## **Waste Management Form**

Applicant Details	Development	Residential development on lands adjacent to 'The Grange', Brewery Road, Stillorgan, Blackrock, Co. Dublin.
	Site name and address	'The Grange' Brewery Road, Stillorgan, Blackrock, Co. Dublin
	Project Team	<ul> <li>Project Managers – Lafferty Project Management</li> <li>Architects – O'Mahony Pike Architects</li> <li>Environmental Consultants (Waste) – AWN Consulting Ltd.</li> </ul>
	Waste Expert	Elaine Neary (BA MApplSc MCIWM) Associate, AWN Consulting Ltd.
Summary of development	Residential units	As of August 2019: 287 no. units:
		<ul> <li>Apartments:</li> <li>19 no. studio apartments;</li> <li>125 no. 1-bed apartments; and</li> <li>143 no. 2-bed apartments.</li> </ul>
		More detailed breakdown available in the Planning Application.
	Commercial units	As of August 2019:  Creche – 658 m².
	Specialist Units	As of August 2019:
		Tenant amenity space – 961.5 m <sup>2</sup>
Waste Generated	Types of waste	Typical waste types which will be generated on a daily basis:  • Mixed Non-Recyclable (MNR) / General Waste – includes domestic non-recyclable waste and nappies from creche • Dry Mixed Recyclables (DMR) – includes cardboard, paper, plastic packaging and bottles, aluminium cans, tins and Tetra Pak cartons • Organic (food) waste • Glass

		Other waste types which will be generated less frequently:  • Green/garden waste may be generated from external landscaping; • Batteries (both hazardous and non-hazardous); • Waste electrical and electronic equipment (WEEE) (both hazardous and non-hazardous); • Printer cartridges/toners; • Chemicals (paints, adhesives, resins, detergents, etc.); • Light bulbs; • Textiles (rags); • Waste cooking oil (if any generated by the residents or commercial tenants); • Furniture (and from time to time other bulky wastes); and • Abandoned bicycles.
	Quantities of waste	Using Table 1 in BS5906:2005 Waste Management in Buildings – Code of Practice, the total weekly waste quantities for the apartments will be c. 39m³ per week. Whereas the AWN waste generation model estimates c. 49m³ per week from the residential units.  Based on data from the existing Grange development, the estimated waste arising from the proposed development would be c. 70.8m³  The Code of Practice does not provide a specific methodology for estimating waste arisings from creche uses. AWN have estimated that the creche units will generate 3.82m³ per week.  A detailed breakdown of the estimated waste arisings is provided in Tables 4.1 and 4.2 of the Operational Waste Management Plan (OWMP) prepared by AWN for the development.
Waste Storage	Local storage	The layout and sizing of the apartment and housing units is sufficient to allow residents to furnish their own units with separate containers for mixed non-recyclables (MNR), dry mixed recycles (DMR), organic waste and glass waste. The locations, sizes and quantity of these bins within each individual unit (kitchen, bathrooms, en-suite, bedrooms etc.) will be at the discretion of the residents.  Similarly, the creche unit is sufficient in space to allow space for MNR, DMR, organic and glass waste storage. The locations, sizes and quantity of these

		bins within the unit will be at the discretion of the
		tenants and will be subject to detailed fit-out design.
	Shared Storage	The strategy for waste storage is described in detail in the OWMP.
		In summary, the residential units will share a communal Waste Storage Area (WSA) at Level 01. The location of the WSA is illustrated in the planning application drawings. The WSA has been appropriately sized to accommodate the estimated waste arisings for the residential units as set out in Table 4.1 of the OWMP based on a weekly collection frequency and the provision of the appropriate waste management equipment, correctly laid out and efficiently managed.
		The creche will store segregated waste within their unit as described in the OWMP.
	Management System	The strategy for waste movement and collection is described in detail in the OWMP and is summarised below.
		Residential Waste
		A collection point has been provided close to the Stillorgan Road entrance to the existing Grange apartments. It can be used for set down of the waste collection vehicles while the bins are emptied and FIBC bags are collected.
		Compacted waste (in FIBC's) will be transferred by the nominated waste contractor from the communal residential WSA to the waste collection truck via using a Moffit pallet truck. The waste collection truck will use the designated collection point. This waste will only be transferred at the time of collection (and not before).
		Wheeled bins (of organic and glass waste) will be transferred from the WSA to the collection point by personnel nominated by the building management company or waste contractor (depending on arrangement). Once emptied, the bins will be promptly returned to the WSA.
		The creche unit employees will be responsible for presenting their own waste for collection on the footpath in front of the unit. Once emptied, they will be promptly returned to the internal WSA within the unit. The bins will be positioned on the footpath so as not to obstruct pedestrian traffic.

	Contingency System	The communal residential WSA is sufficient in space such that it would allow for storage of empty wheelie bins and FIBCs as a contingency measure in the event of missed collections.  In the case of a missed collection due to a public holiday, the waste contractor will typically issue advice on alternative day(s) for waste collection where required and residents/commercial operators will be made aware of this by the building management company(s).
Legal	Tenant Obligations	<ul> <li>All residents and the commercial tenant are required to comply with the requirements of Dun Laoghaire-Rathdown County Council Storage, Presentation and Collection of Household and Commercial Waste Bye-Law 2009 in relation to storage, separation at source and presentation of waste materials.</li> <li>All apartment residents are required to deposit their waste, segregated in accordance with the building management company requirements, in the appropriate bins in their allocated Waste Storage Area.</li> <li>No waste shall be placed on the ground in the Waste Storage Areas – only in the provided bins.</li> <li>The crèche tenant must provide the developer with proof of the agreed contract with a waste service provider.</li> </ul>
	Management provision for handling waste arising	Upon completion of the development, the developer will appoint a management company to look after the apartment blocks and communal facilities.  The building management company will appoint employees to clean and maintain the communal residential WSA on a regular basis and to transfer the wheelie bins from the WSA to the collection point on the agreed days and times. Depending on agreement with the waste service provider, employees from the waste contractor may transfer the wheelie bins to the collection vehicle at the time of collection.  The management company will ensure the communal residential WSA is suitably secured with access for residents, building management personnel and the nominated waste contractor(s) only by use of a key or a fob. They will also ensure there is clear graphical signage for residents on waste types which can be placed in each bin. The detailed design phase of the development will

	include provision to make sure the WSA is suitably ventilated and provided with lighting and wastewater drainage.
Monitoring and follow-up	The building management company will post waste generation data from the waste service providers in the communal residential WSA on a regular basis to inform residents of the quantities of MNR, DMR, organic and glass waste being generated. Rolling trends of waste quantities will highlight to residents when waste generation increases/decreases throughout the year and will give the apartment residents a sense of ownership.
	The management company will actively encourage maximum segregation of waste by regularly reviewing waste management fees and decreasing fees in line with decreasing costs from waste service providers, where possible.  The developer will provide each apartment in the
	scheme with ventilated organic food waste caddies to encourage segregation of food waste within each unit.