



## **Preliminary Construction and Environmental Management Plan**

Proposed Strategic Housing Development at Carrickmines Great,  
Glenamuck Road South, Dublin 18

July 2022

**Waterman Moylan Consulting Engineers Limited**

Block S, Eastpoint Business Park, Alfie Byrne Road, Dublin  
[www.watermangroup.com](http://www.watermangroup.com)



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## Quality Assurance – Approval Status

This document has been prepared and checked in accordance with  
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Issue	Date	Prepared by	Checked by	Approved by
No. 1	Jul '22	M.Doyle	<i>Joseph Gibbons</i>	<i>Joseph Gibbons</i>

## Comments

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## Disclaimer

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We disclaim any responsibility to the Client and others in respect of any matters outside the scope of the above.

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## 1. Introduction

Waterman Moylan in conjunction with the applicant have prepared the following preliminary Construction and Environmental Management Plan for the implementation of the construction phase of the proposed Strategic Housing Development to the rear of Cairnbrook Estate and in the townland of Carrickmines Great, Glenamuck Road South, Dublin 18. This report has been prepared as part of a planning submission to An Bord Pleanála for the proposed SHD development of 167 No. residential units and 1 No. Creche.

The plan sets out typical arrangements and measures which may be undertaken during the construction phase of the project in order to mitigate and minimise disruption / disturbance to the area around the site. The construction methodology for the proposed development is based upon traditional construction methods being implemented on site comprising of standard mechanical excavations for strip footing foundations to the houses and the apartments. Similarly underground drainage and services will be installed in a traditional manner comprising open excavations for pipe trenches and backfilling. There are no requirements for special construction methods to be adopted on the development site. The purpose of this report is to summarise the possible impacts likely to arise from the construction of the development and to set out mitigation measures to be implemented and to guide the Contractor who will be required to develop and implement the Construction and Environmental Management Plan on site.

This Construction and Environmental Management Plan is indicative only and should not be construed as representing the exact method or sequence in which the construction works shall be carried out.

As is normal practice, the Main Contractor for the project is responsible for the method in which the demolition and construction works are carried out and to ensure that best practices and all legal obligations including Local Authority requirements and Health and Safety legislation are complied with. The main contractor is also responsible for the design and installation of all temporary works required to complete the permanent works. This plan can be used by the Main Contractor to develop their final Construction and Environmental Management Plan.

## 2. Site Description

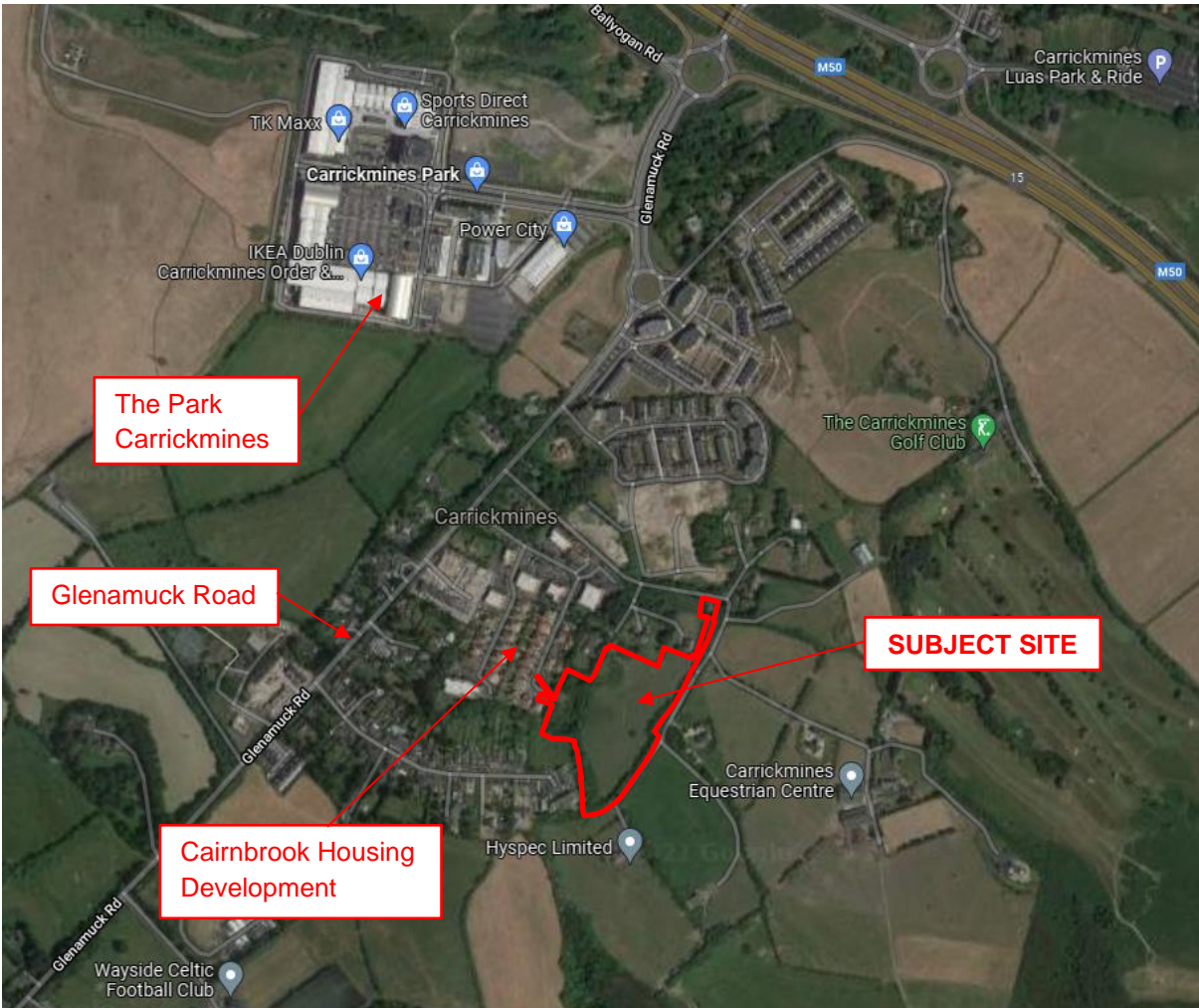
### 2.1 Site Location

The site is located within the townland of Carrickmines Great, Glenamuck Road South, Dublin 18. The lands are located to the south and west of Springfield Lane, to the east of Cairnbrook residential estate and north of Rockville Drive. There is undeveloped farmland along the eastern border of the site boundary.

The proposed development is approximately 1 km from the M50, 1.17 km south of the Ballyogan Wood Luas station and 14km south of Dublin City Centre.

Refer to Figure 1 for the location of the proposed development.

Figure 1. Site Location Map (Image from Google Maps)



### 2.2 Existing Development

The total site area is approximately 3.056 hectares. The site is currently greenfield. There are no dwellings or structures on the subject site. Disused farm sheds stand on a section of land in the ownership of the applicant, located on Springfield Lane to the north of the subject site. The site falls from

southeast to northwest with the highest ground level of 102 m OD Malin and the lowest ground level of 91.62m OD Malin. There are a number of well-established trees and foliage along the border of the subject site.

There is 1 No. existing vehicular access to the site off Springfield Lane. There are a further 3 No. gates providing access to the site around the site perimeter.

## 2.3 Proposed Development

The proposed development seeks to demolish existing outbuildings on site and provide for the construction of 167 no. residential units, a childcare facility with a GFA of 188 sq.m., associated internal roads, pedestrian and cycle paths, open space, and all associated site and infrastructural works.

The residential component of the development consists of 98 no. apartments and 69 no. houses, to be provided as follows:

- 30 no. 1-bed apartments;
- 47 no. 2-bed apartments;
- 21 no. 3-bed apartments;
- 43 no. 4-bed (Type A, A1 and D) houses;
- 26 no. 3-bed (Type B, C and E) houses;

The 98 no. apartments are to be provided within 3 no. apartment buildings of 5 no. storeys in height, each over basement level, with adjacent surface car parking. The houses consist of 2 and 3 storey terraced, semi-detached and detached dwellings.

The proposal contains a total of 237 no. car parking spaces, including 173 no. at surface level and 64 no. at basement level, 253 no. bicycle parking spaces, including 34 no. at surface level and 219 no. secure spaces at ground floor level of the apartment buildings, and 6 no. motorcycle parking spaces at basement level. The vehicular access to the development is to be provided from Cairnbrook residential estate to the west, including associated works to facilitate same. A vehicular entrance is also proposed from Springfield Lane to access the house proposed on the northern part of the site. Pedestrian and cycle links are proposed to Springfield Lane to the north and to link to the permitted development (Reg. Ref.: PC/H/01/19) at Rockville Drive / Glenamuck Cottages to the south.

Bin stores, plant rooms and block cores are located at basement and ground floor level of the apartment buildings. The proposed development includes private amenity space, consisting of balconies / terraces for all apartments and private gardens for the houses, public and communal open space, including children's play areas and an ancillary play area for the childcare facility, PV panels and green roofs at roof level of the apartment buildings, public lighting, utilities infrastructure and an ESB Substation. The proposal includes all associated site and infrastructural works, including tie-ins to existing infrastructure in the Cairnbrook residential estate, foul and surface water drainage, attenuation tanks, hard and soft landscaping, boundary treatments, internal roads, cyclepaths and footpaths.



### **3. General Site Set Up and Pre-Commencement Measures**

Detailed condition surveys (including photographs) may be carried out on certain adjacent / adjoining third party buildings prior to any work being carried out on the site. The purpose of the survey would be to record the condition of the properties before the works commence. Copies of these survey reports would be provided to the third-party owners.

A detailed condition survey (including photographs) may be carried out on the roads and footpaths surrounding the site. The purpose of the survey would be to record the condition of the streets and footpaths around the site prior to the works commencing.

A site compound(s) including offices and welfare facilities will be set up by the main contractor within the site, in locations to be decided.

Prior to any site works commencing, the main contractor will investigate / identify the exact location of and tag all existing services and utilities around and through the site with the assistance of the relevant DLRCC technical divisions and utility companies.

Typical working hours for the site would be 07.00 to 19.00 Monday to Friday and 08.00 to 14.00 Saturday. No Sunday work will generally be permitted. The above working hours are typical; however, special construction operations may need to be carried out outside these hours to minimise disruption to the surrounding area.

### **4. Site Security and Hoarding Lines**

Hoarding lines and site security will be set up within the development site as required.

Hoarding and security fencing will be required on the public roads during the construction works. Prior to construction commencing on site, a detailed construction traffic management plan will be prepared and submitted by the appointed contractor to DLRCC.

The traffic management plan will identify staging areas, delivery of materials, strategy for large concrete pours, removal of any demolition waste, traffic routes etc.

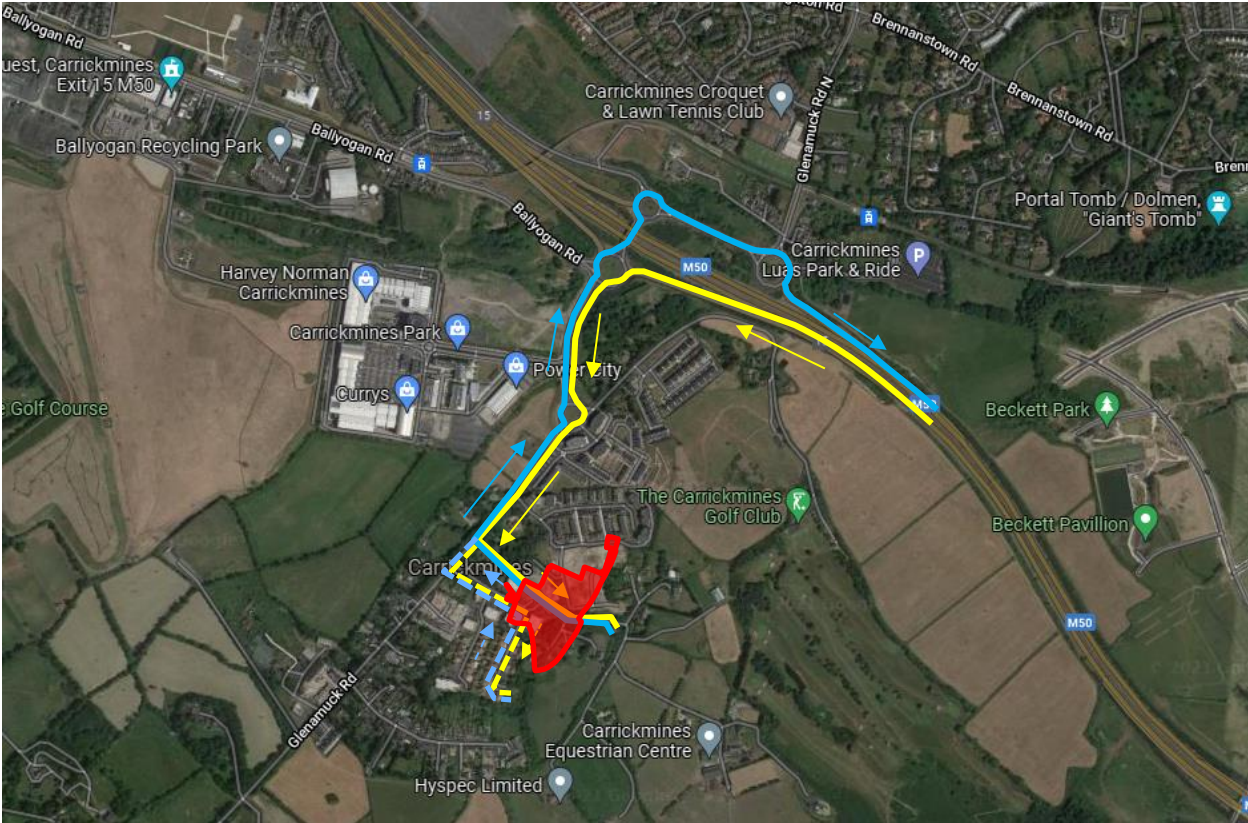
Access gates will be operated by a flagman who will divert incoming / outgoing vehicles / pedestrians and general traffic as necessary.

## 5. Construction Traffic Routes

The proposed development site is located to the rear of Cainbrook Estate which is located adjacent to Glenamuck Road and which links the site to the M50 to the north of the site. There is also an existing laneway (Springfield Lane), which can provide construction access to the subject site which is located to the north of the site. It is intended that Springfield Lane will be the primary construction access route to the development for construction traffic, which will be routed via the M50 and then from the M50 via Glenamuck Road turning left into the existing lane and through to the subject site. All construction traffic will exit the site through the existing Springfield lane, turning right onto Glenamuck Road and then onto the M50.

All construction traffic will exit the site through the existing Springfield Lane, turning right onto Glenamuck Road and then onto the M50.

Figure 2. Construction Traffic Plan



As outlined above, construction access to the site will be primarily via the existing Springfield Lane (solid blue/yellow lines in Figure 2 above) subject to the laneway being available. However, should Springfield Lane not be available for whatever reason then the access to the site will be via Cairnbrook Estate although this will be for the minimum period possible (broken blue/yellow lines in Figure 2 above).

Due regard will be paid to minimising any impacts by construction vehicles on the existing developments in the area. Should the intended construction traffic routes become an issue, then the position will be reviewed by the Project Team and changes made.

Particular emphasis will be placed on;

- The issue of instructions and maps on getting to site to each supplier sub-contractor to avoid 'lost' construction traffic travelling on unapproved routes;

- Ongoing assessment of the most appropriate routes for construction traffic to and from the site;
- Interface with operation of local traffic;
- Use of banksman and / or traffic lights to control exit of construction vehicles; and
- No construction traffic waiting on the public roads.

## 6. Deliveries

Deliveries and access to the construction site as described in section 5 above.

In the event that large concrete pours are required which may result in congestion at the entrance to the site, the deliveries will be organised such that concrete trucks will queue at a pre-determined staging point and will then be called in by radio as appropriate to the site, via a pre-determined route and to the required access gate.

Set procedures and designated wash-out areas will be provided, or alternatively vehicle wash-out will be prohibited if a suitable wash-out area is not identified.

All delivery vehicles will be co-ordinated as required by a flagman on duty at the relevant access point.

All large pours will be carefully co-ordinated with the roads department at Dun Laoghaire-Rathdown County Council.

## 7. Parking and Storage

A small amount of parking will be available on site. These will be managed by the contractor to ensure the fire tender access to the main “Cairnbrook” development remains clear at all times. The site is well served by public transport including Dublin Bus, as well as the LUAS Ballyogan Wood stop approximately 1.7 km from the site. Site management will organise additional off-site parking and shared car arrangements if required.

For those who wish to cycle to and from the development, dedicated cycle parking will be provided for the duration of the works within the site. Shower facilities and lockers will also be provided, and cycle links will be maintained at all times.

A Construction Stage Mobility Plan will be prepared by the contractor alongside the Construction Management Plan before starting on site.

The main contractor will be required to schedule delivery of materials on a daily basis. If necessary, the main contractor will be required to provide a secure material staging compound on the site.

# 8. Hours of Operation

## 8.1 County Development Plan

### 8.1.1 Construction Management Plans

Section 12.9.4: *Construction Management Plans* of the DLRCC County Development Plan, 2022 – 2028 refers to Construction Management Plans as follows:

*The CMP will address issues such as traffic management, hours of working, delivery times, prevention of noise and dust, reinstatement of roadway lining and signing, repair of damage to footways and grass verges and the accommodation of worker parking within the development curtilage. Hours of construction and deliveries should normally be in accordance with the guidance set out in Section 12.9.5.*

### 8.1.2 Hours of Construction

In the absence of a Construction Management Plan approved by the Planning Authority, Section 12.9.5 of the DLRCC County Development Plan, 2022 – 2028 sets out policy in relation to Hours of Construction as follows:

- Site development and building works shall be restricted to 7.00am to 7.00pm Monday to Friday and 8.00am to 2.00pm Saturday. Deviations from these times will only be allowed in exceptional circumstances. No works shall take place on site on Sundays or Bank Holidays.
- There shall be no access onto the site before 7am or after 7pm in the absence of an approved deviation.
- In certain instances, in order to address site specific of impact on residential or other sensitive amenity a later start time and/or different hours may be conditioned.

It will be noted that in certain circumstances, it may be necessary for construction works to take place outside these hours, and any such works will be agreed in advance with the Planning Authority..

## 8.2 Proposed Working Hours

The proposed working hours for the redevelopment of the Glenamuck site are set out below:-

- Monday - Friday : 07h00 – 19h00
- Saturday : 08h00 – 14h00

## 8.3 Mitigation Measures

To mitigate the impact of construction activities both during and after construction hours, the following measures are proposed:

- Scheduling of deliveries to avoid interference with the peak hour of traffic movement from Cairnbrook Estate;
- Co-ordination of deliveries to site with adjoining developments;
- Scheduling of noisier activities as early as possible;
- Noise mitigation measures as Section 9.2 of this Plan; and
- Vibration mitigation measures as per Section 9.3 of this Plan.
- Ecological mitigation measures as per Section 10.7 of this Plan.

In addition, the management at the Cairnbrook site will implement a program of consultation for businesses and the community including advance notification of works. This will be especially relevant to

the residents of Cairnbrook Estate who will be kept fully informed at all times of activities on site by the approved construction. A liaison office will be provided by the contractor to liaise with the residents of Cairnbrook.

An Ecological Check of Works will also be appointed and will be present on site during site clearance, top soil stripping and to ensure that the mitigation measures set out in Section 10.7 of this report are implemented properly, to oversee habitat creation and enhancement and to conduct ecological monitoring.

## 9. Control of Noise & Vibration

### 9.1 County Development Plan 2022 – 2028

Section 12.9.2: *Noise Pollution* of the County Development Plan 2022 – 2028 notes that

The Planning Authority will use the Development Management process for larger developments;

*To require developers to produce a Sound Impact Assessment and Mitigation Plan where a noise - generating use is proposed and specialist input is deemed necessary, for any new development that the Planning Authority considers will impact negatively on pre-existing environmental sound levels.*

### 9.2 Construction Noise Management

In the absence of any statutory Irish guidance relating to the maximum permissible noise level that may be generated during the construction phase of a project, it is proposed that the construction works will incorporate:

- Best practice measures relating to the control and minimisation of as set out in BS 5228 (2009) Parts 1 and 2 noise during all phases of the work.;
- Selection of quiet plant including proprietary acoustic enclosures to compressors and generators;
- Control of noise sources including reduction of resonance effects by stiffening and / or the application of damping compounds to panels and / or cover plates;
- Control of rattling and grinding noises by fixing resilient materials between the contact surfaces.
- Screening by demountable enclosures;
- The siting of mechanical plant as far away from residential areas as possible; and
- Regular maintenance of all plant;

Ref: British Standard BS 5228 (2009): Code of Practice for Control of Noise and Vibration on Construction and Open Sites Part 1: Noise.

### **9.3 Construction Vibration Management**

In the absence of any statutory Irish guidance relating to the maximum permissible vibration level that may be generated during the construction phase of a project, it is proposed that the construction works will incorporate:

- Selection of quiet plant with low vibration emissions;
- Provision of anti-vibration mounts on reciprocating plant;
- Limitation of vibration from construction activities to the levels recommended in BS 5228;
- Materials to be lowered rather than dropped; and
- Resilient materials to be provided on surfaces onto which materials are being lowered.

Ref: British Standard BS 5228 (2009): Code of Practice for Control of Noise and Vibration on Construction and Open Sites Part 2: Vibration.

## 10. Environmental Effects

### 10.1 County Development Plan 2022 – 2028

Section 12.9.6: *New Developments/Change of Use – Environmental Impacts* of the Dun Laoghaire Rathdown County Development Plan 2022 – 2028 requires that:

Applications for developments of greater than 500 sqm commercial shall:

- Submit, prior to the commencement of development, details of a Sediment and Water Pollution Control Plan in relation to the construction phase of such developments.
- Implement an appropriate rodent/pest control plan.

Applications for developments of greater than 1,000 sqm commercial shall:

- Incorporate, where appropriate land for the development of local 'Bring Centres' for recyclable materials, accessible to the general public. The location of these "bring centres" shall have regard to the impact on surrounding residential areas.
- Include an assessment of the impacts of climate change on their development and make provision for these impacts – particularly relating to drainage design, waste management, and energy use;
- Be generally designed and constructed in accordance with the provisions of the Greater Dublin Strategic Drainage study policy document entitled 'New Development'.

### 10.2 Measures to Minimise Nuisance

The measures to be operational at this site will include:

- Use of properly designed access and egress points to minimise impact on both external traffic and amenity of residents;
- Check on each departing vehicle at exit from site to public road;
- Use of banksman and/or traffic lights to control exit of construction vehicles onto public road;
- Controlled off-site HGV holding area where deliveries are called up as required. No HGV's waiting outside site;
- Issue of instructions and maps on getting to site to each sub-contractor to avoid 'lost' HGV's disrupting traffic;
- Establishment and maintenance of HGV holding areas within the site;
- Ongoing assessment of the most appropriate routes for construction traffic to and from the site;
- Interface with operation of HGV traffic from adjacent railway and port terminals; and
- Restriction of work hours to industry standard working hour.

### 10.3 Site Control Measures

The designated and operational on-site control measures, which will be established and maintained at this site, will include:

- Designated hard routes through site;
- Each departing vehicle to be checked by banksman;
- Wheel wash facility at egress point;
- Provision and facilities to cover lorry contents as necessary;



- Controlled loading of excavated material to minimise risk of spillage of contents;
- Spraying/damping down of excavated material on site by dedicated crews;
- Use of known routes for lorries to monitor impact on local area; and
- Facility to clean local roads if mud or spillage occurs.
- Hazardous materials to be stored in a designated area on site with appropriate drip trays/bunding and fire extinguishers to contain any spillages.

## 10.4 Control of Dirt and Dust

The main consideration will be to combat dirt and dust at source so as not to let it adversely affect the surrounding areas. The objective will be to contain any dirt or dust within the site, which is large enough for comprehensive control measures.

The main problems, which may arise during the early part of construction, will be controlled by the measures described above and by the following measures:

- The use of hardcore access route to work front;
- A regime of 'wet' road sweeping can be set up to ensure the roads around the immediate site are as clean and free from dirt / dust arising from the site, as is reasonably practicable. This cleaning will be carried out by approved mechanical sweepers.
- Footpaths immediately around the site can be cleaned by hand regularly, with damping as necessary.
- High level walkways and surfaces such as scaffolding can be cleaned regularly using safe 'wet' methods, as opposed to dry methods.
- Vehicle waiting areas or hard standings can be regularly inspected and kept clean by brushing or vacuum sweeping and will be regularly sprayed to keep moist, if necessary.
- Vehicle and wheel washing facilities can be provided at site exit(s) where practicable. If necessary vehicles can be washed down before exiting the site.
- Netting can be provided to enclose scaffolding in order to mitigate escape of air borne dust from the demolition.
- Vehicles and equipment shall not emit black smoke from exhaust system, except during ignition at start up.
- Engines and exhaust systems should be maintained so that exhaust emissions do not breach stationary emission limits set for the vehicle / equipment type and mode of operation.
- Servicing of vehicles and plant should be carried out regularly, rather than just following breakdowns.
- Internal combustion plant should not be left running unnecessarily.
- Exhaust direction and heights should be such as not to disturb dust on the ground and to ensure adequate local dispersal of emissions.
- Where possible fixed plant such as generators should be located away from residential areas.
- The number of handling operations for materials will be kept to a minimum in order to ensure that dusty material is not moved or handled unnecessarily.
- The transport of dusty materials and aggregates should be carried out using covered / sheeted lorries.
- Material handling areas should be clean, tidy and free from dust.

- Vehicle loading should be dampened down and drop heights for material to be kept to a minimum.
- Drop heights for chutes / skips should be kept to a minimum.
- Dust dispersal over the site boundary should be minimised using static sprinklers or other watering methods as necessary.
- Stockpiles of materials should be kept to a minimum and if necessary, they should be kept away from sensitive receptors such as residential areas etc.
- Stockpiles where necessary, should be sheeted or watered down.
- Methods and equipment should be in place for immediate clean-up of spillages of dusty material.
- No burning of materials will be permitted on site.
- Earthworks excavations should be kept damp where necessary and where reasonably practicable.
- Cutting on site should be avoided where possible by using pre-fabrication methods to facilitate any temporary works that may be required to enable the demolition.
- Equipment and techniques for cutting / grinding / drilling / sawing etc, which minimise dust emissions and which have the best available dust suppression measures, should be employed.
- Prior to commencement, the main contractor should identify the demolition operations which are likely to generate dust and to draw up action plans to minimise emissions, utilising the methods highlighted above. Furthermore, the main contractor should prepare environmental risk assessments for all dust generating processes, which are envisaged.
- The main contractor should allocate suitably qualified personnel to be responsible for ensuring the generation of dust is minimised and effectively controlled.
- Demolition works to incorporate water spray to reduce dust.

## 10.5 Water

The excavations for the drainage pipes, water supply, utilities and foundations are anticipated to impact the ground water in the site due to the high water table on this site.

The contractor shall develop an appropriate dewatering scheme to keep the excavations free from water and ensure the quality of water leaving site is high.

During any discharge of surface water from the excavations, the quality of the water will be improved through the provision of settlement tanks and will be regularly monitored visually for hydrocarbon sheen and suspended solids. Periodic laboratory testing of discharge water samples will be carried out in accordance with the requirements of Dun Laoghaire-Rathdown County Council before discharge to the surrounding drainage network.

Appropriate discharge licenses will be acquired from Dun Laoghaire-Rathdown County Council in respect of discharges from dewatering operations.

## 10.6 Mitigation Measures

An Ecological Clerk of Works will be appointed to oversee the implementation of the ecological mitigation measures and conduct monitoring where required during the Construction Phase of the Proposed Development.

### ***General Protection of Water Quality***

The following standard measures will protect surface waters during the Construction Phase of the Proposed Development:

- No direct, untreated discharges will be made to waters
- Designated impermeable cement washout areas must be provided.
- The pH of any and all discharges made from and during the Construction Phase of the Proposed Development shall be in the range of 6-9 units and not alter the pH of any receiving waters by more than +/- 0.5 pH units.
- Run-off from the working site or any areas of exposed soil will be channelled and intercepted at regular intervals for discharge to silt-traps or lagoons with over-flows directed to land rather than to a watercourse.
- Silty water generated on site will be treated using silt traps/settlement ponds and temporary interceptors and traps will be installed until such time as permanent facilities are constructed.
- A regular review of weather forecasts of heavy rainfall will be conducted, and a contingency plan will be prepared for before and after such events to minimise any potential nuisances. As the risk of the break-out of silt laden run-off is higher during these weather conditions, no work will be carried out during such periods where possible.
- The developer will ensure that erosion control i.e. silt-traps, silt-fencing and swales are regularly maintained during the Construction Phase.
- Any imported materials will, as much as possible, be placed on Site in their proposed location and double handling will be avoided. Where this is not possible designated temporary material storage areas will be used.

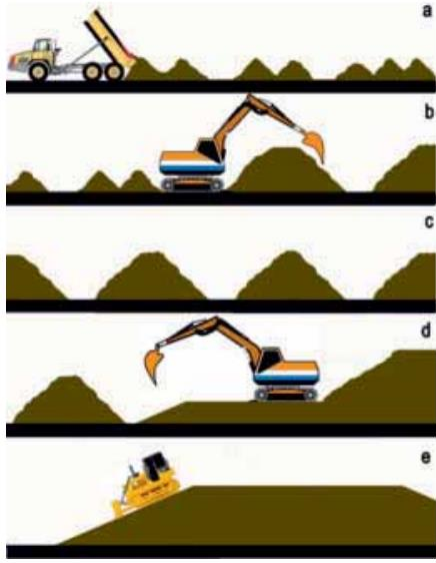
- Imported material will be screened for invasive species. If any invasive species are identified the material will be rejected and disposed of in a suitable licensed waste facility.
- These temporary storage areas will be located at least 10m away from any surface water features/drainage ditches etc.; and will be surrounded with silt fencing to filter out any suspended solids from surface water arising from these materials
- Temporary oil interceptor facilities will be installed and maintained where Site Works involve the discharge of drainage waters to the ditch on site.
- All containment and treatment facilities will be regularly inspected and maintained.
- If cast-in-place concrete is required, all work must be carried out in the dry and effectively isolated from the ditch on site.
- Refuelling of plant during the Construction Phase will only be carried out at designated refuelling station locations on site. Each station will be fully equipped for spill response and a specially trained and dedicated Environmental and Emergency Spill Response team will be appointed before the commencement of works on site.
- Only emergency breakdown maintenance will be carried out on site. Drip trays and spill kits will be available on site to ensure that any spills from vehicles are contained and removed off site;
- All personnel working on site will be trained in pollution incident control response.
- Any other diesel, fuel or hydraulic oils stored on site will be stored in bunded storage tanks- the bunded area will have a volume of at least 110% of the volume of the stored materials as per best practice guidelines (Enterprise Ireland, BPGCS005);
- If portaloos and/or containerised toilets and welfare units will be used to provide facilities for site personnel, all associated waste will be removed from site by a licenced waste disposal contractor.
- Under no circumstances will any untreated wastewater generated onsite (from equipment washing, road sweeping etc.) be released into nearby drains or the ditch within the Site.

## **10.7 Construction Mitigation Measures (Ecological)**

The mitigation measures outlined in the report are in keeping with those outlined in the biodiversity chapter of the Ecological Impact Assessment Report carried out by Enviroguide Consulting, however, any additional measures identified as necessary in either of these reports shall be incorporated into the CEMP by the contractor before commencing work on site. Emergency contact numbers for the Local Authority Environment Section, Inland Fisheries Ireland, the Environmental Protection Agency and the National Parks and Wildlife Service will be displayed in a prominent position within the site compound. These agencies will be notified immediately in the event of a pollution incident.

The schedule of mitigation presented within the Ecological Impact Assessment Report summarises measures that will be undertaken to reduce impacts on ecological receptors within the zone of influence of the proposed development. These are set out overlay.

Sensitive Habitats & Species/Invasive Alien Plant Species	Pre-Construction Mitigation/Surveys	Construction Phase Mitigation	Construction Phase Monitoring
<p><b>Proposed wet grassland/wet woodland &amp; dry grassland</b></p>	<p>A combination of <i>in-situ</i> preservation and reuse of topsoil in selected areas within the landscape plan is proposed to retain/recreate biodiverse grassland/woodland areas.</p> <p><i>In-situ</i> protection of these areas will be achieved by extending the boundary of protective arborist fencing, as indicated in the tree protection plan (Arborist Associates, 2022). The areas where arborist fencing will be extended are along the <b>eastern boundary hedgerow</b> and adjacent to <b>trees nos. 358 to 365</b> inclusive (refer to arborist report and drawings).</p> <p>An <b>Ecological Clerk of Works</b> will demarcate the areas of wet and dry grassland where topsoil will be removed for later use. These areas will be clearly marked off with tape and signage to ensure no construction traffic traverses these areas prior to topsoil removal.</p>	<p><b><u>Scrub Clearance</u></b> It will be necessary to remove the bramble/willow scrub located within the protective arborist fencing in the vicinity of the proposed new wetland area to allow for the enlargement of this habitat. This will be achieved by carefully removing the scrub by hand to prevent sedimentation of the drainage ditch, and damage to the soil structure. No herbicide will be used to remove this scrub.</p> <p><b><u>Rewatering</u></b> If necessary, during construction temporary rewatering of wetland areas will be incorporated in the dewatering management plan.</p> <p><b><u>Soil Management</u></b> The following outlines how topsoil will be reused within the landscape plan: Topsoil from the wet grassland will be used in the area proposed for the pond. Topsoil from the improved grassland (polygon 25) - which has some species more typical of semi-natural dry grassland on the areas where the land is sloping slightly) will be reused in "dry" areas in the landscape plan, which will be managed for biodiversity. The use of wildflower seed mixes in areas designated for biodiversity will be avoided in the landscape plan, unless germination of the native seed bank following a period of monitoring is poor. In this instance, seed will be sourced from Irish stock, with native seed stock to be used so that it is suitable for supporting native pollinators. The areas where topsoil will be reused within the Site is indicated in the landscape plan (DFLA, 2022). It is important that topsoil from the above areas is appropriately segregated and managed throughout the duration of the construction phase to ensure the integrity of the soil and seedbank is preserved. To this end, the following, informed by DEFRA (2009) Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, will be undertaken:</p> <ol style="list-style-type: none"> <li>a) <b>Designated Storage Areas</b> Prior to construction commencing, the areas for storage of topsoil from the wet and dry grassland habitats will be identified. Topsoil from these habitats will be stored on separate stockpiles.</li> <li>b) <b>Topsoil stripping</b> Prior to construction commencing, the project ecologist will identify the areas of the Site where topsoil will be stripped. These areas will be fenced off to prevent any damaged to the topsoil by vehicle tracking through the Site prior to topsoil harvesting. Once designated storage areas have been prepared, topsoil will be stripped. The existing sward within the areas identified by the project ecologist will be cut to the ground. Under no circumstances will surface vegetation be removed by herbicide application. The top 5-10 centimetres of topsoil will be carefully stripped from the designated areas and loaded onto site vehicles. Tracked equipment will be used to reduce compaction where possible. A designated temporary haul route for transport of topsoil to storage areas will be agreed with the project ecologist in advance. Topsoil will be stripped during the driest conditions possible, ideally during the summer period. Soil generally gains</li> </ol>	<p>Ensure hoarding/fencing is intact and working <b>throughout entire construction phase.</b></p>

Sensitive Habitats & Species/Invasive Alien Plant Species	Pre-Construction Mitigation/Surveys	Construction Phase Mitigation	Construction Phase Monitoring
		<p>strength and becomes more resistant to damage as it dries. If sustained heavy rainfall (e.g. &gt;10mm in 24 hours) occurs during soil stripping operations, work will be suspended and not restarted until the ground has had at least a full dry day or agreed moisture criteria (such as a specified soil moisture content) can be met<sup>(1)</sup>.</p> <p><b>c) Topsoil Storage</b>  Soil will be stored in an area of the Site where it can be left undisturbed and will not interfere with site operations. Ground to be used for storing the topsoil will be cleared of vegetation. According to the Site Investigation report, laboratory tests of the shallow cohesive soils confirm that clay soils dominate the Site with low to intermediate plasticity indexes of 14% to 16% recorded. According to DEFRA (2009) Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, there are two principal methods for forming soil stockpiles, based on their soil moisture and consistency. The following method, as recommended by DEFRA when soil having to be stockpiled is wet and/or plastic in consistency, will be implemented:  The soil is tipped in a line of heaps to form a 'windrow', starting at the furthest point in the storage area and working back toward the access point (a). Any additional windrows are spaced sufficiently apart to allow tracked plant to gain access between them so that the soil can be heaped up to a <b>maximum height of 2m (b)</b>. To avoid compaction, no machinery, even tracked</p> <p>p l a n t, t r a c k e d e x c a v a t o r s a r e u s e d t o c o m b i n e t h e w i n d r o w s.</p>  <p>Once the soil has dried out and is non-plastic in consistency (this usually requires several weeks of dry and windy or warm weather), the windrows are combined to form larger stockpiles, using a tracked excavator (d). The surface of the stockpile is then reggraded and compacted (e) by</p>	

<sup>(1)</sup> DEFRA (2009) Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Available at <http://defraweb/environment/land/soil/index.htm>

Sensitive Habitats & Species/Invasive Alien Plant Species	Pre-Construction Mitigation/Surveys	Construction Phase Mitigation	Construction Phase Monitoring
		<p>a tracked machine (dozer or excavator) to reduce rainwater infiltration.</p> <p>Stockpiles will not be positioned within the root or crown spread of trees, or adjacent to ditches, watercourses or existing or future excavations. Soil will have a natural angle of repose of up to 40° depending on texture and moisture content but, if stable stockpiles are to be formed, slope angles will normally need to be less than that. Once the stockpile has been completed the area should be cordoned off with secure fencing to prevent any disturbance or contamination by other construction activities. Stockpiles will NOT be seeded. Under no circumstances will surface vegetation on stockpiles be treated by herbicide application. Stockpiles will be protected from erosion by covering with geotextile matting. Stockpiles will be clearly labelled with their origin from the Site.</p> <p><b>d) Topsoil Spread</b></p> <p>The receiving ground will be prepared by loosening of the subsoil using a ripper tine or similar piece of equipment. Topsoil will be loaded from the relevant stockpile and backtipped onto the loosened subsoil in the appropriate area. The topsoil will be spread by an excavator to the required thickness. After respreading topsoil, any large, compacted lumps will be broken down by appropriate cultivation to produce a fine tilth. Topsoil will be cultivated to its full depth using appropriate tillage equipment to de-compact and fully re-aerate the soil.</p> <p>Tracked equipment will be used wherever possible to reduce soil compaction.</p>	
<b>Trees and hedgerows for retention</b>	<p>Ground protected by the fencing will be known as the 'Work Exclusion Zone' and sturdy protective fencing will need to be erected along the points identified in the Tree Protection Plan <b>prior</b> to any soil disturbance and excavation work starting on site. This is essential to prevent any root or branch damage to the retained trees. The British Standard BS5837: <i>Trees in relation to design, demolition and construction (2012)</i> specifies appropriate fencing. Refer to the arborist report (Arborist Associates, 2022) for full details.</p>	<p>Tree and hedge vegetation to be protected as per the Arboricultural Method Statement/Tree Protection Strategy (Arborist Associates, 2022).</p>	<p>Ensure hoarding/fencing is intact and working <b>throughout entire construction phase.</b></p> <p>Any additional monitoring as specified in the Arboricultural Method Statement/Tree Protection Strategy (Arborist Associates, 2022) to be implemented.</p>
<b>Drainage ditch at the Site, Glenamuck North Stream, Carrickmines Stream and Shanganagh River &amp; Aquatic</b>	<p><b>Retained Open Ditch</b></p> <p>A trenched double silt fence will be installed adjacent to the retained wet grassland/scrub area in the vicinity of the drainage ditch under the supervision of an ECoW.</p>	<p><b>Culvert and Headwall Installation</b></p> <ul style="list-style-type: none"> <li>All in-stream works will be carried out in line with Inland Fisheries Ireland (2016) <i>Guidelines on the Protection of Fisheries During Construction Works in and Adjacent to Waters.</i></li> <li>Precast concrete pipes and headwalls shall be used to significantly minimise the need for the</li> </ul>	<p>Ensure silt fences are intact and <b>working throughout entire construction phase.</b></p> <p>All containment and treatment facilities</p>

Sensitive Habitats & Species/Invasive Alien Plant Species	Pre-Construction Mitigation/Surveys	Construction Phase Mitigation	Construction Phase Monitoring
<p><b>Fauna (fish, otter)<sup>1</sup></b></p>	<p>The silt fence is to be located on the construction site-side of the protective arborist fencing.</p>	<p>use of in-situ concrete for this element of the works.</p> <ul style="list-style-type: none"> <li>• The Contractor shall plan the works to ensure works are carried out during dry spells and monitor daily weather forecasts accordingly.</li> <li>• The culvert and headwall will be installed avoiding the need for in channel works in so far as possible.</li> <li>• Excavated material shall be disposed of to an appropriate licenced facility or reused on site where the material is deemed suitable.</li> <li>• Where water ingress in excavations is evident during the construction of the culverts, all dewatering flow will be passed through filtering dewatering bags to remove sediments.</li> <li>• The Contractor will adopt a water over pumping arrangement to manage the incoming water from upstream. The overpumped water shall pass through silt bags or other suitable measures before discharging to the previously constructed culvert downstream.</li> </ul> <p><b>General Protection of Water Quality</b> The following standard measures will protect surface waters during the Construction Phase of the Proposed Development:</p> <ul style="list-style-type: none"> <li>• No direct, untreated discharges will be made to waters</li> <li>• Designated impermeable cement washout areas will be provided.</li> <li>• Run-off from the working site or any areas of exposed soil will be channelled and intercepted at regular intervals for discharge to silt-traps or lagoons with over-flows directed to land rather than to a watercourse.</li> <li>• Silty water generated on site will be treated using silt fences/settlement ponds for the duration of the Construction Phase and will be appropriately located near the ditch (as described under pre-construction mitigation/surveys column) to prevent untreated surface water run-off entering it.</li> <li>• A regular review of weather forecasts of heavy rainfall will be conducted, and a contingency plan will be prepared for before and after such events to minimise any potential nuisances. As the risk of the break-out of silt laden run-off is higher during these weather conditions, no work will be carried out during such periods where possible.</li> <li>• Any imported materials will, as much as possible, be placed on Site in their proposed</li> </ul>	<p>will be maintained and inspected <b>regularly based on Site and weather conditions</b> for any signs of contamination or excessive silt deposits and records of these checks will be maintained. The pH of any and all discharges made from and during the Construction Phase of the Proposed Development shall be monitored <b>throughout the duration of the Construction Phase</b> and must be within the range of 6-9 units and not alter the pH of any receiving waters by more than +/- 0.5 pH units. Regular inspections of the ditch within the works area will be carried out and a record of these inspections will be kept on file. The inspections will comprise a search for visible signs of pollution including suspended solids, silt, hydrocarbon sheen and/or other products.</p>

<sup>1</sup> Surface water mitigation measures will serve to protect designated sites (pNHAs) downstream of the Proposed Development.



Sensitive Habitats & Species/Invasive Alien Plant Species	Pre-Construction Mitigation/Surveys	Construction Phase Mitigation	Construction Phase Monitoring
		<p>location and double handling will be avoided. Where this is not possible designated temporary material storage areas will be used.</p> <ul style="list-style-type: none"> <li>• These temporary storage areas will be located at least 10m away from the drainage ditch and will be surrounded with silt fencing to filter out any suspended solids from surface water arising from these materials</li> <li>• Temporary oil interceptor facilities will be installed and maintained where Site works involve the discharge of drainage waters to nearby watercourses.</li> <li>• Refuelling of plant during the Construction Phase will only be carried out at designated refuelling station locations on site. Each station will be fully equipped for spill response and a specially trained and dedicated Environmental and Emergency Spill Response team will be appointed before the commencement of works on site.</li> <li>• If cast-in-place concrete is required, all work must be carried out in the dry and effectively isolated from the ditch on site.</li> <li>• Only emergency breakdown maintenance will be carried out on site. Drip trays and spill kits will be available on site to ensure that any spills from vehicles are contained and removed off site.</li> <li>• All personnel working on site will be trained in pollution incident control response.</li> <li>• If portaloos and/or containerised toilets and welfare units will be used to provide facilities for site personnel, all associated waste will be removed from site by a licenced waste disposal contractor.</li> <li>• Under no circumstances will any untreated wastewater generated onsite (from equipment washing, road sweeping etc.) be released into the ditch onsite.</li> </ul> <p><b>Fuel and Chemical Storage</b>  Appropriate storage facilities will be provided on Site.  Areas of high risk include:</p> <ul style="list-style-type: none"> <li>• Fuel and chemical storage;</li> <li>• Refuelling Areas;</li> <li>• Site Compound; and</li> <li>• Waste storage areas.</li> </ul> <p>There will be no washdown facilities for plant and equipment on the Proposed Development Site.  If required, fuel, oils and chemicals will be stored on an impervious base within a bund remote from any surface water ditches or locations.  All tank, container and drum storage areas shall be</p>	

Sensitive Habitats & Species/Invasive Alien Plant Species	Pre-Construction Mitigation/Surveys	Construction Phase Mitigation	Construction Phase Monitoring
		<p>rendered impervious to the materials stored therein. Bunds shall be designed having regard to Environmental Protection Agency guidelines 'Storage and Transfer of Materials for Scheduled Activities' (2904). All tank and drum storage areas shall, as a minimum, be bunded to a volume not less than the greater of the following:</p> <ul style="list-style-type: none"> <li>• 110% of the capacity of the largest tank or drum within the bunded area; or</li> <li>• 25% of the total volume of substance that could be stored within the bunded area.</li> </ul> <p>Concrete mixer trucks will not be permitted to wash out on Site with the exception of cleaning the chute into a container which will be removed off Site to an authorised facility.</p>	
<b>Groundwater</b>	Measures set out above regarding fuel and chemical storage will serve to protect soil and groundwater.	<p>Groundwater may be encountered during the construction works. Where water must be pumped from the excavations, water will be managed in accordance with best practice standards (i.e., CIRIA – C750) and regulatory consents.</p> <p>Excavations and potentially contaminated stockpiled soils will be constructed/located/sheeted in a manner that ensures water is contained within the site boundary.</p>	n/a
<b>Invasive Alien Plant Species</b>	<p>A pre-construction Invasive Alien Plant Species (IAPS) survey will be carried out at the Site.</p> <p>IAPS will be managed in accordance with the Invasive Alien Species Management Plan prepared for the Site.</p> <p>All machinery will be thoroughly cleaned and disinfected prior to arrival on site to prevent the spread of invasive species.</p>	IAPS will be managed in accordance with the Invasive Alien Species Management Plan prepared for the Site. Contractors are expected to have cognisance of invasive species during the works.	n/a
<b>Bats</b>	<p>In relation to trees proposed to be felled and identified as Potential Bat Roosts (PBRs), these should be resurveyed in consultation with the tree contractors. The following is recommended:</p> <ul style="list-style-type: none"> <li>• A Phase Two PBR survey is recommended for the three trees identified as a PBR and proposed to be felled (tree No. 10 (Ash); Tree Tag No. 0354 (Ash) and Tree Tag No. 0355 (Ash)). This should be undertaken at least one month prior to tree felling in order to propose</li> </ul>	<p>Trees proposed to be removed should be felled on mild days during the autumn months of September, October or November or Spring months of February and March (felling during the spring or autumn months avoids the periods when the bats are most active).</p> <p>An assessment of trees according to their PBR value determines the methodology of felling. Trees with PBR Category 1 are highly suitable for roosting bats and require more intensive procedures prior to felling. The trees identified within the survey area are PBR Category 2. The procedure to fell these is as follows:</p> <ul style="list-style-type: none"> <li>• Category 2: Any ivy covered trees which require felling will be left to lie for 24 hours after cutting to allow any bats beneath the cover to escape.</li> </ul> <p>The cutting of ivy on trees and pruning of trees to be retained is recommended where ivy is very heavy and causing suppression of the crown and increasing the wind sail area. This in turn could leave the tree more vulnerable to wind damage. Where necessary, ivy on trees will be cut at ground level and allowed to die off and fall off the tree over a period of time/years. The same is true for the remedial tree works (e.g. pruning) being recommended – these are to address structural issues and safety to the surrounding area. The works being</p>	An ecological clerk of works will be present for vegetation clearance activities.

Sensitive Habitats & Species/Invasive Alien Plant Species	Pre-Construction Mitigation/Surveys	Construction Phase Mitigation	Construction Phase Monitoring
	<p>a tree felling plan in conjunction with tree contractors.</p> <ul style="list-style-type: none"> <li>Alternative roosting sites (i.e. summer bat boxes) will be erected prior to the removal of trees. These are recommended to be erected 6 months prior to tree felling to allow local bat populations to become aware of them prior to removal of the trees.</li> </ul>	<p>recommended – pruning and ivy cutting, are preliminary recommendations at present and will need to be reviewed once the site is laid out. Where works are not necessary, these measures will be left undone. <b>All tree works, and works within the RPA (Root Protection Area) should this become necessary, will be reviewed on site prior to being carried out in consultation with the project ecologist/bat specialist taking on board their recommendations on the management of these trees and wildlife.</b></p> <p>Night-time lighting during the Construction Phase will be on motion sensors to protect bats.</p>	
<b>Birds</b>	n/a	<p>Any clearance of vegetation will be carried out outside the main breeding season, i.e. 1st March to 31st August, in compliance with the Wildlife Act 2000. Should any vegetation removal be required during this period, the NPWS will be consulted, and instruction taken from them. To mitigate <b>daytime noise disturbance</b>, the following measures will be implemented:</p> <p>Selection of plant with low inherent potential for generating noise.</p> <p>Siting of plant as far away from sensitive receptors as permitted by site constraints.</p> <p>Avoidance of unnecessary revving of engines and switch off plant items when not required.</p> <p>Keep plant machinery and vehicles adequately maintained and serviced.</p> <p>Proper balancing of plant items with rotating parts.</p> <p>Keep internal routes well maintained and avoid steep gradients.</p> <p>Minimise drop heights for materials or ensure a resilient material underlies.</p> <p>Use of alternative reversing alarm systems on plant machinery.</p> <p>Where noise originates from resonating body panels and cover plates, additional stiffening ribs or materials should be safely applied where appropriate.</p> <p>Limiting the hours during which site activities likely to create high levels of noise are permitted.</p> <p>Appointing a site representative responsible for matters relating to noise.</p> <p>Monitoring typical levels of noise during critical periods and at sensitive locations.</p> <p>The following <b>general dust control measures</b> will be followed for the duration of the Construction Phase of the Proposed Development and will ensure no significant dust related impacts occur to nearby sensitive receptors including local faunal species.</p> <p>In situations where the source of dust is within 25m of sensitive receptors screens (permeable or semi-permeable) will be erected.</p> <p>Haulage vehicles transporting gravel and other similar materials to site will be covered by a tarpaulin or similar.</p> <p>Access and exit of vehicles will be restricted to certain access/exit points.</p> <p>Vehicle speed restrictions of 20km/hr will be in place.</p>	An ecological clerk of works will be present for vegetation clearance activities.

Sensitive Habitats & Species/Invasive Alien Plant Species	Pre-Construction Mitigation/Surveys	Construction Phase Mitigation	Construction Phase Monitoring
		<p>Bowers will be available during periods of dry weather throughout the construction period.</p> <p>During dry and windy periods, and when there is a likelihood of dust nuisance, a bowser will operate to ensure moisture content is high enough to increase the stability of the soil thereby reducing the amount of dust. Stockpiles will be stored in sheltered areas of the site, covered, and watered regularly or as needed if exposed during dry weather.</p> <p>Gravel should be used at site exit points to remove caked-on dirt from tyre tracks.</p> <p>Equipment will be washed at the end of each work day.</p> <p>Hard surfaced roads will be wet swept to remove any deposited materials.</p> <p>Unsurfaced roads will be restricted to essential traffic only.</p> <p>If practical, wheel-washing facilities should be located at all exits from the construction site.</p> <p>Dust production as a result of site activity will be minimised by regular cleaning of the site access roads using vacuum road sweepers and washers. Access roads should be cleaned at least 0.5km on either side of the approach roads to the access points.</p> <p>Public roads outside the site will be regularly inspected for cleanliness, as a minimum daily, and cleaned as necessary. A road sweeper will be made available to ensure that public roads are kept free of debris.</p> <p>The frequency of cleaning will be determined by the site agent and is weather and activity dependent</p> <p>The height of stockpiles will be kept to a minimum and slopes should be gentle to avoid windblown soil dust. The following will be dampened during dry weather:</p> <ul style="list-style-type: none"> <li>o Unpaved areas subject to traffic and wind</li> <li>o Stockpiles</li> <li>o Areas where there will be loading and unloading of dust-generating materials</li> </ul> <p>Under no circumstances will wastewater from equipment, wheel or surface cleaning be allowed enter the surface water drainage network.</p>	
<b>Small mammals e.g., Hedgehog and Pygmy Shrew</b>	n/a	<p>Vegetation clearance will be undertaken working from the middle of the site outwards with controlled removal of the vegetated areas i.e., sequentially rather than all at once. Site clearance works of large areas of scrub or dense bracken will be undertaken slowly, leaving adequate time for any hedgehog (or other mammals) that may be present in these habitats sufficient time to escape.</p> <p>As best-practice, all construction-related rubbish on site e.g., plastic sheeting, netting etc. should be kept in a designated area on site and kept off ground level so as to protect Hedgehogs from entrapment and death. The above measures will also act to mitigate potential negative impacts on other small mammal species potentially found on site e.g., Pygmy Shrew.</p> <p>Work likely to cause disturbance during hibernation – for example removal of hibernation habitats such as log piles and dense scrub ideally will not take place during November to March, unless these areas are deemed to be devoid of hibernating mammals in advance by a suitably qualified ecologist.</p> <p>See daytime noise disturbance mitigation outlined for birds above.</p>	An ecological clerk of works will be present for vegetation clearance activities.
<b>Amphibians</b>	An appropriate exclusion barrier to prevent entry and divert the frogs away	Site clearance works will begin before the on-set of the breeding season (ideally between September to February).	An ecological clerk of works will be present for

Sensitive Habitats & Species/Invasive Alien Plant Species	Pre-Construction Mitigation/Surveys	Construction Phase Mitigation	Construction Phase Monitoring
	<p>from the works will be installed around the perimeter of the Site by a suitably qualified ecologist.</p> <p>A precautionary pre-construction amphibian survey will be undertaken at the Site to ensure that no breeding frogs are present within the Site prior to the initiation of clearance works.</p>	<p>In the event that common frogs (of any life stage) are detected during the Construction Phase, they will be captured and / or translocated from the Site. Immature or adult frogs will be moved beyond the exclusion fence whereas tadpoles and spawn will be translocated to the nearest suitable waterbody within 1-2km distance. Mechanical pumps should be fitted with a fine mesh screen in order to negate the chances of frogs or their larvae being sucked into the impeller mechanism. All capture and translocation works will be undertaken immediately in advance of site clearance works.</p> <p>Vegetation clearance will be undertaken working from the middle of the site outwards with controlled removal of the vegetated areas i.e., sequentially rather than all at once. A suitably qualified and licenced Ecological Clerk of Works will be retained during the construction phase</p> <p><b>Pond Construction</b></p> <p>It is proposed to include a lined pond within the Proposed Development Site. As the pond will be lined, there will be no contact between the pond and the natural seed bank. As topsoil is naturally rich in nutrients, addition of topsoil to the pond could cause an algal bloom. As such this should be avoided. If feasible, it may be possible to allow the charophyte recorded within the wet grassland to persist by collecting the charophyte, storing it appropriately and translocating it into the pond upon completion of the pond.</p> <p>It is strongly recommended that the pond is constructed as per the Amphibian Habitat Management Handbook (Baker et al., 2011). It is recommended that in addition to the stone boulders and stepping-stones proposed around the pond margins, that logs from the proposed tree felling are also placed around the margins of the pond to provide shelter for adult frogs and newts, under guidance from the ECoW.</p> <p><b>Additional Recommendations</b></p> <p>Gandola (2022) also recommends providing a cross-road linkage between the pond and the proposed swales to the north of the main access road (see Figure 2 of the Amphibian Report). This could be achieved via an “amphibian tunnel”, as common frogs will undoubtedly use the swales as foraging and breeding habitats (when filled with water) (Gandola, 2022). A tunnel would provide an alternative way for frogs to cross the road between these habitats while reducing the chances of road caused mortality and without interfering with the proper functioning of the swale/ SuDS.</p> <p>Where gully pot drains are to be installed, it is also recommended that recessed kerbs and “amphibian ladders” are installed. These additional features will provide wildlife an opportunity to avoid or escape falling into the gully system. Amphibian ladders are custom made for each gully pot and therefore are one of the final additions to the drainage system.</p>	<p>vegetation clearance activities.</p> <p>If any habitats, waterbody or flooded depressions need to be drained or pumped to facilitate works, this shall be carried out under the supervision of a suitably experienced ecologist to ensure that no frogs or their larvae remain before the habitat is infilled or destroyed.</p>

## **11. Duties and Responsibilities**

### **11.1 Standards**

Insofar as the construction of this development may impact on the surrounding road network, the development and associated roadworks shall be undertaken in compliance with the requirements of Dun Laoghaire Rathdown County Council issued by the Transportation Department in November 2008 and any other requirements that the County Council may impose during the course of the works.

### **11.2 Project Team**

It shall be the duty of the Project Team to provide the main Contractor in good time with all necessary designs, details, drawings and specifications so that the Contractors can, in conjunction with the Project Team prepare detailed proposals and programmes for the execution of the works for submission to Dun Laoghaire Rathdown County Council as required by the *"Directions for Roadworks Control"*.

It shall also be the duty of the Project Team to ensure that the Contractors proposals are reasonable and that they are implemented in a safe and competent manner.

### **11.3 Main Contractor**

It shall be the duty of the Main Contractor in conjunction with the Project Team to prepare detailed construction and traffic management proposals for the implementation of the works.

The Contractor shall give adequate and timely notice to Dun Laoghaire Rathdown County Council as specified in of *"Directions for Roadworks Control"*.

The Contractor(s) shall also be responsible for implementing the traffic management proposals in a safe and competent manner on an ongoing basis.

### **11.4 Construction Program**

At the time of preparing this edition of this Plan in July 2022, the planning application for the proposed redevelopment is being prepared for the formal SHD submission to An Bord Pleanala.

The development provides for a 30-month construction period commencing in 2023 with completion in 2026.

# UK and Ireland Office Locations

