Hillhouse Enterprise Zone

Masterplan Baseline

October 2018
## Issue and Revision Record

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</tbody>
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1 Introduction

1.1 Hillhouse Enterprise Zone Masterplan
Blackpool, Fylde and Wyre Economic Development Company (BFWEDC) and NPL Developments Ltd have commissioned Mott MacDonald, in conjunction with IBI Group and BE Group, to develop a Masterplan for the Hillhouse International Enterprise Zone located in Thornton-Cleveleys, in the borough of Wyre, Lancashire. The 138 hectare site is occupied by over 40 companies with large areas of land still available for development.

1.2 Purpose of the Baseline Report
This report forms the baseline assessment of the existing situation at the Enterprise Zone (EZ) in advance of the full masterplan. It identifies the main constraints and opportunities at present on the site based on desktop analysis and consultation with businesses which occupy the site, local council officers, and specialist organisations such as utility providers. Further details on the sources used for data collection are provided in Section 4. The baseline report will be used as the basis for developing the Masterplan.

1.3 Structure of the Baseline Report
This remainder of this baseline report is structured as follows:

Section 2 provides an introduction to the Hillhouse site as it currently is and some background on its history.

Section 3 explains the planning policy context in which the Hillhouse site sits; this covers local and national policy.

Section 4 explores in more detail an assessment of the Enterprise Zone as it is at present, covering property, urban realm, transport and movement, utilities, flood risk and drainage, and environmental.

Section 5 presents an analysis of the strengths, weaknesses, opportunities and threats relating to the development of the site, and some initial masterplan layout concepts which will developed further in due course.

Finally Section 6 identifies the next steps which need to be undertaken in developing the Masterplan, based on the findings of this baseline report.

1.4 Sources of Information and Consultation
Section 0 of this report provides the information which has been collected on Hillhouse to constitute the baseline. To gather the data, a broad range of sources have been used, principally desktop assessments, mapping and GIS resources, site visits by specialists to Hillhouse Enterprise Zone and the surrounding area, and discussions with representatives from Wyre Council, NPL Developments as the primary owners of Hillhouse, and current occupiers of the site. Specific data sources for each discipline are provided in Section 4.
1.5 Delivery Partners

1.5.1 NPL

NPL manage the secure access area of the site, and are responsible for providing utilities and generally maintaining the site. Significant sums have been invested in this regard, with further planned in the future.

NPL’s vision for the site is to have a number of large industrial uses such as power plants, of which there are several advanced enquiries.

The need to retain the key on-site occupiers and facilitate their future growth aspirations.

1.5.2 Wyre Council and BFWEDC

Wyre is the local authority responsible for Hillhouse. They are keen to align with the vision of the EZ which is to increase employment on the site and to boost Hillhouse’s status as a site at the forefront of the UK’s economy in advanced manufacturing and energy generation.

1.5.3 Key Considerations

Discussions with NPL and Wyre Council. Key requirements include:

- Removing the severance caused by the disused rail-line;
- The opportunity for additional space for development through the removal of the reservoir to the north;
- The need to accommodate Wyre Council Local Plan requirements – in particular 250 new residential units; at least 13ha of employment development within use class B1, B2 and B8 and the aspiration for new greenspace;
- The need to remove HGV’s from Bourne Road to reduce impacts to adjacent residential areas;
- The opportunity to increase accessibility by non-car modes; and
- The potential benefits from repositioning the secure fence line to open the site for a wider commercial / business offer.
2 Site Description and Background

2.1 Setting

Hillhouse International Enterprise Zone is situated in the local authority of Wyre, south east of the town of Fleetwood and on the western banks of the River Wyre estuary. It covers an area of around 138 hectares and is home to over 40 companies.

Hillhouse started as an ICI chemical production plant and has been a leading site for the UK’s chemical sector since World War 2. ICI was the key occupant of the site until the 1990s. In 2003, the majority of the site was bought by NPL Group and since then, rapid development through substantial infrastructure and development investments has taken place.

Its legacy as a chemical production plant is still seen today, with a number of organisations in the chemical production sector located on the site. In addition, there has been some diversification into complementary sectors such as energy production and management, advanced manufacturing and engineering, and waste recycling.

2.2 Layout

Hillhouse Enterprise Zone is split into the two parts – a secure gated complex, situated between the former Poulton-Fleetwood Railway and the River Wyre, and an open area to the north-west; Figure 1 shows the site’s layout with the secure and open areas.

The secure site has full COMAH status and is home to four large occupiers (Victrex, Vinnolit, AGC and Addisons Engineering) plus approximately 35 smaller enterprises – as indicated on Figure 2. Within the secure site, there are a number of parcels of vacant land which present opportunities for new investment or expansion of existing businesses on site. The northern end is largely undeveloped, with a reservoir and an area where nature has been allowed to take its course. Ecological issues relating to this area are discussed in Section 4.6.

The open access area has four components - Burn Hall Industrial Estate, Waste Technology Park, Thornton-Cleveleys Sports Ground and land designated for a privately-owned retail district centre (in the Fleetwood-Thornton Area Action Plan). Burn Hall Industrial Estate has a range of occupants, such as a fire fighting training college, and small commercial and industrial units. The Thornton Cleveleys Sports Ground is allocated for residential development. The land designated for a privately owned district centre received planning permission for a supermarket, but this has since lapsed without any development taking place.
Figure 1: Hillhouse International EZ site layout
Figure 2: Land ownerships at Hillhouse

Source: Mott MacDonald
2.3 Enterprise Zone Status

In 2015, Hillhouse International was designated as an Enterprise Zone, with the ambition to grow employment on the site from 1,650 jobs at present to over 3,000 by 2035. The main industries on the site are energy, advanced manufacturing, and chemical and polymer production. Figure 3 shows the boundaries of the EZ, which has two fiscal zone rates areas. Whilst these are the boundaries at present, they are not fixed and there is potential for the boundaries to change in due course.
Figure 3: Hillhouse International Rates Areas
As shown on Figure 3, there is a mixture of Business Rates Discount and Enhanced Capital Allowance (ECA) areas. As explained above, whilst there are over 40 companies currently operating at Hillhouse International, there remain numerous parcels of land (see Figure 4) which are currently un-used and are therefore available for regeneration and investment. These are shown in yellow in Figure 5.

**Figure 4: Vacant land within secure site**

![Vacant land within secure site](source: Mott MacDonald)

The areas of vacant land present opportunities for development by new occupants to the site, or expansion by enterprises already present.
Figure 5: Available and occupied land at Hillhouse International

Source: Hillhouse International
3 Planning Policy Considerations

3.1 Planning Policy Context

The current Development Plan for the Hillhouse International Enterprise Zone comprises:

- Saved policies of the Wyre Borough Local Plan (1999);
- Fleetwood - Thornton Area Action Plan (AAP) (2009);
- Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD (2009); and

Where specific allocations made in the Local Plan are in conflict with proposals in the AAP, allocations in the AAP will take precedence. The AAP allocates the Hillhouse secure site for industry and business purposes under Policy 3 and Wyre Borough Council is currently preparing a new Local Plan which will replace the AAP and the saved policies of the Local Plan. The new Local Plan is at an advanced stage of preparation having been submitted to the Secretary of State in January 2018. Hearing sessions as part of an Examination in Public (EiP) took place between 15 May and 5 June 2018. The Council has now published its schedule of proposed Main Modifications following receipt of the Inspectors Post Hearing Advice and these are being consulted on between 12 September and 24 October 2018. It is anticipated that the new Local Plan will be adopted in early 2019.

The new Local Plan allocates the entire Hillhouse International Enterprise Zone for mixed-use development under Policy SA4 which requires the site to deliver:

- 250 dwellings; and
- At least 13 hectares of employment development within use classes B1, B2 and B8.

Other complementary commercial uses including an element of small convenience (A1 retail store) of not more than 400m² to support the residential and employment development would also be acceptable.

Policy SA4 requires the entire Enterprise Zone to be brought forward in line with a masterplan covering the whole of the designated area and the masterplan must be agreed by the Council prior to the granting of planning permission for any part of the Enterprise Zone.

At its Cabinet meeting on 5th September 2018, Wyre Council adopted its ‘Guidance on the Preparation of Masterplans’ to assist landowners/developers and stakeholders in preparing masterplans where this is required by the Wyre Local Plan.

Given that the preparation of the masterplan for the Hillhouse Enterprise Zone commenced some time ago and prior to the adoption of this guidance, it has been agreed in discussions with the Council that the masterplan should be progressed in its current form. However, future iterations of the masterplan will need to accord with the masterplan guidance.

3.2 Key issues

Third party funding needs to be sourced to enable the following:
● A landscape and green infrastructure framework incorporating structured tree planting, and pedestrian and cycle connectivity within and where possible outside the site
● A Project Level Habitat Regulation Assessment (HRA) for the entire Enterprise Zone (having regard to the mitigation measures in the Habitats Regulations Assessment of the Local Plan)
● A Flood Risk Assessment (FRA) for the entire Enterprise Zone must be carried out as planning applications begin to come forward, and the results used to take a sequential approach to overall site layout
● Residual surface water run-off should drain direct to the river Wyre via Springfield in the north and Royles Brook in the south. This will require a masterplan-wide drainage strategy
● A ground and water contamination desk study will be required and followed, if necessary, by more detailed site investigation.

If such third party funding cannot be secured, the above will be sourced on a development led basis.
4 Existing Situation

4.1 Market/property situation

The commercial property market in Wyre has been reviewed in the context of assessing the development opportunities for the Hillhouse Enterprise Zone. Various property market indicators have been analysed, including currently marketed properties, historical transactions, employment land take-up, mix of uses, etc. The principal sources of information used for understanding the property market are the EGi property market database and commercial property websites, annual monitoring reports from Wyre Council, and consultations with commercial agents and the businesses already at Hillhouse.

Overall, the Wyre commercial property market is generally a small-volume, small-unit market, dominated by local small and medium sized enterprise (SMEs) serving a relatively local market. The larger scale operators at Hillhouse EZ – Victrex, ACG Chemicals, Vinnolit – would be key exceptions to this, having a more international profile and larger than typical Wyre businesses. This is an ongoing legacy of the long-term chemical production use of the Hillhouse site. These key businesses and the gated nature of the majority of Hillhouse EZ are the key differentials of the EZ from other employment areas in Wyre. It has a clear and apparent differing function in the local economy from other areas, which would influence the types of businesses that would and would not be attracted to it. Burn Hall, an established Industrial Estate developed around Venture Road provides the current unsecure element of the Hillhouse EZ.

The Red Marsh Industrial Estate is located to the west of the rail line that forms the western boundary of the Hillhouse EZ site. It is a long, linear estate, centred on Red Marsh Drive. The Red Marsh Industrial Estate is a typical mix of the indigenous businesses in industrial estates in Wyre, predominantly SMEs servicing the local area. Businesses include automotive repairs/maintenance, trade suppliers, storage, small engineering, trade painting, etc. The estate does not have a clearly defined entry point and is not gated/secured. While alongside the Hillhouse EZ it does not have an obvious significant economic relationship with it, rather it serves a distinctly different, and local, function. The size of the units, including small workshops and small to medium industrial/storage premises, reflect this local function.

Both the Hillhouse EZ and the Red Marsh Industrial Estate are bounded by residential uses, which impact on access points, perceptions of amenity and potential expansion opportunities outside the current boundaries. In particular, Red Marsh Industrial Estate cannot expand from its current footprint, bounded not only by residential uses but by a school and the rail corridor. While Hillhouse EZ has considerable expansion room within its boundaries, the Red Marsh Industrial Estate is built out. Furthermore, its built stock has a low vacancy rate, indicating a lack of opportunities for businesses looking to locate to this estate.

4.1.1 Employment Land Take-Up

Employment land monitoring prepared by Wyre Council as part of the Local Plan evidence base summarises the borough-wide take-up of employment land. Including allocated and unallocated sites, the total gross employment land take-up between 2011 and 2018 in the borough was 12.61 ha, equating to an average annual take-up of 1.8 ha per annum. This demonstrates the low volume of growth in the Wyre market generally.

The employment land monitoring also identifies remaining allocated land in the borough. As at March 2018 (set against the current Development Plan), there was some 76.86 ha identified as
being available employment land remaining in Wyre, of which 47.1 ha was in the Hillhouse secure area. This shows the importance of the EZ to Wyre is providing future employment growth for the borough.

### 4.1.2 Vacant Properties

A schedule of the vacant floorspace being marketed in the study area (as at July 2017) has been compiled from a review of commercial property agents’ websites and subscription based property websites, supported by on the ground inspections. The marketed space is taken to be a reasonably close approximation to that which is vacant – although there may be occupiers waiting for interest in their property before moving, and empty units not actually being marketed. The stock of vacant premises in a locality is constantly changing due to the regular churn of businesses in and out of an area. The vacancy profile represents a snapshot of the market at the time of investigation.

The localities of Thornton-Cleveleys, Fleetwood and Poulton-le-Fylde have been examined separately to identify any local differences in area.

#### 4.1.2.1 Thornton-Cleveleys

13 different vacant property units have been identified within the Thornton-Cleveleys area as being vacant on the current market, including seven industrial units and six office units.

The largest industrial premises currently being marketed is Units A and B at Dorset Drive, with a combined floorspace (including auxiliary offices) of 3,300 sqm. It is being priced at about £32/sqm (£3/sqft). The largest unit in Red Marsh Industrial Estate is the Brookside unit at about 1,750 sqm, which has an asking price of £43/sqm (£4/sqft). Smaller units are demanding higher price points at about £50-70 sqm (£4.5-6.5/sqft).

Vacant office units in Thornton-Cleveleys are small, scattered premises either in town centre locations (along Victoria Drive West) or in industrial estates. There is no dedicated, modern office park uses in Thornton-Cleveleys. These units would provide for micro-businesses in the area, but do not present a corporate level image. There are a range of price points, including a range within the town centre premises, though only one unit was asking for a price about £100/sqm (£9.3/sqft).

As is typical of most industrial and office units, the most common tenure type being marketed was leasehold, although some units were being offered as both leasehold and freehold.

#### Table 1: Vacant Premises – Thornton-Cleveleys

<table>
<thead>
<tr>
<th>Address</th>
<th>Postcode</th>
<th>Size (sqm)</th>
<th>Tenure</th>
<th>Use Type</th>
<th>Rent/Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 11, Croft Court Industrial Units, Butts Close</td>
<td>FY5 4JX</td>
<td>65</td>
<td>Leasehold</td>
<td>Industrial</td>
<td>£58.4 psm</td>
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<tr>
<td>Unit 3, Fox Court, Red Marsh Drive, Red Marsh Industrial Estate</td>
<td>FY5 4HH</td>
<td>90</td>
<td>Leasehold</td>
<td>Industrial</td>
<td>£72.1 psm</td>
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<tr>
<td>Unit A, Red Marsh Drive, Red Marsh Industrial Estate</td>
<td>FY5 4HR</td>
<td>232</td>
<td>Leasehold or Freehold</td>
<td>Mixed-Industrial</td>
<td>£51.8 psm</td>
</tr>
<tr>
<td>Industrial and Office Building, Sharomar Works, Holly Road, Red Marsh Industrial Estate</td>
<td>FY5 4HH</td>
<td>954</td>
<td>Leasehold</td>
<td>Industrial, Office</td>
<td>£41.9 psm</td>
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Table 2: Vacant Premises – Fleetwood

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<tr>
<th>Address</th>
<th>Postcode</th>
<th>Size (sqm)</th>
<th>Tenure</th>
<th>Use Type</th>
<th>Rent/Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit A, Industrial and Office Building, Dorset Avenue</td>
<td>FY5 2DB</td>
<td>1,534</td>
<td>Leasehold</td>
<td>Industrial, Office, Other</td>
<td>£32.6 psm</td>
</tr>
<tr>
<td>Unit B, Industrial and Office Building, Dorset Avenue</td>
<td>FY5 2DB</td>
<td>1,766</td>
<td>Leasehold</td>
<td>Industrial, Office, Other</td>
<td>£32.3 psm</td>
</tr>
<tr>
<td>Unit, Brookside, Red Marsh Industrial Estate</td>
<td>FY5 4EL</td>
<td>1,748</td>
<td>Leasehold or Freehold</td>
<td>Industrial</td>
<td>£43.1 psm Leasehold</td>
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<tr>
<td>Office</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Floor Office, 123 Victoria Road West</td>
<td>FY5 3LG</td>
<td>23</td>
<td>Leasehold</td>
<td>Office</td>
<td>£153.2 psm</td>
</tr>
<tr>
<td>1st and 2nd Floor Offices, Victoria Road West</td>
<td>FY5 3LG</td>
<td>127</td>
<td>Leasehold</td>
<td>Office</td>
<td>£73.7 psm</td>
</tr>
<tr>
<td>Office Building, 23 Beechwood Drive</td>
<td>FY5 5EJ</td>
<td>161</td>
<td>Leasehold</td>
<td>Office</td>
<td>£93.2 psm</td>
</tr>
<tr>
<td>Office Suite, 35 Victoria Road East</td>
<td>FY5 5BU</td>
<td>40</td>
<td>Leasehold</td>
<td>Office</td>
<td>£100 psm</td>
</tr>
<tr>
<td>Office, Dorset Avenue</td>
<td>FY5 2DB</td>
<td>77</td>
<td>Leasehold</td>
<td>Office</td>
<td>£50.9 psm</td>
</tr>
<tr>
<td>1st Floor above ‘The Great Fortune House’, Victoria Road West</td>
<td>FY5 3LG</td>
<td>187</td>
<td>Leasehold</td>
<td>Office</td>
<td>£42.8 psm</td>
</tr>
</tbody>
</table>

Source: BE Group

4.1.2.2 Fleetwood

Fleetwood, at the northern end of the Fylde coast and fronting Morecambe Bay has an economy influenced by its coastal location, including tourism and a legacy of its fishing industry. B-class employment uses are small and serve a local population. 13 premises were identified as being on the market.

The three industrial units on the market are small, light industrial units 120-260 sqm (1,300-2,800 sqft), with asking prices of about £43-65/sqm (£4-6/sq ft).

Ten office units were identified as being on the market in Fleetwood. The office units are generally town centre premises, ideal for SMEs. The range of suites at Carleton Court (Lord Street) provide some choice in terms of unit size in an above-retail location. The Health and Wellbeing Centre on Dock Street provide modern accommodation stock over three levels for a total of 2,005 sqm, which is a substantial quantity of floorspace in one premises in this market. Earmarked for medical or allied services, this building may eventually accommodate several operators, rather than one operator taking the full floorspace. The offices in Fleetwood had less of a price range and a lower average price point than Thornton-Cleveleys.

Table 2: Vacant Premises – Fleetwood

<table>
<thead>
<tr>
<th>Address</th>
<th>Postcode</th>
<th>Size (sqm)</th>
<th>Tenure</th>
<th>Use Type</th>
<th>Rent/Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Units 5&amp;6, Victoria Business Park, Copse Road</td>
<td>FY7 6RP</td>
<td>260</td>
<td>Leasehold</td>
<td>Mixed Industrial</td>
<td>£46 psm</td>
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<tr>
<td>Unit 9, Harbour Trading Estate, Henderson Road</td>
<td>FY7 7QB</td>
<td>232</td>
<td>Leasehold</td>
<td>Industrial</td>
<td>£43 psm</td>
</tr>
<tr>
<td>Unit 6, Harbour Trading Estate, Henderson Road</td>
<td>FY7 7QB</td>
<td>116</td>
<td>Leasehold</td>
<td>Industrial</td>
<td>£64.6 psm</td>
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### Table 3: Vacant Premises – Poulton-le-Fylde

<table>
<thead>
<tr>
<th>Address</th>
<th>Postcode</th>
<th>Size (sqm)</th>
<th>Tenure</th>
<th>Use Type</th>
<th>Rent/Price</th>
</tr>
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<tbody>
<tr>
<td><strong>Industrial</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bracewell Avenue Poulton</td>
<td>FY6 8JE</td>
<td>632</td>
<td>Leasehold</td>
<td>Industrial and Office</td>
<td>£47.1 psm</td>
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<tr>
<td>Industrial Estate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit A, Furness Drive, Poulton</td>
<td>FY6 8JS</td>
<td>361</td>
<td>Leasehold</td>
<td>Warehouse, Showroom, Office</td>
<td>£66.7 psm</td>
</tr>
<tr>
<td>Industrial Estate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 5, The Old Coal Yard, Hall</td>
<td>FY6 0PJ</td>
<td>120</td>
<td>Leasehold</td>
<td>Industrial</td>
<td>£66.7 psm</td>
</tr>
<tr>
<td>Gate Lane</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9a Cocker Avenue, Poulton</td>
<td>FY6 8JU</td>
<td>1,303</td>
<td>Freehold</td>
<td>Industrial</td>
<td>£503.5 psm</td>
</tr>
<tr>
<td>Industrial Estate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(£556,000)</td>
</tr>
<tr>
<td>Building 3, Aldon Road, Poulton</td>
<td>FY6 8JL</td>
<td>305</td>
<td>Freehold</td>
<td>Industrial</td>
<td>£705 psm</td>
</tr>
<tr>
<td>Business Park</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(£215,000)</td>
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</tbody>
</table>

Source: BE Group
### Address Postcode Size (sqm) Tenure Use Type Rent/Price

<table>
<thead>
<tr>
<th>Address</th>
<th>Postcode</th>
<th>Size (sqm)</th>
<th>Tenure</th>
<th>Use Type</th>
<th>Rent/Price</th>
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</thead>
<tbody>
<tr>
<td>Unit 7&amp;8, Bracewell Avenue, Poulton Business Park</td>
<td>FY6 8JF</td>
<td>325</td>
<td>Freehold</td>
<td>Industrial</td>
<td>£677 psm (£220,000)</td>
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<tr>
<td>Grizedale Lea Farm, Shard Lane, Hambleton</td>
<td>FY6 9BX</td>
<td>492</td>
<td>Freehold</td>
<td>Industrial</td>
<td>£15.8 psm</td>
</tr>
<tr>
<td>Warehouse building with yard, Cocker Avenue, Poulton Industrial Estate</td>
<td>FY6 8JU</td>
<td>872</td>
<td>Leasehold or Freehold</td>
<td>Industrial</td>
<td>£40.1 psm Leasehold (£487.2 psm Freehold (£425,000)</td>
</tr>
<tr>
<td>Trilanco Building, Bracewell Avenue, Poulton Business Park</td>
<td>FY6 8JF</td>
<td>1,592</td>
<td>Freehold</td>
<td>Warehouse, Light Industrial</td>
<td>£345.5 psm (550,000)</td>
</tr>
<tr>
<td>Warehouse building with yard, Burlington Court, Cocker Avenue, Poulton Business Park</td>
<td>FY6 8JF</td>
<td>2,481</td>
<td>Freehold</td>
<td>Industrial</td>
<td>£330.5 psm (£820,000)</td>
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<tr>
<td>Unit 1, Castle Gardens Crescent, Carleton</td>
<td>FY6 7NJ</td>
<td>102</td>
<td>Leasehold</td>
<td>Industrial</td>
<td>£64.7 psm</td>
</tr>
<tr>
<td>Rear Workshop, Castle Gardens Crescent, Carleton</td>
<td>FY6 7NJ</td>
<td>47</td>
<td>Leasehold</td>
<td>Industrial</td>
<td>£63.7 psm</td>
</tr>
</tbody>
</table>

### Offices

| Buildings and Land, Station Road                                       | FY6 7HU  | 206.3      | Leasehold | Office       | £46.1 psm             |
| Office, Castle Gardens Crescent, Carleton                             | FY6 7NJ  | 15.9       | Leasehold | Office       | £75.5 psm             |

Source: BE Group

#### 4.1.2.4 Vacancy – Summary

It is apparent from the size and locations of the available units on the market that these serve a localised function. Typically, such units are filled by SMEs with a strong local link (e.g. indigenous businesses or business owners/managers residing in the area). Therefore, such units would not be directly competitive with the function of businesses within the Hillhouse EZ. However, it also demonstrates the types of units in the market, which, if Hillhouse was to expand its functions, are indicative of the types of units that would be expected in such an expansion.

#### 4.1.3 Transactions

The commercial property transactions over the last decade have been reviewed to gauge the types of demand for stock and popular sizes of units. Transaction volumes are influenced by demand, but also by the supply of stock on the market. Low transaction volumes may be due to a lack of demand or a lack of supply, which may be dampening the market.

The tables below detail the transaction volumes for industrial and office units in the area since 2007, separated by year and size band. Overall, some 55 industrial transactions and 24 office transactions were recorded. This demonstrates the relative strengths of these sectors in this area, but also shows the low annual turnover of stock (5.3 industrial transactions per annum full years 2007-16 and 2.4 office transactions per annum).

For industrial properties, the volume of stock transacted has increased in recent years. For the four most recent full years (2013-16), transactions have averaged eight per annum, indicating a level of solidity to the market in the years following the recession period. There is generally a lag in the publishing of deals in the property market and thus the 2017 deals should be considered as not fully up-to-date.
Two-thirds of the industrial transactions were for units less than 300 sqm, with a further 16 percent for units 300-500 sqm. Only two deals have been done for units above 1,000 sqm, although it is noted that one of these was in 2017 (an investment sale for a 3,310 sqm unit at Dorset Avenue in Thornton-Cleveleys). Larger markets would have a higher volume of stock above 1,000 sqm, including representations above 5,000 sqm. However, this industrial market, due to it being a small engineering and SME market, rather than a logistics market, which would require larger warehousing units.

Thornton-Cleveleys recorded the bulk of industrial transactions in the area over the last decade, comprising some 41 of the 55 industrial deals (75 percent). This compares to the current level of vacant industrial stock in the market, with Poulton-le-Fylde having the greatest quantum of floorspace available.

Table 4: Industrial Deals within the last 10 years

<table>
<thead>
<tr>
<th>Size (sqm)</th>
<th>0-100</th>
<th>101-300</th>
<th>301-500</th>
<th>501-1,001</th>
<th>1,001+</th>
<th>Unknown</th>
<th>Total</th>
</tr>
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<tr>
<td>2007</td>
<td>Floorspace (sqm)</td>
<td>494</td>
<td>1,124</td>
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<td></td>
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<td>1,618</td>
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<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>6</td>
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<tr>
<td>2008</td>
<td>Floorspace (sqm)</td>
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<td>465</td>
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<td>1</td>
<td>853</td>
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<td>1</td>
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<tr>
<td>2009</td>
<td>Floorspace (sqm)</td>
<td>275</td>
<td>1,244</td>
<td>950</td>
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<td>Floorspace (sqm)</td>
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<td>503</td>
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<td>1</td>
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<tr>
<td>2013</td>
<td>Floorspace (sqm)</td>
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<td>555</td>
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<tr>
<td>2014</td>
<td>Floorspace (sqm)</td>
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<td>Floorspace (sqm)</td>
<td>241</td>
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<td>1,564</td>
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<td></td>
<td>2,617</td>
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<td>Number of Properties</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td></td>
<td></td>
<td>11</td>
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<tr>
<td>2017 YTD</td>
<td>Floorspace (sqm)</td>
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<td></td>
<td>3,310</td>
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<td>3,402</td>
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<td>1</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>Floorspace (sqm)</td>
<td>1,315</td>
<td>3,465</td>
<td>3,617</td>
<td>3,017</td>
<td>4,611</td>
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<td>20</td>
<td>9</td>
<td>4</td>
<td>2</td>
<td>55</td>
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</tbody>
</table>

Source: BE Group

Similarly to the industrial market, the recent office transactions have seen an up-turn in volume over the decadal average, with 2013-16 recording an average of 4.3 office deals per annum compared to 2.4 deals per annum over the decade. 21 of the 24 office deals (88 percent) have been recorded in Thornton-Cleveleys.

The small unit market is the dominant market in the office sector. 20 of the 24 office transactions (83 percent) were less than 300 sqm, including 13 less than 100 sqm (54 percent). However, it
is noted that three transactions were recorded in the +1,000 sqm size bracket, which is a considerable unit size for this market. The three transactions were sales of full office buildings in Thornton-Cleveleys, Poulton-le-Fylde and Fleetwood. It is noted that no transactions were recorded in 300-1,000 sqm size bracket. Therefore, individual office units being transacted are exclusively small units, with the occasional sale of full office buildings as investments.

Table 5: Office Deals within the last 10 years

<table>
<thead>
<tr>
<th>Year</th>
<th>Size (sqm)</th>
<th>0-100</th>
<th>101-300</th>
<th>301-500</th>
<th>501-1,001</th>
<th>1,001+</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>Floorspace (sqm)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>Floorspace (sqm)</td>
<td>198</td>
<td>198</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>Floorspace (sqm)</td>
<td>20</td>
<td>3,215</td>
<td>3,235</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2010</td>
<td>Floorspace (sqm)</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>Floorspace (sqm)</td>
<td>112</td>
<td>112</td>
<td></td>
<td></td>
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<td>2012</td>
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<td>48</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>Floorspace (sqm)</td>
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</tr>
<tr>
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<tr>
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<td>112</td>
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<tr>
<td>2017</td>
<td>Floorspace (sqm)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>YTD</td>
<td>Floorspace (sqm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Floorspace (sqm)</td>
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<td>4,534</td>
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<td>Number of Properties</td>
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<td>7</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>24</td>
</tr>
</tbody>
</table>

Source: BE Group

4.1.4 Property Market Opportunities

The opportunities for the Hillhouse EZ stem from both its intrinsic characteristics and points of difference, and the overall market opportunities in this corridor. Its historic and on-going uses as a chemicals production node will continue to be its core function. The energy opportunities given impetus through the EZ designation have considerable potential for Hillhouse. However, the broader market in this corridor also provides potential opportunities for growth, particularly on land considered excess to core requirements. There is the potential to capitalise on capacity constraints in surrounding employment areas, most notably at Red Marsh Industrial Estate.

4.1.4.1 Chemical and Energy Production

The chemical and energy production uses of the Hillhouse EZ are its defining characteristic and will be the core use of the Hillhouse EZ in coming years. They will benefit from clustering within
the EZ, through shared infrastructure, use of by-products, energy requirements, emergency services, etc.

These uses will be developed on a bespoke basis, with niche requirements in terms of plant, buildings, infrastructure (inputs and outputs), open storage and buffering. Operators looking to enter the EZ will be seeking land for design and build projects. Clearly, this has been where the interest has been since the area was designated as an EZ. Their large capital costs in bringing such projects to fruition would benefit significantly from the incentives and benefits of the EZ.

Allied support services, such as engineering or maintenance services, would have a growing demand as the EZ develops. There would be opportunities to provide construction and maintenance services for the specialised plant and equipment on sites. The range of complementary uses would be sufficient to support dedicated support services. These would be B2 units, with some demand for open storage for equipment. For ease of operations, these support facilities should be located as close as possible to the core uses (and their clients) and thus would be logically located within the secure area of the EZ. However, some uses may be located further afield.

Further scientific or research support services within the Hillhouse EZ, are possible, although it is more likely that such research facilities would either occur within the individual enterprises at Hillhouse or link with the region’s universities and thus be off-site.

4.1.4.2 Other Businesses Requiring Secure Sites

The secure nature of the Hillhouse EZ site is an attractor to some businesses that are not associated with the target industry sectors of the EZ. Businesses may see the security that is external to their individual plot boundary as being a key benefit to their operations.

This is likely to be a relatively narrow market, with most businesses looking for B-class land or premises happy to manage security requirements on site. However, there would be a certain number of operators that would value such an additional layer of security, such as those with some of the following characteristics:

- Large premises;
- Large outdoor storage areas, particularly with sizeable equipment storage;
- Sensitive uses (e.g. uses that may attract protestors or that require buffering);
- Difficult to secure premises or equipment

Those with high traffic requirements are unlikely to be attracted to premises within external gating and security due to the slowing down of operations that such a layer of security would incur.

Such businesses are likely to be seeking premises through the usual commercial property channels, rather than specifically investigating EZ options. Attracting such businesses to the Hillhouse EZ would require promoting the EZ to the wider commercial property industry, rather than focussing on core EZ industry sectors.

These businesses may be lower order priorities for the EZ, generating less of a return than other options. However, these businesses may represent a transitory use of some land that is not otherwise required in the short to medium terms.

4.1.4.3 Local Business

The capacity constraints at Red Marsh Industrial Estate highlight the opportunity for further premises servicing a similar function in this corridor. Furthermore, the dated nature of much of
the stock at Red Marsh, coupled with the awkward access to this estate, suggests there would be an opportunity to attract businesses from Red Marsh that are seeking to upgrade their premises.

As is seen from the current stock at Red Marsh and the transactional data of commercial property in this corridor over recent years, the demand for stock would be for small commercial units. In relation to B1c light industrial and B2 industrial units, there would be demand for very small, roller-door workshops (<100 sqm), small engineering premises (250-500 sqm) and a narrower demand for medium size industrial units (1,000-2,000 sqm). There would be some take-up of B8 uses, including open storage and small warehousing.

There is a gap in the supply of good quality office space in a dedicated business park. However, this would remain a risky development at this stage, due to the limited size of the office market in this corridor. However, a medium to long term option of further, quality commercial office stock at the EZ would broaden its attractiveness and provides an opportunity for a corporate, gateway image for the EZ.

Importantly, if this opportunity would be taken up by the Hillhouse EZ, it would need to be located outside of the secure area. A large proportion of the visitations to these businesses would be from the local population or from tradespeople (e.g. dropping off car for servicing, visiting landscape supplies) and therefore would be incompatible with a gated industrial area. Furthermore, the businesses themselves would not consider the gated security as necessary or beneficial for their operations.

The market niche that this section can be promoted on is its quality, modern premises that have the benefits of the EZ.

4.1.4.4 Other Ancillary Uses

The core employment uses of the Hillhouse EZ would benefit from being served by a range of ancillary uses for staff and businesses. There is currently a lack of food or other retail or accommodation either on site or surrounding the EZ in convenient locations. Therefore, there are limited opportunities for buying lunches, meeting clients off-site or for recreational activities.

The employment on site is 24/7 and this is likely to continue as the EZ grows. There is also sufficient quantum of employment on site to provide the critical mass to support ancillary services. It is considered that as the EZ grows there would be sufficient critical mass to support a central hub of uses on site, dedicated for staff and businesses to use. Such central hubs are increasingly popular on larger business and commercial parks in providing an array of services in one location. They are seen by developers as beneficial in improving the attractiveness of the business parks to potential occupiers, can result in an uplift of rental income and can provide an additional income source. A central hub for Hillhouse could include a café, meeting/conference rooms, break-out space, gym, rec room, etc. that can be used by employees throughout the EZ.

The large and growing node of employment and businesses at Hillhouse suggests that a hotel would be supportable that would primarily service the businesses at the EZ. As the core chemicals businesses at Hillhouse are international firms, there is already a baseline market to service visitors to these operators. Any visitors to Hillhouse would need to stay at accommodation further afield, either at Blackpool or Fleetwood, both of which are primarily geared for the holiday market. There is a market gap for a budget, business-oriented hotel in close proximity to the Hillhouse EZ. Clearly, this use would need to be outside of the secure area.
This corridor has seen considerable residential development in recent years. Further growth is anticipated, with developers keen to acquire further sites. Land that is determined to be extraneous to the EZ commercial needs is likely to be desired by the residential property market.

4.2 Urban Realm

This section describes the existing context of the site and its surrounding environment, based on visual assessments of the site. This study underpins the key physical influences that will shape the proposed development options for the site going forward. The analysis of the urban realm of the Hillhouse Enterprise Zone site is framed into four key themes; form (architectural quality, historic context, built form/ grain, frontages, views and vistas), movement (accessibility, legibility, pedestrian corridors, safety), use (land uses, activity) and space (public space, environment, views, character areas).

The secure nature of the site provides a unique urban context with un-adopted roads, vacant plots and high fences resulting in a complex environment for users. Whilst the operational efficiency of the site is of paramount importance it is considered that the site should be viewed as a place to work and, therefore, the analysis for the site has been based on it being an urban area for pedestrians and cyclists.

The context of the site benefits from both spaces within the Enterprise Zone and facilities/ adjacent buildings and the functions of both. Natural (e.g. river and green spaces) and artificial (e.g. A-road and existing industrial infrastructure) assets provide several benefits to the site concurrently. The natural features contribute to the development’s views towards riverfront, recreational and open spaces, whilst the artificial features provide accessibility and connectivity to the development internally (e.g. secure access, secured barriers) and externally (e.g. good road network throughout the site).

Within the boundary of proposed enterprise zone there are large areas of vacant and poorly maintained spaces which creates negative environment for users and visitors, impacting on perception of the place. The wide-open, undefined spaces throughout the site may generate disorientation, and consideration must be given to existing and future capacity demands on the enterprise zone, hence, it is vital to evaluate current and predicted future uses. The spatial proportion is important to ensure that employees feel comfortable, secure and protected. Nonetheless, although these spaces have negative characteristics, they generate areas of opportunities for the development.

Generally, the site lacks active frontages. Creating attractive frontages of commercial use within specific areas (possibly in the potential Riverside Business Park and alongside near the potential gateway) will reinforce the sense of arrival and enhance the urban environment within the site.

The following provides further analysis of the form, space, use and movement of the site.
Figure 6: Urban design opportunities and constraints plan

Source: IBI
4.2.1 Form

**Surrounding Context:** The form of the surrounding area is primarily residential with a mix of terraced, semi-detached and detached properties. This creates a consistent urban form to the south of the site, however the residential urban grain to the west and north is broken by industrial development and a large waste treatment centre. Existing open land, currently occupied by recreation uses, is planned for residential growth in the future.

**Edges:** The site is clearly defined by the disused Poulton to Fleetwood railway line to the west and the River Wyre to the east. This edge is further defined by a high palisade fence which secures the site on all sides with access provided at critical points. The Wyre Way runs along the eastern edge of the site, however this is inaccessible from the site and the security detracts from the environmental quality of the River Wyre frontage.

**Built Form:** The site is made up of a mixture of structures for storage, advanced manufacturing, Research and Design (R&D) and chemical testing, as well as a number of office buildings located throughout the site. Further sites for storage and lay down are located through the site and secured by fencing.
The above plan indicates the areas of the masterplan where there is the most potential for regeneration. The purple coloured areas being where the site is largely vacant, and the orange where there are existing uses which could be refurbished, upgraded or redeveloped.
Figure 8: Product Manufacturing unit to the south of the secure site, taken from Wyre Way

Source: IBI

Architectural Quality: There is a major disparity between the quality of the buildings within the site. For example the Victrex site in the centre of the site provides a high quality recently developed office building with well-designed parking areas, however there are a number of buildings which are reaching the end of their design life and require significant upgrade.

Similarly, the recently constructed Addison high tech manufactory provides a good example of a modern building within the industrial setting.
Mass and Scale: The massing and scale of buildings through the site is largely consistent, however larger structures and buildings (approx. equivalent to 4-6 storeys) are largely located to the south of the site whilst the centre of the site has a more modest scale (approx. 3-4 storeys) with a business park type form. There are opportunities to increase scale within the centre of the site, however views from surrounding residential areas should be fully considered to the sites edges.

4.2.2 Movement

Pedestrian and Cycle Access: Pedestrian access into the majority of site is limited due to the secure nature of the site, however pedestrian gates are provided at Bourne Road and Hillylaid Road. Generally the pedestrian environment is poor with little or no footpaths provided through the secure site and areas within Burn Hall Industrial have little pedestrian space within them. Cycle access and cycle parking is limited throughout the site. It should be noted that the Wyre Way provides excellent recreational routes to the north and south along the Wyre River and the several country parks and natural features along this corridor.

Strategic Access: Whilst the site is well established as an industrial and manufacturing site the strategic access into the site from the Strategic Road Network is limited. Since the closure of the railway there has been limited public transport and freight access into the site, however the nearby residential area is served by bus routes linking to Fleetwood and Thornton-Cleveleys, and beyond.
Figure 10: Key Movement Concepts

Source: IBI
**Vehicular Access:** The north-western section of the site (west of rail line) is accessible from Fleetwood Road (B5268). The secure site is accessed via Bourne Road, however the street has become residential in nature due to recent development and there is risk of access conflict going forward. Further secure access to the site is provided to the south from Hillylaid Road, this access is primarily used as a staff access point.

**Figure 11: Existing access into site via Bourne Road**

![Image](source: IBI)

**Service and Heavy Goods Access:** Heavy goods and service vehicles access the site via Bourne Road. The efficiency of secure access is poor which leads to congestion along this road. Furthermore, the residential development around Bourne Road is residential in character and potential conflicts exist between residential and industrial movements.
Figure 12: Existing access to waste plant with potential access to north of secure site

Source: IBI

Figure 13: Adjacent disused railway line

Source: IBI
**Internal Movement:** The internal road network provides a primary access loop (West Road, South Road, East Road) which serves most plots with direct access. The primary access loop is accessed via both secure gateways to the west and south.

West Road runs through the centre of an active manufacturing site which creates potential safety issues for vehicles, cyclists and pedestrians, as well as restricting movement for some vehicles. Potential to re-route the primary corridor around the manufacturing plant should be considered to reduce access and safety issues.

The internal layout of the northern industrial site is logical, however requires enhancement to encourage movement and improve the urban environment.

**Car and Cycle Parking:** Parking is provided throughout the site on an informal (on-street) and formal (designated private car parks) basis. There is a need to formalise the parking provision for cars to ensure on-street parking does not become an issue. A staff car park is provided to the south of the site at the southern access.

Cycle parking throughout the site is very limited – a cycle movement strategy should be coupled with adequate cycle parking within key locations and sites.

**4.2.3 Use**

**Internal Land Uses:** There is a clear distinction between the more intensive manufacturing (chemical/plastics) to the south of the site and the less intensive commercial operation to the centre, north and west of the secure site. Throughout the site there is a mixture of tenures and land use operations which are not necessarily conducive to efficient economic and urban operation. Better planning of the site is needed to improve operation and increase efficient use of land. Reuse or re-planning of sections of the site would increase intensity of use and increase activity in key areas. A mixture of industrial and residential uses creates a distinctive mix to the west of the railway. A small industrial area located off Fleetwood Road (B5268) at Venture Road and a large Waste Recycling Plant, accessed via a dedicated access road, are located to the north west of the site. The synergies between these uses currently works well, however increased industrial operation may cause issues in terms of noise, traffic and pollution.
Figure 14: Land use

Source: IBI
Figure 15: Vacant plots within the site provide development potential but detract from the character and environment of the place

Surrounding Land Uses: The site is bordered by residential areas to the south (Stanah) and there has been significant residential growth to the south of the Waste Technology Park and west beyond Red Marsh Industrial Estate. The residential areas of Fleetwood and Cleveleys are within easy reach of the site.

Two holiday park caravan sites are located to the north (Cala Gran Holiday Park) and to the south (Knepps Farm Holiday Park). The Wyre Estuary Country Park and Wyre Visitor Centre are located to the south of the site in Stanah and Fleetwood Marsh Nature Reserve located to the north of the site in Fleetwood. The Iron Horse Pub is located to the north west of the site on Fleetwood Road and a number of sports clubs and pitches are located to the west of the site. Furthermore, the Cala Gran Holiday Park has a number of food and retail outlets within it.

The remaining dominant land use in the area is agriculture with a number of farm holdings located to the north of the site.

4.2.4 Space

Public Space: There is limited public space within the site with the majority of land provided to highway and unmaintained highway edges. Vacant sites to the south of the site and within the northern area of the secure site are overgrown with significant levels of biodiversity established. The reservoir to the north of the site provides an opportunity for a high quality natural space.
within the site, although perhaps in a revised arrangement to its current utilitarian layout. There is a need to improve the urban environment within the site generally and provide opportunities for pedestrian and cycle movement.

There is little formal green and blue infrastructure within the site and opportunities to link to adjacent recreational corridors and sites including the Wyre Way, Wyre Estuary Country Park, a new country park to the north and sports fields should be investigated. The disused railway line adjacent to the site provides potential strategic green links for cycle connectivity, however opening this area for public use would provide security risks for the site.

Figure 16: Green space
Figure 17: Reservoir to north of site

Source: IBI

Figure 18: Contrast of built and natural character of site

Source: IBI
Figure 19: Informal green space within the site

Source: IBI

Figure 20: Poor pedestrian and cycle environment at entrance to site

Source: IBI
4.3 Transport and Movement

An assessment of the transport and movement situation at Hillhouse has been undertaken by Mott MacDonald’s transport specialists using a mixture of site visits to Hillhouse and the surrounding locality, supported by maps of the local area and discussions with representatives from Wyre Council on the transport issues in the area. There are known highway constraints along the A585 corridor and the A585 Windy Harbour to Skippool Junction improvement scheme is confirmed which will provide improved access along the corridor. There have not been discussions with Lancashire County Council (the highways authority for Wyre) nor Highways England which is responsible for the A585 to the west of Hillhouse, connecting the M55 and Fleetwood.

4.3.1 Vehicular Access

Hillhouse EZ is located 9 miles north of the M55; the A585 connects Hillhouse to the motorway network. The site is somewhat ‘hidden’ behind residential areas, which makes access to the site limited to one main access point and a second employee only access off Hillylaid Road. The main access into the secure site is via the gatehouse on the western side of the site, accessed via Bourne Road from the A585. There are two access points to the open area of the site from Fleetwood Road, for the units situated in the north-western part of the site. Figure 23 shows the location of the site in relation to the area, while Figure 24 shows the roads, railways and footpaths in the immediate vicinity of the EZ.

![Figure 21: Secure site security lodge access](source: Mott MacDonald)

The northern end of the secure site remains relatively un-developed; there are some roads laid, but as shown in Figure 22, many of these are of poor quality and not properly surfaced.
Figure 22: Unsurfaced road at northern end of secure site

Source: Mott MacDonald
In Figure 23, the purple shapes represent junctions where improvements have recently been implemented to enhance the capacity and safety of the junction. Capacity constraints are still an issue at locations in the vicinity of Hillhouse EZ. Particularly along the A585 towards Fleetwood.
A pinchpoint is identified at the secure site gatehouse, which is the only entry point for visitors and deliveries. There is only one booth which means a delay with one vehicle can quickly create a queue. This can affect staff with parking permits as well as visitors and deliveries.

Data on entries to the site by vehicle type are shown in Table 6. HGVs and Visitors can only use the Main Gate; employees can use both gates so figures are the average across both gates.

**Table 6: Average number of entrances per day**

<table>
<thead>
<tr>
<th></th>
<th>Main Gate</th>
<th>South Gate (Hillylaid Road)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HGVs/Commercial vehicles</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>Visitors</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td>600</td>
<td></td>
</tr>
</tbody>
</table>

Source: NPL Developments Ltd

Previously, a new road had been proposed between the northern open access area of the site and Fleetwood Road, along the southern edge of the waste technology park site. The land north of Bourne Road, to the immediate west of the rail line, is designated for housing developments, and so potential for conflicts or congestion along Bourne Road exists. In particular, if activity at...
Hillhouse is to expand with new enterprises, more HGVs are likely to be using Bourne Road to access the site, putting additional pressure on this residential area.

4.3.2 Pedestrian and cycling access

Pedestrian and cycling access to the site is via the same routes as highways access, with the same two access points to the secure site. Opportunities for walking are relatively limited due to the low numbers of residential properties within easy walking distance of the western gate access of the secure site area and the open access area to the north.

The southern entrance to the secure area (the employee only entrance) is situated within a residential area, which makes it more accessible on foot by those who live in the vicinity. However, even once somebody is within the site, it can be a lengthy walk of up to 25 minutes on roads which have no or poor footways through the site to get to land at the northern end of the secure site, around the reservoir. Given that most new developments are likely to be situated at the northern end of the secure area, as this is where most of the vacant land is, walking is not an appealing option.

The northern, open access area of the EZ suffers particular lack of pedestrian routes, with the busy B5268 Fleetwood Road not offering an attractive or safe walking route.

Figure 25: Wyre Way Public Right of Way

The Wyre Way Long Distance footpath runs to the east of Hillhouse International, between the eastern boundary and the River Wyre. There is no access between the secure site and this recreational route.
Cycling access is possible but, as with walking, not appealing for the northern end of the site. For the secure access area, cycling is a more viable option, particularly for access via the employee only entrance off Hillylaid Road, which is situated in a residential area.

4.3.3 Public transport

Public transport access to Hillhouse is minimal. Bus services close to the site are listed in Table 7, while the routes taken by the bus services, and the bus stops, are shown in Figure 30.

Table 7: Hillhouse Bus services

<table>
<thead>
<tr>
<th>Service</th>
<th>Route</th>
<th>Monday-Friday frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Fleetwood – Trunnah – Thornton – Blackpool</td>
<td>6 per hour</td>
</tr>
<tr>
<td>75/A</td>
<td>Fleetwood – Preston</td>
<td>1 per hour</td>
</tr>
</tbody>
</table>

Source: Blackpool Transport

The nearest bus stops are on Fleetwood Road, which is around 1km from the secure site entrance, a 10-15 minute walk. This means a walking time of up to 25 minutes can be expected from the bus stop to most parcels of land on the Hillhouse Industrial Estate. For the northern, open access area of the site, the closest bus stop is at the junction of Venture Road and Fleetwood Road. This is up to around 250m from most of the buildings in this part of the site, equivalent to a 5 minute walk. There are some footways around this part of the site, although they are limited in coverage and of fairly poor quality.

The Poulton-Fleetwood Railway Line is an historic branch line, which runs on the western boundary of the Industrial Estate. It has been mothballed and therefore is not currently operational. Their desire is for a section of the track to Fleetwood to be re-opened and for more frequent heritage services to operate. However, there are issues associated with re-opening the line such as risky level crossings in Thornton, and the conflict with Wyre Council and Hillhouse’s
aim of building a new road access in to the industrial estate, over the railway line to provide a new northern access road.

Discussions have taken place between Network Rail, Wyre Council and Mott MacDonald regarding the state of the line, and the potential for future usage of it. The rail line has recently been truncated at Poulton-le-Fylde station by Network Rail.

**Figure 27: Incoming commuter patterns to Thornton**

Incoming commuter patterns shown in Figure 27 demonstrate that most employees live locally in the Lancashire area. The largest flows to Thornton are from Thornton itself and Fleetwood, with some smaller flows from Blackpool and Lytham St Annes.
**Figure 28: Thornton for Cleveleys station**

![Thornton for Cleveleys station](image1)

Source: Mott MacDonald

**Figure 29: Poulton-Fleetwood Railway (non-operational)**

![Poulton-Fleetwood Railway (non-operational)](image2)

Source: Mott MacDonald
4.3.4 Outstanding queries

As mentioned already, Highways England, the highways authority for Wyre, have not been consulted, as there are no proposals for them to comment on at this stage. Once the draft masterplan has been compiled, Highways England will be consulted, and will be able to inform of any considerations relating to the highways around Hillhouse which need to be taken into account in the masterplan.

4.4 Utilities

The site has been operational since the 1920s; from that time the requirement and methodology for the provision of services has altered. The distribution of utilities was achieved by the use of open shared trenches. At road crossings, precast concrete slabs were placed across the trench. Due to changes in use within the site most of the apparatus within these trenches is currently redundant. As access to the site is controlled, the use of these open trenches remains a viable option. A meeting on 13th August 2017 was held between Mott MacDonald & NPL where the current utility infrastructure was discussed. Following the meeting NPL issued AutoCAD drawings of existing, proposed and some redundant apparatus. The text below provides a
breakdown of the existing utility apparatus network which has been collated from the AutoCAD drawing and the results of the meeting.

It should be remembered that the data received may not be a full record and that the alignment of the apparatus indicated on the drawing may differ on site.

4.4.1 Online Search results

Linesearch was carried out for the whole of the Hillhouse site, the results of which indicated presence of:

- ESP (Utilities) Group
- Blue Transmission Walney
- Dong Energy (UK) Ltd
- Electricity North West Limited
- National Grid Gas (above 7 bar),
- National Grid Gas Distribution Limited (Above 2 bar)
- National Grid Electricity Transmission

Whilst their presence is noted, at this stage it is difficult to determine if it is affected.

4.4.2 Electricity

The distribution network operator (DNO) for the area is Electricity North West Ltd (ENWL). Records received show an extensive network of 33kV cables within the development, however, most appear to be clear of the works. To provide electricity to part of the site ENWL have constructed a Primary Substation within the centre of the existing industrial development. The site also benefits from a number of electricity producers who are selling their power within the development. To achieve this there are a number of private ring mains to distribute the electricity. However, the data provided does not provide any indication of the size, type or carrying voltage of the cables.

4.4.3 Gas

The intermediate pressure (2 to 7 bar) gas main runs just outside the eastern boundary of the site. At the northern end, the gas main enters the site and runs parallel to the reservoir. On the western side of the development the apparatus remains within the development. Records also show another gas main within the site; however, no details of this apparatus are currently available.

4.4.4 Potable Water

The majority of the potable water main has been replaced with polyethylene apparatus, however, existing steel main to the north of the existing development. This apparatus has suffered a number of faults over the years and is due to be replaced. The new apparatus is proposed to connect in to a larger diameter feed which will increase supply. The diameter of the pipe is circa 300mm. In addition to this pipe, a 4" runs along the eastern boundary of the site. This is utilised in times of a fault on the main supply but has insufficient capacity to feed the whole site.

4.4.5 Telecoms

BT Openreach have an extensive network within the site. Due to the age of the development, it is likely that copper is still used within part of the network. Returns currently received from other telecom providers do not show additional apparatus.
4.5  Flood risk and drainage

4.5.1  Flood Risk

The proposed development area lies on the west bank of the River Wyre north of Stanah and south of the Fleetwood Dock area. Within the Wyre Borough Council Flood Management Strategy, the area was designated as the Middle Estuary.

The area is shown on the Environment Agency “Flood Maps for Planning” as being protected by flood defences. It is understood that the defences at Stanah, considered inadequate in 2003/4, were subsequently improved by Environment Agency. Large parts of the Enterprise Zone are located in Flood Zones 2 and 3 (more than 0.1% chance of flooding occurring in any year). The flood defences in place along the estuary do protect the site, but further mitigation measures will be required to ensure that the site is safe for the lifetime of development carried out under the masterplan and a Flood Risk Assessment of the whole site must be carried out.

The Strategic Flood Risk Assessment produced by Wyre Borough Council in 2017 identified that the fluvial and tidal defences are maintained by the Environment Agency with the standard of protection of 1 in 100 years. The Local Plan requires a Flood Risk Assessment (FRA) of the whole site to be carried out and used to take a sequential approach to site layout. The FRA must also consider the risk results from a breach at the tidal river embankment adjacent to the lagoon areas and development will be required to contribute to improvements of this embankment in accordance with the Environment Agency’s Wyre Urban Core Strategy (2013). Finished flood levels must be above the design flood of <0.5% chance of flooding plus an allowance for climate change for the life of the development. Where finished flood levels cannot be set above this level, the implementation of flood proofing/resilience measures that will protect occupants and the property up to that floor level will be required.

In summary, the main risk is generated from failure of tidal gates or flap valves and breaches of the existing flood defences.

The level of flood risk to the site should not preclude development.

4.5.2  Drainage

The site is served by a complicated drainage network including Surface Water Drainage, Foul Water Drainage, and Trade Effluent (discharging to the Wyre Estuary under discharge consents). Each of the above is discussed below.

United Utilities records show no public sewers within the area and Environment Agency classify the Springfield, Royles Brook, and Hillylaid Pool watercourses as main river (main river consultation map). Any modifications to watercourses will need to be discussed with the Environment Agency, Lead Flood Authority, and the Planning Authority.

4.5.2.1  Surface Water Drainage

This surface water drainage system is inherently linked with flood risk. The main system (outfalls) discharges via three watercourses each of which contains open and culverted sections. Each watercourse serves areas of existing development and the watercourses will also provide the outfall for future development.

All discharge to the River Wyre as described below:
The Springfield System - whose catchment covers rural areas to the south of Fleetwood, industrial areas (those under consideration, the former ICI works) at Hillhouse and some residential areas at Burn Naze.

The system appears to have two outfall points, one to the south of the main lagoon area close to Fleetwood Marsh Nature Park and Fleetwood Dock and one within the northern site boundary area close to the site lagoon.

The outfall beneath this area is in a large diameter brick culvert at depth with a twin tidal flap chamber controlling backflow from the River Wyre. It is understood that the culvert has been cleaned recently. Maintenance of the flap valves is necessary to aid protection from flooding during tide locking.

The watercourse/culvert is shown (on ICI drawing NW/2001/034/1 Hillhouse -Services Surface Water) to have drained the northern portion of the former site which will be developed as development areas A to D.

The condition or extent of the old drainage network is not known.

The Royles Brook System – The catchment for this system extends to Norcross and to Carleton. The section Norcross to Carlton is understood to be a United Utilities Sewer (map data from Wyre Borough Council Land Drainage Strategy).

Parts of the system are pumped, Royles Brook Station near Marsh Mill with the pumping station containing three submersible pumps to relieve problems in the upstream end of the brook system.

The Brook serves the central part of the former ICI site with the old drainage network generally flowing from north to south where it discharges into the watercourse. Areas immediately south of the brook drain from south to north to discharge to the brook.

The condition and extent of the old drainage network is not known.

New development in the central area generally follows the same principles discharging to this watercourse via the existing or modified system. It is anticipated that the proposed development at the area close to the railway would discharge to the Brook.

Hillylaid Pool Old and New System lies at the southern boundary of the Hillhouse site. It consists of the old meandering brook adjacent to a man-made linear watercourse. The catchment area includes Thornton, parts of Norcross, and extends southward toward Carleton. The Royles Brook System Connects to Hillylaid Pool to the south-east corner of the Hillhouse site north of Kneps Farm/caravan site.

The combined systems Royles Brook and Hillylaid Pool discharge to the River Wyre via the Stanah outfall and pumping station. The outfall is controlled by tidal gates with the pumps assisting as necessary. Two Archimedian screw pumps of 3.3m diameter lift water by 4.5m and discharge at a rate of 4.2 m3/sec from the confluence of Hillylaid Pool and Royles Brook. In severe storms both pumps operate together to reduce backup of water in the system.

The southern areas of Hillhouse discharge into the Hillylaid Pool watercourse via several outfalls. It is considered that the south-central area of proposed development would follow that principle.
4.5.2.2 Foul Water Drainage

No United Utilities sewers are present within the site. ICI records are not clear in respect of foul drainage discharges. A foul pumping station is shown on the records lying to the south of the site close to Hillylaid Brook but this is noted as being decommissioned in 1980 with sewage being transferred to the Vinnolit main plant.

This new plant (Pumping Station) is situated to the east of the main Vinnolit Production plant close to the Wyre bank. The plant discharges flow via a rising main to the sewage treatment plant at Fleetwood. It is understood that the capacity of this treatment plant is limited and may not be able to serve the proposed development.

The condition of foul sewers within the site and the extent of the system is not clear nor is it clear whether all sites discharge to the Vinnolit Pumping Station. This will require further investigation. It is likely that a package/modular treatment plant will be required to serve plots A to D with other sites being catered for in the existing network if practicable. If not, foul flows would be transported to the package/modular treatment plant.

4.5.2.3 Trade Effluent

An extensive trade effluent system is present across the site all of which is routed to a main outfall to the River Wyre. This outfall consists of a large partitioned gabion unit accepting flows from Victrex, AGC CE and Vinnolit via separate chambers. Flows are pumped into the outfall bay to discharge to the river and one spare inlet is available.

It is understood that the facility can be expanded to cater for additional inputs. It is assumed that future development would discharge to this point or to a similar newly constructed facility if necessary and if that could be agreed with Environment Agency.

4.6 Environment and ecology

The environmental baseline for the site and the wider surrounding area has been established using publicly-available information, such as Ordnance Survey (OS) mapping and environmental data sets from government agencies, including the Environment Agency, Forestry Commission, DEFRA and Historic England. In addition, NPL Estates’ site archive records/reports were viewed by Mott MacDonald on 2nd August 2017. No site specific survey work or intrusive investigations have been undertaken at this stage to inform the environmental and ecology baseline for the site; these do need to be undertaken before development can begin.

4.6.1 Landscape and Visual

Natural England has selected and divided areas of England’s countryside into character areas, based on the features that shape that landscape and their associated ecosystem services. The site is located within National Character Area No. 32 – Lancashire and Amounderness Plain, which covers an area of 95,593 ha. The northern coastal plain and reaches of the River Wyre, which are adjacent to the north and east of the site area, are described as improved pasture with isolated arable fields, with blocks of mixed woodland punctuating the gently rolling plain.

There are no Countryside Rights of Way (CRoW) within 1km of the site boundary. The site is bordered by the River Wyre Estuary, which flows in a general south to north direction along its eastern extent. The land use to the west and south of the site is predominantly residential, with small commercial premises. The site lies approximately 4km south-east of Fleetwood town centre.
The likelihood of any proposed works affecting the surrounding area is anticipated to be low due to the presence of trees to the south and west, which shield views to residential properties. Views from across the estuary, on the northern bank of the River Wyre, are unlikely to be affected due to the site’s legacy of industrial land use, hence any future development on site is unlikely to result in a significant change to the landscape character.

4.6.2 Ecology

The site is surrounded by pockets of deciduous woodland; directly west of the sea reservoir, on either side of the disused railway line, along the site access road, and two areas immediately south of the site. All these woodlands have an area of approximately 0.5 – 1 hectares. There are no areas of Ancient Woodland within 500m of the site.

Morecambe Bay, adjacent to Hillhouse on its eastern extent, is a Ramsar site and a Special Area of Conservation (SAC) due to its internationally important numbers of migratory wildfowl. However, this designation doesn’t extend into the estuary itself, and is located approximately 3.5km north of the site boundary.

Morecambe Bay is also designated as a Special Protection Area (SPA) due to wildfowl populations, the Bay also supports dense communities of invertebrates, saltmarsh vegetation and large mussel beds. The Wyre Estuary is located adjacent to the site’s eastern extent. The Estuary is designated as a Site of Special Scientific Interest (SSSI) due to its national importance for wintering and passage of Black-Tailed Godwit, wintering Turnstone and Teal, in times of hard weather. Other wading birds present include: Lapwing; Golden Plover; Oystercatcher; Redshank and Dunlin, occupying various ecological niches within the estuary.

The Wyre Estuary is also dominated by a range of plant species, with the lower marshes colonised by those specialised to bare mud and withstanding frequent tidal inundation, whilst the higher marshes are dominated by grazing-sensitive species. The Wyre is a recommended Marine Conservation Zone (MCZ) to protect nationally important marine wildlife, habitats, and geology. The Lune Estuary SSSI is located approximately 3.5km north of the site, and designated for its saltmarsh habitat and range of coastal species it supports.

There are three Biological Heritage sites within 500m of the site, to the north, east and west. Careful consideration will need to be given to these important biological and ecology assets in the preparation of the masterplan.

The site includes land connected with ecological mitigation and compensation that was provided to offset ecological impacts associated with a previous residential development at Bourne Road (planning permission 10/00215). The ecological mitigation and compensation land requires further consideration and review if the land is to be brought forward for development as part of the masterplan.

4.6.3 Archaeology and Heritage

There are three Grade II Listed Buildings within 500m of the site boundary: Trunnah Farmhouse which is 305m to the west, Poolfoot Cottage which is 330m to the west and the Sacred Heart Catholic Church, which is 420m to the west (DEFRA, MagicMap 2017). There are no conservation areas or scheduled monuments within the site boundary or within 500m of the site boundary. Potential presence of archaeological remains within the site boundary is unknown.

4.6.4 Geology

According to the British Geological Society (BGS) 1:50,000 scale Solid and Drift Map for Blackpool (Sheet 66), the site is underlain by superficial Tidal Flat Deposits comprising clays.
and silts, which overlie Devensian-aged Glacial Till. The BGS maps do not identify any Made Ground within the site area. The main geological feature in the area is a synformal syncline whose axis trends approximately north-south. According to the BGS the bedrock underlying the majority of the site is the Sidmouth Mudstone Formation, forming part of the western limb of the syncline, which dips to the east at an unknown angle beneath the River Wyre Estuary. Within the Sidmouth Mudstone Formation, the Preesall Halite Member has been identified in the south-east extent of the site, this comprises Mudstone and Halite-stone.

According to the Coal Authority Interactive Map viewer, historical mining activities do not pose a risk to the site (http://mapapps2.bgs.ac.uk/coalauthority/home.html).

4.6.5 Water Environment

Three EA-Designated Main Rivers flow within the site boundary, all flow west-east across the site, into the River Wyre. Two of the three named; Royles Brook and Springfield. Royles Brook crosses the central half of the site, south of the Victrex plant and north of the Wyre Power plant. Royles Brook has been the receptor of many pollution incidents, mentioned in Section 4.6.6 Contaminated Land. Springfield which crosses the northern half of the site to the south of the reservoir. The River Wyre bounds the site to the east, it is also the receptor of many historic pollution incidents mentioned in Section 4.6.6.

The northern extent of the site (where the sea reservoir is located) and the southern extent of the site is designated as an Environment Agency (EA) Flood Zone 3. Therefore, the land has a ≥ 1 in 100 annual probability of river flooding or ≥ 1 in 200 annual probability of sea flooding according to the EA. The EA has reported the land as benefitting from flood defences. A section of coast on the east edge of the site is shown to have flood defences in place on the EA Flood Map for Planning, offering potential mitigation against flood risk.

Land to the south of the sea reservoir, in the middle section of the site, is designated as Flood Zone 1 by the EA. Therefore, the land has < 1 in 1000 annual probability of river or sea flooding.

According to the EA long term flood risk information, the site area is identified as being at low to medium risk of flooding from surface water, although not across the entire site. The extent of the surface water flooding appears to be located on or adjacent to the EA-Designated Main Rivers within the site or the site roads, in particular, surrounding the main Victrex facility. The site is identified as not being at risk of flooding from reservoirs.

According to the EA, the Sidmouth Mudstone Formation which underlies the site is classified as a Secondary B Aquifer, which stores and yields limited amounts of groundwater due to its thin, permeable horizons of sandy material. This aquifer is classified as having high groundwater vulnerability, suggesting that any leachates are likely to permeate through the overlying units and potentially contaminate the groundwater. The site is not located within an EA designated groundwater source protection zone. There is one water abstraction licence within 500m of the site, the licence is held by Thornton Facilities Management Ltd. (Licence Number. 2672421005), and is being used for general cooling for the purpose of industrial/commercial services.

The site is located approximately 20m to the west of the Wyre Estuary, therefore groundwater levels and water quality are likely to be influenced by tidal and seasonal influences, which may result in fluctuating groundwater levels and water quality across the site.

4.6.6 Contaminated Land

The first use of the site was for agricultural land, with the name Hillhouse derived from the name of the farm which in 1852 was located in the centre of the present site boundary. By 1890 the
site was being used by Fleetwood Salt Company, later United Alkali Company, to make soda ash for glass and soap production. This continued until 1941 when ICI General Chemicals Division chemicals production began on site, as agents for the Ministry of Supply, salt from Preesall was used to make chlorine. ICI took over running of the site under contract to various business groups. Products produced on site included polyurethanes, vinyl chloride and thermoplastics. Until 1999 Thornton Power station also operated on the site. In 2013 ICI exited Hillhouse, with large proportions of the site having been sold to NPL Estates and Lancashire County Council.

There is one recorded historic landfill site within the site boundary: Hillhouse Landfill Site, which is known to comprise four tipping sites for industrial waste from various factories within the Hillhouse Estate (EA, 2017). Tip No’s 1 and 2 are recorded to have been used between 1959 – 1965, however it is believed that tipping in these sites continued until 1980. Waste is believed to comprise general waste, construction waste, cardboard, pallets and wood also including empty drums and washing residues (Atkins, ICI Hillhouse Desk Study 1997). Site records from 1975 state that various sludges were tipped “down holes” and spread over Tip No’s 1 and 2. These sludges were of varying chemical composition, containing: chlorobenzenes; bromochlorobenzenes; tars; iron compounds; lubricants; pigments; plasticisers; lime; magnesia; alumina and sodium hydroxide. Voids were also encountered within the tipped waste. According to the BGS aquifer maps there are no superficial aquifers under the site, reducing the potential risk of the above contaminants leaching into the River Wyre Estuary.

There is potential for more contaminants to be present on the site, and anecdotal evidence obtained during a site visit by Mott MacDonald on 02/08/17 suggests a number of land areas with increased contamination potential (See Figure 32 below). These include an area in the north-west of the site which is known to hold buried drums containing benzene (Location 3, on Figure 31). The location of these drums was visually confirmed during ground investigation works, undertaken on behalf of NPL Estates Peter Naylor. The drums were left in situ, as since their burial in the 1950s they have corroded over time and may have potentially released their contents into the surrounding soil, making this area of the site potentially contaminated with benzene. There has also been asbestos observed in these soils, historic intrusive investigations indicate that asbestos may be present over other areas of the site (See Figure 31).
**Figure 31: Contaminant locations**

Source: Interpretive map and suspected locations of contaminants produced by Peter Naylor (NPL Estates), based on historic evidence from intrusive investigations (Atkins, 1997 and Babtie 1995), and industrial land use on site.

The southern extent of area 9 and the westerly extent of area 10 (as shown on Figure 31) are currently used by NPL Estates and Lancashire County Council to stockpile soil removed from area 2, following development of the Waste Technology Park. According to the NPL site staff, this stockpiled material has undergone a series of remediation treatments, which now render it suitable for use as ‘product’ on the site, i.e. it may be used in future landscaping or construction, but must remain on site. Details of the remediation and laboratory test results were not available at the time of writing.

The majority of the site is hardcover, resulting from the historic site use as a chemical works. This hardcover acts as a barrier between any potentially contaminated ground/groundwater and land-users or other sensitive receptors such as flora and fauna. Therefore, some areas of the site are fit for limited land-use e.g. storage. For example, areas 19 and 20 are believed to be
contaminated with mercury, originating from ICI historic trade waste (reported pollution events), but remain capped by concrete slabs, so are currently being used as storage for battery units providing the concrete is not broken.

The area in the north-west of the site, adjacent to Fleetwood Road has been known to be subject to various pollution incidents throughout the operation of the LCC waste recovery facility, and the adjacent waste transfer station. According to the EA records, waste materials were released in November 2002 causing minor impact to air and significant impact to land; an unknown pollutant was released in December 2005 causing significant impact to air and land; inert materials and wastes were released in February 2006 causing significant impact to air and land; specific waste materials were released in July 2007 causing minor impact to air and significant impact to land; atmospheric pollutants and effects were released in April 2014 causing significant impact to air.

There have been two notifiable pollution events on the site post-1998, in January 2005 an unknown pollutant had a significant impact to water and in July 2013 sewage materials had a minor impact to air and a significant impact to water.

There have been seven notifiable events of industrial pollution on the site post-1998, AGC Chemicals Europe Ltd. released 678kg of PFCs in 2012, 33.77kg of HFCs in 2011, 0.236t of Tetrafluoroethylene in 2010 and 4.5t of HCFCs in 2007. Asahi Glass Fluropolymers UK Ltd. released 23000kg of HCFCs in 2003, 0.17t of both VOCs and HCFCs in 1998.

There are also records of seventy reported pollution Incidents having occurred between 1988 – 1996, when ICI Chemicals operated at the site. These incidents released a range of pollutants including trade waste, PVC latex, surfactants, mercury, ethylene dichloride. These incidents appear to typically affect water, mostly being released into Royles Brook and the River Wyre Estuary.

There are two main outfalls from the site, which discharge into the River Wyre Estuary. The north outfall is monitored on a monthly basis by NPL Estates, showing occasional elevated levels of 1,2-dichloropropane, for example 43µg/l in December 2015 and 38µg/l in January 2016. In December 2015, there were slightly increased readings for trichloromethane and tetrachloroethane, but both readings were only 2µg/l above their detection limits.

Data associated with the main outfall into the Wyre Estuary, in the southeast of the site, is monitored and held by Victrex, Vinnolit and Wyre Power, which currently operate under a permitted discharge consent.

The site is underlain by superficial deposits, often containing peat and other organic material, recorded landfills are identified in the north of the site, and potentially volatile organic contaminants are present in the soil and groundwater across the site. There is therefore an increased potential for ground gas generation and migration both on-site and off-site, however, this risk is yet to be quantified fully.

4.6.7 Air Quality

There are no Department for Environment Food and Rural Affairs (DEFRA) Air Quality Management Areas (AQMA’s) within the site or within 500m of the site boundary (DEFRA, 2017). There are however, several potentially sensitive air quality receptors surrounding the site, this includes the residential areas to the east and south and ecological designated sites to the west.
4.6.8 Noise

There are no DEFRA Noise Important Areas (NIA’s) within the site boundary or within 500m of the site boundary (DEFRA, 2017). There are however, several potentially sensitive noise receptors surrounding the site, this includes the residential areas to the east and ecological designated sites to the west.

4.7 Current Landowners/Occupiers

Consultations were undertaken with some of the larger current occupiers of Hillhouse. Specific issues raised are below; some common points raised related to security with several businesses wanting their own secure areas around their site to add further protection for particularly sensitive enterprises. Related to this, some occupiers expressed frustrations or tensions with neighbouring businesses. Occupiers raised concerns around visibility and signage, both inside and outside the site, which makes it difficult for visitors and deliveries to find their way. Having only one entrance/exit point, on Bourne Road, which all vehicles must register at, creates a bottleneck. Businesses and their suppliers have experienced delays in gaining access into the site due to the limited capacity of the security point. For larger businesses or those considering expansion, this is perceived as a threat to their growth and profitability.

In terms of the experience for businesses’ employees working at Hillhouse, common frustrations among businesses were of the lack of on-site facilities for staff, such as canteen or catering facilities and shared conference/meeting spaces, as many individual companies do not have such facilities. Additionally, occupiers expressed a desire for amenities within the site such as a gym and small supermarket on the site to provide leisure and retail facilities. The current environment and lack of consistent good quality footpaths around the site makes walking for leisure purposes or between different buildings of a company an unpleasant and at times dangerous experience, due to the substantial number of HGVs which move around the site.

4.7.1 Victrex

Victrex have recently acquired an increased landholding within the Hillhouse site, in order to consolidate their land ownership. They are looking to acquire further parcels of neighbouring land. Victrex and AGC have entered a joint venture to secure their own electricity supply, separate from the main supply provided by NPL.

Staff at Victrex feel footpaths within the secure site are poor, and that there is potential for investment in improvements to the environment and ease of movement around the site. They noted that signage to the EZ and at the entrance to the secure site is of a poor standard.

4.7.2 Vinnolit

Vinnolit has one operation site in the UK, which is at Hillhouse where it employs 60 staff. However, due to their main bases and source of raw materials being in Germany, their biggest issue is related to the transportation of the raw materials from Germany to Hillhouse via road and sea. They do not currently have plans to expand their operations at present.

Vinnolit have no on-site catering facilities or canteen; they would like to see a central facility which offers these sort of facilities.

4.7.3 AGC

AGC’s main concerns are related to security. Security around their site is poor, as one of the main access roads in the site runs through the middle of their plant, and anyone from within the
secure site can walk in. This presents a health and safety risk which they would like to reduce by having their own secure area restricted to AGC staff only.

AGC have an office block facility on the southern boundary of the secure site. However, these facilities are over-sized which have passed their shelf life. They are looking to consolidate their office space into a more suitable space, ideally within the secure area, but it does not need to be adjacent to the processing plant.

4.7.4 On Site Kitchens

On Site Kitchens are one of the smaller enterprises at Hillhouse. Their land is situated on the north-eastern part of the developed area of the secure site. Like other enterprises, they have desires to expand their operations and therefore additional space is preferred. They are willing to move if a suitable larger site is found, but they would like to remain in the secure area due to the high value and mobile nature of their equipment.

4.7.5 Addisons

The new high-tech manufactory has recently been constructed on Hillhouse to consolidate operations, and also minimise the influence of vibration – particularly from HGV’s. Any new roads should be positioned away from the facility. The company has aspirations for expansion in the future.

4.7.6 Fire Fighting Training College

The college is experiencing growing demand in its business to offer services to naval organisations.

4.8 Summary of constraints and opportunities

This section has provided details of the existing conditions at Hillhouse International EZ covering numerous key disciplines. In summary, the main constraints and opportunities which have been identified in each discipline are as follows:

<table>
<thead>
<tr>
<th>Property Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>The commercial property market in the Wyre area is reasonably vibrant, with a number of premises being available in the area which serve the local economy. These units are generally suitable for local SMEs due to the small size of properties available. Similarly, most the recent property transactions have been for smaller units; this may mean the space available at Hillhouse could cater for industrial uses which require bigger premises for design and build purposes. Chemical production and related industries are expected to remain the dominant uses on the site. The nearby Red Marsh Estate is at capacity and outdated; Hillhouse may be able to absorb demand at the estate for larger or updated premises.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Urban Realm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hillhouse has a large number of industrial buildings owing to the chemical testing and production nature of the site. The southern part of the site contains large structures, while the northern part of the site is more open with undeveloped land. The industrial site is bounded by fencing to create a secure environment, which is a selling feature of the site for the businesses</td>
</tr>
</tbody>
</table>
located on it. To the northern part of the EZ is an open access area. Immediately outside the EZ, land usage is predominantly residential.

**Transport and Movement**

Due to the secure nature of the site, access into it is limited to two points – the main gate on the western boundary, and an employee only gate on the southern boundary. The main gate is relatively inefficient meaning delays can occur, and is the only access point for HGVs and visitors. There is potential for conflicts along Bourne Road, between residents and increasing HGV volumes. In the local vicinity, key routes such as the A585 Amounderness Way experience congestion.

Pedestrian and cycling access in generally limited with few safe or appealing routes in to the site, particularly the northern areas. Bus services in the area are reasonably frequent, but the closest stop is a 10-15 minute walk from the site entrance. Consequently vehicle movements in and out of the site are high. Within the Hillhouse site, paths for walking and cycling are inconsistent and this, combined with the layout of the site, does not encourage active movement around the site.

**Utilities**

Distribution of utilities at Hillhouse has been achieved through using open shared trenches, although these are now mainly redundant. Hillhouse is serviced by electricity, gas, water and telecoms. A primary substation has been built on the site, and some producers on the site sell their power internally. Water apparatus at the site has been upgraded and replacement is continuing where needed. Some unknowns relating to the utilities, such as the condition of the infrastructure, remain further investigations including underground visual surveys, are required.

**Flood risk and drainage**

Hillhouse International is located 20m west of Wyre Estuary, and the northern and southern extent of the site are located in Flood Zone 2, with a 1 in 100 probability of river flooding or 1 in 200 probability of sea flooding. However, the land benefits from flood defences on its eastern perimeter against 1 in 200-year events. Some works may need to be carried out to further protect new developments against climate change which could breach the existing flood defences.

Surface water and trade effluent discharge in to the River Wyre. The system for foul water drainage is unclear. The condition of the drainage network is not known; underground investigations needs to be conducted to ascertain their state.

**Environment and Ecology**

Previous usage of the site means contamination of land exists across the site. The hardcover which exists on much of the site acts as a barrier between potentially contaminated ground and
land users. The site is located 20m west of the Wyre Estuary, which poses a flood risk of greater than 1 in 100-year risk of flooding for the northern part of the site, although the land does benefit from flood defences. The land to the south and west of the site is predominantly residential, although the presence of trees acts as a shield between the site and properties.

The site is located near to the River Wyre estuary which is a designated Special Protection Area and a Site of Special Scientific Interest.
5 Initial Masterplan Considerations

This section explores some factors which need to be considered within the Masterplan, and puts forward some initial ideas for how the site could be taken forward.

5.1 SWOT Analysis

The following SWOT analysis focusses on key urban issues of the Hillhouse site and highlights some of the key considerations which need to be taken into account in developing the Masterplan.

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure site with enhanced security and self-contained nature of site</td>
<td>Congested access at Bourne Road</td>
</tr>
<tr>
<td>Wyre Way and Wyre Estuary Country Park provide adjacent recreation</td>
<td>Limited access to north of site</td>
</tr>
<tr>
<td>High quality office buildings and bespoke manufacturing structures</td>
<td>Poor quality urban environment for pedestrians and cyclists</td>
</tr>
<tr>
<td>Well defined primary access loop with each plot afforded its own access</td>
<td>Ageing building stock</td>
</tr>
<tr>
<td>High concentration of activity from employees</td>
<td>Number of vacant and poorly maintained sites</td>
</tr>
<tr>
<td>High levels of biodiversity to the north of the site around the reservoir</td>
<td>Poor sense of arrival at Bourne Road and waste site to north</td>
</tr>
<tr>
<td>Site is well screened from the west by surrounding land uses and disused railway line</td>
<td>Conflict between residential and industrial/manufacturing land uses (COMAH zones)</td>
</tr>
<tr>
<td></td>
<td>Limited public transport access</td>
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<tr>
<td></td>
<td>Wyre River and surrounding natural assets poorly addressed</td>
</tr>
<tr>
<td></td>
<td>Aging infrastructure and access arrangements</td>
</tr>
<tr>
<td></td>
<td>Safety issues on West Road</td>
</tr>
<tr>
<td></td>
<td>Limited amenities on site and in surrounding area</td>
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<tr>
<td></td>
<td>Lack of defined green and blue infrastructure</td>
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<tr>
<td></td>
<td>Poor wayfinding from main road and within the site</td>
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<td></td>
<td>Cost of new infrastructure</td>
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<tr>
<td></td>
<td>Access over Network Rail land to improve access to the site</td>
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<tr>
<td></td>
<td>Impact on local residents</td>
</tr>
<tr>
<td></td>
<td>Pollution (odour, noise, pollution, light) from industrial opportunity</td>
</tr>
<tr>
<td></td>
<td>Flooding</td>
</tr>
<tr>
<td></td>
<td>Health and safety issues for pedestrians and cyclists</td>
</tr>
<tr>
<td></td>
<td>Maintaining security of site in key areas</td>
</tr>
<tr>
<td></td>
<td>Inability to improve strategic access and public transport networks</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide recreational links to Wyre Way, Wyre Estuary Country Park and new country park to north</td>
<td></td>
</tr>
<tr>
<td>Enhance pedestrian and cycle environment within the site to encourage this movement</td>
<td></td>
</tr>
<tr>
<td>Create a “recreational loop” within the site to create defined green</td>
<td></td>
</tr>
<tr>
<td>Create a central hub within the site which provides amenity and retail for the site</td>
<td></td>
</tr>
<tr>
<td>Create a new access into the site to the north west</td>
<td></td>
</tr>
</tbody>
</table>
- Create an environmental feature around the reservoir
- Create a new gateway to the site off Fleetwood Road
- Use of disused railway line for strategic cycle or public transport connections

| The approach of place-making is crucial to creating sustainable places and communities. A key characteristic relevant to place-making is promoting walkability – a socially equitable method of movement that is most accessible to the people and most environmental friendly transportation mode. Although the current situation of the site necessitates the need for efficient vehicular-dominant movement and accessibility, there is huge potential of promoting walkability and cycling throughout the northern part of the site, particularly on the perimeter of the River Wyre. Thus, in order to promote walking and cycling activities, the proposed design scheme will shape a built environment that is planned in a manner that it encourages people to walk through a high-quality pedestrian and cycling environment – generating a vibrant employment site rather than disconnected one. Applying urban design principles onto the design of the masterplans will help unlock development capacity, creating ‘places’ of high quality and variety in the spaces between buildings. They will also reflect on defining a hierarchy of streets (for movement and connectivity), spaces, and places and provide a clear and legible urban environment. In addition, emphasis will be made on increasing and enhancing the network of green and open spaces generating landscapes with value and character. Moreover, the aim to safeguard existing views of River Wyre, whilst framing new one. The masterplan must re-focus on creating positive relationship between the built and natural environments. |

5.2 Initial options

The initial masterplan options of the Enterprise Zone intervention have been planned and designed with a vision that is holistic; with the ultimate goal to meet local demands, whilst developing on a city and regional scale as well as thrive to compete nationally and internationally. Diversifying the uses within the masterplan will help facilitate more opportunities for economic prosperity through the provision of jobs. The masterplan aims to enhance accessibility, connectivity and legibility of the site and mitigate its current poor urban environment. One of the weakness of the site is its lack of defined identity; there is focus on buildings rather than place or spaces which creates a fragmented area with poor character. Options were developed based on the three access arrangements that were established on a number of considerations of the existing situation and future development aspirations. Due to the constraint of the secured part of the site (south), accesses to the site will have a major impact on the potential uses of land within the development. The mixture of land-uses will help to support the existing community alongside new residents with increased prospective employment opportunities to allow economic growth, enhancement of green infrastructure and open space networks, and housing provision. Emphasis has been made on the integration of land-use and transportation in order to generate efficient land utilisation and promote good linkage between people and places. Some initial options for masterplan development at Hillhouse have been developed. These are shown in the following. The preferred option will be a hybrid or an adaptation of one or more of these options. |
Note the options would require the partial closure or a new crossing of the rail line to the west, and all options retain the most southern secure access to help with the permeability of the site.

5.2.1 Option A

Figure 32: Initial Indicative Masterplan Option A

Option A proposes an industrial-led mixed-use development with a combination of business uses (offices), general industrial uses, commercial (hotel and food and cafes), leisure (community hub/indoor sports) as well as residential development. It aims to expand the industrial growth of the existing development whilst supporting it with the other uses. The first access design option focuses on the northern part of the site as a strategic route for the unsecured part of the site, whilst maintaining the southern access with a slight alteration to position of the security point—creating a junction with the assumption that derelict railway line is to be removed.

In terms of the land-use strategy, there are opportunities to allocate B1 uses (e.g. offices) adjacent to River Wyre as a way of maximising views and vistas of the river as well as
increasing employment opportunities. Due to the nature of the uses, this would strengthen the route of the potential recreational trail. In light of this, a green corridor axis will consequently generate continuity towards the natural heritage located north of the site. Moreover, the location of the community hub (leisure uses) could be situated alongside the river and at the centre of the unsecured site bordering River Wyre (see figure 33), generating a potential landmark and gateway for the development (fronting the access route). The inclusion of restaurants and cafes close to the leisure and office facilities will enhance viability for their uses and increase service provision for the users. To the west of the site of the right-hand side (near River Wyre) will be B8 uses (storages, sheds) situated next to the derelict railway line since the nature of the building use does not contain active frontages as well as maximising the use of space (see figure 33).

**Figure 33: Option A Land Use Provision**

Source: IBI Group
5.2.2 Option B

Similar to Option A, Option B maintains the same strategic access to the north of the site. Nonetheless, the southern access is proposed to be disconnected with no entrance to the site. Furthermore, the leisure and business facilities are very similar to the previous option, however, the top part of the northern site to allocate B8 uses to separate them from the rest of the development and create a more pedestrian-friendly environment (due to heavy vehicular movement and take-up of space).

The allocation of residential uses to the west works well with the existing setting – adjoining existing residential neighbourhoods. There is also potential of allocating commercial and retail uses to the corner of the site (left side) which could act as a strategic gateway and landmark for the rest of the development, incorporating a hotel as well as some restaurants and cafes could potentially increase the viability and liveability of the development as well as support the business/industrial facilities allowing visitors to be in close proximity to the Economic Zone. This masterplan option proposes a commercial-led and industrial mixed-use development.
Figure 34: Initial Masterplan Option B

Source: IBI Group
5.2.3 Option C

The access of Option C reiterates the previously mentioned strategic route leading to the northern part of the site (unsecured zone). However, it also introduces an access to the southern site (secured zone), which would allow for better surveillance and ease of accessibility to the distinct parts of the site. Potential of adding some B1 uses to the southern site to increase employment opportunities and support existing uses. On the other hand, the northern site proposes the same commercial uses with alterations of the location of certain uses (e.g. commercial and retail placed closer to the road in order to increase accessibility for the wider
The west part of the site also consists of the same uses with the restaurants and cafes position between the hotel and the added B1 uses to increase its potential viability for the both users alongside the residents adjacent to them.

**Figure 36: Initial Masterplan Option C**

Source: IBI Group
Figure 37: Land Use for Option C

Source: IBI Group
6 Next Steps

The Baseline Report for the Hillhouse Enterprise Zone represents the first stage of the process. Section 5 provided some initial concepts for the Masterplan which are to be taken forward and developed in more detail. The next stage of the process is to further develop the initial concepts in to more detailed plans. In part, the aim of the Masterplan is to address the issues and build on the opportunities identified in the baseline to guide the development of the Enterprise Zone in to a more vibrant and productive site which brings hundreds of jobs to the local economy. The Masterplan will propose how each area of the site is to be used, what investments needs to be made to improve the feel and urban realm, identify the necessary upgrades to transport and access and the utilities infrastructure to enable the full implementation of the Masterplan.

Once the full Masterplan has been drafted, the baseline and proposed Masterplan, along with explanatory documentation, will be taken to public and stakeholder consultation. Statutory consultees, local businesses, and local residents will be able to provide feedback on the proposal. Following this, a period of redrafting to take into account any issues raised by the consultation will be completed, before the Masterplan is adopted as the guiding framework for the future development of the Hillhouse Enterprise Zone. At this stage, an implementation plan will also need to be developed.

Whilst the data collated for the Baseline report is reasonably detailed, it is recognised that some bases have not been covered, and Section 4 indicated for some disciplines where further investigatory work needs to be undertaken to complete the picture. In particular, the utilities and water infrastructure is below ground and examinations of the condition of these has not been carried out for the Baseline report. Therefore, it is recommended that underground investigations are completed. Similarly, the baseline environmental assessment was predominantly done using mapping and historical documents, plus a visual site visit. Consequently, the environmental condition below surface, and the possibilities of contamination or other disposed-of material is unknown; sub-surface inspections need to be carried out.

To date, there have been no discussions with either Highways England, which manage the A585 Amounderness Way or the Environment Agency. However, given that both of these are statutory consultees, they will be able to provide any relevant feedback within the consultation process.

Table 8: Outstanding queries to be addressed

<table>
<thead>
<tr>
<th>Issue</th>
<th>What to be done</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development demand</td>
<td>Assessment of demand for proposed land use</td>
</tr>
<tr>
<td>Utilities infrastructure condition</td>
<td>Intrusive site investigation</td>
</tr>
<tr>
<td>Utility demand</td>
<td>Utility demand assessment</td>
</tr>
<tr>
<td>Utility capacity</td>
<td>Discussions with providers</td>
</tr>
<tr>
<td>Infrastructure demand and capacity</td>
<td>Discussion with infrastructure providers</td>
</tr>
<tr>
<td>Pipelines</td>
<td>Establish width of easement/ wayleave for High-Pressure Gas main</td>
</tr>
<tr>
<td>Ecological constraints</td>
<td>Phase 1 Ecology assessment</td>
</tr>
<tr>
<td></td>
<td>Project Level Habitat Regulation Assessment</td>
</tr>
<tr>
<td></td>
<td>Review of ecological mitigation and compensation land</td>
</tr>
<tr>
<td>Landscape and green infrastructure</td>
<td>Landscape and green infrastructure framework</td>
</tr>
<tr>
<td></td>
<td>Funding mechanism for provision and long term maintenance of green infrastructure</td>
</tr>
<tr>
<td>Issue</td>
<td>What to be done</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------------------------------------</td>
</tr>
<tr>
<td>Contaminated land and water</td>
<td>Intrusive site investigation</td>
</tr>
<tr>
<td>Flood risk and drainage</td>
<td>Flood risk assessment</td>
</tr>
<tr>
<td>Hazardous waste</td>
<td>Intrusive site investigation</td>
</tr>
<tr>
<td>Off-site traffic impact</td>
<td>Traffic impact assessment</td>
</tr>
<tr>
<td>On-site sustainable transport</td>
<td>Sustainable transport study including pedestrian and cycle connectivity</td>
</tr>
<tr>
<td>Environmental Health</td>
<td>Noise impact assessment</td>
</tr>
</tbody>
</table>

Source: Mott MacDonald

It is important that the client group, partners and stakeholders are well-informed of progress during the development of the Masterplan to ensure buy-in from all parties.