



## Guidance Notes

for

Environmental Management

of

Construction Projects

August 2020

# Guidelines for Construction Management

All relevant environmental issues should be considered at the initial project design stage, taking full account of the ProPG: Planning & Noise; Professional Practice Guidance on Planning & Noise published by The Institute of Acoustics.

In Particular the following issues should be considered:

## 1. Noise Planning

- To promote good practice in relation to the layout and planning of new developments by
- Demonstrating a Good Acoustic Design Process
- Observation of internal Noise Level Guidelines
- Undertaking an External Amenity Area Noise Assessment
- Consideration of other relevant local issues

## 1. Waste – Construction phase

- Management of waste, including measures to ensure tracking of all waste generated to final destination. The recording of gate receipts for the licenced facility to which excavation and demolition wastes are brought is essential to ensure that waste materials removed from sites are properly disposed of and that site management is in compliance with statutory obligations under the Waste Management Acts 1996, as amended.
- Plans, including applications under Article 27 of the European Communities (Waste Directive) Regulations, 2011 for re-use of building materials, recycling of demolition material and the use of materials from renewable sources. In all developments in excess of 10 housing units and commercial developments in excess of 1000 sq.m, a materials source and management plan showing type of materials/proportion of re-use/recycled materials to be used shall be implemented by the developer to support the development of the circular economy.
- Identification and management of any Hazardous Wastes likely to arise during the construction process. In the event that hazardous soil, or historically deposited hazardous waste is encountered during the work, the contractor must notify Dún Laoghaire Rathdown County Council, Environmental Enforcement Section, and provide a Hazardous/Contaminated Soil Management Plan, to include estimated tonnages, description of location, any relevant mitigation or monitoring proposed, and destinations for authorised disposal/treatment, in addition to information on the authorised waste collector(s)
- Provision of a dedicated and secure compound, containing bins and skips into which all waste generated by construction site activities will be placed and designation of a single person with responsibility for provision of signage and verbal instruction to ensure proper housekeeping, maintenance of records and segregation of construction waste materials

Waste planning shall take account of “Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects”, published by the Department of the Environment, Heritage and Local Government in July, 2006, particularly the requirements of ;

### **3.4 C&D Waste Management Plans - Specific Guidelines on Content**

***A Project Construction and Demolition (C&D) Waste Management Plan should address the following aspects of the Project:***

- ***analysis of the waste arisings/material surpluses;***
- ***specific waste management objectives for the project;***
- ***methods proposed for prevention, reuse and recycling of wastes;***
- ***material handling procedures; and proposals for education of workforce and plan dissemination programme.***

***C&D Waste Management Plans do not need to be complicated documents and should concentrate on those reasonable measures that can be taken to improve the management of waste within projects. They can also be provided as a resource to contractors and subcontractors who may have been required by both specification and contractual requirements to prepare C&D Waste Management Plans. Designers and Developers shall have regard to the legislative requirements in terms of waste licensing and permitting as set out in Section 1.2 of these guidelines.***

***The effectiveness of the C&D Waste Management Plan and its implementation should be tracked through regular checks and audits carried out on site, which should focus on material inputs to the project and the waste outputs for each unit operation. Such internal auditing may be carried out by an appropriately trained and technically competent “C&D Waste Manager”. The audits should also investigate the operational factors and management policies that contribute to the generation of waste and identify appropriate corrective actions. It is essential that reviews of waste management practices take place through each stage of the project.***

***Future development of C&D Waste Management Plan content should be based upon the successes of previous Plans and take account of review findings on implementation of existing plans.***

***The Plan should document proposals for the management of C&D waste as concisely as possible. For clarity, besides assisting assessment and implementation, the Project C&D Waste Management Plan should be organised systematically. Individual headings should be provided, describing the following:***

- ***description of the Project;***
- ***wastes arising including proposals for minimisation/reuse/recycling;***
- ***estimated cost of waste management;***

- *Demolition Plan;*
- *roles including training and responsibilities for C&D Waste;*
- *record keeping procedures; and*
- *waste auditing protocols.*

## **2. Environmental Impacts – Construction Phase**

### **a. Noise & Vibration**

Detailed consideration should be given to;

- Details of the measures that require to be implemented to ensure that potential impacts relating to noise nuisance and disturbance and vibrational impacts are effectively minimised, controlled and monitored to ensure that site construction activities do not have an adverse or unacceptable impact on local receptors, adjacent property, adjacent users and human health and on the wider receiving environment.

### **b. Dust & Odour**

- All operations on-site shall be carried out in a manner such that air emissions do not result in significant impairment of, or significant interference with amenities or the environment beyond the site boundary.
- A dust monitoring strategy should be implemented for the development.

### **c. Complaints Handling**

- Maintenance of a site complaints log detailing
  - Name and address of complainant
  - Time and date complaint was made
  - Date, time and duration of noise
  - Characteristics, such as noise rumble, clatters, intermittent, etc.
  - Likely cause or source of nuisance
  - Weather conditions, such as wind speed and direction
  - Investigative and follow -up actions
- Liaison with Local Community and Businesses
  - Appointment of a Liaison Officer as a single point of contact to engage with the local community and respond to concerns
  - Keeping local residents and businesses informed of progress and timing of particular construction activities that may impact on them

#### **d. Monitoring**

- Air Monitoring

- A programme of air quality monitoring shall be put in place at the site boundaries for the duration of excavation and construction activities to ensure that the air quality standards as set out in The Air Quality Standards Regulations 2011 relating to dust deposition and specifically PM10 levels are not exceeded
- Measures to ensure that where levels exceed specified air quality limit values, dust generating activities cease and alternative working methods are identified and implemented.
- The selection of sampling point locations will be completed after consideration of the requirements of Standard Method VDI 2119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method) German Institute) with to the location of the samplers relative to obstructions, height above ground and sample collection and analysis procedures. The optimum locations will be determined by a suitably qualified air quality expert to ensure that dust gauge locations are positioned in order to best determine potential dust deposition in the vicinity of site boundaries and existing buildings.
- Technical monitoring reports detailing all measurement results shall be subsequently prepared and maintained on site.

- Noise Monitoring

- Prior to the commencement of the proposed site works noise monitors stations shall be installed and maintained to provide continuous noise monitoring at proposed baseline monitoring stations to measure and record the impact of site activities on local receptors.
- All noise monitoring data shall be compiled into a monthly technical monitoring report which will include a full assessment of the noise impacts arising from site construction activities.
- Should construction noise limit criteria be approached or exceeded and appropriate measures shall be implemented to address the issues raised.

### **3. Environmental Impacts – Operational Phase**

#### **A. Noise, Vibration and Odour**

Consideration should be given to measures that require to be implemented to avoid the creation of serious environmental nuisance in the operation of the completed development, with specific reference to avoidance of the creation of noise nuisance to any third party receptor or on any residential units which form part of the development. For night time noise assessment the relevant World Health Organisation guidelines should be taken into account. Particular consideration should be given to the ventilation strategy for buildings and the acoustic design of noise generators such as gym facilities to prevent noise and air emissions that may cause either noise or odour nuisance, in accordance with the commitment set out in section 5.5 of the “Energy and Sustainability Report”.

Detailed consideration should be given to;

- Measures required to avoid the generation of potential conflicts in terms of noise amenity within the development itself, whether from the incorporation of uses that can serve as noise generators or improperly sited building services.
- Appropriate design of the commercial units, including the mechanical services associated with these units shall be undertaken to ensure that the completed development provides a very high degree of sound insulation between adjoining units, so that one unit does not have a negative noise or vibration impact on another

#### **B. Pest Control**

An appropriate rodent/pest control plan should be put in place for the overall development.