- 1.2.2 The Company's principle aim in relation to the Armthorpe Quarry recycling activity is to ensure that its operation is in continued compliance with the required environmental regulations administered by the Environment Agency. The recycling operation at the site will be operated to the highest environmental standards. The Company's incorporation details are included in **Appendix 1**. Tarmac considers their facilities as the gateway to sustainable materials management. Each site is operated in an ethical and responsible manner, engaging with stakeholders and ensuring a safe environment for employees and the local community.
- 1.2.3 The company believes that sustainable materials management does not have to impact on communities in the way historical developments may have done in the past. By making decisions such as developing the facilities sympathetically to the locality and by targeting sustainable employment, their developments can make a positive impact.
- 1.2.4 Within current operations, the company employs an operational management team who share this vision and are qualified to the highest and required industry standards (WAMITAB/COTC).
- 1.2.5 One of the main principles of the development is to integrate the facility into the community it is located within. This focus on community scale and operation brings direct employment benefits to the local area and with the facility itself requiring local third-party company services such as the below, indirect employment opportunities are also a possibility;
  - Vehicle and Plant Service & Maintenance Companies;
  - Fuel Supplying Companies;
  - Haulage Companies; and
  - Customers to Tarmac Ltd.
- 1.2.6 The cornerstone of the development will be landfill avoidance. It is anticipated that close to 100% recycling will be achieved via the re-processing of materials into their component parts for the production of a value-added product. The residual percentage to landfill or another final disposal option is expected to be very low to insignificant.
- 1.2.7 The mineral operations at the Armthorpe Quarry are well established and are already home to a number of complementary activities. The continued appropriately consented operations of the site are integral to the vision and future portfolio of Tarmac Limited in delivery of its services in the region both to the public and private sectors. This site will allow the company to demonstrate its commitment to the recovery of materials by diverting waste streams away from direct disposal and into recycling and reuse.

## 1.3 Non-Technical Summary

- 1.3.1 When undertaking road repair and maintenance works, the old road surface is generally 'planed off' generating road planings. The planings contain good quality aggregate which is suitable for recycling and re-use. The majority of road planings encountered contain bitumen and are therefore classified under the European Waste Catalogue (EWC) Code 170302, which is non-hazardous. These materials are typically recycled at sites holding a T5 Exemption or Standard Rules Permit as appropriate, for the subsequent manufacture of aggregates from waste in accordance with the relevant quality protocols.
- 1.3.2 Certain areas of road identified on the proposed works subject to this application have been identified as containing tar. This changes the classification of the material to EWC Code 170301\* which is classified as a hazardous waste and the usual recycling outlets discussed in Paragraph 1.3.1 are not appropriate. Whilst the material still contains the aggregate, the tar used to bind the stone is classified as a hazardous waste.
- 1.3.3 The recycling and recovery operation at Armthorpe will manage and process up to 400,000 tonnes of waste per annum, 200,000 tonnes per annum of which will be Asphalt Wastes Containing Coal Tar (AWCCT) 170301\*. The waste will be subjected to a physical treatment processes, where appropriate, in order to turn the material into a useable, marketable product and/or for reuse back into road construction schemes.

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- 1.3.4 The waste proposed to be treated is limited to Local Authority roads, consisting namely of asphalt and road planings some of which may contain tar. The operation broadly consists of the storage and subsequent treatment of this material by sorting, separation, screening, crushing and blending of waste for recovery purposes to a secondary aggregate. This secondary aggregate is utilised as a constituent part of foamed asphalt (cold mix) for use on civil engineering schemes.
- 1.3.5 The proposed waste treatment and recycling facility will undertake the inspection, reception, storage, treatment and recovery of construction type waste from the surrounding region.
- 1.3.6 Site activities will take place upon an area of established engineered surfacing (Concrete Bound Granular Material (CBGM)), with sealed drainage to an isolation tank. This will be in an area of the overall Armthorpe Quarry complex located mid-way along the northern boundary, directly adjacent to Holme Wood Lane. The site is accessed from the south west off Junction 4 of the M18. Traffic will then travel in a north easterly direction along Holme Wood Lane before taking a right turn into the site. The site's location within its overall surrounds can be seen on **Drawing Reference TA1041/5/01**.
- 1.3.7 Once on site, the materials arriving will undergo the initial Duty of Care procedure at the site's weighbridge and reception facilities. Vehicles will then be directed towards the incoming materials storage area pending treatment. All access roadways and manoeuvring areas are surfaced with Tarmac/Concrete, with the treatment and processing area also lain to concrete. These surfaces also have integral sealed drainage systems. The recycling site is provided with suitable site offices and welfare facilities for the workforce. A single deck weighbridge will be installed on site as part of the reception facilities for the overall operations. This will ensure that all inputs and outputs to the operation will be accurately recorded, and where required in the instance of waste materials, details captured in accordance with the Duty of Care Regulations.
- 1.3.8 Wastes will be transported to and from the site by road, weighed in and recorded over the weighbridge and then directed to the incoming storage area. The wastes are then transferred to their designated treatment areas for processing via mobile plant, and thereafter to their respective storage areas in readiness for transfer off-site for onward use.
- 1.3.9 Waste storage and treatment will be undertaken within areas of impermeable engineered surfacing consisting of CBGM. Drainage is achieved via general falls in the surface to channel drains. These then fall to a central isolation tank for storage and subsequent tankering off site. General fugitive surface water run-off is directed away from the processing and storage operations towards the wider site infrastructure to the south and west.
- 1.3.10 Briefly, the operational waste activities undertaken on site can be divided into the following categories:

## Asphalt Wastes (Road Planings)

- Waste Receipt;
- Waste Storage within designated areas;
- Waste Processing; and
- Product Storage within designated areas, prior to on or off-site use.
- 1.3.11 It is proposed that Tarmac will undertake their operations on the area of Armthorpe Quarry described in paragraph 1.3.7 above (on the eastern side of the site with access being gained off the northern boundary). The wider Armthorpe Quarry is owned and operated by Yorkshire Aggregates Limited. The site (which was a former sand and gravel quarry), acts as a recycling centre for Yorkshire Aggregates where they process inert waste for the production of secondary aggregates. The Yorkshire Aggregates inert waste operation is situated to the south and west of Tarmac's proposed operation. Tarmac will lease part of the site from Yorkshire Aggregates with their operation being physical separate from the established inert waste recycling activities and also permitted directly by the Environment Agency.
- 1.3.12 The site has full planning permission for the current minerals and waste management use.

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- 1.3.13 In terms of Ecology, the nearest sites of importance are c. 2.7km to the east, namely the Humberhead Peatlands National Nature Reserve, Hatfield Moors Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI). It has been designated for the flora and fauna it supports in a lowland peat bod environment. Lowland peat bogs are a nationally rare habitat with none occurring in lowland England in completely unmodified form, most having been cut for peat.
- 1.3.14 The site sits within a Nitrate Vulnerable Zone as designated by the DEFRA for Surface and Groundwater.

## 1.4 Scheduled Activity and Specified Waste Management Operations

1.4.1 As the site will be recycling waste that could be classified as hazardous (due to the presence of coal tar), it will be considered an Installation activity and permitted as set out in the Environmental Permitting (England & Wales) Regulations 2016 (as amended) as a Schedule 1 Part 2 Part A(1) regulated activity. This will require consideration against sector guidance, and assessment of the proposed operation against generic Best Available Techniques (BAT). The activity will be classified as follows;

Schedule 1, Part 2 - Activities

- Section 5.3 Part A(1)a Disposal or Recovery of Hazardous Waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities;
  - (vi) recycling or reclamation of inorganic materials other than metals or metal compounds.
- Section 5.6 Part A(1)a Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes pending any of the activities listed in Sections 5.2, 5.2, 5.3 and paragraph (b) of this Section, except
  - (i) Temporary storage pending collection on the site where the waste is generated, or
  - (ii) Activities falling within Section 5.2.
- 1.4.2 The following waste management operations are to be carried out at the facility, including those proposed in Section 1.3.6 (codes taken from Waste Framework Directive 2008/98/EC Annex I and II):
  - R5: Recycling or reclamation of other inorganic materials;
  - R13: Storage of wastes consisting of materials intended for submission to any operation numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced):
  - D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced); and
  - Storage: Includes storage as inherent part of associated on site delivery and despatch operations.

## 1.5 Facility Location

1.5.1 The proposed site for the Asphalt Waste Recycling Facility is located on the north eastern side of the wider Armthorpe Quarry site, with access being gained off Holme Wood Lane which bounds the northern boundary. Armthorpe Quarry contains a number of other complimentary operations run by the Stone and Garden Company and Yorkshire Aggregates, including an aggregates supply business and inert waste recycling operations respectively. The general location of Tarmac's Asphalt Waste Recycling Facility is shown in **Drawing Reference TA1041/5/01**. The National Grid Reference for the approximate centre of the site is: NGR 465775, 405227.

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