Protos Plastics Park

DETAILED PLANNING APPLICATION FOR THE DEVELOPMENT OF A MATERIALS RECYCLING FACILITY, TWO PLASTICS RECYCLING FACILITIES, A POLYMER LAMINATE RECYCLING FACILITY AND A HYDROGEN REFUELLING STATION ON LAND AT, PROTOS, INCE

PLANNING STATEMENT

SEPTEMBER 2021

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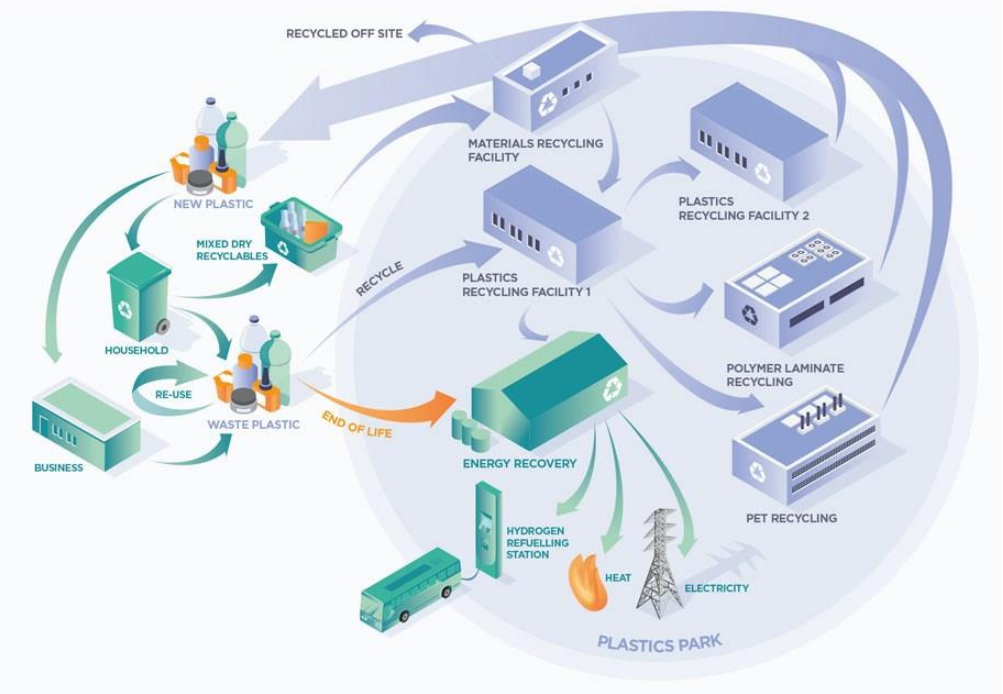
1.0 INTRODUCTION, BACKGROUND AND SCOPE OF THE APPLICATION

1.1 Introduction

1.1.1 This Planning Statement has been prepared in support of a planning application made by Peel NRE Ltd ('the Applicant') to Cheshire West and Chester Council ('CWACC' or 'the Council') for the development of a Materials Recycling Facility (MRF), two Plastics Recycling Facilities (PRFs), a Polymer Laminate Recycling Facility (PLRF) and a Hydrogen Refuelling Station ('the Proposed Development') on land at Protos, Ince Marshes on land off Pool Lane/Grinsome Road, Ince ('the Site').

1.1.2 The application boundary is shown on drawing no. 20039-FRA-XX-00-DR-A-90-0001. The Proposed Development is shown on drawing no. 20039-FRA-XX-00-DR-A-90-000, and is shown in the context of the wider Protos site on drawing no. 20039-FRA-XX-00-DR-A-90-0005.

1.1.3 The Proposed Development would form part of the 'Protos Plastics Park', a unique concept which would deliver a cluster of recycling and recovery technologies that would enable mixed recyclables and pre-sorted plastics to be sorted, processed and recycled into products which can be re-used in plastics manufacturing all on a single site. Plastics which could not recycled would be used as feedstock for the plastics to hydrogen facility, providing a circular economy solution to waste plastic in this area of the north-west. The graphic below illustrates the broad concept of the Plastic Park.



1.1.4 Two components of the Protos Plastics Park have already been granted planning permission:

- Plastics to Hydrogen Facility on Plot 10A, reference 19/03489/FUL granted 18th March 2020
- PET Recycling Facility on Plot 13, reference 20/04396/FUL granted 12th May 2021

1.1.5 It is the intention of the applicant that the various components of the Plastics Park could be developed out in a phased manner with individual operators and developers bringing forward individual or multiple components of the Plastics Park over time.

1.1.6 This introductory section provides a brief description of the Proposed Development, details of the Applicant, background to the proposals, details of the pre-application consultation and public consultation exercise undertaken, and the scope of the planning application.

1.2 The Applicant

1.2.1 Peel NRE, part of Peel Land and Property (Peel L&P), works in partnership with investors, technology providers and business, together with the public sector, to provide bespoke real estate, infrastructure and operational solutions for the low carbon and circular economy sector.

1.2.2 Peel NRE owns and develops projects relating to energy generation, waste management and district heating. Peel NRE has achieved planning consent for a range of schemes in these areas, including the Protos energy and resource hub in Ince, Cheshire.

1.2.3 Peel NRE is a forerunner in the sustainable management of plastic waste. Their Plastic Park at Protos will help to manage some of the millions of tonnes of plastic waste generated in the UK each year and is part of Peel L&P's wider commitment to the UN Sustainable Development Goals, specifically goal 12 which focusses on sustainable consumption and production.

1.3 Background

1.3.1 Protos is a significant industrial development site with the benefit of planning permissions for industrial, commercial, waste, transport and energy uses. The principal planning permission was granted in 2009 (outline planning permission reference APP/Z0645/A/07/2059609), this development was referred to as Ince Resource Recovery Park and was subsequently rebranded as Protos. Protos was proposed to deliver a series of integrated waste management facilities which contributed to the sustainable management of waste in Cheshire West and Cheshire and other local authorities in the northwest of England.

1.3.2 Subsequent to the grant of the outline planning permission there have been a number of amendments to the planning permission and reserved matters have been approved for detailed schemes across Protos. This includes developments on the plots to which this planning application relates. There have also been a series of standalone planning permissions granted for different energy and waste developments across Protos, all of which are similar in nature to types of uses originally consented. In this regard Protos is considered to be an ideal location for the development of a comprehensive integrated waste management solution for waste plastics.

1.3.3 The concept of a 'Plastics Park' was always envisaged within the Ince Resource Recovery Park. However, the current scheme now being proposed reflects the importance now being placed by society on the need to manage waste plastic in a more sustainable and responsible manner.

1.3.4 The issue of how society manages waste plastic has been increasingly scrutinised in recent years. The Government has estimated 2.3 million tonnes

of plastic packaging waste was produced in 2017, with over half of this sent for disposal. However, estimates undertaken by other organisations have put the overall figure for plastics waste much higher. A report in 2018 commissioned by the World Wildlife Fund identified that 4.9 million tonnes of plastic waste was generated in the UK in 2014, with an estimate of 5.2 million tonnes of plastic waste being generated in 2018.

1.3.5 As set out in Our Waste, Our Resources: A Strategy for England, there is an urgent need for new thinking to tackle avoidable plastic waste. The UK recycling rates have plateaued in recent years with a significant reliance being placed on the export of poor quality plastic waste for recycling to countries with less stringent regulation and poor waste management infrastructure.

1.3.6 In order to try and help address the issue of plastic waste a Policy Paper was published by the Government in March 2020 for a plastic packaging tax. Primary legislation introducing the tax was included in the Finance Bill 2021 which received Royal Ascent on 10th June 2021. The tax will take effect from 1st April 2022. The tax will relate to plastic packaging produced in, or imported into, the UK that does not contain at least 30% recycled plastic. The plastic packaging tax is charged at a rate of £200 per metric tonne of plastic packaging with less than 30% recycled plastic, and will apply to plastic packaging manufactured in, or imported into, the UK. This tax will result in a significant demand for recycled plastic feedstock and as such the UK needs to develop significantly more plastics recycling and recovery capacity if it is to try meet the Government's aspirations on recycling and the circular economy.

1.3.7 In order to meet the required plastics recycling and recovery requirements Peel NRE are proposing to develop the Protos Plastic Park.

1.4 Consultation

1.4.1 A pre-application consultation request was submitted to CWACC on the 11th January 2021. The purpose of the request was to: agree the scope and content of the planning application; to seek the Council's views on the principle of the development; and to identify and discuss any local issues.

1.4.2 Pre-application feedback was subsequently provided by CWACC (ref. 21/00153/PREAPP) setting out the policies that would be relevant to the determination and an agreed scope of the application. The advice also

requested that the planning submission provided a rationale to the approach to the design of the facility, taking into account how the facility would be viewed by users accessing Protos, receptors in the local area and those using the public right of way which runs through the site.

1.4.3 In relation to public engagement a variety of methods were used to inform the local community about the proposals, these included:

- Production of a project specific page on the Protos website providing details of the project and inviting comments.
- A newsletter to 9,304 local homes and businesses informing them of the proposals and inviting them to view and comment on the development proposals of the Protos website.
- Project website was development providing information on the Proposed Development and inviting feedback.
- Coinciding with the pre-application consultation launch, a press release was issued to media outlets in July 2021 to provide an overview of the proposed development and advertise the consultation.
- Live stream of a webinar presenting the proposals to the public and allowing questions to be raised to the project team.
- Briefing of the Protos Community Forum and Cheshire West and Chester councillors.

1.4.1 Due to restrictions imposed by the Covid 19 pandemic it has not been possible to hold a face-to-face public event. However, it is considered that the approach adopted above, and use of the well established communication channels established as part of the Protos development, has enabled the Applicant to effectively communicate the development proposals and gather public views of the proposal in advance of the application being submitted.

1.4.2 Appendix A contains a Consultation Report which sets out in detail the consultation undertaken and summarises the responses received from the public in relation to the proposals.

1.5 Scope of the Application

1.5.1 The documents that either form the planning application, or are submitted in support of the application, are:

- A cover letter;
- Planning Application Form and Certificates;
- Application Drawings;
- This Planning Statement supported by the following technical reports:
    - Consultation Report;
    - Carbon Assessment;
    - Economic Impact and Social Value Assessment;
    - Noise Assessment;
    - Highways Technical Note;
    - Arboricultural Impact Assessment;
    - Protos Flood Risk Assessment and Surface Water Management Plan;
    - Stage 1 Geo-Environmental Assessment; and
    - BREEAM Pre-Assessment;
- Design Evolution; and
- Environmental Statement (ES) providing the following detailed technical assessments:
    - Landscape and Visual Assessment
    - Ecology and Nature Conservation
    - Air Quality

1.5.2 The Planning Statement is divided into 7 main sections following from this introduction. Section 2.0 describes the Site and provides a summary of the relevant planning history. A detailed scheme description is provided in Section 3.0. Section 4.0 sets out the need for the facility and its benefits. Section 5.0 details the findings of a number of environmental assessments completed to inform the planning application, this is followed by an appraisal of the relevant planning policy in Section 6.0. Finally, Section 7.0 provides a conclusion to the Planning Statement.

2.0 THE SITE, ITS SURROUNDINGS AND PLANNING HISTORY

2.1 Site Description

2.1.1 The Proposed Development would be located across Plots 9B, 10A, 11 and 12 of Protos ('the Site'). The Site is located 1.2km to the east of the village of Ince and 800m to the north of the settlement of Elton. The location of the Site is shown on Figure 1, with the redline planning application boundary shown on drawing no. 20039-FRA-XX-00-DR-A-90-0001. The Site covers an area of approximately 10 ha. The centre of the Site area is located on Grinsome Road roundabout at National Grid reference SJ 463 764.

2.1.2 The Site is located in the administrative area of CWACC. The Mersey Estuary is located circa 1km to the north of the Site and is designated as a Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar site.

2.1.3 The Site is located on land within Protos. In total Protos covers approximately 134 hectares of land, of which 54 hectares is consented for waste and energy related development. The remaining land is being used for landscape and habitat creation works. The developer of Protos is the Applicant, Peel NRE Ltd.

2.1.4 Protos is a significant industrial development site with the benefit of planning permissions for industrial, commercial, waste, transport and energy uses. The principal planning permission was granted in 2009 (planning permission reference APP/Z0645/A/07/2059609), this development was referred to as Ince Resource Recovery Park or the RRP consent. As set out in the subsequent planning history Protos has been subject to a number of planning permission since 2009. The layout of Protos, including the Proposed Development, is shown on drawing no. 20039-FRA-XX-00-DR-A-90-0005.

2.1.5 Plot 11 and 12 lie to the south of Grinsome Road, with Plot 10A located to the north of Grinsome Road. Plot 9B is located to the east of Marsh Lane, which connects to Grinsome Road via internal access roads within Protos. Grinsome Road is a private road, which runs from the Pool Lane/Grinsome Road roundabout (circa 1.5km to the west of the Site) to the CF Fertiliser manufacturing plant circa 500m to the east of the Site. Grinsome Road forms the main access to the Protos development.

2.1.6 Figure 2 shows the location of the Site on an aerial photograph. The various development plots lie between 4.2m and 9.2m Above Ordnance Datum (AOD).

2.1.7 Plot 9B is currently in use as a contractors compound and has been developed with hard standing since 2016. Drains which form part of the wider Protos surface water management system are located on the northern and western boundaries of the plot. Road 2, an internal Protos private road, runs to the north of the plot and Marsh Lane to the west.

2.1.8 Plot 10A is currently undeveloped and comprises areas of rough grassland with areas of woodland on the western and north western boundary. Two drains which form part of the wider Protos surface water management system are located in the northern area of the plot. Road 1, an internal Protos private road, runs to the east of the plot. A restricted byway forms the southern boundary of plot, beyond which is a narrow band of trees and scrub, and Grinsome Road.

2.1.9 Plot 11 and 12 are located to the south of Grinsome Road. Plot 11 is located to the south west of Grinsome Road roundabout. The eastern half of Plot 11 is covered in hardstanding associated with a former natural gas exploration well. The western half of the plot is covered with tall ruderal vegetation and scrub, as is Plot 12. The southern and western boundary of Plot 11 and the southern boundary of Plot 12 is formed by an area of woodland. An access road, which leads from Encirc Glass Ltd onto Grinsome Road roundabout, runs through Plot 11. A drainage ditch runs along the eastern boundary of Plot 12. A temporary access road and construction compound associated with a new pylon is also located to the immediate east of Plot 12. Prior to 2010 all of the development plots were agricultural fields.

2.1.10 There are a number of existing major industrial facilities in close proximity to the Site. Encirc Glass Ltd, a bottle manufacturing plant, is located circa 300m to the west of the Site. This plant includes a 33m high building, 10 hectares in area, with other buildings up to 40m in height. The CF Fertilizers UK plant is located 500m to the east of the Site. The plant covers an overall area of circa 50 hectares and manufactures over 1 million tonnes of fertiliser per year. The plant includes a number of stacks and process equipment up to 80m in height. The CF Fertilizers UK plant is registered as an Upper Tier Control of Major Accident Hazards (COMAH) site.

2.1.11 The Ince Biomass Renewable Energy Plant is located circa 150m to the northeast of the Site. The development includes a 49m high main building and 85m high emission stack. The facility also includes a pitched roof biomass

storage building, 13m in height. The Stanlow Oil Refinery is located circa 1.5km to the west of Site and is also registered as an Upper Tier COMAH site. A 19 turbine wind farm completed construction in September 2016 to the east of the Site. The closest of the 125m (to blade tip) turbines is located circa 1km to the east of the Site.

2.1.12 The Protos Energy Recovery Facility, which is being developed by the waste management firm Covanta, is currently being constructed on Plot 8 to the north east of Plot 9B. When constructed the facility will manage up to 350,000 tonnes of residual waste. The main building of the facility will be up to 60m in height, with a 100m high emissions stack.

2.1.13 As well as the industrial sites described above, there are significant areas of agricultural land close to the Site, used for arable crop production and grazing.

2.1.14 The closest residential properties are as follows:

- Properties on Orchard Park Lane – circa 600m to the south of the Site
- Properties on Station Road/Marsh Lane, Ince – circa 1.35 km to the west of the Site
- Holme Farm – circa 950m to the north west of the Site

2.1.15 The closest residential properties to the east are two farms located on Rake Lane, circa 2km from the Site.

2.1.16 The Helsby to Hooton railway line runs in an east west orientation approximately 550m to the south of the Site.

2.1.17 There are three Public Footpaths within 1km of the Site, the closest is located circa 850m to the west which links Ince village to Grinsome Road. A restricted byway passes along the southern boundary of the Plot 10A adjacent to Grinsome Road. National Cycle Route 5 runs along the Restricted Byway and joins Marsh Lane to the south of Plot 9B.

2.2 Planning History

2.2.1 This section of the Planning Statement sets out the planning history associated with the wider Protos site, relevant to the Proposed Development. The Site, in insolation, has a relatively limited planning history limited to the Protos consent and the subsequent Section 73 modifications and associated reserved matters

applications. Plot 11 is also subject to a planning permission for a natural gas exploration well.

2.2.2 The Protos site is subject to numerous planning permissions. The 'parent' permission that provides for what is now known as Protos was granted in 2009 (at the time known as Ince Resource Recovery Park or RRP) following a planning appeal (ref. APP/Z0645/A/07/2059609). It was subsequently subject to two new permissions granted under Section 73 in 2010 (ref. 10/01488/FUL) and 2015 (ref. 14/02277/S73). The permissions provide for:

- An Integrated Waste Management Facility, comprising Waste Transfer Station and In-Vessel Composting Facility, Materials Recovery Facility and Mechanical Biological Treatment Plant (Plot 5 and 11);
- Soil Treatment Facility (Plot 2);
- Waste and Electrical and Electronics Facility (Plot 3);
- Wood and Timber Recycling Facility (Plot 4);
- Plastics Village (Plot 6):
- Water Treatment Plan (Plot 7);
- Ethanol Production Facility (Plot 9);
- Block Making Facility (Plot 14);
- Resource Recovery Village and Business Centre (Plot 10A, 10A, 12 and 13);
- Dry cargo Facility (Plot 1); and
- Rail line and rail head, access, acoustic barriers, ecological mitigation and areas.

2.2.3 The RRP was implemented, save for those aspects requiring detail by Reserved Matters, through the erection of an acoustic fence. A Reserved Matters application (Reference 15/04176/REM) was submitted on the 12 October 2015 and approved by CWACC on the 9 February 2016, this provided for development on Plots 2, 6, 10A, 10B, 11, 12, 13 and 14.

2.2.4 Planning permission was granted through the reserved matters approval for the following developments on each of the plots associated with this planning application:

- Plot 10A: a two storey business and education centre, with a height of 9.8m and a total external footprint of 11,854m^2;

- Plot 11: an Industrial Waste Transfer Centre, with a height of 15.5 and an external footprint of 4,940m^2.
- Plot 12: twelve warehouse style units on Plot 13, with a height of 10.5m and an external footprint of 13,760m^2.

2.2.5 The first phase of infrastructure works was implemented on the 21 December 2016 comprising the widening of Grinsome Road, works to Pool Lane Roundabout and the development of Grinsome Road Roundabout adjacent to Plot 11.

2.2.6 A summary of the planning permissions which are considered relevant to the Proposed Development located within and adjacent to Protos is provided below. Those permissions which relate directly to the application site are highlighted. The table below is not intended to provide an exhaustive list of all permissions. A number of other consents have been granted across the Protos site to discharge condition requirements or for non-material and minor-material development. In addition, other 'stand-alone' consents have been granted (e.g. fencing, underground electrical cabling and water pipeline consents for the operation of Protos) which are not included below, however these are not considered relevant to the determination of this application.

Table 3.1 Relevant planning permissions

Application Reference	Details / Comment	Date
GDBC/001/00265C	Section 36 Consent and deemed permission for Refuse Derived Fuel (RDF) Generating Station. Located on Plot 8 east of the application site. Located on the same site as the Energy from Waste Facility granted in 2017 (see below).	11/08/09
APP/Z0645/A/07/2059609	**RRP Outline Planning Permission for Ince Resource Recovery Park. Subsequently amended under Section 73 (ref. 10/01488/FUL) and in 2015 (ref. 14/02277/S73).**	11/08/09
09/02568/MIN	**Permission for the drilling of boreholes for the purpose of coal bed methane (CBM) appraisal and production.**	26/04/10
10/01489/FUL	A 132kV/33kV/11kV primary substation on land to the south of Protos.	26/11/10
10/01488/FUL	Section 73 permission of RRP consent to amend the rail, canal and road infrastructure.	21/12/10
11/00040/WAS	Biomass Renewable Energy Plant (BREP). Located on Plot 9 of the RRP to the east of the application site. The permission was subsequently amended under Section 73 in 2014 (14/02278/S73). The BREP has been constructed and is undergoing commissioning.	10/01/13
11/04083/OUT	Timber Recycling Plant (TRP). Located on Plot 3 north of the application site. A subsequently	14/10/13

Application Reference	Details / Comment	Date
	permission was granted under Section 73 (14/02271/S73). The TRP is currently under construction.	
11/04081/WAS	Incinerator Bottom Ash (IBAA) Processing Facility. Located on Plot 4 north east of the application site. This permission has subsequently expired.	13/04/12
14/02278/S73	Section 73 variation of 11/00040/WAS (BREP) to remove the requirement of the first phase rail and berth works and ecological areas.	26/03/15
14/02277/S73	Section 73 variation of 10/01488/FUL (RRP) to defer the development of the canal berth, rail and ecological mitigation areas.	26/03/15
14/02271/S73	Section 73 variation of 11/04083/OUT (TRP) to remove the requirement to deliver the first phase rail and berth works and ecological mitigation areas.	26/03/15
15/04176/REM	**Reserved Matters application pursuant to planning permission 14/02277/S73 providing detailed design in respect of appearance and scale.**	09/02/16
16/03516/FUL	32 standby gas engine electricity generators to the south of Protos. Now expired.	03/11/16
17/02683/FUL	20MW Battery Storage Facility comprising 10 containerised units to store electricity and supply power to the National Grid at peak demand (STOR – Short Term Operating Reserve). Located adjacent to the standby generators south of Protos.	30/08/17
16/03074/FUL	Up to 35MW Energy from Waste (EfW) Facility. Located on Plot 8 (same as RDF site above). Under construction.	07/09/17
19/03489/FUL	Development of a hydrogen production facility and electricity generating plant on Plot 10A.	18/03/2020

2.2.7 On the basis of the foregoing there is a clear planning precedent for development on the Site with a planning fallback position on Plot 10A, 11 and 12 providing for a mix of different development types, including a series of large buildings used for waste recovery operations. These developments are extant and capable of being development with no further recourse to the planning system.

3.0 SCHEME DESCRIPTION

3.1 Introduction

3.1.1 This chapter provides a summary of the layout and design of the Proposed Development. A more comprehensive scheme description is provided at Chapter 4.0 of the ES. As set out in Chapter 1.0 above, there are five discrete development components as follows:

- A **Material Recycling Facility ('MRF')** to be located on Plot 10A which would sort, process and separate 75,000 tonnes of dry mixed recyclates.
- A **Plastics Recycling Facility ('PRF1')** to be located on Plot 11 which would separate 200,000 tonnes of mixed waste plastics into different plastics types for onward processing / recycling / recovery.
- A **Plastics Recycling Facility ('PRF2')** to be located on Plot 12 which would recycle 90,000 tonnes of pre-sorted waste plastics into recycled flaked plastic for re-use in plastics manufacturing.
- A **Polymer Laminate Recycling Facility ('PLRF')** to be located on Plot 9B which would recycle 2,500 tonnes of plastic aluminium laminates by splitting them into aluminium and high-value oil for re-use in plastics manufacturing.
- A **hydrogen refuelling station** to be located on Plot 9B.

3.1.2 As set out in the introduction it is the intention of the applicant that each of the above components could be delivered on a phased basis. Each facility could be run by an independent operator but the synergies between the various facilities lend themselves to an integrated approach, as is the case with other facilities on Protos.

3.1.3 Drawing no. 20039-FRA-XX-00-DR-A-90-0004 illustrates the general arrangement of the Proposed Development, with drawing no. 20039-FRA-XX-00-DR-A-90-0005 showing the development within the context of the wider Protos development. A series of other layout, elevation and section drawings have been submitted which illustrate each of the individual development components in detail.

3.1.4 A Design Evolution Statement is also provided in support of the application. It includes a description of the approach taken to the design of the various development components and incudes a series of drawings and 3D representations of the Proposed Development. The Design Evolution

Statement sets out the design rationale taken to ensure that the Proposed Development delivers a high quality development appropriate for the gateway to Protos, which when completed will represent one of the most comprehensive integrated waste recycling and recovery parks in the UK.

3.1.5 The MRF, PRF1, PRF2 and the PLRF would operate 24 hours, throughout the year with occasional shutdowns for scheduled maintenance. The main processing hours for the MRF, PRF1 and PRF 2 would be 07.00 to 19.00 Monday to Saturday, with maintenance and cleaning activities occurring overnight. The delivery of waste and consumables to the facilities and the export of recycled products and residual wastes would also be undertaken during these hours.

3.1.6 The hydrogen refuelling facility would be capable of being used 24 hours, 356 days a year as an automated facility. However, on the basis that it is anticipated to predominantly service vehicles already accessing Protos, its usage is likely to be limited to 07.00 to 19.00.

3.2 Material Recovery Facility

3.2.1 The proposed MRF would accept, separate and bulk up dry recyclables arising from household kerbside collections, commercial premises and waste management companies. It would comprise a steel-framed building of circa 5,886m^2 gross floor area (including offices and mezzanine). The overall building height would be 15.1m to parapet. The building would contain:

- a general reception area for recyclables;
- a loading bay which would feed the sorting line;
- a sorting line, within which the dry recyclables would be mechanically separated (with some manual sorting/checking);
- balers and recyclables containers;
- storage for baled and loose recyclables;
- a reject handling area; and
- ancillary offices suite, workshop and staff welfare facilities.

3.2.2 Once fully operational the plant would process up to 75,000 tonnes of recyclables per year.

3.2.3 Recyclables would arrive at the facility in either conventional refuse collection vehicles direct from collection rounds, or in bulk haulage vehicles from other waste management facilities. All vehicles would weigh in and proceed to the reception hall inside the main MRF building.

3.2.4 The sorting system is designed to accept and separate:

- newspapers, magazines and pamphlets;
- mixed paper
- old corrugated cardboard
- light card (mainly food packaging containers);
- mixed plastics (Polyethylene Terephthalate (PET), High-Density Polyethylene (HDPE), Polyethylene (PE), Polypropylene (PP), Polyvinyl Chloride (PVC));
- ferrous and non-ferrous metals; and
- glass bottles and jars.

3.2.5 The MRF would be equipped with sophisticated automatic recognition and sorting processes which would employ methods such as screens, mechanical sorters, eddy current separators, optical identification equipment, and air jet separators to split out the different types of recyclable materials.

3.2.6 The separated plastics, card and metals would be stored within silos, baled and loaded into bulk transport vehicles for delivery to reprocessing plants, with the plastics taken to the PRF1 facility on Plot 11.

3.3 Plastics Recycling Facility 1 (PRF1)

3.3.1 The proposed PRF1 would process mixed waste plastics received from the MRF, separately collected mixed plastics (e.g. from Deposit Return Scheme sources), and other mixed plastic sources from offsite waste management facilities. It would comprise a steel-framed building of circa 9,361m^2 gross floor area (including offices and mezzanine). The tallest element of the building would be the sorting hall which would be 16.1m in height to parapet, the material storage area would be 8 m in height to parapet. The building would contain:

- a reception area for receiving baled and loose material for processing;
- PRF 1 sorting plant for separation into mono-polymer plastic types from a mixed plastic feedstock;

- a storage area for outputs from PRF 1, namely mono-polymer plastics, ferrous metal, non-ferrous metal, fuel outputs and rejects;
- air handling and filtration plant; and
- offices, workshops, control rooms and welfare facilities.

3.3.2 Once fully operational plant would process up to 200,000 tonnes of plastic per year. Plastics would arrive at the site via either transfer vehicles from the MRF or via bulk haulage vehicles from offsite waste management facilities.

3.3.3 The plastic would be stored within a dedicated feedstock storage building where it would be fed into the processing hall for sorting. The plastics would pass along a series of conveyors which would include magnets and eddy current separators to remove ferrous and non-ferrous metals. A series of Near Infra Red (NIR) separators would then separate out the different plastic types i.e. Polyethylene Terephthalate (PET), Polyvinyl Chloride (PVC), High-Density Polyethylene (HDPE) and Polypropylene (PP).

3.3.4 Remaining residual mixed plastics (e.g. hard plastics, films etc) would be separated into plastic fractions that could either be processed within an advanced chemical recycling process (which may be developed in the future at Protos) to create a feedstock for future plastics manufacture or a hydrocarbon based fuel, or would be transferred to the Plastics to Hydrogen facility on Plot 10A.

3.3.5 The output from PRF1 is summarised in Table 3.1 below.

Table 3.1 – Output from PRF1

Material	Tonnage	Destination*
PET	25,000	PET facility on Plot 13
	63,000	PRF2
	9,460	Offsite PET recycling
HDPE	21,800	PRF2
	11,350	Offsite HDPE Recycling
PP	10,000	PRF2
	5,090	Offsite PP recycling
Residual mixed plastics	14,740	Plastics to Hydrogen
	33,010	Chemical Recycling
PVC	260	Offsite PVC recycling

Ferrous metals	2,950	Offsite recycling
Non-ferrous metals	720	Offsite recycling
Residuals waste / reject material	2,620	Energy recovery

* - figures based on the assumption that all Plastic Park developments are delivered. Should developments be phased the total tonnage would be exported to offsite processors.

3.4 Plastics Recycling Facility 2 (PRF2)

3.4.1 The proposed PRF2 would process separated mono-polymer plastics (PET, PP and HDPE) from PRF1 or other external mono-polymer supply chains by refining, washing and flaking the plastic so that it can be used directly in plastics manufacture as a direct replacement feedstock for virgin plastic. It would comprise a steel-framed building of circa 17,545m^2 gross floor area (including offices and mezzanine). The tallest element of the building would be the processing and washing hall which would be 16.1m in height to parapet, the material storage area would be 8m in height to parapet. The building would contain:

- a reception area for receiving material from PRF 1 and/or external supply;
- a purification plant for purification of separated PET, PP and HDPE to a quality suitable for further processing;
- flaking facility where separated plastics are reduced into smaller flakes prior to washing;
- washing process for further cleaning of PET, PP and HDPE;
- a storage area for outputs from PRF 2;
- air handling and filtration plant; and
- offices, workshop, control room and welfare facilities.

3.4.2 Once fully operational plant would process up to 90,000 tonnes of plastic per year. Plastics would arrive at the facility either via transfer vehicles from PRF1 or via bulk haulage vehicles from offsite direct source segregated providers.

3.4.3 There would be separate processing lines for each of the three mono-polymers being processed at the facility. The bales of PET, HDPE and PP would be fed onto dedicated conveyor belts by mobile plant in the PRF 2 feedstock area.

3.4.4 For each plastic stream loose material would be subject to additional screening and sorting to ensure the production of high quality recyclable material. This

would include metals removal, using dual overband magnets (in series) and an eddy current separator to remove ferrous and non-ferrous metals respectively.

3.4.5 The plastics would then be conveyed to a NIR separator which would be used to detect and separate the target plastic from any non-metallic residuals in the material stream. Residual material would be conveyed to a skip as a mixed plastic reject.

3.4.6 The processed refined streams of target plastic would then be conveyed to the flaking and washing lines. The plastics would be mechanically broken into small uniform flakes. The flakes would then be processed within a series of washing lines to remove impurities, glues and labels. The flakes would then be dried and small particulates removed by passing the flakes through a series of air streams.

3.4.7 After drying the flakes are weighed and then sieved before being transferred to a buffer silo. Quality control checks would be undertaken to ensure that the flaked product meets the required specification for the onward use in plastics manufacturing. Cleaned, dried flakes and quality assured recycled product would then be transferred to a bagging station prior to export offsite.

3.4.8 Water used in the washing process would be recycled through a cleaning system to ensure that as much water as possible can be recirculated, reducing water usage. An onsite wastewater treatment system would treat any effluent from the system to a standard which was capable of discharge. Sludge from the cleaning process, which would be removed through the treatment of the process water, would be disposed of to a suitable waste water treatment facility.

3.5 Polymer Laminate Recycling Facility (PLRF)

3.5.1 The proposed PLRF would process laminated plastics such as crisp packets and baby food pouches into the constituent components of aluminium and the plastic covering. The process would use microwave pyrolysis which, as described below, would generate a hydrocarbon oil from the plastic component which could be reused in plastics manufacturing. Aluminium would also be recovered from the process for recycling.

3.5.2 The main PLRF building would comprise a steel-framed building of circa 759m^2 gross floor area (including offices). The building would 9m in height to parapet.

There would be a gas engine emissions stack 12m in height and a flare stack 9m in height. The building would contain:

- a reception area for receiving plastic laminates;
- plastic laminate storage bays;
- a material preparation area;
- process area containing the pyrolysis unit and syngas distillation module;
- flue gas treatment facility; and
- offices, workshop, control room and welfare facilities.

3.5.3 Once fully operational the plant would process up to 2,500 tonnes of plastic laminate waste per year. Plastics will arrive at the site via bulk haulage vehicles from offsite sources (such as food manufacturing plants) or waste management facilities. It is expected there would be up to 4 deliveries of plastic laminate per week, with the same number of movements associated the export of oils and aluminium derived from the recovery process.

3.5.4 Plastics would be delivered into the building and stored within a dedicated feedstock area. The plastic would be prepared to remove any undesirable material (biomass, glass, metals, stones, non-specification plastics). It would then be shredded into flakes and fed into the pyrolysis chamber.

3.5.5 The plastic feedstock would be heated to temperatures of approximately 1,000^{o}C using microwaves. This would result in the pyrolysis of the plastics i.e. the thermal decomposition of the plastic into its constituent components in the absence of oxygen.

3.5.6 The plastic would be volatilised into a hydrocarbon gas, separating it from the aluminium. The aluminium would be removed from the chamber via a conveyor system for onward recycling. The plastic derived hydrocarbon gas would be drawn out of the chamber and cooled to produce a hydrocarbon oil. The oil would be stored within bunded tanks on site prior to export for re-use in plastics manufacturing. The lighter fractions of the hydrocarbon vapour would remain in a gaseous state and would be piped to the on-site gas engine where they would be combusted to generate electricity.

3.5.7 The electricity generated would be used in the production of microwaves and to power other elements of the plant. In this regard the operation of the facility is

self-sufficient with no requirement for any external sources of energy other than during the start-up process when electricity from the local grid would be used. Once operational the plant would run continuously other than for periods of scheduled maintenance or emergency shutdowns.

3.5.8 The facility would include an emergency flare which would be used to burn off any hydrocarbon vapours within the process, should there be a problem within the pyrolysis / distillation modules or the CHP engines.

3.5.9 The emissions associated with the CHP engines would be typical of a conventional CHP gas engine, which would comply with the relevant emissions regulations for this type of plant. The flue gas from combustion of the hydrocarbon gas will pass through a flue gas treatment system before being released to atmosphere via a 12m high stack.

3.5.10 Based on a processing capacity of 2,500 tonnes of feedstock per year it is expected that the facility would produce circa 1,500 tonnes of hydrocarbon oil and 250 tonnes of aluminium for recycling.

3.6 Hydrogen Refuelling Facility

3.6.1 The hydrogen refuelling station would be located on the northern half of Plot 9B, to the north of the PLRF. Hydrogen would be supplied to the refuelling station via a pipeline running from the Plastics to Hydrogen facility on Plot 10B. It would also be possible to supply hydrogen to the refuelling station via tanker. The refuelling station would only be used by HGVs. Whilst it is proposed that the refuelling station would be linked to the Plastics to Hydrogen facility via a pipeline the two facilities would be developed independently, with the refuelling station developed when it was commercially viable e.g. through the establishment of a hydrogen supply contract or when hydrogen vehicles become more established.

3.6.2 The refuelling station would have a capability to dispense 1,000kg per day. This would be sufficient to refuel up to 40 HGVs, assuming a 25kg tank. It is the intention for the refuelling station to predominantly serve HGVs which are already accessing Protos i.e. HGVs accessing other development plots and other nearby businesses e.g. Encirc or CF Fertilizers. As such the majority of the traffic movements associated with the refuelling station are expected to be 'internal' to the Protos development area. Nonetheless, the Transport Technical

Note which supports the application has assumed that 50% of the capacity could be used by offsite HGVs i.e. 20 HGVs per day (20 in and 20 out).

3.6.3 The refuelling station would comprise two main areas. The northern half would house a compressor unit, storage tanks and a hydrogen purification system. The southern half would provide the refuelling area for HGVs.

3.6.4 Two hydrogen dispensers, which would be similar in appearance to conventional fuel dispensing units, would be located to the south of the compressor and storage area. Refuelling HGVs would enter the eastern side of the refuelling station via Road 2 and the access road to the PLRF. Once refuelled vehicles would exit onto Marsh Lane on the western side of the refuelling station. Refuelling would be undertaken using an automated dispensing and payment system so there would be no full time operatives on site. However, the facility would employ servicing and maintenance staff.

3.7 Employment

3.7.1 Table 3.2 sets out the employment generated by each of the development components. There would be a range of different employment opportunities with a mix of skilled operatives, technical engineers, administrative staff, and manual works.

Table 3.2 – Permanent Employment

Site Element	Full Time Equivalent
MRF	20
PRF1	60
PRF2	60
PLRF	6
Hydrogen Refuelling	1
Total Jobs	**147**

3.7.2 The construction of the Proposed Development would also provide temporary employment. The numbers of operatives employed would vary throughout the construction period, with typically higher numbers involved during the internal fit out and commissioning stages. Different trades / professions would also be employed at different stages of the construction e.g. civil engineering contractors, services contractors, mechanical and electrical engineers. Table 3.3 identifies the likely peak employment numbers during the construction

period for each development component. It is also worth noting that the development is likely to be constructed on a phased basis, with different site operators / developers potentially constructing each site independently.

Table 3.3 – Construction Employment

Site Element	Peak Employment
MRF	50
PRF1	75
PRF2	100
PLRF	20
Hydrogen Refuelling	20

3.7.3 There would also be indirect employment generated by the development both during the construction and operational phases. These jobs would be associated with the supply of materials and expendable products and for servicing and maintenance of the facilities.

3.8 Vehicle Movements

3.8.1 The overarching Protos planning permission (ref. 14/02277/S73) limits the number of HGV movement permitted to access each individual development plot. This is prescribed within Condition 9 of the permission, which has been subject to a number of non-material amendments. The condition limits the overall number of daily 2-way HGV movements to the plots listed in the permission to 718 (i.e. 718 in and 718 out).

3.8.2 Table 3.4 sets out the anticipated daily HGV movements associated with the Proposed Development. The Applicant is proposing to retain the overall HGV movements at Protos at 718 per day. As such, and in order to safeguard this maximum number of movements, an application will be made to CWACC to amend Condition 9 of planning permission ref. 14/02277/S73 to re-allocate HGV movements from other development plots to provide for the movements set out in Table 3.4.

3.8.3 As such when considered cumulatively with the other existing and potential developments at Protos, the Proposed Development would not exceed the total HGV movement currently permitted under the current overarching Protos planning permission. On this basis there would be no net change in HGV impacts as a result of the Proposed Development.

3.8.4 Furthermore, it should be noted that the movements set out in Table 3.4 are based on an assumption that each facility operates independently i.e. all inputs and exports from each facility would be offsite movements. The reality, and aspiration for the Plastic Park, is that when all the facilities are developed there would be a flow of material between the different recycling and recovery plants. On this basis the total HGV movements associated with the Plastic Park would be significantly less than those set out in Table 3.4, and there would be a net benefit when compared against the currently approved Protos development.

Table 3.4 – Daily Vehicle Movements

Site Element	Material In	Material Out	Ancillary	Refuelling	Total HGV
MRF	22	14	1	-	37
PRF1	38	38	2	-	78
PRF2	18	18	0	-	36
PLRF	1	1	0		2
Hydrogen Refuelling	-	-	-	20	20

* - Two way movements i.e. 2 movements = 2 in and 2 out

** - Assumed payload of 20 tonnes for bulk HGVs and 5.5 tonnes for RCV.

*** - Assumed all deliveries to the PRF1, PRF2 and PLRF would be via bulk HGVs, and there would be an 80%/20% split between bulk HGVs and Refuse Collection Vehicles (RCVs) at the MRF.

**** - Assumed that 50% of the movements to the hydrogen refuelling would be vehicles already arriving / servicing Protos, and 50% would be from offsite.

4.0 NEED AND BENEFITS

4.1 Introduction

4.1.1 There is no Government policy that requires, as a matter of general principle, applicants to demonstrate that there is a need for their development or to describe the benefits of a proposal being developed. However, it is widely recognised that the need for, and benefits of, a particular scheme may be a material planning consideration.

4.1.2 In terms of waste policy, the approach to demonstrating need is manifest in the National Planning Policy for Waste (NPPW) (paragraph 7), which only expects a market need to be demonstrated where proposals are not consistent with an up-to-date development plan. In such cases, planning authorities should consider the extent to which the capacity of existing operational facilities would satisfy any identified need.

4.1.3 In the case of the Proposed Development, the development plan (which is considered to be up to date) consists of the:

- Cheshire West and Chester Local Plan (Part One) Strategic Polices (adopted 29th January 2015); and
- Cheshire West and Chester Local Plan (Part Two) Strategic Polices (adopted 18th July 2019).

4.1.4 The policies map that supports the Cheshire West and Chester Local Plan illustrates that the Site is covered by Policy STRAT 4 (Ellesmere Port) and ENV8 (Managing Waste) of Part One of the Plan, and Policy EP 6 (Ince Park) and Policy DM 54 of Part 2 of the Plan. These policies identify that the Site is allocated / safeguarded as a multi-modal resource recovery park for use in connection with the recycling, recovery and reprocessing of waste.

4.1.5 The Proposed Development therefore is in accordance with the planned strategic use of the Site. As demonstrated within the planning policy appraisal presented in Section 6.0 the Proposed Development is considered to accord with the Development Plan, which is deemed to be up to date.

4.1.6 Consequently, there should be no expectation in this case to demonstrate need for a waste management perspective. However, the subsequent sections within

this Chapter sets out how there is a clear need for new waste plastic recycling capacity within the UK.

4.1.7 Notwithstanding the above, where there is a clear and urgent need for, and demonstrable benefits derived from, a development; these factors can be very important material planning considerations to which significant weight can be attached. Thus, even where a planning proposal is found to cause a degree of harm, or non-conformity with the plans objectives, planning permission can still be granted where the benefits of the scheme outweigh its dis-benefits.

4.1.8 The following sections consider the need for, and benefits arising from, the Proposed Development in terms of waste management need at the national level and from a local / regional perspective. The chapter then also considers other benefits associated with the scheme.

4.2 National Waste Management Need

4.2.1 The management of plastic waste is a particularly prominent topic in current consumer thinking due to the influence of high-profile individuals, the so-called 'Blue Planet effect', and the tangibility of plastic pollution on the environment at home and abroad. Public awareness of this issue has resulted in a market pull driving manufacturers and brands to make voluntary commitments to change their use of plastics. Reflecting this heightened public awareness is also a regulatory push at EU, UK and national levels towards improving resource efficiency, recognising the value of waste and keeping resources within the economy and out of the environment. Overall, there is a shift from a linear materials usage model (take-make-use-dispose) to a circular economy model (make-use-recycle).

4.2.2 The public's conscience of the potential impacts of plastic on the environment is now such that the use of plastics in many contexts is subject to scrutiny. It is widely accepted that change is required to manage the life-cycle of plastics so as to reduce their environmental harm. Not only are there environmental benefits to managing plastic waste more efficiently, there are also economic benefits to be gained from treating waste plastics (and waste generally) as a resource.

4.2.3 The management of waste plastics and contamination which can arise from the mismanagement of plastics, is recognised as a serious global problem and is

currently a much discussed topic in the UK. Whilst domestic measures are likely to be introduced to reduce the levels of single waste plastics, there will continue to be very significant quantities of waste plastic produced within the UK.

4.2.4 As set out in the introductory chapter of this statement, the Government has estimated 2.3 million tonnes of plastic packaging waste was produced in 2017, with over half of this sent for disposal. However, estimates undertaken by other organisations put the overall figure for plastics waste much higher, with a report in 2018 commissioned by the World Wildlife Fund estimating UK plastic waste to be 5.2 million tonnes in 2018.

4.2.5 At present, UK waste plastics are typically managed by one of four routes:

- Disposal to landfill;
- Energy recovery through incineration;
- Export for reprocessing or disposal; or
- Domestic recycling / reprocessing.

4.2.6 Of these, the environmental disbenefits of landfill disposal and incineration are well understood. The clear preference is for plastic waste to be recycled. However, the UK continues to rely heavily on the export of plastics overseas for recycling. The export of plastic waste to other countries for recycling has attracted significant scrutiny in recent years. From the 1st January 2018, China, the world's biggest recycler of plastics, implemented a ban on contaminated foreign waste imports. However, exports to other countries have continued and there have been numerous reports of the UK derived waste plastics, destined for recycling, being disposed of in landfill overseas or discarded in an uncontrolled manner within the environment. Nonetheless, the UK remains heavily dependent on exporting plastic overseas for reprocessing / recycling with WRAP[1] estimating that around 680,000 tonnes of plastic packaging waste was exported from the UK in 2017.

4.2.7 The UK has very little domestic plastics recycling capacity and it is widely recognised that this must change. In December 2017, the Secretary of State for the Environment (DEFRA), Michael Gove, challenged the Waste & Resources Action Programme (WRAP) to draw up outline proposals as to how the UK could

[1] *PlasticFlow 2025 Plastic Packaging Flow Data Report, 2018, WRAP*

respond and “reduce the environmental damage” caused by plastic waste usage and disposal. In February 2018, WRAP chief executive Marcus Gover responded in an open letter with a commitment to develop work on a ‘strategy’ with other ‘stakeholders’, including councils and the recycling sector. Plans include increasing the use of recycled content in products and the urgent development of new UK capacity for the sorting and recycling of plastic.

4.2.8 The UK Plastics Pact (published by WRAP in November 2018) is a collaborative initiative to create a circular system that keeps plastic in the economy and out of the natural environment. The document contains a number of ambitious targets for 2025, including 70% of plastics packaging to be effectively recycled. Only 46% of plastic packaging was recycled in 2017, therefore, a significant increase in plastic waste recycling capacity will be required to meet this target.

4.2.9 Many companies are developing strategies to remove unnecessary or problematic plastic types from their products, use materials that are easier to recycle or reuse, and use increased quantities of recycled plastic content within their products. This is in part being driven by measures such as the Plastics Tax, which as set out in the introduction will incur a tax on plastic packaging produced in, or imported into, the UK that does not contain at least 30% recycled plastic. Unfortunately, there are concerns in the industry that the current waste management infrastructure in the UK is not capable of processing and supplying enough domestic recycled material to meet the demand that will be generated from the various legislative and policy commitments being implemented.

4.2.10 Whilst industry is striving towards delivering products with higher recyclable content, England and the UK is continuing to struggle to meet recycling targets. The Waste (England and Wales) Regulations 2011 set out obligations to achieve a 50% recycling rate for household waste by 2020 and the Government is targeting a 65% recycling rate for municipal waste by 2035. However, over the 5 year period (2015-2019) the recycling rate from households has remained pretty much static at around 44-45%. The Government has pledged to do more to increase recycling rates, and measures are proposed within the Resources and Waste Strategy and within the draft Environment Bill to try and deliver on these targets. Furthermore, it should be recognised that the figures reported do not represent ‘real’ recycling of plastics, rather they report ‘collection for recycling’ which is the current measure for recycling targets in the UK. This is

not a true measure of the quantity of waste that actually ends up as recycled product for reuse in manufacturing.

4.2.11 In order to increase current rates of collection the draft Environment Bill introduces measures to deliver the implementation of Deposit Return Schemes (DRS) and Extended Producer Responsibility (EPR) systems which will help increase the current reported recycling rates. DRS and EPR will result in more segregated plastics being collected and encourage manufacturers and producers of plastic products to deliver packaging which is easier to recycle and is clearly and consistently labelled. These measures, along with improved collection systems, are anticipated to help consumers to make the correct recycling decisions and thereby drive up recycling rates.

4.2.12 There is a clear and consistent message coming from the Government, Non Government Organisations and the commercial and industrial sectors that there is inadequate waste management infrastructure at present to deliver the levels of recovery and recycling of waste plastic needed to a) fulfil recycling targets and b) produce sufficient recycled plastic for use in the manufacture of new plastic products.

Local Need

4.2.13 Policy ENV 8 of the Cheshire West and Chester Local Plan Part 1 provides supporting text describing the waste management capacity requirements of CWACC. The Council has identified that based on existing operational facilities and currently consented but not operational facilities, there will be sufficient capacity to manage waste generated in CWACC.

4.2.14 The policy recognises that the consented capacity is concentrated in three locations, including Ince Park (Protos), setting out that together these sites would provide the borough with a large amount of recycling and treatment capacity if all were built and operational. Policy STRAT 4 recognises that Protos (Ince Park) is a regionally significant proposal for the development of the UK's largest multi-modal Resource Recovery Park.

4.2.15 Table 8.1 sets out that this future potential capacity includes for 336,800 tonnes per annum of ‘materials transfer and recycling’ and 650,000 tonnes of ‘recycling-processing’. The Proposed Development would be located on one of the sites identified to deliver the capacity identified in Table 8.1 and would

deliver recycling and recovery capacity specifically for plastics, a waste stream that is currently not specifically catered for within CWACC.

4.2.16 Whilst CWACC currently has a number of facilities which sort and separate recyclable material from mixed and residual waste streams, it does not have any facilities which reprocess recyclable plastics into an end product capable of re-use. In this regard, Table 3 of the most recent Waste Needs Assessment (December 2016) shows that less than 1% of the recyclable material recovered from CWACCs waste streams are actually sent to recycling firms within CWACC, in relation to plastic none was recycled within CWACC.

4.2.17 In addition to the policy position outlined above the Applicant has also commissioned a Market Assessment for the Proposed Development. The assessment was undertaken to create a better understanding of the way in which waste plastic is currently managed within Cheshire West and Chester and nearby authorities; and how current and emerging policy may influence the amount of plastic which could be recovered and recycled in the future.

4.2.18 The assessment considered a catchment area with an approximate 2-hour drive time from Protos. This was considered a reasonable distance from which plastic could be sourced, reflecting the regional significance of Protos. Data gathered by the Environment Agency from 2017 was analysed to understand the current plastic waste arisings within the catchment area.

4.2.19 The analysis concluded that in 2017 nearly 1.4 million tonnes per annum (tpa) of different plastic waste could be traced to the catchment area. This comprised plastics directly available as separated plastics waste (~10%), plastic waste as a fraction of comingled dry recyclables (~30%) and plastic remaining within the residual waste stream (~60%).

4.2.20 Based on this data over half a million tonnes of plastics is potentially available for recycling from source segregated plastic waste i.e. either separately collected plastic waste or plastic waste contained within comingled dry recyclables. Whilst it is positive that this volume of plastic has been separated from the residual waste stream there are very few locations within the North West which can actually process the plastic waste for reuse.

4.2.21 The analysis also highlights the significant amount of plastic which remains within the residual waste stream, identifying that approximately 800,000 tonnes

of plastic material remained within the residual waste stream, much of which could potentially be recycled or recovered and used in a more sustainable way.

4.2.22 As set out above there are numerous drivers including government policy, regulation, commercial incentives, cooperate social responsibility and social conscious which are likely to result in higher capture rates of plastic from the residual waste stream in the future. Evidence from northern Europe where DRS schemes have already been implemented suggests that capture rates for recycling of plastics, such as plastic bottles could reach close to 80%. In this regard there is likely to be increasing amounts of source segregated plastic available overtime which would need to be sorted, processed and recycled.

4.2.23 As well as providing increased recycling capacity, the Protos Plastics Park would also help contribute to improving the amount of waste plastic recovered from the residual waste stream. The Plastics Park will provide an opportunity for mixed waste plastics to be processed and segregated into two broad material streams i) plastics capable of being recycled for reuse in plastics manufacturing ii) 'residual' waste plastic which would be used to generate hydrogen or a fuel via advanced chemical recycling. The approach being promoted by the Plastics Park is less reliant on 'recyclable' plastics being segregated from 'non-recyclable' plastics by consumers (i.e. the public and businesses), at existing MRFs and at waste management sorting facilities. At present the complex and often confusing approach to plastic separation leads to a significant proportion of plastic being either left within the residual waste stream or retuned back to the residual waste stream following initial sorting and separation at MRFs. The Plastics Park concept enables a mixed plastic stream to be accepted, removing the need for separation of recyclable and non-recyclable plastics by the user/initial waste management collection system. The outcome of the Plastic Park concept is therefore threefold:

1) a greater proportion of waste plastic would be removed from the residual waste stream;

2) more plastic would be recycled reducing reliance on the production of virgin plastics; and

3) the value of residual plastic not capable of being recycled would be recovered resulting in a better environmental outcome than landfill or incineration.

4.2.24 As part of the Market Assessment future changes to the production and recovery of waste plastic have been analysed. The analysis considers the scenario of low, mid and high plastic waste production and also high, medium and low source segregation scenarios, driven by the implementation of DRS, EPR and Plastics Tax systems. The report estimates that by 2030 an estimated 750,000 – 950,000 tonnes of waste plastic is forecast to be collected for recycling either comingled or source separately segregated.

4.2.25 On the basis of this analysis there is clear need for the delivery of a greater capacity of sorting and recycling facilities within the region. The Proposed Development is required to meet current and future demands as the emerging policy and legislative commitments are implemented. These drivers will further exacerbate the already significant need for improved recycling facilities within CWACC and the surrounding authorities.

4.3 Benefits

4.3.1 Need and benefits of the development are closely aligned. The waste management need for the facility is derived from the environmental pollution and resource sustainability benefits arising from recycling. These and the other benefits of the scheme are described briefly below.

Avoiding Environmental Pollution

4.3.2 The environmental harm arising from the indiscriminate management of waste plastics has been well document in recent years. As set out above the UK is heavily dependent of exporting waste plastic for recycling overseas.

4.3.3 Despite legislative requirements stipulating that only responsible overseas re-processors are used, it is clear from media reports and NGO evidence that once the high value plastics have been sorted and sent for recycling, the remaining lower value plastic is often discarded. Unfortunately, due to less stringent waste management legislation and enforcement in some of these countries, much of the plastic is either burned in an uncontrolled way, releasing toxic and harmful pollutants into the air, or discarded on land, in rivers or directly into the sea. These practices have led to the widespread presence of plastic in the natural environment.

4.3.4 The delivery of domestic recycling facilities would help reduce the reliance on the foreign export of plastic waste for recycling and therefore help reduce the associated environmental pollution.

Resource Sustainability and Climate Change

4.3.5 The Government's Resources and Waste Strategy (set out above) identifies a goal to move towards a more circular economy.

4.3.6 WRAP describes the circular economy is *"an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life."*

4.3.7 The use of virgin materials in production has the potential to result in a number of deleterious effects. In the case of plastic manufacture this requires the drilling and extraction of oil which has the potential to result in harm and pollution to the environment. Manufacture of plastic from virgin materials also has a much higher carbon footprint than using recycled plastics. Furthermore, oil is also a finite resource, which should be used responsibly.

4.3.8 It is well recognised that climate change is one of the most significant challenges facing society at present, recognised by many Council's including Cheshire West and Chester declaring a Climate Emergency.

4.3.9 The Committee on Climate Change (CCC) released the Sixth Carbon Budget, the UK's Path to Net Zero in December 2020. This was produced following the Government's legal commitment to reaching Net Zero greenhouse gas emission by 2050 as set out in the Climate Change Act 2008 (as amended). Within the Sixth Carbon Budget the CCC highlight the importance that improving recycling rates has on the carbon impacts of the waste sector, and the need to invest in recycling infrastructure.

4.3.10 Appendix B to the Planning Statement contains a Carbon Assessment of the Proposed Development. The Carbon Assessment sets out the carbon benefits that would be associated with the delivery of each of the components of the Proposed Development.

4.3.11 The assessment considers the carbon savings associated with the reduction in the requirement for the manufacture of plastic from virgin materials, the carbon

savings associated with the recycling of other recyclable materials extracted from the MRF and carbon savings associated with the generation of energy from end of life plastics. However, it is acknowledged that the development would also give rise to carbon emissions generated from the operation and construction of the various facilities, carbon emissions from the energy generating components of the Plastic Park, and carbon emissions associated with the transport of waste and recycled materials to and from Protos. This has enabled a complete lifecycle estimate of the carbon impact of the development to be provided.

4.3.12 The findings of the assessment estimate that overall the Plastic Park[2] would give rise to a reduction in 751,995 – 216,354 tonnes of CO_2 equivalent per year compared to management of plastics via incineration or landfill respectively. In relation to the components of the Plastic Park being considered within the Proposed Development subject to this planning application the CO_2 equivalent savings equate to 685,737 – 192,146 tonnes per year compared to incineration or landfill respectively. When considered over a 25 year lifetime, including construction related emissions the Proposed Development would give rise to savings in excess of 20 million tonnes of CO_2 emissions when compared to the incineration and 5.7 million tonnes compared to landfill.

4.3.13 In this regard the Proposed Development would help contribute to the Council's strategic priority to help tackle the Climate Emergency and build a green economy:

"As well as making the Council a greener organisation, we will work with businesses and communities to ensure that our borough reduces its carbon footprint and that future generations are protected from climate change. We have a shared responsibility to act and there will be a real urgency to our response. While this is a real challenge it presents great opportunities to build a green economy, more active residents, less congestion, warmer homes, and a more efficient use of our resources."

[2] Plastics Park comprising the Proposed Development, the currently consented Plastics to Hydrogen Facility (Plot 10A), the PET Recycling Facility (Plot 13) and a potential future chemical plastics recycling facility.

Hydrogen Refuelling Infrastructure

4.3.14 If benefits to be derived from the use of hydrogen within HGVs is to be realised, both in terms of air quality and climate change, there is a need to deliver hydrogen refuelling infrastructure. At present there are no hydrogen refuelling stations within CWACC.

4.3.15 The Department for Transport published Decarbonising Transport, A Better, Greener Britain in July 2021. This report recognised the benefits of use of hydrogen as fuel but sets out that "*Progressing the UK's hydrogen economy means rapidly expanding our existing expertise, and infrastructure to create a critical mass and overcoming barriers to production and use.".*

4.3.16 The previously consented Plastics to Hydrogen facility will generate hydrogen. The hydrogen production facility would operate independently from the proposed refuelling station and would be capable of supplying hydrogen to offsite locations. However, the vision (and the most sustainable option) would be for the hydrogen generated at Protos to be used by HGVs serving Protos or the nearby industrial businesses. To do this a hydrogen refuelling station would be required at Protos. In this regard the proposed refuelling station would represent another step in delivering a circular economy approach to managing waste at Protos, whilst helping to improve air quality and reduce the carbon impact of HGV transport within Cheshire West and Chester.

Socio Economic

4.3.17 An Economic Impact and Social Value Assessment has been commissioned by the Applicant for the Protos Plastic Park (Appendix C).

4.3.18 The report has been prepared to demonstrate the employment and Gross Value Added (GVA)[3] benefits associated with the both the construction and operation of the Plastic Park. The report also provides an assessment of Social Value of the construction phase, as well as the wider benefits arising from potential carbon savings and natural capital impacts value resulting from the operation of the Proposed Development.

[3] GVA is a measure of the economic value of goods and services produced in an area. It is defined by the Office for National Statistics (ONS) as "…the difference between the value of goods and services produced and the cost of raw materials and other inputs which are used up in production."

4.3.19 The assessment recognises that the Proposed Development is strongly aligned to strategic drivers aligned with government policy at a national and local level, including:

- Net Zero Targets
- Clean Growth Strategy
- Low Carbon Manufacturing
- Covid-19 Recovery

4.3.20 The Proposed Development would make an important contribution to meeting the environmental and socio-economic benefits which these key policy areas are seeking to deliver.

4.3.21 Whilst Cheshire West & Chester local authority as a whole performs strongly against the regional and national socio-economic benchmarks, the areas around Elton and Ellesmere Port are mostly ranked in the 30% most deprived parts of England. The Proposed Development would support a range of labour market opportunities at various skill levels. The analysis indicates that these jobs would provide additional employment opportunities for the population located close to Proposed Development.

4.3.22 In relation to job creation, the Proposed Development is anticipated to create 147 direct full time equivalent positions, generating an annual Gross Value Added (GVA[4]) figure of £8.5m. The development would also be expected to create an additional 88 jobs in the local area, generating £5 million in net additional GVA. These jobs would be created as an indirect consequence of the development e.g. servicing and maintenance, supply chain, increased spending in the local economy.

4.3.23 Jobs would also be created during the construction phase. Potential peak construction employment is set out in Table 3.3. above. However, Appendix C calculates the total of jobs likely to be supported based on the expected level of construction expenditure. These figures are based on the assumption that one person year of employment will be supported by £246,000 of expenditure and that that ten person years of employment is broadly equivalent to a permanent

[4] GVA is a measure of the economic value of goods and services produced in an area. It is defined by the Office for National Statistics (ONS) as "…the difference between the value of goods and services produced and the cost of raw materials and other inputs which are used up in production."

job. On this basis it is estimated that construction of the Proposed Development would result in the equivalent of 58 full time equivalent jobs being created, delivering a GVA of £27 million. As with permanent employment, the construction phase would also generate indirect employment. It is estimated that the construction of the Proposed Development would create an additional indirect 34 full time equivalent jobs, generating £16.1 million of GVA.

4.3.24 The Proposed Development would also give rise to business rate receipts. Based on the current development proposals the various components of the Proposed Development would generate a total annual business rate income of over £1M.

4.3.25 Other Socio-Economic benefits of the Proposed Development have also been identified:

- Sectoral economic benefits – the Proposed Development would bring positive innovation and productivity effects that will help provide new solutions to waste management and energy production. The Proposed Development would provide linkages to other environmental, science research and energy projects within the vicinity of Protos and the Cheshire Science Corridor Enterprise Zone such as Thornton Science Park, Birchwood, Hooton Park, Hynet, and the Ellesmere Port sites.
- Innovation and Skills - The first Plastic Park of this kind at Protos will set a blueprint for the rest of the UK, revolutionising the way that plastic waste is currently handled. This will help provide innovation and Research and Development opportunities which will help enhance the UKs waste management sector and help deliver on Net Zero. The development of the Plastics Park also presents opportunities though linkages to education institutions.
- Social value - creating local skills and employment; supporting responsible business; enabling healthier, safer and more resilient communities; and safeguarding the environment and responding to the climate emergency.
- Community interventions - Peel NRE contribute substantial funds to a Community Benefit Fund which is managed by a sub-group of the community forum to deliver local interventions[5]. For example, Peel

[5] *https://www.protos.co.uk/community*

NRE's funds have designed and erected wayfinding and information signage in the ecology area (Goldfinch Meadows) to help members of the public enjoy and use the space, and worked with the local primary school and employed CWT's educational outreach team to facilitate a half days activities with the pupils. These interventions will continue as Protos is further developed.

4.3.26 The economic impact and social value assessment report has highlighted that the delivery of proposals for the Plastic Park would lead to several important benefits at the local, regional and national level.

4.3.27 The Proposed Development will deliver a substantial number of employment opportunities throughout the construction and operational phases, both directly and indirectly. It would also make a significant contribution to GVA and would generate over £1M of business rates per annum.

4.3.28 The Proposed Development would also offer other socio-economic benefits thought integration with other waste, energy and science businesses in the area, increasing innovation and skills within CWACC, delivering social value and contributing to the Applicant's current suite of community interventions.

Conclusion

4.3.29 There is no Government policy that requires, as a matter of general principle, applicants to demonstrate that there is a need for their development. However, it is widely recognised that the need for a particular scheme may be a material planning consideration.

4.3.30 It is evidently the case that the UK needs significantly more domestic plastic recycling / recovery capacity to divert waste from landfill, to reduce the need to ship plastic waste overseas for management, decrease the amount of plastic waste polluting the environment and reduce the climate change impacts arising from manufacture of virgin plastics. As such, there is a demonstrable need for the Proposed Development.

4.3.31 This section has set out that there are a number of significant environmental, economic and social benefits that would be delivered by the Proposed Development. The need for the facility and the benefits it offers should be afforded very substantial positive weight in the overall planning balance.

5.0 ENVIRONMENTAL APPRAISAL

5.1.1 A series of environmental assessments have been undertaken to support the planning application. An Environmental Statement (ES) which has been prepared in accordance with the Town and Country Planning (England) Environmental Impact Assessment Regulations 2017.

5.1.2 The ES provides a detailed assessment of the following matters:

- Landscape and Visual Effects
- Ecology and Nature Conservation
- Air Quality

5.1.3 For those subject areas which were not deemed to have the potential to result in likely significant environmental effects (i.e. 'scoped out' of the EIA) but nonetheless were considered to be relevant to the determination of the application, a series of standalone environmental assessments have been undertaken and are provided as appendices to this planning statement:

- Noise (Appendix D)
- Traffic and Transport (Appendix E)
- Arboricultural Assessment (Appendix F)
- Surface Water Management and Flood Risk Assessment (Appendix G)
- Ground Conditions (Appendix H)

5.1.4 The findings of the above assessment work is summarised in the following sections.

5.2 Landscape and Visual Effects

5.2.1 Chapter 5.0 of the ES, together with the supporting Figures and Appendices, sets out an assessment of the likely significant landscape and visual effects of the Proposed Development.

5.2.2 A Landscape and Visual Impact Assessment (LVIA) has been undertaken which follows best practice guidance set out in *Guidelines for Landscape and Visual Impact Assessment.*

5.2.3 The LVIA follows a standard approach, namely:

- The establishment of the baseline conditions, against which the effects of the proposed development will be assessed;
- The determination of the nature of the receptor likely to be affected, i.e. its sensitivity;
- The prediction of the nature of the effect likely to occur, i.e. the magnitude of change; and
- An assessment of whether a likely significant effect would occur upon any receptor, by considering the predicted magnitude of change together with the sensitivity of the receptor, taking into account any proposed mitigation measures.

5.2.4 To assist with the LVIA a detailed assessment of visual effects from eleven viewpoints has been undertaken. The locations of the viewpoints were agreed with CWACC and are located within the 2.5km study area, with the exception of one located in Helsby & Frodsham Hills Area of Special County Value located approximately 2.6km from the Site.

5.2.5 The buildings proposed in each plot would be well designed and would be contemporary in style and clad in recessive colours. The accompanying landscape proposals would include new woodland planting, new hedgerows, new specimen trees, and new areas of wildflower grassland. Internally, each plot would include amenity areas intended to benefit both staff and biodiversity.

5.2.6 The location of the Proposed Development is such that a combination of existing large scale industrial development and mature tree cover would provide very effective screening of the new buildings from many locations. The Encirc facility to the south-west, CF Fertilisers to the south-east, and the Biomass Plant to the east are all much larger in scale than any of the new buildings. Construction is underway on a new Energy from Waste facility to the north of the Biomass plant, which would also be considerably larger than the new buildings. Tall tree belts are present along Grinsome Road to the west of the Site, to the south of the Site, along the southern perimeter of CF Fertilisers to the south-east, and along the nearby railway and M56 motorway corridors. These all combine to greatly limit the influence that the Proposed Development would have over its surroundings.

5.2.7 From a very short section of National Cycle Route 5 (also a public right of way) that runs through the Protos site adjacent to the four development plots the new

buildings would be clearly visible at close range. This would appreciably increase the influence of development upon the view. However, people passing through are likely to expect the presence of development, given the context of the surrounding existing contemporary buildings and structures and ongoing construction activity. As such, effects would not be significant.

5.2.8 From elsewhere, the influence of large scale industrial development upon this part of the Mersey Estuary is well established and the introduction of the Proposed Development would not change this. The Proposed Development would reflect the ongoing development of the wider Protos site, reflecting the transition to a more sustainable, 'circular' approach to waste management. Effects upon the character of the wider landscape and upon views across the landscape would not be significant.

5.3 Ecology

5.3.1 Chapter 6.0 of the ES, together with the supporting Figures and Appendices, sets out an assessment of the likely significant effects of the Proposed Development upon ecology and nature conservation assets at the Site and within the surrounding area.

5.3.2 The ecological baseline at the Site has been characterised by completing an extended Phase 1 habitat survey, a desktop study and a suite of protected species surveys for reptiles, bats, water vole, otter and badger. Dispersion and deposition modelling undertaken as part of the Air Quality assessment allowed consideration of effects on sensitive ecological receptors in a wider context, including European designated sites.

5.3.3 The Site's importance in relation to ecology and nature conservation has been assessed using the best practice guidelines produced by the Chartered Institute for Ecology and Environmental Management (CIEEM)[6] and by the application of professional judgement.

5.3.4 Sensitive ecological features identified on the Site or within the area that could be affected by the project include the Internationally / Nationally important Mersey Estuary SSSI, SPA and Ramsar site; the Regionally important

[6] *CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute for Ecology and Environmental Management, Winchester.*

Frodsham, Helsby and Ince Marshes LWS; habitats of Local Level importance including wet ditches; and species of Local Level importance including European eel, bats and water vole. Himalayan balsam is also present on the site.

5.3.5 In the absence of mitigation, there is potential for significant impacts resulting from the spread of Himalayan balsam, an invasive plant, during the construction and operational phases of the Proposed Development. Following the application of mitigation, including an appropriate control / eradication strategy and adherence biosecurity protocol during construction, no significant residual effects are predicted.

5.3.6 Whilst not deemed to be significant, there is the potential for adverse impacts on the ecological receptors during the construction and operational phases of the Proposed Development.

5.3.7 As such a series of mitigation measures have been proposed which include:

- measures to avoid harm to European eel, amphibians and badger;
- appropriate vegetation clearance timings for breeding birds;
- precautionary tree-felling methodology and an appropriate lighting strategy for bats;
- capture and translocation of water voles, and the creation of non-development buffers around wet ditches for water vole;
- delivery of a net gain in water vole habitat, via creation of new habitats or enhancement of existing habitats; and
- standard working methods and good practice measures (such as pollution prevention and dust suppression measures) – all of which will be controlled through a CEMP – no significant residual effects are predicted.

5.3.8 In addition to the above mitigation, it should be recognised that the First Phase of the Protos development included the creation of two new ecological areas. These have been developed specifically to mitigate the ecological effects of development within Phase 1 of the wider Protos development, which includes the area now being proposed for the Plastics Park.

5.3.9 Following the implementation of the recommended mitigation measures and enhancements described above no significant residual effects are anticipated

to result from the construction or operational phases of the Proposed Development.

5.4 Air Quality

5.4.1 Chapter 7.0 of the ES, together with the supporting Figures and Appendices, sets out an assessment of the likely significant effects of the Proposed Development upon air quality, odour and human health.

5.4.2 During construction there is the potential for dust to be generated from earthworks and movement of plant and machinery. Mitigation measures have been recommended in accordance with best practice guidance, including implementation of a CEMP incorporating a dust management plan. Following implementation of these measures the residual effects are not likely to be significant.

5.4.3 Detailed modelling of the emissions from the PLRF have been undertaken. This modelling includes a series of assumptions that ensures a highly conservative assessment.

5.4.4 The assessment concluded that the effect of process emissions on human health and ecological receptors would not be significant, including effects on the Mersey Estuary SPA, SSSI and Ramsar site.

5.4.5 An assessment of the potential for impacts from dust and odour during operation has been undertaken and has shown that these impacts would not be significant.

5.4.6 Cumulative effects with other emissions sources at Protos has also been assessed. This assessment concluded that there is no risk of significant cumulative effects occurring.

5.5 Noise

5.5.1 A Noise Assessment has been completed and is provided at Appendix D. The Noise Assessment follows BS4142: 2014+A1:2019 ‘Methods for Rating and Assessment industrial and Commercial Sound’. Contemporary baseline noise monitoring has been used to establish representative background sound levels at the nearest sensitive receptors.

5.5.2 Site operational noise has been calculated using empirical noise data and advice on noise levels from the technology providers for the facility. The assessment has used ISO9613-2 prediction methodology and CadnaA noise modelling software for producing noise contours of the highest likely generated noise with all plant operating.

5.5.3 Predicted noise levels are well within the planning consent noise condition limits set out in condition 34 of the Protos Development and also comply with the requirements of BS4142: 2014. Absolute noise levels are shown to be well below sleep disturbance criteria according to WHO guidelines and well below internal room design criteria according to BS8233: 2014.

5.5.4 The assessment therefore concludes that operating the Proposed Development would be acceptable and within all relevant guidance and standards for noise.

5.5.5 Based on the Noise Policy Statement for England concept to the assessment of noise, it is likely that the Proposed Development at residential receptors would indicate a 'No Observed Adverse Effect' (NOAEL). This is the level above which noise can be heard but does not cause any change in behaviour or attitude.

5.5.6 An assessment of construction noise has also been conducted in accordance with BS5228-1: 2009+A1:2014 'Code of practice for noise control on construction and open sites'. This has shown that during the construction period noise levels at residential receptors would be well within threshold levels. Nonetheless, a number of measures have bene proposed which would help to reduce construction phase noise impacts.

5.6 Transportation

5.6.1 A Highways Technical Note (HTN) has been prepared and is provided at Appendix E. The HTN considers the highways and transport implications of the Proposed Development.

5.6.2 It is anticipated that the Proposed Development would generate the following maximum two-way HGV movements per day[7]:

[7] *As per the May 2014 Transport Statement work that defined the figures in planning condition 9 of the main Protos permission, in this context a single 2-way movement is defined as '1 in and 1 out'.*

- Plot 9B – 4 Cars and 22 HGV's,
- Plot 10A – 13 Cars and 37 HGV's,
- Plot 11 – 40 Cars and 78 HGVs, and
- Plot 12 – 40 Cars and 36 HGV's.

5.6.3 The operative overarching Protos planning permission 14/02227/S73, includes a planning condition which restricts the number of HGVs which can access Protos to 718 per day.

5.6.4 The HTN reviews the current allocation of HGV movements across Protos and demonstrates that the operation of the Proposed Development would not result in an increase in HGV numbers above those currently permitted.

5.6.5 In order to ensure that the overall cap of HGV movements across Protos is not exceeded an application to make a non-material variation to the Protos planning permission (14/02227/S73) is being made in parallel with this planning application. The application would amend the allocation of HGV movements on the various development plots, limiting the movements on Plot 9B, 10A, 11 and 12 to the above numbers. HGV movements would then be reduced on other development plots accordingly to ensure the total number of HGV movements across Protos continues to be limited to 718/day.

5.6.6 Similarity, if the Council grant planning permission for the Proposed Development a condition would be attached the permission limiting the number of HGV movements to the figures set out above. The consequence of this is that the Proposed Development would ensure that the overall HGV movement at Protos does not increase if planning permission was granted.

5.6.7 In relation to car movements the plots proposed for development had provision for a total of 515 car parking spaces in the original Protos planning permission ref. 14/02277/S73. The current proposal has reduced car parking numbers to 110 spaces. As such it is anticipated there would be a reduction in overall vehicle movements when compared to the previously consented developments on these plots.

5.6.8 On the basis of the above the impact of HGV movements would be neutral and there would be a reduction in the number of car movements as a result of the Proposed Development when compared to the currently approved use.

5.6.9 Furthermore, it should be noted that the HGV movements set out above are based on an assumption that each facility operates independently i.e. all inputs and exports from each facility would be offsite movements. The reality, and aspiration for the Plastic Park, is that when all the facilities are developed there would be a flow of material between the different recycling and recovery plants. On this basis the total HGV movements associated with the Plastic Park have the potential to be less.

5.6.10 As such it is concluded that the Proposed Development would not generate impacts that would cause an unacceptable impact on the highway safety or severe residual cumulative impacts on the highway network.

5.7 Arboricultural

5.7.1 An Arboricultural Impact Assessment has been completed and is provided at Appendix F.

5.7.2 A survey of the trees within and adjacent to the development areas has been undertaken. Ten individual trees, 6 groups (including sections of groups) and 2 hedges would need to be removed to facilitate the proposal. This includes 1 Category B, 18 category C and 3 category U trees.

5.7.3 None of the trees to be removed are covered by Tree Preservation Orders. The vast majority of the trees to be removed would also have been lost as a result of the previously approved development.

5.7.4 A series of measures are proposed including fencing and pollarding to retain as many existing trees as possible. A substantial landscaping scheme is proposed which would replace lost trees, see drawing number 2879-01-01.

5.8 Flood Risk

5.8.1 Protos has been subject to a number of site wide Flood Risk Assessments, including the Protos Surface Water Management Plan 2018 update, which was submitted to and approved by CWACC in December 2018 pursuant to Condition 23 of planning permission 14/02277/S73 (‘the 2018 SWMP’). The report has been updated to accompany this planning application and is provided at Appendix G.

5.8.2 The updated report reflects the changes to the design of Protos since 2018, including the proposed Plastics Park. The surface water design has been reviewed in light of changes to flood mapping and climate change allowances since the original report was undertaken.

5.8.3 The Site lies in an area classified as Flood Zone 1 (low risk of flooding) and Flood Zone 3a (zone benefiting from flood defences). The update has not identified the need for changes to the proposed storage volumes required for attenuation or the discharge rates provided in the 2018 SWMP, in particular:

- The proposed discharge rate has been reduced or maintained at the existing greenfield runoff rate, so that development will not have a surface water impact or flooding implications to the surrounding areas.
- It is concluded that flooding is unlikely to occur as a result of development for events up to 1 in 100 year plus an allowance for climate change.
- Proposed ponds and ditches will have more than enough storage volume to accommodate surface water generated from the proposed hardstanding area in extreme events.

5.8.4 The report confirms that the ground levels and finished floor levels previously agreed with the Environment Agency, which have been subject to planning conditions on earlier permissions, are still sufficient. This requires floor levels to be set at a minimum of 5.063m AOD and access roads set no lower than 4.763m AOD.

5.8.5 The detailed surface water management plan involves the enhancement of existing ditches and the use of the five ecological mitigation areas proposed as part of Protos to function as either flood compensation areas, surface water attenuation or both.

5.9 Ground Conditions

5.9.1 A Stage 1 Geo-Environmental Assessment has been undertaken and is provided at Appendix H.

5.9.2 The assessment comprises a review of third-party information on the environmental setting of the Site and the Site's previous and current uses with

respect to potential risks to the environment or human health from ground conditions.

5.9.3 Historical mapping indicates that the various development plots have remained largely unchanged throughout their mapped history originally forming parts of agricultural fields. The only noted developments of any significance are the construction of roads on Plots 9B, 11 and 12 prior to 1984 and the more recent use of parts of Plots 9B, 11 and 12 as developer's compounds and the use of the western half of Plot 11 as a natural gas exploration compound. It is considered unlikely that the made ground noted in these areas will contain significant contaminant concentrations as they appear to comprise solely of placed aggregate and hardstanding.

5.9.4 The surrounding land is of mixed agricultural and industrial use with a network of surface drains present, typically forming the boundaries of the neighbouring fields. The proposed industrial use of the Site is considered to be of low / moderate sensitivity. Considering the nature of the Proposed Development, the history of the Sites and the potential contaminants identified, the risks to human health are low but not negligible.

5.9.5 It is recommended that a site investigation is carried out across the Site to determine the composition and chemistry of made ground soils present, although this is anticipated to be limited to the areas where surface deposits are currently present. The findings of the investigations would be used to inform the remedial requirements with regards to contamination, including mitigation measures required during the construction works and to be incorporated within the built development. It is considered that this investigation could be subject to a suitably worded planning condition.

5.9.6 The decommissioning of the former exploratory natural gas well located within Plot 11 would be required prior to any construction works. It is understood that the well is currently capped but is due to undergo formal decommissioning.

5.10 Cultural Heritage

5.10.1 The nearest designated heritage feature is 1km to the north west at Holme Farm, a Grade II listed building. Other designated heritage features are located within Ince and Elton circa 1.25km from the Site. Based on the distance to these heritage assets, the likely visibility of the development and the nature of the

existing setting, which includes extensive visible industrial development, it is concluded that there would be no indirect effects on the setting of these heritage assets.

5.10.2 The development would be located on Plots which have not been previously developed with the exception of the eastern half of Plot 11 which has been subject to development as natural gas exploration compound and Plot 9B which has been used as a contractors compound.

5.10.3 Archaeological mitigation plans agreed through consultation with the Cheshire Archaeological Planning Advisory Service (CAPAS) are in place for Protos, with most of the mitigation (required by the relevant conditions of the extant planning permissions) in the form of a metal detecting survey, investigation of the former site of Grinsome Farm, and palaeoenvironmental assessment of peat cores already having been carried out and reports submitted to CAPAS. Remaining required mitigation includes retrospective archaeological watching briefs at areas of new/widening of existing drainage ditches, and the ongoing protection of a sluice gate throughout any construction works.

5.10.4 On this basis there is considered unlikely to be any direct effects on buried heritage assets.

6.0 PLANNING POLICY CONTEXT AND APPRAISAL

6.1 Policy Context – Overview

6.1.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 and Section 70(2) of The Town and Country Planning Act 1990 require that applications for planning permission should be determined in accordance with the development plan unless material considerations indicate otherwise.

6.1.2 The Proposed Development is located within the administrative area of Cheshire West and Chester Council. In the case of the Proposed Development, the statutory development plan comprises the following documents:

- Cheshire West and Chester Local Plan (Part One) Strategic Polices (adopted 29th January 2015);
- Cheshire West and Chester Local Plan (Part Two) Strategic Polices (adopted 18th July 2019).

6.1.3 Cheshire West and Chester Council have also adopted a number of Supplementary Planning Documents (SPDs). These are intended to expand on policy or provide further details to policies, but do not have the same status as the development plan. The SPDs considered of relevance to the Proposed Development are Travel Planning Guidance and Parking Standards.

6.2 The Statutory Development Plan

6.2.1 The Proposed Development has been assessed against the key relevant policies contained in the Development Plan. Pre-application advice provided by the council highlighted the polices of most relevance to the development as:

- Cheshire West and Chester Local Plan (Part One) Strategic Polices (adopted 29th January 2015);
    - Policy STRAT 1 – Sustainable Development
    - Policy STRAT 2 - Strategic Development
    - Policy STRAT 4 – Ellesmere Port
    - Policy STRAT 10 – Transport and Accessibility
    - Policy SOC5 – Health and Well-being
    - Policy ENV1 Flood Risk and Water Management
    - Policy ENV2 Landscape

- Policy ENV4 Biodiversity and Geodiversity
- Policy ENV 6 High Quality Design and Sustainable Construction
- Policy ENV 8 – Managing Waste
- Policy ECON1 - Economic growth, employment and enterprise

- Cheshire West and Chester Local Plan (Part Two) Land Allocations and Detailed Policies;
  - Policy EP 6 – Ince Park;
  - Policy DM3 – Design Character and Visual Amenity
  - Policy DM4 – Sustainable Construction
  - Policy DM32 – Land contamination and instability
  - Policy DM 54 - Waste management facilities
  - Policy DM 30 - Noise
  - Policy DM 34 – Development in the vicinity of hazardous installations
  - Policy DM40 – Development and Flood Risk
  - Policy DM 41 – Sustainable Drainage Systems
  - Policy DM 44 – Natural Environment.

6.2.2 An assessment of the Proposed Development against these key policies is provided below.

Cheshire West and Chester Local Plan (Part One)

STRAT 1 – Sustainable Development

6.2.3 Policy STRAT 1 reflects the presumption in favour of sustainable development as set out in the Framework. It looks to support development that improves and meets the economic, social and environmental objectives of the borough. It states that proposals which are in accordance with the relevant policies in the Plan, and which support sustainable development principles, will be approved. The policy sets out a framework of locally specific sustainability principles which provide the basis on which other policies within the Plan will shape the borough over the plan period.

6.2.4 It demonstrates the importance the Council places on reducing the emission of greenhouse gases, in that the first bullet seeks to ensure that developments mitigate and adapt to the effects of climate change. The Proposed

Development would help reduce greenhouse gas emissions through the recycling of plastics. Appendix B provides a Carbon Assessment. The findings of the assessment estimate that the CO_2 equivalent savings of the Proposed Development equate to 685,737 – 192,146 tonnes per year compared to incineration or landfill respectively. When considered over a 25 year lifetime, including construction related emissions the Proposed Development would give rise to savings in excess of 20 million tonnes of CO_2 emissions when compared to the incineration and 5.7 million tonnes compared to landfill.

6.2.5 The other sustainable development principles set out in the policy include locating developments in appropriate locations to support employment and the protection, enhancement and improvement of the natural and historic environment.

6.2.6 The Proposed Development is located on Protos which is specifically allocated for the delivery of a development of the type being proposed. A series of environmental assessments have been conducted, including an EIA which demonstrates that the proposals would not result in any significant environmental effects. Protos includes the provision of large areas of habitat enhancement and additional habitat creation and landscaping is proposed as part of this development.

6.2.7 The final sustainable development principles set out in Policy STRAT 1 is that development should ensure prudent use of natural finite resources, promoting the re-use, recovery and recycling of materials. This is the core purpose of the Proposed Development i.e. to deliver increased recycling capacity for waste plastic in Cheshire West and Chester and in the wider region.

6.2.8 It is on this basis that the Proposed Development is considered to comply with the principles of Policy STRAT1.

STRAT 2 - Strategic Development

6.2.9 Policy STRAT 2 (Strategic Development) sets out the levels and locations of new development to meet future needs and the essential infrastructure to support this growth. It requires 22,000 new dwellings and 365 hectares of land for employment related development over the period 2010 to 2030, delivered in line with a settlement hierarchy which directs the majority of development to the main towns of Chester, Ellesmere Port, Northwich and Winsford. The policy

confirms that, to deliver the levels of development outlined a number of key sites have been identified within the Local Plan, and further sites will be identified through the Local Plan (Part Two) and/or Neighbourhood Plans. The Proposed Development is located within one of the sequentially preferable towns (Ellesmere Port) and would contribute to achieving the delivery of the targeted employment development.

STRAT 4 – Ellesmere Port

6.2.10 Policy STRAT 4 supports ongoing employment growth in Ellesmere Port. STRAT 4 sets out the Council's view that "development in Ellesmere Port has the potential to deliver substantial economic growth through the availability of significant sites for industrial, manufacturing and distribution purposes".

6.2.11 The Council's strategy to facilitate the development of land for employment uses in this area is also confirmed in the policy. The explanatory text to the policy identifies the potential for continued investment by existing businesses and new developments in specific growth sectors of the economy and identifies waste management specifically. The Site is located within Key Site C Ince Park, described within the policy.

6.2.12 The Proposed Development site is located within an area considered to be highly appropriate as Protos is specifically intended for the development of waste management solutions that help to recover value from residual waste, in accordance with the description of Key Site C.

6.2.13 In light of the above, the Proposed Development is supported by Policy STRAT 4.

STRAT 10 – Transport and Accessibility

6.2.14 STRAT 10 seeks to ensure that new development comes forward which supports the use of sustainable travel modes and that traffic from developments can be accommodated safely within the existing, or proposed, highway network.

6.2.15 A Highway Technical Note (Appendix E) has been produced to support the application. This demonstrates that the operation of the Proposed Development would not result in an increase in HGV numbers above those currently permitted to access the Protos development. It is envisaged that HGV movements associated with the Proposed Development would be subject to a planning

condition, tying the development to the HGV movement restrictions associated with the wider Protos development. Furthermore, the aspiration for the Plastic Park is that when all the facilities are developed there would be a flow of material between the different recycling and recovery plants. On this basis the total HGV movements associated with the Plastic Park have the potential to reduce overtime, reducing the traffic impact resulting from the wider Protos development.

6.2.16 The parking provisions at the facilities have been designed to meet the anticipated employment demand. Cycle parking has also been provided and it is anticipated that a Travel Plan would need to be delivered for each of the proposed facilities, in line with the wider Protos Travel Plan, to encourage and facilitate sustainable travel to the Site.

6.2.17 The Protos development includes for the development of a canal berth which can be used to transport products to and from the Site. The Proposed Development would be linked to this berth via the internal Protos access roads.

6.2.18 On this basis it is considered that the Proposed Development meets with the principles of STRAT 10.

SOC5 – Health and Well-being

6.2.19 Policy SOC 5 is split into two parts. The first limb of the policy supports development that delivers opportunities for, and delivers improvements to, the communities health and well-being. Many of the elements listed are not directly relevant to the Proposed Development. However, the development has been designed to link into the existing footpath and cycle links which exist at Protos. The development would also help to reduce poverty and deprivation across the borough by providing a significant number of jobs and contributing to the local economy as is demonstrated within the Economic Impact and Social Value Assessment (Appendix C) which supports the application.

6.2.20 The second limb of the policy looks to prevent development that will give rise to significant harm on health and quality of life. As demonstrated within the EIA and the environmental assessments that support the application, the Proposed Development would not give rise to significant harm on health or quality of life, in accordance with the second limb of the policy. The Proposed Development

would continue to support staff access to the site via walking and cycling through the provision of safe access arrangements and appropriate welfare facilities.

ENV1 Flood Risk and Water Management

6.2.21 Policy ENV 1 'Flood Risk and Water Management' seeks to reduce flood risk by directing new development to areas at the lowest risk of flooding and implementing Sustainable Drainage Systems (SuDS).

6.2.22 The Proposed Development is located partially in Flood Zone 1 and partially in Flood Zone 3a.

6.2.23 As set out in Section 5.0 a Flood Risk Assessment and Surface Water Management Plan has been conducted for the wider Protos development which encompasses the Proposed Development (Appendix G). The assessment builds on the Protos, Surface Water Management Plan 2018 update, which was submitted to, and approved by CWACC in December 2018 pursuant to Condition 23 of the wider Protos permission.

6.2.24 The report recommends minimum finished floor levels for buildings of 5.063m AOD and access roads to be set at no lower than 4.763m AOD. The development platform for the Site would be set above these levels.

6.2.25 A Sustainable Drainage Scheme (SUDS) has been designed and implemented to provide for all of the development within Phase 1 of the Protos Development, which includes the Proposed Development. This scheme has previously been approved by the Council and takes into account surface water runoff generated from the plots subject to this application.

6.2.26 It is therefore considered that the Proposed Development accords with Policy ENV 1.

ENV2 Landscape

6.2.27 Policy ENV 2 'Landscape' seeks to protect, and wherever possible, enhance landscape character and local distinctiveness. Development should take full account of the characteristics of the development site and its relationship with its surroundings, and recognise, retain and incorporate features of landscape quality into the design.

6.2.28 The Proposed Development is located within the allocated site of Protos, on plots which were previously granted planning permission for development. As set out in Section 5.2 a LVIA has been undertaken and forms part of the ES submitted with the application. A Design Evolution Statement has also been produced which explains the approach adopted to the design of the facility.

6.2.29 The buildings proposed would be well designed and would be contemporary in style and clad in recessive colours to deliver a positive design statement for visitors and the public that may travel through or close to the site. The accompanying landscape proposals would include new woodland planting, new hedgerows, new specimen trees, and new areas of wildflower grassland. Internally, each plot would include amenity areas intended to benefit both staff and biodiversity.

6.2.30 The location of the Proposed Development is such that a combination of existing large scale industrial development and mature tree cover would provide very effective screening of the new buildings from many locations. The influence of large scale industrial development upon this part of the Mersey Estuary is well established and the introduction of the Proposed Development would not change this. The Proposed Development would reflect the ongoing development of the wider Protos site, reflecting the transition to a more sustainable, 'circular' approach to waste management. Effects upon the character of the wider landscape and upon views across the landscape would not be significant.

6.2.31 On this basis the Proposed Development is considered to accord with Policy ENV 2.

ENV 4 Biodiversity and Geodiversity

6.2.32 Policy ENV 4 'Biodiversity and Geodiversity' seeks to safeguard and enhance biodiversity through the identification and protection of sites and features of international, national and local importance. Development should not result in any net loss of natural assets, and should seek to provide net gains.

6.2.33 As set out in Section 5.3 an ecological impact assessment has been undertaken and forms part of the ES submitted with the application. The plots proposed for development are of limited ecological value. However, the assessment did identify the use of the Site by foraging bats and water vole were found to be

present within some of the ditches which would be affected by the development proposals.

6.2.34 Whilst the development would result in loss of some habitats these impacts are not considered significant, particularly in light of the mitigation proposed and already underway as part of the wider Protos development. An assessment of indirect impacts on nearby sensitive habitats, including the designed Mersey Estuary SSSI, SPA and Ramsar site was undertaken. This included consideration of air emissions from the PLRF. The assessment concluded that the emissions from the facility would not result in a significant effect on the integrity of the protected sites.

6.2.35 The ecological assessment sets out a series of mitigation measures which would be adopted to reduce effects on habitats and species. Most of these measures relate to the adoption of best practice during construction such as pre-commencement surveys, avoiding vegetation clearance during bird breeding periods, soft felling of trees with low potential for roosting bats, application of pollution prevention and dust suppression measures, and providing adequate buffers around sensitive ecological features such as ditches.

6.2.36 There would be a requirement for the exclusion and translocation of water voles to facilitate the development which would be undertaken under a Protected Species Licence and would involve the translation of water voles to the existing habitat mitigation areas within Protos. The diverted ditches would be engineered and planted to provide water vole habitat following completion of the works. Enhancement would also be provided though the planting of tress and other vegetation which would provide habitat for birds, invertebrates and bats, and the installation of bird and bat boxes. As set out above, it should also be recognised that a number of ecological mitigation areas have been developed as part of the delivery of the wider Protos scheme, and these continue to be managed for biodiversity benefit. The current mitigation areas were provided specifically for development of the ‘Phase 1’ plots which include Plots 9B, 10A, 11 and 12 which are the subject of this application.

6.2.37 Appendix 6.2 of the ES provides a report ‘Information to Inform a Habitat Regulations Assessment’. This report considers the potential effect of the Proposed Development on the Mersey Estuary SPA and SSSI. The only possible likely effect has been determined to be associated with water pollution

during the construction phase. As such a series of best practice mitigation measures are proposed. Following implementation of these measures no effects on designated ecological sites are likely.

6.2.38 On this basis the Proposed Development is considered to accord with Policy ENV 4.

Policy ENV 6 'High Quality Design and Sustainable Construction'

6.2.39 Policy ENV 6 'High Quality Design and Sustainable Construction' promotes sustainable, high quality design and construction. The policy sets out a number of points which development should achieve, where appropriate.

6.2.40 Within the local setting there are a number of existing large scale, industrial developments including the Encirc glass manufacturing plant, C F Fertilisers and the biomass plant.

6.2.41 A Design Evolution Statement has been submitted in support of the application. This document sets out the design approach adopted for the various buildings proposed. The development has been designed cognisant of the other development across Protos and the fact that several of the plots being proposed for development would form the 'entrance' to Protos. As such a modern, recessive design approach has been adopted with generous landscaping provided on the boundaries of the plots. The landscaping is proposed to provide screening and biodiversity benefits but also to deliver a scheme which helps to reduce the dominance of the proposed buildings and give the feel of a modern sustainable waste management park.

6.2.42 The design has sought to respond to the existing and proposed developments including the Energy from Waste facility which is currently under construction. The experience of users of the public right of way which traverses the site, has been considered as well as provision of direct cycle and pedestrian access into the development plots. In this regard the development delivers safe and secure access routes to the various development components.

6.2.43 In relation to sustainable development the BREEAM Pre-Assessment Report (Appendix I) demonstrates that a rating of Very Good could be achieved. In terms of energy use it should be noted that the plots would be connected to the Protos wide electricity and heat network which would enable heat and electricity to be delivered from the other energy generating facilities on Protos.

6.2.44 On this basis, in accordance with the principles set out in Policy ENV 6, the Proposed Development would be well designed and would integrate sustainable construction and design techniques.

ENV 8 Managing Waste

6.2.45 Policy ENV 8 sets out how waste in the Borough will be managed and requires proposals to be consistent with the waste hierarchy. The very first statement in the policy sets out that waste management needs in the borough will be met by managing waste as a resource, precisely what the Proposed Development is seeking to achieve.

6.2.46 Ince Park, Ellesmere Port (i.e. Protos) is listed as a safeguarded site for the delivery of waste management uses. The policy sets out that it supports the co-location of waste facilities and the integration of new waste facilities into the existing network of waste management sites in the borough. The supporting text to the policy outlines that Ince Park includes a Plastics Recycling Facility.

6.2.47 Table 8.1 identifies that there is 650,000 tonnes of consented but not yet operational recycling capacity, all of which is identified as being provided at Protos. Furthermore, as set out in Section 4.0 there is a demonstrable need for increased capacity for plastics recycling facilities in the UK.

6.2.48 On this basis the Proposed Development is considered to be fully in accordance with Policy ENV 8.

Policy ECON1 – Economic growth, employment and enterprise

6.2.49 Policy ECON 1 is provided to encourage inward investment in Cheshire West and Chester, creating jobs and creating economic output. The opening paragraph of the policy states *"The Council will promote sustainable economic growth in the borough and wider sub-region, supporting existing businesses, encouraging indigenous business growth and attracting new inward investment".*

6.2.50 Ince Park (i.e. Protos) is listed as a key employment location in the policy and is safeguarded to meet the future economic growth of the borough.

6.2.51 As set out in Section 4.3 an Economic Impact and Social Value Assessment has been provided to support the application. The Proposed Development is

anticipated to create 147 direct full time equivalent positions, generating an annual Gross Value Added (GVA[8]) figure of £8.5m. The development would also be expected to create an additional 72 jobs in the local area, generating £4.2 million in net additional GVA. Jobs would also be created during the construction phase and it is estimated that construction of the Proposed Development would result in the equivalent of 58 full time equivalent jobs, delivering a GVA of £27 million

6.2.52 The Proposed Development would deliver on the purposes of the policy in that it would encourage indigenous business growth, attract new inward investment, create new jobs and encourage start up business activity.

6.2.53 On this basis the Proposed Development would gain support from Policy ECON 1.

Cheshire West and Chester Local Plan (Part Two)

EP 6 – Ince Park

6.2.54 Policy EP 6 sets out that *"Land at Ince Park (Protos) is safeguarded for a multi-modal resource recovery park and energy from waste facility for use in connection with the recycling recovery and reprocessing of waste materials."*

6.2.55 The Proposed Development would help achieve this purpose as it would provide much needed capacity for the recycling of plastics. The policy sets out that development will be supported if it complies with the 12 points described in the policy.

6.2.56 Taking these in turn:

1. It is considered in combination with other planned/consented development at Ince Park and nearby areas – The developed has been considered in the context of the wider delivery of the Protos development and is considered to be complimentary to aims and objectives of the resource recovery park. The supporting assessments and the ES have considered the relevant

[8] GVA is a measure of the economic value of goods and services produced in an area. It is defined by the Office for National Statistics (ONS) as "…the difference between the value of goods and services produced and the cost of raw materials and other inputs which are used up in production."

environmental effects of the development, where appropriate considering the cumulative effects with other development on Protos.

2. *it would not compromise the planned/operational capacity of the Site to provide waste management facilities for specific waste streams, where this contributes to meeting an identified need in the borough* – as discussed above in relation to ENV 8 the Proposed Development would contribute to intended waste management capacity for Ince Park. It would provide 'real' recycling of plastics rather than 'collection for recycling' as is currently the case in the borough. The principle of the Plastics Park will also enable a greater proportion of waste plastic to be separated out of the residual waste stream, resulting in higher rates of plastic recycling. For those plastics which cannot be recycled they will be used to generate hydrogen, fuels or energy.

3. it meets general development requirements for waste management facilities – compliance with ENV 8 is set out above and compliance with Policy DM 54 is described below.

4. *where practicable, it maximises opportunities for freight movements on the Manchester Ship Canal or rail network, particularly to minimise the impact of increased traffic generation on the local road network;* - Due to the way that plastic waste is managed in the municipal sector and the wider commercial and industrial market it is envisaged that waste plastic would be delivered by road. However, Protos does include for the provision of canal and rail berths and if contracts can be secured for the delivery by these means the design of the development would facilitate their use.

5. it safeguards the provision and delivery of port and rail infrastructure; The Proposed Development does not prevent or inhibit the delivery of port or rail infrastructure.

6. *it minimises and mitigates any adverse impacts on the local environment, health and local residential amenity, particularly on residents of Ince and Elton (including noise, air, land or water pollution and visual impact);* - The ES contains an assessment of impacts on air quality and visual impact. Detailed dispersion modelling has been undertaken associated with the emissions from the PLRF and no significant impacts on air quality have been identified. No significant effects were identified from any of the representative viewpoints. However, due to proximity to the development significant visual effects would

be experienced from a very short section of National Cycle Route 5 (also a public right of way) that runs through the Protos site adjacent to the four development plots. The new buildings would be clearly visible at close range, and this would appreciably increase the influence of development upon the view. However, the buildings proposed in each plot would be well designed and would be contemporary in style and clad in recessive colours in order to mitigate visual impact. From elsewhere, the influence of large scale industrial development upon this part of the Mersey Estuary is well established and the introduction of the Proposed Development would not change this. Effects upon the character of the wider landscape and upon views across the landscape would not be significant.

A noise assessment has been undertaken in support of this application and demonstrates that the development would operate within the noise thresholds stipulated by the overarching Protos permission.

The MRF, PRFs and the PLRF would all operate under Environmental Permits and would be required to implement controls that ensure there is no harm to water quality or land.

7. it minimises and mitigates adverse impacts on nature conservation within and adjoining the Site in line with DM 44; - A detailed ecological survey has been undertaken of the Site as part of the EIA. In conjunction with the extensive ecological survey data already available for Protos it is concluded that the development would not result in any significant effects on ecology and nature conservation. This includes an assessment of indirect effects on the nearby designated Mersey Estuary SSSI, SPA and Ramsar site. The Site wide Protos ecological habitat enhancement works, along with additional landscaping on the development plots would mitigate the ecological effects of the development. Various best practice measures would also be implemented during construction to prevent harm to protected species and sensitive habitats.

8. *the ecological mitigation areas that form part of the consented resource recovery park are retained, or there is no net loss in the area and type of ecological mitigation provided within the borough;* - the Proposed Development would not prevent the delivery of the Protos Ecological Mitigation Areas.

9. *the landscape mitigation areas that form part of the consented resource recovery park are retained either in the consented form or through alternative*

equivalent provision and there is appropriate landscaping that respects the landscape character of the Site and its surroundings; - the landscape mitigation areas that form part of the resource recovery park would continue to function to provide the landscape mitigation required by them.

10. *it makes provision for public access on the Site (including public transport), where this would not be prejudicial to the industrial operations, rail or other commercial movements on the Site and/or to public safety, or would not result in recreational pressure or disturbance on sites of ecological importance;* - the Proposed Development would not conflict with the public access already being promoted through Protos. Measures to encourage sustainable travel would be provided such as cycle storage, changing amenities within the facilities, travel information boards, and direct links from footpaths/cycleway into the facilities.

11. it minimises any flood risk arising from the development both on and off-site – surface water from the Site would drain into the Protos wide surface water management scheme. The development platforms would be engineered to lie above the development level specified within the Protos permission, conditioned to ensure resilience against potential flood events.

12. it does not provide unacceptable risks to health and safety in line with Local Plan (Part Two) policy DM 33 and DM 34. – Policy DM 33 and DM 44 are examined within this policy appraisal. The Proposed Development would not give rise to unacceptable risks to health and safety.

6.2.57 On the basis of the above the Proposed Development would be supported in accordance with Policy EP 6.

DM 3 'Design, Character and Visual Amenity'

6.2.58 Policy DM 3 'Design, Character and Visual Amenity' expects development to achieve a high standard of design that respects the character and protects the visual amenity of the local area. The Policy reflects very similar policy requirements to ENV 2 and ENV 6 of the Local Plan Part One. For the reasons set out within the assessment of Policies ENV 2 and ENV 6 above the Proposed Development is considered to accord with this policy.

DM 4 'Sustainable Construction'

6.2.59 Policy DM 4 'Sustainable Construction' requires all development proposals to achieve the highest level of energy and water efficiency that is practical and viable, and to maximise opportunities to incorporate sustainable design features.

6.2.60 Appendix I provides a BREEAM Pre-Assessment Report which sets out the credits which could feasibly be gained by the development. This concludes that the development could achieve a BREEAM Very Good rating.

6.2.61 The development would also potentially utilise heat and electricity from the Protos electricity and heat distribution network which would be connected to the facilities on Protos which generate heat and power. PLRF would be a self sustaining facility from an energy perspective. The pyrolysis process used in the facility would create a combustible gas (as well as extracting aluminium and oils from plastic waste) for use in the gas engines which would generate electricity to power the pyrolysis process. PRF2 would also include a waste water treatment facility to allow water used within the recycling process to be re-used, reducing water usage.

6.2.62 The hydrogen refuelling station would enable the hydrogen generated from waste plastic in the Plastics to Hydrogen facility on Plot 10B to be used onsite. It is envisaged that the facility would be used to fuel HGVs from the developments on Protos, as well as other nearby business such as CF Fertilisers and Encirc. In this regard it delivers on the circular economy approach promoted by Government policy and would support the UKs drive to establish an hydrogen economy.

6.2.63 In this regard the sustainability credentials of the overall development, which would recycle plastic for reuse in manufacturing, are exceptional.

6.2.64 On this basis the Proposed Development is considered to comply with Policy DM 4.

Policy DM32 – Land Contamination and Instability

6.2.65 Policy DM32 sets out that development proposals on land known or suspected to be unstable or contaminated must demonstrate that they will not give rise to significant adverse impacts on health and environmental receptors.

6.2.66 Appendix H provides a Phase 1 Geo-Environmental Assessment. As set out in Section 5.9 this provides a detailed appraisal of the ground conditions at the Site and in the surrounding area.

6.2.67 Historical mapping indicates that the various development plots have remained largely unchanged throughout their mapped history originally forming parts of agricultural fields. However, there are some areas of the plots which have been used for construction compounds and a natural gas exploration compound, as such there potential for some contamination to be present, albeit the likelihood of significant contamination is limited. A conceptual site model has been produced which identifies some potential pollutant linkages but these are considered to be at worst Low/Moderate risk in the absence of mitigation. It is anticipated that following a pre-construction site investigation, standard mitigation measures could be adopted which would avoid harm to human and environmental receptors. No significant risks associated with ground instability have been identified.

6.2.68 On this basis it is considered that the Proposed Development is in accordance with Policy DM32.

Policy DM 54 - Waste Management Facilities

6.2.69 Policy DM 54 confirms that proposals for waste management development will be supported where they meet the principles for sustainable waste management set out in Local Plan (Part One) Policy ENV 8 and additional criteria set out in Policy DM 54. The policy lists 11 points, those of particular relevance to the Proposed Development are discussed below.

6.2.70 The first point of the policy requires new large scale waste management facilities to be located on safeguarded sites, including Protos. The supporting text to the policy sets out that waste management development proposed on the identified strategic sites within ENV8 should be of a scale which is commensurate with the existing plot sizes on these sites. The various facilities that form this planning application have been located on the proposed plots to maximise the development area available and ensure that the allocation is used to its maximum effectiveness.

6.2.71 Point 3 of the policy refers to Appendix B of the National Planning Policy for Waste, which sets out a series of criteria that should be used '*in testing the*

suitability of sites and areas in the preparation of Local Plans and in determining planning applications'. Part 2 of the CWACC Local Plan has been very recently adopted and therefore it can safely be assumed that the Site of the Proposed Development (which has been allocated for waste uses) has been considered against these criteria and has complied with them.

6.2.72 Points 4, 5, 7, 8 and 9 refer to the need to understand the environmental and transportation effects of the proposal. The Application is supported by a series of site specific environmental assessments, the scope of which were agreed through pre-application discussions with the Council, to understand the suitability of this site from a land use planning perspective. The assessments demonstrate that the Proposed Development would not have any unacceptable environmental effects and that the Site is suitable for the use being proposed.

6.2.73 Point 6 of the policy refers to Policy DM 11, which relates to aircraft safety. The Site lies within the consultation zone for Liverpool John Lennon Airport. However, the height of the development is significantly lower than the neighbouring developments of the Ince Biomass Facility, the proposed Energy from Waste facility, the Encirc factory and the CF Fertilizer plant. There would be no organic waste managed at the facility and no areas of open water are proposed, as such the development is not considered to create a bird strike risk.

6.2.74 Point 10 requires discussion of the source and volume of waste material being managed. It is well understood that waste plastic is a common problem and considerable volumes of plastics are sorted from segregated municipal waste streams at Material Recycling Facilities and commercial and industrial waste producers annually, several of which are located within Cheshire West and Chester and the Wirral. As set out in Section 4.0 there is a demonstrable need for plastics recycling businesses and at present there are no plastic recycling facilities in Cheshire West and Chester which deliver a recycled product for direct use in plastics manufacturing.

6.2.75 The waste assessment which was conducted to understand the requirement for plastics recycling within the borough and the surrounding areas has identified a significant local and regional need, as set out in Section 4.0. The economics of transporting waste dictate the distances from which plastic waste is likely to be accepted. The catchment of the waste need assessment was set at a 2 hour drive time, a distance at which waste operators would typically transport waste

within. As such it is anticipated that the facility would manage waste collected within the borough and surrounding authorities. In order to deliver a strategic recycling facility such as the Plastics Park it is necessary for the various facilities to be scaled such that sufficient product is produced for resale into the market to justify the investment. The combined treatment capacity of the proposed facilities would be 367,500 tonnes per annum. However, the Plastics Park is intended to be an integrated series of processing facilities and so there would be a flow of material between the facilities proposed, including the other facilities which are already consented e.g. Plastics to Hydrogen facility on Plot 10A and the PET Recycling facility on Plot 13. As such, in reality the quantity of material would be accepted at the Plastics Park in its entirety could be more like 244,500 tonnes per annum.

6.2.76 On the basis of the above, and principally as the development is located on a site allocated for the purposes proposed, it can be concluded that the Proposed Development is in accordance with Policy DM54 and so would be supported by the Council.

DM 30 Noise

6.2.77 Policy DM 30 'Noise' states that development must not give rise to significant adverse impacts on health and quality of life from noise. The Noise Assessment contained within Appendix D demonstrates that the Proposed Development would not result in any unacceptable impacts in terms of noise and would be capable of complying with the noise thresholds applied to the overarching Protos planning permission. As such, the Proposed Development accords with this policy.

DM 34 – Development in the vicinity of hazardous installations

6.2.78 Policy DM 34 states that "Development in the vicinity of hazardous installations, including proposed new installations for which planning permission or hazardous substances consent has been given, will be supported providing it would not result in a significant increase in the number of people being subjected to threshold levels of risk.".

6.2.79 The Proposed Development would be located circa 500 m to the west of the CF Fertiliser manufacturing plant which is registered as a Control of Major Accidents Hazards (COMAH) Upper Tier site.

6.2.80 There are strict notification and emergency action procedures in place for all developments at Protos, ensuring that all members of staff working in businesses on Protos are fully briefed on the risks posed by CF Fertilisers and adequately trained to deal with an emergency situation.

6.2.81 On this basis the Proposed Development is considered to comply with Policy DM34.

Policy DM 40 'Development and Flood Risk'

6.2.82 Policy DM 40 'Development and Flood Risk' seeks to avoid and reduce flood risk. As noted within the assessment of Policy ENV 1 of the Local Plan Part One a Flood Risk Assessment has been undertaken (Appendix G) which demonstrates that the development would not increase flood risk and the development has been designed to account for potential flooding events by ensuring the buildings and access to the facilities lie above the modelled future flood levels.

6.2.83 As such, the Proposed Development accords with this policy.

Policy DM 41 'Sustainable Drainage Systems (SuDS)'

6.2.84 Policy DM 41 'Sustainable Drainage Systems (SuDS)' requires all major development to incorporate SuDS. On greenfield sites, restrictions on surface water runoff from new development should be incorporated into the development at the planning stage and must mimic or improve upon greenfield rates.

6.2.85 Appendix G describes the Protos wide surface water management plan which has been designed using sustainable drainage principles, delivering a scheme which limit discharge from the wider Protos development to greenfield runoff rates.

6.2.86 As such, the Proposed Development accords with Policy DM 41.

DM 44 – Natural Environment

6.2.87 Policy DM 44 requires planning applications to assess the ecological value of a site and where appropriate propose mitigation and compensation to ensure there is no net biodiversity loss from the development being proposed.

6.2.88 The ES provided within the application includes an ecological impact assessment. The assessment supplements the extensive body of ecological data already gathered as part of the Protos development.

6.2.89 As set out under Policy ENV 4, the Proposed Development is located on areas of limited ecological value, albeit some protected species such as water vole and bats would have the potential to be impacted by the development. As such a series of mitigation measures are proposed to ensure these species are not harmed.

6.2.90 Where possible woodland on the Site has been retained. Nonetheless, the development would result in the loss of some trees. The landscaping scheme includes woodland planting to help mitigate this loss and as the development would be on existing consented plots of the Protos scheme, the Proposed Development should also be considered in the context of the wider Protos ecological mitigation strategy. These site specific and Protos wide mitigation works would ensure that the development would ensure no net loss of biodiversity as a result of the development.

6.2.91 Appendix 6.2 to the ES demonstrates that there would be no likely individual or in combination significant effect on the Mersey Estuary SPA, SSSI and Ramsar European Site.

6.2.92 On the basis of the above the Proposed Development is considered to accord with Policy DM 44.

Conclusion

6.2.93 The Proposed Development has been considered in the context of relevant polices of the adopted Development Plan. The Proposed Development would deliver much needed plastics recycling capacity in Cheshire West and Chester and the surrounding authorities. It would be located on a site allocated for the purpose being proposed, would complement the surrounding land uses and would not give rise to any unacceptable environmental effects. In light of this, policy support has been identified in all relevant policies of the adopted Development Plan.

6.3 Material Considerations

6.3.1 There is no strict definition of what constitutes a 'material consideration' in planning legislation, although case law indicates that any consideration, which relates to the use or development of land is capable of being a material consideration in the determination of a planning application.

6.3.2 As set out in Chapter 4.0 there is a demonstrable need for the facility and it would deliver a number of clear benefits locally, regionally and nationally which are considered to represent 'material considerations' in the determination of the application. In summary the key benefits of the Proposed Development are considered to be:

- The essential need to deliver increased plastics recycling capacity within the UK and the North West of England to deliver on the various statutory and policy commitments which have been made to increase recycling rates and drive more waste up the waste hierarchy, reducing reliance on landfill, incineration and export overseas.
- The Plastics Park provides a unique and innovative approach to the management of waste plastic. It is expected that the Plastics park will encourage a greater volume of plastic to be extracted from the residual waste stream by providing the ability for mixed plastics and mixed dry recyclables to be sorted into recyclable plastic and non-recyclable plastics, rather than relying on source segregation prior to receipt at a recycling facility.
- There is growing demand for high quality recycled plastic which can be used in the manufacture of new plastic products. This demand is driven in through policy and legislative requirements such as the Plastics Tax. The Proposed Development will help ensure that this demand is met from UK sources of recyclable plastics.
- The Proposed Development would help reduce environmental pollution which results from export of plastics overseas where there is the potential for plastic waste to be mismanaged.
- Delivery of significant climate change benefits. The assessment work undertaken in support of the application indicates that the Proposed Development would result in CO_2 equivalent savings of 685,737 – 192,146 tonnes per year compared to incineration or landfill respectively.

- The delivery of a hydrogen refuelling facility would help support the development of the UK hydrogen economy which has been recognised as delivering significant environmental and economic benefits to the UK.
- Creation of jobs and economic growth within the borough. The Proposed Development would create 147 direct full time equivalent positions, generating an annual Gross Value Added (GVA[9]) figure of £8.5m. The development would also be expected to create an additional 72 jobs in the local area, generating £4.2 million in net additional GVA. Additional jobs and GVA would also result from construction activities. The various components of the Proposed Development would generate over £1M of business rates per annum.

6.3.3 In addition to the development plan policies identified above, the Proposal also needs to be considered in the context of other material policy and UK strategy considerations. The main documents considered to be material to the determination of the Proposal have been summarised below, including the National Planning Policy Framework (NPPF) (July 2021) and the National Planning Policy for Waste (NPPW) (October 2014).

The National Planning Policy Framework (July 2021)

6.3.4 The third revised edition of the National Planning Policy Framework (the NPPF) was published in July 2021. It sets out the Government's planning policies for England and how these should be applied to plan making and decision taking. Paragraph 4 of the NPPF states that it should be read in conjunction with the Government's planning policy for waste (considered subsequently). Nevertheless, the NPPF does confirm that local authorities taking decisions on waste applications should have regard to the policies in the NPPF, so far as relevant.

6.3.5 The following sections summarise the relevant sections of the NPPF and how these relate to the Proposed Development.

[9] GVA is a measure of the economic value of goods and services produced in an area. It is defined by the Office for National Statistics (ONS) as "…the difference between the value of goods and services produced and the cost of raw materials and other inputs which are used up in production."

Achieving Sustainable Development

6.3.6 Paragraph 7 of the NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development. Consequently, and at the heart of the NPPF is a 'presumption in favour of sustainable development'. The NPPF identifies that there are three dimensions to sustainable development: economic, social and environmental and these aspects should not be taken in isolation, because they are mutually dependent.

The Presumption in Favour of Sustainable Development

6.3.7 At paragraph 11 there is a presumption in favour of sustainable development, specifically in relation to decision-taking this means:

- *"approving development proposals that accord with an up-to-date development plan without delay; or*
- *where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:*
    - *i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or*
    - *ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole."*

6.3.8 This Planning Statement demonstrates that the Proposed Development represents sustainable development and would accord with the development plan. As such, the planning application should be approved without delay.

Decision Making

6.3.9 Paragraph 39 of the NPPF identifies that *"Early engagement has significant potential to improve the efficiency and effectiveness of the planning application system for all parties. Good quality preapplication discussion enables better coordination between public and private resources and improved outcomes for the community."*

6.3.10 The Applicant undertook pre-application consultation with CWACC to discuss and agree the content and scope of this planning application. This is summarised within Section 1 of this Planning Statement and as a result of the pre-application consultation a number of modifications were made to the design of the facility.

Building a Strong and Competitive Economy

6.3.11 Paragraphs 81 to 83 set out the Government's commitment to building a strong and competitive economy. Paragraph 81 states *"Planning policies and decisions should help create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development."*

6.3.12 As set out earlier in the statement the Proposed Development would create 147 direct full time jobs and would also be expected to create an additional 72 indirect jobs in the local area.

6.3.13 The proposal therefore supports economic growth and therefore clearly accords with this element of the NPPF.

Promoting Sustainable Transport

6.3.14 In relation to sustainable transport, paragraph 111 states that: *"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."*

6.3.15 The Highways Technical Note submitted in support of the planning application sets out that the Proposed Development would not result in an increase in trip generation levels over those already consented at Protos. As such it would not result in any unacceptable impact on highway safety, and would not result in any 'severe' impacts on the local highway network.

6.3.16 Therefore, it is considered to accord with this element of the NPPF.

Making Effective Use of Land

6.3.17 Paragraph 119 sets out that the effective use of land in meeting need for specific uses should be promoted, while safeguarding and improving the environment and ensuring safe and healthy living conditions.

6.3.18 The Proposed Development would be located on land allocated for the purposes proposed. The environmental assessments supporting the application conclude that the proposal would not result in any unacceptable adverse environmental impacts. In addition, the Proposed Development would contribute towards meeting local and national waste management need, and therefore would make effective use of the land. As such, the proposal would accord with this element of the NPPF.

Achieving well-design places

6.3.19 Paragraph 126 sets out that: *"The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities".*

6.3.20 The application is supported by a Design Evolution Statement which sets out how the design of the Proposed Development has taken into account the local setting and seeks to deliver a high quality design which represents the innovative and sustainable development being delivered by Protos. The location of the facility at the entrance to Protos has also informed the approach to the design to ensure that the gateway to Protos delivers a modern, well design feel for users, staff and visitors.

6.3.21 In this respect it is considered that the Proposed Development meets the aspirations of this section of the NPPF.

Meeting the Challenges of Climate Change, Flooding and Coastal Change

6.3.22 Paragraph 152 identifies that: *"The planning system should support the transition to a low carbon future in a changing climate… It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse*

of existing resources, including the conversion of existing buildings; and support …low carbon energy and associated infrastructure."

6.3.23 As identified within Section 4.0 of this Planning Statement, the Proposed Development would assist in the reduction of GHG emissions, with the Proposed Development delivering CO_2 equivalent savings of 685,737 – 192,146 tonnes per year compared to incineration or landfill of waste plastic respectively. This is in accordance with the Government's strategy to deliver a circular economy by making more efficient use the resources available within the UK.

6.3.24 This section of the NPPF also focusses on the importance of considering the impact of climate change on factors such as flood risk. In this regard, the Proposed Development has been designed to ensure that the development is not at risk from flooding. A sustainable drainage system would also be utilised to manage surface water flows, ensuring that flood risk is not increased elsewhere as a result of increased runoff rates from the Site.

Conserving and Enhancing the Natural Environment

6.3.25 This sub-section seeks to ensure that the planning system contributes to the conservation and enhancement of the natural environment by:

- *Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils;*
- *recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services;*
- *maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*
- *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
- *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*

- *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.*

6.3.26 Paragraph 188 states: *"The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities."*

6.3.27 Paragraph 185 relates to noise and requires planning decisions to: *"mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life and identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason."*

6.3.28 The application is supported by a series of environmental assessments which examine the impact of the Proposed Development in relation to all of the factors identified in this section of the NPPF. These assessments identify that, through mitigation, the Proposed Development would not give rise to unacceptable effects on the natural environment. Furthermore, the Proposed Development would help reduce environmental pollution by providing UK based recycling capacity reducing the need to export waste plastic abroad which has the potential to lead to environmental pollution. The development of a hydrogen refuelling facility for HGV would also help improve air quality by supporting the growth of a hydrogen fuelled HGV fleet which would have zero emissions from the HGVs. This would help improve local air quality within the borough. As such, the Proposed Development accords with this element of the NPPF.

National Planning Policy for Waste (October 2014)

6.3.29 The National Planning Policy for Waste (NPPW) was published in October 2014. The introductory text identifies that the NPPW: *"Sets out detailed waste policies. It should be read in conjunction with the NPPF…"* and: *"All local planning authorities should have regard to its policies when discharging their responsibilities to the extent that they are appropriate to waste management."*

6.3.30 Paragraph 1 of the NPPW explains that positive planning plays a pivotal role in delivering waste ambitions through (of relevance to the Proposed Development):

- Delivery of sustainable development and resource efficiency, by driving waste management up the waste hierarchy;
- Ensuring that waste management is considered alongside other spatial planning concerns, recognising the positive contribution that waste management can make to the development of sustainable communities;
- Providing a framework in which communities and businesses are engaged with, and take responsibility for, their own waste in line with the proximity principle; and
- Helping to secure the re-use, recovery or disposal of waste without endangering human health and without harming the environment.

6.3.31 With regard to each of the aforementioned points, the Proposed Development would:

- Clearly deliver sustainable development and resource efficiency, by driving waste management up the waste hierarchy;
- Make a positive contribution to waste management which would also assist in the development of sustainable communities;
- Enable CWACC, and other surrounding planning authorities, to take responsibility for its own waste; and
- Help to secure the recovery of plastic waste without endangering human health and without harming the environment.

6.3.32 Paragraph 4 of the NPPW places emphasis on looking for opportunities to co-locate waste management facilities together and with complementary activities. The Proposed Development would form part of the Plastics Park which when fully developed will comprise a series of integrated waste management facilities which provide for the full lifecycle management of waste plastic; recycling plastics where possible and where this is not feasible recovering hydrogen, fuel or energy.

6.3.33 On the basis of the above it is considered that the NPPW provides significant support for the development.

A Green Future: Our 25 Year Plan to Improve the Environment (2018)

6.3.34 In 2018 the UK government released a policy document *"A Green Future: Our 25 Year Plan to Improve the Environment"*. The document sets out a series of actions which are deemed necessary to enable the UK to *"help the natural world regain and retain good health".*

6.3.35 One of the stated goals of the Plan is *"Using resources from nature more sustainable and efficiently"*. Chapter 4 of the Plan deals with *"Increasing resource efficiency, and reducing pollution and waste".* This includes policies to achieving zero avoidable plastic waste by the end of 2043 and improving the management of residual waste. In order to achieve this the Government committed to developing a new national Resources and Waste strategy.

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

6.3.36 In December 2018, the Government published their ambitious Resources and Waste Strategy. The Ministerial Foreword recognises that there is an urgent need for new thinking to tackle avoidable waste, particularly plastic. It states that an estimated 8 million tonnes of plastic waste enters the sea each year, which causes devastating damage to wildlife and habitats. In addition, the strategy identifies that between 2015 and 2025, if we do not act, marine plastic pollution is set to treble worldwide to 150 million tonnes. The strategy states that "*Our priority will continue to be preventing plastic entering the environment in the first place*".

6.3.37 One of the five strategic ambitions of the Resources and Waste Strategy is to "*To eliminate avoidable* (i.e. when the plastic could have been reused or recycled) *plastic waste over the lifetime of the 25 Year Environment Plan".*

6.3.38 Chapter 3 relates to recovering resources and managing waste. This chapter sets out that the Government wants to promote UK-based recycling and export less waste to be processed abroad.

6.3.39 The strategy identified a number of recycling and recovery targets including:

- A 50% recycling rate for household waste by 2020;

- A 75% recycling rate for packaging by 2030 (subject to consultation);
- A 65% recycling rate for municipal waste by 2035;
- Municipal waste to landfill to be at 10% or less by 2035.

6.3.40 The strategy also introduced the intention to deliver new policies such as Extended Producer Responsibility (EPR) and Deposit Return Schemes (DRS) which are intended to *"help to guarantee that waste products have a value at end of life, increase the quality and quantity of materials available to recyclers, and stimulate demand for secondary materials".*

6.3.41 The strategy recognises the need to increase the available waste infrastructure and is committed to achieving this through the Waste Infrastructure Delivery Programme. This represents a commitment by the Government to spend £3bn by 2042 on new waste infrastructure, including facilities to improve recycling. The key message from the Strategy is that this new infrastructure should be efficient, reliable and deliverable.

6.3.42 The strategy acknowledges that, despite the Waste Infrastructure Delivery Programme's achievements so far, there is still a need for greater reprocessing capacity, particularly in recycling.

6.3.43 Paragraph 7.1.3 sets out that investment in the development of, and pioneering innovative approaches to, boosting recycling will be supported.

Circular Economy Package (2020)

6.3.44 In July 2020 the UK Government published the Circular Economy Package policy statement, it states *"The UK is committed to moving towards a more circular economy which will see us keeping resources in use as long as possible, extracting maximum value from them, minimizing waste and promoting resource efficiency. The Circular Economy Package (CEP) introduces a revised legislative framework, identifying steps for the reduction of waste and establishing an ambitious and credible long-term path for waste management and recycling."*

6.3.45 The policy statement sets out the approach of the UK to the transposition of the European Commission's 2020 CEP Action Plan, identifying how existing and emerging policy documents along with legal commitments set out in the

Environment Bill will deliver the circular economy packages identified in the EUs CEP.

Waste Management Plan for England (2021)

6.3.46 The Waste Management Plan for England provides an overview of waste management in England. It focuses on waste arisings and their management and is intended to be a high-level, non-site specific document. It provides an analysis of the current waste management situation in England and evaluates how the Plan will support implementation of the objectives and provisions of the Waste (England and Wales) Regulations 2011. The Plan identifies the need to increase recycling rates within the UK and reduce plastic waste.

Plastics Packaging Tax: Policy Paper (2020)

6.3.47 In 2018 the UK Government announced its intention to introduce a new tax on plastic packaging. These proposals have been consulted on and the policy paper 'Plastic Packing Tax' sets out the Government's details of how the tax will be implemented in law. The Plastics Tax has now been implemented within primary legislation and will take effect from 1st April 2022.

6.3.48 The legislation will introduce a £200 per tonne tax for plastic packaging with less than 30% recycled content.

6.3.49 The tax is intended as an incentive for businesses to use recycled material in the production of plastic packaging, which will create greater demand for recycled plastics and in turn stimulate increased levels of recycling and collection of plastic waste, diverting it away from export, landfill or incineration.

6.3.50 However, in order to be able to fulfil this commitment plastics producers will need to source recycled plastics which are suitable for use within the specific product they are producing. It is recognised by the industry that the availability of recycled plastic will be one of the major barriers to increasing recycled content. There is a recognised lack of UK recycling capacity to deliver domestic demand and as such there is a significant need to increase the availability of recycled plastic feedstock to help meet the environmental objectives of the proposed tax.

Committee on Climate Change – Sixth Carbon Budget (2020) and Progress in Reducing Emissions (2021)

6.3.51 In the 2020 Sixth Carbon Budget published by the Committee on Climate Change (CCC) identified the need to increase recycling rates and resource efficiency as part of the strategy needed to achieve Net Zero.

6.3.52 In the June 2021 report the CCC identified some of the measures proposed to deliver on waste recycling and resource efficiency including the proposal by the Government for EPR and introduction of the Plastics Tax. However, it also highlighted the urgent need for more to be done including *"encouraging investment in recycling and re-use services and infrastructure"* and *"phasing out exports of waste by 2030 at the latest while strengthening tracking and enforcement, to ensure waste intended for recycling or recovery are treated as such".*

6.3.53 As demonstrated in Appendix B, the Proposed Development has the opportunity to deliver significant carbon savings when compared to management of plastic waste via landfill or incineration.

UK Hydrogen Strategy (August 2021)

6.3.54 The executive summary of the UK Hydrogen Strategy sets out that *"Hydrogen is one of a handful of new, low carbon solutions that will be critical for the UK's transition to net zero.".*

6.3.55 The benefits of developing the hydrogen economy also include improved air quality as a result of zero tailpipe emissions from hydrogen fuelled vehicles, and economic benefits from developing a new sustainable UK based industry which can offer benefits from export of skills and manufacturing outside of the UK.

6.3.56 The Strategy recognises that longer-term role for hydrogen in transport decarbonisation is not yet clear and key challenges in this area include technology uncertainty and lack of existing hydrogen infrastructure.

6.3.57 The Proposed Development would help support the increased use of hydrogen by delivering a hydrogen refuelling station within a location where there is the potential for high demand from HGVs, the very type of transport which hydrogen fuels are well suited to serve.

Environment Bill 2020

6.3.58 The Environment Bill is currently passing through Parliament. It sets out how the UK plans to protect and improve the natural environment post-Brexit.

6.3.59 One of the key areas of The Environment Bill is waste and resource efficiency. The Environment Bill includes measures to move the UK economy from a linear materials usage system to more circular model with the aim of keeping resources in use for longer and ensuring that the maximum value is extracted from them.

6.3.60 The Environment Bill 2020 introduces a number of measures which will contribute to the increase recycling of plastic products. These include:

- Delivery of consistent and frequent recycling collections across England.
- Introduction of clearer labelling on certain products so consumers can easily identify whether products are recyclable or not.
- Expansion of the use of charges on single use plastics, potentially including the introduction of a deposit return scheme on drinks containers.
- Increase producer responsibility schemes to make producers responsible for the full net costs of managing their products when they are ready to be thrown away.
- Provisions for the ban on the export of waste plastics out of the UK.

6.3.61 The accompanying policy paper[10] to The Environment Bill states:

> *"To continue reducing plastic pollution across the country, the Environment Bill will enable the creation of new charges for other single-use plastic items, similar to the carrier bag charge, which will incentivise a shift towards the use of more reusable items. We are also taking powers to establish deposit return schemes that further incentivise consumers to reduce litter and recycle more".*

[10] https://www.gov.uk/government/publications/environment-bill-2020/30-january-2020-environment-bill-2020-policy-statement

6.3.62 These measures will increase the availability of plastics which are capable of being recycled and will introduce incentives which will further increase the demand for recycled plastics, such as producer responsibility schemes.

7.0 CONCLUSION

7.1.1 This Planning Statement accompanies a planning application submitted to Cheshire West and Chester Council by Peel NRE Ltd for the development of a Materials Recycling Facility (MRF), two Plastics Recycling Facilities (PRFs), a Polymer Laminate Recycling Facility (PLRF) and a Hydrogen Refuelling Station.

7.1.2 The issue of how society manages waste plastic has been increasingly scrutinised in recent years. The management of waste plastics and plastics contamination in the environment is recognised as a serious global problem and is currently a much debated topic in the UK.

7.1.3 The Proposed Development would help meet the local and national need for increased plastic recycling capacity, helping to achieve the aims set out within the Government's ambitious Resources and Waste Strategy. The development would give rise to a range of benefits including reduced environmental pollution, improved resource sustainability, lower greenhouse gas emissions, job creation and educational benefits.

7.1.4 The Plastics Park, which the Proposed Development forms a major component of, would provide an innovate and unique facility. The Plastics park will encourage a greater volume of plastic to be extracted from the residual waste stream by providing the ability for mixed plastics and mixed dry recyclables to be sorted into recyclable plastic and non-recyclable plastics, rather than relying on source segregation prior to receipt at a recycling facility.

7.1.5 Recyclable plastics would be processed to deliver a product that can be reused in plastics manufacturing. Separated non-recyclable plastics would be used to generate hydrogen, electricity and fuels.

7.1.6 Critically the Proposed Development would provide 'real' plastic recycling capacity in the borough instead of 'collection for recycling', which often leads to plastic waste being exported overseas, where low grade plastics are disposed of to landfill or incinerated, or in some instances discarded or burnt in an uncontrolled manner.

7.1.7 The Materials Recycling Facility which would separate plastics and other types of dry recyclable material from a mixed waste stream, would contribute to increased recycling rates of a variety of different materials.

7.1.8 The Proposed Development also includes a hydrogen refuelling facility which would be supplied with hydrogen from the consented Plastics to Hydrogen facility which forms part of the Plastics Park. The facility would help support the Government's policy push for use of hydrogen fuels in HGVs and would deliver on the circular economy approach by enabling non-recyclable plastics to be turned into a useful product for reuse.

7.1.9 The development is ideally located within Protos, a development which has planning permission for a variety of energy generation and integrated waste management facilities. The plots proposed for the development already benefit from planning permission for waste management and waste recovery related developments. On this basis the principle of a development similar to that proposed is already established.

7.1.10 The Proposed Development has been considered in the context of relevant polices of the Development Plan and it has been demonstrated that it complies with the plan as a whole. The Proposed Development has also been shown to be aligned to local and national planning policy concerning sustainable waste management.

7.1.11 The Planning and Compulsory Purchase Act 2004 and Town and Country Planning Act 1990 require that planning applications be determined against the policies of the Development Plan unless material considerations indicate otherwise.

7.1.12 It has been demonstrated that the Proposed Development would be in accordance with the policies of the Development Plan and that there are no material considerations which would indicate that the application should be refused. To the contrary there are a number of material considerations that weigh in favour of the grant of the development. Furthermore, it has been demonstrated that the application represents sustainable development and so benefits from the presumption in favour of sustainable development which lies at the heart of the National Planning Policy Framework.

7.1.13 As such, and in accordance with the NPPF, we kindly ask that planning permission is granted for the Proposed Development.

APPENDICES

Appendices

APPENDIX A	Consultation Report
APPENDIX B	Carbon Assessment
APPENDIX C	Economic Impact and Social Value Assessment
APPENDIX D	Noise Assessment
APPENDIX E	Highways Technical Note
APPENDIX F	Arboricultural Impact Assessment
APPENDIX G	Flood Risk Assessment and Surface Water Management Plan
APPENDIX H	Stage 1 Geo-Environmental Assessment
APPENDIX I	BREEAM Pre-Assessment