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Development Servicing Management Plan

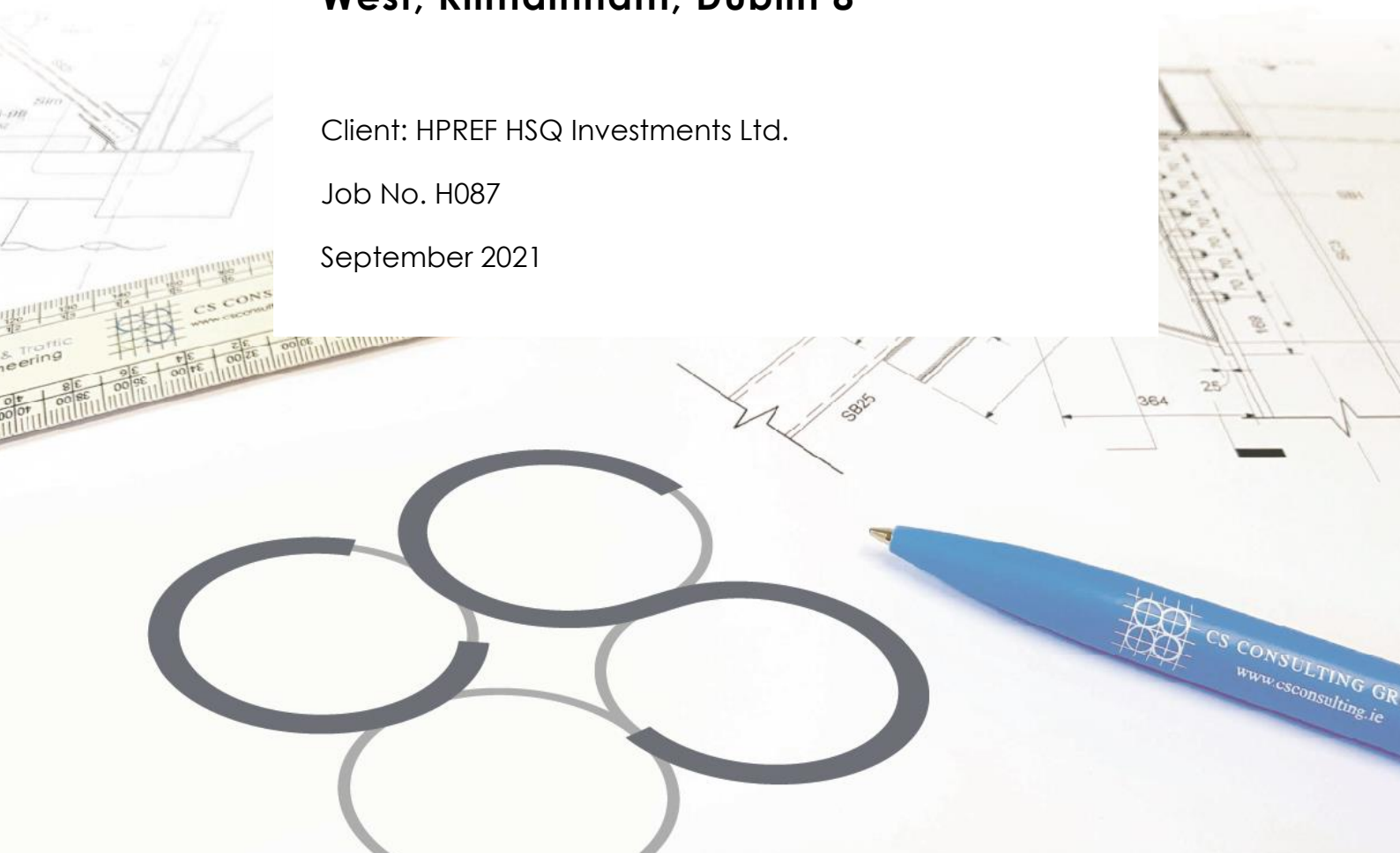
Strategic Housing Development (SHD)

Heuston South Quarter, St. John's Road West, Kilmainham, Dublin 8

Client: HPREF HSQ Investments Ltd.

Job No. H087

September 2021



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DEVELOPMENT SERVICING MANAGEMENT PLAN

STRATEGIC HOUSING DEVELOPMENT (SHD)

HEUSTON SOUTH QUARTER, ST. JOHN'S ROAD WEST, KILMAINHAM, DUBLIN 8

CONTENTS

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1.0 INTRODUCTION

1.1 Scope and Purpose of Report

Cronin & Sutton Consulting Engineers (CS Consulting) have been commissioned by HPREF HSQ Investments Ltd to prepare a Development Servicing Management Plan for a proposed 399-unit Strategic Housing Development at Heuston South Quarter, St. John's Road West, Kilmainham, Dublin 8.

The purpose of the present report is to set out the intended strategy for managing both incoming and outgoing vehicular servicing of the proposed development. Outgoing servicing shall principally comprise the collection of municipal waste generated by the development, while incoming servicing shall include deliveries to the residential and retail elements of the development.

1.2 Site Location

The proposed development is located on St. John's Road West at the Heuston South Quarter complex in Dublin 8, within the administrative jurisdiction of Dublin City Council. The site has an area of 1.08ha and is bounded to the west by the gardens of the Royal Hospital Kilmainham, to the north by St. John's Road West, and to the east and south by existing office and residential buildings forming Phase 1 of the larger HSQ development (which extend to Military Road, further to the south-east).

The location of the proposed development site is shown in Figure 1; the indicative extents of the development site, as well as relevant elements of the surrounding road network, are shown in more detail in Figure 2.

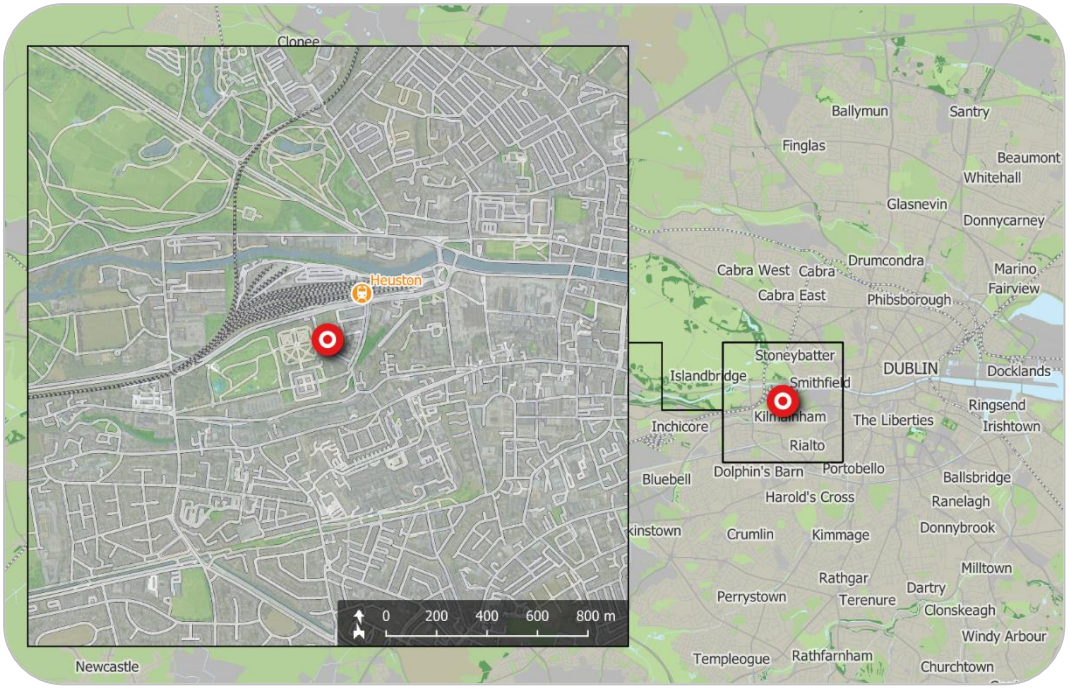

Figure 1 – Location of proposed development site
(*map data & imagery: EPA, OSi, OSM Contributors, Google*)

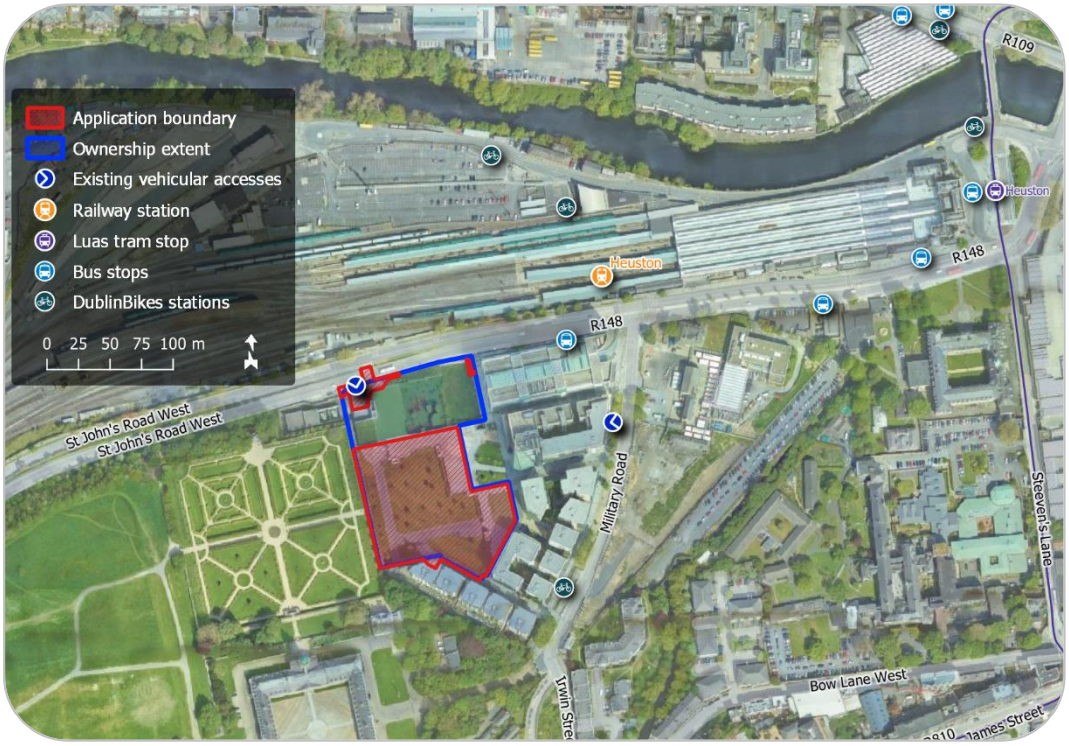

Figure 2 – Site extents and environs
(*map data & imagery: NTA, DCC, OSi, OSM Contributors, Google*)

1.3 Existing Land Use

The subject site is brownfield, comprising a partially developed section of the Heuston South Quarter (HSQ) complex. Some surface level internal roads are present on the site, which benefits from the existing established HSQ vehicular accesses on St. John's Road West (R148) and Military Road. The site has been landscaped as an interim measure to improve its aesthetics pending its complete development. The subject site does not in itself generate any vehicular traffic but is traversed by traffic accessing the existing HSQ complex to/from St. John's Road West.

1.4 Description of Proposed Development

The proposed development will consist of a residential development of 399 no. 'Build To Rent' residential units and all ancillary and associated uses, development and works, and a retail unit of 120 sq m, on a site of 1.08 ha. The proposed development consists of:

- Site clearance and localised demolitions to remove part of the podium and Basement Level -1 reinforced concrete slabs at the interface of the proposed Blocks A and B, together with the incorporation of part of the existing double basement level structure extending to approximately 7,613 sq.m over two levels (excluding an area of 3,318 sq.m that will be backfilled at Basement Level -1) within the proposed development.
- The construction of 5 no. buildings (Blocks A to E) ranging in height between 3- to 18-storeys over double basement level / podium level to provide a residential / mixed use development to provide 399 Specific BTR (Build to Rent) units with a total gross floor area of 29,391 sq.m, comprising 46 no. studios, 250 no. one bedroom units, 90 no. 2 bedroom / 4 person units and 13 no. 2 bedroom / 3 person units; internal communal ancillary residential services / amenities to include a shared co-working area / lounge (178 sq.m) and gym (102 sq.m) at

lower ground floor level, and lounges on either side of a residential foyer at ground floor / podium level within Block A (196 sq.m), and a TV Room / lounge (57 sq.m) at ground floor / podium level within Block C.

- An independent retail unit (120 sq.m) is proposed at ground floor / podium level within Block B.
- A double basement is provided that will be integrated within the existing basement levels serving the wider HSQ development and will be accessed from the existing vehicular ramped accesses/egresses onto/off St. John's Road West and Military Road to the north and east, respectively. Basement level -1 provides: a refuse store; 80 no. car parking spaces (including 4 no. disabled spaces and 8 car club spaces); 4 no. motorcycle parking spaces; and, secure bicycle parking / storage in the form of 251 no. double stacked cycle parking spaces providing capacity for 502 no. secure bicycle storage spaces for residents. An additional 49 no. Sheffield type bicycle stands are provided at basement level -1 to provide 98 no. visitor cycle spaces (inclusive of 8 no. designated cargo bike spaces, that will also be available for the shared use with residents of the scheme) and a further 55 no. Sheffield type bicycle stands are provided at podium level to provide 110 no. cycle parking spaces (108 no. visitor cycle parking spaces (inclusive of 6 no. designated cargo bike spaces) and 2 no. cycle parking spaces in connection with the retail unit). All bicycle parking at basement level is accessed via a dedicated cycle lift from podium to basement level -1 that is situated to the south of Block B.
- Works proposed along the St John's Road West frontage include the omission of the existing left-turn filter lane to the vehicular ramped access to the HSQ development and re-configuration of the pedestrian crossings at the existing junction together with the re-configuration of the existing pedestrian crossing over the westbound

lanes of St. John's Road West leading to an existing pedestrian refuge island. Re-alignment of the existing footpath along the site frontage onto St John's Road West to tie into the reconfigured junction arrangement and provision of a link to a new lift to provide wheelchair access from St John's Road West to the HSQ podium.

- Communal Outdoor Amenity space is provided for residents in the form of rooftop terraces (totalling 1,179sqm), and lower-level communal courtyards between blocks (totalling 960sqm).
- Hard and soft landscaping works are proposed at podium level which includes the extension and completion of the public plaza to the east of Block A; the provision of footpaths; a MUGA (Multi Use Games Area) and informal play areas for children (totalling 1,670sqm).
- A double ESB substation/switch room at ground / podium level within Block A, and a single substation/switch room at ground / podium level within Block B together with associated site development works, which includes the realignment / reprofiling of an existing vehicular access ramp at the southern end of the site between basement levels -1 and -2 and the closure / removal of a second vehicular access ramp between the subject site at basement level -1 and the raised basement level -1 under the Telford building.

2.0 PROPOSED SERVICING AND WASTE COLLECTION ARRANGEMENTS

All incoming and outgoing servicing of the development (including deliveries, refuse collection, tradespeople, and passenger collection/set-down) shall be conducted within the development site, to avoid obstruction of vehicular or pedestrian traffic on the external road network. All such servicing operations, including all refuse collection and HGV deliveries) shall take place at basement level within the site.

Upon completion of the development, a Management Company shall be constituted, with the remit to provide and maintain common areas and communal facilities within the development, including all waste collection and segregation facilities. The Management Company shall prepare an Operational Waste Control Strategy for the development, which shall detail specific operational arrangements for these.

2.1 Vehicular Servicing Access

Vehicular access to the development's basement car park shall be via 2no. existing dedicated two-way access ramps from St. John's Road West (R148) and Military Road. Sufficient clearance has been provided within the basement and along its access ramps for commercial vans. This shall the development's incoming servicing (e.g. furniture deliveries and maintenance work) to be conducted from basement level, with heavy goods or equipment being wheeled to building core entrances and carried by lift to each floor.

2.2 Waste Collection Arrangements

All waste generated by the subject development shall be gathered and segregated at a designated Waste Storage Area (WSA) located internally at lower ground floor level, to which development occupants shall have access. The WSA shall house waste bins for both residential and retail

elements of the development; retail unit bins shall be boxed off and locked to avoid cross-contamination with residential waste. A Refuse Collection Store (RCS) shall be located at basement level -1 directly beneath the WSA, to which it shall be linked by an internal waste lift. The RCS shall be enclosed and secured, with doors giving on to the basement-level vehicle circulation aisle.

Figure 3 – Waste collection arrangements

Waste collection shall occur at basement level -1. Waste bins shall be brought by facilities management from the WSA at lower ground floor level via the waste lift to the RCS below (see Figure 3). The refuse collection vehicle will stop outside the RCS, to which waste collection contractors shall have access and from which the bins will be brought for emptying.

Following bin collections, all waste bins will be promptly returned to the RCS, from which facilities management will return them to the WSA via lift.

Refer to CS Consulting drawing HSQ-CSC-XX-XX-DR-C-0115 for a more detailed view of the swept path of a refuse collection vehicle circulating within the proposed development at basement level.

2.3 Delivery and Servicing Management Measures

This Development Servicing Management Plan will specifically aim to ensure that servicing of the development can be carried out efficiently, whilst minimising both:

- conflicts between vehicular servicing traffic and internal pedestrian and cyclist traffic, and
- any effects on the operational performance of the surrounding road network.

2.3.1 Delivery Scheduling

Peak hour deliveries will be discouraged throughout the development. On the basis that the AM peak is often the busiest hour for servicing, the operation of the development will spread deliveries throughout the day wherever possible. The majority of postal deliveries will be made to grouped mail boxes or to reception areas, reducing delivery time in this instance.

2.3.2 Waste Management

The development shall provide sufficient facilities for storage and collection of segregated waste. Refuse collection will be undertaken outside of peak hours where possible, with the specific collection times being arranged with the private waste contractors to minimise the impacts on the operation of the site.

2.3.3 Operational Coordination, Restrictions and Enforcement

The development's Management Company shall be responsible for establishing and enforcing restrictions on the nature and scheduling of permitted vehicular servicing operations within the site. The Management Company shall maintain records of all large deliveries and shall coordinate with all development occupants to ensure that regular scheduled servicing operations are conducted at suitable times and do not conflict with one another.

The Management Company shall take enforcement measures where such operations are conducted without its approval; these may include vehicle clamping or towing. The Management Company shall also be responsible for preventing unauthorised vehicle parking within the development, which may obstruct servicing operations and could endanger vulnerable road users.

2.3.4 Accommodating Special Deliveries

Any special deliveries to the subject development will need to be arranged with site management in advance. Special deliveries are defined as unusually large items which would arrive on an infrequent basis. The delivery time and duration will be agreed with the development's Management Company to minimise the impact upon the routine daily servicing requirements of the development and the operation of the surrounding road network. All special deliveries should be arranged for off-peak periods, where possible.

3.0 ESTIMATED WASTE GENERATION AND SERVICING DEMAND

3.1 Waste Generation

The proposed development shall generate quantities of waste during its operational phase. The principal types of waste generated by the development will include waste from periodic maintenance and cleaning, used packaging/containers, and general domestic waste generated by occupants of the building. These waste types will be mainly non-hazardous and may be generally classed as municipal waste.

Municipal waste comprises household waste as well as commercial and other waste that, because of its nature or composition, is similar to household waste. It excludes municipal sludges and effluents. In the context of this report, municipal waste consists of three main elements: household, commercial (including non-process industrial waste), and street-cleansing waste (street sweepings, street bins and municipal parks and cemeteries maintenance waste, electoral campaign material).

Typical municipal waste streams are expected to be produced during the operation of the proposed development. These include:

- cardboard and paper;
- plastics (including bottles and other containers);
- food waste;
- glass (including green, brown, and clear);
- metals (including aluminium cans and tin cans).

Periodic maintenance and repair activities will generate small quantities of wastes such as green waste, inert building materials (e.g. textiles) and certain chemicals (cleaning products, paints, pesticides, etc.).

The estimated volumes of waste to be generated by the proposed development are given in Table 1.

Table 1 – Estimated Waste Generation

Waste Type	Volume generated per week		
	Residential Apartments	Retail Unit	TOTAL
Mixed Dry Recyclables	37.10m³	0.56m³	37.66m³
Glass	1.01m³	0.56m³	1.57m³
Mixed Municipal Waste	19.51m³	0.02m³	19.53m³
Organic Waste	5.23m³	0.04m³	5.27m³
TOTAL	62.85m³	1.18m³	64.03m³

Each residential waste stream shall require collection twice per week, while each waste stream generated by the development's retail unit shall require a separate weekly collection. As shown in Table 2, this is expected to result in approximately 12no. vehicular trips per week to the site for waste collection. All waste collection is expected to be conducted by standard refuse collection vehicles.

Table 2 – Estimated Waste Collection Vehicle Trips

Vehicle Type	Vehicular trips per week				
	Mixed Municipal Waste	Glass	Other Recyclable Waste	Organic Waste	TOTAL
Standard Refuse Collection Vehicle	3	3	3	3	12

For additional detail on the proposed development's waste generation and its storage/collection arrangements, please refer to the Operational Waste Management Plan (OWMP) prepared by AWN Consulting and submitted separately in support of this planning application.

3.2 Incoming Servicing

Incoming servicing of the proposed development shall comprise the following operations:

- Postal deliveries to residential units
- Other deliveries to residential units (groceries, meals, etc.)
- Other servicing of residential units (e.g. tradespeople)
- Stock deliveries to retail unit
- Other deliveries to retail unit
- Other servicing of retail unit (e.g. tradespeople)

An estimate of the frequency of such servicing trips is given in Table 3.

Table 3 – Estimated Incoming Servicing Vehicle Trips

Vehicle Type	Vehicular trips per week		
	Residential Apartments	Retail Unit	TOTAL
Light Commercial Vehicle	46	10	56
Rigid HGV	0	1	1
Articulated HGV	0	0	0
TOTAL	46	11	57

3.3 Total Servicing Trips

Table 4 – Estimated Total Servicing Vehicle Trips

Vehicle Type	Vehicular trips per week
Light Commercial Vehicle	56
Refuse Collection Vehicle	12
Rigid HGV	1
TOTAL	69

The resultant total weekly vehicular trips necessitated by the proposed development's incoming and outgoing servicing requirements are presented in Table 4.

4.0 INTEGRATION WITH EXISTING OPERATIONS AND FURTHER DEVELOPMENT

4.1 Integration with Existing HSQ Servicing Operations

At present, certain vehicular servicing operations for the existing HSQ complex are conducted via the subject site. In particular, these operations include deliveries to the SuperValu retail loading dock, located at basement level -1 within the application boundary (see Figure 4), conducted in part by articulated HGVs. The collection of waste generated by the SuperValu retail unit is also conducted at this location.

Figure 4 – HGV servicing of existing SuperValu retail unit

The proposed development's waste collection arrangements, as described in sub-section 2.2 and as shown in Figure 3, allow a refuse collection vehicle continued access to this existing loading dock. The internal basement

layout of the proposed development has also been designed to ensure that an articulated HGV may circulate through the development and have continued access to the SuperValu loading dock, including the space necessary for reversing manoeuvres.

Refer to CS Consulting drawing HSQ-CSC-XX-XX-DR-C-0114 for a more detailed view of the swept path of an articulated HGV circulating within the proposed development at basement level and servicing the SuperValu loading dock.

4.2 Integration with Servicing of Associated Planned Development

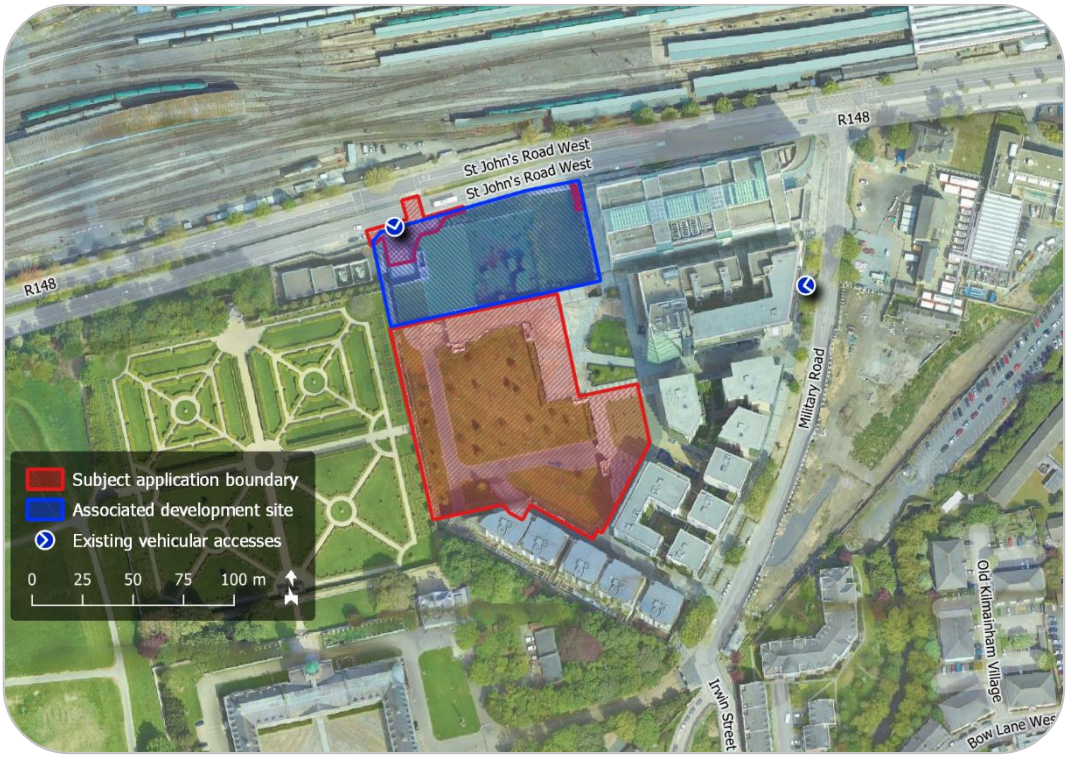

Figure 5 – Associated development site
(*map data & imagery: OSM Contributors, Google*)

The subject site forms the southern part of the applicant's landholding in the existing HSQ complex. In the northern part of this landholding, it is intended

to apply for permission for a commercial development, provisionally comprising:

- offices with a total Gross Floor Area of approx. 27,000m^2;
- a 250-bedroom hotel; and
- 95no. car parking spaces
  (60no. to serve offices and 35no. to serve the hotel).

It is intended that vehicular servicing of this associated planned development shall also be conducted via the internal basement level layout of the proposed development.

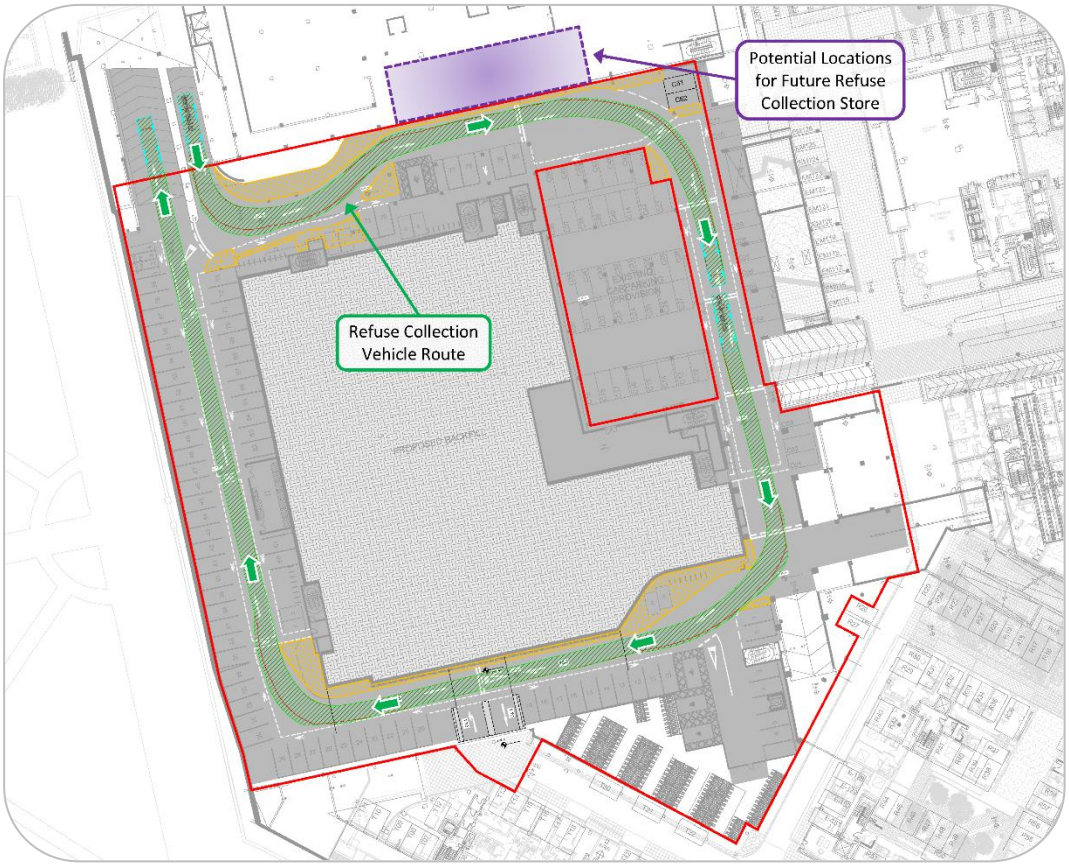

Figure 6 – Indicative future development waste collection arrangements

A detailed design of this associated development has not yet been prepared. As shown in Figure 6, however, a refuse collection store

positioned at the southern boundary of the associated development site (along the subject site's northern boundary) would be readily accessible by a refuse collection vehicle circulating within the subject proposed development. Incoming vehicular servicing (e.g. deliveries), if not conducted within the associated development itself, could also be accommodated at this location within the subject proposed development.