Jackie Greene Construction Ltd (JGC Ltd)

Resource Waste Management Plan

For

Hayden's Lane

Description		Prepared by	
Revision	**Reason for Revision**	**Initials**	**Date**
000	Draft	NG	20.05.24

Contents

1.0 Description of the Project

The development will consist of the following:

- Demolition (site clearance) of existing concrete floor slabs and foundations from existing building which has been demolished previously
- Construction of 65 residential units in 3 No. blocks , with the following breakdown;

    - Block 1 – 3 bed Apt: 3nr
    - Block 1 – 3 bed Duplex: 3nr
    - Block 2 – 1 bed Apt: 10nr
    - Block 2 – 2 bed Apt: 24nr
    - Block 3 – 1 bed Apt: 10nr
    - Block 3 – 2 bed Apt: 14nr
    - Block 3 – 3 bed Apt: 1nr

- 46 car parking spaces including 3 No. disabled spaces
- New boundary treatment along Hayden's Lane including entrance to the proposed development in the former entrance to the new demolished industrial unit
- All associated development works, bin stores and landscaping

1.1 Policy & Legislation

On the proposed works to be carried out JGC will follow the below policies and legislation, which includes:

The EU Waste Framework Directive (Directive 2008/98/EC) which sets the basic concepts and definitions related to waste management, such as definitions of waste, recycling and recovery. It also included definitions for when waste ceases to be waste and becomes a secondary raw material (end-of-waste criteria) and how to distinguish between waste and by-product. The Directive, enacted in Ireland under the Waste Directive Regulations 2011 (S.I. No. 126 of 2011)

2.0 Details of Waste to be Produced on Works

2.1 Main C&D Waste Categories

The main non-hazardous and hazardous waste streams that will be generated by the construction activities at a typical site are shown in Table 3.1. The European Waste Code (EWC) classification for each waste stream is also shown

Waste Description	EWC Code	Waste Expected to be exported off site to Registered Tip	Unit
Soil & Stone	17 05 04	8125.9	m3
Concrete	17 05 07	325	m3
Wood	17 02 01	<1	tn
Iron/Steel/Metals	17 04 05	<1	tn
Canteen Waste	20 03 01	<1	tn
Plastic	17 02 03	<1	tn
Tar	17 03 03	5	tn

2.2 Anticipated Hazardous Waste Arising

Anticipated Hazardous Waste Arising Soil tests will be carried out on excavated soil as deemed appropriate when excavations are undertaken. Fuels stored on site that will be used during the construction phase are classed as hazardous. There will be fuel stored on site for machinery and construction vehicles at site compound. All fuel tanks and draw off points will be bunded. The fuel will be correctly contained and bunded, therefore there will be no fuel wastage at the site

3.0 Waste Management Options

3.1 Bedrock, Concrete

The majority of the C&D waste will be clean, inert material and it is proposed to reuse it for construction purposes where possible. If bedrock is encountered during excavations, it will either be crushed on-site and used for infill during construction or be removed from the site by appropriately permitted waste collectors.

3.2 Soil/Subsoil

Excess inert soils and sub-soils excavated that is not required for use as fill on site will be recovered off-site. Soil will only be removed by authorised waste collectors to an authorised site. Any fill material excavated at the site, which is deemed to be contaminated (i.e. non hazardous or hazardous) will be stored separately to the inert material, sampled and tested, in order to appropriately classify the material as non-hazardous or hazardous.

In addition Article 27 application for waste soil and stone will be investigated and explored as an alternative to landfill

3.3 Plastic

As plastic is now considered a highly recyclable material, much of the plastic generated during construction will be diverted from landfill and recycled. The plastic will be segregated at source and kept as clean as possible and stored in a dedicated skip.

3.4 Timber

Timber that is uncontaminated i.e. free from paints, preservatives, glues etc, will all be recycled. It will be collected on-site in a designated area, and collected by a timber recycling company, or a recycling company that will pass it on to a timber recycling company. Such companies shred the timber and use it in energy recovery or for manufacture of wood products or for landscaping woodchips etc.

3.5 Steel

Steel is a highly recyclable material and there are numerous companies that will accept waste steel and other scrap metals. A segregated skip will be available for steel/metal storage on-site pending recycling.

3.6 Cardboard

Cardboard packaging can also be recycled. Card board will be flattered and placed in a covered skip to prevent it getting wet

3.7 Canteen Waste / WC Utilities Wastes

Regular housekeeping of the temporary canteen/W/C areas will be carried out. Removal of domestic waste from the construction compound will be carried out by a permitted waste contractor. Any temporary W/C utilities used on site during the construction phase will be maintained by an approved and permitted contractor

4.0 Tracking & Documentation

The Waste Manager will maintain a copy of all waste collection permits. If waste (soil & stone) is being accepted on-site, a waste docket must be issued to the collector. As well as a waste collection docket, a receipt from the final destination of the material will be kept as part of the on-site waste management records. All information will be entered in a waste management system to be maintained on-site

4.1 Disposal of C&D Waste

All waste streams will be segregated on site and where its not possible to reuse this will be disposed in accordance with the Waste Management Act 1996. In relation to canteen waste this will be disposed of in accordance with DLR segregation storage and presentation of household and commercial waste by laws 2019.

Workers on the site will be encouraged to recycle as much municipal waste as possible i.e. cardboard, plastic, metals and glass. Prior to removal, the municipal waste receptacle will be examined by wither the foreperson or a member of his/her team to determine if recyclable materials have been placed in there. If this is the case, effort will be made to determine the cause of the waste not being segregate correctly

5.0 Waste Management

5.1 Construction Waste Generation

Table below shows the predicted construction waste generation for the proposed works based on the information available to date along with the targets for management of the waste streams

Waste Description	EWC Code	Waste Expected to be exported off site to Registered Tip	Unit
Soil & Stone	17 05 04	8125.9	m3
Concrete	17 05 07	325	m3
Wood	17 02 01	<1	tn
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Plastic	17 02 03	<1	tn
Tar	17 03 03	5	tn

It should be noted that until final materials and detailed construction methodologies have been confirmed, it is difficult to predict with a high level of accuracy the construction waste that will be generated from the proposed works as the exact materials and quantities may be subject to some degree of change and variation during the construction process

Any suitable excavated material will be temporarily stockpiled for reuse as fill, where possible. It has been estimated that c. 8125 m3 of fill will be removed to an approved landfill.

In addition Article 27 application for waste soil and stone will be investigated and explored as an alternative to landfill

5.2 Soil Management

Project works will result in the excavation of soils as part of the site works. The Contractor will carry out the following as a minimum:

- Detail in-situ (prior to excavation) and ex-situ (post excavation) methodologies to classify waste soil for appropriate disposal, in accordance with relevant Irish and EU legislation and guidance,

- Identify reuse requirements and soils suitable for reuse on site in consultation with the design team, including assessment methodology to determine which soils are suitable for re-use onsite,
- Site management procedures, including waste minimisation, stockpile management, temporary storage procedures, waste licence requirements,
- Waste Management documentation, including waste generation record keeping, waste transfer notes and confirmation of appropriate disposal

5.3 Waste Management Options

Proposed Waste Management Options Waste materials generated will be segregated on site, where it is practical. Where the on-site segregation of certain wastes types is not practical, off-site segregation will be carried out. There will be skips and receptacles provided to facilitate segregation at source where feasible. All waste receptacles leaving site will be covered and enclosed. The appointed waste contractor will collect and transfer the wastes as receptacles are filled. All waste arising's will be handled by an approved waste contractor holding a current waste collection permit. All waste arising's requiring disposal off-site will be reused, recycled, recovered or disposed of at a facility holding the appropriate registration, permit or licence, as required

5.4 Waste Minimisation

Waste Minimisation The following waste minimisation measures will be implemented during the course of the construction works:

- Facilitate recycling and appropriate disposal by on site segregation of all waste materials generated during construction into appropriate categories, including: - Top-soil, subsoil, gravel hard-core - Metals - Dry Recyclables e.g. cardboard, plastic, timber
- All waste assessed by the Waste Manager as 'not suitable for reuse' will be stored in skips or other suitable receptacles in a designated area of the site, to prevent cross contamination between waste streams;

- Uncontaminated excavated material (top-soil, sub soil, etc.) will be segregated, stockpiled and reused on site in preference to importation of clean fill, where possible; and
- Where possible, the Waste Manager will ensure that all waste leaving site will be recycled or recovered.
- Identification of potential for reuse of Inert Wasters
- Just in Time deliveries will be planned and established on site to avoid unwanted material package etc and will reduce waste

5.5 Waste Compound

Details of the provision of a dedicated and secure compound, containing bins and skips into which all waste generated by construction site activities will be placed

- Responsibility for provision of signage and verbal instruction to ensure proper housekeeping and segregation of construction waste materials given to Waste Manager
- Responsibility for identification of Permitted Waste Contractors who shall be employed to collect and dispose of waste arising from the construction works

6.0 Training Provisions for Waste Manager & Crews

A waste manager will be appointed to ensure commitment, operational efficiency and accountability during the C&D phase

6.1 Site Manager Training & Responsibility

The waste manager will be given responsibility and authority to select a waste team if required i.e. members of the site crew that will aid him in the organisation, operation and recording the waste management system implemented on-site. The waste manager will have overall responsibility to oversee record and provide feedback to the client on everyday waste management at the site. Authority will be given to the waste manager to delegate responsibility to sub-contractors where necessary and to co-ordinate with suppliers, service providers and sub-contractors to prioritise waste prevention and salvage. The waste manager will be trained

in how to set up and maintain a record keeping system, how to perform an audit and how to establish targets for waste management on-site. He will also be trained in the best method for segregation and storage of recyclable materials, have information on the materials that can be reused on-site and know how to implement the C&D WMP

6.2 Site crew Waste Management Training

Training of the site crew is the responsibility of the waste manager and as such, a waste training program will be organised. A basic awareness course will be held for all crew to outline the C&D WMP and to detail the segregation of waste at source. This may be incorporated with other training needs (e.g. general site induction, safety training etc). This training course will describe the materials to be segregated, the storage methods and the location of the waste storage areas

7.0 Record Keeping

Records will be kept for each waste material which leaves the site, wither for reuse on another site, recovery, recycling or disposal. A system will be put in place to record the construction waste arising on-site. The waste manager or delegate will record the following:

1. Waste taken off-site for reuse
2. Waste taken off-site for recovery
3. Waste taken off-site for recycling
4. Waste taken off-site for disposal
5. Waste (soil & stone) accepted on-site for recovery

For each movement of waste off-site, a signed waste collection docket will be obtained by the waste manager (or delegate) from the contractor. This will be carried out for each material type. This system will also be linked with the delivery records. A signed waste acceptance docket will be issued for each movement of waste on-site.

8.0 Outline Waste Audit Procedure

8.1 Responsibility for Waste Audit

The appointed waste manager will be responsible for conducting a waste audit at the site during the C&D phase of the development.

8.2 Review of Records and Identification of Corrective Actions

A review of all the records for the waste generated and transported off-site, as well as waste accepted, should be undertaken mid-way through the C&D phase. If waste movements are not accounted for, the reasons for this should be established in order to see if and why the record keeping system has not been maintained. Each material type will be examined in order to see where the largest percentage waste generation is occurring. The waste management methods for each material type will be reviewed in order to highlight how the targets can be achieved. Waste management costs will also be reviewed. Upon completion of the C&D phase a final report will be prepared summarising the outcomes of waste management processes adopted and the total recycling/reuse/recovery figures for the development

9.0 Consultation

9.1 Client

The client will be consulted as required throughout the C&D phase in order to ensure that all available waste reduction, re-use and recycling opportunities are identified and utilised.

9.2 Recycling/Salvage Companies

Companies that specialise in C&D waste management will be contacted to determine their suitability for engagement. If used, each company will be audited in order to ensure that relevant and up-to-date waste collection permits and/or licence are held. In addition, information regarding individual C&D materials will be obtained including the feasibility of recycling each material, the costs of recycling/reclamation and the means by which the wastes

will be collected and transported off-site, and the recycling/reclamation process each material will undergo off-site

The Table overleaf are the appointed companies with relevant waste collection permits

Materials moved off site, as per the following details:

Waste Type EWC Code	Permitted Waste Collector (Incl. permit No.)	Permitted Licensed facility (Include permit No.)
Tar, Cold Plainings, Bitumen	J Ryan Haulage Stringfield Ballywilliam Enniscorthy	NWCPO-10-01298-03 (see attached)
17 04 05 Steel	N/A	
17 06 01 Construction materials containing asbestos (If applicable)	N/A	
17 05 04 17 05 03 Clay, Soils, Stone	Mick Smith Haulage & Sons Ltd Mill Street Hackestown Co.Carlow	NWCPO –13-11134-03 (see attached)
Non Hazardous & Hazard Waste	J Ryan Haulage Stringfield Ballywilliam Enniscorthy	NWCPO-10-01298-03 (see attached)
Excavated Rock	Micon Transport Ltd, Rathfarnham, Dublin 14	NWCPO-22-12754-01 (See attached)