

Great Lakes UK Limited

PROPOSED GREAT WOLF LODGE -LAND TO THE EAST OF M40 AND SOUTH OF A4095, CHESTERTON, BICESTER

Waste Management Strategy



TYPE OF DOCUMENT (VERSION) PUBLIC

PROJECT NO. 70058541

OUR REF. NO. 003

DATE: NOVEMBER 2019

WSP

4th Floor 6 Devonshire Square London EC2M 4YE

Phone: +44 20 7337 1700

Fax: +44 20 7337 1701

WSP.com

Project No.: 70058541 | Our Ref No.: 003

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QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	Draft	Final Draft	Final	
Date	11 October 2019	October 2019	November 2019	
Prepared by	Francesca Walker	Francesca Walker	Francesca Walker	
Signature				
Checked by	Michael Berney	Michael Berney	Michael Berney	
Signature				
Authorised by	Matthew Venn	Matthew Venn	Matthew Venn	
Signature				
Project number	70058541	70058541	70058541	
Report number	001	002	003	



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1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1. WSP has been commissioned by Great Lakes UK Limited to prepare a Waste Management Strategy for a proposed Great Wolf Lodge, Chesterton, Bicester (hereafter referred to as the 'Proposed Development') on land to the east of the M40 and south of the A4095, Chesterton, Bicester (hereafter referred to as the 'Site').
- 1.1.2. This Waste Management Strategy considers the potential impacts that may arise from waste generated during the operational phase, with the overall aim of developing a strategy for legislative compliance and good practice in the separation, storage and collection of waste arisings.

1.2 PROPOSED DEVELOPMENT

1.2.1. The application seeks permission for the following Proposed Development:

"Redevelopment of part of golf course to provide new leisure resort (sui generis) incorporating waterpark, family entertainment centre, hotel, conference facilities and restaurants with associated access parking and landscaping."

1.3 REPORT STRUCTURE

- 1.3.1. This report is set out in the following format:
 - Section 1: Introduction
 - Section 2: Waste Legislation, Policy and Guidance details of the national legislation and local policy that have relevance to the Proposed Development.
 - Section 3: Management of Operational Waste outlines the strategy that will be adopted to manage waste arising from the Proposed Development once operational.
 - Section 4: Summary & Conclusion
 - Appendix A: National and Local Waste Policy and Guidance
 - Appendix B: Ground Floor Plan



2 WASTE LEGISLATION, POLICY AND 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 of 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 waste 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 government has decided that at the point at which the UK is expected to leave the EU (on or before 31 January 2020), all EU legislation which has not been transposed into UK law will be transferred to UK statute. From then on, all EU 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 contains focusses on the details of the national legislation that is relevant to the Proposed Development, much of which is influenced by the rWFD, National and local waste policy and guidance reviewed during the preparation of this Waste Management Strategy are listed 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 (2016 update) This code of practices 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) From 1 January 2015, 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 & LOCAL WASTE POLICY

- 2.3.1. The relevant national and local waste policy that was reviewed during the preparation of the 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);
 - HM Government, A Green Future: Our 25 Year Plan to Improve the Environment (2018):

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- Department for Environment, Food and Rural Affairs (Defra), Our Waste, Our Resources: A Strategy for England (2018);
- Oxfordshire County Council (OCC), Oxfordshire Minerals and Waste Local Plan: Part 1- Core Strategy (2017); and
- Cherwell District Council (CDC), The Cherwell Local Plan: Part 1 (2015).



3 MANAGEMENT OF OPERATIONAL WASTE

3.1 INTRODUCTION

3.1.1. This section details the strategy which will be adopted to manage the waste arising from the Proposed Development once operational.

3.2 WASTE GENERATION MODELLING

- 3.2.1. CDC do not provide commercial waste metrics, therefore estimated waste storage capacity requirements have been quantified based on those provided in British Standards *BS5906:2005 Waste Management in buildings Code of Practice*, together with some assumptions from WSP's working knowledge.
- 3.2.2. **Table 3-1** shows the metrics which relate to weekly collections of waste. It should be noted that in order to calculate waste generation, the Proposed Development was broken down into component parts which were the closest comparable metric in terms of uses for these calculations.

Table 3-1 - Waste Generation Metrics

Component Uses	Metric	Assumptions	Waste Segregation Percentage*
Hotel	Volume per bedroom [250I] x number of bedrooms	n/a	54% Refuse 46% Recycling
Restaurant	Volume per number of covers [75I]	1 cover per 6m²	54% Refuse 34% Recycling 12% Food Waste
Entertainment Complex	Volume per m ² of floor area [5l] x floor area	n/a	54% Refuse 46% Recycling
Fast Food Outlet	Volume per sale [5l] x number of sales	Assumes two operational counters and an average of one sale every 15 minutes throughout the day. Also assumes the opening hours - 06.00am-17.00pm Mon to Sat (Total =78 hours/4,680 minutes).	54% Refuse 34% Recycling 12% Food Waste
Office	Volume arising per employee [50l] x number of employees	6m² per employee	54% Refuse 46% Recycling
Leisure	Volume per m² of floor area [2.5l] x floor area	n/a	54% Refuse 46% Recycling

^{*}percentages taken from Waste and Resource Action Programme (WRAP) 'Overview of Waste in the UK Hospitality and Food Service Sector' study in 2013¹

http://www.wrap.org.uk/sites/files/wrap/Overview%20of%20Waste%20in%20the%20UK%20Hospitality%20and%20Food%20Service%20Sector%20FINAL.pdf

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¹ WRAP (2013) Overview of Waste in the UK Hospitality and Food Service Sector: An overview of waste in the UK hospitality and food service sector



3.2.3. Based on the waste generation metrics summarised above and the proposed area associated with the layout plan, Table 3-2 outlines the weekly waste storage capacity requirements for the Proposed Development. It should be noted that in order to calculate the waste, the Proposed Development was broken down into component parts as shown in Table 3-1, which were the closest comparable metric in terms of uses for waste calculations.

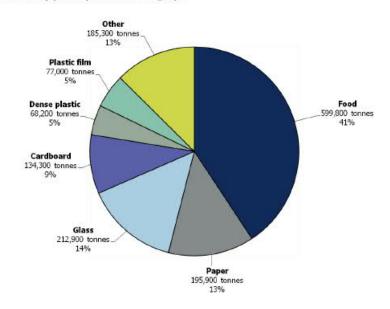
Table 3-2 – Estimated Weekly Waste Generation

Total Waste Generation (litres)	Refuse (litres)	Recycling (litres)	Food Waste (litres)
185,562	100,203	80,384	5,004

- 3.2.4. The recycling waste stream will be further segregated into glass bottles, cardboard & paper, and Dry Mixed Recycling (DMR), which would comprise items such as plastic bottles, plastic packaging, and metal cans.
- 3.2.5. The estimated recycling arising detailed in **Table 3-2** has been apportioned to glass, DMR and cardboard & paper based on waste composition data taken from a study conducted by the Waste & Resources Action Programme (WRAP) in 2011; *The Composition of Waste Disposed of the UK Hospitality Industry*².
- 3.2.6. The composition of mixed residual waste disposed of by the hospitality sector in the UK, concluded by WRAP in the study is illustrated in **Figure 3-1**.

Figure 3-1 - Composition of Mixed Residual Waste Disposed of by the Hospitality Sector in the UK, concluded by WRAP (2011)

The composition (%) of mixed (residual) waste disposed of by the hospitality sector (138 samples) in the UK by primary material category



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² WRAP (2011) The Composition of Waste Disposed of by the UK Hospitality Industry http://www.wrap.org.uk/sites/files/wrap/The Composition of Waste Disposed of by the UK Hospitality Industry FINAL JULY 2011 GP_EDIT.54efe0c9.11675.pdf



3.2.7. It is important to note the WRAP's conclusion of hospitality waste composition detailed in Figure 3-1 is by weight. For the purpose of this waste modelling exercise, the conversion to composition by volume was required. Table 3-3 details the mass to volume conversion factors that have been sourced from the public domain and applied to the estimated weight of each material detailed in Figure 3-1.

Table 3-3 - Conversion Factors

Material	Conversion factor (mass to volume)	
Food waste	1kg / litre	
Glass	0.4kg / litre	
Dense Plastic	0.02kg / litre	
Cardboard	0.6kg / litre	
Paper	0.6kg / litre	
Plastic Film	0.03kg / litre	
Other	0.26kg / litre	

3.2.8. **Table 3-4** details the mass to volume conversion of each material detailed in **Figure 3-1** using the conversion factors detailed in **Table 3-3**.

Table 3-4 - Mass to Volume Conversion

Material	Kg of hospitality waste generated per year*	% composition (tonnes)*	Litres of hospitality waste generated per year**	% composition (litres)**
Food	599,800,000	41	599,800,000	7
Glass	212,900,000	14	532,250,000	6
Dense Plastic	68,200,000	5	3,410,000,000	41
Cardboard	134,300,000	9	223,833,333	3
Paper	195,900,000	13	326,500,000	4
Plastic Film	77,000,000	5	2,566,666,667	31
Other	185,300,000	13	712,692,309	9
Total	1,473,400,000	100	8,371,742,308	100

^{*}As detailed in **Figure 3-1** (tonnes converted into kg)

3.2.9. The estimated recycling arising from the Proposed Development detailed in **Table 3-2** has been apportioned to glass, cardboard & paper and DMR accordingly using the percentage composition (litres) of each material in **Table 3-4**. **Table 3-5** details this apportionment exercise.

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^{**} Based on application of conversion factors detailed in Table 3-3



Table 3-5 – Recycling Apportionment for the Proposed Development

Material	Estimated hospitality recycling arising (litres)	% composition*	Estimated waste arising (litres)
Glass	85,006	6	5,100
Cardboard and Paper		7	5,950
DMR**		87	73,955

^{*}Based on % composition (litres) detailed in Table 3-4

3.3 STORAGE OF WASTE

- 3.3.1. Waste generated within the Proposed Development would initially be deposited and stored in refuse, recycling and food waste containers within the individual units. The containers would be installed as part of the fit-out and should have sufficient capacity to accommodate the waste generated. The number of containers required would depend upon:
 - The commercial activities:
 - The size of the floor area they occupy; and
 - The frequency by which either the Facilities Management (FM) team or staff would transport waste from the commercial units to the main communal bin store.

Shops

- 3.3.2. Shops will generate a variety of waste products that can be recycled. There is clear potential to encourage the separation of waste from these sources.
- 3.3.3. Waste generated in shops will be segregated into refuse, DMR and cardboard & paper.

Restaurants and Drinking Establishments

- 3.3.4. Waste generated in restaurants and drinking establishments will be segregated at source into the following waste streams:
 - Food waste;
 - Glass bottles;
 - DMR; and
 - Refuse.
- 3.3.5. It is envisaged that each unit will provide suitable containers for the separation and storage of these waste streams.

Offices

- 3.3.6. Office waste is mainly generated from employees, printing, administration and associated kitchen facilities.
- 3.3.7. Separate waste containers would be provided in each office area for the segregation of recyclable materials from general waste, such as paper, cardboard and DMR.
- 3.3.8. Waste materials from each office area could be collected daily or multiple times per day (as required) by housekeeping / the FM team and brought to the external waste stores.

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^{**}Assumes DMR comprises remaining recycling streams generated from the Proposed Development e.g. dense plastic, plastic packaging and metal cans.



- 3.3.9. It is anticipated that confidential waste will also be generated in the office spaces. Due to the sensitive nature, confidential waste needs to be secure at all times, therefore, it is proposed that confidential waste will be stored in locked containers in each office.
- 3.3.10. The confidential waste will be retained within the office spaces until it is collected by a specialist waste contractor for either destruction or shredding.

Hotel

- 3.3.11. Waste from the hotel element would be generated from the following main sources:
 - Reception; and
 - Housekeeping.
- 3.3.12. The main types of waste expected will be general refuse, cardboard, paper and mixed glass.
- 3.3.13. Waste stores would be clearly labelled to ensure cross contamination of all waste streams is minimised.

Entertainment Complex and Leisure

- 3.3.14. Typically, leisure centres and entertainment complexes have large floor areas but are not high waste generating buildings, as the majority of the space is dedicated to the entertainment and leisure activities e.g. waterpark and changing rooms.
- 3.3.15. Waste stores would be clearly labelled to ensure cross contamination of all waste streams is minimised.

3.4 COMMUNAL WASTE STORAGE AREAS

- 3.4.1. Housekeeping and/ or the FM team would be responsible for transporting waste to the communal stores and disposing of it in the appropriately labelled bins.
- 3.4.2. The Proposed Development will include three main waste stores; a store for food waste, a store for recyclable waste and an area for dedicated compactors for refuse, and cardboard & paper.
- 3.4.3. Based on the estimated waste arisings summarised in **Table 3-2**, **Table 3-6** shows the number of waste compactors required for refuse and cardboard & paper, based on three times a week collection frequency and a 3:1 compaction ratio for refuse and 2:1 compaction ratio for cardboard & paper, which is typical within the waste management industry.

Table 3-6 – Compactor requirements

Waste Stream	No. of Compactors (24.5 cu.m)*		
Refuse (3:1)	1		
Cardboard & Paper (2:1) 1			
*Assumes operation compactor capacity is 80%			

3.4.4. The proposed location of the compactors is shown in **Figure 3-2**. For context the full ground floor plan is shown in **Appendix B**.

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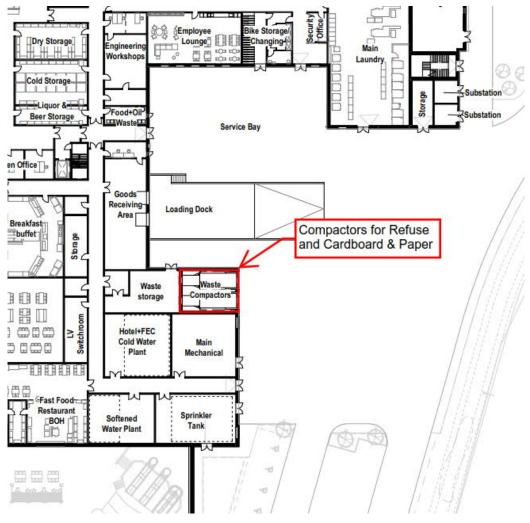


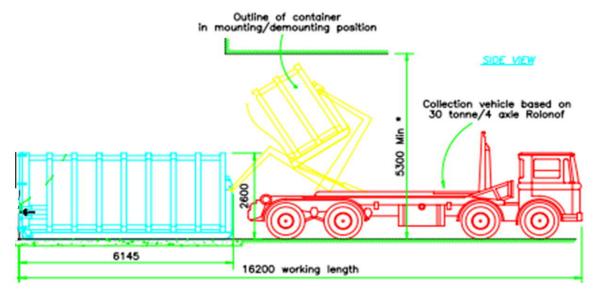
Figure 3-2 - Proposed Location of Compactors (refer to Appendix B for full ground floor plan)

Source: EPR Architects, Proposed Great Wolf Lodge, Chesterton, Bicester, Oxfordshire, Proposed Ground Floor, 10875-EPR-00-GF-DR-A-TP-0200, Rev 3

- 3.4.5. The overall required working length of a static compactor is approx. 20m; this dimension includes a 10m Roll-on Roll-off (RoRo) vehicle space at the front of the compactor, the combined compactor and skip and a 1m clearance to the rear between the compactor and the wall. The typical width of the compactor is 2.41m.
- 3.4.6. A head clearance height of 5.3m (ground slab to soffit) is required when collecting the compactor. Travelling height requirements of a Ro-Ro vehicle collecting the compactor is 4.5m (ground to soffit).
- 3.4.7. **Figure 3-3** shows the height clearance required for the collection of the compactor.



Figure 3-3 – Typical Static Compactor Collection Height Requirements



Source: PAKAWASTE Ltd. Static Compactor with Rear Loader Off Floor/ Container General Layout. Drawing Number: 52-0192

3.4.8. Based on the estimated recycling arisings in **Table 3-2**, **Table 3-7** shows the bin number requirements for the food waste store and the recycling store, based on a collection frequency of three times a week.

Table 3-7 - Food Waste and Recycling Bin Number Requirements

Waste Stream	No. 1,100 litre bins	No. 140 litre bins	No. 240 litre bins
Food waste	-	13	-
Glass*	-	-	6
DMR**	10	-	-

^{*}A glass crusher unit will be used which reduces the bin requirements and assumes 2:1 compaction rate and 80% capacity.

3.4.9. **Table 3-8** shows the dimensions for each bin type.

Table 3-8 - Bin Dimensions

	1,100 litre Eurobin	240 litre bins	140 litre bins
Height (mm)	1,465	1,080	1,054
Width (mm)	1,370	580	560
Depth (mm)	1,070	730	560

3.4.10. A glass crusher will be provided in the waste store to reduce the volume of glass for collection. **Figure 3-4** shows an example glass crusher.

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^{**} In bin compactors will be used which reduces the bin requirements and assumes 3:1 compaction rate.



Figure 3-4 - Example glass crusher³



- 3.4.11. It should be noted that the waste model for glass has been based on a compaction rate of 2:1, and assumed 80% capacity of the bin.
- 3.4.12. The typical dimensions for the proposed glass crusher are as following:
 - Height (shutter up): 2.19m
 - Height (shutter down): 1.84m
 - Depth: 1.03m
- 3.4.13. An in-bin compactor will be provided in the waste store to reduce the volume of glass for collection. **Figure 3- 5** shows and example in-bin compactor.

Figure 3-5 - Example of in-bin compactor⁴



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³ Tony Team, In Bin Glass Crusher https://www.tonyteam.co.uk/products/glass-bottle-crushers/%EF%BB%BFfull%E2%80%88size-glass-crusher/

⁴ Agritel Ltd, In Bin Compactor https://www.agritelonline.co.uk/ag-mac-bp11-bin-press.html?gclid=Cj0KCQjwrfvsBRD7ARIsAKuDvMMHfph9ThVSGG1DVNRwKJjcOGzL2Li9MahWz94-oDcoNyrEHAs0kK8aAo7MEALw_wcB



- 3.4.14. This type of compactor can achieve volume reductions of approximately 3:1.
- 3.4.15. Dimensions for a typical in-bin compactor are:
 - Width = 1.5m
 - Length = 1.9m
 - Working length = 4.0m (for the operator and free movement of bins)
 - Height = 2.5m
- 3.4.16. **Figure 3-6** shows the proposed locations of the recycling and food waste stores.

Figure 3-6 - Locations of food waste store and recycling store (refer to Appendix for full ground floor plan)



Source: EPR Architects, Proposed Great Wolf Lodge Chesterton, Bicester, Oxfordshire, Proposed Ground Floor Plan, 10875-EPR-00-GF-DR-A-TP-0200, Rev 3.

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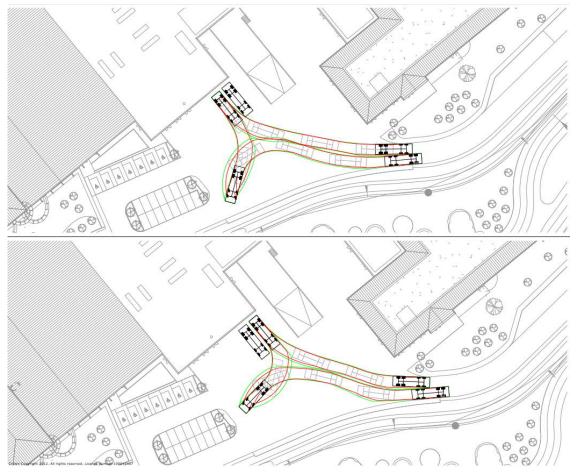
- 3.4.17. In accordance with BS5906:2005, the food waste and recycling stores would be designed so that a 150mm space between and around bins and a 1.5m walkway between rows of bins is provided; the doorways of the waste stores should also provide a 1.5m clear opening.
- 3.4.18. The waste stores will be designed to BS5906:2005 *Waste Management in Buildings Code of Practice*. In summary, the facilities will include the following:
 - A suitable water point in close proximity to allow washing down;
 - All surfaces sealed with a suitable wash proof finish (vinyl, tiles etc.);
 - All surfaces easy to clean;
 - Suitable floor drain; and
 - Suitable lighting and ventilation.

3.5 COLLECTION OF WASTE

- 3.5.1. The FM team would be responsible for collecting the separated waste streams from the interim waste stores across the Proposed Development, transporting them to the communal waste stores and segregating waste into the appropriately labelled bins or compactors. The FM team would appoint a waste management contractor(s) to subsequently collect the waste from the communal waste stores and also collected the compactors.
- 3.5.2. Proposed locations where the Refuse Collection Vehicles (RCVs) would park when emptying bins would be designed so that collection operatives are not required to transport the bins a greater distance than 10 metres.
- 3.5.3. Paths between waste stores and collection points would be a minimum width of 2 metres, free from kerbs or steps, have a solid foundation and be suitable paved with a smooth and continuous finish.
- 3.5.4. To collect the waste compactor, the Ro-Ro vehicle will park in the delivery yard. The appointed waste contractor will reverse their Ro-Ro vehicle up against the compactor and lift it onto the back of the vehicle. The contractor will take the compactors off-site to be emptied before returning them to their storage area in the delivery yard.
- 3.5.5. **Figures 3-7** and **3-8** show the swept path analyses of the Ro-Ro Vehicle and the RCV in the delivery yard.

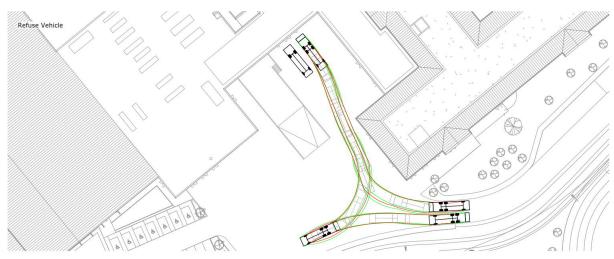


Figure 3-7 - Swept Path Analysis of Ro-Ro Vehicle



Source: Motion; Great Wolf Resort, Bicester; Swept Path Analysis Rolonoff Vehicle; Drawing Number 1803047-TK56.

Figure 3-8 - Swept Path Analysis of Refuse Collection Vehicle



Source: Motion; Great Wolf Resort, Bicester, Swept Path Analysis Deliver Yard; Drawing No. 803047-TK58



4 SUMMARY AND CONCLUSION

4.1 SUMMARY OF STRATEGY

- 4.1.1. The Proposed Development will be provided with sufficient internal waste storage space as part of its fit-out. This will be the first point of temporary storage for waste generated within the units.
- 4.1.2. Shops within the Proposed Development will provide the appropriate storage for the separation of refuse and recycling.
- 4.1.3. Restaurants and drinking establishments at the Proposed Development will ensure that food waste, glass bottles, refuse and recycling are all separated at source.
- 4.1.4. Offices will provide waste containers in each office area to encourage the segregation of waste from recycling. Confidential waste generated will be secured at all times and collected by a specialist waste contractor.
- 4.1.5. The hotel section of the Proposed Development will provide appropriate waste storage areas to ensure refuse, cardboard, paper and mixed glass are segregated.
- 4.1.6. Entertainment and leisure areas are unlikely to generate high volumes of waste. Waste stores will be clearly labelled to ensure cross contamination of all waste streams is minimised.
- 4.1.7. The FM team will be responsible for transporting refuse, recycling and food waste from their respective unit to the appropriate waste store or compactors.
- 4.1.8. Food waste, glass bottles, cardboard & paper and DMR will all be segregated from refuse.
- 4.1.9. All waste storage areas will be clearly labelled to ensure cross contamination of refuse and recycling is minimised. All waste storage areas will be built to BS 5906:2005 standards.
- 4.1.10. The waste collection contract will be in place pre-occupation of the Proposed Development.

4.2 CONCLUSION

- 4.2.1. The Waste Management Strategy has taken into account the need to lessen the overall impact of waste generation through the recycling of materials from the operational phase of the Proposed Development.
- 4.2.2. The proposals set out in this strategy meet the requirements of relevant waste policy and follow applicable guidance.

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Appendix A

NATIONAL AND LOCAL WASTE POLICY & GUIDANCE



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NATIONAL WASTE POLICY

National Planning Policy Framework (2019)⁵

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 Development.

National Planning Policy for Waste (2014)⁶

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.

The Policy includes the following which is of relevance to the Proposed Development:

'8. When determining planning applications for non-waste development, local planning authorities should, to the extent appropriate to their responsibilities, ensure that:

new, non-waste development makes sufficient provision for waste management and promotes good design to secure the integration of waste management facilities with the rest of the development and, in less developed areas, with the local landscape.'

Our Waste, Our Resources: A Strategy for England (2018)⁷

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.

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**.

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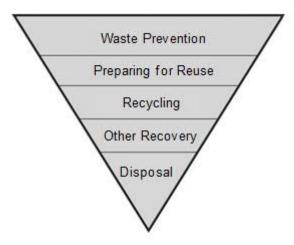
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⁵ Ministry of Housing, Communities and Local Government (MHCLG) (2019) *National Planning Policy Framework* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

⁶ 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
⁷ 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-



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.

A Green Future: Our 25 Year Plan to Improve the Environment⁸

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 aim that include:

- Working towards an ambition of zero avoidable waste by 2050;
- Working to a target of eliminating avoidable plastic waste by end of 2042;

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⁸ Department for Environment, Food and Rural Affairs (Defra) A Green Future: Our 25 Year Plan to Improve the Environment https://www.gov.uk/government/publications/25-year-environment-plan



- Meeting all existing waste targets- including those on landfill, reuse and recycling- and developing ambitious new future targets and milestones;
- Seeking to eliminate waste crime and illegal waste sites over the lifetime period of this Plan, prioritising those of highest risk. Delivering a substantial reduction in litter and littering behaviour; and
- Significantly reducing and where possible preventing all kinds of marine plastic pollution- in particular material that cam originally from land.

LOCAL WASTE POLICY

Oxfordshire Minerals and Waste Local Plan: Part 1- Core Strategy (2017)9

The Minerals and Waste Local Plan: Part 1-Core Strategy, provides the planning strategies and policies for the development that will be needed for the supply of materials and management of waste in Oxfordshire over the period to the end of 2031. It sets out policies to guide minerals and waste development over this plan period and common core policies which address development management issues relevant to both minerals and waste. There are no policies or extracts from this document that are of relevance to the Proposed Development.

The Cherwell Local Plan 2011-2031¹⁰

The Cherwell Local Plan looks to the future and sets out CDC's proposals to support the local economy and communities over the next few decades. It is a plan which seeks to ensure the growth is targeted in the most sustainable locations. Their strategy is to focus housing growth on Bicester and Banbury to maximise the investment opportunities in the local towns. The following extracts are of relevance to the Proposed Development.

'Policy ESD 3: Sustainable Construction

All new non-residential development will be expected to meet at least BREEAM 'Very Good' with immediate effect, subject to review over the plan period to ensure the target remains relevant. The demonstration of the achievement of this standard should be set out in the Energy Statement.

All development proposals will be encouraged to reflect high quality design and high environmental standards demonstrating sustainable construction methods including but limited to:

Reducing waste and pollution and making adequate provision for the recycling of waste.

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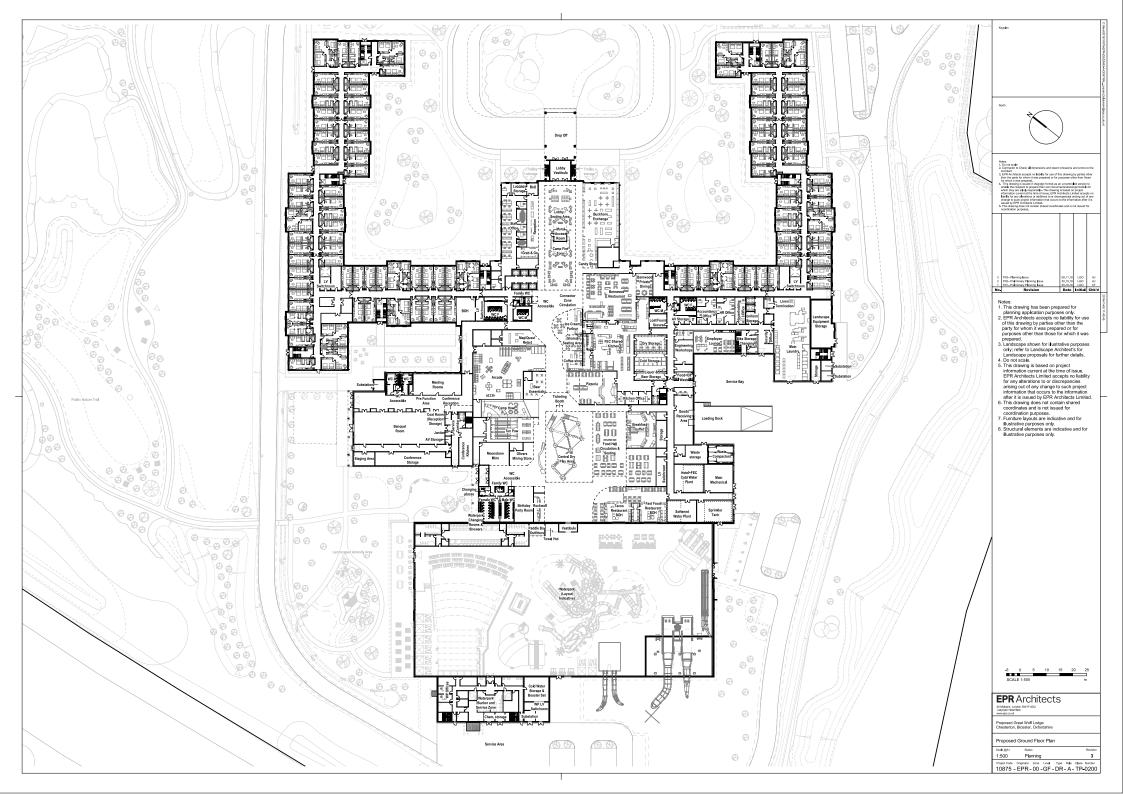
Oxfordshire County Council (2017) Oxfordshire Minerals and Waste Local Plan: Part 1- Core Strategy https://www.oxfordshire.gov.uk/residents/environment-and-planning/planning/planning-policy/minerals-and-waste-policy/core-strategy#adoption

¹⁰ Cherwell District Council (2015) The Cherwell Local Plan 2011-2031: Part 1 Adopted 20 July 2015 https://www.cherwell.gov.uk/downloads/download/45/adopted-cherwell-local-plan-2011-2031-part-1-incorporating-policy-bicester-13-re-adopted-on-19-december-2016

Appendix B

PROPOSED GROUND FLOOR PLAN







4th Floor 6 Devonshire Square London EC2M 4YE

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