

## Appendix A17.1: Key Materials and Waste Legislation

### 1 Introduction

- 1.1 Appendix A18.1 (Planning Policy Context for Environmental Assessment) describes the planning policies and guidance from the national to the local level that are relevant to the Materials Assessment. An assessment of the compliance of the proposed Scheme against all development plan policies relevant to this environmental topic is reported in Appendix A18.2 (Assessment of Development Plan Policy Compliance) and a summary overview is provided in Section 18.4 (Assessment of Compliance) in Chapter 18 (Policies and Plans) of the Environmental Statement (ES).
- 1.2 The Materials Assessment contained within Chapter 17 has been largely based on the guidance contained within unpublished draft Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 6 HD212/11 Materials Chapter (The Highways Agency, Scottish Government, Welsh Assembly Government and The Department for Regional Development Northern Ireland 2012), hereafter referred to as draft HD212/11. This appendix expands on this guidance, and the content of local devolved Scottish policy relevant to materials and waste management.
- 1.3 As set out in draft HD212/11 the following, are the key strategies in regard to materials:
- Securing the Future - The UK Government Sustainable Development Strategy 2005.
  - EU Sustainable Development Strategy – Renewed Strategy 2006.
- 1.4 Securing the Future – the UK Government Sustainable Development Strategy 2005 presents the vision of a *'one planet economy'* and encourages businesses to consider the implications that sustainable consumption and production will have on their business models and product / service ranges. It further asserts that consumers today demand higher environmental and ethical standards from businesses and that those, *'that anticipate this trend and develop 'material light' goods and services will be best placed to benefit from these opportunities and to enhance their competitiveness'*.
- 1.5 The EU Sustainable Development Strategy sets out a single, coherent strategy on how the EU will more effectively live up to its long-standing commitment to meet the challenges of sustainable development. It recognises the need to gradually change our current unsustainable consumption and production patterns and move towards a better integrated approach to policy-making.
- 1.6 The above strategies identify the following priorities: sustainable consumption and production; climate change; and natural resource protection. The principal of achieving 'more with less' has been investigated as part of this assessment and has directly shaped the proposed mitigation.
- 1.7 Scottish Environment Protection Agency (SEPA) set out in Appendix 4 of 'Understanding the Definition of Waste' (2006), guidelines to determine when waste may cease to be waste. This is achieved through evaluating the full recovery of waste. In 2013, approximately 6.2 million tonnes of waste was generated by construction and demolition activities in Scotland compared to 2.4 million tonnes of waste generated by households. Scotland's 'Zero Waste Plan 2010' sets out the Scottish Government's vision for a zero waste society. This describes a Scotland where all waste is viewed as a resource; waste is minimised; valuable resources are not disposed of to landfill; and a majority of waste is sorted, leaving a minimal volume of waste requiring treatment. To achieve this, the Plan sets out measures, including:
- development of a Waste Prevention Programme for all wastes, ensuring the prevention and re-use of waste is central to all of the Scottish Government's actions and policies; and
  - two new targets applying to all waste by 2025: 1) 70% recycled; and 2) a maximum of 5% sent to landfill.
- 1.8 The Waste Prevention Programme was published in October 2013 and is called 'Safeguarding Scotland's Resources – Blueprint for a More Resource Efficient and Circular Economy'. The Plan aims to cut 7% of all waste in Scotland by 2017 and 15% by 2025.

- 1.9 'Low Carbon Scotland: Meeting our Emissions Reduction Targets 2013 – 2027' reiterates the targets provided in the Waste Prevention Programme, however it also states the aim of recycling all waste with no landfill by 2050.

#### **Climate Change (Scotland) Act (2009)**

- 1.10 The Act sets out Scotland's strategy for the reduction of greenhouse gas (GHG) (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride) and a transition to a low carbon economy. Part 1 of the Act, creates the statutory framework for greenhouse gas emissions reduction in Scotland by setting an interim 42% reduction target by 2020 relative to 1990 emissions levels, with the power for this to be varied based on expert advice, and an 80% reduction target for 2050 (also relative to 1990 emissions).
- 1.11 Part 4 of the Act places duties on public bodies (including Transport Scotland) in relation to climate change. These duties require that a public body must, in exercising its functions, act in a way that is best calculated to contribute to the delivery of emissions reduction targets (termed climate change 'mitigation'), assists in the delivery of statutory climate change adaptation programmes and is considered to be the most sustainable. In the case of Transport Scotland, this includes delivering infrastructure projects sustainably with the aim to achieve.

*'Almost complete decarbonisation of road transport by 2050 with significant progress by 2030 through wholesale adoption of electric cars and vans, and significant decarbonisation of rail by 2050.'*

#### **Scotland's Zero Waste Plan (2010)**

- 1.12 Scotland's Zero Waste Plan outlines a strategy for a zero waste society which in turn will help to achieve the targets set out in the Climate Change (Scotland) Act (2009) of reducing Scotland's greenhouse gas emissions by 42% by 2020 and 80% by 2050.
- 1.13 The Plan's objectives include:
- *'eliminating the unnecessary use of raw materials, leading to further reductions in GHG emissions in areas such as mining of raw materials, manufacturing, and transport. Financial savings are also made through recycling and recovering value from materials;*
  - *producing energy savings from the manufacture of products from recycled materials in preference to raw materials; and*
  - *construction and Demolition waste are highlighted as an area in which future policy can be developed to support higher targets and recovery levels in this area. This is proposed to be achieved through the collection of more robust data on these waste types, their composition and their waste management methods'.*

- 1.14 Furthermore, in relation to the use of materials, the Plan's vision is to;

*'Reduce Scotland's impact on the environment, both locally and globally, by minimising the unnecessary use of primary materials, reusing resources where possible, and recycling and recovering value from materials when they reach the end of their life'.*

#### **Transport Scotland Corporate Plan (2012 – 2015)**

- 1.15 Published in 2012, Transport Scotland's Corporate Plan sets out guidance for delivering increased sustainable economic growth. The Corporate Plan notional end date was 2015 and the Transport Scotland Annual Business Plan (2015-2016) sets out at page 3 that the Corporate Plan has been: *'extended for one additional year'*. Ensuring the protection and enhancement of Scotland's environment is a key consideration during the construction and maintenance of transport infrastructure. As such, the following key commitments are relevant to Materials and Waste:
- *'fully integrate our Carbon Management System (CMS) to influence and support low-carbon decision-making across the design and delivery of transport infrastructure projects and network maintenance;*

- *utilise our CMS, in tandem with our Carbon Management Plan, to facilitate annual sustainability reporting;*
- *embed resource efficiency into our practices and adopt the next generation of Waste and Resources Action Programme (WRAP) Construction Commitments; and*
- *support sustainable design, construction, maintenance and operations through the adoption of infrastructure assessment schemes'.*

### **Local Council Waste Management Strategies**

- 1.16 The Highland Council and Moray Council (note that the proposed Scheme is not within the jurisdiction of Moray Council) work closely in the area of waste management and the two councils produced a joint Waste Strategy Report in 2009 to identify services and treatment facilities that would be required to achieve their respective waste targets. The chosen option comprised the development of three efficient recovery of energy from waste (EfW) plants in Highland, one in Moray and in-vessel composting (IVC). After the adoption of Scotland's Zero Waste Plan in 2010 and the introduction of The Waste (Scotland) Regulations 2012, both Councils reviewed their strategies to ensure that their services and treatment facilities were in line with the revised legislation.

#### The Highland Council

- 1.17 The Highland Council issued an 'Update on Waste Strategy' in 2014 which presented a business case in support of the approval previously given in 2009 for three appropriately sized and sited EfW facilities in Skye, Caithness and Inverness. It is recommended that development of these three EfW plants best supports the goal of '*locally based solutions which can be delivered on an incremental basis*'.

#### Moray Council

- 1.18 Whilst the proposed Scheme is not within the jurisdiction of Moray Council, it is considered that its proximity requires a review of its waste management strategy. Moray Council committed to the following targets for municipal waste based on Scotland's Zero Waste Plan in their 2015 LDP:
- *'increasing the proportion recycled or composted to 40% by 2010, 50% by 2020 and 70% by 2025;*
  - *a 5% limit on landfill of municipal waste by 2025; and*
  - *to stop the growth of municipal waste by 2010'.*
- 1.19 Moray Council acknowledge in their LDP that in order to achieve these targets there will need to be both a reduction in the amount of waste produced and a significant increase in waste management infrastructure. The Council reviewed their waste management strategy in 2015, and proposed the development of an integrated 'one stop shop' waste facility at Moycroft. This facility would consolidate waste operations within the council area, and make both operational and strategic sense for the development of future waste management facilities.
- 1.20 The following table outlines the key points of the other legislation, plans and guidance relevant to materials and waste, and details how they have been addressed in the Materials Assessment for the proposed Scheme:

**Table 1: Materials and Waste Legislation, Plans and Guidance**

Document	Key Points and how they are Addressed by the Materials Assessment
The Weeds Act 1959	<p>The Weeds Act was enacted in 1959 to afford the Minister of Agriculture, Fisheries and Food the power to prevent the spread of injurious weeds, including (but not exclusive to) sayspear thistle, creeping or field thistle, curled dock, broad-leaved dock and ragwort. In the case of any public road it applies to <i>'the authority by whom the road is being maintained'</i>.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>The A96 will be maintained by BEAR Scotland who will be responsible for compliance with the Act.</p> <p>A Construction Environmental Management Plan (CEMP) and Site Waste Management Plan (SWMP) will be implemented for the proposed Scheme which will outline the means by which the appointed contractor will commit to comply with all relevant legislation.</p>
Wildlife and Countryside Act 1981	<p>The Wildlife and Countryside Act 1981 repeals and re-enacts with amendments to the Protection of Birds Acts 1954 to 1967 and the Conservation of Wild Creatures and Wild Plants Act 1975. The key aims of the Act are: to prohibit certain methods of killing or taking wild animals; to amend the law relating to protection of certain mammals; to restrict the introduction of certain animals and plants; to amend the Endangered Species (Import and Export) Act 1976; to amend the law relating to nature conservation, the countryside and National Parks and to make provision with respect to the Countryside Commission; to amend the law relating to public rights of way; and, for connected purposes.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>The appointed contractor will take steps to ensure that no flora, fauna or designations covered by the Act are destroyed or disturbed during the transport of materials to and from site, during construction and during any demolition and waste disposal activities. A CEMP will be implemented for the proposed Scheme which will outline the means by which the appointed contractor commits to comply with all relevant legislation.</p>
Environmental Protection Act 1990	<p>The Environmental Protection Act 1990 makes provision for the improved control of pollution arising from certain industrial and other processes. It comprises nine <i>'parts'</i>, a number of which are particularly relevant to the Materials Assessment of the proposed Scheme: Part I relates to integrated pollution control and air pollution control by Local Authorities; Part II to waste on land; Part III to statutory nuisances and clean air; Part IV to litter etc.; and Part VIII Miscellaneous - Other controls on substances, articles or waste.</p> <p>Chapter 17 (Materials) <b>Mitigation Items M1</b> and <b>M2</b> are applicable.</p> <p>A Construction Environmental Management Plan (CEMP) and Site Waste Management Plan (SWMP) will be implemented for the proposed Scheme which will outline the means by which the appointed contractor commits to comply with all relevant legislation.</p>
Environmental Protection (Duty of Care) Regulations 1991	<p>The Environmental Protection (Duty of Care) Regulations 1991 imposes a duty of care on any person who imports, produces, carries, keeps, treats or disposes of controlled waste to ensure that there is no unauthorised or harmful deposit, treatment or disposal of the waste; to prevent the escape of the waste from their control; to ensure that the transfer is only to an authorised person or for authorised transport purposes; and that a written description of the waste is also transferred.</p> <p>Any person who is subject to this duty of care must make and retain documents and be able to furnish copies of them. The transfer note must be signed by both the transferor and the transferee at the same time as the written description of the waste is transferred; it must identify the waste in question and state its quantity; how the waste is stored; the time and place of transfer; the name and address of the transferor and the transferee; whether the transferor is the producer or importer of the waste; which (if any) authorised transport purpose applies; and certain additional information.</p> <p>The transfer note or copies of them must be held for two years from the transfer, and copies of these documents must be furnished to a waste regulation authority if required. Breach of the duty of care or of these Regulations is a criminal offence.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable. In <b>Mitigation Item M1</b>, the appointed contractor commits to comply with all relevant waste management and pollution prevention legislation. All wastes removed from site will be sent to a licensed recycling or disposal facility with completed waste transfer notes in line with regulatory requirements.</p> <p>The SWMP and/or CEMP will specify those responsible for recording any importation, production, transport, retention, treatment or disposal of controlled waste.</p>
Environment Act 1995	<p>The Environment Act 1995 provides for the establishment of the Environment Agency (England and Wales) and SEPA, and provides for the transfer of functions, property, rights and liabilities to those bodies with respect to: contaminated land and abandoned mines; National Parks; fisheries; the control of pollution, and the conservation and / or enhancement of natural resources and the environment.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable. In <b>Mitigation Item M1</b>, the appointed contractor will commit to comply with all relevant legislation, including SEPA guidance and appropriate Environment Agency Pollution Prevention Guidelines (PPGs). If necessary, the appointed contractor would consult SEPA for advice.</p>
Special Waste Regulations 1996	<p>The Special Waste Regulations 1996 provide a new definition of <i>'special waste'</i>, and make provision for handling such waste. This is to implement the definition of <i>'hazardous waste'</i> in Council Directive 91/689/EEC, and extend it to cover certain other waste considered by the</p>

Document	Key Points and how they are Addressed by the Materials Assessment
	<p>United Kingdom to display particular hazardous properties. Household waste is excluded from the definition.</p> <p>Regulation 4 requires that SEPA (in relation to Scotland) give unique codes to consignments of waste or to carrier's rounds, that are to be shown, together with other required information, on consignment notes which are to accompany the waste when transported. Records must be kept by those consigning and carrying hazardous waste for three years, and also for sites where hazardous waste is deposited.</p> <p>Regulation 17 prohibits the mixing of special waste with other waste or other categories of special waste except where this is authorised under, or exempted from the effect of, certain other waste management legislation. Failure to comply with the Regulations a criminal offence except for an Agency member, officer or employee.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>If hazardous wastes cannot remain on-site, they will be disposed of at the Avondale Hazardous Waste Landfill in Falkirk (See Figure 17.1) with completed hazardous waste transfer notes.</p>
<p>EU Landfill Directive 1999 (1999/31/EC)</p>	<p>The objective of the Directive is to prevent or reduce as far as possible negative effects from the landfilling of waste on the environment, in particular on surface water, groundwater, soil, air, and on human health. It applies to all landfills, defined as 'waste disposal sites for the deposit of waste onto or into land' which are divided into three classes:</p> <p>landfills for hazardous waste;  landfills for non-hazardous waste; and  landfills for inert waste.</p> <p>A standard procedure for the acceptance of waste in a landfill is laid down so as to avoid any risks and sets up a system of operating permits for landfill sites. All Member States must ensure that existing landfill sites may not continue to operate unless they comply with the provisions of the Directive.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>According to the waste management hierarchy, landfilling is the least preferable option and should be limited to the necessary minimum. The principles of the waste hierarchy have been applied to this proposed Scheme to minimise waste generation and maximise re-use of materials on-site, where possible. Where re-use is not possible within the proposed Scheme, and waste needs to be landfilled, it will only be sent to landfills which comply with the requirements of Directive 1999/31/EC on the landfill of waste.</p>
<p>Environmental Protection (Disposal of Polychlorinated Biphenyls and other Dangerous Substances) (Scotland) Regulations 2000</p>	<p>These Regulations are additional to the existing relevant requirements of the waste management licensing regime under the Environmental Protection Act 1990, and are made specifically for the decontamination or disposal of Polychlorinated biphenyls (PCBs) and equipment containing them. Regulation 3 prohibits the holding in Scotland of certain equipment contaminated by PCBs ('contaminated equipment') by anyone other than a person registered with SEPA under these Regulations. This prohibition applies after 31<sup>st</sup> July 2000.</p> <p>Chapter 17 (Materials) <b>Mitigation Items M1</b> and <b>M2</b> are applicable.</p> <p>In <b>Mitigation Item M1</b>, the appointed contractor will commit to comply with all relevant waste management and pollution prevention legislation, and any / all affected equipment / wastes will be managed as outlined in the CEMP and SWMP.</p>
<p>Landfill (Scotland) Regulations 2003</p>	<p>The Landfill (Scotland) Regulations 2003 set out a pollution control regime for landfills for the purpose of implementing Council Directive 99/31/EC (as above) on the landfill of waste in Scotland.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>The principles of the waste hierarchy have been applied to this proposed Scheme to minimise waste generation and maximise re-use of materials on-site, where possible. Where waste needs to be landfilled, it will only be sent to landfills which comply with these Regulations.</p>
<p>Special Waste Amendment (Scotland) Regulations 2004</p>	<p>The Special Waste Amendment (Scotland) Regulations 2004 amend the Special Waste Regulations 1996 ('the principal Regulations') to require producers of special waste to keep a register which details the documents required to be kept with regard to hazardous waste.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>If hazardous wastes cannot remain on-site, they will be disposed of at the Avondale Hazardous Waste Landfill in Falkirk (See Figure 17.1) with completed hazardous waste transfer notes.</p>
<p>Securing the Future – the UK Government Sustainable Development Strategy 2005</p>	<p>Securing the Future – the UK Government Sustainable Development Strategy 2005 provides an update to the 1999 Strategy, taking into account new policies and developments since its publication, and highlighting the renewed international push for sustainable development from the World Summit on Sustainable Development in Johannesburg in 2002.</p> <p>The strategy presents the vision of a 'one planet economy' and encourages businesses to consider the implications that sustainable consumption and production will have on their business models and product / service ranges. 'Sustainable consumption and production is about achieving more with less. This means not only looking at how goods and services are produced, but also the impacts of products and materials across their whole lifecycle and building on people's awareness of social and environmental concerns. This includes reducing the inefficient use of resources which are a drag on the economy, so helping boost business competitiveness and to break the link between economic growth and environmental degradation'.</p> <p>It further asserts that consumers today demand higher environmental and ethical standards from businesses and that those, 'that anticipate this trend and develop 'material light' goods and services will be best placed to benefit from these opportunities and to enhance their</p>



Document	Key Points and how they are Addressed by the Materials Assessment
	<p><i>competitiveness</i>’.</p> <p>Chapter 17 (Materials) <b>Mitigation Items M1</b> and <b>M2</b> are applicable.</p> <p>The importance of careful management of materials to minimise their use, promote re-use, and reduce waste has been considered from the start in relation to this proposed Scheme. A ‘Detailed Assessment’ of the materials and waste aspects of the proposed Scheme have been identified and quantified in line with the DMRB ‘Materials’ guidance. The whole life carbon emissions associated with material use, transport of materials and waste, site plant energy consumption and energy consumption during operation as well as emissions associated with structural maintenance have also been calculated.</p> <p>There is significant synergy between minimising the use of materials and the generation of waste, and both legislation and voluntary best practice mechanisms have been developed and implemented to mitigate adverse environmental impacts associated with materials and waste.</p>
<p>EU Sustainable Development Strategy (SDS), Renewed Strategy 2006</p>	<p>The overall aim of the EU Sustainable Development Strategy (SDS) is: ‘to identify and develop actions to enable the EU to achieve a continuous long-term improvement of quality of life through the creation of sustainable communities able to manage and use resources efficiently, able to tap the ecological and social innovation potential of the economy and in the end able to ensure prosperity, environmental protection and social cohesion’.</p> <p>The renewed 2006 EU SDS reviewed the earlier SDS commitments and set out a single, coherent strategy on how the EU will more effectively live up to its long-standing commitment to meet the challenges of sustainable development. It recognised the need to gradually change our current unsustainable consumption and production patterns and move towards a better integrated approach to policy-making. It reaffirmed the need for global solidarity and recognised the importance of strengthening our work with partners outside the EU, including those rapidly developing countries which will have a significant impact on global sustainable development.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>Sustainability has been incorporated into the design of the proposed Scheme since inception, and the CEMP will be used to inform the completion of a sustainability assessment such as the Civil Engineering Environment and Quality Award Scheme (CEEQUAL) examination. CEEQUAL is an evidence-based sustainability assessment rating tool and awards scheme for civil engineering, infrastructure, landscaping and public realm projects that aims to deliver improved project specification, design and construction of civil engineering works.</p>
<p>Strategy for Sustainable Construction DEFRA 2008</p>	<p>The Strategy for Sustainable Construction DEFRA 2008 was launched in 2008 and aims to bring some coherence to the many initiatives aimed at delivering sustainable construction. The Strategy identifies a number of topics crucial to delivering a sustainable built environment, which include both Waste and Materials, and objectives, targets and activities are set out for each.</p> <p>For Waste the over-arching target is: ‘By 2012, a 50% reduction of construction, demolition and excavation (CD&amp;E) waste to landfill compared to 2008’.</p> <p>For Materials the over-arching target is: ‘That the materials used in construction have the least environmental and social impact as is feasible both socially and economically’.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>The minimisation of materials use and waste generation has been considered from inception in relation to the proposed Scheme. A ‘Detailed Assessment’ of the materials and waste aspects of the proposed Scheme have been identified and quantified in line with the DMRB ‘Materials’ guidance. The whole life carbon emissions associated with material use, transport of materials and waste, site plant energy consumption and energy consumption during operation as well as emissions associated with structural maintenance have also been calculated. Both legislation and voluntary best practice mechanisms have been developed and implemented to mitigate adverse environmental impacts associated with materials and waste.</p>
<p>EU Waste Framework Directive 2008 (2008/98/EC), as amended.</p>	<p>The EU Waste Framework Directive (WFD) 2008 (2008/98/EC), as amended defines waste as ‘<i>any substance, or object, which the holder discards or intends or is required to discharge</i>’.</p> <p>Some types of waste are harmful to human health, or to the environment, either immediately or over an extended period of time. These are called hazardous wastes, defined in the WFD as: ‘<i>waste which displays one or more of the 15 hazardous properties listed in Annex III of the revised Waste Directive</i>’.</p> <p>Waste management is structured around a ‘<i>waste hierarchy</i>’ which defines the order of preference of the various waste management options: prevention, preparing for re-use, recycling, recovery and disposal.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>The principles of the waste hierarchy have been applied to minimise waste generation and maximise re-use of materials on-site, where possible. Where re-use is not possible within the proposed Scheme, alternative options would be sought off-site.</p>
<p>Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (DEFRA, 2009)</p>	<p>The Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (DEFRA 2009) has been developed to assist anyone involved in the construction sector to better protect the soil resources with which they work.</p> <p>Soil management should be considered at every stage of the project: pre-construction planning (have a soil resource survey carried out prior to any earthworks operations, incorporate the results into the site working strategy e.g. SWMP, ensure that waste regulations are followed as necessary, consider the use of sustainable drainage systems on site for long term protection of soils.); during construction (prepare a Soil Resource Plan and when stripping, stockpiling or placing soil, do so in the driest condition possible, use tracked equipment where possible to</p>

Document	Key Points and how they are Addressed by the Materials Assessment
	<p>reduce compaction, confine traffic movement to designated routes, keep soil storage periods as short as possible, clearly define stockpiles of different soil materials.); and landscape, habitat or garden creation (safeguard and utilise on-site soil resources where possible and, if importing soils, use a reputable supplier of soil from a known source).</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>The proposed Scheme design has sought to achieve a 'cut and fill balance' such that the amount of useable cut material produced from construction is matched by the amount of material required to build embankments and landscaping, but additional materials will also need to be imported and excess, unusable materials to be exported. These volumes have been assessed and considered in the Materials Assessment for the proposed Scheme.</p> <p>The SWMP would set out how all construction phase materials would be managed, including soils, and it may include specific soils management plans developed under this code of practice.</p>
<p>Land Remediation and Waste Management Guidelines, SEPA, 2009</p>	<p>The Land Remediation and Waste Management Guidelines (SEPA 2009) sets out how SEPA will regulate the treatment and / or use of contaminated materials only at the site of excavation. SEPA's key concern is to ensure that there is no pollution of the environment or harm to human health. Subject to the criteria set out in the guidelines, SEPA will not regulate soil that will not require treatment and is able to be used at the site of excavation as part of the development or land remediation project. If these criteria cannot be met, they will regulate the activities.</p> <p>Excavated contaminated soil requiring treatment before it can be used will be regulated under waste legislation. Treatment of waste soil and groundwater must be carried out within the terms of a waste management licence (either a mobile plant licence or site licence). Licensed activities must be accompanied by a site specific working plan agreed in advance with SEPA. A mobile plant licence can be issued to cover use of treated waste soils at the site of excavation, and waste soil treated off-site to be used at the source site (i.e. site of excavation).</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>In <b>Mitigation Item M1</b>, the appointed contractor will commit to comply with all relevant legislation, including SEPA guidance and appropriate Environment Agency Pollution Prevention Guidelines (PPGs). If necessary, the appointed contractor will consult SEPA for advice.</p> <p>The SWMP would set out how all construction phase materials would be managed, including soils, and it may include specific soils management plans developed under these guidelines.</p>
<p>Climate Change (Scotland) Act (2009)</p>	<p>The Climate Change (Scotland) Act (2009) sets out Scotland's strategy for the reduction of greenhouse gas (GHG) and a transition to a low carbon economy. Part 1 of the Act, creates the statutory framework for greenhouse gas emissions reductions in Scotland by setting an interim 42% reduction target by 2020 relative to 1990 emissions levels, with the power for this to be varied based on expert advice, and an 80% reduction target for 2050 (also relative to 1990 emissions).</p> <p>Part 4 of the Act places duties on public bodies (including Transport Scotland) in relation to climate change. These duties require that a public body must, in exercising its functions, act in a way that is best calculated to contribute to the delivery of emissions reductions targets, assists in the delivery of statutory climate change adaptation programmes and is considered to be the most sustainable. In the case of Transport Scotland, this includes delivering infrastructure projects sustainably with the aim to achieve, '<i>Almost complete decarbonisation of road transport by 2050 with significant progress by 2030 through wholesale adoption of electric cars and vans, and significant decarbonisation of rail by 2050</i>'.</p> <p>Chapter 17 (Materials) <b>Mitigation Items M1</b> is applicable.</p> <p>The minimisation of materials use and waste generation has been considered from the start in relation to this proposed Scheme. The whole life carbon emissions associated with material use, transport of materials and waste, site plant energy consumption and energy consumption during operation as well as emissions associated with structural maintenance have also been calculated. Both legislation and voluntary best practice mechanisms have been developed and implemented to mitigate adverse environmental impacts associated with materials and waste.</p>
<p>Scotland's Zero Waste Plan, 2010</p>	<p>Scotland's 'Zero Waste Plan 2010' sets out the Scottish Government's vision for a zero waste society. This describes a Scotland where all waste is viewed as a resource; waste is minimised; valuable resources are not disposed of to landfill; and a majority of waste is sorted, leaving a minimal volume of waste requiring treatment. To achieve this, the Plan sets out measures, including the development of a Waste Prevention Programme for all wastes, ensuring the prevention and re-use of waste is central to all of the Scottish Government's actions and policies; and two new targets applying to all waste by 2025: 1) 70% recycled; and 2) a maximum of 5% sent to landfill. Waste management is structured around the 'waste hierarchy' as per Directive 2008/98/EC.</p> <p>The Waste Prevention Programme was published in October 2013 in a document called 'Safeguarding Scotland's Resources – Blueprint for a More Resource Efficient and Circular Economy'. The Plan aims to cut 7% of all waste in Scotland by 2017 and 15% by 2025. 'Low Carbon Scotland: Meeting our Emissions Reduction Targets 2013 – 2027' reiterates the targets provided in the Waste Prevention Programme, however it also states the aim of recycling all waste with no landfill by 2050.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>The principles of the waste hierarchy have been applied to this proposed Scheme to minimise waste generation and maximise re-use of materials on-site, where possible. Where re-use is not possible within the proposed Scheme and waste needs to be landfilled, it will only be sent to landfills which comply with the requirements of Directive 1999/31/EC on the landfill of waste.</p>

Document	Key Points and how they are Addressed by the Materials Assessment
<p>SEPA "Regulatory guidance – Promoting the sustainable reuse of greenfield soils in construction" (March 2010)</p>	<p>This guidance was produced to promote the sustainable re-use of natural topsoil and subsoil from 'greenfield sites'. Excess soils from development sites are generally regarded as waste and their use or disposal requires a waste management licence or a registered exemption. Given the desire to promote the reuse of greenfield soils however, SEPA has adopted a regulatory position that waste controls are not likely to be applied to soil if: 1) the soil is derived from a greenfield site as defined in the guidance; and 2) the soil is used off-site in one of the approved uses listed in the guidance.</p> <p>If producers and users of greenfield soil comply with this guidance, SEPA will not regulate its use under waste legislation. Although producers and users are not obliged to comply with this guidance, if they do not then greenfield soil will be subject to the requirements of waste legislation. Similarly, soils that do not fit the description given in this guidance will not be covered by this regulatory position.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>In <b>Mitigation Item M1</b>, the appointed contractor commits to comply with all relevant legislation, including SEPA guidance and appropriate Environment Agency Pollution Prevention Guidelines (PPGs). If necessary, the appointed contractor will consult SEPA for advice.</p> <p>The SWMP would set out how all construction phase materials would be managed, including soils, and it may include specific soils management plans developed with consideration of this guidance.</p>
<p>Wildlife and Natural Environment (Scotland) Act 2011</p>	<p>The Wildlife and Natural Environment (Scotland) Act 2011 makes provision in connection with the protection of wildlife and the natural environment.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>The appointed contractor will take steps to ensure that no flora, fauna or designations covered by the Act are destroyed or disturbed during the transport of materials to and from site, and during any demolition and waste disposal activities. A CEMP and SWMP will be implemented for the proposed Scheme which will outline the means by which the appointed contractor commits to comply with all relevant legislation.</p>
<p>Waste Management Licensing (Scotland) Regulations 2011, as amended.</p>	<p>The Waste Management Licensing (Scotland) Regulations 2011 (as amended), consolidate the waste management licensing and exemption system contained in the Waste Management Licensing Regulations 1994 as (amended). The system provides for the form and contents of applications for waste management licences, and for their surrender or transfer. It outlines the conditions which are to be included in a licence, and makes provision for the protection of groundwater against pollution caused by certain dangerous substances.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>In <b>Mitigation Item M1</b>, the appointed contractor will commit to comply with all relevant waste management and pollution prevention legislation, including Waste Management Licensing (Scotland) Regulations 2011. Additional Mitigation Items relate to the implementation of a CEMP and SWMP, as well as specific instructions on dealing with hazardous wastes. If hazardous wastes cannot remain on-site, they will be disposed of at the Avondale Hazardous Waste Landfill with completed hazardous waste transfer notes.</p>
<p>SEPA "Technical Guidance Note - Paragraph 19 Exemption Waste for construction and other relevant work"</p>	<p>'Technical Guidance Note - Paragraph 19 Exemption Waste for construction and other relevant work' provides guidance, definitions, operational policy and strategy with regard to registering a "paragraph 19" exemption for the use of waste in construction or other relevant works. Only wastes listed in Table 11 of Schedule 1 to the Waste Management Licensing (Scotland) Regulations 2011 (as amended) can be used for relevant work under a paragraph 19 exemption. If the waste is stored at the site where it is to be used then it may be stored for the duration of the registration, 12 months. If the waste is not produced at the site then it cannot be stored there for more than six months.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>In <b>Mitigation Item M1</b>, the appointed contractor will commit to comply with all relevant waste management and pollution prevention legislation, including Waste Management Licensing (Scotland) Regulations 2011, and additional Mitigation Items relate to the implementation of a CEMP and SWMP.</p>
<p>The Control of Asbestos Regulations 2012</p>	<p>The Control of Asbestos Regulations 2012 relate to the regulation and control of classification, packaging and labelling of dangerous substances and preparations, and persistent organic pollutants, dangerous substances, preparations and chemicals. They revoke and re-enact the 2006 Control of Asbestos Regulations with some modifications so that there is a consolidated set of Asbestos Regulations. The main change is the requirement to notify work to the relevant enforcing authority, carry out medical examinations and to keep a register of work.</p> <p>Chapter 17 (Materials) <b>Mitigation Items M1</b> and <b>M2</b> are applicable.</p> <p>Prior to demolition, any properties scheduled for demolition would be subject to a disruptive and fully intrusive survey to determine the presence of asbestos prior to work commencing. The waste produced from removal activities would be disposed of in accordance with the Special Waste Amendment (Scotland) Regulations 2004, The Control of Asbestos Regulations 2012 and SEPA (2015) Guidance: Asbestos in Demolition Wastes.</p> <p>Asbestos surveys of the structures to be demolished would also be undertaken prior to any demolition works commencing and appropriate management and disposal routes identified. Any asbestos found is likely to require disposal approximately 250km away at the Avondale Hazardous Waste Landfill near Falkirk, which has ample capacity remaining.</p>
<p>The Waste (Scotland)</p>	<p>The Waste (Scotland) Regulations 2012 provide for the separate collection, transport and</p>



Document	Key Points and how they are Addressed by the Materials Assessment
Regulations 2012	<p>treatment of dry recyclable waste and food waste, and for related matters. All persons who produce 'controlled waste' (other than occupiers of domestic properties) are obligated to: ensure the separate collection of dry recyclable waste from 1 January 2014; keep separate all separately collected wastes during collection and transport; take reasonable steps to ensure that high quality waste is available for recycling; and to prevent any other person contravening that duty. Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>In <b>Mitigation Item M1</b>, the appointed contractor will commit to comply with all relevant waste management legislation. If wastes cannot be legitimately re-used on site, they would be removed to a licensed recycling or disposal facility in line with regulatory requirements outlined in this legislation.</p>
Pollution Prevention and Control (Scotland) Regulations 2012	<p>The Pollution Prevention and Control (Scotland) Regulations 2012 provide an integrated pollution control regime for Scotland on industrial emissions and other environmentally polluting activities. It is a requirement for any person operating an installation or mobile plant at which an activity described in the regulations is taking place, have a permit granted by SEPA under these Regulations.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>In <b>Mitigation Item M1</b>, the appointed contractor will commit to comply with all relevant waste management and pollution prevention legislation, including appropriate Environment Agency Pollution Prevention Guidelines (PPGs) and SEPA guidance on sustainable waste management. If necessary, the contractor would consult SEPA for advice. If wastes cannot be legitimately re-used on site, they would be removed to a licensed recycling or disposal facility with completed waste transfer notes in line with regulatory requirements.</p>
Transport Scotland Corporate Plan (2012 – 2015)	<p>The Transport Scotland Corporate Plan (2012 – 2015) sets out guidance for delivering increased sustainable economic growth, and the Transport Scotland Annual Business Plan (2015-2016) extends the plan for one additional year. The Plan commits to fully integrate the Transport Scotland Carbon Management System (CMS) to influence and support low-carbon decision-making across the design and delivery of transport infrastructure projects and network maintenance; embed resource efficiency into their practices; and support sustainable design, construction, maintenance and operations through the adoption of infrastructure assessment schemes.</p> <p>Chapter 17 (Materials) <b>Mitigation Items M1</b> is applicable.</p> <p>A detailed assessment of the potential carbon dioxide equivalent (CO<sub>2</sub>e) impacts of the proposed Scheme has been carried out based on the indicative material and waste volumes using Transport Scotland's Carbon Management System 2014 (CMS). Whole life carbon emissions have been estimated based on the embodied carbon associated with material use, transport of materials and waste, site plant energy consumption and energy consumption during operation as well as structural maintenance.</p>
Scottish Planning Policy, Scottish Government, 2014	<p>The purpose of the Scottish Planning Policy (SPP) is to set out national planning policies which reflect Scottish Ministers' priorities for operation of the planning system, and for the development and use of land. The SPP promotes consistency in the application of policy across Scotland whilst allowing sufficient flexibility to reflect local circumstances.</p> <p>It directly relates to:</p> <ul style="list-style-type: none"> <li>the preparation of development plans;</li> <li>the design of development, from initial concept through to delivery; and</li> <li>the determination of planning applications and appeals.</li> </ul> <p>The SPP sits alongside the National Planning Framework (NPF), which provides a statutory framework for Scotland's long-term spatial development for the next 20 to 30 years. The SPP sets out policy that will help to deliver the objectives of the NPF. These guidelines ensure that Planning Authorities and SEPA work collaboratively to achieve zero waste objectives, having regard to the Zero Waste Plan, through development plans and development management.</p> <p>Waste management should be incorporated into the development plans of major sites, and the SPP advises that planning authorities should consider requiring the preparation of a Site Waste Management Plan (SWMP) as a condition of planning permission.</p> <p>Chapter 17 (Materials) <b>Mitigation Item M1</b> is applicable.</p> <p>The principles of the waste hierarchy have been applied to minimise waste generation and maximise re-use of materials on-site, where possible. Where re-use is not possible, and waste needs to be landfilled, it will only be sent to landfills which comply with the requirements of Directive 1999/31/EC on the landfill of waste.</p> <p>A 'Detailed Assessment' of the materials and waste aspects of the proposed Scheme has been carried out in line with the DMRB 'Materials' guidance, which includes a review of local waste capacity. The assessment concludes that there is likely to be adequate waste management capacity in Highland, Moray and Aberdeenshire to deal with the waste arising from the proposed Scheme.</p> <p>The appointed contractor will commit to comply with all relevant legislation, and both a CEMP and SWMP would be implemented as recommended in this Policy.</p>