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**ENVIRONMENT**

Roxhill (Junction 15) Ltd,
M1 J15 SRFI
Northampton,

# FRAMEWORK SITE WASTE MANAGEMENT STRATEGY

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# FRAMEWORK SITE WASTE MANAGEMENT STRATEGY


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## Notice

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# 1.0 INTRODUCTION

1.1 This document was prepared by BWB Consulting Ltd on behalf of Roxhill (Junction 15) Limited in respect of a proposed strategic rail freight interchange comprising of the following:

- An intermodal freight terminal including container storage and HGV parking, rail sidings to serve individual warehouses, and with the capability to also provide a 'rapid rail freight' facility as part of the intermodal freight terminal;
- Up to 468,000 sq m (approximately 5 million sq ft) (gross internal area) of warehousing and ancillary buildings, with additional floorspace provided in the form of mezzanines;
- New road infrastructure and works to the existing road network, including the provision of a new access and associated works to the A508, a new bypass to the village of Roade, improvements to Junction 15 and to J15A of the M1 motorway, the A45, and other highway improvements at junctions on the local highway network;
- Strategic landscaping and tree planting, including diverted public rights of way; and
- Earthworks and demolition of existing structures on the SRFI site.

1.2 This document sets out a Framework Waste Management Strategy (FWMS) for the proposed development.

1.3 This FWMS was prepared to outline the developments approach to applying the waste hierarchy regarding both construction and operational phases of the proposal.

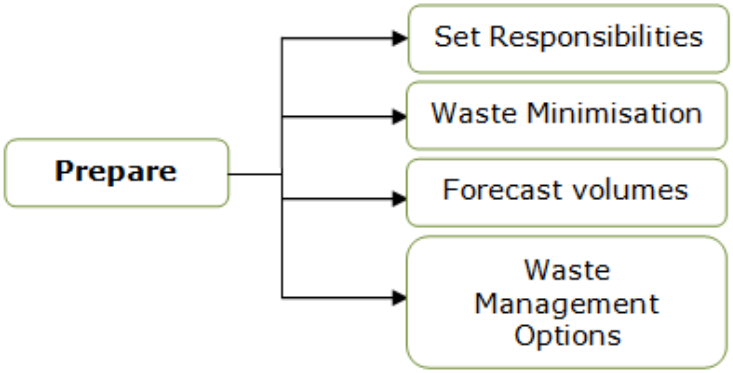
1.4 This strategy should be read in conjunction with the Design and Access statement and the Refuse Strategy set out therein.

1.5 The preparation of this document is intended to encourage the designers and contractor to consider materials and methods of construction that produce the minimum amount of waste, build waste management targets into tender specifications, and improve resource efficiency to provide resource savings over the construction of the project.

1.6 Diagram 1 provides guidance regarding the preparation element of the process and identifies where savings and efficiencies can be gained.

1.7 **Diagram 1** provides guidance regarding the preparation element of the process and identifies where savings and efficiencies can be gained.

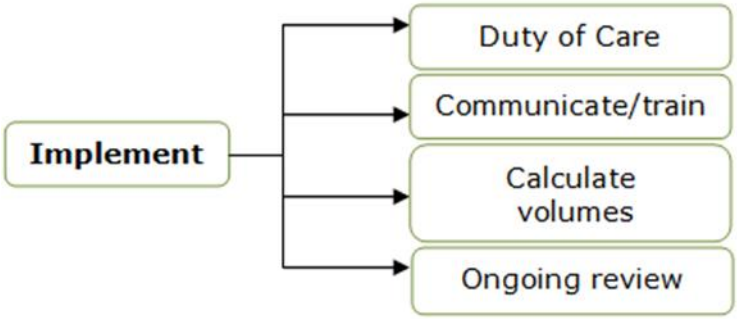
***Diagram 1***




1.8 The next step to improving resource efficiency and waste reduction is the actual implementation of the agreed measures and detailed Site Waste Management Plan (SWMP). This is to be followed by a thorough implementation of the plan; carrying out all mitigation measures where possible, providing the communication and training required to achieve this and reviewing progress by determining actual volumes of waste reaching each destination.

1.9 Diagram 2 identifies key areas where targets and actions can be implemented.

***Diagram 2***



# 2.0 PLANNING POLICY AND OBJECTIVES

## Waste Hierarchy

2.1 The 'Waste Hierarchy' is set out in Article 4 of the revised Waste Framework Directive[1](below) and should be considered when planning waste actions. Priority should be given to prevention, reusing and recycling on the site before considering off site re-use or recycling, and then other types of recovery or disposal.

***Table 1: The Waste Hierarchy***

| Stages | Examples of Options (as provided by Defra) |
|---|---|
| Prevention | Using less material in design and manufacture. Keeping products for longer; re-use. Using less hazardous materials. |
| Reusing onsite/preparing for re-use off site. | Checking, cleaning, repairing, refurbishing, whole items or spare parts. |
| Recycle | Turning waste into a new substance or product. Includes composting if it meets quality protocols. |
| Other Recovery | Includes anaerobic digestion, incineration with energy recovery, gasification and pyrolysis. |
| Disposal | Landfill and incineration without energy recovery. |

2.2 The objective of good waste management is to handle waste arising as high as possible in this hierarchy, with prevention through waste minimisation as the best option.

2.3 This waste strategy is associated with waste collection, storage and disposal and as such is concerned with the recycling, other recovery and disposal aspects of the hierarchy and focuses on benefits that can be brought in these aspects.

## Adopted Northamptonshire Minerals and Waste Local Plan

2.4 The Northampton Minerals and Waste Local Plan[2] (NMWLP) contains the following policies that are of relevance to the proposed development.

2.5 **Policy 26- Sustainable Design and Use of Resources**- "*All new built development should seek to utilise the efficient use of resources in both its construction and its operation through:*

- *Design principles and construction methods that minimise the use of primary aggregates and encourage the use of building materials made from secondary and recycled sources,*
- *Construction and demolition methods that minimise waste production, and re-use and recycle materials (as far as practicable) on-site,*

[1] Directive 2008/98/EC on Waste (Waste framework Directive)
[2] Adopted Northamptonshire Minerals and Waste Local Plan- July 2017

- *The use of non-primary mineral construction materials, except where there is a need to protect and conserve the existing character of the area, which require traditional building materials (such as building and roofing stone),*
- *Design and layout that allows the sorting, recycling, biological processing and storage of waste, and*
- *Supporting the move to a low carbon economy by way of reduced greenhouse gas production through design and layout that incorporates energy and water efficiency, and where appropriate flood mitigation or attenuation measures".*

## Northamptonshire Joint Municipal Waste Management Strategy

2.6 The Northamptonshire Joint Municipal Waste Management Strategy (2012)[3], provides a commitment to increase recycling rates across the county while ensuring the waste hierarchy is utilised when considering the best options for managing Local Authority Collected Municipal Waste, (LACMW). This principle will be applied to the generated commercial industrial waste from the operational phase.

## Objectives of this FSWMS

2.7 The primary objective of the FSWMS is to ensure waste on site is managed in a compliant and sustainable manner. The following points outline the additional objectives of the framework site waste management strategy:

- This strategy will demonstrate that the development was designed in a manner to incorporate existing and future long term needs of waste management. This is provided by ensuring waste collection and storage facilities are designed with adequate capacity, to enable appropriate segregation of wastes and are readily accessible to waste collection vehicles servicing the buildings.

- Re-use and Recycling targets for the proposed development will be formalised within a detailed and site specific Site Waste Management Plan (SWMP). This document specifies the waste stream, its volume and details how it will be managed or disposed of. The specific targets have not been established yet and will be agreed with the Contractor during procurement and set out in the SWMP. These targets will be established in support of the adopted Minerals and Waste Local Plan[2].

- The waste strategy will support recycling by providing appropriate facilities for segregation of recyclable waste at source, with clear signage of waste types appropriate for each bin type.

[3] Northamptonshire Joint Municipal Waste Management Strategy 2012

# 3.0 SITE WASTE MANAGEMENT PLAN (SWMP)

## Relevant Guidance

3.1 A detailed SWMP will be written prior to construction of the proposed development.

3.2 SWMPs are relevant to all aspects of construction works. Development of a SWMP will assist in tracking waste, managing waste targets, improving material resource efficiency and helping to comply with the duty of care requirements. A SWMP will record how waste is disposed of, re-used, recycled or recovered.

3.3 The SWMP will specify the accountable party to which any specified measures apply. Accountable parties within the SWMP are detailed below. The below represents the previous requirements of the 2008 SWMP Regulations. While these have since been repealed and are no longer a statutory requirement, they act to provide a good source of guidance for the requirements of an effective SWMP.

## Client responsibilities

3.4 The Client is responsible for ensuring that the SWMP is prepared before construction work commences; this can be undertaken either by themselves or an appointed person.

3.5 The Client should appoint a Principal Contractor who is also responsible for reviewing, revising and refining the SWMP.

3.6 The Client must give reasonable directions to any contractor so far as is necessary to enable the Principal Contractor to comply with the SWMP requirements.

## Principle Contractor

3.7 A client who intends to use one or more contractors for any project must appoint a contractor as the Principal Contractor. The Principal Contractor will typically be appointed by competitive tender.

3.8 The Principal Contractor is responsible for ensuring that all personnel on site are given the appropriate information and/or training needed to meet requirements within the SWMP.

3.9 The Principal Contractor must ensure that the SWMP is kept up to date and located onsite at all times. Every contractor must be aware of its location.

3.10 Waste management tasks in the SWMP should be undertaken by the relevant contractors and sub-contractors within a co-operative environment that encourages the development of effective waste management strategies.

3.11 The contractor should ensure that, as far as is practically possible, the waste hierarchy preferential system is applied to waste management decisions onsite.

3.12 Recovery or disposal of site waste must be undertaken in compliance with the environmental permitting, waste duty of care and waste carrier legislation.

## Preparation of the SWMP

3.13 The SWMP will be prepared by the Principal Contractor through the Tender process and prior to commencement of works. Suggested instructions for tender in this respect are set out in **Appendix 1.**

3.14 A framework has been set out for the format of the SWMP and is enclosed in **Appendix 2**.

3.15 The Principal Contractor will be responsible for preparing and implementing the SWMP in accordance with this framework and to meet the waste objectives to be set out by the Client.

# 4.0 MATERIALS RESOURCE EFFICIENCY

4.1 In designing the site, consideration has been given to re-use materials from the demolition process over purchasing new materials where possible.

4.2 Construction methods and use of materials should be considered to reduce the amount of waste from the construction site. Preliminary records of decisions taken on materials resource efficiency may begin at the earliest stages of the project commencement. Copies of related documentation can be used to help complete this part of the SWMP.

4.3 The SWMP should contain a statement on the consideration given to materials resource efficiency in designing and planning the construction. This may include design specifications, choice of materials and method of construction such as pre-fabricated materials.

4.4 This is subject to confirmation and further consideration at a later stage within the project lifecycle, at which time the more detailed SWMP will be prepared.

# 5.0 WASTE MANAGEMENT DURING CONSTRUCTION PHASE

## Identifying Waste Streams

5.1 The 3 main potential waste streams from the construction of the development are as follows:

- Engineering/Excavation material - e.g Vegetation, topsoil, natural ground, made ground;
- Construction waste - e.g Cement, concrete, aggregates, pipe work and sand; and
- General waste (produced from temporary accommodation on site)- e.g. Cardboard, plastic, glass, wood.

5.2 Each type of waste should be identified as inert, non-hazardous or hazardous as per Regulation 6 and 7 of The Hazardous Waste Regulations 2005 (SI 2005/894). Advice can be found in the European Waste Catalogue.

5.3 If any types of waste are classified as hazardous under Regulation 6 of the Hazardous Waste Regulations then the contractor must notify the Environment Agency that they are producing hazardous waste, prior to removal of any waste from the site.

5.4 The potential for the presence of asbestos on site should be investigated and will be confirmed in the pre-tender Health and Safety Plan.

5.5 The SWMP should state the potential waste streams from the construction site and describe each waste expected to be produced in terms of quantity and characteristics.

## Determining Waste Quantity

5.6 As part of the SWMP an estimate of the amount of construction waste will need to be made. From this, targets should be set as to how much waste will be produced and re-used, recycled or disposed of at each stage of the construction process.

5.7 Quantities of waste can be reduced by simple decisions early in the design process such as considering pre-ordering materials to specification or purchasing materials with returnable packaging. Accurate ordering can reduce site waste as well as reduce costs and space required for storage. Recycling of existing site materials can reduce waste and client costs. Additionally, ensuring cut and fill materials likely to be produced throughout the construction phase are understood in order to ensure the minimum amounts of material required are used. Therefore, further saving cost and waste production.

## Prioritising Waste Management Actions

5.8 The 'Waste Hierarchy' is set out in Article 4 of the revised Waste Framework Directive and should be considered when planning waste actions. Priority should be given to

reusing and recycling on site before considering off site re-use or recycling, and then other types of recovery or disposal.

5.9 The SWMP should be updated by the contractor, who should essentially carry out an audit in order to forecast how much of each waste type will be produced on site and action how it will be managed. The waste hierarchy should be considered.

5.10 For each waste stream, targets should be set for the proportion that will be re-used, recycled on site, or removed from the construction site. Materials removed from the site will be re-used off site, recycled, recovered or disposed of elsewhere.

5.11 **Table 5.1** below summarises options to be considered relative to each stage of the hierarchy.

***Table 5.1: Examples of Application of Hierarchy***

| | Stages | Examples of options (as provided by DEFRA) |
|---|---|---|
| ↓ | Prevention/Reduce | Consideration given to minimise over-ordering and understanding of cut and fill volumes requiring excavation prior to commencement of construction. |
| | Reuse | Excavated soils from pre-construction activities to be reused on site and balance achieved where feasible (cut & fill exercise) |
| | Recycle | Recycling arrangements will form part of the detailed layouts and designs associated with the development. |
| | Recover | Opportunity to send vegetation and food waste from site to a composting facility/anaerobic digestion plant to be considered. |
| | Disposal | Only to be considered as a last resort. |

# 6.0 WASTE DUTY OF CARE

## Waste Carriers

6.1 The site operator has a legal obligation to ensure any waste being disposed of off-site, is transported by a registered waste carrier.

6.2 Any person transporting waste from the site will be authorised to do so, registered as a waste carrier with the Environment Agency, and checks should be carried out to ensure that all sub-contractors are legally compliant.

## Environmental Permits

6.3 Further compliance checks will be made by the site principal contractor as to the destination of all wastes exported off site. It is a statutory requirement that all wastes removed from site are disposed of at a suitably regulated site. I.e. the principal contractor for the development must confirm that all sub-contractors are removing site waste to a fully permitted site able to accept that specific waste stream. Failing to do this can have legal implications for the site principal contractor as well as the company removing the waste and site operators of the wastes final destination.

## Waste Transfer Documentation

6.4 The revised Waste (England and Wales) Amendment Regulations (2014) set obligations under the duty of care to take account of the waste hierarchy. This means that a declaration of application of the waste hierarchy must be included on waste transfer documentation and hazardous waste consignment notes.

6.5 Documentation must include the 2007 Standard Industrial Classification (SIC) code of the person transferring the waste.

6.6 The modified hazardous waste consignment note must also be used, which will contain a declaration in Part D that the waste hierarchy has been applied. 2003 SIC codes must continue to be used.

6.7 All waste loads exported or imported from and to the site will be accompanied by the relevant waste transfer/consignment paperwork.

# 7.0 WASTE COLLECTION AND STORAGE AT NORTHAMPTON GATEWAY SRFI

7.1 The measures outlined below form the basis of the FSWMS and will feed into the SWMP. They indicate how waste will be managed during the operational phase of the development.

7.2 The SWMP should also seek to identify opportunities for mitigating and managing solid waste arising from the operational phases of the development. The SWMP will estimate the waste stream types likely to be generated from the proposed facilities. It will also seek to identify all potential operational waste streams as well as the potential for segregation, recycling and re-use of operational waste.

7.3 A commitment to minimise waste production will need to be encouraged across site users/occupiers and will be achieved through;

- Raising awareness and understanding through tool box talks;
- Providing adequate storage facilities for waste; and
- Monitoring waste produced to confirm whether targets are met (regular audits to be undertaken).

7.4 Operational waste will be encouraged to be recycled wherever possible. Recycling operations will be determined prior to operation commencing.

7.5 Waste collection bins and bin storage facilities will be provided in each building block within the development. The type, capacity and arrangements of the bin store will be designed to meet the requirements of that block.

7.6 Areas for waste collection/storage facilities will also be provided across the site to accommodate waste generated from B use classes.

7.7 Bins provided will allow segregation of recyclable and non-recyclable waste, consistent with the collection and recycling regime of Council.

7.8 Collections will be strictly managed to ensure they occur during the off peak periods thereby avoiding the busiest trafficked periods and so limiting the impact on existing traffic flows.

7.9 Employment area occupiers will make their own arrangements for bin provision as required by their particular operation and collection and disposal provider.

7.10 The principles of this waste strategy will apply to the future phases of the development but the detailed proposals for waste collection will evolve and will be determined at reserved matters stage for each phase coming forward.

7.11 The final SWMP and final site design will ensure that appropriate site waste handling and storage procedures will be implemented at the application site – to ensure that appropriate storage areas are provided to facilitate recovery, recycling and composting where possible.

# APPENDIX 1

# SUGGESTED INSTRUCTIONS FOR TENDER

## Appropriate Contractors

The management of site waste will be considered as part of the procurement process and information should be provided by tendering contractors to develop the SWMP and estimate the waste generated by the project.

It is expected that the contractor will consider the management of site waste as part of the tender process. Consideration should be given to the potential waste streams identified from the site and reasonable targets should be set to reduce the amount of waste leaving the site to be disposed of in landfill.

The contractor should accept the Duty of Care in accordance with "Waste Duty of Care Code of Practice, March 2016".

It is recommended that any contractors would have an appropriate environmental policy such as ISO14001 or equivalent.

## Waste Management

To ensure compliance with regulations and accountability, waste management tasks will be written into the terms of contracts.

Payment for waste removal should only be made when evidence of delivery to an authorised location is provided.

## Further Guidance and Legislation

The EC Landfill Directive and The Landfill (England and Wales) Regulations 2002 (as amended 2004 and 2005) require that each type of waste to be accepted by a landfill shall be characterised to ensure all information necessary for a safe disposal of the waste in the long term is available.

The Waste (England and Wales) Regulations 2012 implement the Revised EU Waste Framework Directive 2008/98/EC (the Revised WFD) into national law in England and Wales. The aim of the Revised WFD is to provide measures to reduce overall impacts and improve the efficiency of resource use whilst incorporating the hazardous waste directive into the revised directive.

The Hazardous Waste (England and Wales) Regulations 2005 set out the need for notification of premises producing hazardous waste to the Environment Agency, completion of consignment notes to accompany movement of waste, keeping records, and prohibition of mixing waste. Hazardous waste regulations which should be considered by the contractor include:

- The Hazardous Waste (England and Wales) Regulations 2005 (SI 2005/894); and
- The Hazardous Waste (England and Wales) (Amendment) Regulations 2009 (SI 2009/507).
- It should be noted that the Waste Regulations (2012) have made further amendments to the Hazardous Waste (England and Wales) Regulations.

# APPENDIX 2
# EXAMPLE SITE WASTE MANAGEMENT PLAN

(To be completed by Principal Contractor)

**The tables below should be completed and updated by the Principal Contractor. Wastes mentioned in the table are examples of potential wastes from the site for the purpose of this FSWS and are not exhaustive. Further site activities such as ground preparation and general construction will produce additional waste streams.**

| SITE DETAILS | | RESPONSIBLE BODIES | CLIENT | PRINCIPLE CONTRACTOR |
|---|---|---|---|---|
| **Site Name** | Northampton Gateway | **Name** | Roxhill (Junction 15) Ltd | |
| **Site Location** | | **Contact Personnel** | | |
| **Site Cost** | | **Address** | | |
| **Site Start Date** | | | | |
| **Site Completion Date** | | **Telephone** | | |

## Forecast Volumes

| SITE ACTIVITY | WASTE | SOURCE | EXPECTED QUANTITY | RECOMMENDED WASTE ACTION |
|---|---|---|---|---|
| **Demolition/Construction** | Concrete material | Groundworks | | Re-use as hardcore for new development if suitable |
| | Concrete | Existing Buildings | | Recycle on site, crushed as hardcore |
| | Sub Soils | Groundworks | | Re-use on site |
| | Top Soils | Groundworks | | Re-use on site |
| | Bricks | Existing buildings | | Re-use on site |
| | Ceramic Tiles | Existing Buildings | | Segregate for offsite recycling |
| | Mix of blocks and ceramics | Existing infrastructure | | Offsite recycling |
| | Copper pipes and fittings | Existing Buildings/Infrastructure | | Segregate and recycle offsite |
| | Iron and Steel | Existing infrastructure | | Re-use or recycle |
| | Concrete Pipes | Existing drainage infrastructure | | Re-use on site if suitable condition, or recycle material |

| SITE ACTIVITY | WASTE | SOURCE | EXPECTED QUANTITY | RECOMMENDED WASTE ACTION |
|---|---|---|---|---|
| | Plastic Pipes | Existing drainage infrastructure | | Re-use on site if suitable condition, or recycle material |
| | Glass | Existing buildings (windows) | | Segregate for offsite recycling |
| | Asbestos materials | Existing buildings (insulation) | | Segregate for removal by licensed hazardous waste carrier |
| **Materials Delivery/Supply** | Paper and card packaging | New site material packaging | | Minimise packaging arriving on site, segregate onsite and recycle offsite |
| | Plastic packaging | New site material packaging | | Minimise packaging arriving on site, segregate onsite and recycle offsite |
| | Timber packaging | New site material packaging | | Minimise packaging arriving on site, segregate onsite and recycle offsite |

## Waste Management

| WASTE CARRIER DETAILS | | | | |
|---|---|---|---|---|
| Name | | | | |
| Contact Personnel | | | | |
| Address | | | | |
| Telephone | | | | |
| Waste Carrier Registration no. | | | | |
| Reference for SWMP | A | B | C | D |

| Type of Waste Material / Location | I N H | EWC[1] code | Re-used | | | | Recycled | | | | | | Disposed of | | | | Waste Carrier | Waste Site | WTN[2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | On site | | Off site | | Site use | | Off site use | | MRF[3] | | Landfill | | Other | | | | |
| | | | T | A | T | A | T | A | T | A | T | A | T | A | T | A | | | |
| Concrete (general) / demolition | I | 17 01 01 | | | | | | | | | | | | | | | | | |
| Soils | I | 17 05 04 | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bricks, / demolition | I | 17 01 02 | | | | | | | | | | | | | | | | |
| Tiles and ceramics / demolition | I | 17 01 03 | | | | | | | | | | | | | | | | |
| Mixture of Bricks and Blocks / Demolition | I | 17 01 07 | | | | | | | | | | | | | | | | |
| Copper, Bronze, Brass / demolition | N | 17 04 01 | | | | | | | | | | | | | | | | |
| Iron and Steel / demolition | N | 17 04 05 | | | | | | | | | | | | | | | | |
| Glass / demolition | N | 17 02 02 | | | | | | | | | | | | | | | | |
| Insulation materials including asbestos / demolition | H | 17 06 01* | | | | | | | | | | | | | | | | |
| Paper and card packaging / construction materials | N | 15 01 01 | | | | | | | | | | | | | | | | |
| Plastic packaging / construction materials | N | 15 01 02 | | | | | | | | | | | | | | | | |
| Totals | | | | | | | | | | | | | | | | | | |
| SWMP Target % | | | | | | | | | | | | | | | | | | |
| Actual Performance Score as % | | | | | | | | | | | | | | | | | | |

I – Inert, N – Non-hazardous, H – Hazardous, T – Target, A – Achieved

[1] European Waste Catalogue

[2] Waste Transfer Note, or consignment note for hazardous waste

[3] Materials Recycling Facility

BWB