

READING INTERNATIONAL BUSINESS PARK

WASTE MANAGEMENT STRATEGY

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VELOCITY
Transport Planning

TABLE OF CONTENTS

1	INTRODUCTION	1
2	WASTE LEGISLATION, POLICY & GUIDANCE	5
3	MANAGEMENT OF COMMERCIAL WASTE: MAIN BUILDING (SPURS A-F)	7
4	MANAGEMENT OF COMMERCIAL WASTE: THE DOT & FARMHOUSE	18
5	SUMMARY AND CONCLUSIONS	24

FIGURES

FIGURE 1–1: SITE LOCATION AND LOCAL CONTEXT	2
FIGURE 1–2: SITE CONFIGURATION	4
FIGURE 3–1 EXAMPLE INTERNAL BINS.....	8
FIGURE 3–2 EXAMPLE INTERNAL FOOD WASTE BIN.....	9
FIGURE 3–3 EXAMPLE INTERNAL GLASS WASTE BIN	9
FIGURE 3–4 EXAMPLE FM TROLLEY	10
FIGURE 3–5 EXAMPLE FM TROLLEY	10
FIGURE 3–6: COMMERCIAL WASTE COMPOUND	11
FIGURE 3–7 EXAMPLE PORTABLE SKIP COMPACTOR	12
FIGURE 3–8 EXAMPLE SKIP COLLECTION VEHICLE.....	12
FIGURE 3–9 PORTABLE COMPACTOR LOADING / UNLOADING	13
FIGURE 3–10 EXAMPLE 240-LITRE WHEELED BIN.....	13
FIGURE 3–11 EXAMPLE RCV.....	14
FIGURE 3–12 EXAMPLE RCV DIMENSIONS.....	14
FIGURE 3–13 COMMERCIAL WASTE COMPOUND CONFIGURATION	17
FIGURE 4–1 THE DOT AND FARMHOUSE LOCATIONS	18
FIGURE 4–2 COMMERCIAL WASTE STORE.....	22
FIGURE 4–3: RCV SWEPT PATH ANALYSIS.....	23

TABLES

TABLE 3-1 CURRENT AND ESTIMATED WEEKLY WASTE GENERATION	8
TABLE 3-2 DIMENSIONS OF PORTABLE WASTE COMPACTOR (10.7M3)	12
TABLE 3-3 240-LITRE WHEELED BIN DIMENSIONS.....	13
TABLE 3-4 COMMERCIAL WASTE COMPOUND STORAGE PROVISION	16



TABLE 4-1 WASTE METRICS	19
TABLE 4-2 COMMERCIAL AREAS	20
TABLE 4-3 ESTIMATED WEEKLY WASTE GENERATION.....	20
TABLE 4-4 WASTE STORAGE PROVISION	21

APPENDICES

APPENDIX A	NATIONAL, LONDON AND LOCAL WASTE POLICY & GUIDANCE
APPENDIX B	EXISTING SITE COLLECTION SCHEDULE
APPENDIX C	SWEPT PATH ANALYSIS



1 INTRODUCTION

1.1 INTRODUCTION

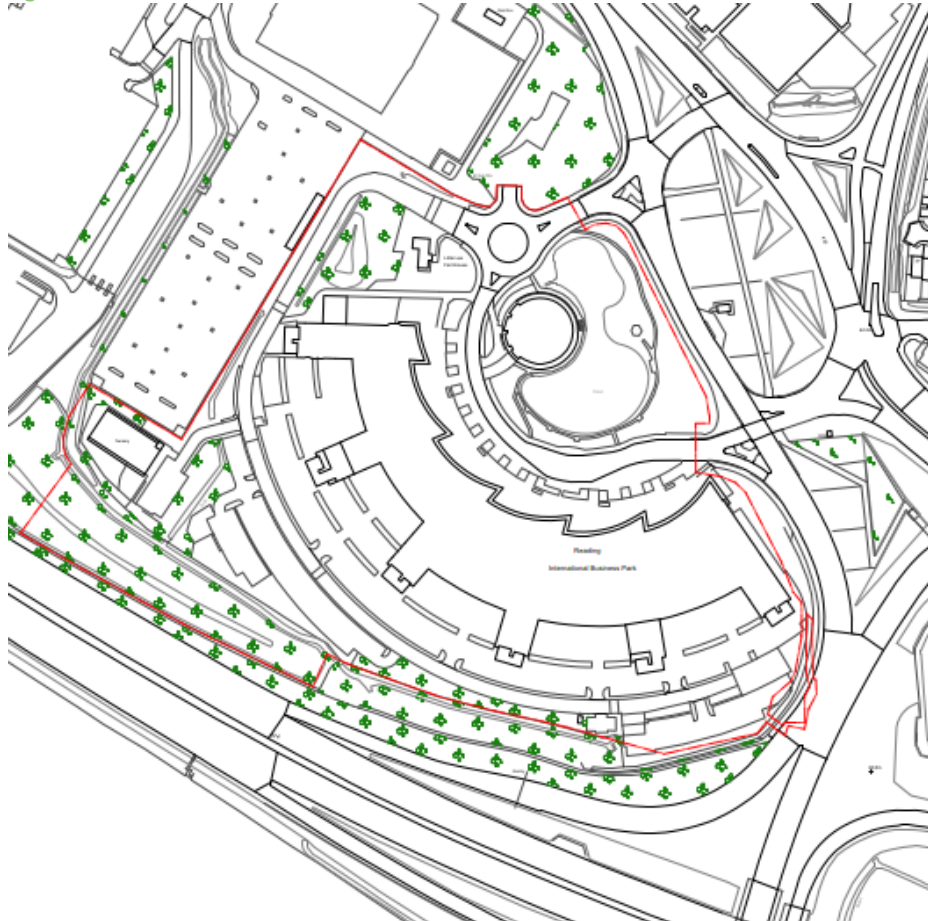
- 1.1.1 This Waste Management Strategy (WMS) has been prepared by Velocity Transport Planning to accompany a detailed planning application for redevelopment proposals for Reading International Business Park (hereafter referred to as the 'Proposed Reconfiguration') within the borough of Reading.
- 1.1.2 This Waste Management Strategy considers the potential impacts that may arise from waste generated during the operational phase of the Proposed Reconfiguration, with the overall aim of developing a strategy for legislative compliance and good practice in the separation, storage and collection of waste.

1.2 THE SITE

- 1.2.1 RIBP is located at Junction 11 of the M4, providing excellent connectivity to the national motorway network, and central Reading. It comprises a large single office building extending to circa 380,000sqft (35,000sqm) of commercial and ancillary floorspace within 6 connected blocks along with a number of ancillary freestanding buildings in the same grounds.
- 1.2.2 The office floorspace was originally designed to operate as either a single headquarters, or a multi-let office campus. Although the building was originally the headquarters for Worldcome (who became Verizon), over the years they have reduced their occupancy such that the building is now home to a number of different companies.
- 1.2.3 Despite the site's very prominent gateway location, vacancy rates have increased and currently stand at around 170,000sqft (16,000sqm). This is due to a number of factors, but primarily due to the office space having not been modernised so that it is no longer categorised as 'Category A'. It also lacks good quality amenity provision. As a consequence, RIBP finds it difficult to compete with the higher quality office accommodation elsewhere in Reading and in particular at nearby Green Park.
- 1.2.4 The office floorspace is supported by a number of ancillary uses in the main building including food and beverage outlets on the ground floor and a private gym facility located at basement level.
- 1.2.5 There are also three additional standalone buildings within the red line boundary. 'The Dot', which acts as the main workplace cafeteria for office workers, the Grade II listed 'Little Lea Farmhouse' (the Farmhouse) which has been used for various uses but most recently for informal storage by Verizon, and the Busy Bees creche which is located to the rear of the site and operates separately from the rest of the property.
- 1.2.6 It is understood that the lawful use of the entire site is Class E (as of 1st September 2020, subject to the outcome of the recent legal challenge to the changes to the Use Classes Order, and B1 before this date).
- 1.2.7 **Figure 1–1** illustrates the location of the site.



Figure 1–1: Site Location and Local Context



1.3 PROPOSED RECONFIGURATION

- 1.3.1 The Applicant is in the process of acquiring the Site and plans to fund significant improvement works next year to the tune of some £25m, with the intention of creating an exemplary commercial offering in terms of occupier satisfaction, sustainability and wellness.
- 1.3.2 In this context, the COVID-19 pandemic has accelerated the growing shift towards employee health and wellness and the proposed works seek to ensure that the commercial floorspace, and the ancillary uses provided, are of the highest quality and suitable for the post COVID working environment. The applicant has recently been in conversation with the International WELL Building Institute regarding 'Well' Certification and the measures that could be introduced to achieve this accreditation.
- 1.3.3 There are a number of alterations proposed to the building as explained in The Design and Access Statement (DAS) provided in support of planning application. The DAS provides an overview of the design and rationale behind the proposed changes to the buildings, however, for ease of reference planning permission is being sought for the following:
- Changes to the external façade;
 - New entrance and lobby area to provide a more prominent and welcoming reception area to create a greater sense of arrival;



- New expanded gym facility adjacent to an improved, covered and secure cycle parking area including electric cycle charging points, lockers, changing facilities and showers;
- A comprehensive hard and soft landscaping scheme which seeks to improve the amenity of the site for formal and informal use by employees;
- Re-purposing of The Dot to provide both office space and a multi-function space for use by all tenants along with changes to its external appearance;
- Bringing back the Farmhouse into beneficial use including minor alterations for which Listed Building Consent is being sought;
- Revisions to the parking layout to facilitate the various alterations and accommodate displaced parking, including an amended bus layby, improved servicing and consolidated waste management and collection arrangements;

1.3.4 As part of the site wide enhancements for which planning permission is not required it is also intended to:

- Improve the overall sustainability of the site, secure a reduction in energy loss, introduce heat pump technology, provide electric vehicle charging points and seek both WELL accreditation and a BREEAM Excellent rating.
- Introduce a package of improvements to greatly enhance sustainable transport/accessibility to site and promote travel by non-car modes (including by way of a consolidated cycle parking facility, increased cycle parking provision including folding bikes/enlarged cycles/EV cycles, EV charging, car share bays, dedicated travel plan network, future proofed cycle docking station to promote access to the town centre/Green Park station, funding commitments to the Greenwave Bus, bus stop improvements, and provision of better travel information);

1.3.5 The intention is to commence works during the early part of 2021.

1.3.6 In summary, **Application 1** seeks permission for the following:

- Upgrade of existing office building comprising the construction of a new entrance, reconfiguration of the car parking and basement level employee ancillary facilities (provision of new gym and end of journey facilities) and improvements to the hard and soft landscaping (including provision of meeting pods), consolidated waste management area, external alterations to 'The Dot' and internal works to the Listed Little Lea Cottage and the recolouring of the existing terracotta tiles under Permitted Development Rights"

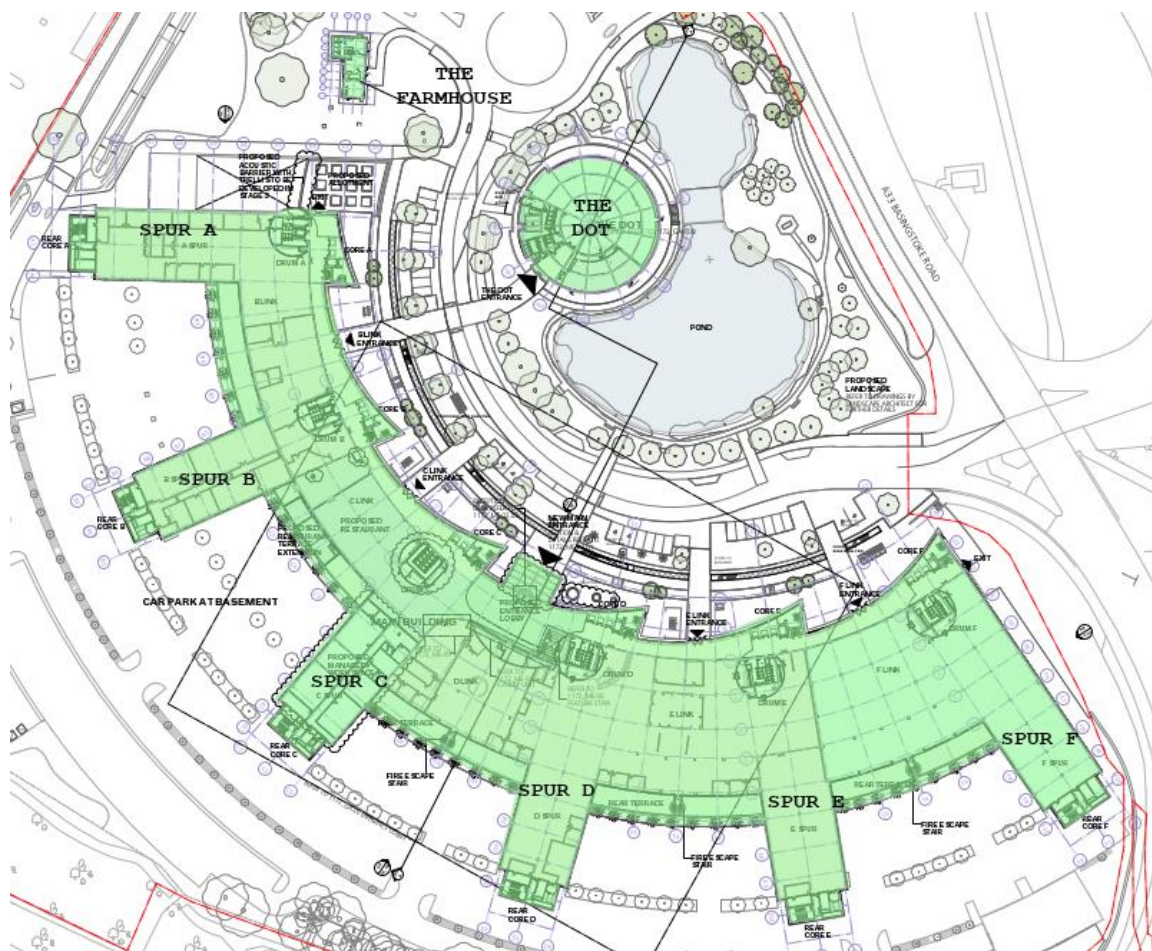
1.3.7 **Application 2**, promotes further refinements to the parking layout and

- A Decked Car Park to the rear of the site and associated amendments to the parking layout at grade.

1.3.8 **Figure 1–2** shows the configuration proposals.



Figure 1–2: Site Configuration



1.3.9 This document should be read in conjunction with the Delivery and Servicing Plan and Transport Technical Note also submitted in support of planning.

1.4 DOCUMENT STRUCTURE

1.4.1 This report is set out in the following format:

- **Section 2: Waste Legislation, Policy and Guidance** - details of the national legislation and local waste policy that have relevance to the Proposed Reconfiguration.
- **Section 3: Management of Commercial Waste: Main Building (Spurs A-F)** - provides an estimate of commercial waste arising and outlines the plan which will be adopted to manage the waste arising from the Main Building within the Proposed Reconfiguration once operational.
- **Section 4: Management of Commercial Waste: The Dot & Farmhouse** - provides an estimate of commercial waste arising and outlines the plan which will be adopted to manage the waste arising from the Dot and Farmhouse within the Proposed Reconfiguration once operational.
- **Section 5: Summary & Conclusions**



2 WASTE LEGISLATION, POLICY & GUIDANCE

2.1 INTRODUCTION

- 2.1.1 The development and implementation of European Union (EU) waste policy and legislation is delivered by EU Directives, such as the Landfill Directive, Waste Electrical and Electronic Equipment Directive etc. Member States must implement the policy drivers and requirements of these Directives through national legislation.
- 2.1.2 The revised Waste Framework Directive (rWFD) is a unique EU Directive because it clarifies the definition of 'waste' and other concepts such as 'recycling' and 'recovery'. It implements a revised Waste Hierarchy, expands the 'polluter pays' principle by emphasising producer responsibility and applies more stringent waste reduction and management targets for Member States. It also requires Member States to take measures to promote high quality recycling and to set up separate collections of paper, plastic, metal and glass.
- 2.1.3 The UK formally left the EU on 31 January 2020. Under the UK-EU withdrawal agreement, a transition period will end on 31 December 2020 (unless extended), during which time the UK will be treated for most purposes as if it were still an EU member state, and most EU law (including as amended or supplemented) will continue to apply to the UK. From then on, legislation will remain in force as part of UK law and can be repealed or amended at the will of Parliament or the devolved parliaments / assembly.
- 2.1.4 This section focusses on the details of the national legislation that is relevant to the Proposed Reconfiguration, much of which is influenced by the rWFD. National and local waste policy and guidance documents reviewed during the preparation of this Waste Management Strategy are detailed below.

2.2 NATIONAL LEGISLATION

- 2.2.1 A list of relevant items of national waste legislation is outlined below in reverse chronological order:
- **Waste Management, The Duty of Care Code of Practice (2018 update)** - This code of practice replaces the 1996 Code and is pursuant to Section 34(9) of the Environmental Protection Act 1990. It sets out practical guidance on how to meet waste duty of care requirements and is admissible as evidence in legal proceedings i.e. its rules will be taken into account where relevant in any case based on breach of the duty of care.
 - **The Waste (England and Wales) Regulations 2011 (as amended)** - Waste collection authorities must collect waste paper, metal, plastic and glass separately. It also imposes a duty on waste collection authorities, from the date, when making arrangements for the collection of such waste, to ensure that those arrangements are by way of separate collection.



- **Environment Protection Act 1990** - Part II of the act was originally implemented by the Duty of Care Regulations 1991. The Duty of Care is a legal requirement for those dealing with certain kinds of waste to take all reasonable steps to keep it safe and is set out in Section 34 of the Act. The Waste (England and Wales) Regulations 2011 repealed the Environmental Protection (Duty of Care) Regulations 1991 and apply the Duty of Care requirements by the Environmental Protection Act 1990.

2.3 NATIONAL, LONDON & LOCAL WASTE POLICY

2.3.1 The relevant national, regional and local waste policy that was reviewed during the preparation of this Waste Management Strategy is outlined below and further detail provided in **APPENDIX A**.

- Ministry of Housing, Communities and Local Government (MHCLG), *National Planning Policy Framework* (2019);
- MHCLG, *National Planning Policy for Waste* (2014);
- Department for Environment, Food and Rural Affairs (DEFRA), *Our Waste, Our Resources: A Strategy for England* (2018);
- HM Government, *A Green Future: Our 25 Year Plan to Improve the Environment* (2018);
- Reading Borough Council (RBC), *Local Plan* (2019); and
- RBC, *Sustainable Design and Construction SPD* (2019).



3 MANAGEMENT OF COMMERCIAL WASTE: MAIN BUILDING (SPURS A-F)

3.1 INTRODUCTION

- 3.1.1 This section outlines the proposed waste management strategy that will be used to manage the operational waste arising from the main building within the Proposed Reconfiguration.

3.2 WASTE GENERATION MODELLING

- 3.2.1 Estimated volumes of commercial waste generated within the main building at the Proposed Reconfiguration once operational have been quantified using the existing waste storage provision on site. Commercial waste collection data was employed in favour of area-based waste generation calculations, as this data is more reflective of actual waste generation levels than estimated ones.
- 3.2.2 Details of the existing waste collection schedule were provided to Velocity Transport Planning by the Building Manager on 29th September 2020; full details are included within **APPENDIX B**. In summary, the following waste streams and container types are currently used on site for the storage and collection of waste:
- Residual Waste – 1,100-litre Eurobins and 7.6m³ Rear End Loader (REL);
 - Dry Mixed Recycling (DMR) – 1,100-litre Eurobins;
 - Food Waste – 180-litre wheeled bins; and
 - Glass Waste – 240-litre wheeled bins.
- 3.2.3 To calculate estimated weekly waste generation for the Proposed Reconfiguration, the existing weekly waste generation was the baseline for a 40% occupancy level.
- 3.2.4 To provide a robust waste management strategy for the Proposed Reconfiguration, estimated waste generation is based on a 110% occupancy level. This is to provide contingency in the event of operational issues or high waste generating events.
- 3.2.5 **Table 3-1** summarises the total weekly generation per waste stream for the existing site, based on the current waste collection schedule and the estimated waste generation for the Proposed Reconfiguration once fully occupied.



Table 3-1 Current and Estimated Weekly Waste Generation

Waste Stream	Existing Site (Litres per Week)	Proposed Reconfiguration (Litres per Week)
Residual Waste	15,200	41,800
Dry Mixed Recycling (DMR)	12,700	34,925
Food Waste	1,260	3,465
Glass Waste	240	660
TOTAL	29,400	80,850

3.3 PROPOSED WASTE MANAGEMENT STRATEGY

3.3.1 The proposed strategy to manage commercial waste has been devised to provide a high-quality service to the commercial tenants whilst remaining compliant with relevant standards.

3.4 INTERNAL WASTE STORAGE

3.4.1 Each commercial tenant will be responsible for storage of the waste within their premises. It is assumed that each commercial operator will distribute receptacles throughout their tenanted area to capture waste and recycling.

RESIDUAL WASTE & DMR

3.4.2 It is recommended that employees are not provided with under-desk bins as this discourages recycling.

3.4.3 Examples of suitable bins for residual waste and DMR are shown in **Figure 3–1** below.

Figure 3–1 Example Internal Bins



- 3.4.4 It is assumed that bins will be provided at appropriate locations throughout each tenanted and communal area.

FOOD WASTE & GLASS WASTE

- 3.4.5 Areas generating food waste (breakout areas, office kitchens and commercial kitchens) will be expected to provide segregated storage for food waste (and glass waste where required) in addition to the residual waste and DMR bins. An example of a suitable internal bin for the storage of food waste is shown in **Figure 3-2**.

Figure 3-2 Example Internal Food Waste Bin



- 3.4.6 An example internal glass recycling bin is shown in **Figure 3-3**.

Figure 3-3 Example Internal Glass Waste Bin



- 3.4.7 A Facilities Management (FM) contractor will be appointed to collect waste from communal areas within the Proposed Reconfiguration, on an agreed schedule.
- 3.4.8 Further, each commercial operator will be required to appoint an FM contractor to collect waste generated within their tenanted area on an appropriate schedule.



- 3.4.9 It is assumed that the operatives will collect waste in suitable trolleys and move it internally via corridors and service lifts where necessary. Example trolleys are shown in **Figure 3–4** and **Figure 3–5** below.

Figure 3–4 Example FM Trolley



Figure 3–5 Example FM Trolley



- 3.4.10 The FM operatives will be responsible for collecting each waste stream separately and transferring them to the Commercial Waste Compound.

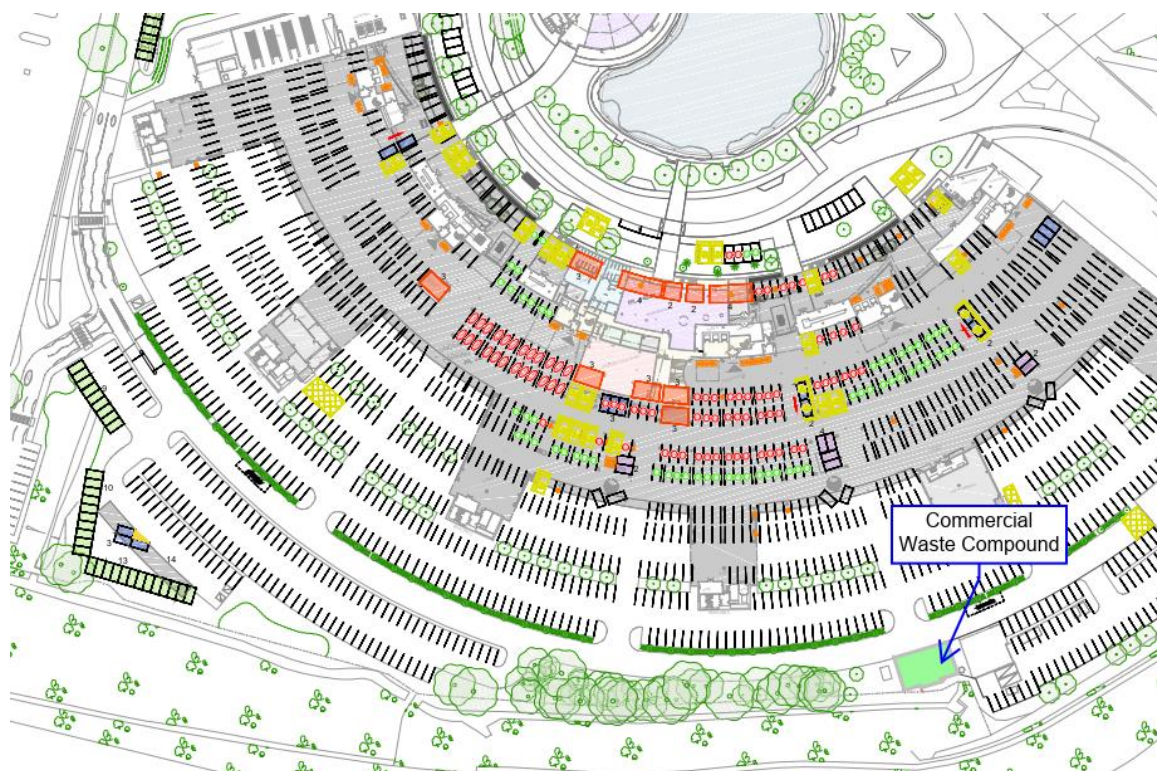
3.5 COMMERCIAL WASTE STORAGE AND COLLECTION

- 3.5.1 A commercial waste compound will be provided within the external landscape of the Proposed Reconfiguration. This is the location that all residual waste, DMR, food waste and glass waste generated within the main building of the Proposed Reconfiguration will be stored prior to collection.

- 3.5.2 The location of the commercial waste compound can be seen in **Figure 3–6**.



Figure 3–6: Commercial Waste Compound



3.5.3 The commercial waste compound will be designed and constructed to BS5906:2005 standards. In summary, the facility will include the following:

- A suitable water point should be provided in close proximity, to allow washing down;
- All surfaces should be sealed with a suitable wash proof finish;
- All surfaces should be easy to clean, and
- Suitable lighting and ventilation should be provided.

3.5.4 Collection of each waste stream will be arranged through a commercial waste contractor by the building management team.

3.5.5 The surface between the presentation point and the nearest vehicular access will be:

- free from steps or kerbs
- have a solid foundation;
- have a smooth solid surface; and
- be level and have a gradient of no more than 1:12, with a minimum width of 2 metres.

RESIDUAL WASTE AND DMR

3.5.6 Residual waste and DMR will be stored in portable skip-loaded compactors. An example of a portable skip compactor is shown in **Figure 3–7**.



Figure 3–7 Example Portable Skip Compactor



3.5.7 The dimensions of the portable waste compactors are detailed in **Table 3-2**.

Table 3-2 Dimensions of Portable Waste Compactor (10.7m³)

Dimension	Measurement (mm)
Width	1,890
Length	4,425
Height	2,190

3.5.8 The waste collection contractor will collect the portable waste compactors using a skip vehicle. An example skip vehicle can be seen in **Figure 3–8**.

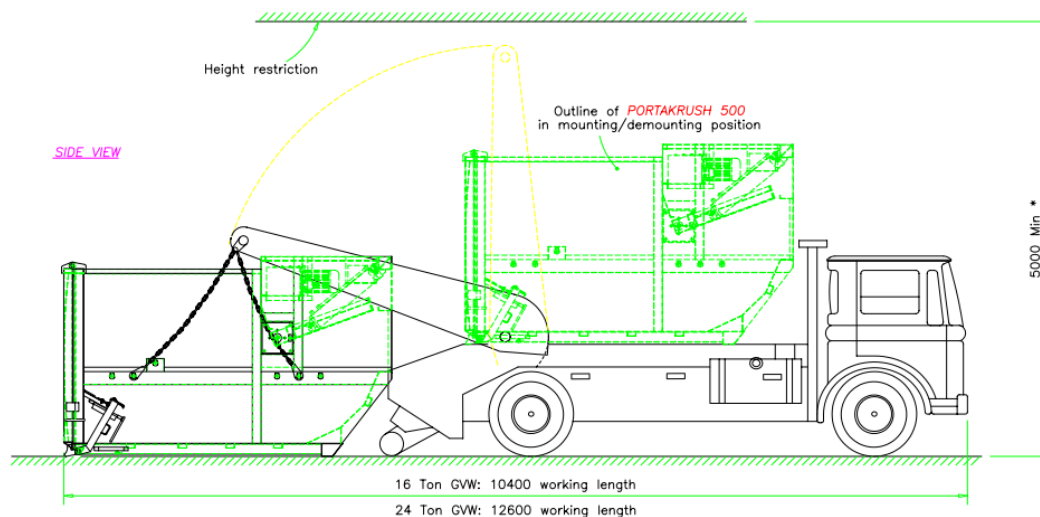
Figure 3–8 Example Skip Collection Vehicle



3.5.9 The commercial waste compound will be designed to accommodate the loading and unloading of the waste compactors. **Figure 3–9** shows indicative spatial requirements for a skip-loaded portable waste compactor.



Figure 3–9 Portable Compactor Loading / Unloading



FOOD WASTE AND GLASS WASTE

- 3.5.10 Food waste and glass waste will be stored in 240-litre wheeled bins within the commercial waste compound. An example 240-litre wheeled bin is shown in **Figure 3–10**.

Figure 3–10 Example 240-Litre Wheeled Bin



- 3.5.11 The dimensions of a 240-litre wheeled bin are summarised in **Table 3-3**.

Table 3-3 240-Litre Wheeled Bin Dimensions

Dimension	Measurement (mm)
Width	580
Length	740
Height	1,100



3.5.12 On an agreed schedule, the waste collection contractor will attend the commercial waste compound to empty the food waste and glass waste bins into a Refuse Collection Vehicle (RCV). Food waste bins will require washing periodically to ensure hygiene standards are sufficiently maintained.

3.5.13 An example RCV is shown in **Figure 3–11**.

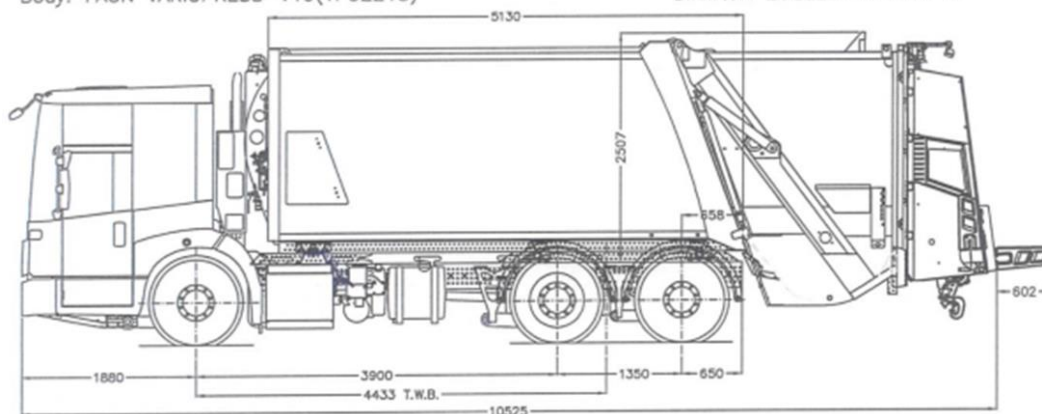
Figure 3–11 Example RCV



3.5.14 **Figure 3–12** shows the dimensions of an example RCV.

Figure 3–12 Example RCV Dimensions

Chassis: MERCEDES ECONIC 6x2RS 2630LL Euro 6 Crew Cab Wheelbase: 3900 T.W.B.4433
 Plated Weights: Fa.7500 Ma.11500 Ra.7500 (19000). TOTAL.26000
 Body: FAUN VARIOPRESS–V19(VP5221S) Binlifter: ZOELLER ROTARY 3



3.5.15 The waste collection contractor will transport each waste stream to an appropriately licenced facility for processing or treatment.

BULKY WASTE

3.5.16 It is anticipated that the Proposed Reconfiguration will generate bulky waste for removal on an ad-hoc basis. This could include pallets from deliveries or redundant furniture.



- 3.5.17 The building management team and commercial tenants will be encouraged to use furniture re-use schemes within the local area to minimise the generation of bulky waste where possible. Suitable schemes can be found via the Reuse Network¹.
- 3.5.18 A space within the commercial waste compound will be allocated for the storage of bulky waste generated by the Proposed Reconfiguration.
- 3.5.19 When sufficient items have been collected within the bulky waste area, the building management team will arrange for a commercial waste contractor to attend and remove them.

GROUNDS MAINTENANCE WASTE

- 3.5.20 The existing site has a small skip in situ for the storage of organic grounds maintenance waste generated by grass-cutting, hedge cutting and tree pruning.
- 3.5.21 It is not anticipated that the generation of grounds maintenance waste will increase once the Proposed Reconfiguration becomes operational.
- 3.5.22 A skip for organic grounds maintenance waste will be located within the commercial waste compound.
- 3.5.23 A commercial waste contractor will be appointed to collect the material for recycling on an appropriate schedule.

3.6 COMMERCIAL WASTE COMPOUND

- 3.6.1 Based on the estimated waste generation summarised in **Table 3-1**, **Table 3-4** summarises the waste storage and collection frequencies required to service the main building within the Proposed Reconfiguration.

¹ Reuse Network <https://reuse-network.org.uk/>



Table 3-4 Commercial Waste Compound Storage Provision

Waste Stream	Container Type	Number of Containers	Suggested Collection Frequency
Residual Waste	Portable 10.7m ³ Compactor (Compaction 3:1)	1	Twice Weekly
DMR	Portable 10.7m ³ Compactor (Compaction 2:1)	1	Daily
Food Waste	240-Litre Wheeled Bin	9	Twice Weekly
Glass Waste		3	Weekly
Bulky Waste	15-20m ² Area	-	Ad-hoc
Grounds Maintenance Waste	8yd ³ Enclosed Skip	1	Ad-hoc

3.6.2 Waste storage capacities have been based on a five-day operational week.

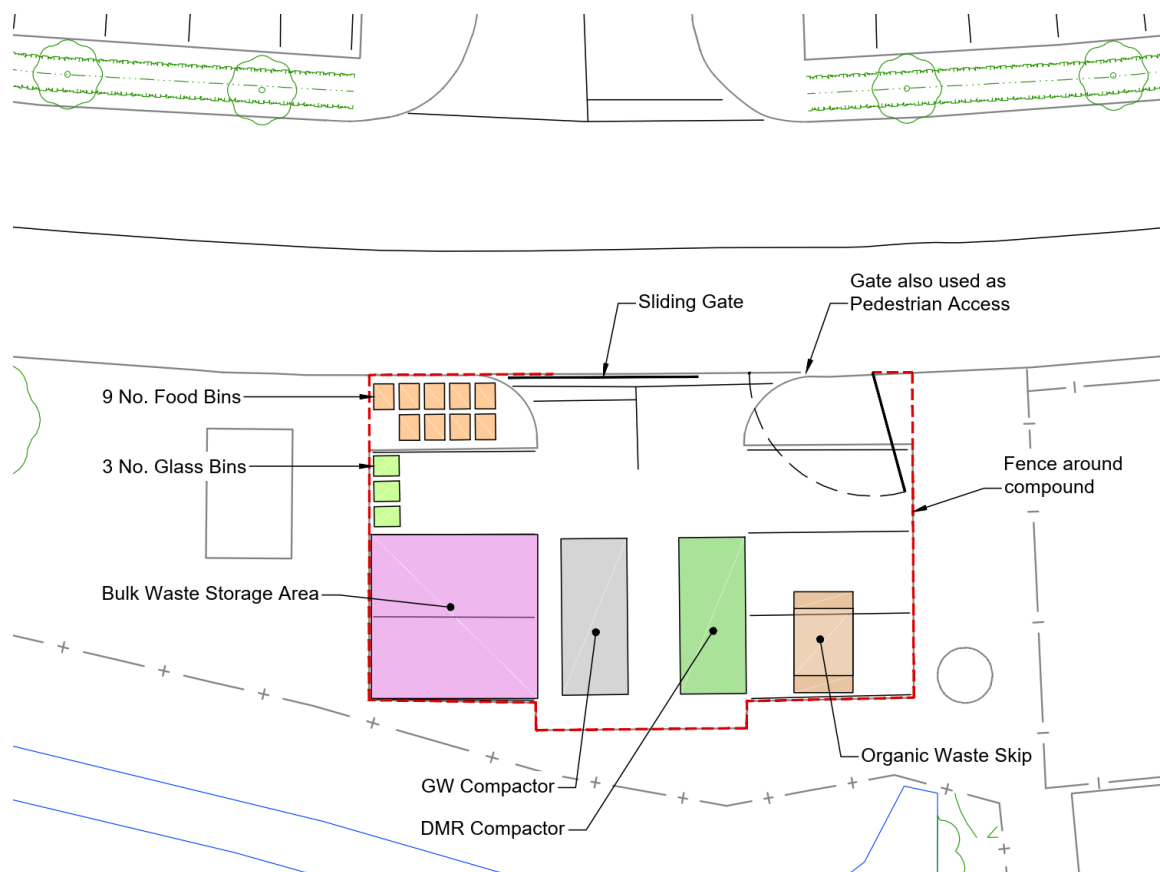
3.6.3 To provide contingency to accommodate peak waste periods, such as holiday periods, festival and special events, the following assumptions have been made:

- Daily collections - the provision of two days' waste storage capacity; and
- Twice weekly collections - the provision of three days' waste storage capacity.

3.6.4 The configuration of the commercial waste compound is shown in **Figure 3-13**.



Figure 3–13 Commercial Waste Compound Configuration



3.6.5 The loading manoeuvres for the commercial waste compound are included in **APPENDIX C**.

3.7 HAZARDOUS WASTE

3.7.1 It is not anticipated that significant volumes of hazardous waste will be generated by the business activities within the Proposed Reconfiguration once operational.

3.7.2 Commercial operators will be responsible for the safe and secure storage and disposal of specialist or hazardous waste within their tenanted area. Examples of hazardous waste likely to be generated include:

- Toner and printer cartridges;
- Batteries; and
- Waste Electrical and Electronic Equipment (WEEE).

3.7.3 Commercial operators will arrange for a suitably licenced commercial waste contractor to remove hazardous waste on an appropriate schedule directly from their tenanted area.

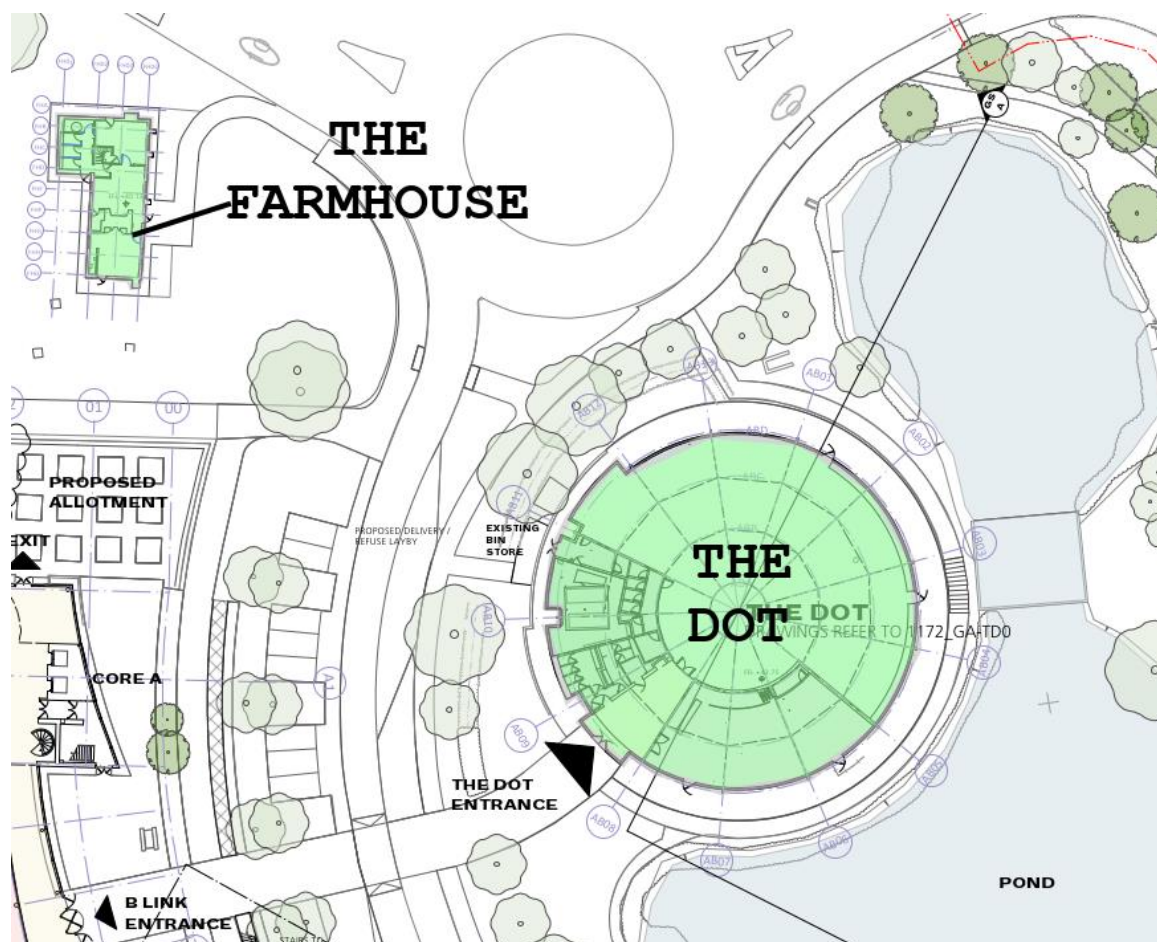


4 MANAGEMENT OF COMMERCIAL WASTE: THE DOT & FARMHOUSE

4.1 INTRODUCTION

- 4.1.1 This section outlines the proposed waste management strategy that will be used to manage the operational waste arising from the Dot and the Farmhouse within the Proposed Reconfiguration.
- 4.1.2 The Dot and Farmhouse are satellite buildings, providing space to complement the uses within the main building.
- 4.1.3 **Figure 4–1** shows the existing location of the Dot and Farmhouse.

Figure 4–1 The Dot and Farmhouse Locations



4.2 WASTE GENERATION MODELLING

WASTE METRICS

4.2.1 To calculate estimated waste generation from the commercial area within the Dot and the Farmhouse, appropriate metrics were sourced and applied from British Standard – BS5906:2005 *Waste Management in Buildings – Code of Practice*.

4.2.2 **Table 4-1** summarises the waste metrics applied.

Table 4-1 Waste Metrics

Use Class	Metric	Assumptions	Waste Composition
Entertainment/Leisure Complex	Volume per m ² of floor area [5 litres] x floor area	-	- Residual Waste 47.5% - DMR 47.5% - Food Waste 5%
Office	Volume per employee [50 litres] x number of employees	1 employee per 10m ²	

COMMERCIAL AREAS

4.2.3 **Table 4-2** details the commercial areas that form the Dot and Farmhouse within the Proposed Reconfiguration.



Table 4-2 Commercial Areas

Location	Description	Use Class	Area (m ²)
The Dot	Office	Office	631
	Multipurpose Area	Entertainment/Leisure	178
Farmhouse	Wellness Centre	Entertainment/Leisure	134
TOTAL			944

ESTIMATED WEEKLY WASTE GENERATION

- 4.2.4 Using the waste metrics and compositions detailed in **Table 4-1** and the areas detailed in **Table 4-2**, **Table 4-3** estimates the weekly waste generation for the Dot and the Farmhouse once operational.

Table 4-3 Estimated Weekly Waste Generation

Use Class	Estimated Weekly Waste Generation (Litres)			
	Total Waste Volume	Residual Waste	DMR	Food Waste
Office	3,155	1,499	1,499	158
Entertainment/Leisure	1,562	742	742	78
TOTAL	4,718	2,241	2,241	236

4.3 PROPOSED WASTE MANAGEMENT STRATEGY

- 4.3.1 The proposed strategy to manage commercial waste has been devised to provide a high-quality service to the commercial tenants whilst remaining compliant with relevant standards.

4.4 INTERNAL WASTE STORAGE

- 4.4.1 It is assumed that the commercial operator will distribute appropriate internal bins throughout the Dot and Farmhouse to capture each waste stream.
- 4.4.2 An FM contractor will be appointed to collect waste from each area within the Dot and Farmhouse on an agreed schedule.



4.4.3 The FM contractor will be responsible for transferring the waste generated within the Farmhouse to the commercial waste store in the Dot on an agreed schedule.

4.4.4 The FM contractor will transfer each waste stream to the commercial waste store in the Dot and segregate them into appropriately labelled bins.

4.5 COMMERCIAL WASTE STORAGE AND COLLECTION

4.5.1 Currently the Dot is serviced by an external commercial waste store; this will continue to be where all residual waste, DMR and food waste is stored prior to collection. It is expected that the waste generated within the Dot will decrease as the majority use class is currently food and beverage, which generates high volumes of waste, compared to the proposed new uses.

4.5.2 Based on the estimated weekly waste generation detailed in **Table 4-3**, **Table 4-4** summarises the waste proposed waste storage provision and anticipated collection schedule.

Table 4-4 Waste Storage Provision

Waste Stream	Container Type	Number of Containers	Suggested Collection Frequency
Residual Waste	360-Litre Wheeled Bin	3	Daily
DMR		3	Daily
Food Waste	180-Litre Wheeled Bin	2	Weekly

4.5.3 Waste storage capacities have been based on a five-day operational week.

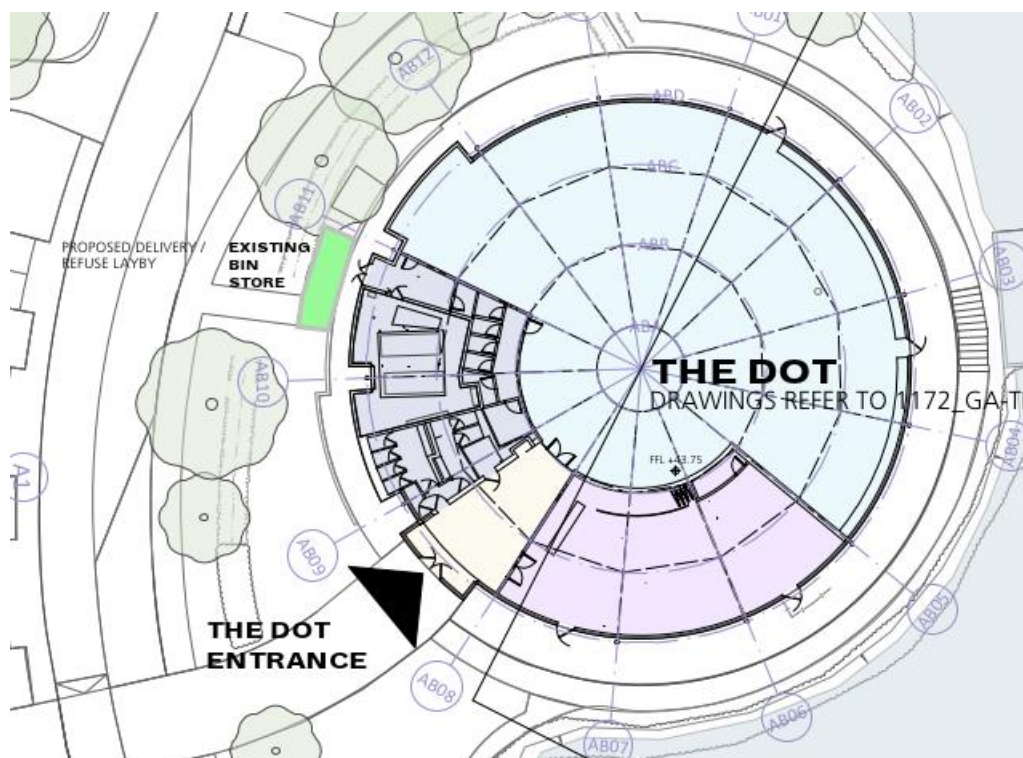
4.5.4 To provide contingency to accommodate peak waste periods, such as holiday periods, festival and special events, the following assumptions have been made:

- Daily collections – the provision of two days' waste storage capacity; and
- Twice weekly collections – the provision of three days' waste storage capacity.

4.5.5 The location of the external commercial waste store is shown in **Figure 4-2** below.



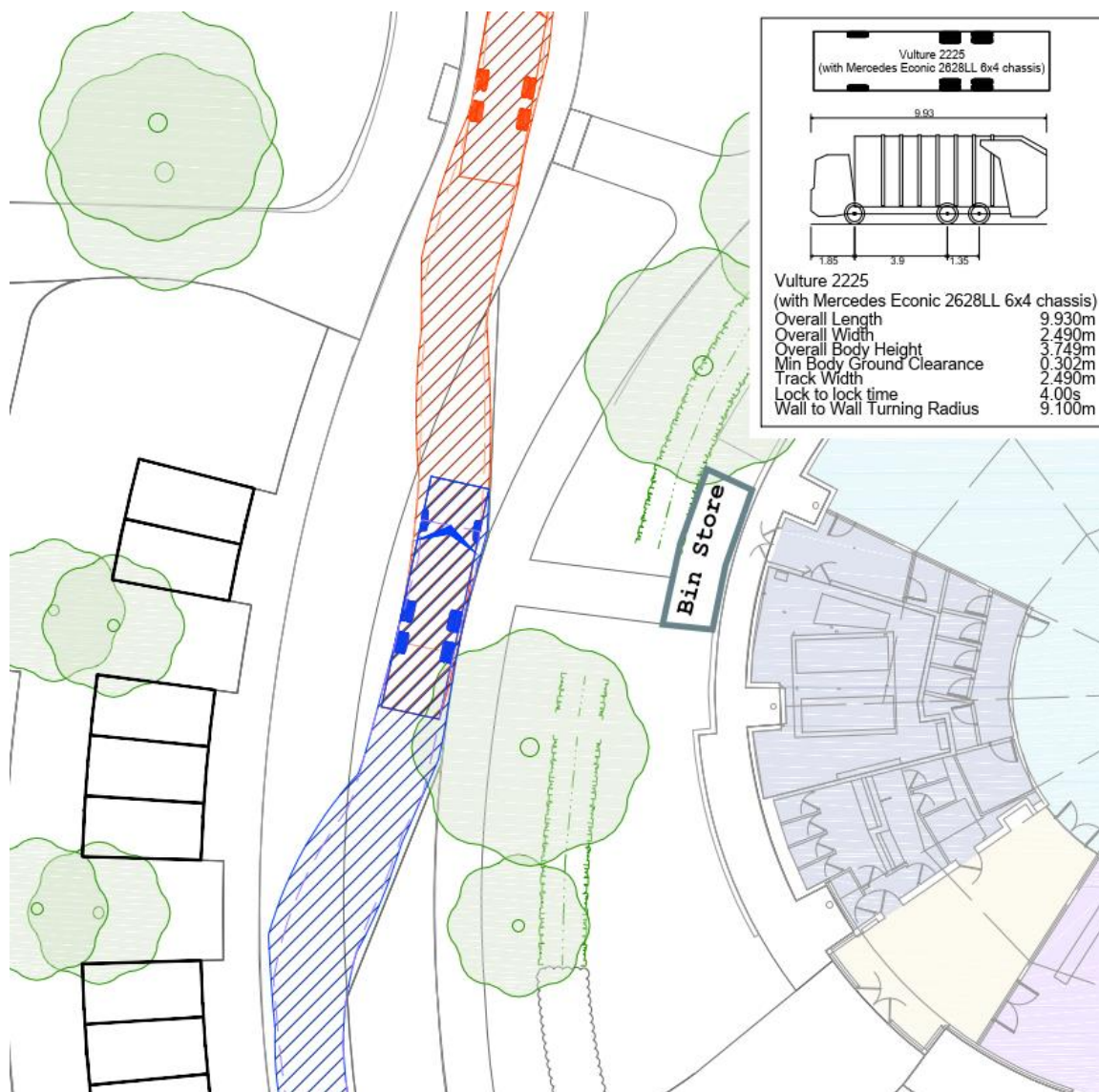
Figure 4–2 Commercial Waste Store



- 4.5.6 The commercial waste store will be designed and constructed to BS5906:2005 standards. In summary, the facility will include the following:
- A suitable water point should be provided in close proximity, to allow washing down;
 - All surfaces should be sealed with a suitable wash proof finish;
 - All surfaces should be easy to clean, and
 - Suitable lighting and ventilation should be provided.
- 4.5.7 Collection of each waste stream will be arranged through a commercial waste contractor by the building management team.
- 4.5.8 The surface between the presentation point and the nearest vehicular access will be:
- free from steps or kerbs
 - have a solid foundation;
 - have a smooth solid surface; and
 - be level and have a gradient of no more than 1:12, with a minimum width of 2 metres.
- 4.5.9 On collection days the commercial waste contractor will park the RCV in the layby adjacent to the Dot and collect the bins directly from the commercial waste store.
- 4.5.10 An extract from the swept path analysis included in **Appendix C** for this manoeuvre is shown in **Figure 4–3**.



Figure 4–3: RCV Swept Path Analysis



- 4.5.11 Once the bins have been emptied, they will be returned to the commercial waste store.



5 SUMMARY AND CONCLUSIONS

5.1 SUMMARY

MAIN BUILDING

- 5.1.1 Waste will be segregated internally by each commercial tenant into the following waste streams:
- Residual Waste;
 - DMR;
 - Food Waste; and
 - Glass Waste.
- 5.1.2 Estimated waste generation has been based on the existing waste collection schedule and includes contingency capacity to account for operational issues.
- 5.1.3 Waste streams will be transferred from the communal and tenanted areas to the commercial waste compound on an appropriate schedule by contracted FM-teams.
- 5.1.4 The commercial waste compound will be designed to BS5906:2005 standards.
- 5.1.5 Residual waste and DMR will be stored in 10.7m³ portable waste compactors.
- 5.1.6 Food waste and glass waste will be stored in 240-litre wheeled bins.
- 5.1.7 Each waste stream will be collected by a commercial waste contractor on an agreed schedule.
- 5.1.8 A skip will be provided for grounds maintenance waste.
- 5.1.9 An area within the commercial waste compound will be provided for the storage of bulky waste.
- 5.1.10 Commercial tenants will be responsible for the storage and disposal of their own hazardous waste.

THE DOT AND FARMHOUSE

- 5.1.11 Waste will be segregated internally into the following waste streams:
- Residual Waste;
 - DMR; and
 - Food Waste.
- 5.1.12 Estimated waste generation has been calculated using metrics from BS5906:2005.
- 5.1.13 Waste streams will be transferred from the communal and tenanted areas to the commercial waste store on an appropriate schedule by a contracted FM-team.
- 5.1.14 The commercial waste store will be designed to BS5906:2005 standards.
- 5.1.15 Residual waste and DMR will be stored in 360-litre wheeled bins.
- 5.1.16 Food waste will be stored in 180-litre wheeled bins.
- 5.1.17 Each waste stream will be collected by a commercial waste contractor on an agreed schedule.



5.2 CONCLUSIONS

- 5.2.1 This Waste Management Strategy has taken into account the need to lessen the overall impact of waste generation through recycling of materials from the operational phase of the Proposed Reconfiguration.



APPENDIX A

NATIONAL, LONDON AND LOCAL WASTE POLICY & GUIDANCE

NATIONAL WASTE POLICY

NATIONAL PLANNING POLICY FRAMEWORK (2019)²

The revised National Planning Policy Framework was updated on 19 February 2019 and sets out the government's planning policies for England and how these are expected to be applied. It does not include anything of relevance to waste management that would be applicable to the Proposed Reconfiguration.

DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS (DEFRA), OUR WASTE, OUR RESOURCES: A STRATEGY FOR ENGLAND (2018)³

The strategy sets out how England will preserve the stock of material resources by minimising waste, promoting resource efficiency and moving towards a circular economy. At the same time, the country will minimise the damage caused to the natural environment by reducing and managing waste safely and carefully, and by tackling waste crime.

It combines actions the country will take now, with firm commitments for the coming years and gives a clear longer-term policy direction in line with the 25 Year Environment Plan. This is the blueprint for eliminating avoidable plastic waste over the lifetime of the 25 Year Plan, doubling resource productivity, and eliminating avoidable waste of all kinds by 2050.

NATIONAL PLANNING POLICY FOR WASTE (2014)⁴

The National Planning Policy for Waste replaces 'Planning Policy Statement 10: Planning for Sustainable Waste Management' (PPS 10) and is to be considered alongside other national planning policy for England - such as in the NPPF and the Waste Management Plan for England. As its primary focus is on planning for waste management facilities, it is not considered relevant to the Proposed Reconfiguration.

Waste Hierarchy

The Waste Hierarchy requires avoidance of waste in the first instance followed by reducing the volume that requires disposal after it has been generated.

It gives an order of preference for waste management options to minimise the volume for disposal, as shown in **Figure A1.1**.

² Ministry of Housing, Communities & Local Government (MHCLG) (2019) *National Planning Policy Framework*

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

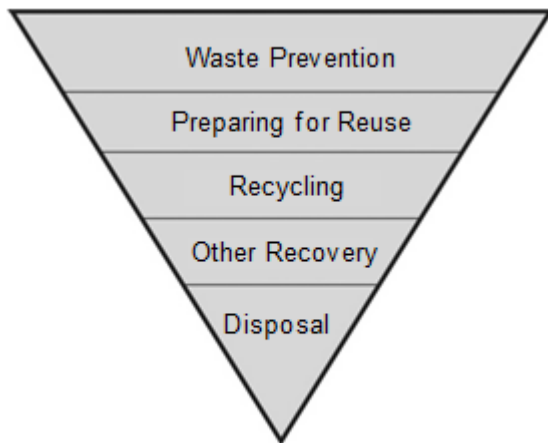
³ Department for Environment, Food and Rural Affairs (Defra) (2018), *Our Waste, Our Resources: A Strategy for England*

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765914/resources-waste-strategy-dec-2018.pdf

⁴ MHCLG (2014) *National Planning Policy for Waste*

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/364759/141015_National_Planning_Policy_for_Waste.pdf

Figure A1.1: The Waste Hierarchy



Source: Waste Framework Directive

The main principles of the Waste Hierarchy are:

- Waste should be prevented or reduced at source as far as possible;
- Where waste cannot be prevented, waste materials or products should be reused directly or refurbished and then reused;
- Waste materials should be recycled or reprocessed into a form that allows them to be reclaimed as a secondary raw material;
- Where useful secondary materials cannot be reclaimed, the energy content of the waste should be recovered and used as a substitute for non-renewable energy resources; and
- Only if waste cannot be prevented, reclaimed or recovered, should it be disposed of into the environment and this should only be undertaken in a controlled manner.

The Waste Hierarchy has been implemented in England and Wales by the Waste (England and Wales) Regulations 2011. These regulations require that an establishment or undertaking that imports, produces, collects, transports, recovers or disposes of waste must take reasonable steps to apply the Waste Hierarchy when waste is transferred or disposed of.

DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS (DEFRA), OUR WASTE, OUR RESOURCES: A STRATEGY FOR ENGLAND (2018)

The strategy sets out how England will preserve the stock of material resources by minimising waste, promoting resource efficiency and moving towards a circular economy. At the same time, the country will minimise the damage caused to the natural environment by reducing and managing waste safely and carefully, and by tackling waste crime.

It combines actions the country will take now, with firm commitments for the coming years and gives a clear longer-term policy direction in line with the 25 Year Environment Plan. This is the blueprint for eliminating avoidable plastic waste over the lifetime of the 25 Year Plan, doubling resource productivity, and eliminating avoidable waste of all kinds by 2050.

HM GOVERNMENT, A GREEN FUTURE: OUR 25 YEAR PLAN TO IMPROVE THE ENVIRONMENT (2018)

The 25 Year Environment Plan sets out government action to help the natural world regain and retain good health. Its aim is to deliver cleaner air and water in cities and rural landscapes, protect threatened species and provide richer wildlife habitats. It calls for an approach to agriculture, forestry, land use and fishing that puts the environment first.

With regard to waste management, the plan details aims that include:

- Zero avoidable plastic waste by 2042;
- Reduce food waste; and
- Improving the management of residual waste.

LOCAL WASTE POLICY

READING BOROUGH LOCAL PLAN (2019)

The Local Plan for Reading is the document that contains the policies for how Reading will develop up to 2036, which is the end date of the plan. It identifies the amount of development that will take place, the areas and sites where development is expected to be accommodated, and where it will be restricted, and sets out policies for how planning applications will be decided. Extracts relevant to the Proposed Reconfiguration are as follows:

'CC5: Waste Minimisation and Storage

Development should demonstrate measures to minimise the generation of waste in the construction, use and life of buildings and promote more sustainable approaches to waste management, including the reuse and recycling of construction waste and the promotion of layouts and designs that provide adequate, well-designed space to facilitate waste storage, reuse, recycling and composting.'

READING SUSTAINABLE DESIGN AND CONSTRUCTION SPD (2019)

This SPD is intended to guide developers and decision-makers on the implementation of key sustainability policies set out in the Reading Local Plan, namely CC2-CC5, EN18 and H5. Extracts relevant to the Proposed Reconfiguration are as follows:

'Minimising waste during the use and life of buildings

- *Submission of plans illustrating adequate space to facilitate waste storage, re-use, recycling and composting. This forms a mandatory element of the BREEAM standards. Residents must be provided with adequate storage for residential waste.*
- *Appropriate development (e.g. residential, education, etc) should seek to incorporate facilities to compost household waste, reducing the amount of household waste sent to landfill.*
- *Adequate provision for both internal and external storage of waste should be provided. This space should be an integral part of the design of the proposal and not merely added on at the end of the process.*
- *Development should consider the incorporation of the following strategies within the developments to help reduce waste:*
 - *Greywater recycling*
 - *On site food composting*
 - *Off-site recycling facilities'*

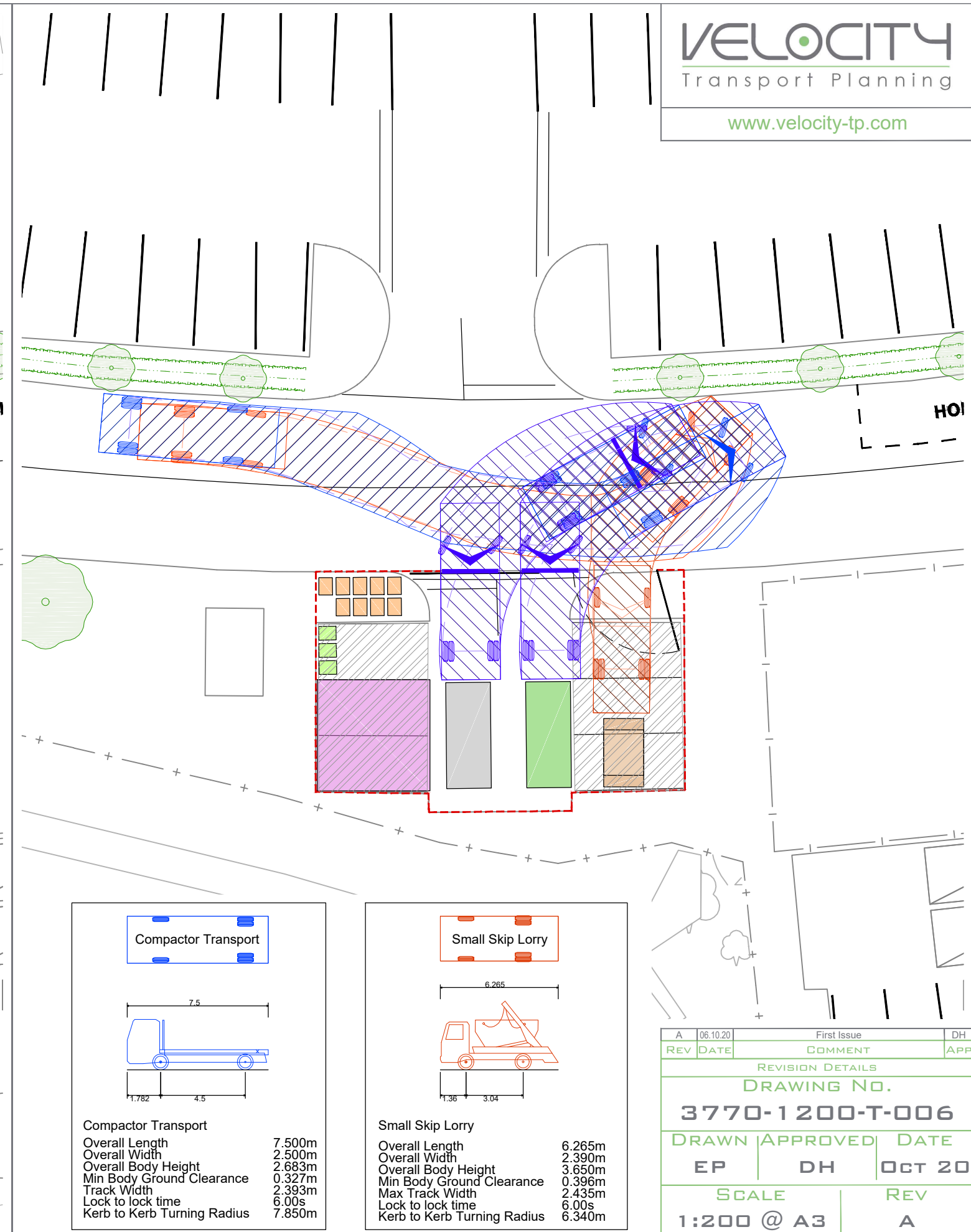
APPENDIX B

EXISTING SITE COLLECTION SCHEDULE

Area	Product Description	Container type	Quantity	Frequency per week
Restaurant – DOT	General Waste	360 L	3	5 (Monday – Friday)
	Dry Mixed Recycling	360 L	4	5 (Monday – Friday)
	Food Waste Recycling	180 L	3	2 (Monday & Thursday)
	Glass Recycling	240 L	1	1 (Friday)
All containers are located in a storage compound next to the Café, larger containers cannot be used due to the size of the compound.				
Service Area 1 - Main Waste Management area, back of the rear car park, behind spur B	General Waste	7.6 cubic metre REL end (Rear Loader)	1	Weekly
	Dry Mixed Recycling	1100 L	4	Weekly
Service Area 2 – Waste from Benugo – behind spur F	General Waste	1100 L	2	Weekly (Friday)
	Dry Mixed Recycling	1100 L	1	Weekly (Friday)
	Food Waste Recycling	180 L	1	Weekly (Thursday)

APPENDIX C

SWEPT PATH ANALYSIS



CLIENT

TRISTAN CAPITAL PARTNERS

PROJECT

READING INTERNATIONAL BUSINESS PARK

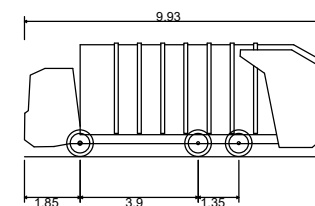
DRAWING TITLE

WASTE MANAGEMENT COMPOUND



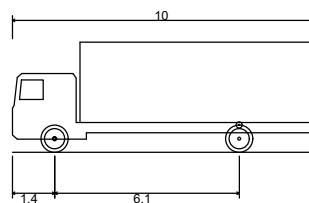


Vulture 2225
(with Mercedes Econic 2628LL 6x4 chassis)



Vulture 2225
(with Mercedes Econic 2628LL 6x4 chassis)
Overall Length 9.930m
Overall Width 2.490m
Overall Body Height 3.749m
Min Body Ground Clearance 0.302m
Track Width 2.490m
Lock to lock time 4.00s
Wall to Wall Turning Radius 9.100m

FTA Design HG Rigid Vehicle (1998)



FTA Design HG Rigid Vehicle (1998)
Overall Length 10.000m
Overall Width 2.500m
Overall Body Height 3.645m
Min Body Ground Clearance 0.440m
Track Width 2.470m
Lock to lock time 3.00s
Kerb to Kerb Turning Radius 11.000m

B	29.10.20	Revised Layout & Tracking	DH
A	06.10.20	First Issue	DH
REV	DATE	COMMENT	APP

REVISION DETAILS

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EP DH OCT 20

SCALE REV

1:250 @ A3 B

CLIENT

TRISTAN CAPITAL PARTNERS

PROJECT

READING INTERNATIONAL BUSINESS PARK

DRAWING TITLE

FRONT LANDSCAPE - SWEEP PATH ANALYSIS



