

PROSIECT GWYRDD

**PROSIECT GWYRDD - POTENTIAL  
SITE ASSESSMENT**

October 2008

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## CONTENTS

	Page
<b>EXECUTIVE SUMMARY</b>	<b><u>0</u></b>
<b>SECTION 1</b>	<b><u>0</u></b>
<b>INTRODUCTION</b>	<b><u>0</u></b>
1.1 Overview	<u>1</u>
1.2 Scope of Study	<u>1</u>
1.3 Documents Consulted	<u>2</u>
<b>SECTION 2</b>	<b><u>4</u></b>
<b>APPROACH &amp; METHODOLOGY</b>	<b><u>4</u></b>
2.1 Introduction	<u>5</u>
2.2 Assessment Criteria	<u>6</u>
2.3 Assessment Method	<u>11</u>
<b>SECTION 3</b>	<b><u>12</u></b>
<b>STUDY FINDINGS</b>	<b><u>12</u></b>
3.1 Site Assessment	<u>13</u>
3.2 Summary Comments	<u>22</u>
<b>SECTION 4</b>	<b><u>23</u></b>
<b>NEXT STEPS</b>	<b><u>23</u></b>
4.1 Taking the Site(s) to Market	<u>24</u>
4.2 Requirements for Site Surveys	<u>24</u>
4.3 Environmental Impact Assessment	<u>25</u>
<b>APPENDICES</b>	<b><u>30</u></b>
Appendix 1 Site List	
Appendix 2 Site Plans	
Appendix 3 RWP Areas of Search	
Appendix 4 Site Questionnaire Responses	
Appendix 5 Individual Site Assumptions	
Appendix 6 Indicative EIA Programme	



## EXECUTIVE SUMMARY

PB has been appointed by Prosiect Gwyrdd to consider the issue of potential sites for the development of residual waste treatment facilities. The intention of this study is to support the Outline Business Case in demonstrating that the project is deliverable and that suitable sites are likely to be available.

The process undertaken is considered to mirror the works of the South East Wales Regional Waste Plan (RWP) and the individual Council planning policies; it does not imply a particular technology, nor does it pre-empt the Councils' emerging Local Development Plans. The compiled list of 59 sites subject to this assessment is founded on the list taken from the South East Wales Regional Waste Plan Recommended Draft 1<sup>st</sup> Review (dated March 2008).

A set of criteria have been established, against which each site is assessed. These criteria are based on the RWP Areas of Search criteria and project specific criteria for Prosiect Gwyrdd, covering the following issues:

- Planning status of the land / site;
- Site area;
- Proximity to centres of population / source of waste;
- Access potential;
- Proximity to housing;
- Consideration of local setting and land use;
- Proximity to national, local landscape, heritage and nature site designations; and
- Compliance with planning policy.

In addition, added benefits of the sites in relation to the following have been considered:

- Proximity to electrical grid connection;
- Potential for CHP;
- Site ownership;
- Potential for expansion; and
- Potential for rail link.

The site assessment process has yielded potential 18 sites that may be suitable for development for Prosiect Gwyrdd, of which 6 are in WAG or Council ownership. Each of the shortlisted sites have been rated by Technical Officers of the Officer Steering Group, according to 'high', 'medium' or 'low' prospects for Prosiect Gwyrdd to take forward as a reference site for the procurement, as summarised below:



Council Area	Sites that satisfy the criteria	Potential sites that are understood to be within WAG or Council ownership
Caerphilly	<u>2 sites:</u> <ul style="list-style-type: none"> <li>Land at Oakdale Business Park (Plateau 1), Oakdale - <b>HIGH</b></li> <li>Land at Dyffryn Business Park (North Parcel), Ystrad Mynach - <b>LOW</b></li> </ul>	<u>1 site:</u> <ul style="list-style-type: none"> <li>Land at Oakdale Business Park (Plateau 1), Oakdale</li> </ul>
Cardiff	<u>7 sites:</u> <ul style="list-style-type: none"> <li>Capital Business Park, Wentloog - <b>HIGH</b></li> <li>Brindley Road, Grangetown - <b>MEDIUM</b></li> <li>Prairie Site, Cardiff Docks – <b>LOW / MEDIUM</b></li> <li>Land adjacent to freight terminal, Wentloog – <b>MEDIUM / HIGH</b></li> <li>Texaco Tank Farm, Cardiff Docks - <b>LOW / MEDIUM</b></li> <li>Trident Park, Cardiff Bay - <b>LOW</b></li> <li>Land adjacent to former Acer building, Wentloog - <b>HIGH</b></li> </ul>	<u>3 sites:</u> <ul style="list-style-type: none"> <li>Capital Business Park, Wentloog</li> <li>Brindley Road, Grangetown</li> <li>Land adjacent to former Acer building, Wentloog<sup>1</sup></li> </ul>
Monmouthshire	<u>1 site:</u> <ul style="list-style-type: none"> <li>Quaypoint, Magor - <b>MEDIUM</b></li> </ul>	N/A
Newport	<u>5 sites:</u> <ul style="list-style-type: none"> <li>Llanwern, Newport - <b>MEDIUM</b></li> <li>Queensway Meadows East - <b>HIGH</b></li> <li>Solutia, Traston Road, Newport - <b>MEDIUM</b></li> <li>Queensway Meadows, Tatton Road, Newport - <b>HIGH</b></li> <li>Nash Mead South, Queensway Meadows, Newport - <b>MEDIUM</b></li> </ul>	<u>2 sites:</u> <ul style="list-style-type: none"> <li>Queensway Meadows East</li> <li>Queensway Meadows, Tatton Road, Newport</li> </ul>
Vale of Glamorgan	<u>3 sites:</u> <ul style="list-style-type: none"> <li>Land to south east of J34 M4, Miskin - <b>MEDIUM</b></li> <li>Barry Docks, Barry – <b>LOW / MEDIUM</b></li> <li>Llandow Trading Estate, Llandow, Cowbridge – <b>MEDIUM</b></li> </ul>	N/A

<sup>1</sup> Since completing the site assessment, it has been brought to PB's attention that this site is now being developed



The next steps required to allow the procurement team to take one or more sites to market have been outlined. The site assessment undertaken as part of this study has not considered any site-specific conditions that may affect the potential future use of any site. It is recommended that some site 'scoping' surveys be carried out to inform the choice of sites to be taken forward to procurement.

The initial focus should be on carrying out surveys that would support any planning application and Environmental Impact Assessment (EIA) for the site. It is suggested that, as a minimum, the following work would need to be carried out and interpreted prior to taking the site(s) to market. It would also be prudent to carry out actual site investigations on the land that may be identified as being required after carrying out these studies:

- Topographical surveys of the land;
- Examination of land quality reports;
- Phase 1 habitats survey to see what may or may not be supported on the site; and
- Desk studies and site walkover to determine the potential issues.

## SECTION 1

# INTRODUCTION

## **1 INTRODUCTION**

### **1.1 Overview**

PB has been appointed by Prosiect Gwyrdd to consider the issue of potential sites for the development of residual waste treatment facilities. The intention of this study is to support the Outline Business Case in demonstrating that the project is deliverable and that suitable sites are likely to be available.

Furthermore, in accordance with guidance from the Welsh Assembly Government and Partnerships UK, Prosiect Gwyrdd is considering its options for taking forward one or more suitable sites to offer to potential bidders in the procurement phase of the project.

### **1.2 Scope of Study**

In support of the Outline Business Case, the aim of this report is to identify potential sites for waste treatment infrastructure that could possibly be taken to the market by Prosiect Gwyrdd. This report and hence the site assessment remains technology neutral; there is no consideration of specific facility needs for Prosiect Gwyrdd and sites are not considered in terms of their suitability for different technologies or different handling capacities. The process undertaken and this report is considered to mirror the works of the South East Wales Regional Waste Plan (RWP) and the individual Council planning policies; it does not imply a particular technology nor pre-empt the Councils' emerging Local Development Plans. The compiled list of sites subject to this assessment is founded on the list taken from the South East Wales Regional Waste Plan Recommended Draft 1<sup>st</sup> Review (dated March 2008).

This report presents the methodology, principles, justifications and assumptions behind compiling the subject list, the assessment objectives and criteria as well as the evaluation of the sites themselves. The principal approach has been to follow the guidance in the RWP and to evaluate all the sites against what is considered a justified, uniform set of local criteria. The assessment does not cross-compare sites within or between Councils; it evaluates sites from the perspective of both site-specific and criteria based policies. Neither does this criteria based site assessment consider the potential building design or technological costs for mitigating potential impacts. These are more site-specific matters for the future, and issues that are beyond the remit of this report which is to identify any possible sites that could be taken to the market.

The actual purpose and approach of this report means that the procurement strategy for the project does not preclude the fact that other sites may, and probably will be, available and brought from the private sector as part of their solution bids and that these sites may or may not be within the boundaries of the partnership. According to the procurement strategy such sites and solutions can be considered as part of the procurement process. It should also be noted that this assessment is project specific to the search of a site for residual waste treatment procurement by the Prosiect

Gwyrdd partnership, and would not restrict in any way any other private or public interest in sites that may be suitable for other waste management use in the future.

### **1.3 Documents Consulted**

In preparation for this study, sources of national policy and guidance on planning for waste management and resource recovery facilities in Wales have been referenced and taken into consideration, including:

- The National Waste Strategy for Wales – Wise about Waste, 2002;
- South East Regional Waste Plan 1<sup>st</sup> Review (RWP) and Recommended Draft, 2008;
- South East Wales Economic Forum (SEWEF) Land Survey 2007 - Land and Property Group Sites Database;
- South East Wales Regional Waste Plan - Health Impact Assessment (HIA);
- Defra's Industrial Heat Maps;
- Planning Policy Wales Technical Advice Note - TAN (Wales) 21: Waste, 2001;
- Environment Agency's Waste Arisings Data;
- Welsh Assembly Government's Objectives for the RWP Review;
- Relevant Unitary Development Plans (UDP) maps and policies; and
- Welsh Assembly Government Department for the Environment, Sustainability and Housing, Planning Health Check Framework, Version 2, September 2008.

The approach to this assessment is considered to address one of the Welsh Assembly Government's (WAG) strategic priorities; to improve the levels of health in Wales and reduce the inequalities in health that exist between different communities. This commitment is embodied in the Assembly's strategic priorities for the waste sector. A key policy of the National Waste Strategy for Wales is that all necessary measures must be taken to protect human health and the environment against harmful effects caused by the production, collection, transport, treatment, storage, recovery and disposal of waste, and identifies HIA as a tool that must be used in waste management decisions. TAN (Wales) 21 describes HIA as a means of taking health into account in decision-making processes so that the potential positive and/or negative health effects on people of policies, programmes and other developments are not overlooked.

#### **1.3.1 Regional Waste Plan**

The Recommended Draft of the RWP 1<sup>st</sup> Review was prepared by the South East Wales Regional Waste Group (RWG) in line with the requirements of TAN (Wales) 21 and later guidance from WAG. It was compiled in accordance with the following principal techniques:

- Life cycle analysis (LCA)
- Sustainability Appraisal (SA)
- Strategic Environmental Assessment (SEA)
- Strategic Health Impact Assessment (HIA)

Potentially available land areas on existing and allocated B2 or major industry sites within the Prosiect Gwyrdd local authority boundary are listed in Appendix G of the RWP. This list is drawn from the SEWEF database resulting from the Land Survey report (April 2007), using information seemingly gathered from each Council's Economic Development Teams. The RWP clearly states that *"it would be inappropriate, and circumventing the due and proper process, for the RWP 1<sup>st</sup> Review to state that sites other than existing B2 or major industry sites and B2 sites that have already been allocated in development plans are suitable locations for new in-buildings facilities; this is a policy making exercise that should only be undertaken at the local level through the Local Development Plan (LDP) preparation process"*.

The RWP goes on to state that "it should be noted that at the current time there is a clear surplus of land on existing land use class B2 'general industrial' (and similar) employment sites, existing major industry areas, and new B2 sites allocated in development plans to accommodate the highest estimate of the total land area required for new in-building waste management facilities". In addition, it is noted that WAG and Local Authorities (LAs) own similar amounts of developable land with B2 planning permission or proposed use and therefore they equally share the responsibility of enabling the sale or release of appropriate land from within their portfolios for new waste management or resource recovery facilities.

Areas of Search Maps within the RWP, discussed later in this report, were generated in 2007 by RPS Planning, Transport and Environment and were seemingly designed specifically for assisting in the identification of suitable locations for waste facilities and additional employment sites.

The above discussion is assumed to justify why the RWP list has been taken as the starting point for this site assessment to identify potential sites for Prosiect Gwyrdd.

## SECTION 2

### **APPROACH & METHODOLOGY**

## **2 APPROACH & METHODOLOGY**

### **2.1 Introduction**

The RWP lists 66 potentially available sites within the Prosiect Gwyrdd local authority boundary, along with their respective developable areas. If the actual developable area of a site was not known for the compilation of the RWP list, SEWEF took it as 85% of the entire area as it was assumed that 15% would be utilised for internal access routes and landscaping. It is understood that this assumption on developable land area only had to be applied to the Monmouthshire sites as the other Prosiect Gwyrdd Councils noted a difference in total and developable areas.

The practical status of each of the RWP listed sites was reviewed as part of this study through detailed discussions with the planning and economic development departments of the respective Prosiect Gwyrdd Councils – Caerphilly, Cardiff, Monmouthshire, Newport and the Vale of Glamorgan. This culminated in a revised list of 59 sites and available areas, which was drawn from the information the Councils are currently preparing and aim to present in their respective emerging Local Development Plans (LDP).

The Councils' agreed list of sites is tabulated in Appendix 1 and the site plans and aerial photographs are included in Appendix 2. The aerial photographs are not assumed to give the current view of the site, but are a useful visual reference tool.

It has not been possible to identify specific areas available within the larger sites and therefore it has been assumed that the entire area is available for ranking against assessment criteria. If appropriate, a further assumption has been taken to assess what is considered to be the most appropriate or favoured location for a facility within the land available. The purpose of this (and actually the basis of devising and determining the assessment criteria) was to reduce unreasonable hindrances such that viable sites could realistically emerge from the ranking process. Specific individual plot availability must therefore be a latter part of the process, once the sites have passed through a uniform criteria evaluation. This approach is also considered to be supported by the Councils, which have not sought to have these sites removed from the RWP during the latest review, and therefore the Councils are assumed to view these sites as their best and most suited to a waste management related use.

The RWP incorporates Areas of Search maps that provide guidance as to some of the more national and regional issues that should be addressed when considering a site location, and the issues that should be addressed at the local level along with site specific factors. The generation and assessment of Areas of Search in the RWP have been undertaken through a Sustainability Appraisal (SA) process that incorporated the requirements of Strategic Environmental Assessment (SEA) and used Geographical Information System (GIS) data to produce the Areas of Search maps.



## 2.2 Assessment Criteria

### 2.2.1 RWP Areas of Search

The RWP applies weightings to the SA objectives and criteria of the Areas of Search, the weightings were classified as follows:

A weighting of 5 – Excluded areas

4 – Areas with regional/national constraints

3 – Areas with some, though not significant, constraints

2 – Areas with some potential

1 – Areas of high potential

The RWP tabulated Areas of Search – SA objectives, criteria and weightings are presented in Appendix 3.

The RWP Areas of Search maps are drawn upon only 'mappable' criteria relating to strategic level spatial issues. While GIS mapping methods of specific criteria have been used to exclude areas, including buffer zones, this does not preclude waste developments demonstrating the ability to mitigate against potential or perceived impacts with the advancing technology capabilities and the different types and sizes of facilities now within the market.

One of the main points from the RWP of note for this study is that the Areas of Search maps and GIS data are not be used to determine the appropriateness of individual sites. The RWP clearly states that *"locations that have been identified as 2<sup>nd</sup>, 3<sup>d</sup> or 4<sup>th</sup> Areas of Search must not be excluded from consideration as appropriate areas"* and goes on to outline numerous reasons for this including that *"a particular site could be developed for waste management facilities with no potential impacts, or that adequate mitigation measures will control any potential impacts"*.

A significant proportion of the land with planning permission or allocated in Wales for business development is within or adjacent to sites that have been designated for landscape or ecology related reasons and often have major road scheme improvements proposed in close proximity. It has accordingly become very evident during this study that areas with realistic development potential and the majority of the sites listed in Appendix 1 would be very heavily negatively weighted based on the Areas of Search maps. This is contrary to the individual Councils' opinions for these areas and demonstrates that the sites must be viewed individually and subjectively and that comparative alternative site assessments will be valuable tools in a planning determination.

2.2.2 Criteria for Prosiect Gwyrdd

While recognising the failings of the Areas of Search mapping, the RWP provides guidance on how sites can be identified and assessed at a local level. This RWP guidance has been expanded upon in this study to include a range of other issues that need to be considered as part of the process of planning for waste facilities. Accordingly, the ranking criteria for this assessment have evolved from:

1. The RWP Sustainability Appraisal Objectives and Map Criteria for the Areas of Search maps and a realistic interpretation of the applied weightings.
2. Numerous local issues, some of which are suggested within the RWP at paragraph K3.10, including:
  - site suitability;
  - site / building vacancy and availability – including opportunities for re-using vacant industrial sheds, existing buildings in the countryside and quarries and for redeveloping brownfield sites, industrial areas and ports;
  - site infrastructure (including electricity grid connections);
  - site ownership;
  - existing and proposed neighbouring land uses;
  - the nature of existing businesses / waste facilities on the location / site;
  - the presence of existing Planning Permissions;
  - opportunities for co-locating and networking facilities with proposed or existing energy consuming land uses such as district heating systems or large industrial energy users;
  - planning-in opportunities for the future expansion of facilities;
  - existing and proposed transport infrastructure – including opportunities for integrated multi-modal road, train, canal and sea connections;
  - opportunities for co-locating waste management / resource recovery / reprocessing /re-manufacturing facilities, and other synergistic activities within the Environmental Goods and Services sector, to form environmental technology clusters – the concept of such Eco-parks is endorsed by TAN 21;
  - the cumulative effect of waste management facilities and other development on sensitive environmental receptors;
  - the cumulative effect of waste management facilities and other development on the well-being of the local community, including any significant adverse impacts on environmental quality, social cohesion and inclusion or economic potential; and

- the relevant measures envisaged to prevent, reduce and as fully as possible off-set any significant adverse effects on the environment.
3. The inclusion of the criteria specific to Prosiect Gwyrdd identified criteria and additional issues appertaining locally that are recognised Environmental Impact Assessment (EIA) topics, including:
- Site area and setting;
  - Traffic and transport;
  - Planning policy
  - Planning history;
  - Landscape designations;
  - Ecology and nature classifications;
  - Agricultural land classification;
  - Groundwater quality;
  - Surface water quality;
  - Flooding;
  - Historic environment;
  - Recreation activities;
  - Air quality/noise/environmental nuisance;
  - Proximity to waste arisings; and
  - Visual/landscape impact.

These issues were all combined using experienced, professional judgement to collate Table 1 below showing the Sustainability Appraisal / Deliverability Objectives and Assessment Criteria that would be uniformly applied to rank the sites in each of the five Council areas of Prosiect Gwyrdd.

Table 1: The Determined Objectives and Assessment Criteria

	Sustainability Appraisal / Deliverability Objectives	Criteria number	Assessment Criteria:
Site Selection	Ensure prudent use of land & resources.	1	Existing or allocated B2 industrial land
		2	Minimum area 2ha
	Minimise greenhouse gases emissions. Provide employment opportunities. Minimise increased cost of waste management. Proximity principles.	3	Urban area <50km (population >10,000)
		4	< 5 km from 'A' major road network (Including local knowledge of proposed transport route improvements within 5 years).
	Minimise adverse effects on air quality. Minimise adverse effects on residential property. Minimise adverse effects on public health and avoid increasing health inequalities.	5	Residential area ≥ 250m
		6	Potential use is considered to be in keeping with the site setting and local land uses.
		7	Considered to satisfy local opinion on any perceived cumulative impacts and potential effects on sensitive receptors.
	Protect & enhance the landscape, townscape & cultural heritage of Wales. Protect biodiversity. Protect local amenity.	8	No National or Local Landscape, Heritage or Nature site designation ≤250m. Existing or allocated sites that are within designations are assumed to satisfy this criterion particularly where consideration is applicable under policies. Professional opinion re adjoining designations based on site history and policies.
		9	Considered opinion is that any perceived impact can be practically overcome if there is a designation >250m ≤1000m of the site boundary
	Sustainable Local Development Control	10	In the main a potential development is considered compliant with current local Development Policy (including acceptance of non-compliance where matters are considered practical to overcome).
Added Benefits	Energy efficiency	11	Apparent proximity to grid (Line KV not known)
		12	Perceived potential for local CHP
	Project delivery	13	Local Authority or WAG owned
		14	Expansion potential (considered opinion)
		15	Perceived potential rail link (distance relative, not cost)

The Assessment Criteria have been placed in a perceived order of ranked importance. Each individual site is to be reviewed against each criterion in turn; those sites satisfying the first criterion will be considered against the 2<sup>nd</sup> criterion and so on. Any site that prevails through criterion 10 of the ranking process is considered a potential site for Prosiect Gwyrdd. Criteria 11 to 15 inclusive have been deemed 'added benefits' for the sites, which are particularly beneficial for the Prosiect Gwyrdd overall objectives and the possibly of taking one or more sites to market.

The Prosiect Gwyrdd Officer Steering Group has approved the contents and ranked ordering of the criteria. It is seen to follow available and referenced guidance, the recommendations of the RWP, covers various previously discussed techniques, addresses local issues and incorporates more site specific circumstances and demonstrates the additional benefits sought by Prosiect Gwyrdd.

### 2.2.3 Justification of Criteria

The justification and assessment method used for some of the criteria is self explanatory from the Sustainability Appraisal/ Deliverability Objectives. The justification for other criteria and their assessment is as follows:

- **Criterion 2 – site area:** The RWP suggests, as a general guide, that a mean typical facility capacity is 180,000tpa (tonnes per annum) and that this would have a mean typical land take of 6ha. Innumerable examples of the various operational facilities across the UK demonstrate that larger facilities can and have been established on significantly smaller sites. Accordingly, 2ha has been concluded as the minimum site size that would be considered by a potential facility developer.
- **Criterion 5 – no residential area within 250m:** This is assumed to be a significant residential area, not individual properties since individual properties are often found to happily exist in close proximity to a whole range of potential impacting land uses. 250m is taken as a comfortable distance considering the typical setting of these sites and the operational circumstances demonstrated by example facilities elsewhere in the UK. It is assumed that any potential impacts can be addressed by modern design and technology such that a facility would not present itself as a nuisance to residential developments at or beyond this distance.
- **Criterion 8 – no national or local landscape, heritage or nature sites designations within 250m:** Modern design, technology capabilities and the operating requirements stipulated under the permits issued by the Environment Agency are assumed to address any potential impacts such that they do not exert any negative influence at or beyond this distance. A significant majority of the subject 59 sites are within or adjoin such land designations and did actually prevail as operational heavy, possibly polluting or potentially impacting industrial uses before the areas were designated. For these reasons, coupled with the fact that the sites have been proposed and allocated for consideration for a waste management related use, it is assumed to be reasonable to conclude that these sites automatically satisfy this criterion. Obviously, it would not be practical to enforce this criterion on sites already within or neighbouring such designations otherwise it would discount the majority of allocated development sites in Wales as a whole. This is a general, considered, practical approach although the site

specific applicability of this criterion would actually have to be a matter for detailed assessment if a site were to be pursued further.

One of the issues not covered in the assessment criteria is the altitude of sites, but it is assumed that this need not be a consideration if the site satisfies the local opinion criteria. A significant proportion of the sites for assessment are also within classified flood zones. This issue is considered to be addressed within other criteria while also being matters that can be resolved in the technical design of a site, the associated costs and implication of which are beyond the scope of this study.

### **2.3 Assessment Method**

The individual sites, as listed in Appendix 1, were evaluated using publicly available plans, information and the maps and policies of the respective Council UDPs. Whilst the UDPs are all under review in the production of LDPs by the various Councils, they have been employed as the relevant policy documentation. This is in line with draft Welsh Assembly Government guidance on Local Development Plans, which states that where a UDP has been put on deposit it may remain a consideration in development control decisions until a LDP has been placed on deposit.

The material used for evaluating the sites was supplemented by information provided by the Council planners in response to a circulated questionnaire that was specifically generated to acquire and hence look to incorporate the local perspective, site specific knowledge and aspirations. The individual Council responses to the circulated questionnaire are compiled in Appendix 4.

On completion of the ranking, the findings were subject to a further local check with the individual site assessments being discussed and agreed in principle with the relevant Council planning departments.

## SECTION 3

# **STUDY FINDINGS**

### **3 STUDY FINDINGS**

#### **3.1 Site Assessment**

The ranking of sites against the criteria in Table 1 and the base assumptions of each criterion is seen as the required pragmatic approach to site evaluation and a likely practical approach when seeking planning permission for a waste management facility or for undertaking an alternative site assessment. The results of ranking the individual sites are given in Table 2, based on assumptions and observations about each site, which are summarised in Appendix 5.



**SECTION 3  
STUDY FINDINGS**



**Table 2: Site Assessment Summary**

	Sustainability Appraisal / Deliverability Objectives	nos.	Assessment Criteria:	Caerphilly														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
				Land at Oakdale Business Park (Platiau 1), Oakdale (area 30.2ha)	Land at Havtin Park (South Parcel) 8.8ha	Land at Caerphilly Business Park, Caerphilly (3.6ha)	Land at Oakdale Business Park (Platiau 2), Oakdale (area 7.0ha)	Land at Dyffryn Business park (South Parcel), Ystrad Mynach (area 6.3ha)	Land at Heads of the Valleys, Rhymercy (5.2ha)	Land at Dyffryn Business Park (North Parcel), Ystrad Mynach (area 4.9ha)	Land at Havtin Park (North Parcel), Pengam (area 4.5ha)	Land at Oakdale Business Park (Platiau 3), Oakdale (area 3.4ha)	Land at Trenewydd Business Park, Caerphilly (area 2.2ha)	Land at Oakdale Business Park (Platiau 4), Oakdale (area 3ha)	South Extension Penylan, Croespannen (2.4ha)	Pennallia Extension, Hengoed (1.6ha)	Land at Western Industrial Estate, Caerphilly (area 1.1ha)	Land at Nine Mile Point, Cwmfelinfach (area 1.1ha)
Site Selection	Ensure prudent use of land & resources	1	Existing or allocated B2 industrial land	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		2	Minimum area 2ha	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗
	Minimise greenhouse gases emissions. Provide employment opportunities. Minimise increased cost of waste management. Proximity principles	3	Urban area <50km (population >10,000)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
		4	< 5 km from 'A' major road network (Including local knowledge of proposed transport route improvements within 5 years).	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Minimise adverse effects on air quality. Minimise adverse effects on residential property. Minimise adverse effects on public health and avoid increasing health inequalities.	5	Residential area ≥ 250m	✓	✗	✗	✓	✗	✓	✓	✓	✗	✗	✗	✗			
		6	Potential use is considered to be in keeping with the site setting and local land uses.	✓			✗		✓	✓	✗							
		7	Considered to satisfy local opinion on any perceived cumulative impacts and potential effects on sensitive receptors.	✓					✓	✓								
	Protect & enhance the landscape, townscape & cultural heritage of Wales. Protect biodiversity. Protect local amenity.	8	No National or Local Landscape, Heritage or Nature site designation ≤250m. Existing or allocated sites that are within designations are assumed to satisfy this criteria particularly where consideration is applicable under policies. Professional opinion re adjoining designations based on site history and policies.	✓					✓	✓								
		9	Considered opinion is that any perceived impact can be practically overcome if there is a designation >250m ≤1000m of the site boundary	✓					✓	✓								
	Sustainable Local Development Control	10	In the main a potential development is considered compliant with current local Development Policy (including acceptance of non-compliance where matters are considered practical to overcome).	✓					✗	✓								
Added Benefits	Energy efficiency	11	Apparent proximity to grid (Line KV not known)	✓						✓								
		12	Perceived potential for Local CHP	✓						✗								
	Project Delivery	13	Local Authority or WAG owned	✓						✗								
		14	Expansion potential (considered opinion)	✓						✓								
		15	Perceived potential rail link (distance relative, not cost)	✗						✗								

# SECTION 3 STUDY FINDINGS



	Sustainability Appraisal / Deliverability Objectives	nos.	Assessment Criteria:	Cardiff									
				16	17	18	19	20	21	22	23	24	25
				Capital Business Park, Wentlog (area 14.7)	Brindley Road, Grange town (area 7.2)	Prairie Site, Cardiff Docks (area 16.2)	Wentlog Corporate Park, Wentlog (area 15.6)	Land adjacent to Freight terminal, Wentlog (area 12.7)	Tesaco Tank Farm, Cardiff Docks (area 6.1 ha)	Trident Park, Cardiff Bay (area 4.6ha)	Land adjacent to the former Acer building, Wentlog (area 3.9ha)	Pengam Green, Cardiff Bay (area 9.7)	Pacific Business Park, Cardiff Bay (area 1.3 ha)
Site Selection	Ensure prudent use of land & resources	1	Existing or allocated B2 industrial land	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		2	Minimum area 2ha	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
	Minimise greenhouse gases emissions. Provide employment opportunities. Minimise increased cost of waste management. Proximity principles	3	Urban area <50km (population >10,000)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		4	< 5 km from 'A' major road network (Including local knowledge of proposed transport route improvements within 5 years).	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Minimise adverse effects on air quality. Minimise adverse effects on residential property. Minimise adverse effects on public health and avoid increasing health inequalities.	5	Residential area ≥ 250m	✓	✓	✓	✗	✓	✓	✓	✓	✗	
		6	Potential use is considered to be in keeping with the site setting and local land uses.	✓	✓	✓		✓	✓	✓	✓	✗	
		7	Considered to satisfy local opinion on any perceived cumulative impacts and potential effects on sensitive receptors.	✓	✓	✓		✓	✓	✓	✓		
	Protect & enhance the landscape, townscape & cultural heritage of Wales. Protect biodiversity. Protect local amenity.	8	No National or Local Landscape, Heritage or Nature site designation ≤250m. Existing or allocated sites that are within designations are assumed to satisfy this criteria particularly where consideration is applicable under policies. Professional opinion re adjoining designations based on site history and policies.	✓	✓	✓		✓	✓	✓	✓		
		9	Considered opinion is that any perceived impact can be practically overcome if there is a designation >250m ≤1000m of the site boundary	✓	✓	✓		✓	✓	✓	✓		
	Sustainable Local Development Control	10	In the main a potential development is considered compliant with current local Development Policy (including acceptance of non-compliance where matters are considered practical to overcome).	✓	✓	✓		✓	✓	✓	✓		
Added Benefits	Energy efficiency	11	Apparent proximity to grid (Line KV not known)	✓	✓	✓		✓	✓	✓	✓		
		12	Perceived potential for Local CHP	✓	✓	✓		✓	✓	✓	✓		
	Project Delivery	13	Local Authority or WAG owned	✓	✓	✗		✗	✗	✗	✓		
		14	Expansion potential (considered opinion)	✓	✗	✓		✓	✓	✗	✓		
		15	Perceived potential rail link (distance relative, not cost)	✓	✗	✓		✓	✓	✓	✓		

# SECTION 3 STUDY FINDINGS



	Sustainability Appraisal / Deliverability Objectives	nos.	Assessment Criteria:	Monmouthshire				
				26	27	28	29	30
				Quaypoint, Magor (area 16.3ha)	Grove Farm, Llanfoist, Abergavenny (area 4.2ha)	Manhlad, Pontypool (area 2.1ha)	Wonastow Road Phase 1, Monmouth (area 2.1ha)	Ross Road, Abergavenny (area 1.3ha)
Site Selection	Ensure prudent use of land & resources	1	Existing or allocated B2 industrial land	✓	✓	✓	✓	✓
		2	Minimum area 2ha	✓	✓	✓	✓	✗
	Minimise greenhouse gases emissions. Provide employment opportunities. Minimise increased cost of waste management. Proximity principles	3	Urban area <50km (population >10,000)	✓	✓	✓	✓	
		4	< 5 km from 'A' major road network (Including local knowledge of proposed transport route improvements within 5 years).	✓	✓	✓	✓	
		5	Residential area ≥ 250m	✓	✗	✗	✓	
		6	Potential use is considered to be in keeping with the site setting and local land uses.	✓		✗	✗	
		7	Considered to satisfy local opinion on any perceived cumulative impacts and potential effects on sensitive receptors.	✓				
	Protect & enhance the landscape, townscape & cultural heritage of Wales. Protect biodiversity. Protect local amenity.	8	No National or Local Landscape, Heritage or Nature site designation ≤250m. Existing or allocated sites that are within designations are assumed to satisfy this criteria particularly where consideration is applicable under policies. Professional opinion re adjoining designations based on site history and policies.	✓				
		9	Considered opinion is that any perceived impact can be practically overcome if there is a designation >250m ≤1000m of the site boundary	✓				
	Sustainable Local Development Control	10	In the main a potential development is considered compliant with current local Development Policy (including acceptance of non-compliance where matters are considered practical to overcome).	✓				
Added Benefits	Energy efficiency	11	Apparent proximity to grid (Line KV not known)	✓				
		12	Perceived potential for Local CHP	✓				
	Project Delivery	13	Local Authority or WAG owned	✗				
		14	Expansion potential (considered opinion)	✓				
		15	Perceived potential rail link (distance relative, not cost)	✓				

# SECTION 3 STUDY FINDINGS



	Sustainability Appraisal / Deliverability Objectives	nos.	Assessment Criteria:	Newport														
				31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
				Llanwrn, Newport (area 39.5ha)	Queensway Meadows East (area 34.5ha)	Solihū, Traston Road, Newport (area c. 28ha)	Queensway Meadows, Tattion Road, Newport (area 17.2ha)	Nash Mead South, Queensway Meadows, Newport (area 2.1ha)	Rogersstone Railway sidings (2), Wern Ind. Estate, Rogersstone (area 0.9ha)	Freshwater, Queensway Meadows, Newport (area 0.7)	Newport Docks (NV3), Newport Docks, Newport (area 0.7ha)	Newport Business Centre, Corporation Rd, Newport (area 0.6ha)	Clearwater Road, Queensway Meadows, Newport (area 0.4ha)	Land adj unit 22, Maesglas Industrial Est., Newport (area 0.3)	Stephenson St Ind. Estate, Stephenson St, Newport (area 0.2ha)	Newport Docks, Newport (area 0.2ha)	Orb Industrial Estate, Stephenson St, Newport (area 0.2ha)	Longditch Road, Queensway Meadows, Newport (area 1.3ha)
Site Selection	Ensure prudent use of land & resources	1	Existing or allocated B2 industrial land	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		2	Minimum area 2ha	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
	Minimise greenhouse gases emissions. Provide employment opportunities. Minimise increased cost of waste management. Proximity principles	3	Urban area <50km (population >10,000)	✓	✓	✓	✓	✓										
		4	< 5 km from 'A' major road network (Including local knowledge of proposed transport route improvements within 5 years).	✓	✓	✓	✓	✓										
	Minimise adverse effects on air quality. Minimise adverse effects on residential property. Minimise adverse effects on public health and avoid increasing health inequalities.	5	Residential area ≥ 250m	✓	✓	✓	✓	✓										
		6	Potential use is considered to be in keeping with the site setting and local land uses.	✓	✓	✓	✓	✓										
		7	Considered to satisfy local opinion on any perceived cumulative impacts and potential effects on sensitive receptors.	✓	✓	✓	✓	✓										
	Protect & enhance the landscape, townscape & cultural heritage of Wales. Protect biodiversity. Protect local amenity.	8	No National or Local Landscape, Heritage or Nature site designation ≤250m. Existing or allocated sites that are within designations are assumed to satisfy this criteria particularly where consideration is applicable under policies.	✓	✓	✓	✓	✓										
		9	Considered opinion is that any perceived impact can be practically overcome if there is a designation >250m ≤1000m of the site boundary	✓	✓	✓	✓	✓										
	Sustainable Local Development Control	10	In the main a potential development is considered compliant with current local Development Policy (including acceptance of non-compliance where matters are considered practical to overcome).	✓	✓	✓	✓	✓										
Added Benefits	Energy efficiency	11	Apparent proximity to grid (Line KV not known)	✓	✓	✓	✓	✓										
		12	Perceived potential for Local CHP	✓	✓	✓	✓	✓										
	Project Delivery	13	Local Authority or WAG owned	✗	✓	✗	✓	✗										
		14	Expansion potential (considered opinion)	✓	✓	✓	✓	✗										
		15	Perceived potential rail link (distance relative, not cost)	✓	✗	✓	✗	✗										

## SECTION 3 STUDY FINDINGS



	Sustainability Appraisal / Deliverability Objectives	nos.	Assessment Criteria:	Vale of Glamorgan													
				46	47	48	49	50	51	52	53	54	55	56	57	58	59
				Land to South East of Junction 34, M4, Miskin (area 5.42ha)	Cardiff International Airport Business Park, Rhosne, Barry (area 20.0 ha)	Vale Business Park, Llandow, Cowbridge (area 10.5ha)	Cardiff International Airport Business Park, Rhosne, Barry (area 10.4 ha)	Barry Docks, Barry (area 9.0ha)	Llandow Trading Estate, Llandow, Cowbridge (area 7.3ha)	Cardiff International Airport Business Park, Rhosne, Barry (area 5.7 ha)	Sully Moors Road, Barry (area 4.9ha)	Winbourne Road, Barry Docks, Barry (area 4.1ha)	Merley Tille Site, St. Mary Hill, Cowbridge (area 0.8ha)	Vale Business Park, Llandow (1), Cowbridge (area 0.8ha)	Vale Business Park, Llandow (2) Cowbridge (area 0.8ha)	Atlantic Trading Estate (1), Barry (area 0.6ha)	Atlantic Trading Estate (2), Barry (area 0.5ha)
Site Selection	Ensure prudent use of land & resources	1	Existing or allocated B2 industrial land	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		2	Minimum area 2ha	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗
	Minimise greenhouse gases emissions. Provide employment opportunities. Minimise increased cost of waste management. Proximity principles	3	Urban area <50km (population >10,000)	✓	✓	✓	✓	✓	✓	✓	✓	✓					
		4	< 5 km from 'A' major road network (including local knowledge of proposed transport route improvements within 5 years).	✓	✓	✓	✓	✓	✓	✓	✓	✓					
	Minimise adverse effects on air quality. Minimise adverse effects on residential property. Minimise adverse effects on public health and avoid increasing health inequalities.	5	Residential area ≥ 250m	✓	✓	✓	✓	✓	✓	✓	✗	✗					
		6	Potential use is considered to be in keeping with the site setting and local land uses.	✓	✗	✗	✗	✓	✓	✗							
		7	Considered to satisfy local opinion on any perceived cumulative impacts and potential effects on sensitive receptors.	✓				✓	✓								
	Protect & enhance the landscape, townscape & cultural heritage of Wales. Protect biodiversity. Protect local amenity.	8	No National or Local Landscape, Heritage or Nature site designation ≤250m. Existing or allocated sites that are within designations are assumed to satisfy this criteria particularly where consideration is applicable under policies.	✓				✓	✓								
		9	Considered opinion is that any perceived impact can be practically overcome if there is a designation >250m ≤1000m of the site boundary	✓				✓	✓								
	Sustainable Local Development Control	10	In the main a potential development is considered compliant with current local Development Policy (including acceptance of non-compliance where matters are considered practical to overcome).	✓				✓	✓								
Added Benefits	Energy efficiency	11	Apparent proximity to grid (Line KV not known)	?				✗	?								
		12	Perceived potential for Local CHP	✓				✓	✓								
	Project Delivery	13	Local Authority or WAG owned	✗				✗	✗								
		14	Expansion potential (considered opinion)	✓				✓	✓								
		15	Perceived potential rail link (distance relative, not cost)	✓				✓	✓								

Note: The term 'B2' employment and major industry sites is used here to include other land uses that have similar characteristics such as existing waste management sites, ports, some brownfield sites, and other similar sui generis land uses.

The findings are summarised in Table 3 that show several sites have successfully satisfied the criteria and emerge as potential sites for Prosiect Gwyrdd's residual waste treatment facilities. There are indeed sites within this list that are either owned by WAG or the Councils.

**Table 3: Summary of Potential Sites**

<b>Council Area</b>	<b>Sites that satisfy the criteria</b>	<b>Potential sites that are understood to be within WAG or Council ownership</b>
Caerphilly	<u>2 sites:</u> <ul style="list-style-type: none"> <li>– Land at Oakdale Business Park (Plateau 1), Oakdale</li> <li>– Land at Dyffryn Business Park (North Parcel), Ystrad Mynach</li> </ul>	<u>1 site:</u> <ul style="list-style-type: none"> <li>– Land at Oakdale Business Park (Plateau 1), Oakdale</li> </ul>
Cardiff	<u>7 sites:</u> <ul style="list-style-type: none"> <li>– Capital Business Park, Wentloog</li> <li>– Brindley Road, Grangetown</li> <li>– Prairie Site, Cardiff Docks</li> <li>– Land adjacent to freight terminal, Wentloog</li> <li>– Texaco Tank Farm, Cardiff Docks</li> <li>– Trident Park, Cardiff Bay</li> <li>– Land adjacent to former Acer building, Wentloog</li> </ul>	<u>3 sites:</u> <ul style="list-style-type: none"> <li>– Capital Business Park, Wentloog</li> <li>– Brindley Road, Grangetown</li> <li>– Land adjacent to former Acer building, Wentloog</li> </ul>
Monmouthshire	<u>1 site:</u> <ul style="list-style-type: none"> <li>– Quaypoint, Magor</li> </ul>	N/A
Newport	<u>5 sites:</u> <ul style="list-style-type: none"> <li>– Llanwern, Newport</li> <li>– Queensway Meadows East</li> <li>– Solutia, Traston Road, Newport</li> <li>– Queensway Meadows, Tatton Road, Newport</li> <li>– Nash Mead South, Queensway Meadows, Newport</li> </ul>	<u>2 sites:</u> <ul style="list-style-type: none"> <li>– Queensway Meadows East</li> <li>– Queensway Meadows, Tatton Road, Newport</li> </ul>
Vale of Glamorgan	<u>3 sites:</u> <ul style="list-style-type: none"> <li>– Land to south east of J34 M4, Miskin</li> <li>– Barry Docks, Barry</li> <li>– Llandow Trading Estate, Llandow, Cowbridge</li> </ul>	N/A

Each of these short-listed sites has subsequently been rated according to the perceived potential for Prosiect Gwyrdd. The ratings used are:

- High                      perceived as excellent potential to consider further on the basis that all criteria and added benefits were met
- Medium                  perceived as moderate potential for further consideration, but with some constraints due to the added benefits
- Low                        perceived to have low viability for Prosiect Gwyrdd due to few added benefits

This exercise has been undertaken by the technical officers of the Prosiect Gwyrdd team and the results are included in Table 4.

**Table 4 Comparative Rating of Short-listed Sites**

Council Area	High rating	Medium Rating	Low Rating
Caerphilly	Land at Oakdale Business Park (Plateau 1)		Land at Dyffryn Business Park (North Parcel) – gateway to Mid Valley area and close to District General Hospital
Cardiff	Capital Business Park – WAG owned, good location Land adj former Acer building – WAG owned, next to renewable energy company <sup>2</sup>	Brindley Road – possible site for Park & Ride (Medium / High) Land adj freight terminal – private interest in site, but controlled by WAG, Council interest also, currently under negotiations with Covanta for option, but negotiations due to close in Sept, Council keen to develop if Covanta deal fails	(Low / Medium) Prairie Site – ABP owned, cash required for purchase (Low / Medium) Texaco Tank Farm - ABP owned, cash required for purchase Trident Park – under control of private waste management company (Viridor) for development
Monmouthshire		Quaypoint – good access, close to motorway, close to brewery for CHP potential, unsure of ownership, previously subject to a number of planning applications but not yet developed due to (as understood) economic reasons	
Newport	Queensway Meadows East – good access, away from housing Queensway Meadows, Tatton Road – good access, away from housing	Solutia – good rail access, private ownership Nash Mead South – good access, but in private ownership Llanwern – private ownership, away from centres of waste production, close to major housing development (likely too close to link for CHP potential)	
Vale of Glamorgan		Land SE of J34 M4 – private ownership Llandow Trading Estate – private ownership	(Low / Medium) Barry Docks – understood to be under option to develop for waste management by private contractor

<sup>2</sup> Since completing the site assessment, it has been brought to PB's attention that this site is now being developed



### **3.2 Summary Comments**

A reasoned approach has been taken to the methodology and determination of the criteria against which a researched, up to date list of 59 available sites have been ranked. The assessment is principally founded on the RWP listed sites and guidance for their evaluation at a national, regional and, more importantly, local level. This study, therefore, does not identify all the potentially available sites that could be considered for waste facilities within the Prosiect Gwyrdd area. The findings are indicative rather than definitive. If the identified sites were to be pursued, they must be subject to far greater detailed planning assessment at the local level and specifically to the emerging and as yet to be adopted LDP policies.

This assessment has been successful in identifying sites that Prosiect Gwyrdd could pursue for taking to market. Site visits to those locations that satisfied the ranking matrix would enable potential opportunities and constraints to be recognised at the ground level, and accordingly place each site in better context for comparison.

While the sites have been assessed on available information, input from the individual Councils and professional opinion, the ultimate suitability of marketing any of the identified 18 sites of which 6 are in WAG or Council ownership, is at the discretion of the Prosiect Gwyrdd Officer Steering Group.

## SECTION 4

### **NEXT STEPS**

## **4 NEXT STEPS**

### **4.1 Taking the Site(s) to Market**

The site assessment study has revealed that a number of sites identified in the RWP are likely to be suitable for Prosiect Gwyrdd's residual waste treatment facility. This is in addition to any other sites that may be proposed by the market outside this work.

It is understood that Prosiect Gwyrdd is seeking to take one or more sites forward from this study to offer to potential bidders as part of the procurement phase. In order to be in a position to do this, one or more of the Prosiect Gwyrdd Councils must be in control of the site(s), either through acquiring direct ownership or through securing an option to develop the site that could subsequently be transferred to the successful contractor.

From the site assessment carried out in this study, Prosiect Gwyrdd has a number of short-listed sites to consider for further development. It is recommended that the Officer Steering Group may initially consider those sites under WAG or Council ownership and those rating as 'high' in Table 4. Prosiect Gwyrdd would be advised to seek professional legal and procurement advice to further investigate the potential to gain control of these sites.

### **4.2 Requirements for Site Surveys**

The site assessment undertaken as part of this study has not considered any site-specific conditions that may affect the potential future use of any site. It is recommended that some site 'scoping' surveys be carried out to inform the choice of sites to be taken forward to procurement.

#### **4.2.1 Scoping Surveys**

The initial focus should be on carrying out surveys that would support any planning application and Environmental Impact Assessment (EIA) for the site. There are a number of areas for which work would be required for the EIA and planning, and those which may require some on-site work and physical investigations are:

- Air quality
- Ecology & nature
- Geology & soils/ contaminated land
- Noise
- Traffic

For these (and all the other areas required for EIA), the requirements would be determined during a scoping exercise, which would involve a desk study of available information. It is likely that as part of the scoping exercise the following will need to be undertaken:

- Topographical surveys of the land
- Examination of land quality reports (Envirocheck reports)
- Phase 1 habitats survey to see what may or may not be supported on the site
- Desk studies and site walkover to determine the potential issues

It is suggested that, as a minimum, this work would need to be carried out and interpreted prior to taking the site(s) to market. It would also be prudent to carry out actual site investigations on the land that may be identified as being required after carrying out this scoping exercise. It is not possible to be more specific on what these site investigations may involve at this stage, as the scoping study would identify this. The investigations are likely to involve some form of borehole drilling and soil sampling, and are likely to take 2-3 months from start to finish, including analysis & reporting.

It is not necessarily recommended making progression on the ecological surveys (those that would come out of the phase 1 study) until later in the procurement, as these have a maximum 'shelf-life' of 2 years and so would be out of date by the time the planning application is likely to be submitted. However, if the scoping study and phase 1 habitats survey revealed the likely presence of sensitive habitats, carrying out ecological detailed surveys would be very useful for the potential development and to determine the deliverability of the site for this project, while recognising that this work would probably need to be repeated later in the procurement.

#### **4.3 Environmental Impact Assessment**

In addition to gaining control of a site (or sites), it is considered good practice to make some progress on site surveys to support the planning application and Environmental Impact Assessment either prior to or during the early stages of procurement of a residual waste treatment contract. This information can be used by bidders to work up their solutions and reduces the potential for claims of increased costs later on in the process. Once a company is named as the Preferred Bidder, it would normally be expected for that company to progress any additional site investigations and studies required to proceed to planning application.

If the environment is considered at an early stage then there is the opportunity for environmental issues to be designed out of the proposed project. Mitigation can be both costly and time consuming to undertake so a proactive approach can prove to be a huge benefit to both the developer and the environment.

An overview of the generic EIA process is presented here.

#### 4.3.1 Introduction

Environmental Impact Assessment (EIA) is a systematic process used to identify, predict and evaluate the likely environmental effects of a proposed scheme. The outcome of the EIA process is an Environmental Statement (ES) which is a communication tool provided to the planning authority in order to help them make an informed decision on whether the project should proceed.

#### 4.3.2 Legislation

EIA is legislated under Council Directive 85/337/EEC "Assessment of effects of certain public and private projects on the environment" as amended by 97/11/EC. Member states have implemented 85/337/EEC as amended through a national legislation. Within the UK it has been legislated under a variety of legislation including the Town and Country Planning Act 1990 and Highways (Environmental Impact Assessment) Regulations (England and Wales) 2007 to name but a few. Waste Projects generally assessed under the Town and Country Planning Act 1990.

#### 4.3.3 Stages of the EIA Process

The main stages of the EIA process are:

##### 1. Screening

This stage determines whether the development proposal requires an EIA or not. For some projects an EIA is mandatory, however for others a screening decision will need to be made based on the development characteristics, sensitivity of the receiving environment and potential effects of the scheme. It is likely that an EIA will be required for a waste infrastructure project of the scale and scope of Prosiect Gwyrdd.

##### 2. Scoping and Methodology

Scoping identifies the key issues associated with the proposed scheme and helps focus the assessment onto those areas where significant effects are likely. Scoping can be undertaken by a consultancy, alternatively a scoping opinion can be sought from the Local Planning Authority (LPA). Either way it is a process which relies upon consultation of stakeholders and collection of good quality background information in order to direct future assessment requirements.

##### 3. Assessment

During this stage detailed surveys are undertaken in order to allow experts to analyse the impacts associated with the project and recommend appropriate mitigation measures to compensate for these effects.

##### 4. Production of the Environmental Statement

The Environmental Statement (ES) is a legal document which communicates the findings of the EIA process to the decision makers in order to allow them to make an informed decision on whether planning permission should be granted to the proposed project.

## 5. Monitoring

Although this is not a mandatory stage within the EIA process it is best practice to undertake monitoring both during and post construction. This satisfies the stakeholders that mitigation has been implemented and is working effectively.

### 4.3.4 EIA Programme

Appendix 6 shows a generic EIA programme spread over a period of 47 weeks. This is the average time that will be spent on an EIA and although it is possible to conduct an EIA in a shorter timeframe issues can arise due to the seasonal constraints associated with some of the data collection.

The consultant is often brought in after the screening process has been undertaken and the need for an EIA or similar Environmental Report to satisfy planning requirements has been identified. The programme therefore starts after the screening opinion, but before the final design has been identified.

The topic areas investigated as part of the EIA process are generally as follows:

- Air Quality and Climate Change
- Arboriculture
- Archaeology and Cultural Heritage
- Community
- Cumulative Effects
- Ecology and Nature Conservation
- Geology and Soils / Contaminated Land
- Hydrology and Hydrogeology
- Landscape and Visual
- Landuse
- Noise and Vibration
- Planning and Policy
- Socioeconomic
- Sustainability
- Traffic and Transportation
- Waste

Although the generic programme allows 8 weeks for primary data collection and then a further 12 weeks for collection of additional baseline data this may be extended or shortened due to the seasonal nature of data collection. For example Table 5 below shows the appropriate seasons for collection of ecological data. It should be noted that some baseline information has a certain shelf life, i.e. ecology surveys.

**Table 5: Appropriate survey seasons for ecological surveys.**

Species	Survey Calendar											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Great Crested Newt												
Bats												
Badgers												
Dormice												
Reptiles												
Water Voles												
Otters												
Breeding Birds												

	Surveys are optimal during this period
	Surveys may be conducted during this period
	Surveys possible however results may prove inconclusive
	Surveys during this period are not advisable for welfare or other reasons

N.b: This is indicative only and consultation with an Ecologist is recommended in the first instance

It should be noted that as indicated within Table 5 Great Crested Newt surveys can only be undertaken between April, May and June because if undertaken at any other time of the year they cannot prove beyond reasonable doubt whether this internationally endangered species is present on site.

Similarly noise and traffic data cannot be collected during the main travel periods which cover most of the summer months. To determine air quality it may be required to collect up to 6 months worth of data if the project is situated in a sensitive area but the air quality assessment cannot be completed until the traffic data has been collected. There are numerous constraints for gathering baseline information and it is recommended that consultation is undertaken with professional advice.

The ES produced will as a minimum contain the following information:

- A description of the project including size, scale and situation of the site;
- An outline of the main alternatives examined by the developer and an indication of the main reasons why the preferred scheme option (being assessed) was chosen;
- Survey methodologies on how the data required to identify the effects was collected;
- A description of the measures envisaged to avoid, reduce and remedy the effects; and
- A non-technical summary of the findings of the ES.

The Scoping and Methodology Report and Environmental Statement will be submitted to the client for comment many times before final submission of the ES with the planning application. Once within the public domain the ES must be made available at a reasonable fee to all who may wish to purchase a copy for their own perusal. Copies will also be held within the Local planning Authority for those interested parties who wish to read the document without purchasing it.



## **APPENDICES**



## APPENDICES

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### APPENDIX 1: SITE LIST

## APPENDICES

Potentially available land on existing and allocated B2 or major industry sites in the Prosiect Gwyrdd area - Founded on the Recommended Draft RWP 1st Review March 2008 - Appendix G.

Local Authority Area	Site Number	Name of site	Location	Owner	Developable Area - according to Council Planners
Caerphilly	1	Land at Oakdale Business Park (Plateau 1)	Oakdale	Local Authority	30.2
Caerphilly	2	Land at Hawtin Park (South Parcel)	Pengam	Private	8.8
Caerphilly	3	Land at Caerphilly Business Park	Caerphilly	Local Authority	3.6
Caerphilly	4	Land at Oakdale Business Park (Plateau 2)	Oakdale	Local Authority	7.0
Caerphilly	5	Land at Dyffryn Business park (South Parcel)	Ystrad Mynach	Private	6.3
Caerphilly	6	Land at Heads of the Valleys	Rhymney	WAG	5.2
Caerphilly	7	Land at Dyffryn Business Park (North Parcel)	Ystrad Mynach	Private	4.9
Caerphilly	8	Land at Hawtin Park (North Parcel)	Pengam	Private	4.5
Caerphilly	9	Land at Oakdale Business Park (Plateau 3)	Oakdale	Local Authority	3.4
Caerphilly	10	Land at Trecenydd Business Park	Caerphilly	Private	2.2
Caerphilly	11	Land at Oakdale Business Park (Plateau 4)	Oakdale	Local Authority	3.0
Caerphilly	12	South Extension Penylan	Croespenmaen	Private	2.4
Caerphilly	13	Pennallta Extension	Hengoed	Private	1.6
Caerphilly	14	Land at Western Industrial Estate, Caerphilly	Caerphilly	Private	1.1
Caerphilly	15	Land at Nine Mile Point, Cwmfelinfach	Cwmfelinfach	Local Authority	1.1
				<b>Total</b>	<b>85.3</b>
Cardiff	16	Capital Business Park	Wentloog	Local Authority	14.7
Cardiff	17	Brindley Road	Grangetown	Local Authority	7.2
Cardiff	18	Prairie Site	Cardiff Docks	Private	16.2
Cardiff	19	Wentloog Corporate Park	Wentloog	Joint Ownership	15.6
Cardiff	20	Land adjacent to Freight terminal	Wentloog	Private	12.7
Cardiff	21	Texaco Tank Farm	Cardiff Docks	Private	6.1
Cardiff	22	Trident Park	Cardiff Bay	Private	4.6
Cardiff	23	Land adjacent to the former Acer building	Wentloog	WAG	3.9
Cardiff	24	Pengam Green	Cardiff Bay	WAG	9.7
Cardiff	25	Pacific Business Park	Cardiff Bay	Private	1.3
				<b>Total</b>	<b>92.0</b>
Monmouthshire	26	Quaypoint	Magor	Private	16.3
Monmouthshire	27	Grove Farm	Llanfoist, Abergavenny	Private	4.2
Monmouthshire	28	Mamhilad	Pontypool	WAG	2.1
Monmouthshire	29	Wonastow Road Phase 1	Monmouth	WAG	2.1
Monmouthshire	30	Ross Road	Abergavenny	Private	1.3
				<b>Total</b>	<b>26.0</b>
Newport	31	Llanwern	Llanwern	Private	39.5
Newport	32	Queensway Meadows East	Queensway Meadows	WAG	35.4
Newport	33	Solutia	Traston Road	Private	28.0
Newport	34	Queensway Meadows	Tatton Road	WAG	17.2
Newport	35	Nash Mead South	Queensway Meadows	Private	2.1
Newport	36	Rogerstone Railway sidings (2)	Wern Ind. Estate, Rogerstone	Private	0.9
Newport	37	Freshwater, Queensway Meadows	Queensway Meadows	Private	0.7
Newport	38	Newport Docks (NV3)	Newport Docks	Private	0.7
Newport	39	Newport Business Centre	Corporation Rd	Private	0.6
Newport	40	Clearwater Road	Queensway Meadows	Private	0.4
Newport	41	Land adj unit 22	Maesglas Industrial Est.	Private	0.3
Newport	42	Stephenson St Ind. Estate	Stephenson st	Local Authority	0.2
Newport	43	Newport Docks	Newport Docks	Private	0.2
Newport	44	Orb Industrial Estate	Stephenson St	Local Authority	0.2
Newport	45	Longditch Road	Queensway Meadows	WAG	1.3
				<b>Total</b>	<b>127.7</b>
Vale of Glamorgan	46	Land to South East of Junction 34, M4(Miskin)	Miskin	Private	54.2
Vale of Glamorgan	47	Cardiff International Airport Business Park	Rhose, Barry	Joint Ownership	20.0
Vale of Glamorgan	48	Vale Business Park	Llandow, Cowbridge	Private	10.5
Vale of Glamorgan	49	Cardiff International Airport Business Park	Rhose, Barry	Joint Ownership	10.4
Vale of Glamorgan	50	Barry Docks	Barry	Private	9.0
Vale of Glamorgan	51	Llandow Trading Estate	Llandow, Cowbridge	Private	7.3
Vale of Glamorgan	52	Cardiff International Airport Business Park	Rhose, Barry	Local Authority	5.7
Vale of Glamorgan	53	Sully Moors Road	Barry	Private	4.9
Vale of Glamorgan	54	Wimbourne Road, Barry Docks	Barry	Private	4.1
Vale of Glamorgan	55	Marley Tile Site	St. Mary Hill, Cowbridge	Private	0.8
Vale of Glamorgan	56	Vale Business Park, Llandow (1)	Llandow, Cowbridge	Private	0.8
Vale of Glamorgan	57	Vale Business Park, Llandow (2)	Llandow, Cowbridge	Private	0.8
Vale of Glamorgan	58	Atlantic Trading Estate (1)	Barry	Local Authority	0.6
Vale of Glamorgan	59	Atlantic Trading Estate (2)	Barry	Local Authority	0.5
				<b>Total</b>	<b>129.1</b>
				<b>Overall Total</b>	<b>460.1</b>

### Notes:

Units: Hectares

The term 'B2 employment sites and major industry sites' is used here to include other land uses that have similar characteristics such as existing waste management sites, ports, some brownfield sites, and other similar sui generis land uses.



## APPENDICES

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### APPENDIX 2: SITE PLANS

**Caerphilly – Site 1 Oakdale Plateau 1**





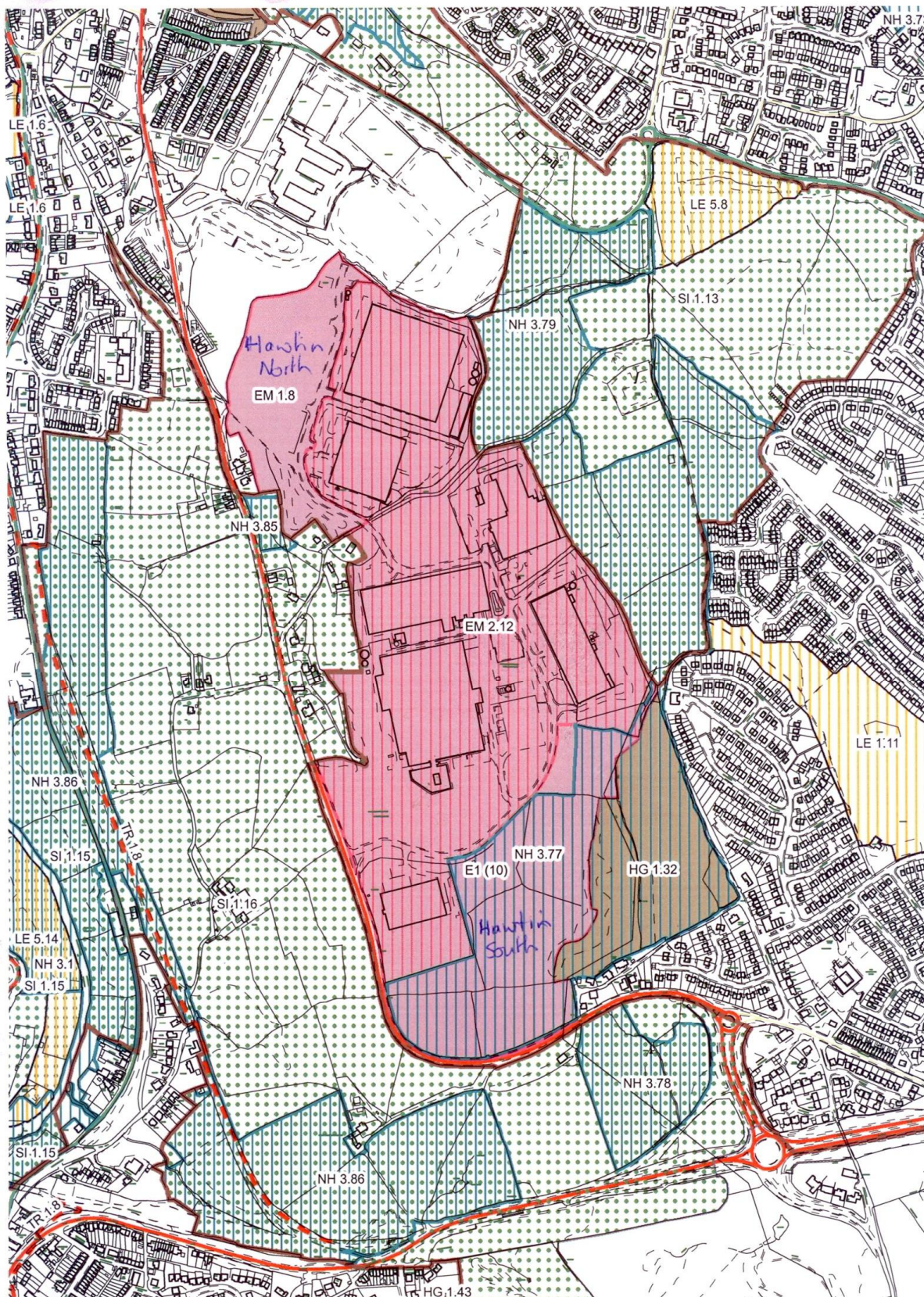




**Caerphilly – Site 2 Hawtin South Parcel**







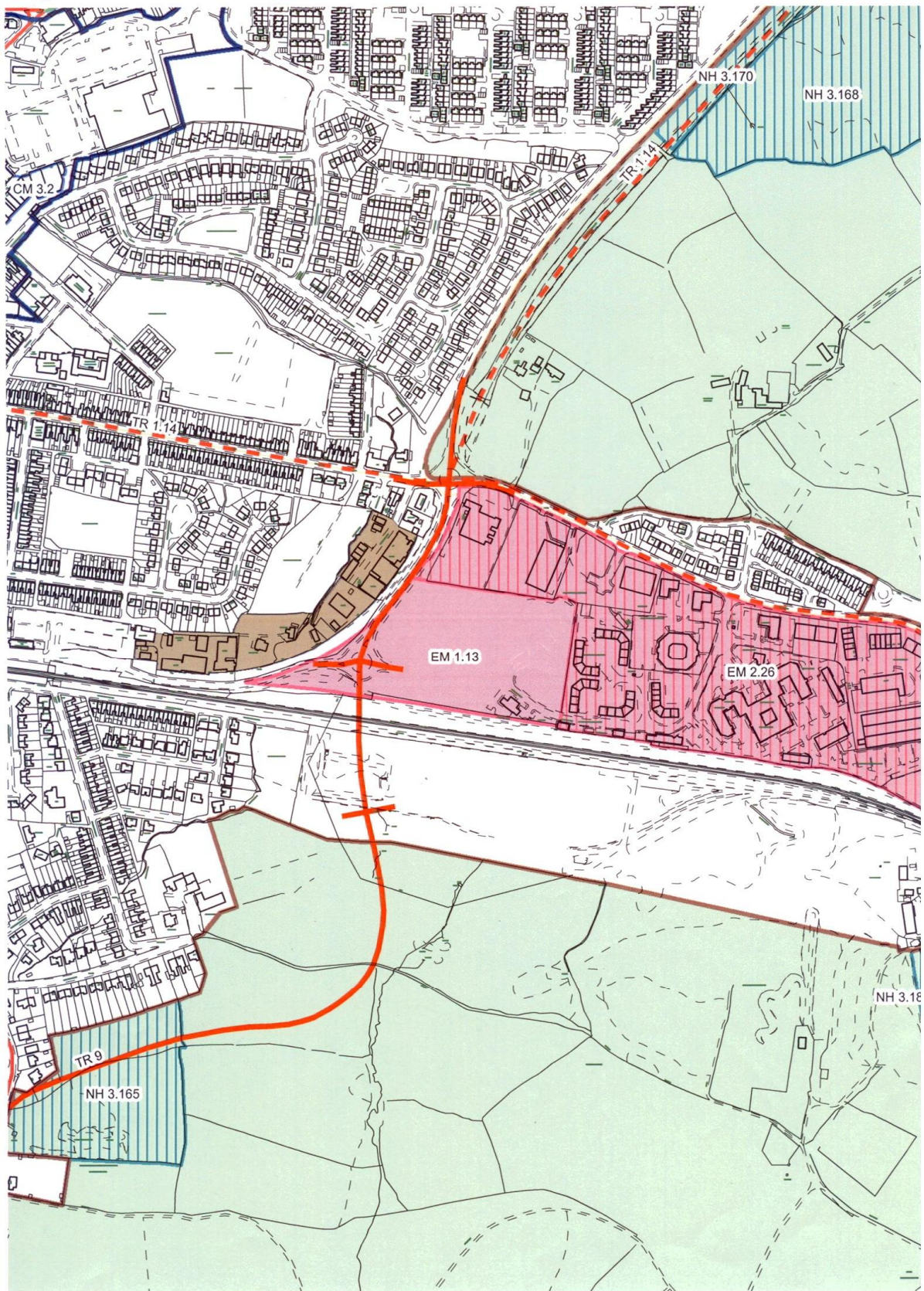
EMI. 8 - Hawtin Park north E(10) - Hawtin Park south



**Caerphilly – Site 3 Caerphilly Business Park**







Map 12: 1:1 Scale - Southfields Business Park



Caerphilly – Site 4 Oakdale Plateau 2





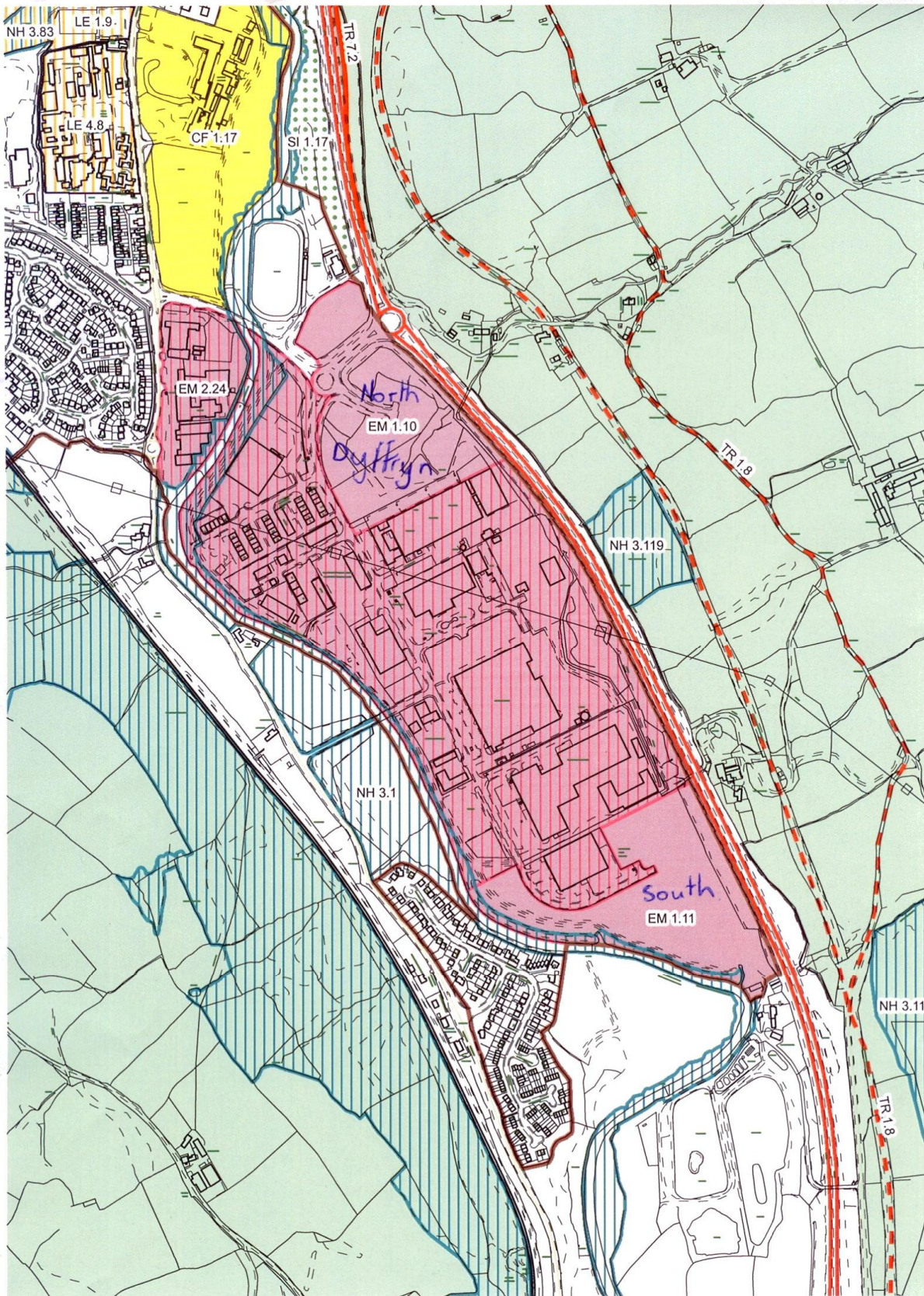




Caerphilly – Site 5 Dyffryn South Parcel

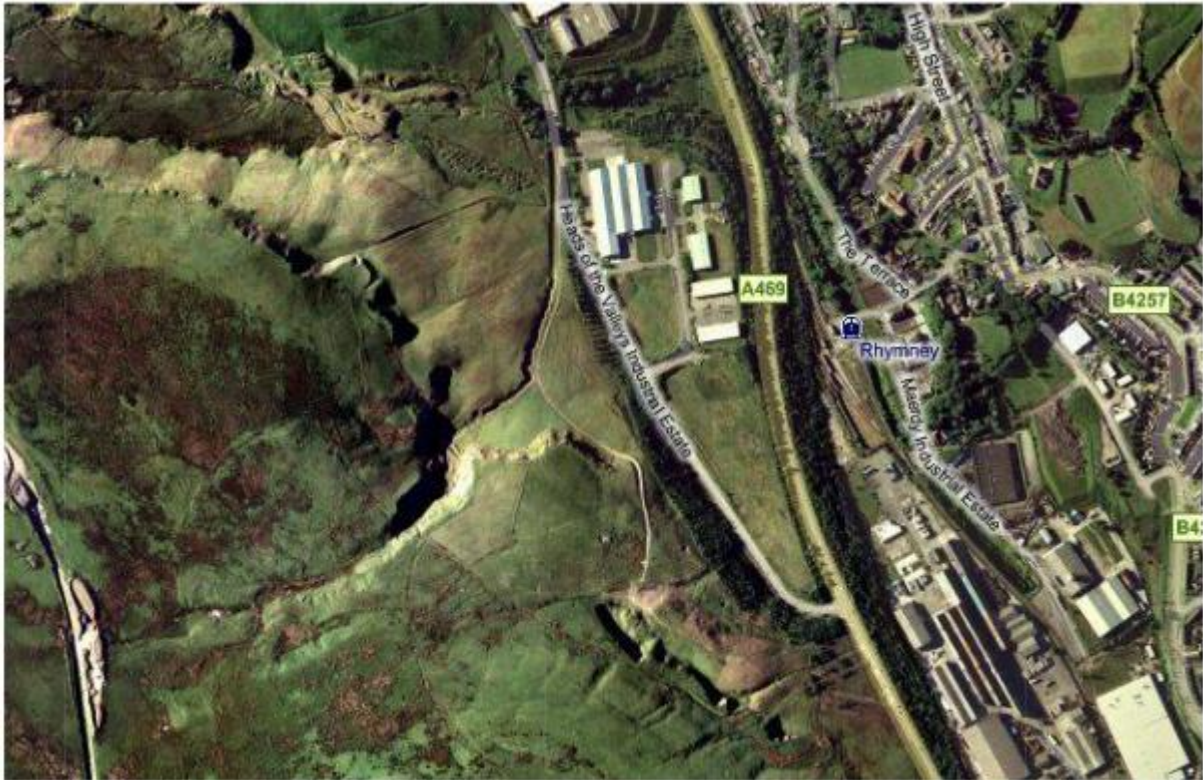




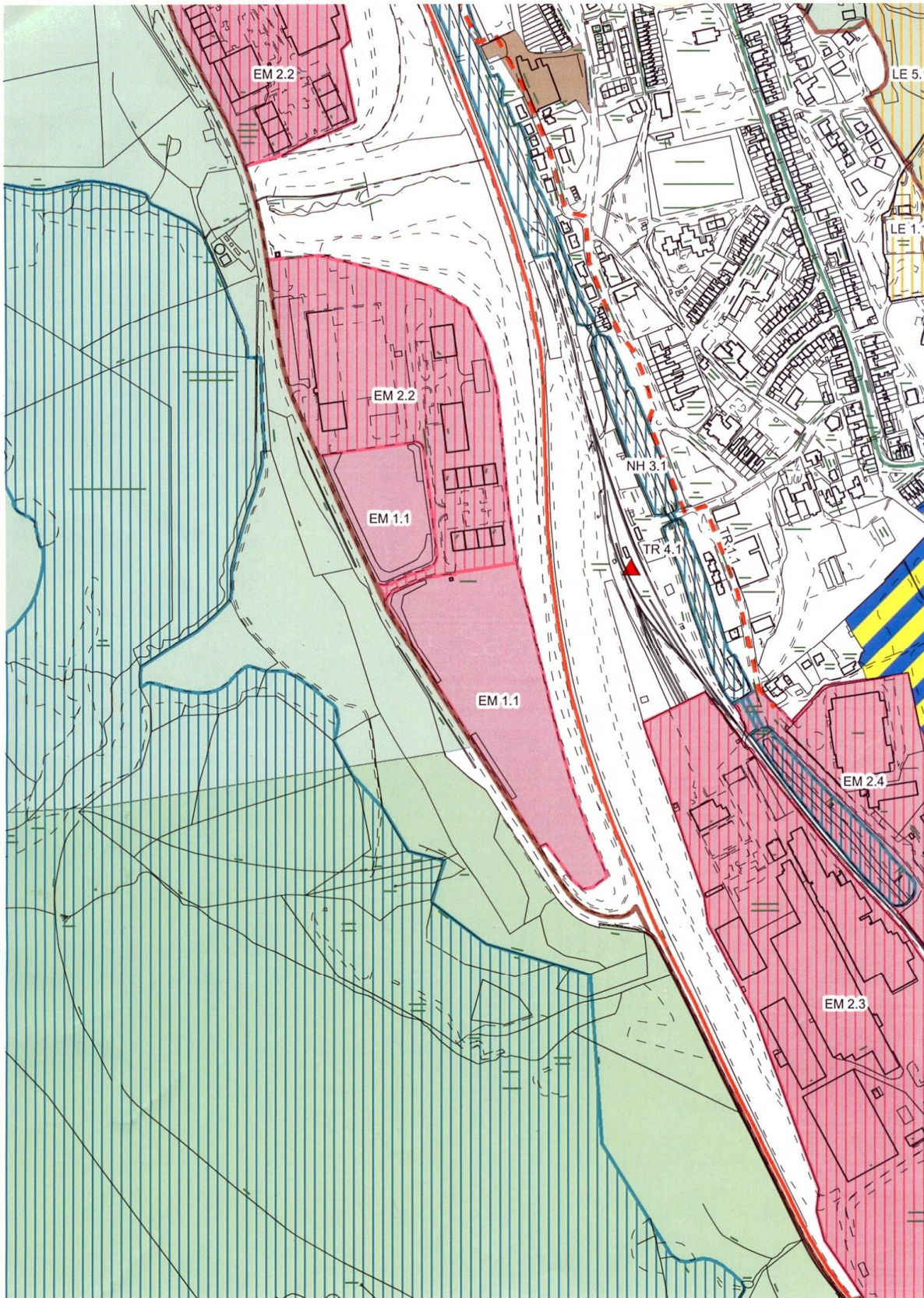




**Caerphilly – Site 6 Heads of the Valleys**





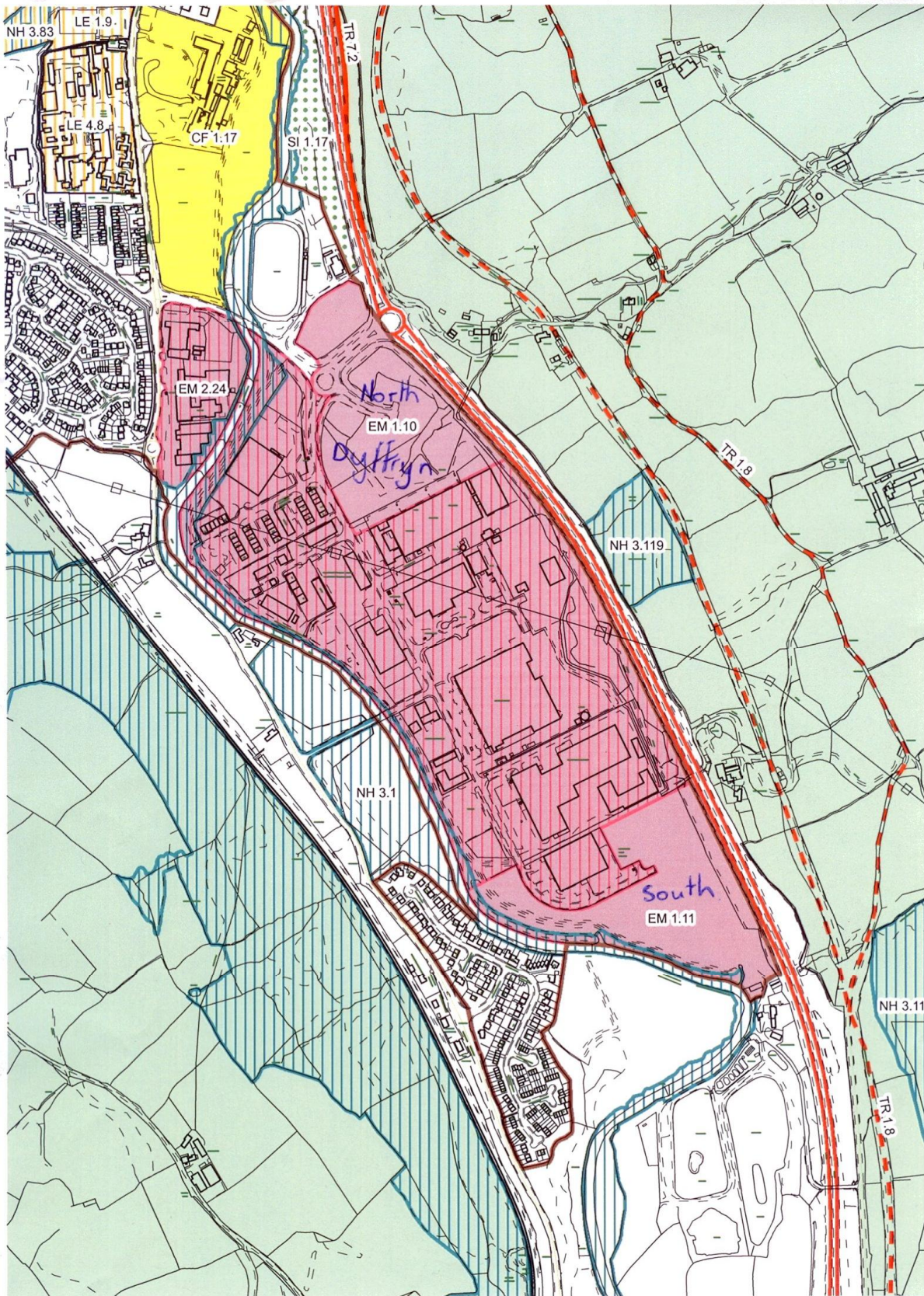




Caerphilly – Site 7 Dyffryn North Parcel





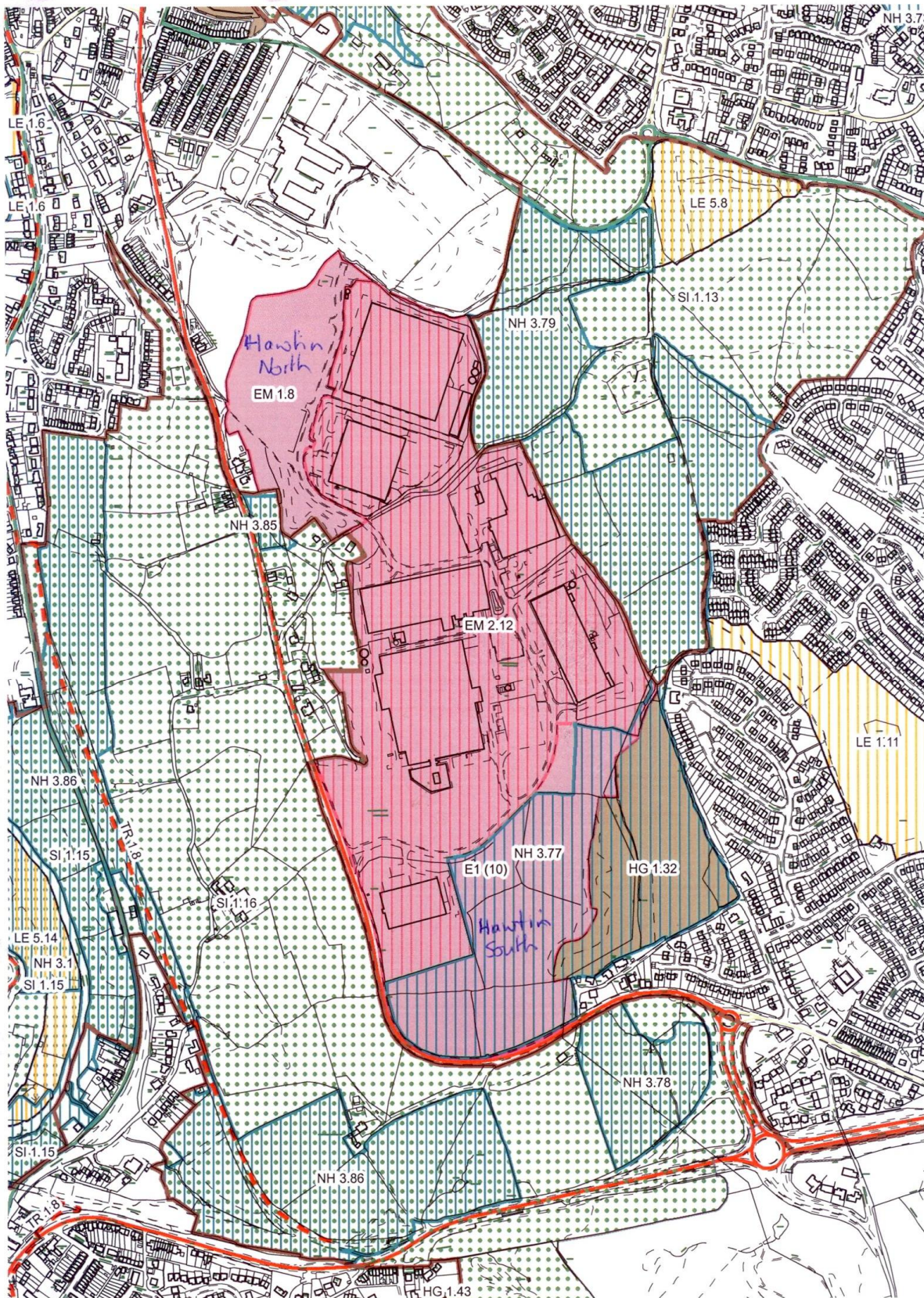




**Caerphilly – Site 8 Hawtin North Parcel**







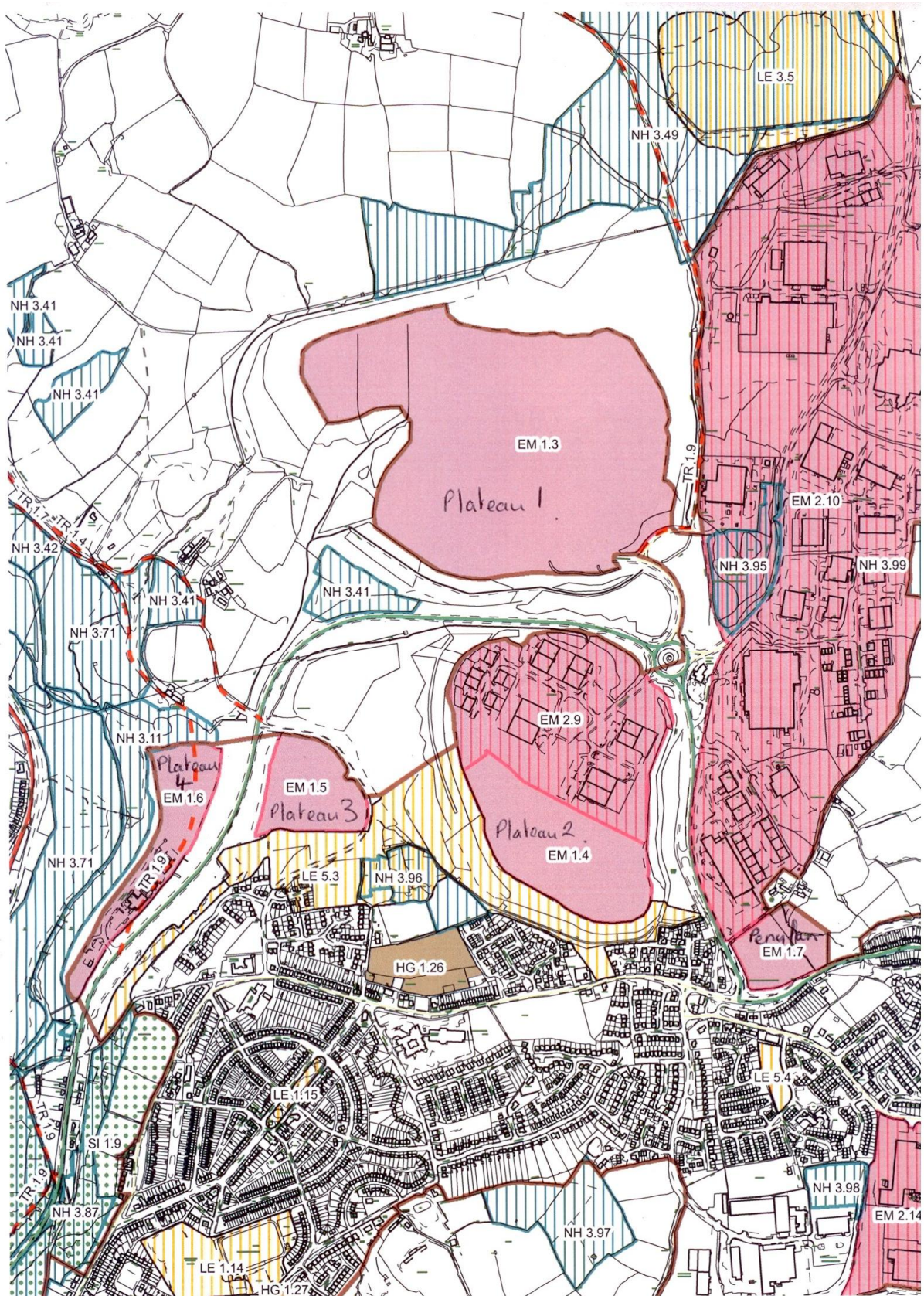
EM 1.8 - Hawtin Park north E1(10) - Hawtin Park south



Caerphilly – Site 9 Oakdale Plateau 3





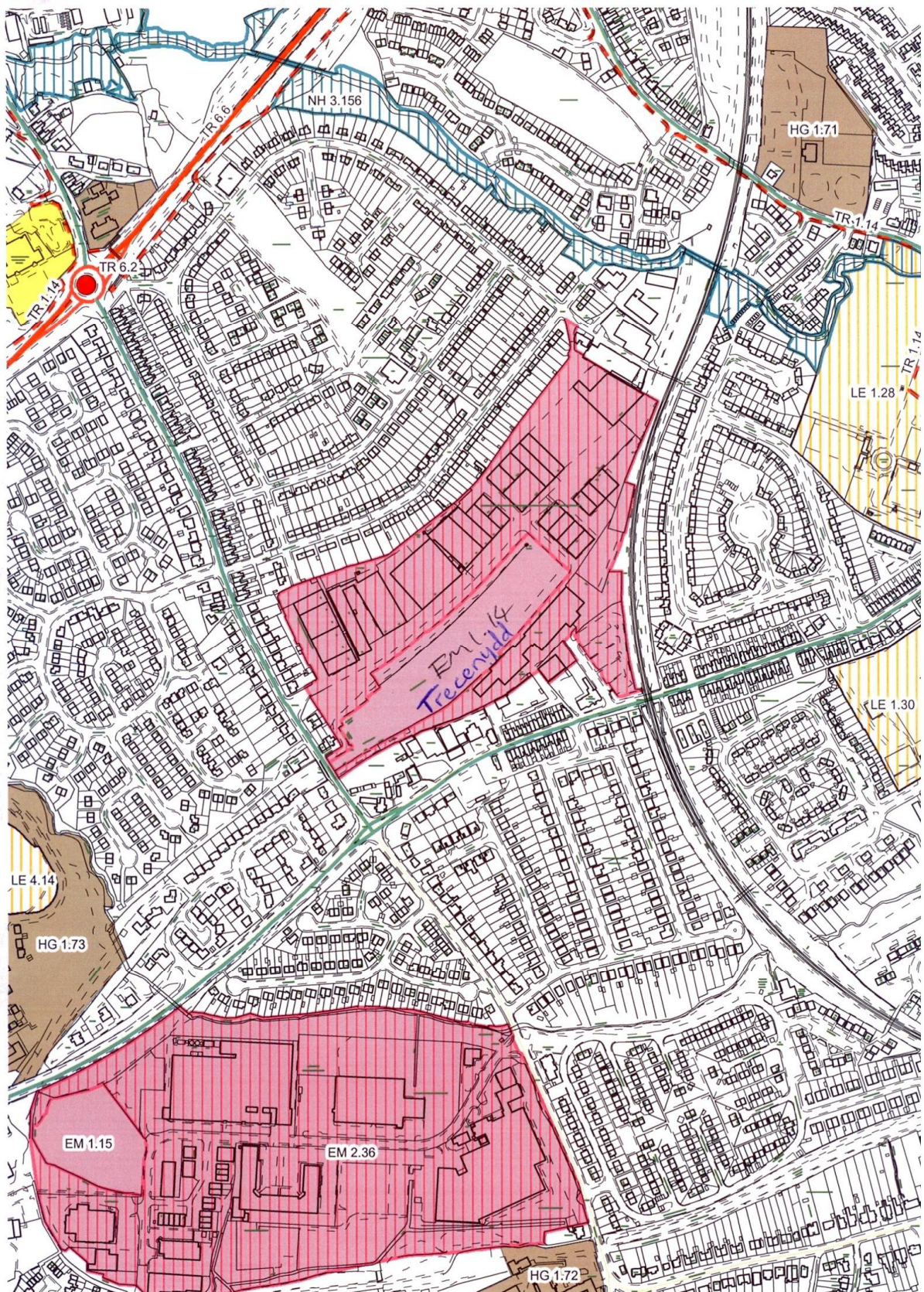




## Caerphilly – Site 10 Trecenydd





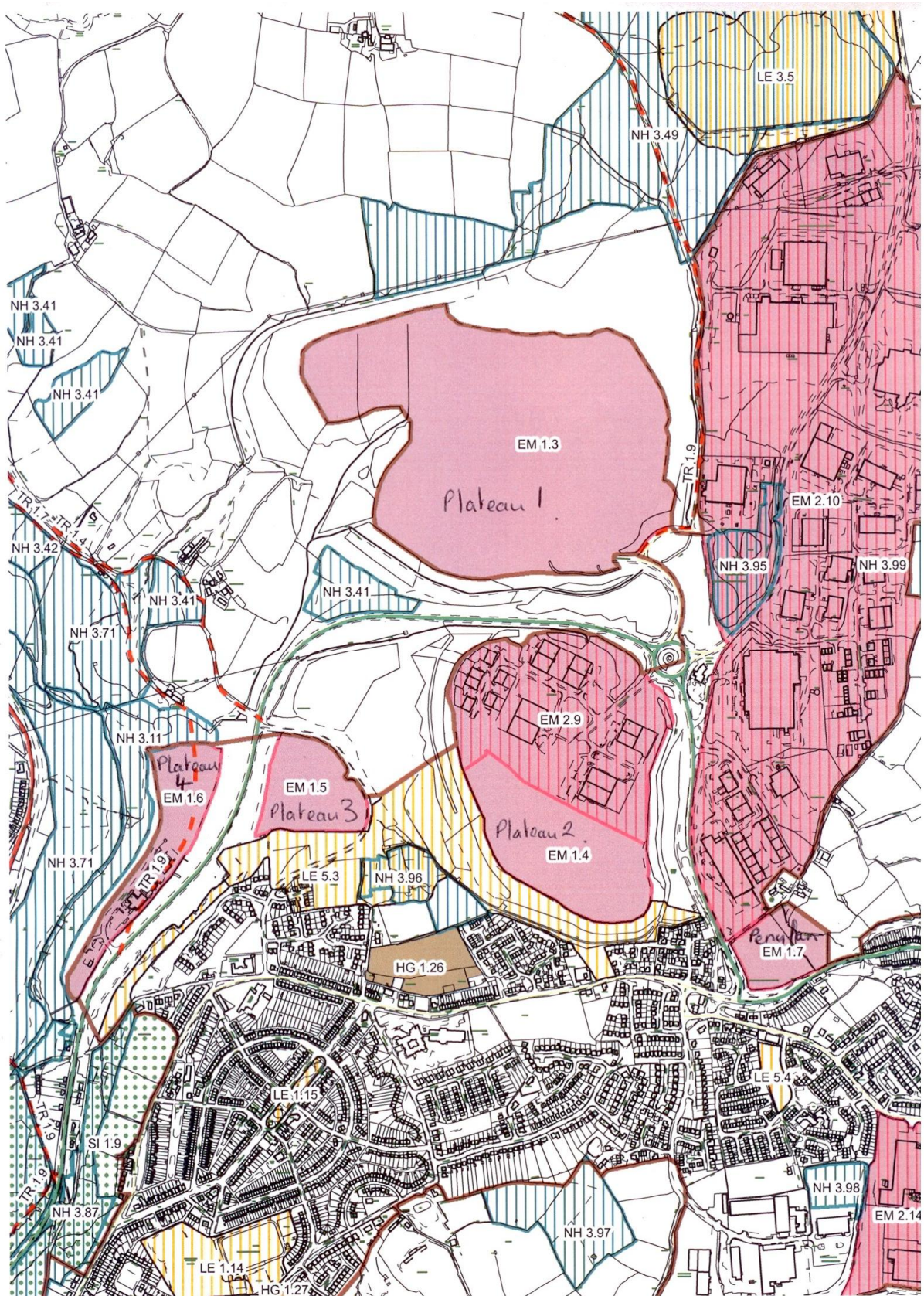




## Caerphilly – Site 11 Oakdale Plateau 4





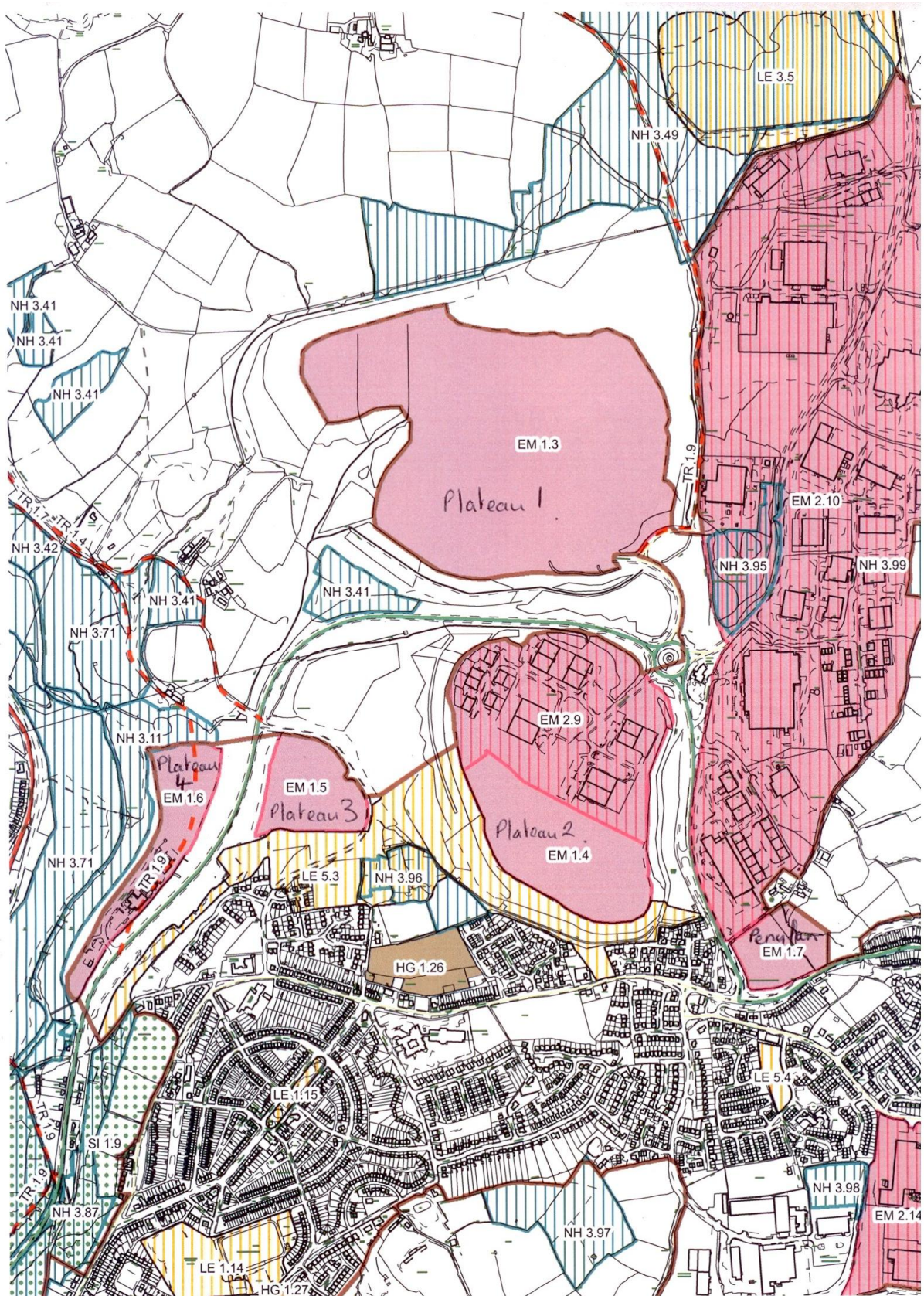




Caerphilly – Site 12 South Extension Penyfan

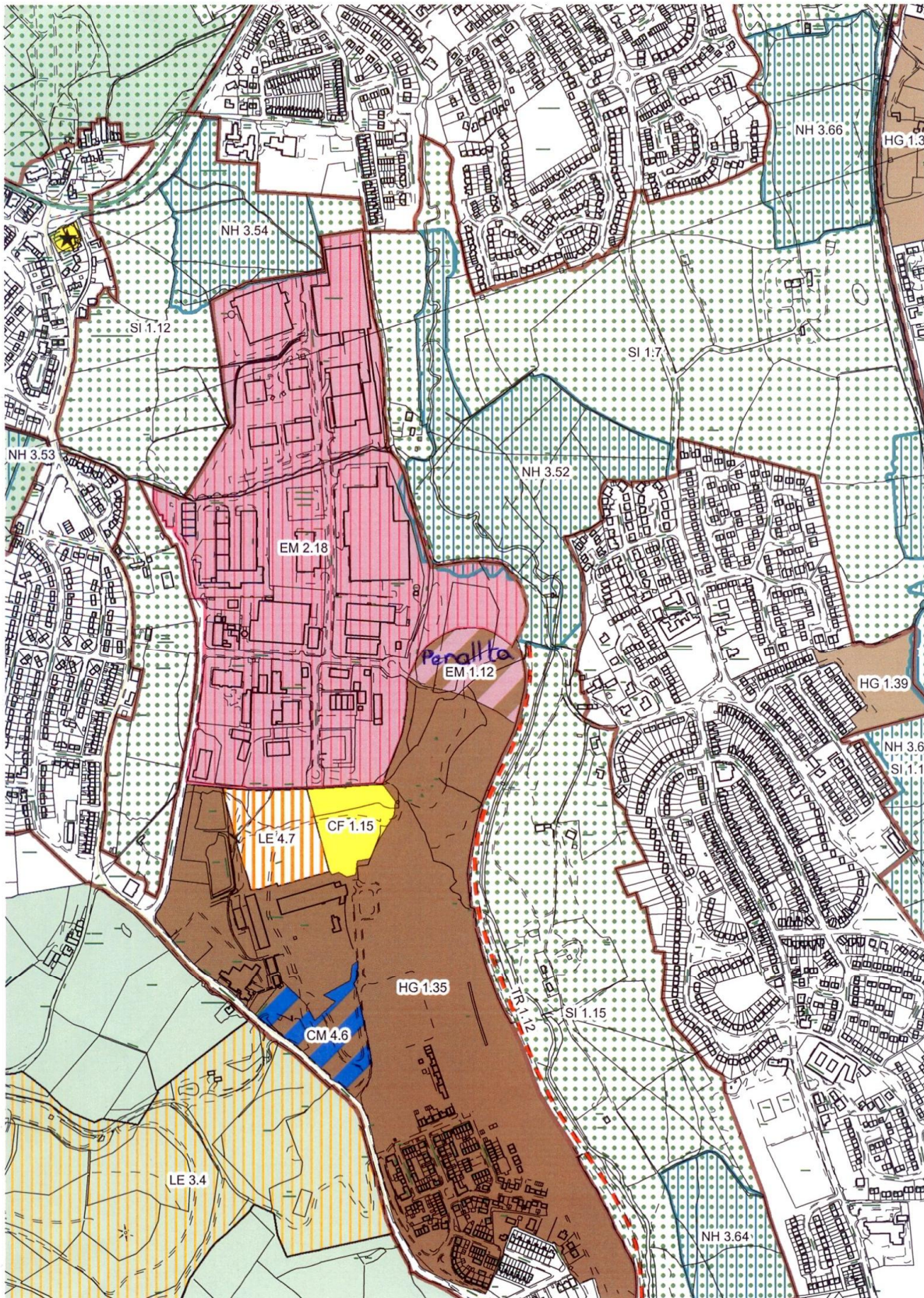






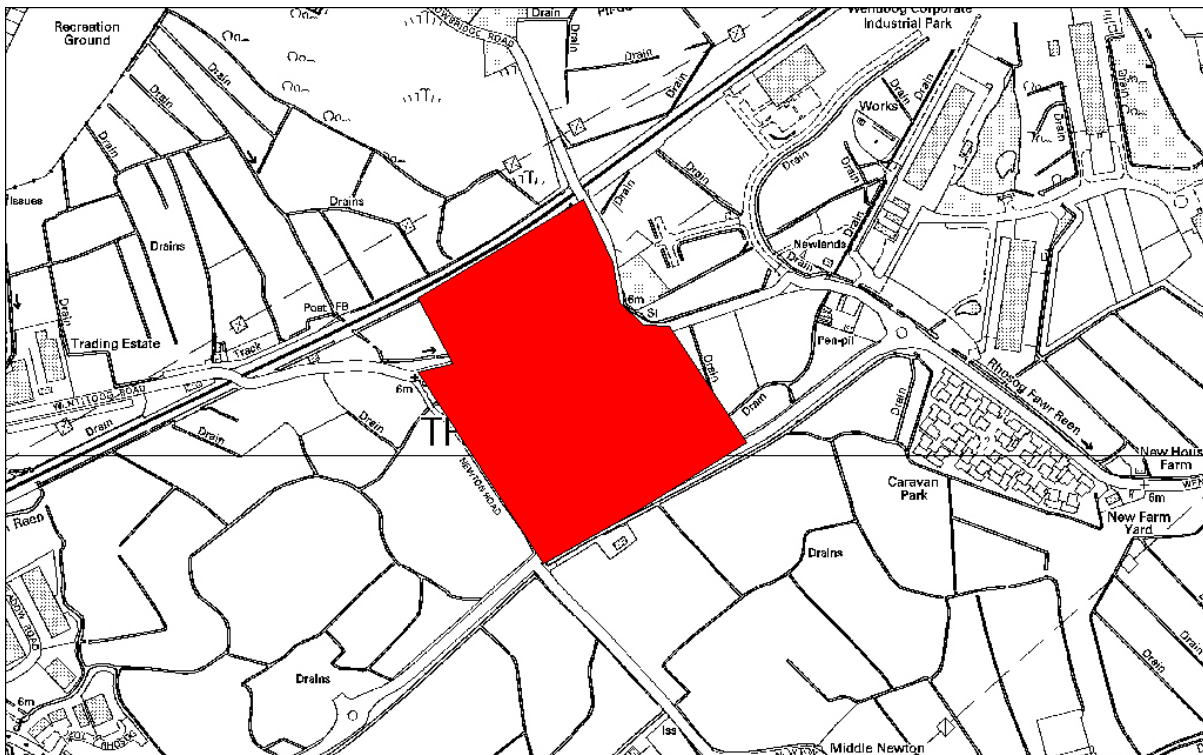


## Caerphilly – Site 13 Pennallta Extension





Cardiff – Site 16 Capital Business Park



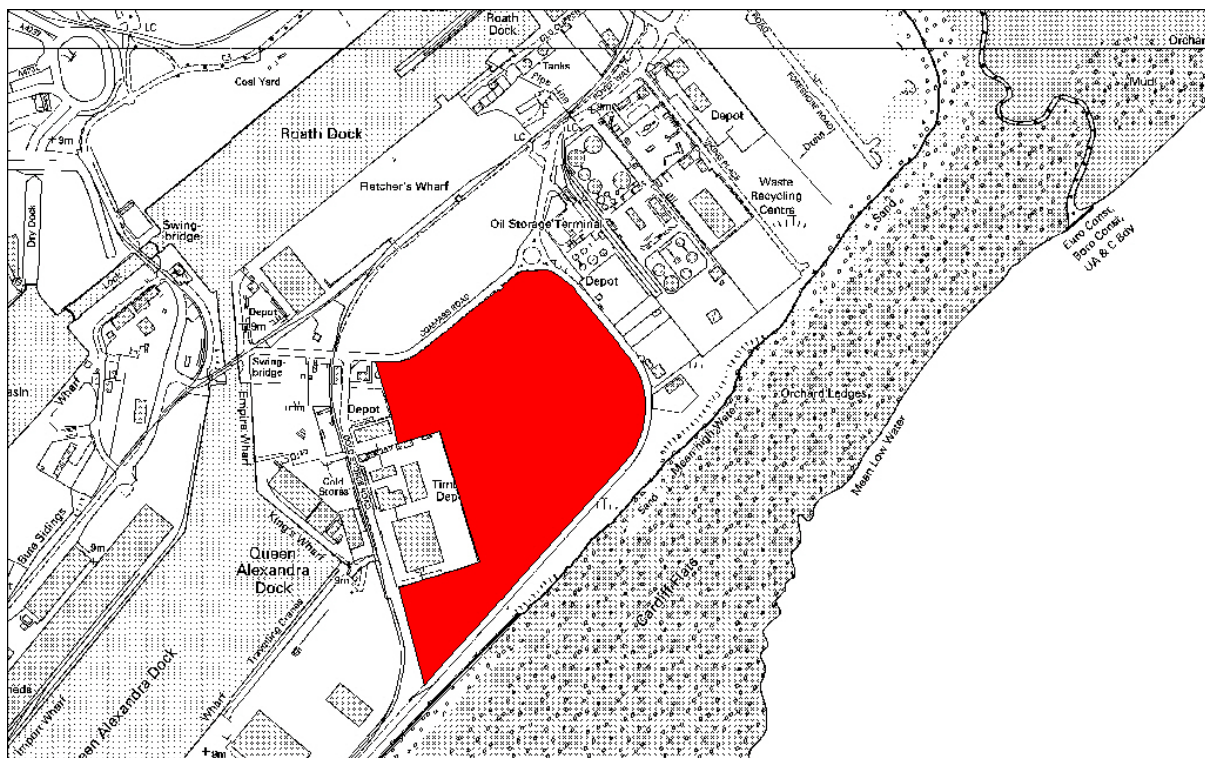


Cardiff – Site 17 Brindley Road



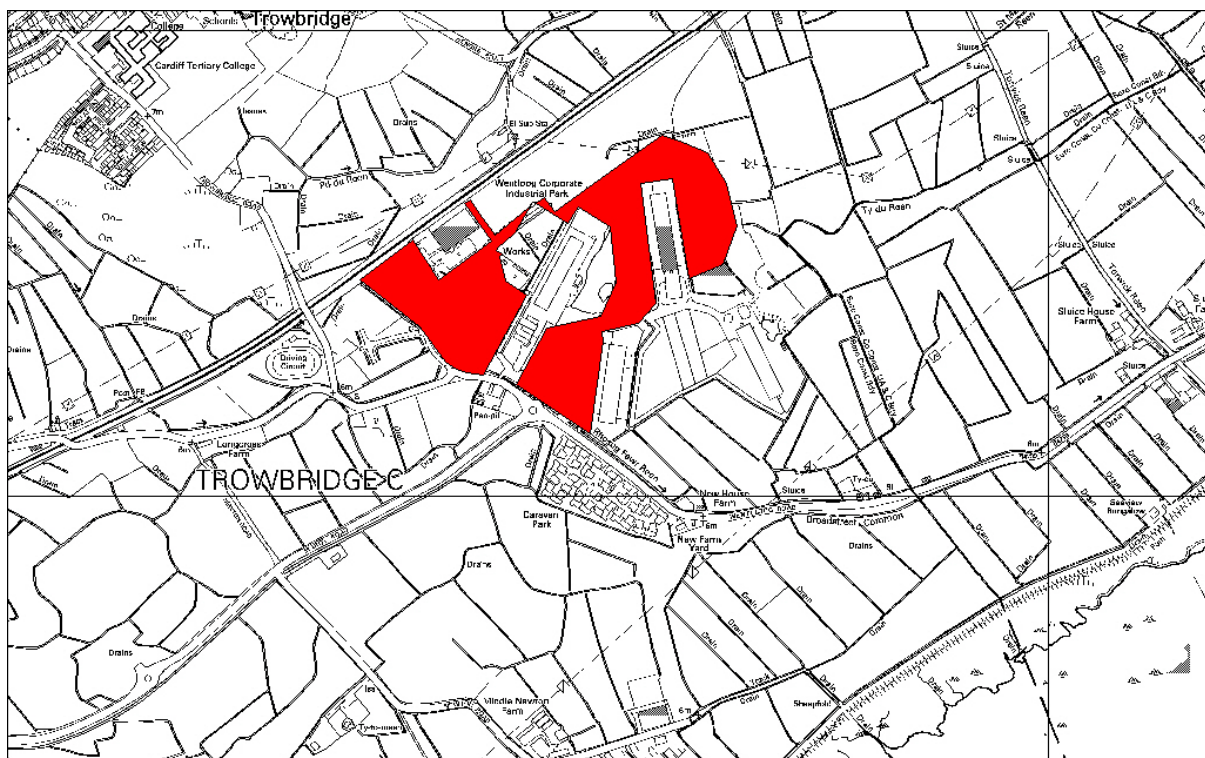


Cardiff – Site 18 Prairie Site





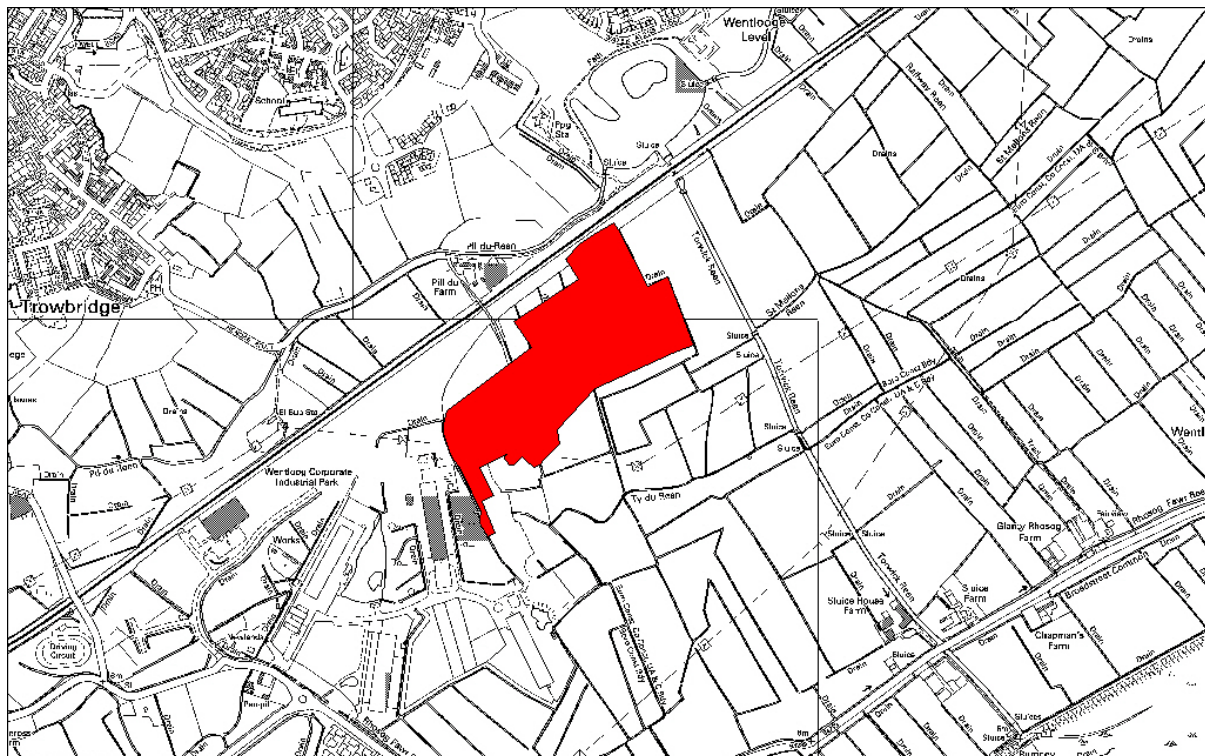
Cardiff – Site 19 Wentloog Corporate Park





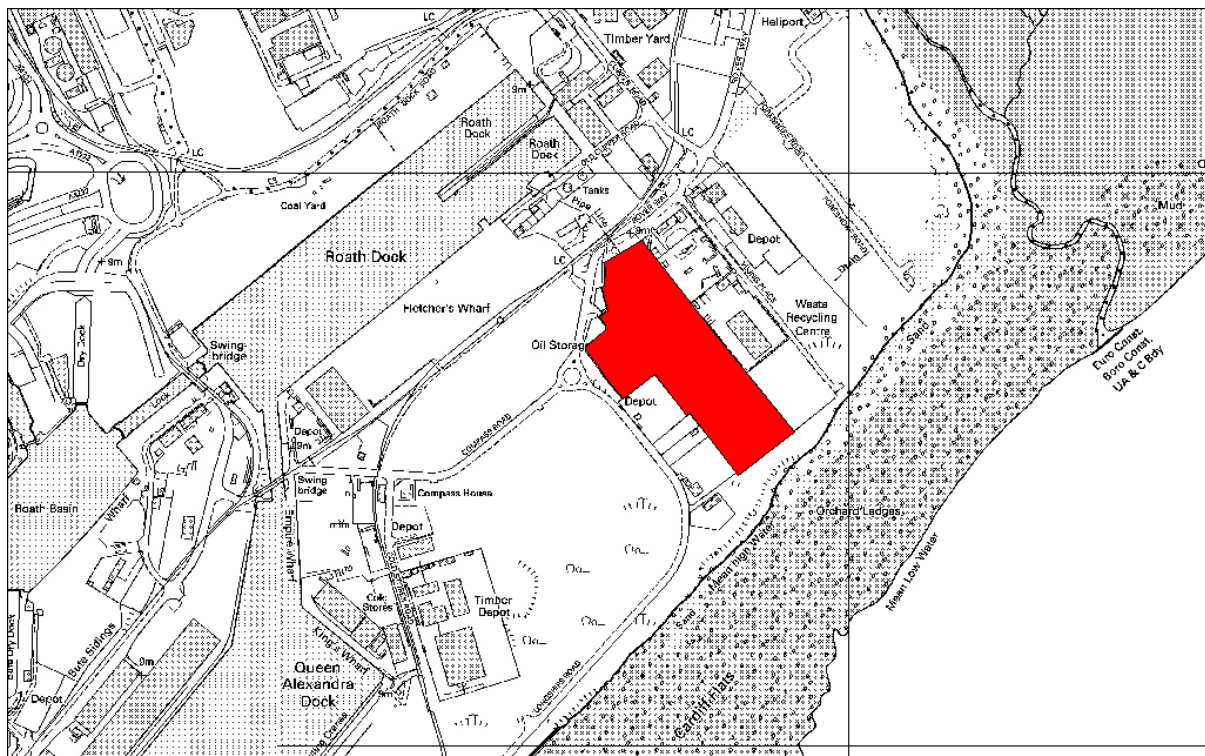
Cardiff – Site 20 Land adj Freight Terminal







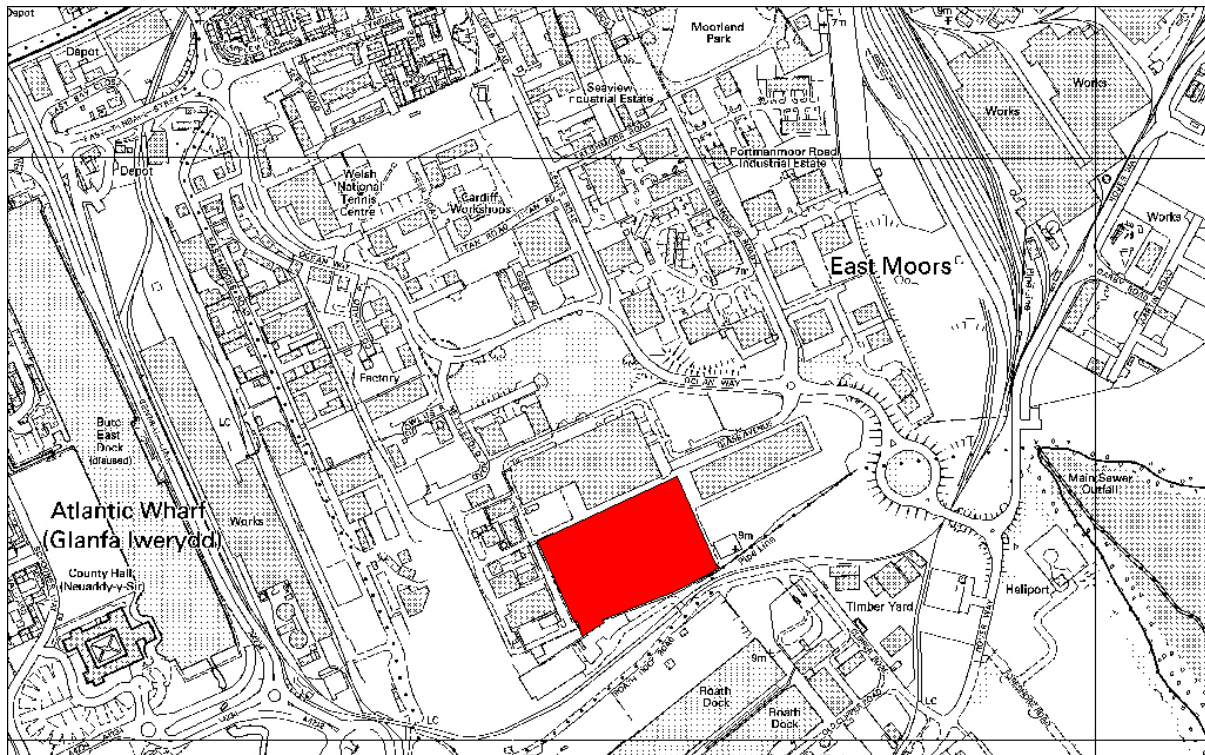
Cardiff – Site 21 Texaco Tank Farm





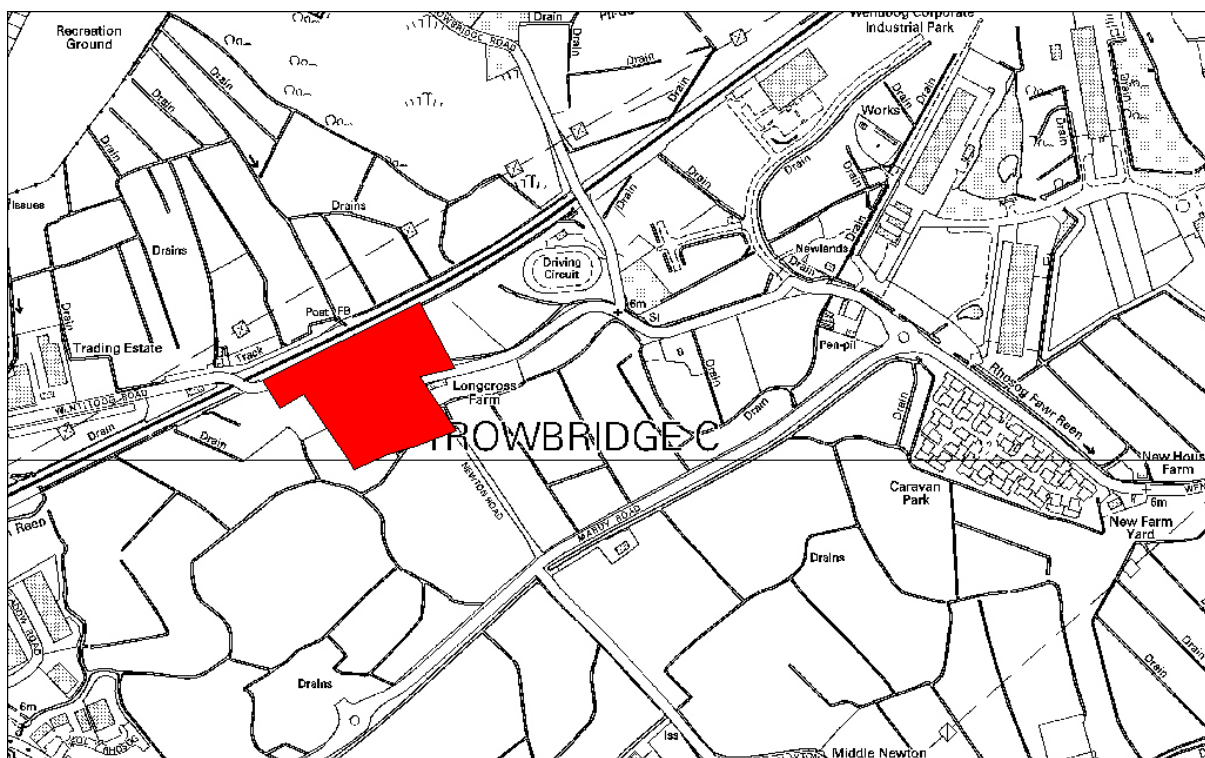
## APPENDICES

### Cardiff – Site 22 Trident Park





Cardiff – Site 23 Land adj Acer Buidling

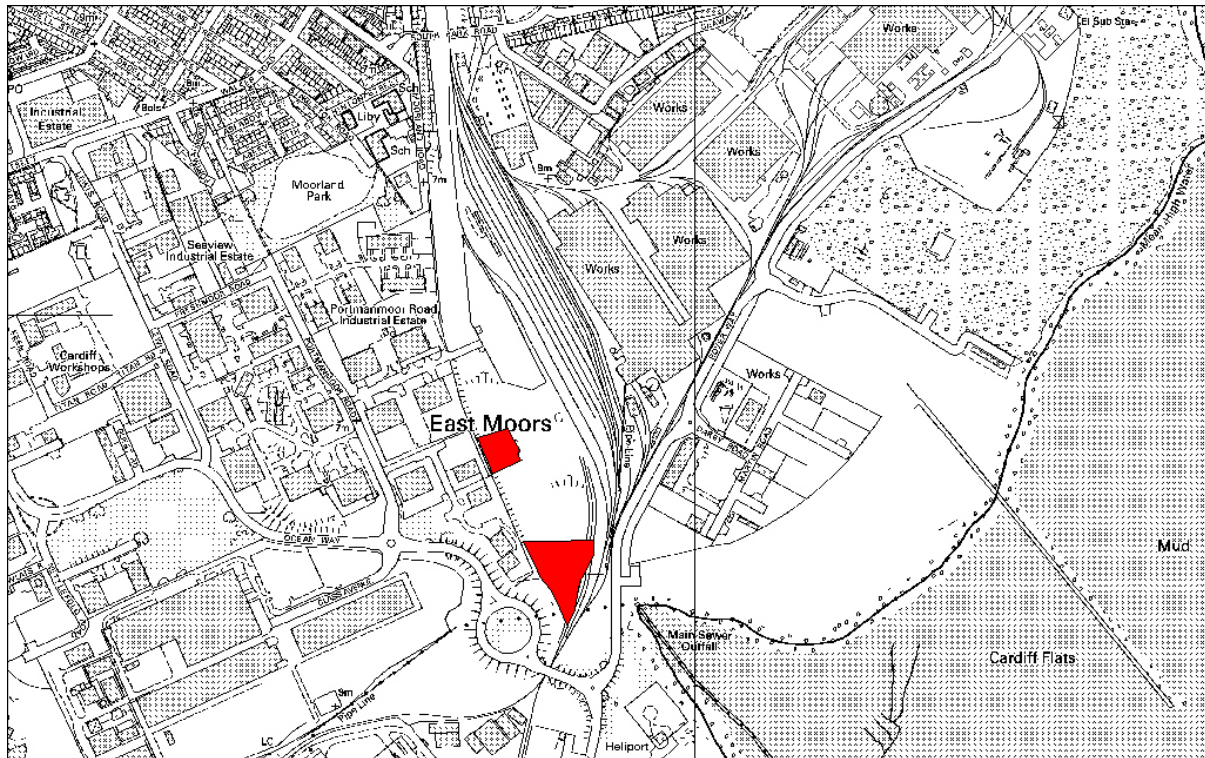




Cardiff – Site 24 Pengam Green

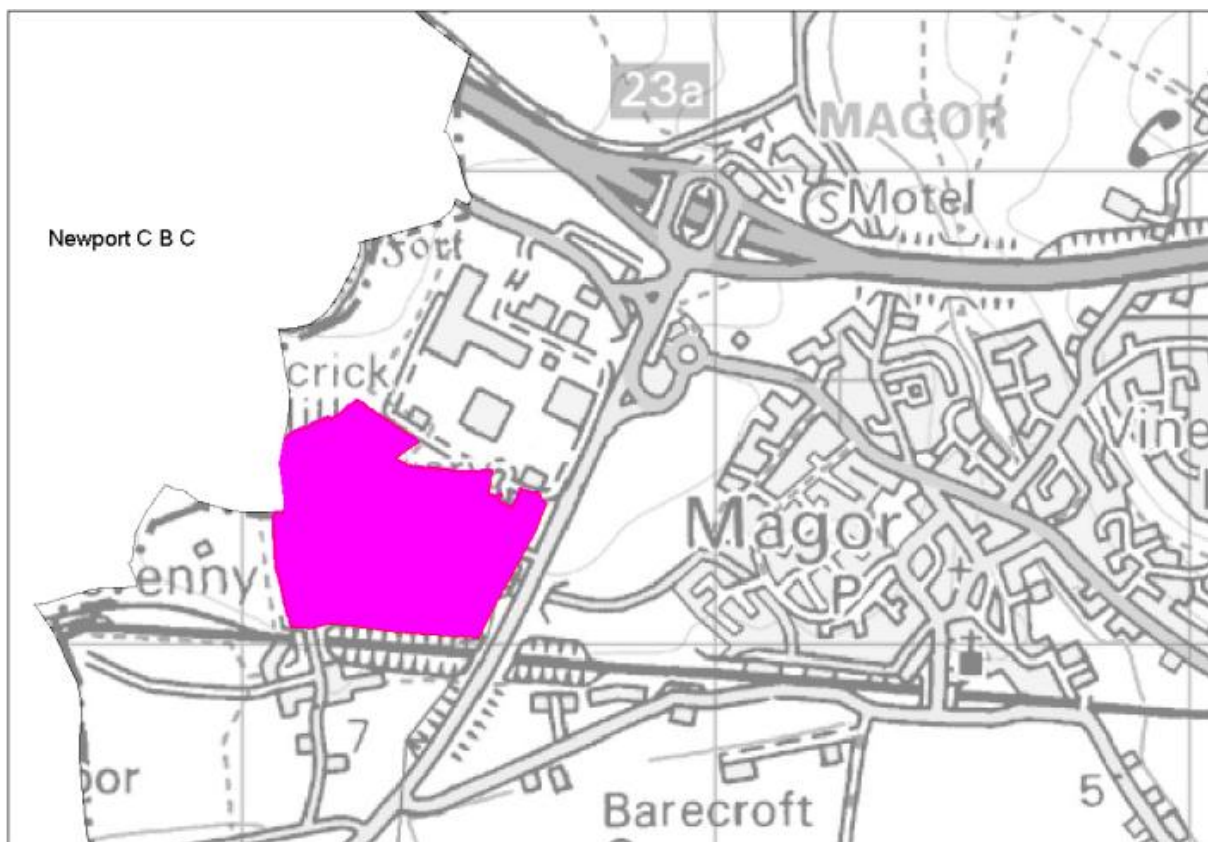


## Cardiff – Site 25 Pacific Business Park



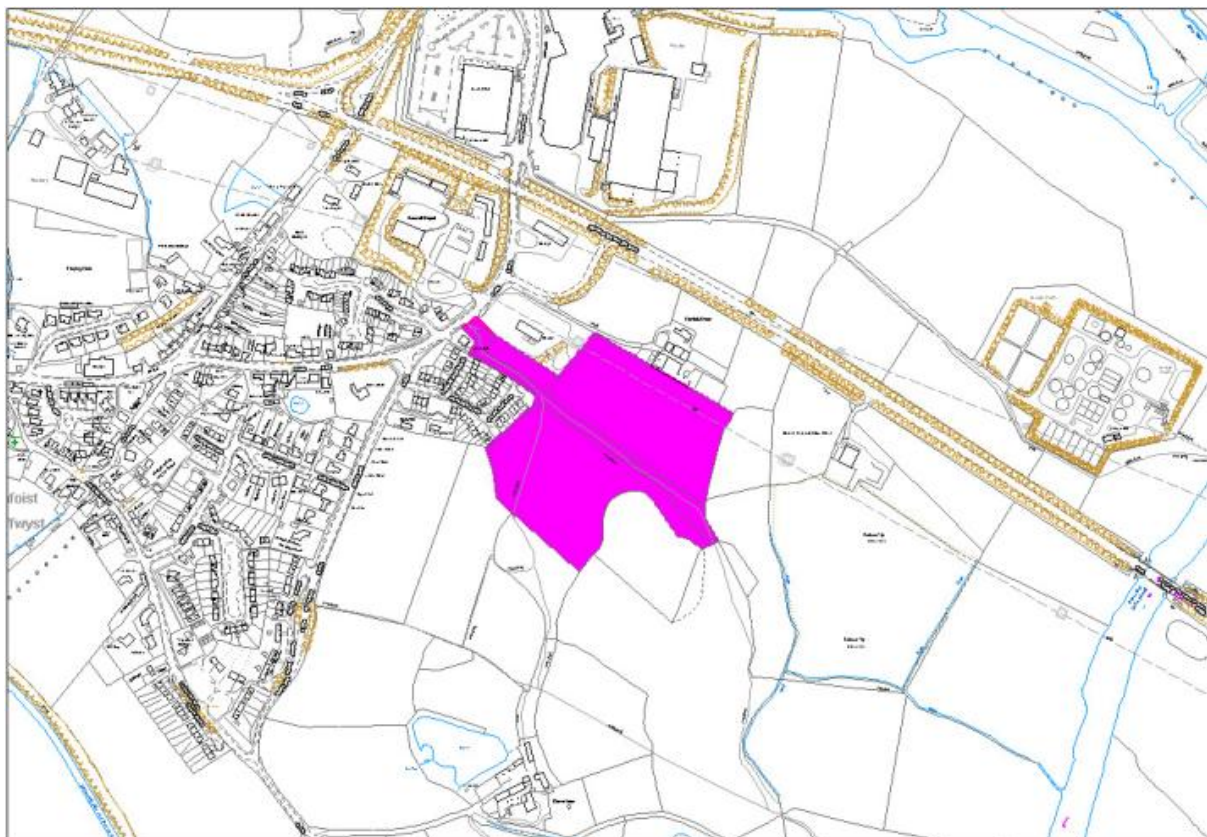


Monmouthshire – Site 26 Quaypoint





Monmouthshire – Site 27 Grove Farm



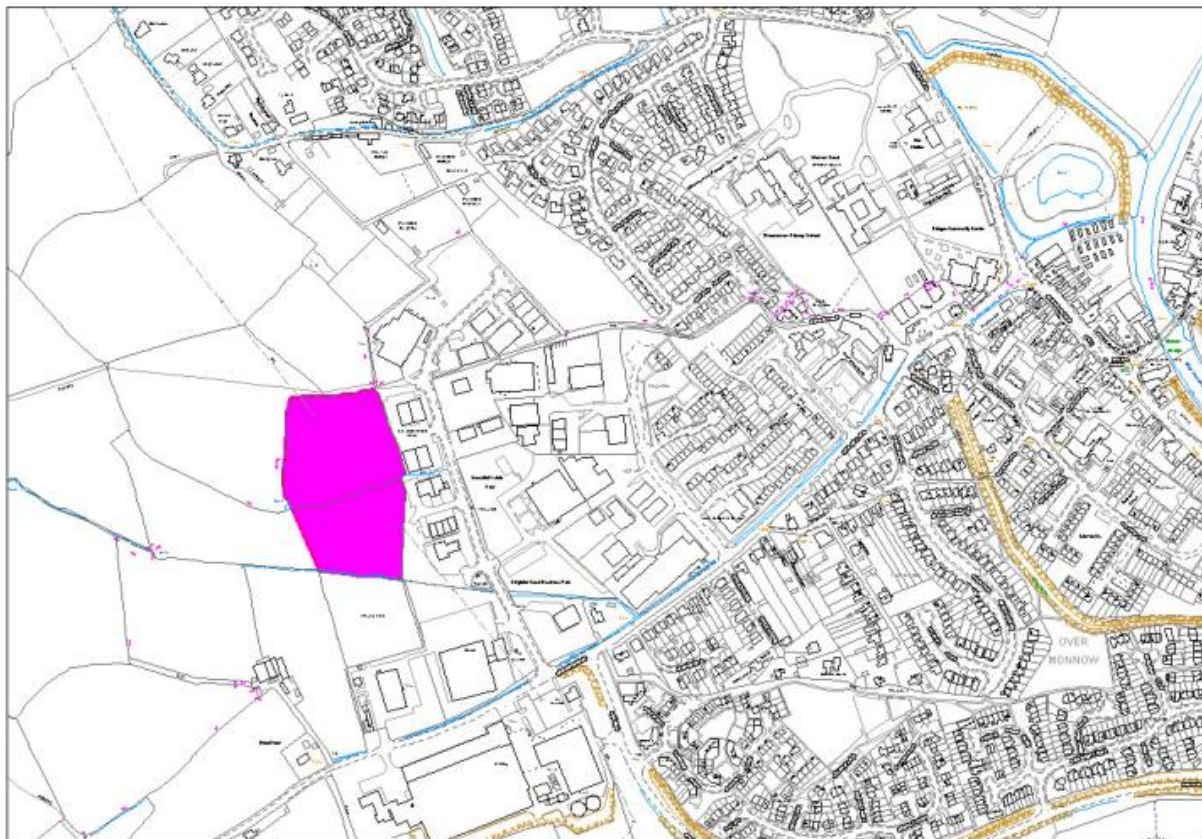


Monmouthshire – Site 28 Mamhilad



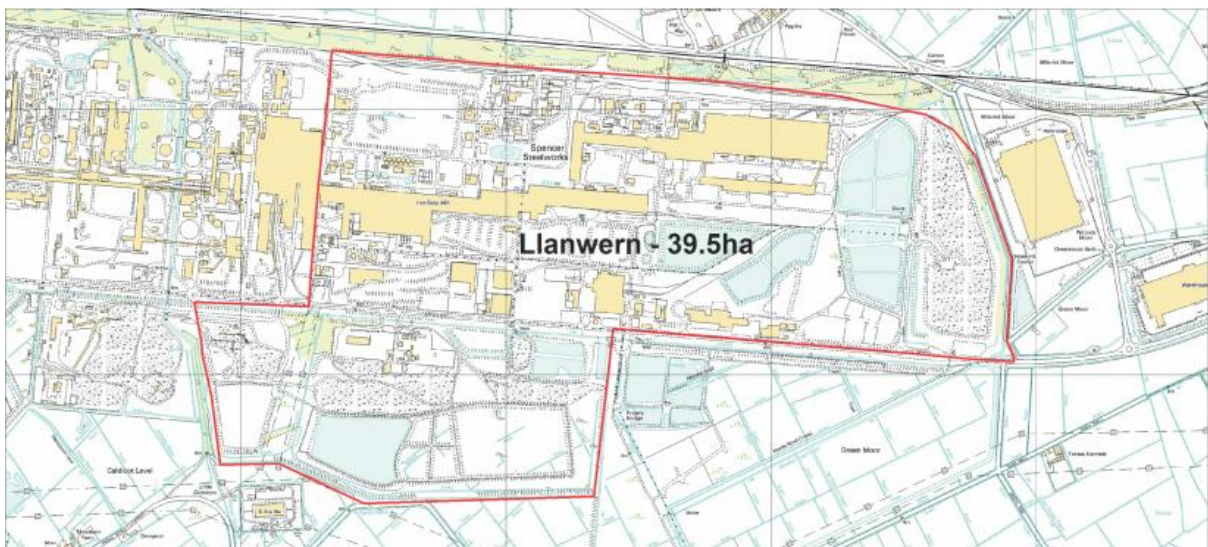


Monmouthshire – Site 29 Wonastow Road





Newport – Site 31 Llanwern

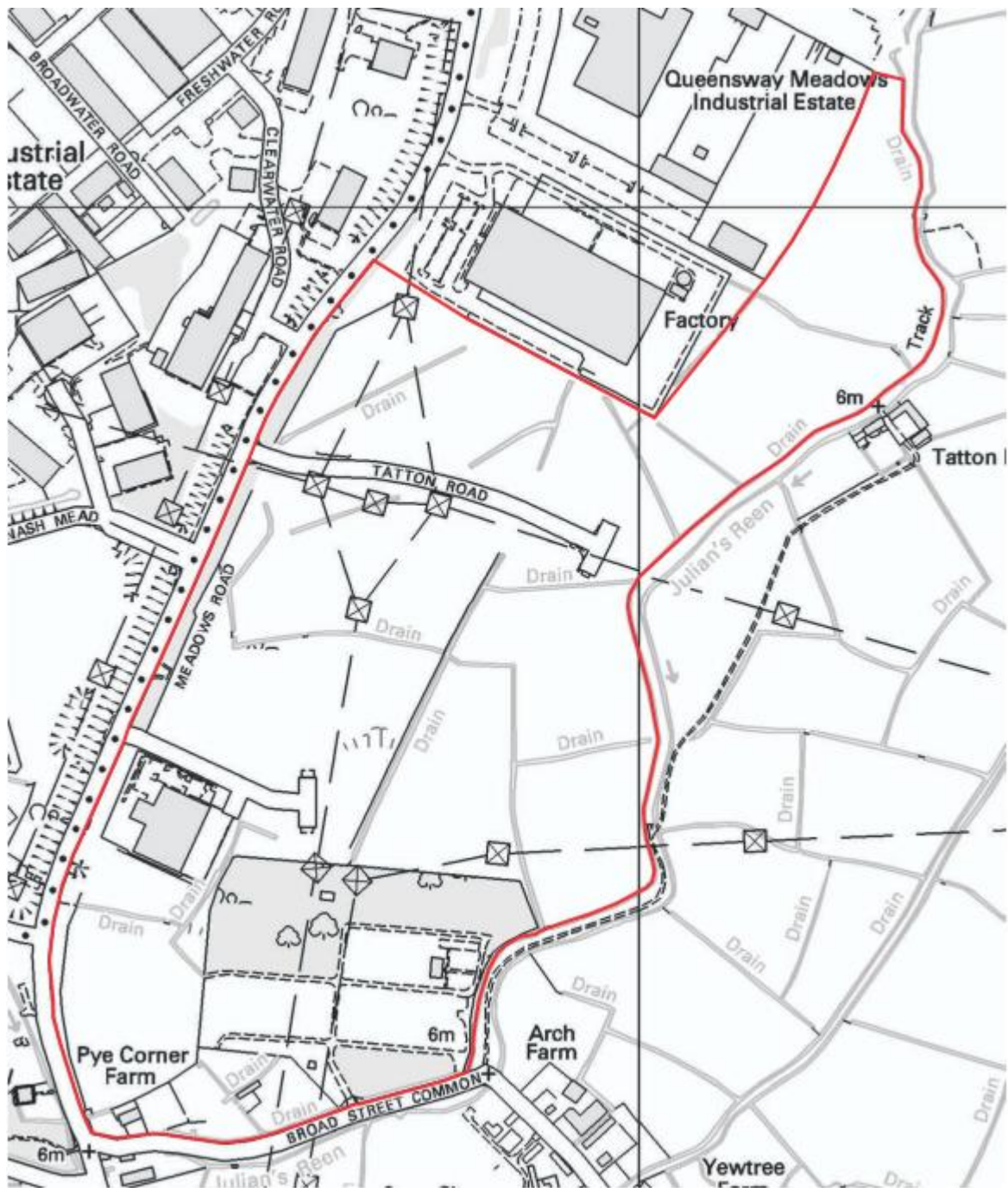




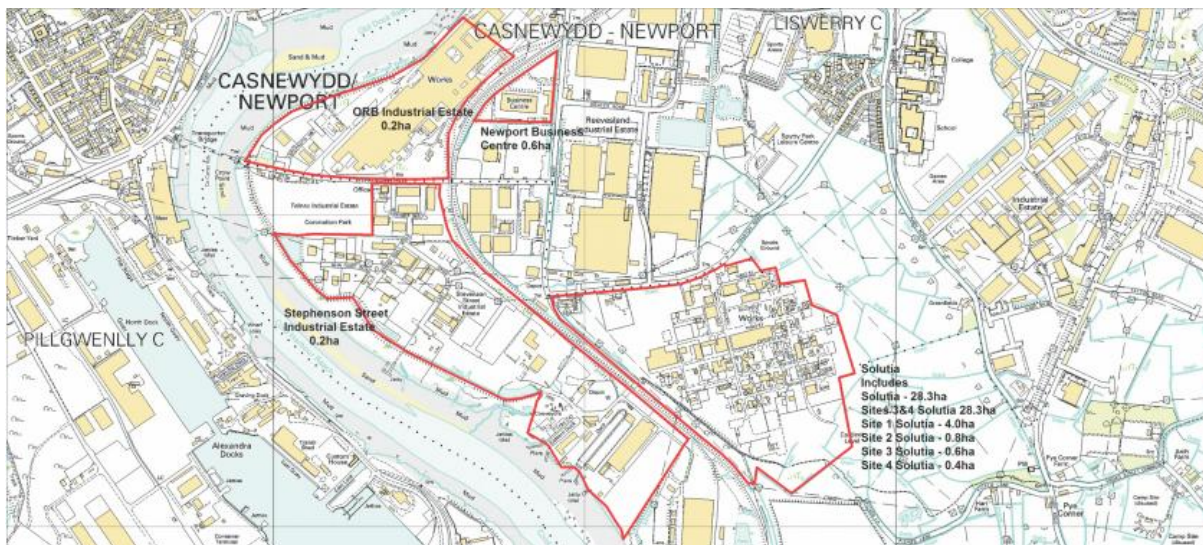
Newport – Site 32 Queensway Meadows East







## Newport – Site 33 Solutia

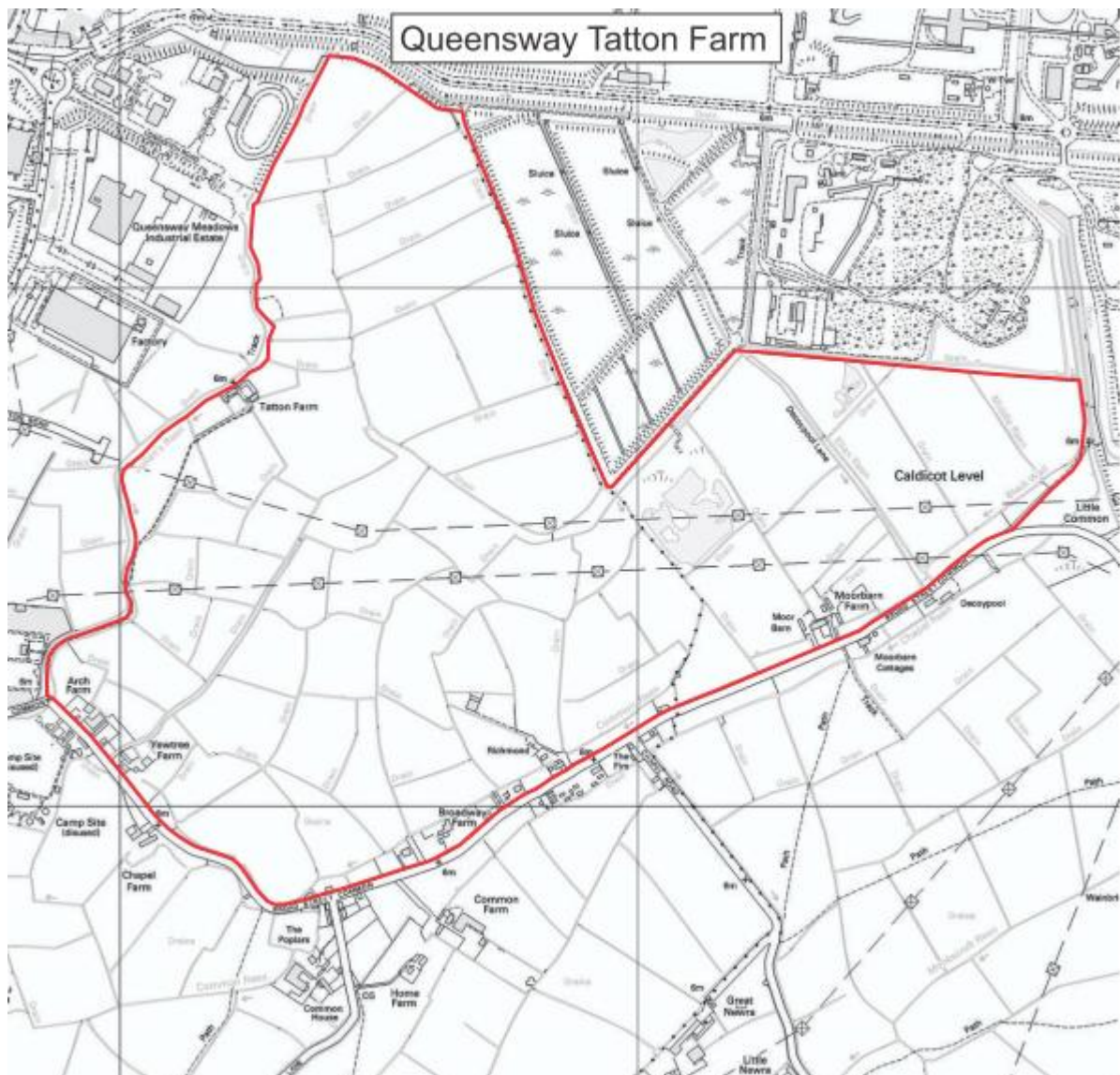




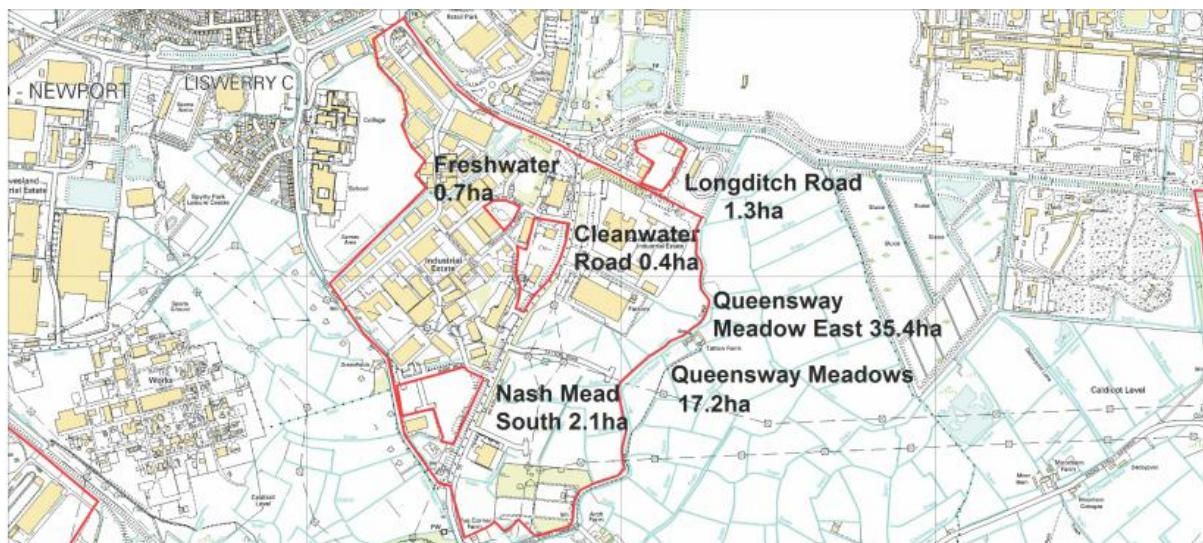
**Newport – Site 34 Queensway Meadows Tatton Road**





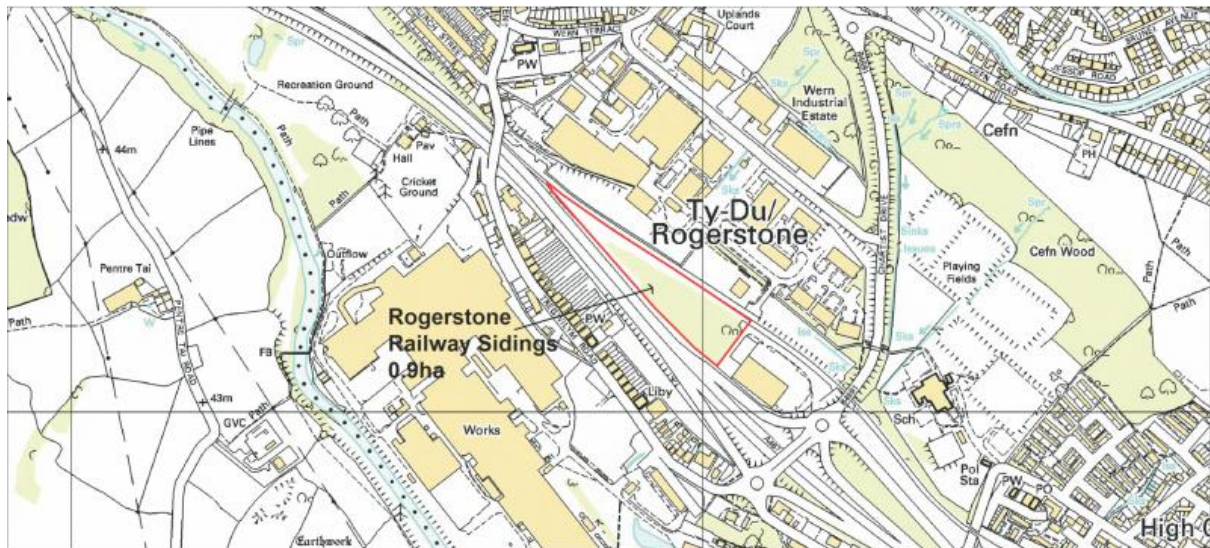


Newport – Site 35 Nash Mead South





## Newport – Site 36 Rogerstone Railway Sidings

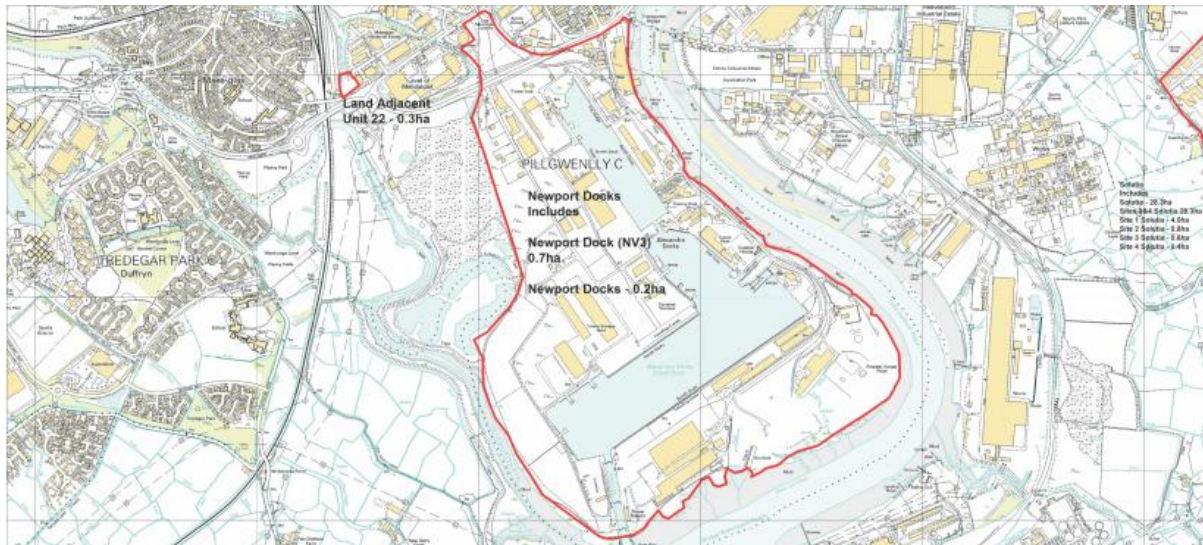


## Newport – Sites 37, 40, 45 in and around Queensway Meadows

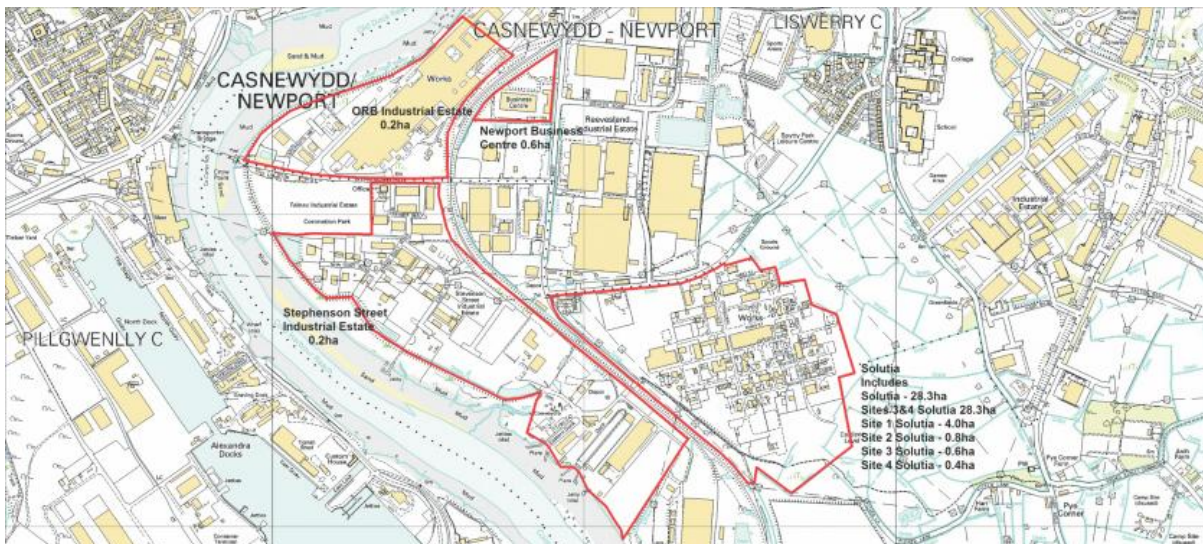




## Newport – Sites 38, 41, 43 Newport Docks

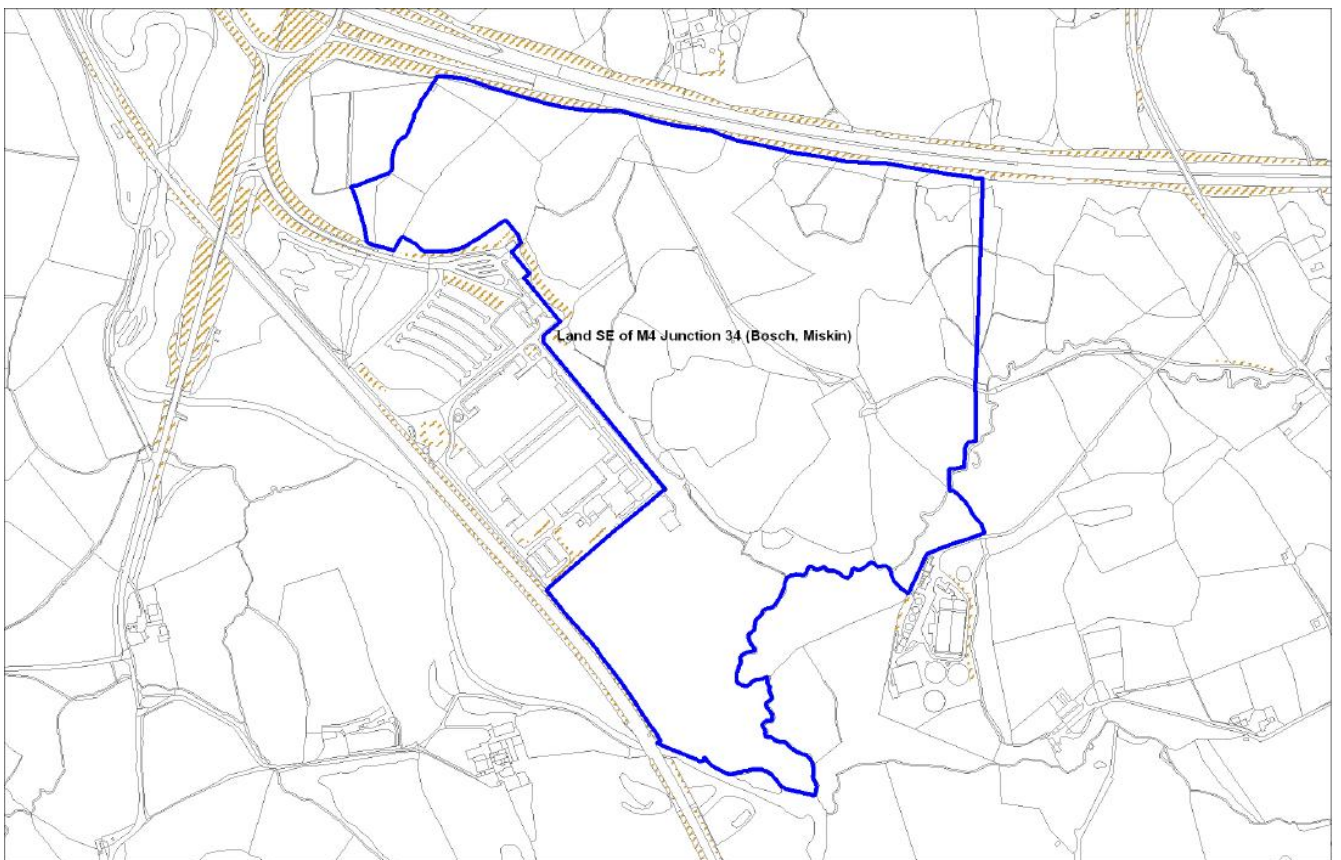


## Newport – Sites 39, 42, 44 near Solutia



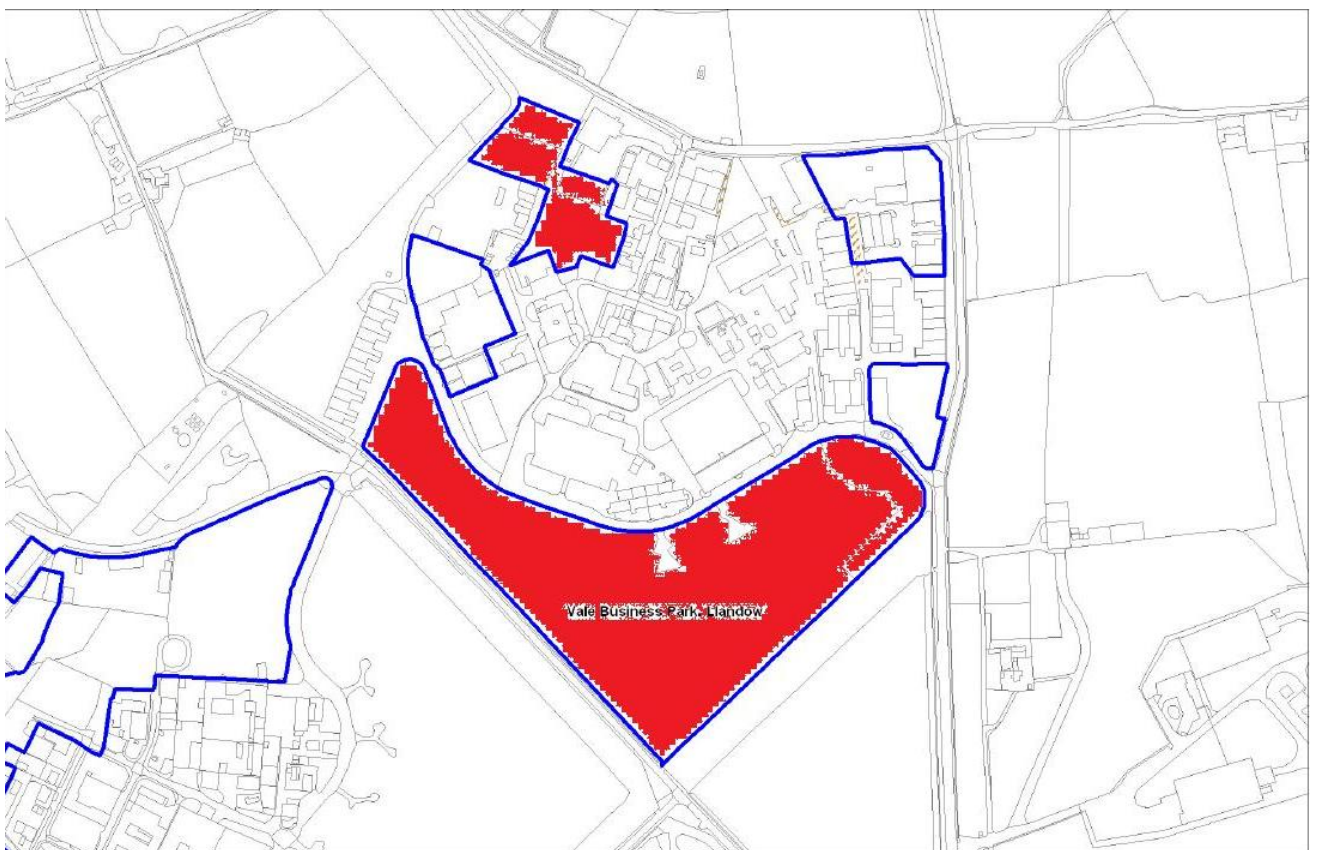


Vale of Glamorgan – Site 46 Land SE of J34 M4

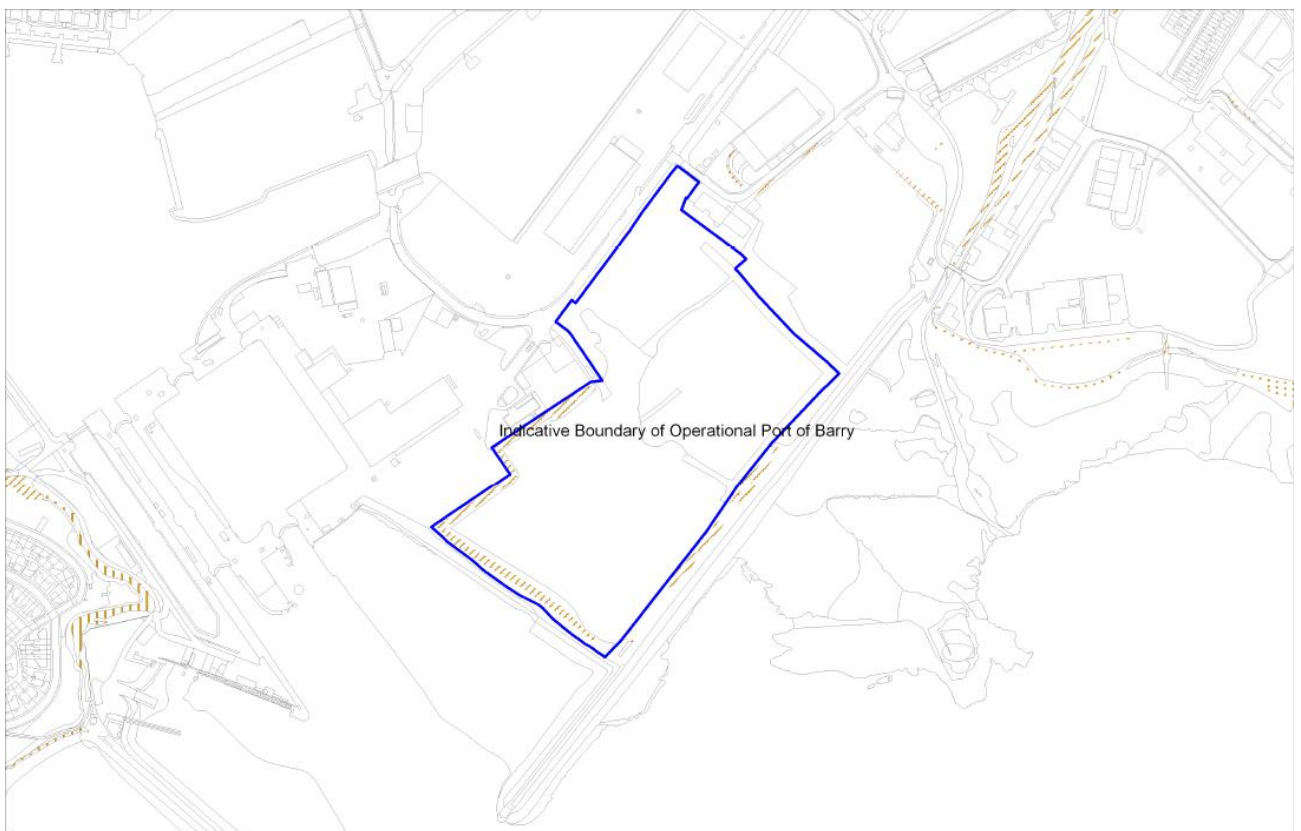




Vale of Glamorgan – Site 48 Vale Business Park

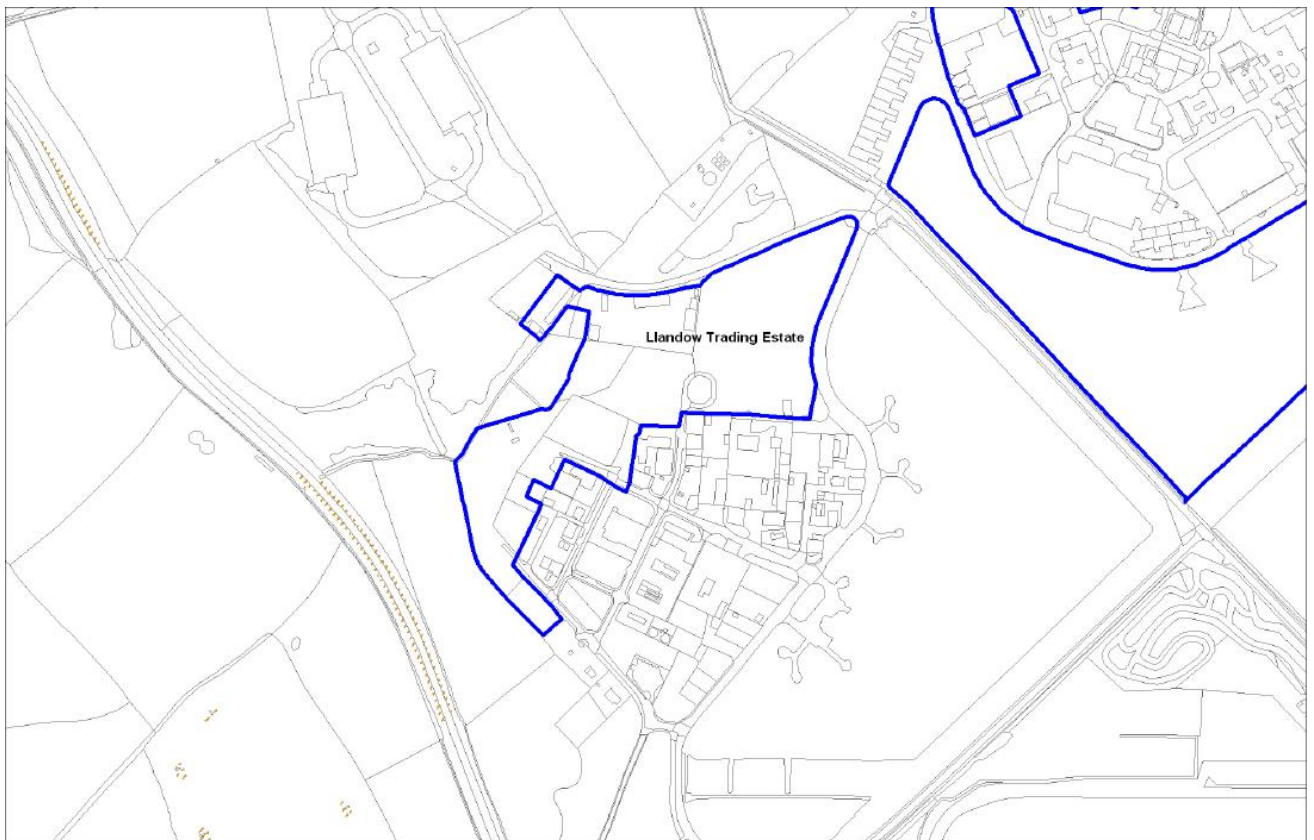


Vale of Glamorgan – Site 50 Barry Docks



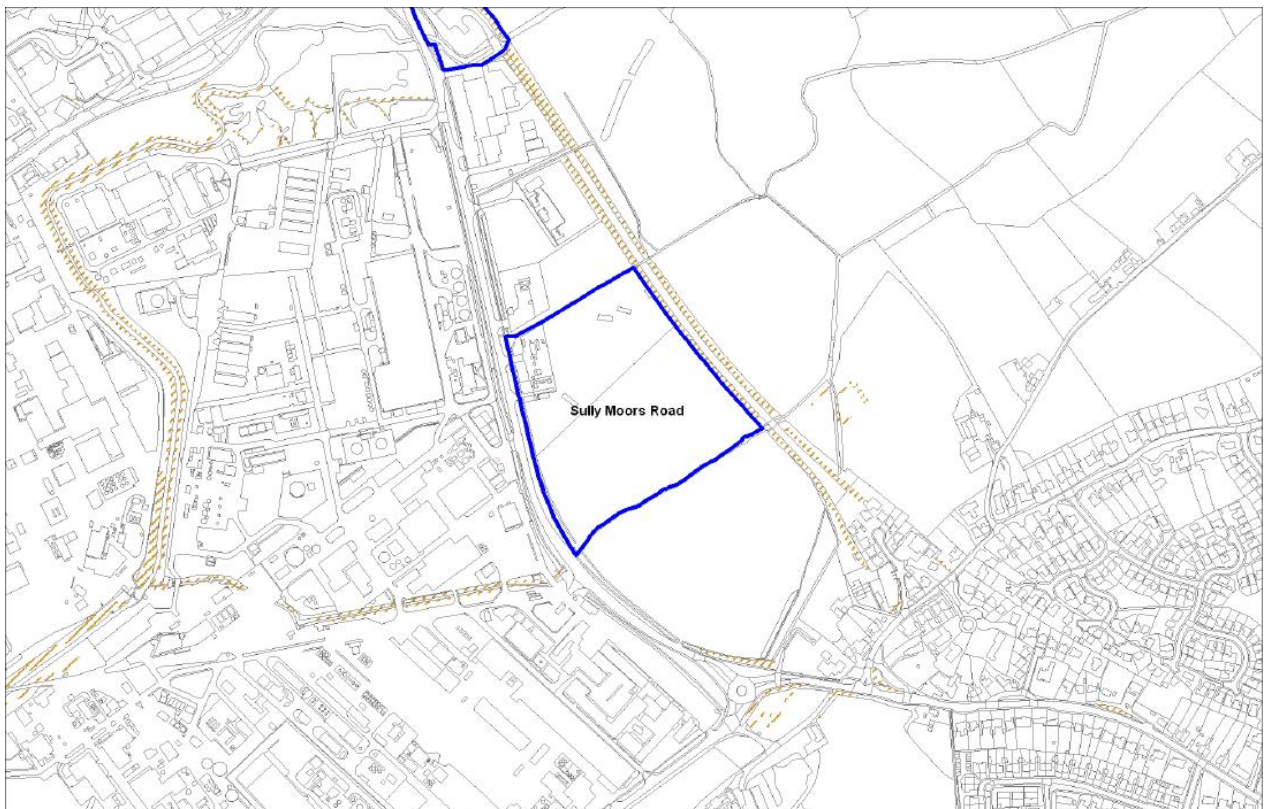


Vale of Glamorgan – Site 51 Llnadow Trading Estate



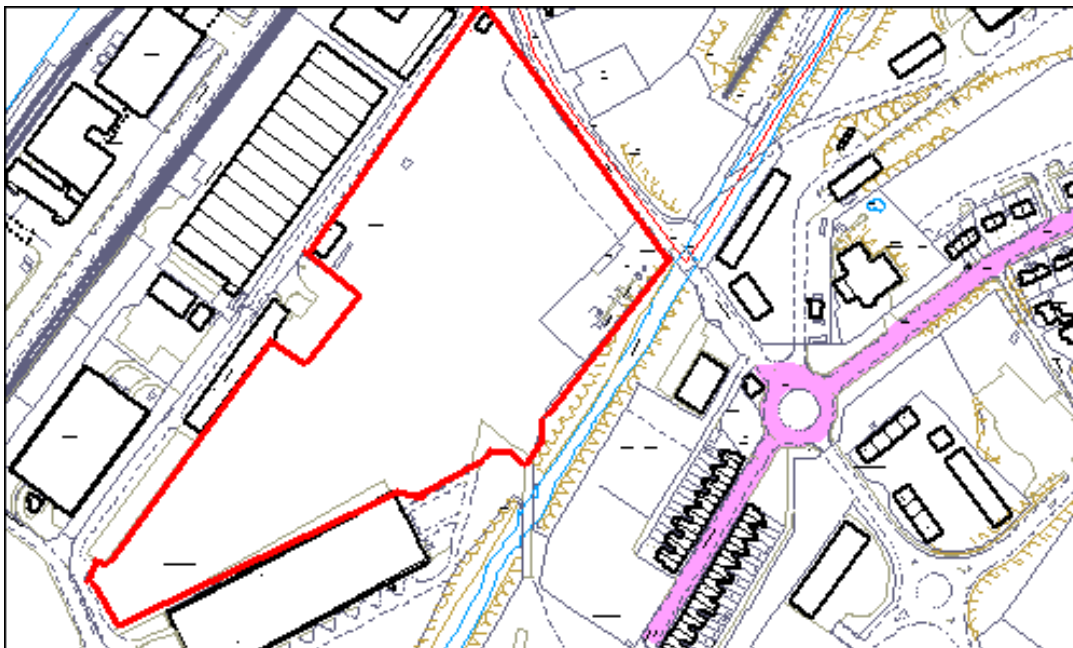


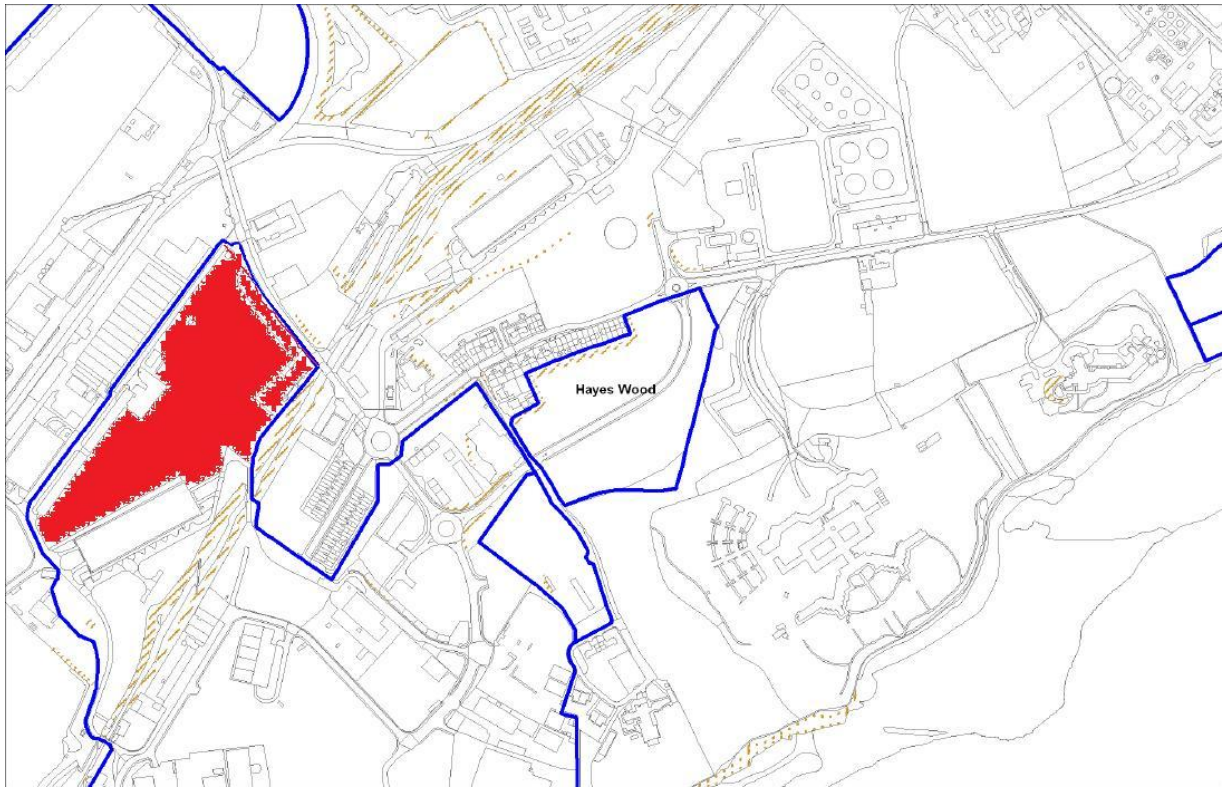
**Vale of Glamorgan – Site 53 Sully Moors Road**





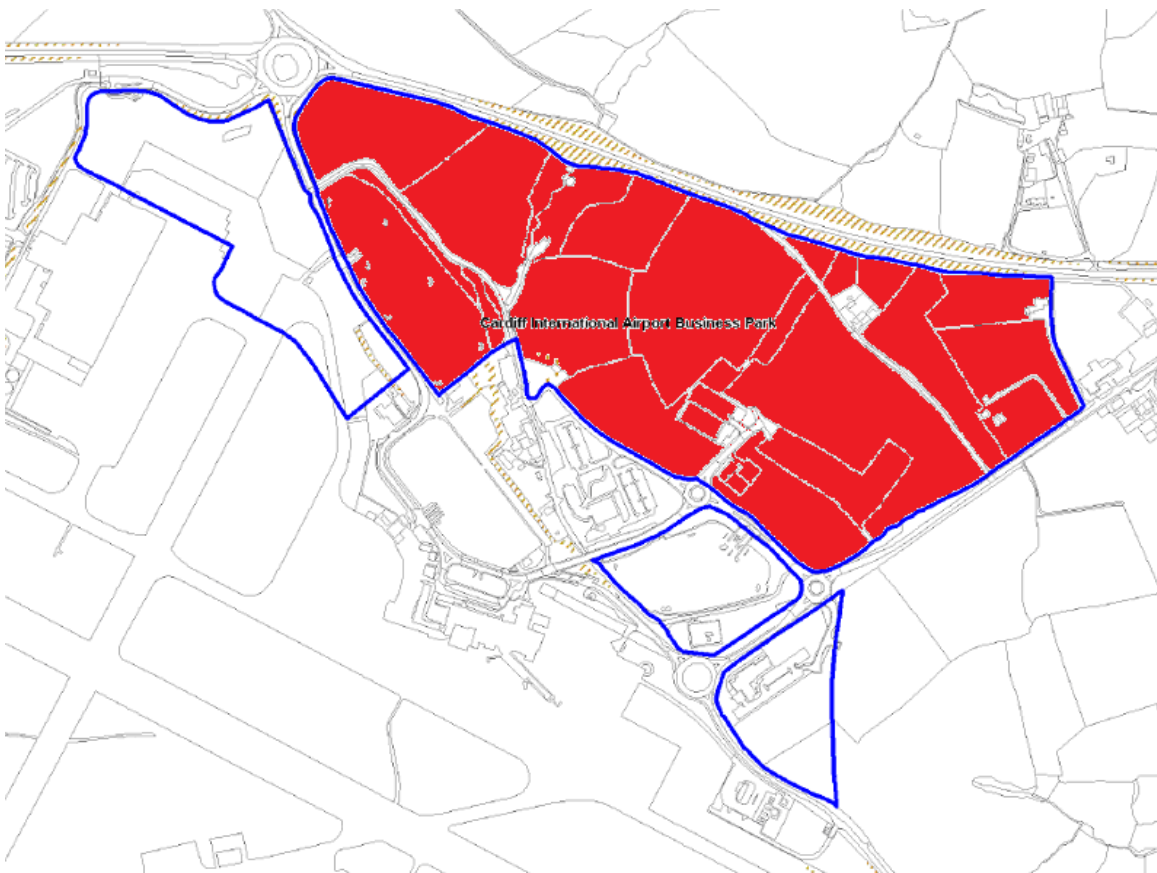
Vale of Glamorgan – Site 54 Wimbourne Road







Vale of Glamorgan – Sites 47, 49, 52 Cardiff Airport Business Park



**APPENDIX 3: RWP AREAS OF SEARCH**



**Figure 24: Areas of Search Sustainability Appraisal – Summary of Objectives & Mapped Criteria**

Sustainability Appraisal Objectives	Mapped Criteria
Ensure prudent use of land & resources	<ul style="list-style-type: none"> <li>• Landfill Site</li> <li>• Quarry site</li> <li>• Agricultural Land Classification</li> <li>• Green Wedges</li> <li>• Industrial Land</li> <li>• Existing Non-Landfill Waste Management Facility</li> </ul>
Minimise greenhouse gas emissions	<ul style="list-style-type: none"> <li>• Proximity to Ports / Docks</li> <li>• Proximity to Urban Area</li> </ul>
Minimise adverse effects on air quality	<ul style="list-style-type: none"> <li>• Air Quality Management Area</li> <li>• Proximity to Residential Development</li> </ul>
Protect & enhance the landscape, townscape & cultural heritage of Wales	<ul style="list-style-type: none"> <li>• Proximity to National Parks</li> <li>• Proximity to Areas of Outstanding Natural Beauty</li> <li>• LandMap</li> <li>• Special Landscape Area</li> <li>• Historic Landscape</li> <li>• Proximity to World Heritage Site</li> <li>• Proximity to Scheduled Ancient Monuments</li> <li>• Heritage Coast</li> <li>• Proximity to Historic Park and Garden</li> </ul>
Minimise adverse effects on water quality	<ul style="list-style-type: none"> <li>• Minor Aquifer</li> <li>• Proximity to River Quality Objectives</li> <li>• Proximity to Surface Water Protection Zone</li> <li>• Groundwater Source Catchment Area Zones</li> <li>• Major Aquifer</li> <li>• Lakes and Rivers</li> </ul>
Avoid increasing flood risk	<ul style="list-style-type: none"> <li>• TAN 15 Layer C1</li> <li>• TAN 15 Layer C2</li> </ul>
Protect biodiversity	<ul style="list-style-type: none"> <li>• Proximity to Special Area of Conservation</li> <li>• Proximity to Special Protection Area</li> <li>• Proximity to Ramsar Site</li> <li>• Proximity to Site of Special Scientific Interest</li> <li>• Proximity to National Nature Reserve</li> <li>• Local Nature Reserve</li> <li>• Proximity to Ancient Woodland</li> </ul>
Provide employment opportunities & support long-term jobs & skills	<ul style="list-style-type: none"> <li>• Proximity to Urban Area</li> </ul>
Minimise adverse effects on residential property	<ul style="list-style-type: none"> <li>• Proximity to Residential Development</li> </ul>
Minimise the increased cost of waste management	<ul style="list-style-type: none"> <li>• Proximity to Urban Area</li> <li>• Proximity to Primary Road Network</li> <li>• Slope</li> </ul>
Protect local amenity	<ul style="list-style-type: none"> <li>• Common Land / Open Country</li> <li>• Public Forests</li> <li>• Country Parks</li> </ul>
Minimise adverse effects on public health and avoid increasing health inequalities	<ul style="list-style-type: none"> <li>• Proximity to Residential Development</li> </ul>

### APPENDIX 4: SITE QUESTIONNAIRE RESPONSES

The main responses are summarised from each of the 5 Councils to the Questionnaire circulated, included in alphabetical order:

- Caerphilly
- Cardiff
- Monmouthshire
- Newport
- Vale of Glamorgan



## APPENDIX 5: INDIVIDUAL SITE ASSUMPTIONS

While the body of the report addresses the approach to the assessment criteria and the main assumptions associated therewith, this Appendix sets out the assumptions that have been made on the individual sites.

### Caerphilly

The Council has approved the use of the Caerphilly UDP in its present form for all planning purposes since it has gone through all stages except that of formal adoption. The Council view is that the plan carries almost the same weight as an adopted plan in respect of all the policies that are in the plan.

The main policies considered from the UDP: 1DC, DC1, DC2, C11, C12, C13, C14, E1, E2, E4, E6, W1 & W4.

#### Site 1: Land at Oakdale Business Park (Plateau 1), Oakdale (area 30.2ha)

There are 67.6 ha in total allocated on the Oakdale site for B1, B2 & B8. Oakdale is the largest strategic development opportunity in the County and it is hoped will provide a major mid valley employment location. It is classed Brownfield Land and part of the area has planning permission for the said B Use Classes though this may now have lapsed.

It is hoped that Plateau 1 will be developed by a single large business but such an aspiration is seemingly considered subject to a commitment to the construction of a priority scheme in the County Highway Strategy – Sirhowy Enterprise Way. Part of the northern boundary of Plateau 1 abuts a small (on County scale) Site of Importance for Nature Conservation (**SINC**) known as ‘Pen-y-Fan Pond and Meadows’ – assumed can satisfy requirements thereof due to overall site size, technology etc. Assumed a waste facility inc CHP could be developed as part of larger scheme.

#### Site 2: Land at Hawtin Park (South Parcel) 8.8ha

A stated successful strategic development site in the mid valley corridor, this southern parcel is considered suitable for a variety of employment uses, under classes B1, B2 and B8 though it adjoins a significant housing development site. The site is allocated for redevelopment/new employment though it is designated an SINC - Crown Estate Meadows, Pontllanfraith and in part a Green Wedge - Maesycwmmmer, Pontllanfraith and Fleur de Lys. There is an SSSI to the south and west boundaries beyond the A4049.

Though the site is considered suitable and identified for B Class Uses there is currently a decision pending on an outline application for residential/commercial development. The site is considered a potential buffer zone between the existing and intended new housing and the industrial land. It is a green field site and its shape and the land surface is considered awkward and this has brought into question the actual possibility of any future physical development being realised.

Site 3: Land at Caerphilly Business Park, Caerphilly (3.6ha)

Identified for new industrial and business development B1, B2 & B8, the site was previously known as Van Road / All Metals BR Sidings site and is in close proximity to Caerphilly Railway Station. It is derelict land in the south west corner of the existing large Caerphilly Business Park that is allocated for business infill and similar. Planning permission was granted on the site earlier in 2008 to develop the business park and it is bounded by parcel of land that has been utilized for the Caerphilly Park and Ride access road. A waste facility is assumed not to satisfy local land use, setting and development aspirations for the area.

Site 4: Land at Oakdale Business Park (Plateau 2), Oakdale (area 7.0ha)

Part of the entire Oakdale development area. This Plateau was designated for a number of units of different sizes for different occupiers, to be built with European Union funding. Several of these units have now seemingly been completed and only the more southern portion of Plateau 2 are still available for develop. The available area is in close proximity to existing and allocated housing. The location of a waste facility between the said units and housing is not considered in keeping with local policy or the approach to such development planning in general.

Site 5: Land at Dyffryn Business park (South Parcel), Ystrad Mynach (area 6.3ha)

Brownfield site, allocated business B1, B2, B8 development. 2001 Permission for industrial/warehousing granted though assumed not developed. Part of the site is identified within flood zones C1 & C2 of Rhymney River, the history of flooding is unknown though it is assumed that no major (development preventing) threat is poised. Whilst design and technology advances are assumed can address (the cost of which is not of concern here) the threat of flooding is an issue to be assessed in any proposed development for a waste facility in this location. There is an existing residential area to the west beyond the river. SINC in proximity - River Rhymney, Mynydd Bach Slopes & Llanbradach Fawr Woodlands and local SLAs - North Caerphilly & Mynydd Eglwysilan.

Access to the site is assumed through the business park from the north. Whilst allocated for industrial use its setting in the most southern reaches of the business park and the neighbouring landscape & designations are not considered to favour the sitting of a significant waste facility.

Site 6: Land at Heads of the Valleys, Rhymney (5.2ha)

Allocated B1, B2 & B8, part of the site has planning permission for industrial unit development. None of the site is designated but in proximity there are SINC in proximity - River Rhymney west beyond the A469 & Cefn Gelligaer, SLA - Upper Rhymney Valley and VILL - Northern Rhymney Valley that lie to the west. The site is considered to have poor access for any significant traffic movements from the south of the region. The transport network is assumed suitable for a local waste facility to be considered on this site though not sufficient to support a sub regional facility.

Site 7: Land at Dyffryn Business Park (North Parcel), Ystrad Mynach (area 4.9ha)

Brownfield site, allocated business B1, B2, B8 development, considered to be at the gateway of Dyffryn Business Park though seemingly has unfortunately not secured. Several lapsed industrial permissions and one application for residential refused in 2003. Part of the site is identified within flood zones C1 & C2 of Rhymney River, the history of flooding is unknown though it is assumed that no major (development preventing) threat is poised, also considering here the distance from the river and neighbouring land uses. The potential threat of flooding should be assessed in any proposed development for a waste facility in this location.

SINC - River Rhymney follows the course of the river in proximity to the site though beyond neighbouring industrial land to the north and northwest. Seemingly an SSSI further to the north and Green Wedge designated land to the east beyond the A472. There is existing residential development to the northwest beyond the river and further industrial units located the other side thereof.



A short access distance to the site can be gained directly through industrial use designated land from the A742.

Site 8: Land at Hawtin Park (North Parcel), Pengam (area 4.5ha)

Allocated for redevelopment and new employment use. Planning permission previously granted for B1/B2/B8 and ancillary office development but permission has not been instigated and now assumed lapsed. To the south lies part of the SINC's - Bryn Ysafan Meadow, Victoria Road Slopes & Trelyn Woodland and Meadow and Green Wedges in proximity are Maesycwmmmer, Pontllanfraith and Fleur de Lys & Pengam, Blackwood and Pontllanfraith. Neither are new designations.

This 4.5ha parcel is brownfield land that has had previous industrial use. There is existing residential development to the west, principally beyond the A4049. There is a major middle school slightly to the north of the site and an associated large school-bus terminal/transfer point.

Site 9: Land at Oakdale Business Park (Plateau 3), Oakdale (area 3.4ha)

This Plateau is assumed close to existing & allocated housing and a waste facility is not considered in keeping with local policies and aspiration for development here – at only 3.4ha in total it is not assumed that associated development constraints can be overcome or mitigated against.

Site 10: Land at Treceynydd Business Park, Caerphilly (area 2.2ha)

On former rail sidings, this industrial estate is in the heart of Caerphilly and the existing uses on the estate are for storage and distribution. Office use planning permission was granted in 2005 though seemingly not yet pursued and remaining validity is questioned. In amongst major residential area and associated access routes.

Site 11: Land at Oakdale Business Park (Plateau 4), Oakdale (area 3ha)

Similar assumptions made here as for Plateau 3 and seemingly office block uses now occupy almost 50% of the site.

Site 12: South Extension Penylan, Croespenmaen (2.4ha)

Site was not within the settlement boundary in the UDP or an allocated employment site but it is now in the proposed LDP on both of these accounts. Part of the area was allocated for housing in UDP though this is not to be specified in LDP and any such development will be guided by a scheme if submitted by the developer. The site is allocated on the southern reaches of a large industrial area. This has significant residential developments to the west and south. There is farmland to the east that is outwith the Settlement Boundary. There are no landscapes, heritage, nature site or similar designation in proximity.

Site 13: Pennallta Extension, Hengoed (1.6ha)

Too small and seemingly now committed to mixed use development.

Site 14: Land at Western Industrial Estate, Caerphilly (area 1.1ha)

Too small.

Site 15: Land at Nine Mile Point, Cwmfelinfach (area 1.1ha)

Too small.

**Cardiff**

Main policies considered: City of Cardiff Local Plan, Adopted January 1996 Nos 3, 5, 8, 9, 33, 37, 38, 39 & 55.

**Site 16: Capital Business Park, Wentloog (area 14.7)**

The whole site seemingly in the Gwent Levels: Rumney and Peterstone SSSI. There is an isolated farmhouse to the south but it is assumed that this would be acquired by a developer in the area. There is housing approved in proximity though this is the other side of the rail line and not as yet developed. The SSSI designation has been discounted as a criterion upon which the site should fail the assessment due to the sites history, planning status, location within a Business Park and its actual allocation.

**Site 17: Brindley Road, Grangetown (area 7.2)**

There appears to have been some former landfilling activity on part of the site and therefore land remediation works may be required. It is assumed that there are no designations to the west of the site.

**Site 18: Prairie Site, Cardiff Docks (area 16.2)**

This is an existing area for Port Related Industry. It adjoins the Severn Estuary SSSI to the south. The site is assumed to pass the SSSI criterion based on its long established history - even before SSSI designation and its setting and local land uses including a waste recycling centre and the also listed Texaco site; the modern design and technology capabilities for waste related facilities and the PPC requirements should provide the required protection of the SSSI. Since financial issues are not a consideration of this report, modern technical design capabilities are also assumed to have the ability to address the Flood Risk potential.

**Site 19: Wentloog Corporate Park, Wentloog (area 15.6)**

Part of this site is within the Gwent Levels SSSI though it is assumed to pass this criterion for reasons noted for other sites. The restricting factor is the close proximity of a relatively recently expanded/established large gypsy site.

**Site 20: Land adjacent to Freight terminal, Wentloog (area 12.7)**

Seemingly part of this site is allocated and part is within land classified as 'Open Countryside Including the Urban Fringe', the entire site is within the Gwent Levels though assumed to pass the criterion for reasons named for other sites. There is existing housing in proximity though it is the other side of the rail line and an operational rail freight terminal. WAG may have some involvement with this site though they are not the listed owners.

**Site 21: Texaco Tank Farm, Cardiff Docks (area 6.1 ha)**

A former oil storage facility, this site has been evaluated like the neighbouring Prairie site.

**Site 22: Trident Park, Cardiff Bay (area 4.6ha)**

Existing Business, Industry and Warehousing, holds planning permission and is within the 'Cardiff Bay Development Corporation'.

**Site 23: Land adjacent to the former Acer building, Wentloog (area 3.9ha)**

This Acer site is owned by WAG, it adjoins the Capital Business Park (owned by the LA) and hence the table assumption that there could be room for future expansion if the land remain available. The site is again noted to be within the Gwent Levels though assumed to pass the criterion. Access is



## APPENDICES

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assumed to be from the south through the existing business park. Whilst there is housing the other side of the rail line, it has been assessed like the adjoining Capital Business Park site.

Site 24: Pengam Green, Cardiff Bay (area 9.7)

Allocated Business, Industry and Warehousing and adjoins open space. Any form of industrial development would need a landscape buffer. Not a site for consideration given the site setting and proximity of housing and retail.

Site 25: Pacific Business Park, Cardiff Bay (area 1.3 ha)

Too small.

**Monmouthshire**

The main policies considered from the Monmouthshire UDP, Adopted 22 June 2006 are: E10, E1K, C4, C6, DES2, E2, W9 and ENV1

**Site 26: Quaypoint, Magor (area 16.3ha)**

Seemingly in an archaeological sensitive area though apparently no major archaeological resource present, a waste related use would be acceptable since other development will be considered – foundations etc. It is assumed that a 2ha site can be found within the northern area of this entire 16.3ha site. This would be closer to the existing industrial use and >250m from residential, land designations. Assume a grid connection is possible as would the possibility of CHP particularly if development link with other in proximity. A site visit probably advisable to view the setting, landscape aspects, topography relative to brewery building and locality etc at first hand. Sensitivity of brewery neighbour assumed to be part of an EIA.

**Site 27: Grove Farm, Llanfoist, Abergavenny (area 4.2ha)**

Nothing specific to note.

**Site 28: Mamhilad, Pontypool (area 2.1ha)**

Identified B1, B8 but adjoining Council boundary and apparent B2 allocation. A rural location assumed too far in realistic and practical terms re proximity principle etc.

**Site 29: Wonastow Road Phase 1, Monmouth (area 2.1ha)**

Site dismissed due to location and access through housing. Individual properties c.250m but residential area with the associated infrastructure including sports field, school, hospital.

**Site 30: Ross Road, Abergavenny (area 1.3ha)**

Too small.

**Newport:**

Main policies considered: WD2, ED1, T5, SP56, SP7, SP14, SP16, SP26. With the exception of Llanwern, all the Newport sites are considered to be Tan 15's. Engineering and technology capabilities are assumed to be capable of addressing this issue and whilst the associated economics will be site specific, such costs are not a consideration in this report.

**Site 31: Llanwern, Newport (area 39.5ha)**

Is the land to the west of the active steelworks, part of the area allocated for Newport Eastern Expansion for mixed use housing and associated land uses and employment. There are also proposal for the Southern Distributor Road. The subject area adjoins the steelworks boundary, is c. 100 acres in size on the western periphery of the 600 acre site. There is a large buffer zone allocated between the proposed housing and employment uses. The planners are understood to have done a supplementary guidance on this site showing disposition of proposed uses and the promotion of rail access is favoured.

It is an established heavy industry site and area, in proximity to Greenmor Waste Site used for the tipping and storage of steel waste though alongside allocated major new regeneration scheme and designated countryside. The Gwent Levels SSSI lies beyond the proposed M4 relief road to the south. It is assumed that a site can be found for a waste facility within the 100 acres adjacent the active steelworks.

**Site 32: Queensway Meadows East (area 35.5ha)**

Apparently not serviced, the Queensway Sites have been allocated and are favoured for 20ha/50acre block developments – it is assumed that, as required, a waste facility could be brought forward as part of such a proposal and if viable CHP linked. Site is allocated for employment purposes – one of the 3 main areas in Newport for new Industrial and Business Development, within the transport development area in proximity to the line of the proposed M4 relief road. Of the total available area, it is assumed that a site for a waste facility could be identified in the mid to northern section.

**Site 33: Solutia, Traston Road, Newport (main area c. 28ha)**

Allocated, has planning permission and an existing Industrial Use. Whilst there are several designations in the area they are all concluded at a distance of >500m. Significant site access improvements will result from the proposed neighbouring major road improvements. It is apparently viewed as a site that could be suitable for a waste facility though with the planned new M4 works it is apparently also considered desirable for the area to be promoted for prominent industrial use - attracting higher land values though, this a matter that would be resolved locally.

Though several sites have been listed within Solutia in the RWP list, it has been assumed as one area for the purpose of this assessment since the specific on-site availability of individual plots is likely to have changed over the years since Solutia was listed. It is assumed that a 2ha site can be identified within the overall c.28ha Solutia Site.

**Site 34: Queensway Meadows, Tatton Road, Newport (area 17.2ha)**

Allocated for employment, part of east Newport expansion and in proximity to the proposed Southern Distributor Road and M4 relief road – the route of which is within SSSI, an area designation that incorporates part of this allocated site. Housing is assumed on to be on the southern boundary, outside the allocated employment land and south of the proposed M4 route. Hence, is assumed as site for a waste facility can be found within this 17.2ha.

**Site 35: Nash Mead South, Queensway Meadows, Newport (area 2.1ha)**

Part of the site has valid B2 planning permission, it is allocated for employment use, is within the proposed Eastern Expansion Area.



## APPENDICES

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Site 36: Rogerstone Railway sidings (2), Wern Ind. Estate, Rogerstone (area 0.9ha)

Site 37: Freshwater, Queensway Meadows, Newport (area 0.7)

Too small.

Site 38: Newport Docks (NV3), Newport Docks, Newport (area 0.7ha)

Too small.

Site 39: Newport Business Centre, Corporation Rd, Newport (area 0.6ha)

Too small.

Site 40: Clearwater Road, Queensway Meadows, Newport (area 0.4ha)

Too small.

Site 41: Land adj unit 22, Maesglas Industrial Est., Newport (area 0.3)

Too small.

Site 42: Stephenson St Ind. Estate, Stephenson St, Newport (area 0.2ha)

Too small.

Site 43: Newport Docks, Newport (area 0.2ha)

Too small.

Site 44: Orb Industrial Estate, Stephenson St, Newport (area 0.2ha)

Too small.

Site 45: Longditch Road, Queensway Meadows, Newport (area 1.3ha)

Too small.

**Vale of Glamorgan:**

Main policies considered: policies 1 & 2, TRAN1, TRAN8, MIN3, WAST1, WAST2, ENV3, ENV4, ENV11, ENV13, ENV14, ENV15, EMP1, EMP2.

**Site 46: Land to South East of Junction 34, M4, Miskin (area 54.2ha)**

Very large area of designated land adjacent M4, junction 34 from which direct access can be gained to the site. Site adjoins the well established BOSCH industrial plant. Assumed potential use for a waste facility (an area possibly in the northern section of the entire site) is in keeping with local land use and business development designation though in seemingly a rural area. Assume potential associated impacts also acceptable due to proximity to M4. Note part of site apparently safe guarded for mineral resources (sand & gravel) – assume extraction pre development. Entire area is <250m from a former landfill site. Part of site could be within Ely Valley SSSI and within the Ely Valley and Ridge Slopes special landscape area but it is assumed an area that can be considered, particularly under policy ENV 4.

**Site 47: Cardiff International Airport Business Park, Rhose, Barry (area 20.0 ha)**

A large site next to Cardiff airport, adjacent a special landscape area and in an otherwise rural location. The site is allocated for employment use though, not considered a viable site for this use due to it's proximity to the airport and conflict with local development policies and aspirations.

**Site 48: Vale Business Park, Llandow, Cowbridge (area 10.5ha)**

A rural location, known to affect a carboniferous limestone aquifer from which groundwater is abstracted. The site is considered available for small and medium sized business developments. The overall transport links are not favourable for a subject waste management facility and such a proposal is considered to conflict with local development policies and aspirations.

**Site 49: Cardiff International Airport Business Park, Rhose, Barry (area 10.4 ha)**

Assess in line with the above noted.

**Site 50: Barry Docks, Barry (area 9.0ha)**

A site allocated for employment uses, within an area classified as 'Developed Coast' area and the subject of emphasis for regeneration. There is a landfill in close proximity and there is currently an active use for waste storage and recycling. Flood defence mechanisms are an envisaged requirement in any site design.

**Site 51: Llandow Trading Estate, Llandow, Cowbridge (area 7.3ha)**

Whilst located in close proximity to the Vale Business Park site, Llandow Trading Estate access, existing land uses, policies and aspirations for the area are considered more align to a waste facility development.

**Site 52: Cardiff International Airport Business Park, Rhose, Barry (area 5.7 ha)**

Assess in line with the above noted.

**Site 53: Sully Moors Road, Barry (area 4.9ha)**

Allocated employment land, adjoining land classified as 'Green wedge'. The site is approximately 250 from a former landfill site. The site is not assumed suitable for a waste facility due to its location, residential proximity, access route, neighbouring uses, policies and aspirations for site the locality.

**Site 54: Wimbourne Road, Barry Docks, Barry area 4.1ha)**

## APPENDICES

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Is allocated for employment uses, classified as an area with non-conforming uses and a site within the Developed Coast though, there is residential development in close proximity.

Site 55: Marley Tile Site, St. Mary Hill, Cowbridge (area 0.8ha)

Too small.

Site 56: Vale Business Park, Llandow (1), Cowbridge (area 0.8ha)

Too small.

Site 57: Vale Business Park, Llandow (2) Cowbridge (area 0.8ha)

Too small.

Site 58: Atlantic Trading Estate (1), Barry (area 0.6ha)

Too small.

Site 59: Atlantic Trading Estate (2), Barry (area 0.5ha)

Too small.



## APPENDIX 6: INDICATIVE EIA PROGRAMME

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20	Week 21	Week 22	Week 23	Week 24	Week 25	Week 26	Week 27	Week 28	Week 29	Week 30	Week 31	Week 32	Week 33	Week 34	Week 35	Week 36	Week 37	Week 38	Week 39	Week 40	Week 41	Week 42	Week 43	Week 44	Week 45	Week 46	Week 47	
Time Frame in weeks																																																
Project Development																																																
Kick Off Meeting/Workshop																																																
Monthly (4 weekly) Progress Meetings)																																																
Bi-weekly Internal Progress Meetings																																																
Design Freeze																																																
Review of Existing Project Data and Initial Data Collection																																																
Project Familiarisation/Review Existing Data																																																
Primary Data Collection																																																
Initial Consultation with Key Stakeholders																																																
Environment Features and Constraints Mapping																																																
Submission of data to GIS specialist for mapping																																																
Scoping and Methodology																																																
Refining of scope and methodology																																																
Production of Scoping and Methodology Report																																																
Submission of specialist chapters to core team																																																
Submission of Scoping and Methodology Report to Client for Review																																																
Internal review period by Client																																																
Receipt & Incorporation of internal comments from Client																																																
Assessment of Environmental Impacts																																																
Collection of additional baseline data																																																
Assessment of Environmental Impacts																																																

