Tritax Symmetry (Hinckley) Limited

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

The Hinckley National Rail Freight Interchange

Development Consent Order

Project reference TR050007

Site Waste and Materials Management Plan

Report Prepared by: BWB Consulting Ltd

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CONTENTS

INTRODUCTION

1.1. This framework Site Waste and Materials Management Plan (SWMMP) has been developed on behalf of Tritax Symmetry (Hinckley) Limited ('TSH') in support of the Hinckley National Rail Freight Interchange (HNRFI) application for a Development Consent Order (DCO). It accompanies the Environmental Statement (ES). In line with the environmental aspirations of HNRFI and the requirements specified in Chapter 17: 'Materials and Waste' of the ES Volume 1 (Main Report) (Document reference 6.1.17), application document this document constitutes the outline SWMMP at the preliminary design stage. The relevant mitigation measures to reduce the material assets and waste impacts from the ES have been included.

1.2. It is proposed that, this Framework SWMMP is secured by the DCO and that a requirement of the DCO is that the SWMMP is updated to a detailed phase specific SWMMP which is then submitted for approval by the local planning authority prior to the construction of a given phase.

Project Description

1.3. TSH is bringing forward proposals for the HNRFI at Junction 2 of the M69. The scheme is considered to be a Nationally Significant Infrastructure Project (NSIP). The Main HNRFI Site comprises 209.81 hectares (or 2,098,100m^2) of predominately agricultural land as demonstrated within the Illustrative Context Masterplan (plan reference 2.4). Specifically, HNRFI will provide:

- An intermodal rail freight terminal on the Felixstowe to Nuneaton railway line with a daily capacity to accommodate 16 trains up to 775m in length.
- A container storage yard with administrative and welfare facilities.
- 850,000 m^2 of warehouse floorspace (650,000 m^2 ground floor and a further 200,000 m^2 of mezzanine floorspace).
- Dedicated site access directly from Junction 2 of the M69 motorway. As part of the proposals, a northbound off-slip and a southbound on-slip would be added

to this junction, which only currently caters for motorway traffic heading to and from the north.

- A new highway link from Junction 2, which would run north-westwards across the southern end of the HNRFI and over the railway, connecting to the B4669 Leicester Road and referred to as the 'A47 Link Road'.
- Demolition of existing structures and earthworks to create development plots and landscape zones.
- Strategic landscaping and open space, including alterations to public rights of way and the creation of new ecological enhancement areas and publicly accessible open areas, notably in the form of new open public space adjacent to Burbage Common.

Aims/Purpose of the SWMMP

1.4. The framework SWMMP is an important tool to improve the environmental performance of a project and set out the arrangements that are proposed for managing any waste produced. It will be used throughout the design process, to promote re-use of materials in line with circular economy principles, where feasible, and 'designing out waste' through the development of a waste strategy through the demolition, excavation and construction phases. It will also be used to monitor waste arisings and optimise the strategy going forward.

1.5. The principal objective of sustainable resource and waste management is to use material resources more efficiently and seek to reduce the volume of waste produced and the volume of waste requiring final disposal by landfill. Where waste is generated, it should be managed in accordance with the waste hierarchy, demonstrating that the best environmental outcome has been chosen.

1.6. This SWMMP aims to first estimate the quantity of Construction, Demolition and Excavation (CD&E) waste generated by a project, and then demonstrate how this waste can be managed safely and sustainably to reduce the impact it has on the environment. It is used to plan, implement, monitor and review resource efficiency and waste management on a construction site. It describes how materials will be managed efficiently and disposed of legally during the construction of the works, explaining how the re-use and recycling of materials will be maximised.

1.7. It should be noted that this document sets out the arrangements for managing waste produced by the construction of the Proposed Development. The management of waste produced during the operational phase will be dealt with through the Materials and Waste Environmental Statement (ES) Chapter.

1.8. Although the legal requirement to produce a SWMP as part of the Site Waste Management Plan (SWMP) Regulations 2008[1] were revoked in December 2013, the production of a SWMP is included within the Hinckley and Bosworth Borough Council

[1] Her Majesty's Stationary Office (HMSO), 2008. The Site Waste Management Plans Regulations 2008.

planning application requirements[2] and are promoted within Policy CS23 – Waste in the Blaby District Local Plan[3].

1.9. This SWMMP will include:

- A summary of the relevant legislation and policies providing guidance on the management of CD&E waste.
- Estimates of the types and quantities of CD&E waste likely to be generated as a result of the construction of the Proposed Development,
- Information on how the waste will be managed (i.e. reused, recycled or disposed of), including the proposed waste recovery and disposal system.
- Guidance on the mitigation and waste management measures to be implemented on-site.
- Guidance for the recording of design and construction decisions that demonstrate good and best practice in material resource use and waste minimisation and management.

1.10. A SWMMP is considered a 'live document' that should be continually reviewed, edited and updated in accordance with the progress of additional design and consent and/or prior to any construction works commencing. This framework SWMMP will therefore be refined by the Principal Contractor(s) (PC(s)) as HNRFI progresses as a live document, reviewed and updated regularly throughout the Project. The responsibilities of the PC(s) are outlined in Section 4.1.

1.11. This SWMMP should be read alongside the Construction Environmental Management Plan (CEMP) which will also be submitted as part of the DCO application.

[2] Hinckley and Bosworth Borough Council, 2019. Validation Requirements for Planning Applications.
[3] Blaby District Council, 2013. Local Plan (Core Strategy) Development Plan Document.

1.12. The HNRFI will need to comply with a range of environmental and waste legislation. A summary of the regulatory framework is provided below:

The Environmental Permitting (England and Wales) Regulations (2016)[4]

1.13. The Environmental Permitting Regulations aim to ensure that waste activities are authorised and that their discharges do not harm human health or the environment. Environmental permits must be granted by the EA. The Regulations combine the requirements for an integrated waste management approach and for hazardous waste management. This provides a framework for regulation that enables the EA to assess permitting and compliance.

The Waste (England and Wales) Regulations (2011 plus amendments)[5]

1.14. The Waste Regulations implement revisions to the Waste Framework Directive in England and Wales. They apply the waste hierarchy which details methods to reduce waste generation and the amount of waste sent to landfill. The methods of waste management in order of preference are:

- prevent;
- prepare for re-use;
- recycle;
- recover; and
- dispose.

The Hazardous Waste (England and Wales) Regulations (2005)[6]

1.15. The Hazardous Waste Regulations set out the regime for the control and tracking of hazardous waste in England and Wales. The regulations introduced a process of registration of hazardous waste producers and a new system for recording the movement of waste.

National Policy Statement for National Networks (2014)[7]

1.16. This policy statement produced by the Department for Transport set out the need to manage waste when delivering the development of nationally significant infrastructure projects (NSIPs) on the national road and rail networks in England.

1.17. The policy states that human health and the environment should be protected by producing less waste and by using it as a resource wherever possible. Where this is

[4] The Environmental Permitting (England and Wales) Regulations 2016. 675. London: The Stationery Office.
[5] The Waste (England and Wales) Regulations 2011. 988. London: The Stationery Office.
[6] The Hazardous Waste (England and Wales) Regulations 2005. 894. London: The Stationery Office.
[7] National Policy Statement for National Networks 2014. Department for Transport.

not possible, waste management regulation ensures that waste is disposed of in a way that is least damaging to the environment and to human health, i.e., by implementing sustainable waste management through the waste hierarchy.

1.18. The proposed arrangements for managing waste should also be set out and should describe the proposed waste recovery and disposal system for all waste generated by the Proposed Development. The policy requires effective management of hazardous and non-hazardous waste arising from the construction and operation of the Proposed Development. The proposed arrangements should set out:

- How waste will be properly managed, both on-site and off-site;
- To show that the waste from the proposed facility can be dealt with appropriately by the waste infrastructure which is, or is likely to be, available. Such waste arisings should not have an adverse effect on the capacity of existing waste management facilities to deal with other waste arisings in the area; and
- How adequate steps have been taken to minimise the volume of waste arisings, and of the volume of waste arisings sent to disposal, except where an alternative is the most sustainable outcome overall.

1.19. This SWMMP is considered to describe the proposed arrangements for managing construction waste generated by the Proposed Development. The impact of managing the additional waste on the local waste infrastructure has been assessed within the Materials and Waste ES Chapter.

National Planning Policy Framework (2021)[8]

1.20. The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England. The NPPF must be taken into account in preparing development plans and is a material consideration in planning decisions. The policy sets out objectives for sustainable development which includes protecting and enhancing our natural, built and historic environment through minimising waste and pollution.

Our Waste, Our Resources: A Strategy for England (2018)[9]

1.21. The Our Waste, Our Resources Strategy, building on the previous national waste strategies for 2000 and 2007, contains actions and commitments, which set a clear direction towards a zero-waste economy.

Leicestershire Minerals and Waste Local Plan up to 2031 (adopted 2019)[10]

1.22. This Minerals and Waste Local Plan includes the spatial vision, spatial strategy, strategic objectives, and core policies which aim to guide the future winning and

[8] Ministry of Housing, Communities & Local Government (2021) National Planning Policy Framework. London.
[9] HM Government (2018) Our Waste, Our Resources: a Strategy for England. London.
[10] Leicestershire County Council (2019) Leicestershire Minerals and Waste Local Plan.

working of minerals within Leicestershire. These also guide the waste management development within the County.

Mineral and Waste Safeguarding Hinckley and Bosworth (2015)[11]

1.23. The Mineral and Waste Safeguarding guidance document produced by Leicestershire County Council identifies the areas within Hinckley and Bosworth District for mineral safeguarding. It also identifies the location of waste sites within the district for safeguarding.

Mineral and Waste Safeguarding Blaby District (2015)[12]

1.24. The Mineral and Waste Safeguarding guidance document produced by Leicestershire County Council identifies the areas within Blaby District for mineral safeguarding. It also identifies the location of waste sites within the district for safeguarding.

Targets

1.25. The ES identifies the following waste-related targets for HNRFI based on:

- At least 90% (by weight) of all Construction and Demolition Waste (CDW) will be subjected to material recovery in accordance with the Waste Framework Directive. In addition, the Project will aim to achieve at least 90% (by weight) material recovery of non-hazardous CDW.
- The site will aim to achieve a cut and fill balance for excavated material (sub-soil).

[11] Leicestershire County Council (2015) Mineral and Waste Safeguarding: Hinckley and Bosworth Borough.
[12] Leicestershire County Council (2015) Mineral and Waste Safeguarding: Blaby.

Waste Management Principles

Waste Hierarchy

1.26. The waste management principles of the waste hierarchy are now fully incorporated in the Waste Management Plan for England as objectives to be delivered through waste local plans. These principles are outlined in the table below.

Table 1 Waste Management Principles

Principle	Description
Waste Hierarchy	A theoretical framework used as a guide to the waste management options that should be considered when assessing the Best Practicable Environmental Outcome (BPEO). The methods of waste management in order of preference are: • Prevent • Prepare for re-use • Recycle • Recover • Dispose
Waste as a Resource	Certain wastes can be directly used or separated / processed for use as a replacement for raw materials, saving resources and potentially reducing energy use or other impacts associated with virgin resource extraction and transport.
Proximity Principle	Waste should be treated or disposed of at an appropriately licensed facility closest to the origin of waste.
Regional Self-Sufficiency	Where practical, waste should be treated or disposed of within the region in which it is produced.
Best Practicable Environmental Option-(BPEO)	Defined by the Royal Commission on Environmental Pollution (1988) as *"the outcome of a systematic and consultative decision making procedure which emphasises the protection and conservation of the environment across land, air and water"*. The BPEO procedure establishes, for a given set of objectives, the option that provides the most benefits, as a whole, at acceptable cost, in both the short term and the long term.

Duty of Care

1.27. The Duty of Care, set out in Section 34 (1) of the Environmental Protection Act 1990, imposes a legal responsibility to produce, store, transport and dispose of waste without harming the environment on anyone who is the holder of controlled waste.

1.28. All reasonable steps must be taken to:

- Prevent unauthorised or harmful deposit, treatment or disposal of waste.

- Prevent a breach (failure) by any other person to meet the requirement to have an environmental permit, or a breach of a permit condition.
- Prevent the escape of waste from an individual's control.
- Ensure that any person the waste is transferred to has the correct authorisation.
- Provide an accurate description of the waste when it is transferred to another person.

'Designing Out' Waste

1.29. During construction the PC(s) should consider the upper tiers of the waste hierarchy as required with a view to minimising the overall volume of waste arisings via designing out waste and maximising efficient use of materials, ultimately to prevent and minimise waste sent to landfill.

1.30. A key objective for the preliminary design phase has been to design out waste generation where possible. The Materials and Waste ES Chapter and SWMMP include evidence of the measures adopted through the preliminary design to 'design out' waste including designing for re-use and recovery, materials optimisation, offsite construction, future (deconstruction and flexibility), and waste efficient procurement. The measures are described below.

Design for Re-use and Recovery

Demolition

1.31. Prior to demolition of each structure or building, a pre-demolition audit will be carried out to quantify materials and investigate opportunities for re-use and recycling following the BPEO procedure. There will be crushing / screening of demolition arisings for use as recycled aggregate and fill materials which require a registered waste exemption or an environmental permit. Where possible it is likely unsuitable material will be mechanically and / or chemically stabilised, such as via lime stabilisation, and used within landscape areas on HNRFI.

Excavation

1.32. Site levels and grading of HNRFI have been designed to achieve a cut and fill balance where practicable, in order to help minimise excavation quantities (sub-soil). Cut and fill balances have been reviewed for each of the phases of development with the majority having sufficient permanent or temporary land to retain material arisings in dedicated landscape bunds. Where possible, unsuitable material will be mechanically and/or chemically stabilised and used within landscape areas on the Main HNRFI Site. If material is to be removed from the Main HNRFI Site, this will be in accordance with best practice measures as prescribed by the BPEO framework.

Topsoil

1.33. The topsoil removed will first be used in the following hierarchy:

- Topsoil will be set aside for re-use in on site landscaping requirements (used in permanent works)
- Topsoil will be used to create the various noise / visual bunds (used in permanent works)
- Topsoil requirements for offsite BNG areas will be taken from the site (used in permanent works)
- Topsoil will be placed back on plots for future development to protect the formation until they are ready to come forward (used in temporary works)
- Topsoil may be used to create surcharge loading if geotechnical conditions require ground improvement (pre-loading technique) (this will be a temporary use)

1.34. The residual topsoil that cannot be utilised in the above listed activities will be stockpiled for storage. Given that a balance of topsoil cannot be achieved on site, there are a number of options for movement of the excess:

- Reuse of the topsoil elsewhere, for use in agricultural or biodiversity uses or to meet the needs of developments in the region.
- The remainder will be transferred for re-use or recovery via a Waste Transfer Station or potentially for inert landfill cover and restoration if a suitable home cannot be found at the right time.

Construction

1.35. TSH is committed to sourcing construction materials with a high recycled content and supporting a circular economy.

1.36. If the PC(s) cannot achieve that target, they will need to undertake a whole life sustainability assessment of alternative options to demonstrate a sustainable alternative approach.

1.37. At present it is expected that all existing aggregate-based material will be incorporated into fill materials subject to suitability and any hazardous content. Ideally, the balance of additional required aggregate-based materials will be sourced from local quarries. However, based on supply and demand the closest quarry to the Proposed Development may not be able to provide all material requirements.

1.38. There are instances where crushed secondary aggregates can be used, with demolition waste arisings a good source of aggregate for both concrete and road construction where available. Recycled aggregate can be used for highway construction where it can be categorised or classified as a suitable fill material under the specification for Highway Works guidance notes. These stipulate the type of material, grading requirements and other associated testing requirements that must be met to produce a Type 1 aggregate.

1.39. The PC(s) will identify local Materials Recovery Facilities (MRFs) and neighbouring construction projects that could potentially supply secondary aggregate.

1.40. For concrete, as much material as practicable should be constructed from recycled materials. It is common for 20% of the material by volume to be recycled material, which can be increased beyond 40% depending on the mix, workability and strength gain requirements.

1.41. Haul roads and compounds will utilise recycled aggregates from either demolition materials onsite or potentially offsite from other local construction projects where regulatory compliance can be achieved.

1.42. The majority of the steel sourced for bridge beams or ground support solutions will be made from high rates of recycled steel where feasible.

1.43. The temporary works will include compound hard standings, haul roads, turning circles, laydown areas, access and egress areas along with crane and piling rig platforms. All these temporary works areas will be constructed using recycled aggregates from either demolition materials onsite or potentially offsite from other local construction projects where regulatory compliance can be achieved.

Design for Materials Optimisation

1.44. TSH and the PC(s) will investigate and identify how materials can be designed to be more easily adapted over an asset lifetime and how deconstruction of elements can be maximised at the end of first life.

1.45. Design for materials optimisation features the simplification and standardisation of materials and component selection with the aim of making the design more buildable. The standardisation of materials and component choices will enhance the buildability as well as potentially decreasing the level of rework.

1.46. TSH and the PC(s) will investigate the opportunity to introduce the standardisation of selected materials to ensure waste inherent in the design is further reduced through detailed design.

1.47. Site accommodation within the main construction compounds will also be standardised, allowing for efficiency in ordering required materials and equipment, and also providing clarity for workers who are then familiar with the site layout whichever compound they access (including operation and location of waste separation facilities).

Design for Offsite Construction

1.48. TSH and the PC(s) will investigate the potential for offsite construction of certain elements of HNRFI such as bridge components. Offsite construction can drive improvements in the products or processes employed in construction. At this stage

it would be envisaged to manufacture offsite bridge beams, culverts and short span bridges, parapets, prefabricated concrete units (headwalls and drainage rings), retaining walls, central reserve barriers and steel segments (if selected to be used). Offsite construction will be maximised where possible.

ANTICIPATED WASTE QUANTITIES

Waste Forecast

1.49. The potential waste types that could arise during the demolition, excavation and construction phases are summarised in the table below:

Phase	Type of Material	Classification / Management
Demolition	Existing infrastructure such as farmhouse and road demolition including supports, rails, voids. Demolition activities will generate a range of waste streams which will include building materials, such as concrete, bricks, plastics, metals, plasterboard, timber, paint, etc. Demolition activities will also generate a range of potentially hazardous waste streams which will include but not be limited to: made ground, soil and sub-soils, asphalt and bituminous products and existing structures containing asbestos.	Inert; and/or, Non-hazardous; and/or, Hazardous. Non-hazardous, and Hazardous which will include but not be limited to: made ground, soil and sub-soils if it contains sufficiently high levels of heavy metals, asphalt if it contains coal tar and asbestos if it is confirmed in existing structures. Some material may be suitable for re-use or recycled onsite. Local recycling facilities. Disposal at an inert/non-hazardous or hazardous landfill site.
Site preparation and earthworks	Vegetation strip and tree removal. Existing highways infrastructure such as kerbs, lighting, highways signs, safety barriers, etc.	Re-use onsite. Recycling offsite in local projects. Local recycling facilities. Disposal at an inert/non-hazardous or hazardous landfill site.
	Made ground, soil and sub-soils	Inert; and/or, Non-hazardous; and/or, potentially Hazardous if it contains sufficiently high levels of heavy metals.
Construction	Construction materials, such as concrete, bricks, plastics, metals, plasterboard, timber, paint, etc.	Inert; and/or, Non-hazardous; and/or, Hazardous. Some material may be suitable for re-use or recycled onsite. Local recycling facilities. Disposal at an inert or non-hazardous site.

	Made ground, soil and sub-soils.	Non-hazardous, and Hazardous if it contains sufficiently high levels of heavy metals.
	Waste products arising from the presence of construction staff onsite e.g. effluent from portable toilets, food waste and packaging, as well as waste from surplus materials and spillages.	Inert; Non-hazardous and potentially Hazardous. Some material may be suitable for re-use or recycled onsite. Local recycling facilities. Disposal at an inert or non-hazardous site.

Construction Waste

1.50. The estimated construction waste is summarised in Chapter 17 of the ES. The quantity of construction waste that will be diverted from landfill via re-use, recycling and recovery is based on a landfill diversion rate of 90%.

1.51. Construction waste has been estimated based on the preliminary design (as shown in the indicative General Arrangement drawings). As such, once the final detailed design is complete, the assumed quantities set out in the ES and in this SWMMP will be reviewed and updated to ensure that the final design will not lead to new or materially different significant effects, and that the mitigation set out remains appropriate.

1.52. The total quantity of construction waste estimated to be generated as a result of the Proposed Development is shown in the table below. This figure has been calculated using Smart Waste BRE Waste Benchmark Data[13] and assumes the buildings to be constructed are industrial buildings, producing an average quantity of 12.6 tonnes of construction waste per 100 m^2. This data provides an estimate of waste produced during the construction phase only and does not include demolition, excavation, or earthworks waste (which is set out below in paragraphs 1.51 to 1.56). Waste produced from the construction of roads and paved areas within the Main HNRFI Site (including hardstanding for the Railport) has been calculated based on 3% of the materials[14].

Table 2 Estimated type and quantities of Construction waste material

Type of Material	Quantity of Waste (tonnes)
Total floorspace of new buildings	81,900
Area of roads and car parks	9,995
Total	91,895

[13] Smart Waste BRE Waste Benchmark Data (2012)

[14] Based on industry standard quantity surveying estimates.

Demolition Waste

1.53. Demolition waste will be generated through the clearance of buildings and existing infrastructure, including services, roads, and drains which will need to be removed prior to construction. These are likely to consist of hard and inert materials, soils, rock and stones, wood (including vegetation), asphalt, brick, concrete, and miscellaneous metals.

1.54. The estimated quantity of waste anticipated to be generated as a result of the demolition of existing buildings and structures on site can be seen in the table below.

Table 3 Estimated quantity of demolition waste, broken down into waste stream

Waste Stream	Quantity of Waste (tonnes)
Masonry buildings (housing)	4,866
Steel frame buildings (barns)	15,558
Total	20,424

Excavation Waste

1.55. Cut and fill balances have been reviewed for each of the construction phases, with the majority having sufficient permanent or temporary land to retain material arisings in dedicated and functional landscape bunds.

1.56. Where cut and fill balance at phase level is not possible, the intention is for excess materials to be utilised within other phases as part of the HNRFI, with the aim of achieving an overall cut/fill balance of sub-soil, where possible. This will depend on the scheduling and timing of the construction of each scheme and the nature of the materials available. Based on the current cut and fill assessments for each project, it is unlikely that imported material will be brought into any part of HNRFI. There is however, likely to be an excess of topsoil – please see paragraph 1.33 for details on how the excess topsoil will be responsibly managed.

1.57. Once the final detailed design is complete, the assumed earthworks movements set out in the ES and in this SWMMP will be reviewed and updated to ensure that the final design will not lead to new or materially different significant effects, and that the mitigation set out remains appropriate.

1.58. The quantity of CD&E waste that will be diverted from landfill via re-use, recycling and recovery is based on a landfill diversion rate of 90%.

GUIDANCE ON THE MANAGEMENT OF WASTE ON-SITE

Roles and Responsibilities

Principal Contractor(s)

1.59. The Project will be constructed by a number of PC(s). There is an overarching CEMP and this will include in due course phase-specific CEMPs produced by the PC(s). Any further SWMMP produced by the PC(s) will be based on and in alignment with this framework SWMMP document.

1.60. The framework SWMMP will be refined by the PC(s) as works progresses. Once work commences onsite the collection of waste data, including actual waste arisings and waste management methods, will be recorded in a SWMMP template by the PC(s).

1.61. The PC(s) will implement a programme of environmental training for key staff at the site, including required training in relation to waste and materials management, waste licensing etc. This will enable them to train other operatives through Toolbox Talks and gather feedback from site personnel.

1.62. The PC(s) will provide general information on waste and specific information relating to the SWMMP in site inductions and Toolbox Talks. This training will include information on the segregation strategy and recovery targets in place at the site. Toolbox talks will be carried out on waste issues every two months, as a minimum, and all relevant staff and sub-contractors will be expected to attend. The SWMMP will also be communicated to relevant parties during the site induction process and where relevant, during the daily briefing process. Any changes to the SWMMP will be communicated at Toolbox Talks

1.63. The PC(s) will provide a SWMMP template (usually in the form of a spreadsheet) to determine waste management and recovery options and record actual waste related actions and movements during the demolition, excavation and construction phases of the project.

1.64. The PC(s) will establish agreements with sub-contractors for the management of waste. These agreements will be contractually binding and will include minimum standards and targets for diversion from landfill.

1.65. The PC(s) will review the evidence of the waste management contractors registration and environmental permitting prior to waste departing HNRFI. The PC(s) will verify the waste management contractor through the Defra website ('register of carriers, brokers and dealers')[15]. The PC(s) will also store documentation provided by the waste management contractors such as waste transfer notes.

[15] https://environment.data.gov.uk/public-register/view/search-waste-carriers-brokers

Waste Carriers

1.66. The PC(s) will identify waste management facilities for the management of all waste streams arising from the site whilst achieving compliance with all relevant legislation. The waste management facilities, where feasible, will be as close to HNRFI as possible, in line with the proximity principle for waste treatment and disposal. The proximity principle is the requirement to treat and/or dispose of wastes in reasonable proximity to their point of generation. The PC(s) will engage with waste management contractors to identify opportunities for recycling materials generated by the Project.

1.67. Waste carriers are responsible for collecting and transporting waste. They are required to register for a waste carrier licence. In order to ensure waste collected from the Proposed Development is dealt with in accordance with legal requirements, the PC(s) will check the following for all waste carriers that visit site and retain an auditable record of such checks:

- Contractor's name
- Date(s) of waste removal
- Type(s) of waste removed
- Method of treatment, recovery or disposal
- Volume or weight of waste removed
- Costs associated with waste removal, transport and treatment.

1.68. All waste removed from site must be accompanied by a Waste Transfer Note (or Waste Consignment Note for hazardous waste).

Construction Manager

1.69. The Construction Manager will be responsible for implementing measures and guidance from the SWMMP on-site. It is recommended that the Construction Manager provides advice on waste reduction and waste segregation within site inductions, highlighting the importance of not contaminating skips designated for recycling.

1.70. The Construction Manager should also carry out a daily inspection of the waste management areas, reporting any issues along with any corrective action taken. Where appropriate, the Construction Manager may choose to change the site set up with the aim to improve recycling rates.

Waste Management Measures

1.71. All contractors working on-site should be encouraged to investigate opportunities to

reduce waste generation.

Demolition

1.72. Although much of the area included in the Order Limits comprises undeveloped land, there are buildings and existing infrastructure, including services, agricultural holdings, roads, and drains which will need to be removed prior to construction. These are likely to consist of hard and inert materials, soils, rock and stones, wood (including vegetation), asphalt, brick, concrete, and miscellaneous metals.

1.73. HNRFI will generate material from demolition and the PC(s) will aim to reuse as much material as possible as part of the construction or be considered for use in other construction projects to minimise their classification as waste as far as practicable.

1.74. TSH and the PC(s) will maximise opportunities to re-use existing foundations, structures, pavements, floor slabs and services onsite. Where this is not appropriate, the PC(s) will consider crushing demolition materials for recycling as aggregates onsite. If onsite recycling is not feasible, the PC(s) will identify opportunities for recycling the demolition materials offsite in any other TSH projects or other suitable local projects, through a recycling contractor or on other external projects. The re-use and recycling of demolition waste is likely to require a registered waste exemption or an environmental permit, which the PC(s) will be responsible for obtaining and managing.

1.75. Best practice at the time, such as the Environment Agency Quality protocols: converting waste into non-waste products (Quality protocols) (Environment Agency, 2020d)[16] will be used to identify when a waste-derived material can be regarded as a non-waste product and no longer subject to waste controls. The quality protocols could potentially be applied to optimise the amount of demolition materials that can be re-used across the Project, and the requirement to comply with these protocols is set out in the CEMP.

1.76. There is potential that some of the existing structures could contain asbestos. The PC(s) will develop an Asbestos Management Plan to identify potential sources of asbestos and it will be managed on the Project. Any contaminated materials will need to be segregated separately from 'clean' demolition materials to avoid cross contamination before they are sent for appropriate and permitted treatment/recovery/disposal.

Excavation Phase

1.77. The approach to earthworks will enable materials excavated onsite to be re-used at areas of the HNRFI where materials are required as far as practicable. This will minimise the amount of material required from offsite. In addition, it may also be

[16] Environment Agency (2020d) Quality protocols: converting waste into non-waste products.

possible to identify other construction projects located close to HNRFI that can re-use the materials.

1.78. The approach to earthworks will, however, be influenced by the construction phasing and there may be limitations on how materials can be re-used between schemes. Early identification of, and communication with, other developments and processors will be undertaken by the PC(s) to identify further opportunities to recover excavated materials.

Materials Management Plan

1.79. It is recommended that a MMP is developed further by the PC(s) prior to the commencement of construction – an example template is provided in Appendix A. The PC(s) will include the proposals for the handling of waste material following the protocols. Not all material produced during the construction process will be classed as waste, but excess material will need to be classified by the PC(s) in accordance with Environment Agency Waste Management 3 guidelines (WM3) (Environmental Agency, 2021)[17] prior to its removal from site. The Project will use all the relevant tools to comply with waste legislation and guidance including the Demolition Protocol, Quality Protocol, CL:AIRE, Definition of Waste Code of Practice (DOW:COP), exemptions and / or permits.

Contaminated Materials

1.80. Contaminated materials will be segregated from 'clean' excavated materials to avoid cross-contamination before they are sent for appropriate and licensed treatment, recovery or disposal.

1.81. In addition, it is recommended that an outline MMP will be developed further by the PC(s) in accordance with best practice to demonstrate how excavated materials will be managed and re-used. Any waste arisings of made ground, soils and sub soil should be classified as per (WM3) guidelines for waste classification.

1.82. The PC(s) will develop a testing and classification regime for these materials to ensure the correct waste management or possibility of re-use. Not all material produced during the construction process will be classed as waste, but excess material will need to be classified in accordance with WM3 guidelines prior to its removal.

Materials Storage Areas

1.83. The location of material storage areas will be determined by the PC(s) following

[17] Environment Agency (2021) Waste Management 3 (WM3)

detailed design and detailed construction phase planning when storage requirements are finalised.

1.84. The locations and management of the material storage areas will comply with all measures set out in the CEMP, including avoiding known constraints highlighted for protection within the ES. This will ensure that any constraints upon location and positioning are complied with at all times.

1.85. To enable construction works to take place, material storage areas will be required at multiple locations to facilitate holding material in the short or long term for compounds, haul roads or permanent works. The areas are likely to be de-vegetated and topsoil removed. Where material is to be reused on site, material cut will be removed where required to larger material deposit locations where it will either be placed within landscape fill areas or directly within fill areas on the schemes.

1.86. It is essential that good practice is followed to ensure the material being stored remains in good condition, being adequately sealed and placed in the desired thicknesses to prevent deterioration of the materials such as topsoil. The location of material storage areas is dependent on materials suitability and any visual constraints for bunded areas in the Order Limits.

1.87. Materials will be moved in the most efficient way possible, taking note of access routes, traffic management restrictions and available storage. Where possible, material will be moved away from the main works areas using independent haul roads. For cut material, the maximum stockpile height of 5m will be implemented for most materials, provided that it does not present any slope failure concerns.

1.88. For topsoil storage a maximum stockpile height of 2m will be implemented if the topsoil material is going to be retained for future reuse on HNRFI. All stockpiling falls under the temporary works management and will be suitably designed. This will be required to be suitably managed and controlled by the PC(s).

Construction Phase

1.89. The depletion of finite mineral resources occurs through extraction of primary aggregates (e.g. sands and gravels). Structures, drainage and other associated products will be procured with consideration of the environmental impacts associated with their manufacture, which are set out in Environmental Product Declarations (EPDs), as well as other considerations such as structural design, carbon footprint, energy consumption, long-life performance, visual impacts, durability and cost.

1.90. The PC(s) will strive to minimise construction waste. This includes but is not limited to the following measures:

Framework Site Waste and Materials Management Plan

Good Practice	Description
Sustainable procurement	Materials selected will be durable to ensure long life and reduced need for replacement. Over-ordering of materials will be avoided and suppliers that minimise packaging will be used. Where feasible any packaging will be returned to the supplier for recycling. Construction material specifications will prioritise the procurement and use of recycled/secondary aggregates and other recycled materials e.g. wood for formwork.
Supply chain partners	All members of the supply chain will be made aware of the SWMMP for example this could be written in their contracts. The PC(s) is responsible for the delivery of the SWMMP and the Construction Manager will ensure that it is delivered. Workshops will be held throughout the construction period to help reinforce the SWMMP and ensure that all partners are kept up to date with developments. Targets will be established for the minimisation of waste and the recycling of materials. These targets will then be communicated to the workforce and performance against them will be measured.
Avoid wasteful working practices	Employees will be given appropriate training both as part of site induction and at intervals throughout the life of HNRFI such as Toolbox Talks.
Materials management	The law[18] says contractors must keep every part of a construction site in 'good order' and every place of work clean. The objective is to achieve what is usually called a good standard of 'housekeeping' across the site. Materials will be appropriately handled and stored throughout their lifecycle from delivery to inclusion, e.g. return surplus materials to storage. In addition, other construction materials (for example timber) will be carefully stored prior to use on the scheme in order to prevent waste created by damaged materials (e.g. by weather conditions). There will be designated areas for the storage of materials. Any potential contaminants will be managed in accordance with appropriate and current best practice measures.
Modern Methods of Construction	The introduction of new Modern Methods of Construction (MMC) will continue to be investigated during the detailed design phase of HNRFI.

[18] Health and Safety at Work Act (1974) – Section 3

1.91. The PC(s) will introduce good onsite practice to ensure waste is managed effectively. While reduction of waste will remain the highest priority, waste produced will be segregated. This will allow materials to be re-used or recycled and ultimately reduce the amount of waste that has to be finally disposed of.

1.92. The PC(s) will establish waste storage and recycling areas, for each element of the development, for the safe storage and processing of recovered materials to ensure that opportunities for re-use are maximised.

1.93. Only where no other waste management option is found to be feasible, up to a maximum of 10% of waste shall be sent to an appropriately permitted landfill site in accordance with UK legislation and local requirements.

1.94. A specific area will be designated and signposted to facilitate the separation of materials for potential recycling, salvage, re-use and return. Recycling and waste bins are to be kept clean and clearly marked in order to avoid contamination of materials. If skips are clearly identified the bulk of the workforce will deposit the correct materials into the correct skip. The PC(s)' management plans will identify how construction waste will be managed and mitigated onsite. The PC(s) will include the topic of waste segregation in the site induction and will also undertake regular Toolbox Talks to avoid cross contamination of waste streams. The PC(s) will also develop a programme of checks of these to ensure site staff are segregating waste effectively. Where contamination of a skip is identified, the item of waste in the incorrect bin will be removed and transferred to the correct container following the appropriate Health and Safety procedures.

1.95. The waste storage areas will be located on impermeable surfaces with appropriate drainage as well as hazardous waste storage areas to minimise cross contamination of other waste streams and avoid any contamination of surrounding ground. The PC(s) will identify the appropriate drainage which would include temporary interceptors or bunded areas. The separate storage area for hazardous waste shall include labelled bins for, but not limited to, aerosols, oils, paints, solvents, and asbestos and Waste Electrical and Electronic Equipment (WEEE). In addition the PC(s) will clearly identify control measures for preventing and managing spills in the waste storage areas. This will include the provision of spill kits in the waste storage areas.

Re-use of Materials

1.96. The PC(s) will maximise the re-use of any existing materials and construction elements wherever possible. The PC(s) will establish a waste storage and recycling area for the safe storage and processing of recovered materials to ensure that opportunities for re-use are maximised.

Recycling of Materials

1.97. While reduction of waste will remain the highest priority, waste produced will be

segregated for recycling and recovery. This will allow materials to be recycled and ultimately reduce the amount of waste that has to be finally disposed of.

Landfill

1.98. Where no other waste management option is found to be feasible, wastes will be sent to an appropriately permitted landfill site.

Hazardous Waste

1.99. Hazardous waste will be managed using the appropriate and best practice guidance for the recovery and disposal of hazardous waste under regulation 15(1) of the Waste (England and Wales) Regulations 2011. The Environment Agency has set out a hazardous waste strategy which set out a methodology for the sound management of hazardous wastes[19].

1.100. Hazardous waste will be correctly labelled, will not be mixed with nonhazardous waste, securely contained and disposed of by a registered waste carrier for hazardous waste. The Duty of Care (DoC) (explained within paragraph 1.27 and 1.28) applies to hazardous wastes.

1.101. The PC(s) will retain all consignment notes in accordance with waste collection and transfer by an approved supplier once hazardous materials are sent for appropriate and permitted treatment/recovery/disposal.

Monitoring

1.102. Monitoring and measurement of waste will be undertaken on a regular basis by the PC(s), with regular interpretations to identify trends and rectify wasteful practices. The results of monitoring will be included in regular site meetings.

1.103. Additional monitoring, if necessary, will be identified by the respective PC(s) and Construction Manager.

[19] https://www.gov.uk/dispose-hazardous-waste/print

REVIEW

1.104. It is recommended that the SWMMP is reviewed every 6 months to reflect the progress of the development. If there has been any significant change in the project, the SWMMP should be reviewed earlier.

1.105. The review should check that reuse and recycling targets are being achieved and the quantity of waste being generated. The waste management measures should also be checked, and any additional measures required should be added.

Reviews of the SWMMP can be logged in the below table.

Date	Summary of any actions/changes to be made

Post Project Completion

1.106. Once construction works are complete, a Waste Management Closure Report should be prepared and submitted by the PC(s) to TSH within 3 months of completion.

1.107. The waste generated in the life-cycle of a building accounts not only from the construction itself but more so on the phases of design, operation and demolition. To reduce the waste generated in construction and demolition by recycling, reusing and repurposing waste, planning should be implemented to promote a circular economy. This will need to include the materials and waste monitoring records providing part of the evidence that net zero carbon for the construction phase has been achieved by the development, in accordance with the UK Green Building Council Framework as committed to by TSH.

1.108. The report should include:

- Lessons learnt
- If there have been any deviations from the original strategy and the reasons why
- A comparison of actual waste quantities against what was proposed
- Future recommendations
- Analysis of any cost savings

Appendix A: Example Materials Management Plan

Example Materials Management Plan (MMP) Form - October 2022

This form should be completed once the lines of evidence have been marshalled in relation to suitability for use, certainty of use and quantity required.

The answers to the questions posed within this form, together with the supporting information will constitute the MMP and must be provided to the Qualified Person.

A Qualified Person may comment on draft versions of this MMP, but will not complete the Declaration until all the relevant documents, demonstrating lines of evidence have been provided for each site.

The person / organisation who will pay the Declaration fee should confirm that they have read and understand the Terms and Conditions relating to the payment of the Declaration fee to CL:AIRE. These can be found on the CL:AIRE website.

The person / organisation agreeing to pay the Declaration Fee - Name, organisation and contact details inc. email address -	

☐ **I confirm I have read and understood the Terms & Conditions.**

Each question must be answered. If the question is not applicable please state this and provide a brief explanation.

1. Specify the scenario to which this MMP relates, as described in the Definition of Waste: Development Industry Code of Practice (DoW CoP) (1, 2, 3 or 4):

☐ 1. Reuse on the Site of Origin

☐ 2. Direct Transfer of clean naturally occurring soil / mineral materials

☐ 3. Cluster Project

☐ 4. Combination of any of the above

In the case of a combination of reuse scenarios, please describe it below (e.g. (i) Reuse on Site of Origin and Direct Transfer of clean naturally occurring unpolluted soils, (ii) Reuse on the Site of Origin with Direct Transfer of clean naturally occurring soil to x number of development sites etc:

(NB: A Declaration is required for reuse on the Site of Origin and for any 2 site arrangement i.e. there is no facility for a combination Declaration)

2. Organisation and name of person preparing this MMP	(Full address and contact details)

Document Control

Date issued	
Revision date	

Summary of revision 1	
Summary of revision 2	

Insert additional lines to the table above for any subsequent revisions.

Note - revisions to the MMP do not trigger an additional Declaration by a Qualified Person, unless an additional site is added to the project.

Revisions to the MMP must be recorded and summarised in the Document Control box above.

Site Details

3. Site / Project name(s)	
Reuse / receiving site name	
Donor site name (if Direct Transfer)	

Landowners

4a. Name of Landowner(s) (full address and contact details) – where excavated materials are to be reused.	
4b. Name of Landowner(s) (full address and contact details) – where excavated materials are arising from.	

Summary and objectives

5a. Provide a brief description of the planned project and how excavated materials are to be reused.	

General Plans and Schematics

6. **Attach** a location plan for the site(s) and a plan of the site(s) which identifies where different materials are to be excavated from, stockpile locations (if applicable), where materials are to be treated (if applicable) and where materials are to be reused.	Plan Document Reference(s):

7. **Attach** a schematic of proposed materials movement. Where there is only one source area and one placement area briefly describe it. For all other projects a schematic is required.	Description & Schematic Document Reference:

Parties Involved and Consultation – if more than one party please provide additional details for them and identify the location that they will be working e.g. where a site is zoned

8a. Main earthworks contractor(s) (full address and contact details) – Where excavated materials are to be reused.	
8b. Main earthworks contractor(s) (full address and contact details) - Where excavated materials are arising from.	

9. Treatment contractor(s) (full address and contact details) – for treatment on site of origin, or at a Hub site within a fixed STF / Cluster Project.	

10. Where wastes and materials are to be transported between sites, provide details of the transport contractor(s) (full address, contact details and waste carriers registration details (if applicable)).	

11. Provide Local Authority contact details (full address and named contacts) where excavated materials are to be reused.	

12a. For the site where materials are to be reused and for Hub Site locations provide Environment Agency contact details (full address and named contacts):	
For all Cluster Projects: 12b. Attach any relevant documentation from the EA relating to the excavation and reuse of the materials to demonstrate no objection to the proposals (see 3.37 of DoW CoP) If the EA has not been consulted please explain why (see paragraph 3.39 of the DoW CoP).	EA references:

Lines of Evidence

There is no one single factor that can be used to decide that a substance or object is waste, or when it is, at what point it ceases to be waste; as complete a picture as possible has to be created.

The following sections require completion to ensure the correct decision is made.

If a requested item is not relevant it is important to clearly state why this is so (e.g. no planning permission required because permitted development status exists).

Suitable for use criteria

13. Please describe or provide copies of the required specification(s) for the materials to be reused on each site.	Document Reference(s):

Where contamination is suspected or known to be present 14a. Please provide copies of or relevant extracts from the risk assessment(s) that has been used to determine the specification for use on the site. **This must relate to the place where materials are to be used.** This must be in terms of (i) human health (ii) controlled waters and (iii) any other relevant receptors. If a risk assessment is not relevant for a particular receptor given the site setting please explain why below:	Document Reference(s):
14b. Please attach any relevant documentation from the LA relating to the excavation and reuse of the materials to demonstrate no objection (see 3.37 of the CoP)	LA Document references:

14c. Please attach any relevant documentation from the EA relating to the excavation and reuse of the materials to demonstrate no objection (see 3.37 and Table 2 of the CoP)	EA Document references:
14d. Please attach any relevant documentation from any other regulators (if relevant) relating to the excavation and reuse of the materials to demonstrate no objection (see 3.37 of the CoP)	Document Reference(s):

Where contamination is not suspected 15a. Please attach copies or relevant extracts from the Desk Top Study that demonstrates that there is no suspicion of contamination.	Document Reference(s)
15b. Please attach copies of or relevant extracts from the site investigation/testing reports that adequately characterise the clean materials to be used (if appropriate).	Document Reference(s)
15c. Please attach copies of any other relevant information (if available) confirming that land contamination is not an issue.	Document Reference(s)

NB: It is your responsibility to assess the nature of the material to be used and that it fits within the limitations of the scenario under which it is to be used

Certainty of use

Various lines of evidence are required to demonstrate that the materials are certain to be used. This includes:

- The production of this MMP
- An appropriate planning permission (or conditions that link with the reuse of the said materials)
- An agreed Remediation Strategy(ies)
- An agreed Design Statement(s)
- Details of the contractual arrangements

Please identify in the following sections what lines of evidence relate to the site(s) **where the materials are to be used**.

16a. Planning Permission(s) relating to the site where materials are to be reused Please provide a copy of the relevant planning permission	Document Reference:
16b. Explain how the reuse of the excavated materials fits within the planning permission(s) for each site.	
16c. If planning permission is not required for any one site please explain why below e.g. permitted development, clean-up of a chemical spill, surrender of an Environmental Permit, re-contouring within the existing permission.	

Where contamination is suspected or is known to be present	Document Reference(s):

17. Please provide a copy of any Remediation Strategy(ies) that have been agreed with relevant regulators.	

Where contamination is not suspected 18. Please provide a copy of any Design Statement(s) that have been agreed (e.g. with the planning authority or in the case of permitted developments the client).	Document Reference(s):

Quantity of Use

19. Please provide a breakdown of the excavated materials for each site and how much will be placed at each site or sub area of each site. Where this is not specific to a single readily identifiable source refer to an annotated plan, schematic or attach a tabulated summary.	Document Reference(s):

20a. How has consolidation/compaction being considered in the above mass balance calculations?	
20b. How has loss due to treatment being considered in the above mass balance calculations (if applicable)?	

20c. How has the addition of treatment materials being considered in the above mass balance calculations (if applicable)? Note - An exact figure is not required but one that is reasonable in the circumstances and can be justified if challenged.	

Contingency arrangements

Explain what is to happen in the following situations and **identify the appropriate clauses** in the contract(s) (Such clauses must be provided to the Qualified Person, preferably as a summary document): or

21a. What is to happen to, and who is to pay for out of specification materials?	Reference:
21b. What is to happen to, and who is to pay for any excess materials?	Reference:
21c. What happens if the project programme slips in relation to excavated materials or materials under -going treatment?	Reference:
21d. Other identified risk scenarios for the project (relating to excavated materials)?	Reference:

The Tracking System

Where contamination is suspected or known to be present, state the procedures put in place to:

22a. For all sites please describe the tracking system to be employed to monitor materials movements.	

Where contamination is suspected or known to be present, state the procedures put in place to: 22b. Prevent contaminants not suitable for the treatment process being accepted	
Where contamination is suspected or known to be present, state the procedures put in place to: 22c. Prevent cross contamination of materials not in need of treatment, wastes awaiting treatment and treated materials	
Where contamination is suspected or known to be present, state the procedures put in place to: 22d. Demonstrate that materials that do not require treatment and successfully treated materials reach their specific destination	
Where contamination is suspected or known to be present, state the procedures put in place to: 22e. Ensure that waste for off-site disposal or treatment is properly characterised and goes to the correct facility	

23. Please attach a copy of the tracking forms / control sheets that are to be used to monitor materials movements.	Document reference(s)

To include transfer of loads on site into stockpiles prior to treatment (if applicable), stockpiled after treatment (if applicable), stockpiled awaiting use (as appropriate) and final placement.	

For Hub Sites within Cluster Projects & where materials need treatment before reuse 24. Please attach a copy of the Environmental Permit covering the treatment process. Alternatively if the treatment is covered by a Mobile Plant Permit and associated Deployment Form, attach a copy of the EA agreement to the Deployment Form.	Permit reference / EA letter reference:

Records

25. Where, and in what form, are records to be kept? Note – records e.g. transfer notes, delivery tickets, Desk Top Study, Site Investigation, Risk Assessment(s), Verification Report(s) need to be kept for at least 2 years after the completion of the works and production of the Verification Report	

Verification Plan

26. Provide or explain the Verification Plan which sets out how you will record the placement of materials and prove that excavated materials have been reused in the correct location and in the correct quantities within the development works (see 3.4 of the DoW CoP).	Document Reference