne to the north, Liffey Valley and the Grand Canal to the south. Considering the lack of source-receptor pathways (i.e. hydrological connections) and the distance between these sites and the proposed development site, no likely impacts of the proposed development on these sites are predicted.

**Table 3.** Details of Natura 2000 sites within 15km of the proposed development site

	<b>Natura 2000 Site</b>	<b>Designation</b>	<b>Code</b>	<b>Distance from proposed development site</b>
1	Malahide Estuary	SAC	000205	13km
2	South Dublin Bay	SAC	000210	14km
3	North Dublin Bay	SAC	000296	15km
4	Rye Water Valley/ Carton	SAC	001398	8.7km
5	South Dublin Bay and River Tolka Estuary	SPA	004024	14km
6	Malahide Estuary	SPA	004025	13km
7	North Bull Island	SPA	004006	12km

**Table 4.** Summary of information relating to Natura 2000 sites within 15km of the proposed development site

Natura 2000 Site	Qualifying Interests / Special Conservation Interests <i>*Priority habitats</i>	Overall conservation status; SAC NPWS (2013) SPA BoCCI	Conservation Objectives*/ ** www.npws.ie
Malahide Estuary SAC	1140 Mudflats and sandflats not covered by seawater at low tide 1310 Salicornia and other annuals colonising mud and sand 1320 Spartina swards (Spartinion maritimae) 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (Juncetalia maritimi) 2120 Shifting dunes along the shoreline with Ammophila arenaria (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)	Poor Poor Poor Poor Poor Bad Bad	NPWS (2013) Conservation Objectives: Malahide Estuary SAC 000205. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht
South Dublin Bay SAC	1140 Mudflats and sandflats not covered by seawater at low tide	Poor	NPWS (2013) Conservation Objectives: South Dublin Bay SAC 000210. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht
North Dublin Bay SAC	1140 Mudflats and sandflats not covered by seawater at low tide 1210 Annual vegetation of drift lines 1310 Salicornia and other annuals colonising mud and sand 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1395 Petalwort Petalophyllum ralfsii 1410 Mediterranean salt meadows (Juncetalia maritimi)	Poor Poor Poor Poor Good Poor	NPWS (2013) Conservation Objectives: North Dublin Bay SAC 000206. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht

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	2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with Ammophila arenaria (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes) 2190 Humid dune slacks	Poor Bad Bad Bad	
Rye Water Valley/ Carton	7220 Petrifying springs with tufa formation (Cratoneurion) 1014 Narrow-mouthed Whorl Snail Vertigo angustior 1016 Desmoulin's Whorl Snail Vertigo moulinsiana	Bad Poor Bad	NPWS (2016) Conservation objectives for Rye Water Valley/Carton SAC [001398]. Generic Version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.
South Dublin Bay and River Tolka Estuary SPA	A046 Brent Goose Branta bernicla hrota A130 Oystercatcher Haematopus ostralegus A137 Ringed Plover Charadrius hiaticula A141 Grey Plover Pluvialis squatarola A143 Knot Calidris canutus A144 Sanderling Calidris alba A149 Dunlin Calidris alpina alpina A157 Bar-tailed Godwit Limosa lapponica A162 Redshank Tringa totanus A179 Black-headed Gull Chroicocephalus ridibundus A192 Roseate Tern Sterna dougallii A193 Common Tern Sterna hirundo A194 Arctic Tern Sterna paradisaea	Green Amber Green Amber Amber Green Red Amber Red Red Red Amber Amber Amber	NPWS (2015) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
Malahide Estuary SPA	A005 Great Crested Grebe Podiceps cristatus A046 Brent Goose Branta bernicla hrota A048 Shelduck Tadorna tadorna A054 Pintail Anas acuta A067 Goldeneye Bucephala clangula A069 Red-breasted Merganser Mergus serrator A130 Oystercatcher Haematopus ostralegus A140 Golden Plover Pluvialis apricaria	Amber Green Amber Red Red Green Amber Green	NPWS (2013) Conservation Objectives: Malahide Estuary SPA 004025. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

	A141 Grey Plover <i>Pluvialis squatarola</i> A143 Knot <i>Calidris canutus</i> A149 Dunlin <i>Calidris alpina alpina</i> A156 Black-tailed Godwit <i>Limosa limosa</i> A157 Bar-tailed Godwit <i>Limosa lapponica</i> A162 Redshank <i>Tringa totanus</i>	Amber Amber Red Amber Amber Red	
North Bull Island SPA	A046 Brent Goose <i>Branta bernicla hrota</i> A048 Shelduck <i>Tadorna tadorna</i> A052 Teal <i>Anas crecca</i> A054 Pintail <i>Anas acuta</i> A056 Shoveler <i>Anas clypeata</i> A130 Oystercatcher <i>Haematopus ostralegus</i> A140 Golden Plover <i>Pluvialis apricaria</i> A141 Grey Plover <i>Pluvialis squatarola</i> A143 Knot <i>Calidris canutus</i> A144 Sanderling <i>Calidris alba</i> A149 Dunlin <i>Calidris alpina alpina</i> A156 Black-tailed Godwit <i>Limosa limosa</i> A157 Bar-tailed Godwit <i>Limosa lapponica</i> A160 Curlew <i>Numenius arquata</i> A162 Redshank <i>Tringa totanus</i> A169 Turnstone <i>Arenaria interpres</i> A179 Black-headed Gull <i>Chroicocephalus ridibundus</i>	Green Amber Amber Red Red Amber Red Amber Amber Green Red Amber Green Red Red Turnstone Red	NPWS (2015) Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

\* Conservation Objectives for SAC's overall to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected. Detailed objectives are provided for some SACs and the references are provided above.

\*\* Conservation Objectives for SPA's overall to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests. Detailed objectives are provided for some SACs and the references are provided above

## Elements of the Project Likely to Give Rise to Impacts

The Natura 2000 sites in Dublin Bay (>8km from the proposed development site) are connected by two potential pathways with the proposed development site at Cruiserath i.e. potentially via surface water generated at the development site during construction and operation and discharged into Dublin Bay via the local sewer network and the River Tolka, and potentially via foul effluent generated at the proposed development site and discharged from Ringsend WWTW (Waste Water Treatment Works) into Dublin Bay.

During construction phase, works such as site clearance and removal of vegetation may result in silt-laden run-off. Noise and physical disturbance associated with construction activity may disturb wildlife locally.

Once the site is operational, surface water collecting on roofs, car parks and sealed footpaths will drain to a surface water attenuation pond in the southern end of the site, which will overflow into the public surface water sewer. Storm water will be discharged from the pond via a flow control device that has been sized according to the allowable site discharge rates, which will eventually discharge to the River Tolka via the existing sewer network. The River Tolka discharges to the mouth of the Liffey Estuary in Dublin Bay.

Sanitary effluent from the site will be sent directly to the foul sewer line. Prior to connection to the foul drainage network, canteen and kitchen waste, if any, will be passed through a grease trap to remove oils, fats and greases. Effluent will be carried to Ringsend WWTW (Waste Water Treatment Works) by the existing municipal system. Following treatment at Ringsend WWTW, effluent will be discharged to Dublin Bay. The proposed development does not include a requirement for a process drainage network. The Ringsend WWTW is scheduled for expansion and upgrade in the near future (<http://www.dublincity.ie/main-menu-services-water-waste-and-environment-ringsend-waste-water-treatment/ringsend-wastewater>; accessed November 2016).

## Screening Matrices for Appropriate Assessment

The following section includes a number of screening matrices designed to assess the potential for the proposed development to give rise to significant impacts on the conservation objectives or overall integrity of the Natura 2000 sites within 15km of the proposed development sites. These matrices are based on those contained within the European Commission guidance document "Assessment of plans and projects significantly affecting Natura 2000 sites- Methodology Guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission, 2001".

## Description of any Likely Direct, Indirect or Secondary Impacts of the Project on Natura 2000 sites

Any likely direct, indirect or secondary impacts of the proposed development, both alone and in combination with other plans or projects, on SACs or SPAs by virtue of the following criteria: size and scale, land-take, distance from the Natura 2000 site(s) or key features of the site, resource requirements (such as water abstraction), emissions (disposal to land, water or air), excavation requirements, transportation requirements and duration of construction, operation, decommissioning are presented in Table 5.

**Table 5.** Likely impacts of the project on Natura 2000 sites

Likely Direct, Indirect or Secondary Impacts of the Project on the Natura 2000 sites	
<b>Size and Scale</b>	As the proposed development (i.e. development of a Data Service Facility) is not located within any European site, no direct impact on any Natura 2000 site is predicted owing to the size and scale of the project. The nearest Natura 2000 site for the proposed development site is >8km distance. Indirect impacts are not predicted as there are limited hydrological connections between the proposed development site and Natura 2000 sites, which might impact on water quality in Dublin Bay. There are no hydrological connections with the Rye Valley. Sanitary effluent will be treated by the Ringsend WWTW (which is scheduled for upgrade). Surface water will be collected in



	an attenuation pond allowing sediments to settle. Storm water will discharge to public water sewer at allowable rates.
<b>Land-take</b>	None. Works will not result in any land take within the Natura 2000 network.
<b>Distance from Natura 2000 site(s) or key features of the site(s)</b>	As no works are proposed within any Natura 2000 sites, there is no potential for direct impacts on these sites. The closest Natura 2000 site is the Rye Valley/Carton SAC (8.7km distance).
<b>Resource Requirements</b>	None predicted, as no resources from any Natura 2000 sites will be exploited in the course of the proposed development
<b>Emissions</b>	There will be no direct emission from the proposed development to any Natura 2000 site. Any emissions from the proposed development either during the construction or operational phase are unlikely to impact on any Natura 2000 sites as the nearest site is >8km distance.
<b>Excavations</b>	There will be some excavation on the proposed development site as part of site preparation works. Excavation has the potential to give rise to an increase in silt-laden run off to watercourses and an associated deterioration in water quality. The Natura 2000 sites within the Zone of Influence are >8km from the development site. Any silt-laden surface run-off will be channeled into the attenuation ponds allowing sediments to settle.
<b>Transportation requirements</b>	Transport to the proposed development site will be on the existing road network and no new routes are required.
<b>Duration of construction, Operation and Decommissioning</b>	Construction phase is estimated to be 12- 18 months. The facility is expected to be operational for the foreseeable future.
<b>Cumulative impacts with other plans and projects</b>	None predicted. It is considered that there will be no significant impact on Natura 2000 sites associated with this project, and no significant cumulative negative impacts of this project in combination with other land-use activities or infrastructural projects in the surrounding area. The site is surrounded by industrial and residential developments although it is close to the rural fringe of west County Dublin.

### Description of any Likely Changes to Natura 2000 sites

Any likely changes to the Natura 2000 sites as a result of the development proposal are described below in Table 6 with reference to the following criteria: reduction of habitat area, disturbance to key species, habitat or species fragmentation, reduction in species density, changes in key indicators of conservation value (e.g. water quality etc.) and climate change.

**Table 6.** Likely changes to the Natura 2000 sites

<b>Likely changes to the Natura 2000 sites</b>	
<b>Reduction of Habitat Area</b>	None. There will be no reduction of any habitat area within any Natura 2000 site as a result of the proposed development.
<b>Disturbance to Key Species</b>	None predicted as the proposed development site does not support any of the Qualifying Interests or Special Conservation Interests for the Natura 2000 sites in the Zone of Influence. Black-headed Gulls utilize tilled fields as foraging habitat but there are no records from the site.
<b>Habitat or Species Fragmentation</b>	None predicted as the proposed development site does not support any of the Qualifying Interests or Special Conservation Interests for the Natura 2000 sites in

	the Zone of Influence.
<b>Reduction in Species Density</b>	There is no potential for direct or indirect reduction in species density. There are no direct hydrological connections between the proposed development site and Natura 2000 sites in Dublin Bay although there are limited indirect hydrological connections. There are no hydrological connections with the Rye Valley. Sanitary effluent from the site will be treated by the Ringsend WWTW (which is scheduled for upgrade). Surface water will be collected in an attenuation pond allowing sediments to settle. Storm water will discharge to public water sewer at allowable rates. The proposed development site does not support any of the Qualifying Interests or Special Conservation Interests for the Natura 2000 sites in the Zone of Influence although Black-headed Gull may utilize the tilled field.
<b>Changes in Key Indicators of Conservation Value</b>	There are no direct hydrological connections between the proposed development site and Natura 2000 sites in Dublin Bay although there are limited indirect hydrological connections. There are no hydrological connections with the Rye Valley. Sanitary effluent from the site will be treated by the Ringsend WWTW (which is scheduled for upgrade). Surface water will be collected in an attenuation pond allowing sediments to settle. Storm water will discharge to public water sewer at allowable rates. No changes in key indicators are therefore predicted.
<b>Climate Change</b>	The development may have a negative impact on climate change by removing vegetation but the proposed landscaping scheme includes many trees, which will have a positive impact.

#### Description of any Likely Impacts on Natura 2000 sites as a whole

No direct impacts are predicted on any Natura 2000 site as a result of the proposed development. The primary pathway for indirect impacts on Natura 2000 sites resulting from the proposed development is the surface water network but any surface water will be channeled into attenuation ponds, which if constructed and operated correctly, should intercept any silt-laden run-off. The usual protocols for bunding areas for storage of any fuels, oils, cement etc. will apply.

There is no suitable habitat on the proposed development site for any of the qualifying features/ special conservation interests apart from the tilled field, which may provide foraging habitat for Black-headed Gulls.

#### Indicators of Significance as a Result of the Identification of Effects

Indicators of significance are provided below in Table 7 for any impacts identified above in terms of loss, fragmentation, disruption, disturbance and changes to key elements of the site, such as water quality.

**Table 7** Indicators of significance as a result of the identification of effects

<b>Indicators of significance as a result of the identification of effects</b>	
<b>Loss</b>	The potential for direct or indirect loss of suitable habitat for qualifying interests of SACs in the zone of influence is not likely to be significant due to the limited nature of hydrological connections between the sites and the proposed development site. The potential for indirect loss of habitat for special conservation interests of SPAs within 15km is not likely to be significant as there is no suitable habitat within the proposed development site apart from the tilled field, which may have some value

	for Black-headed Gulls as foraging habitat.
<b>Fragmentation</b>	The potential for fragmentation of habitats or populations qualifying interests/ special conservation interests of Natura 2000 sites in the zone of influence is not likely to be significant due to the limited nature of indirect hydrological connections or other pathways between the sites and the proposed development site.
<b>Disruption</b>	The potential for disruption of ecological processes in Natura 2000 sites in the zone of influence is not likely to be significant due to the limited nature of indirect hydrological connections or other pathways between the sites and the proposed development site.
<b>Disturbance</b>	Any potential for disturbance of special conservation interest / qualifying interest populations is not likely to be significant as there is no suitable habitat for these species on the proposed development sites apart from the Black-headed Gull and the distance between the sites and the development site (>8km).
<b>Changes to key elements of the site</b>	The potential for changes to key elements of the Natura 2000 sites is not likely to be significant due to the limited nature of hydrological connections and lack of other pathways between the sites and the proposed development site. The potential for indirect loss of habitat for special conservation interests of SPAs within 15km is low as there is no suitable habitat within the proposed development site.

#### **Description of any Likely Impacts of the Project on Natura 2000 sites**

Table 8 summarises the potential for likely significant impacts of the project on the individual Natura 2000 sites within 15km of the proposed development.

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**Table 8** Summary of potential for likely significant impacts on the Natura 2000 site as a result of the proposed development

Natura 2000 site	Potential for likely significant impacts
Malahide Estuary SAC	There is considered to be no possibility of either direct or indirect impacts on the qualifying interests (coastal habitats and species) due to the distance between the SAC and the proposed development site (13km) and the lack of direct hydrological connections.
South Dublin Bay SAC	There is considered to be no possibility of either direct or indirect impacts on the qualifying interests (coastal habitats) due to the distance between the SAC and the proposed development site (14km) and the lack of direct hydrological connections.
North Dublin Bay SAC	There is considered to be no possibility of either direct or indirect impacts on the qualifying interests (coastal habitats and species) due to the distance between the SAC and the proposed development site (15km) and the lack of direct hydrological connections.
Rye Water Valley/ Carton SAC	There is considered to be no possibility of either direct or indirect impacts on the qualifying interests (petrifying springs, narrow-mouthed whorl snail and Desmoulin's whorl snail) due to the distance between the SAC and the proposed development site (8.7km) and the lack of direct hydrological connections.
South Dublin Bay and River Tolka Estuary SPA	There is considered to be little possibility of either direct or indirect impacts on the special conservation interests (several species of birds listed in Table 2) due to the distance between the SPA and the proposed development site (14km) and the lack of direct hydrological connections. Black-headed Gull feed on tilled fields, such as that in Cruiserath, in winter but this habitat is common in north and west Dublin.
Malahide Estuary SPA	There is considered to be no possibility of either direct or indirect impacts on the special conservation interests (several species of birds listed in Table 2) due to the distance between the SPA and the proposed development site (13km) and the lack of direct hydrological connections.
North Bull Island SPA	There is considered to be little possibility of either direct or indirect impacts on the special conservation interests (several species of birds listed in Table 2) due to the distance between the SPA and the proposed development site (12km) and the lack of direct hydrological connections. Black-headed Gull feed on tilled fields, such as that in Cruiserath, in winter but this habitat is common in north and west Dublin.

## Conclusions on the Screening Process

On the basis of the screening matrices detailed above, which consider the potential impacts of the proposed development on Natura 2000 sites in the absence of mitigation measures (not considered at the screening stage), it is considered that the proposed project is not likely to have any significant impacts on any Natura 2000 sites, alone or in combination with other plans or projects in the area.

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## References

### AA Guidance

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<http://www.birdwatchireland.ie/OurWork/SpeciesHabitatConservationinIreland/BirdsofConservationConcern/tabid/178/Default.aspx>

National Parks and Wildlife Service (Natura 2000 site synopses, conservation objectives etc.)

[www.npws.ie](http://www.npws.ie)