ALLAN MOSS ASSOCIATES LTD
Environmental Planning and Landscape Design

PROPOSED EXPANSION AT TOMLINSON'S DAIRIES
FIVE CROSSES INDUSTRIAL ESTATE, MINERA, WREXHAM
PHASES 1, 2 & 3 - COLD STORE & BMB EXTENSIONS

LANDSCAPE & VISUAL IMPACT APPRAISAL

Prepared for:

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1.0 INTRODUCTION

1.1 Scope of Report

1.1.1 Tomlinson's Dairies Ltd is seeking planning permission to expand its existing dairy operation at Five Crosses Industrial Estate, Minera, Wrexham. Allan Moss Associates Ltd has been appointed as the landscape consultant to this project.

1.1.2 This Landscape & Visual Impact Appraisal provides an evidence base to inform the decision making process from a landscape character and visual amenity perspective. In particular the report covers the following matters:

- Description of the proposed development and identification of the range of potential landscape and visual effects;
- Description of the site and the surrounding locality; a description of overall visibility; and the identification of potential visual receptor locations relevant to the proposed development;
- Identification of relevant landscape character classifications;
- Assessment of landscape value and landscape susceptibility against appropriate criteria;
- Assessment of the magnitude of the landscape effects of the proposed development against appropriate criteria;
- Assessment of the overall level of landscape effects against appropriate criteria;
- Assessment of visual amenity value and visual receptor susceptibility against appropriate criteria;
- Assessment of the magnitude of the visual effects of the proposed development against appropriate criteria;
- Assessment of the overall level of visual effects against appropriate criteria;

1.1.3 The report has been prepared by Allan Moss who is a chartered landscape architect and town planner with over 36 years' experience in both private and public sectors. He was involved in preparing the Landscape Institute/IEMA's Guidelines on best practice for landscape and visual impact assessment (GLVIA2), published in April 2002[(1)].

1.1.4 The site and the surrounding locality was visited in March 2016 for the purpose of preparing this report.

1.1.5 A list of references is given at the end of this report and the various plans and photographs referred to are included as appendices. All the photographs, apart from aerial views, have been taken with a Canon EOS 5D MkIII DSLR camera (full frame sensor) fitted with a fixed 50mm lens. Photograph locations are indicated on the plan at Appendix F.

1.2 Methodology

1.2.1 The methodology used in this appraisal takes account of the 'Guidelines for Landscape and Visual Impact Assessment: Third Edition 2013' (GLVIA3) [(2)]. The guidelines are not intended as a prescriptive set of rules. They indicate that landscape and visual impact studies can be undertaken at differing levels of detail depending on the scale and nature of the project. The approach adopted should be proportional to the scale of the project that is being considered and the nature of its likely effects. The guidelines advise that assessments should focus on the identification of likely important effects. There is no requirement to assess all effects.

1.2.2 For non-EIA projects the guidelines specifically state that an assessment of the significance of effects should not be undertaken.

1.2.3 This is a non-EIA project and the level of detail provided in this landscape appraisal is considered to be sufficient to inform the decision making process for a development of this nature from a landscape character and visual amenity perspective.

1.3 Limitations

1.3.1 The effects of the proposed development on the surrounding locality are considered on the basis of views from publicly accessible locations only. No attempt is made to negotiate blocked or hazardous routes that may be unsafe to the assessor. Views from private property are generally considered on the basis of inter-visibility with the application site rather than visits to individual properties.

1.3.2 The assessment is based on fieldwork carried out during the early spring period before the trees were in leaf. It is likely that from some locations the site will be less visible in the summer months when the trees are in full leaf.

1.3.3 Any heritage assets referred to in the assessment are assessed in accordance with the GLVIA3 guidelines (ie. as effects on people or the landscape resource at those locations). The assessment is not intended to be an assessment on heritage assets or their settings, as different guidance and methodology has to be used for assessing such potential heritage impacts.

1.4 Study Area

1.4.1 The study area is represented by the plan at Appendix F, which identifies the main locations from where the proposed development might potentially be seen. This has been established by way of desk study and detailed observations in the field.

2.0 NATURE OF PROPOSED DEVELOPMENT

2.1 Summary of Proposed Development

2.1.1 The proposed development involves the extension of the existing dairy facility at Tomlinsons Dairies on the Five Crosses Industrial Estate, Minera, Wrexham. The site would be developed in 3 phases to enable the dairy to continue production whilst the building works proceed. This report considers the combined effects of Phases 1, 2 & 3.

2.1.2 Plans have been prepared by Haston Reynolds Ltd illustrating how Phases 1, 2 & 3 would be developed. These are included at Appendix A.

2.1.3 Phase 1 involves an extension on the north-eastern side of the existing cold store building. It would measure 40.2m x 22.2m with the main single storey section at 6.2m high and a smaller two-storey portion at 10.62m high adjacent to the existing building. There would also be a basement loading area (below ground). The extension would be clad in colour coated profiled steel composite cladding panels (colour: Pure Grey) with contrasting parapet, verge and corner flashings and drips (colour: Merlin Grey). These colours match the existing blow moulding building, but the Pure Grey cladding is a darker shade of grey than the Goosewing Grey used on the original dairy building.

2.1.4 Phase 2 consists principally of a two storey extension with a basement area on the north-eastern side of the existing cold store building. This would measure approximately 46.66m x 26.34m x 13.17m high, with both ground level and basement loading areas. However, the Phase 2 proposal also includes the vertical extension of a section of the Phase 1 single storey cold store, to provide storage space at first floor level which is contiguous with the first floor of the Phase 2 two storey structure. This extension would also be clad in colour coated profiled steel composite cladding panels (colour: Pure Grey) with contrasting roofing, parapet, verge and corner flashings and drips (colour: Merlin Grey) to match the Phase 1 extension.

2.1.5 The existing raw milk silos on the western corner of the existing dairy building would be replaced with 5 new silos, each 4.25m diameter x 18.0m high with a 1.0m handrail at the top. They would be colour coated (Pure grey).

2.1.6 In addition a 2.4-3.0m high acoustic fence and earth mound would be installed on the south-eastern edge of the site to reduce noise on the neighbouring residential property (Kalver).

2.1.7 Additional hardstandings and car parking areas would be provided to the east of the buildings. Commercial vehicle access would be via the existing site access through the Five Crosses Industrial Estate. A new restricted (car-only) access from Gwernygaseg Road will also be provided to serve the proposed new main staff car parking area.

2.1.8 The existing surface water attenuation pond/swale to the east of the existing buildings would also need to be moved to accommodate the proposed extensions and hardstandings.

2.1.9 Phase 3 involves a two storey extension on the north-western side of the existing blow moulding building. This would measure approximately 46.22m x 25.72m x 11.27m high. It would be clad in colour coated profiled steel composite cladding panels (colour: Pure Grey) with contrasting roofing, parapet, verge and corner flashings and drips (colour: Merlin Grey) to match the existing building.

2.2 Integrated Landscape Mitigation

2.2.1 Landscape mitigation and enhancement is included as an integral part of the planning application proposals. This would involve the creation of new native tree planting belts along the northern and eastern site boundaries to supplement planting that has already been carried out as part of earlier phases of development. Full details of the proposed landscaping measures are indicated on the plan at Appendix I. The implementation of this new landscaping would be linked to the phasing of the development

2.3 Range of potential landscape & visual effects

2.3.1 The range of potential landscape and visual effects that may arise from a development such as this are summarised below:

Direct effects on landscape components, such as:

- agricultural land loss
- tree/hedgerow loss
- tree/hedgerow gain

Effects on landscape character, such as:

- introduction of additional built development
- introduction of new landscaping

Effects on visual amenity, such as:

- public views from roads, footpaths etc
- private views from residential properties

3.0 LANDSCAPE & VISUAL BASELINE

3.1 Description of Site and Surrounding Locality

3.1.1 Tomlinsons Dairies occupies the northern edge of the Five Crosses Industrial Estate in Minera as indicated on the location plan at Appendix B.

3.1.2 The site is located on the western slope of a small valley through which flows the River Gwenfro. The land falls from west to east, crossing the 245m to 235m contours as illustrated on the location plan.

3.1.3 Existing features on the site and in the wider landscape are illustrated on the aerial photographs at Appendix C, which date from June 2013. Views from the surrounding locality are illustrated in the photographs at Appendix D.

3.1.4 The southern and western parts of the site are occupied by the existing dairy buildings which include the main dairy unit, a blow moulding building and a workshop, along with associated hardstandings and car parking. The northern and eastern parts of the site are currently occupied by earthworks, landscaping, an attenuation pond/swale and a vacant field.

3.1.5 To the south and west the site is bounded by security fencing. To the north and east the site is bounded by existing hedgerows. Along the north-western boundary there is scrub vegetation along the line of a disused railway.

3.1.6 There is also a high voltage powerline crossing the eastern part of the site with a large pylon within the eastern boundary. This poses a significant design constraint on any future building and tree planting proposals.

3.1.7 There are no public footpaths or bridleways directly affecting the site. However there are some footpaths in the local area with potential views of the site. A map is provided at Appendix E which indicates all public rights of way relevant to the site.

3.1.8 To the south and west the site abuts the other industrial development on the Five Crosses Industrial Estate. There is also a residential property called Kalver and associated paddocks adjacent to the south-eastern boundary. Landscaping measures have been carried out under previous development proposals to provide a buffer between this property and the Tomlinsons Dairies site.

3.1.9 To the north-west the site abuts a disused railway line, beyond which lies the residential area of Gegin. To the east the site abuts Gwernygaseg Road, beyond which lies open countryside. There are also further open fields to the north.

3.1.10 Tomlinsons Dairies essentially lies at the interface of the urban area of Minera to the south-west and the rural area of the Gwenfro valley to the north-east.

3.2 Overall Visibility

3.2.1 The areas for proposed expansion are largely screened from close up views to the south and west by the existing industrial buildings on the Five Crosses Industrial Estate. However there is the potential for partial longer distance views from more elevated ground to the south-west in the vicinity of New Brighton and Minera Mountain as illustrated on the Visual Receptor Plan at Appendix F and in Photographs 11 to 15 at Appendix D.

3.2.2 The main public views towards the site are from the roads and footpaths to the north-east of the site, particularly from higher ground on the opposite side of the Gwenfro valley. These locations are illustrated on the Visual Receptor Plan and in Photographs 1, 2 and 4 to 9.

3.2.3 Other potential but less notable views are available from the north-west in the vicinity of Gegin (Photograph 3) and from the south-east on the northern edge of Coedpoeth (Photograph 10).

3.3 Visual Receptors

3.3.1 Relevant visual receptor locations with potential views of the site are listed in Table 1 below. Each location is numbered and can be cross referenced to the Visual Receptor Plan at Appendix F.

Table 1: Potential Visual Receptors

Ref	Receptor Location	Distance from Site	Elevation (AOD)	Comments
	Public locations with potential views of site:			
1	Gwernygaseg Road	Adjacent	230-233m	Close up views for a distance of approx 420m (Photographs 1 & 2)
2	Ruthin Road (A525)	140m	255m	Partial view through intervening vegetation. (Photograph 3)
3	Minera Road (B5102)	350-800m	225-255m	Middle distance views for a distance of approx 350m (Photograph 4)
4	Brymbo Road	700-800m	240-265m	Intermittent middle distance views for a distance of approx 200m (Photographs 5 & 6)
5	Footpath BRY/60	450-720m	235-250m	Middle distance views for a distance of approx 800m (Photograph 8)
6	Footpath BRY/63	280-450m	220-240m	Middle distance views for a distance of approx 170m (Photograph 8)
7	Footpath BRY/61	480-700m	215-250m	Middle distance views for a distance of approx 270m (Photograph 7)

8	Footpath BRY/62	820-920m	205-215m	Long distance views for a distance of approx 150m (Photograph 9)
9	Talwrn Road	450-1550m	180-225m	Intermittent middle and long distance glimpses (Photograph 10)
10	Minera Mountain	1270-1820m	260-405m	Elevated long distance partial views (Photographs 11-15)
	Private dwellings with potential views of site:			
11	Kalver/Cae-crwn	Adjacent	230m	Largely screened by intervening vegetation
12	Dwellings at Gegin	80-220m	250-260m	Approximately 11 dwellings with potential partial views through intervening vegetation
13	Dwellings at Gwern-y-gaseg	400-800m	225-250m	6 dwellings with potential middle distance views
14	Dwelling at Pentre Fron	700m	205m	1 dwelling with potential middle distance view
15	Dwellings at Coedpoeth	520-1550m	185-235m	Approximately 20-25 dwellings with potential middle and long distance views across urban area towards site
16	Dwellings at New Brighton	1200-1450m	255-310m	Several dwellings with potential long distance elevated partial views.
NB. Elevations for receptor locations compare with an elevation of 235-245m AOD for the site.				

3.3.2 The extent to which the proposed development would be seen from each of these receptor locations is considered in Section 7.3.

4.0 LANDSCAPE CHARACTER CLASSIFICATIONS

4.1 Definitions

4.1.1 GLVIA3 provides the following definitions:
*"**Landscape character:** A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse."*

*"**Landscape classification:** A process of sorting the landscape into different types using selected criteria but without attaching relative values to different sorts of landscape."*

4.2 LANDMAP

4.2.1 The former Countryside Council for Wales (now Natural Resources Wales) in partnership with the Welsh Unitary and National Parks authorities developed a GIS based landscape assessment resource called 'LANDMAP' (Landscape Assessment and Decision Making Process) for use in sustainable landscape decision-making.

4.2.2 The following LANDMAP Aspect Areas and evaluations appear to be relevant to the land at Tomlinson's Dairies:

<u>Geological Landscape</u>
Aspect Area: Minera- Llwyneinion
Classification: Other
Overall Evaluation: Moderate (No regionally significant sites/ landforms noted during present survey and geology/geomorphology considered to be typical of feature/ process and is either widespread, better exposed elsewhere or not currently known to be exceptional.)

<u>Landscape Habitat</u>
Aspect Area: Talwrn Grassland
Classification: Mosaic
Overall Evaluation: High (A moderate to high biodiversity landscape that supports some important national and international species giving a high overall value.)

<u>Visual and Sensory</u>
Aspect Area: West Wrexham Hill Slopes
Classification: Hillside & Scarp Slopes Grazing
Overall Evaluation: Moderate (2 Moderate & 2 Low = Borderline Moderate/Low)

<u>Historic Landscape</u>
Aspect Area: Windy Hill
Classification: Irregular Fieldscapes

Overall Evaluation: Moderate (Diffuse area of mixed fields wrapped around a number of industrial settlements but lacking significant historical foci, although the passage of Offa's and Wat's Dykes lifts its value slightly)

Cultural Landscape
Aspect Area: Mynydd Rhiwabon Esclusham (lower slopes)
Classification: Agricultural
Overall Evaluation: High (for its historical value and for the interpretation of the lead-mining industry at Minera.)

4.2.3 Full extracts for these LANDMAP Aspect Areas are provided at Appendix G.

4.3 Wrexham LANDMAP SPG 2007

4.3.1 The Wrexham LANDMAP Supplementary Planning Document 2007[(3)] interprets the LANDMAP database information for Wrexham in a more user friendly format.

4.3.2 This document classifies the land at Tomlinson's Dairies as falling within Landscape Character Area 7d: Wrexham Ridges and Valleys. The character of this area is summarised as:

"A complex area of former mining villages, industry, farmland and woodland in a landscape of distinct ridges and valleys which are aligned towards Wrexham town."

4.3.3 The key landscape characteristics of the Wrexham Ridges and Valleys are summarised as:

Visual character:

- *Visually varied and complex, including lowland, valleys and hill and scarp areas*
- *Characteristic undulating hill slopes with wooded valleys*
- *Views towards Wrexham and the lowlands*
- *Urban villages and Wrexham linked by roads crossing open lowland farmland area*
- *Scattered groups of buildings in local Cefn sandstone and stone-built village cores, individuality in later additions but much standardised modern housing development*

Geological character:

- *The complex landform is related to geological faults, with alternating series of resistant sandstone ridges, and Coal Measure valleys of Carboniferous age*
- *Villages are built on outcrops of Cefn Rock (sandstone) which has been quarried for local building stone*

- *Glacial till covers much of the lower areas, with glacial sands and gravels towards Wrexham*
- *Many artificial landforms including the former Brymbo steelworks site*

Ecological character:

- *Much of the non-built area is improved grassland or arable of relatively low value*
- *Important wetlands include reed mace swamp at Gatewen Moss and rich swamp and marshy grassland at Higher Berse Marsh. Gwenfro valley has wet woodland and areas of valuable lowland pasture*
- *Plas Power tip and the former Brymbo Steelworks site are being restored*

Historical character:

- *Countryside has remnants of ridge and furrow, regular and irregular fields, but much land has been disturbed*
- *Most settlement is related to 19th and 20th century mining and industry*
- *Remnants of Bryn y Gaer prehistoric military hillfort at Pentre Broughton and the route of Offa's dyke can be identified*
- *Brymbo steelworks heritage area and Plas Power colliery buildings have been preserved*
- *Network of disused industrial railway lines crosses area*

Cultural character:

- *Urban villages retain their own cultural identity, but this is becoming weakened*
- *Area is affected by A483 corridor, which separates it from Wrexham, but*
- *increases accessibility to commuters*
- *Agriculture is still of some importance but horsiculture is an increasing land use*

4.3.4 Further details along with advice on management guidelines for LCA 7d: Wrexham Ridges and Valleys are provided at Appendix H.

5.0 LANDSCAPE VALUE

5.1 Definition

5.1.1 GLVIA3 provides the following definition:
*"**Landscape value:** The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons."*

5.1.2 Landscape value therefore involves a degree of subjectivity, in that it calls for comparisons between one landscape and another. All landscapes have value to someone, however, landscapes of recognised value at a national, county or district level have traditionally been recognised by the making of landscape designations.

5.2 Landscape Value Criteria

5.2.1 The landscape value criteria in Table 2 below have been developed to provide a recognisable scale against which any landscape area or landscape feature can be assessed.

Table 2: Landscape Value Criteria	
National/International Level	Landscape areas or landscape features recognised at a national/international level eg. World Heritage Sites, National Parks, AONBs, Grade I & II* Registered Parks & Gardens, Registered Battlefields.
County Level	Landscape areas or landscape features recognised at a county level eg. county level designated landscapes & historic parkland.
District Level	Landscape areas or landscape features recognised at a district level eg. locally designated landscapes & historic parkland.
Community/Parish Level	Landscape areas or landscape features of more than just local value eg. recognised landmarks & beauty spots, village greens & common land.
Local Level	Most other landscape areas or landscape features are of value at a local level either as a local recreational resource or by providing a pleasant visual outlook.

5.3 Landscape Value Assessment

5.3.1 There are no national or local landscape designations affecting the land at Tomlinsons Dairies or the wider Gwenfro valley. However, there is a network of public rights of way and country lanes in the valley facilitating reasonable public access to the countryside as illustrated on the plan at Appendix E. This landscape does therefore have local value in contributing to the rural outlook when viewed from the footpaths, roads and properties identified in Section 3.3 above. Taking account of the criteria in Table 2 and in the absence of any special landscape interests or specific landscape recognition the landscape of the Gwenfro valley is assessed as having Local Level Value.

5.3.2 The proposals map for the current adopted Wrexham UDP indicates the countryside to the west and south-west between Minera and Coedpoeth as being designated as a Green Barrier (Policy EC1). This is essentially a planning designation intended to prevent the coalescence of urban areas and villages; to assist in safeguarding the countryside from encroachment; and to protect the setting of urban areas and villages. It is not a landscape designation and it does not convey any particular recognition in terms of landscape quality or value. These areas are also therefore assessed as having landscape value at a Local Level.

5.3.3 Further to the west the Wrexham UDP proposals map indicates the high ground around Minera Mountain as falling within the wider Ruabon Mountain Special Landscape Area. This is a non-statutory landscape designation that conveys recognition of the landscape value of these upland areas at a District/County level.

6.0 LANDSCAPE SUSCEPTIBILITY

6.1 Definition

6.1.1 GLVIA3 provides the following definition:
*"**Susceptibility:** The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences."*

6.2 Landscape Susceptibility Criteria

6.2.1 The landscape susceptibility criteria in Table 3 below have been developed to provide a recognisable scale against which landscape areas or landscape features can be assessed in terms of their ability to accommodate the development proposed.

Table 3: Landscape Susceptibility Criteria	
High	Landscape areas or landscape features which taking into account the nature of the change anticipated and the potential for mitigation are vulnerable to relatively small changes.
Medium/High	Landscape areas or landscape features which taking into account the nature of the change anticipated and the potential for mitigation can accommodate some change, subject to sensible siting and design.
Medium	Landscape areas or landscape features which taking into account the nature of the change anticipated and the potential for mitigation can reasonably accommodate moderate change, subject to sensible siting and design.
Low/Medium	Landscape areas or landscape features which taking into account the nature of the change anticipated and the potential for mitigation can accommodate larger scale change, subject to sensible siting and design.
Low	Landscape areas or landscape features which taking into account the nature of the change anticipated and the potential for mitigation can accommodate substantial change, subject to sensible siting and design.

6.2.2 Table 4 identifies some of the factors that can affect landscape susceptibility, based on Natural England's Technical Note TIN101. It provides a general guide, but it is not a rigid checklist, as most landscapes will display a mixture of factors indicating both a greater and lesser degree to which development can be accommodated. These factors therefore need to be considered 'in the round'.

Table 4: Landscape Character Susceptibility Factors			
Factor	**Indicators of lower susceptibility (Increased chance that development can be accommodated in the landscape)**	**Indicators of moderate susceptibility**	**Indicators of higher susceptibility (Reduced chance that development can be accommodated in the landscape)**
Landform (also related to visual factors such as elevation and viewing angle)	Absence of strong topographical variety. Featureless, convex or flat.	Moderate topographical variety.	Presence of strong topographical variety or distinctive landform features.
Landscape pattern and complexity	Simple, regular or uniform.	Sub-regular.	Complex, rugged and irregular.
Settlement and man-made influence	Presence of major contemporary structures, for example, utility, infrastructure or industrial elements.	Some contemporary development.	Absence of modern development, presence of small scale, historic or vernacular settlement.
Inter-visibility with adjacent landscapes	Little inter-visibility with adjacent sensitive landscapes or viewpoints.	Moderate inter-visibility with sensitive landscapes or viewpoints.	Strong inter-visibility with sensitive landscapes. Forms an important part of a view from sensitive viewpoints.
Perceptual aspects (sense of remoteness, tranquillity)	Close to visible signs of human activity and development.	Some signs of human activity and development.	Physically or perceptually remote, peaceful or tranquil.
Existing mitigating features or potential for new mitigation	Presence of existing mitigating features (eg. woodlands and hedgerows).	Some existing mitigating features. Opportunities for new planting.	Absence of mitigating features (eg open moorland).
Proximity of sensitive landscape features	Absence of sensitive features	Presence of more distant sensitive features (eg. designated heritage assets)	Presence of closer sensitive features (eg. designated heritage assets)
Adapted from Natural England Technical Information Note TIN101 (September 2011)			

6.3 Landscape Susceptibility Assessment

6.3.1 The landscape character of the site and surrounding locality has been considered in Sections 3.0 & 4.0 above. The factors set out in Table 4 are assessed below on a site specific basis.

Landform (Moderate)

6.3.2 Tomlinsons Dairies is located on the western slope of the Gwenfro valley which is a small valley forming part of the West Wrexham Ridges and Valleys character area. This ridge and valley landscape helps to provide visual containment and limit the effects of the existing development to a localised area.

Landscape Patterns and Complexity (Moderate)

6.3.3 The lower slopes of the Gwenfro valley tend to be occupied by small irregular shaped fields whilst the upper slopes tend to be occupied by larger sub-regular shaped fields. Overall this gives rise to field pattern of moderate complexity as illustrated in the aerial photographs.

Settlement and Man-Made Influences (Low)

6.3.4 Tomlinsons Dairies is located on the existing Five Crosses Industrial Estate which forms part of the larger urban area of Minera/Coedpoeth. The area proposed for future expansion abuts the existing industrial area and is crossed by a high voltage overhead powerline. The A525 runs through Coedpoeth and Minera and there is also a network of minor roads linking with other nearby settlements.

Inter-visibility with Adjacent Landscapes (Low)

6.3.5 The nearest sensitive landscape is Minera Mountain which lies approximately 1.5km to the south-west. This forms part of a Special Landscape Area which is a non-statutory local landscape designation. There are views of the existing industrial buildings on the Five Crosses Industrial Estate and the urban area generally from the higher ground around Minera Mountain. However, the areas proposed for future expansion lie on the north-eastern side of the existing industrial buildings and any new development on this land would therefore largely be screened from view.

Perceptual Aspects (Low)

6.3.6 The site is close to visible and audible signs of human activity and development. There is no sense of remoteness or tranquillity.

Existing Mitigating Features or Potential for New Mitigation (Moderate)

6.3.7 The existing industrial buildings tend to screen the areas proposed for expansion from the south and west. However the site is more open to view from the north

and east. Some structural planting has taken place as part of recent planning approvals and there is scope for further tree planting around the northern and eastern edges of the site, although the overhead powerline does pose some constraint on planting opportunities.

Proximity of Sensitive Landscape Features (Low)

6.3.8 There are no designated heritages assets or other sensitive landscape features likely to be adversely affected by the proposed development.

Conclusion

6.3.9 There are no indicators that suggest that the site and surrounding landscape should be treated as having high landscape susceptibility. Whilst there are some indicators of moderate landscape susceptibility most of the indicators suggest low landscape susceptibility. The site should therefore be reasonably suited to accommodating the further industrial development.

6.3.10 Taking account of the criteria in Tables 3 & 4 the application site and surrounding landscape is assessed as having Low/Medium Landscape Susceptibility to accommodating the future expansion of Tomlinsons Dairies.

7.0 MAGNITUDE OF LANDSCAPE EFFECTS

7.1 Definition

7.1.1 GLVIA3 provides the following definition:
*"**Magnitude (of effect):** A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration."*

7.2 Magnitude of Landscape Effects Criteria

7.2.1 The criteria in Tables 4, 5, 6 & 7 below have been developed to provide a recognisable scale against which the magnitude of landscape change can be assessed.

Table 4: Criteria for Scale of Effect on Landscape Features (adverse or beneficial)	
High	Major change to characteristic landscapes features eg. substantial loss or gain of mature woodland or parkland trees.
Medium/High	Notable change to characteristic landscape features eg. prominent but not necessarily substantial tree or hedgerow loss
Medium	Moderate change to characteristic landscape features or notable change where such features are more readily replaced eg. translocation or re-planting of hedgerows, or replacement of dry stone walls.
Low/Medium	Minor change to characteristic landscape features eg. small scale tree or hedgerow loss or moderate change where such features are more readily replaced.
Low	Slight change to characteristic landscape features where such change would be barely noticed or minor change where such features are more readily replaced.

Table 5: Criteria for Scale of Effect on Landscape Character (adverse or beneficial)	
High	A major change in landscape characteristics such as the introduction or removal of a dominant large scale development and/or a substantial loss of characteristic landscape features, whilst taking account the effectiveness of any landscape mitigation measures.
Medium/High	A notable change in landscape characteristics such as the introduction or removal of a prominent development and/or a notable loss of characteristic landscape features, whilst taking account the effectiveness of any landscape mitigation measures.
Medium	A moderate change in landscape characteristics such as the introduction or removal of a readily noticeable development and/or a moderate loss of characteristic landscape features, whilst taking account the effectiveness of any landscape mitigation measures.
Low/Medium	A minor change in landscape characteristics such as the introduction or removal of a less noticeable development and/or

	a minor loss of characteristic landscape features, whilst taking account the effectiveness of any landscape mitigation measures.
Low	A slight change in landscape characteristics and/or a slight loss of characteristic landscape features, whilst taking account the effectiveness of any landscape mitigation measures.

Table 6: Criteria for Geographical Extent of Landscape Effect	
High	Change on a scale influencing landscape character or landscape features over several landscape types or character areas.
Medium/High	Change on a scale influencing landscape character or landscape features over a broad area such as the landscape type or character area within which the proposal lies.
Medium	Change on a scale influencing landscape character or landscape features within the local area.
Low/Medium	Change on a scale influencing landscape character or landscape features within the immediate setting of the site.
Low	Change on a scale influencing landscape character or landscape features within the development site itself.

Table 7: Criteria for Duration and Reversibility of Landscape Effects	
Long Term	Permanent landscape effects likely to last for over 20 years.
Medium/Long Term	Permanent landscape effects capable of reasonable mitigation within 15 to 20 years.
Medium Term	Permanent landscape effects capable of reasonable mitigation within 10 to 15 years.
Short/Medium Term	Permanent landscape effects capable of reasonable mitigation within 5-10 years.
Short Term	Permanent landscape effects capable of reasonable mitigation within 5 years.
Temporary	Developments seeking temporary planning permission after which the land will be reinstated eg some windfarm developments; or developments where use will only last over a certain period, after which the land will be restored eg. mineral workings
Seasonal	Some developments may be of a seasonal nature eg. polytunnel covers
Intermittent	Some developments may be of an intermittent nature eg. polytunnels forming part of arable rotations

7.3 Assessment of Magnitude of Landscape Effects

Effects on existing landscape features

7.3.1 Most of the proposed expansion can be accommodated within the current approved employment site at Tomlinsons Dairies. Only one small agricultural field (approximately 0.66ha) outside the current approved site would be required to accommodate new car parking and the new access onto Gwernygaseg Road. This field is currently unused and unmanaged. The northern and eastern external hedgerow boundaries to this field would largely be retained, apart from

a small section required to create the new access point. The southern internal hedgerow boundary would also be retained, but the western internal hedgerow boundary would need to be removed.

7.3.2 In addition some recent internal planting within the site would be affected by the extended hardstandings and the relocation of the attenuation pond/swale. Taking account of the criteria in Tables 4, 6 & 7 the loss of existing landscape features is assessed as having a Low/Medium adverse scale of effect; of Low geographical extent; over a Long Term period (ie. permanent).

7.3.3 The Phase 2 & 3 landscaping proposals would result in an increase of approximately 2570m² of native tree belt planting along the northern and eastern site boundaries. This would equate to a Medium beneficial scale of effect; across a Medium geographical extent; over a Long Term period.

Effects on landscape character

7.3.4 In terms of the effect on the character of the wider landscape the proposed expansion would lead to an intensification of industrial development on the northern edge of the Five Crosses Industrial Estate. The new building extensions would be largely screened to the south and west by the existing industrial buildings and by vegetation along the adjacent disused railway. Effects on landscape character will therefore be limited to a localised area to the north and east along this part of the Gwenfro valley.

7.3.5 Whilst the Gwenfro valley has value at a local level it is not a designated landscape and its character is already influenced by its proximity to the existing Five Crosses Industrial Estate, the overhead powerline and the wider urban area. The effect of the proposed development needs to be considered in this context.

7.3.6 Whilst the rooftops of the new extensions may be visible from higher ground to the south-west in the vicinity of Minera Mountain, these would be seen in the context of the existing industrial buildings and the existing urban area as a whole. The high ground to the south-west is over 1.2 km away and at this distance there is unlikely be any unacceptable adverse effects on the character of these areas.

7.3.7 The proposed tree planting along the northern and eastern site boundaries will help to mitigate the effects of both the proposed and existing development on the adjoining countryside as it takes effect.

7.3.8 Taking account of the criteria in Tables 5, 6 & 7, the proposed development is assessed as having a Medium adverse scale of effect of Medium geographical extent on the character of the local landscape in the Medium Term reducing to a Low/Medium adverse effect once the new planting takes effect in the Medium/Long Term.

8.0 OVERALL LEVEL OF LANDSCAPE EFFECTS

8.1 Approach to Combining Judgements

8.1.1 With respect to determining the overall level of effects the GLVIA3 guidelines advise that there are two main alternative approaches to combining the individual judgements made under the various contributing criteria:

"1. They can be sequentially combined: susceptibility to change and value can be combined into an assessment of sensitivity for each receptor, and size/scale, geographical extent and duration and reversibility can be combined into an assessment of magnitude for each effect. Magnitude and sensitivity can then be combined to assess overall significance.

2. All the judgements against the individual criteria can be arranged in a table to provide an overall profile of each identified effect. An overview can then be taken of the distribution of the judgements for each criterion to make an informed professional assessment of the overall significance of each effect."

8.1.2 This appraisal follows the second approach.

8.2 Overall Level of Effects Criteria

8.2.1 The criteria in Table 8 below provide a recognisable scale against which the level of landscape effects can be assessed. The criteria are based on Environmental Impact Assessment: A Guide to Good Practice and Procedures Consultation Paper (DCLG 2006)[(6)].

Table 8: Overall Level of Effect Criteria (adverse or beneficial)

Level of effect	Definition
Severe	Landscape effects that represent key factors in the decision-making process. They are generally, but not exclusively associated with sites and features of national importance and resources/features which are unique and which, if lost, cannot be replaced or relocated.
Major	Landscape effects that are likely to be important considerations at a regional/district scale and, if adverse, are potential concerns to the project, depending upon the relative importance attached to the issue during the decision making process.
Moderate	Landscape effects that while important at a local scale, are not likely to be key decision making issues. Nevertheless, the cumulative effect of such issues may lead to an increase in the overall effects on a particular area or on a particular resource.
Minor	Landscape effects that may be raised as local issues but are unlikely to be of importance in the decision making process. Nevertheless, they are of relevance in the detailed design of the project.
Negligible	Landscape effects that are so slight that there is no need to take them into consideration in the design or mitigation of the development.

Adapted from Environmental Impact Assessment: A Guide to Good Practice and Procedures Consultation Paper (DCLG 2006)

8.3 Assessment of Overall Level of Landscape Effects

8.3.1 All the judgements relating to landscape value, landscape susceptibility, scale of effect, geographical extent, duration and reversibility have been arranged in Table 9 below to provide an overall profile of each identified effect. An informed professional judgement has then been made of the overall level of each effect, as explained in the following paragraphs.

8.3.2 In terms of direct effects on existing landscape features the proposed development would result in the loss of one small field (approximately 0.66ha) which is currently unused and unmanaged. There would also be some small scale hedgerow removal required and the loss of some recent planting within the site to accommodate the extended hardstandings and the relocation of the attenuation pond/swale. The overall level of effect on existing landscape features is considered to be Negligible adverse.

8.3.3 The new landscaping proposals would result in an increase of approximately 2570m² of native tree belt planting along the northern and eastern site boundaries. This will be of long term benefit in terms of integrating both the proposed and existing development with its surroundings. The scale of effect would be Medium beneficial and it would be effective in the Long Term over a Medium geographical area. The overall level of effect is therefore considered to be Moderate beneficial.

8.3.4 Perhaps the most important landscape consideration is the effect that the proposed development will have on the character of the local landscape. The proposed expansion would lead to an intensification of industrial development on the northern edge of the Five Crosses Industrial Estate. The new building extensions would be largely screened to the south and west by the existing industrial buildings and by vegetation along the adjacent disused railway. Effects on landscape character will therefore be limited to a localised area to the north and east along this part of the Gwenfro valley.

8.3.5 The character of this landscape is already influenced by its proximity to the existing Five Crosses Industrial Estate, the overhead powerline and the wider urban area. The effect of the proposed development needs to be considered in this context. The proposed tree planting along the northern and eastern site boundaries will help to mitigate the effects of both the proposed and existing development on the adjoining countryside as it takes effect.

8.3.6 The local landscape has been assessed as having value at a Local level and Low/Medium susceptibility to accommodating the future expansion of Tomlinsons Dairies. The scale of effect on the character of the local landscape has been assessed as Medium adverse across a Medium geographical area in the Medium Term. However in the Medium/Long term the development will be substantially softened as the new tree planting takes effect reducing the scale of effect to Low/Medium adverse. Whilst this effect may be important at a local

scale it is unlikely to be regarded as overriding decision making issue given that the majority of the development will take place within the confines of the existing industrial estate. The overall level of effect on the character of the local landscape is therefore considered to be Moderate adverse.

Table 9: Summary of Assessment of Landscape Effects						
	Sensitivity of Landscape Receptor		**Magnitude of Landscape Effect**			**Level of Landscape Effect**
Effect	**Landscape Value**	**Landscape Susceptibility**	**Scale of Landscape Effect**	**Geographical Extent**	**Duration & Reversibility**	
Effects on existing landscape features	Local	Low/Medium	Low/Medium adverse	Low	Long Term	Negligible adverse
Effects of new tree planting	Local	N/A	Medium beneficial	Medium	Long Term	Moderate beneficial
Effects on character of local landscape	Local	Low/Medium	Medium adverse reducing to Low/Medium adverse	Medium	Medium Term Medium/Long Term	Moderate adverse

9.0 VISUAL AMENITY VALUE

9.1 Definition

9.1.1 GLVIA3 provides the following definition:
*"**Visual amenity**: The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area."*

9.1.2 The guidelines also offer the following guidance about judging the value attached to views:

"Judgements should also be made about the value attached to the views experienced. This should take account of:

- *recognition of the value attached to particular views, for example in relation to heritage assets, or through planning designations;*
- *indicators of the value attached to views by visitors, for example through appearances in guidebooks or on tourist maps, provision of facilities for their enjoyment (such as parking places, sign boards and interpretive material) and references to them in literature or art (for example 'Ruskin's View' over Lunedale, or the view from the Cob in Porthmadog over Traeth Mawr to Snowdonia which features in well-known Welsh paintings, and the 'Queen's View' in Scotland)."*

9.2 Visual Amenity Value Criteria

9.2.1 The visual amenity value criteria in Table 10 below have been developed to provide a recognisable scale against which the value of views can be assessed.

Table 10: Visual Amenity Value Criteria

National/International Level	Views of national/ international importance eg. iconic views of nationally important structures, designed views in Grade I & II* Registered Parks & Gardens or views from scenic routes and scenic viewpoints in landscapes of national importance.
County Level	Views of county importance eg. views from scenic routes and scenic viewpoints in landscapes of county importance.
Parish/District Level	Views of more than just local value eg. views from recognised or well used local landmarks & beauty spots.
Local Level	Most other landscape views are of value at a local level providing a pleasant visual outlook to residents, visitors and travellers.
Negligible or Negative	Some views may have little or even negative value. eg views of derelict or degraded landscapes and eyesores.

9.3 Visual Amenity Value Assessment

9.3.1 The views identified on the Visual Receptor Plan at Appendix F are generally of value at a Local Level to local residents and users of the local roads and public rights of way.

9.3.2 The only views identified which would be of more than local level value or importance would be those from Minera Mountain which falls within a designated Special Landscape Area. Whilst the views from Minera Mountain are assessed as being of District/County Level value it should be remembered that these views are already heavily influenced by urban and industrial development, as illustrated in Photographs 11 to 15.

10.0 VISUAL RECEPTOR SUSCEPTIBILITY

10.1 Definitions

10.1.1 GLVIA3 provides the following definitions:
*"**Visual receptors:** Individuals and/or defined groups of people who have the potential to be affected by a proposal."*

*"**Susceptibility:** The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences."*

10.1.2 The guidelines also offer the following guidance about judging the susceptibility of visual receptors to change:
"The susceptibility of different visual receptors to changes in views and visual amenity is mainly a function of:

- *the occupation or activity of people experiencing the view at particular locations;*
  and
- *the extent to which their attention or interest may therefore be focused on the views and the visual amenity they experience at particular locations."*

10.1.3 Whilst the guidelines indicate that visual receptors most susceptible to change are likely to include residents at home, it is a well- established planning principle that there is no right to a view from residential properties. There have been a number of planning appeal decisions in recent years where Planning Inspectors considering the outlook from residential properties have adopted a stringent approach, whereby a visual impact would have to be overwhelming to the degree that a property would come to be widely regarded as an unattractive and unsatisfactory place in which to live, before giving rise to a reason for refusal. This has become known as the 'Lavender Test'.

10.1.4 As with landscape susceptibility, the susceptibility of visual receptors is also likely to vary according to the type of development envisaged.

10.2 Visual Receptor Susceptibility Criteria

10.2.1 The criteria in Table 11 below have been developed to provide a recognisable scale against which potential visual receptors can be assessed in terms of their susceptibility to the development proposed.

Table 11: Visual Receptor Susceptibility Criteria	
High	People engaged in activities where landscape views are likely to be the prime focus of their attention eg: Visitors to scenic viewpoints Users of strategically promoted footpath routes Visitors to heritage attractions or to other attractions where views of the surroundings are an important contributor to the experience.
Medium/High	People engaged in activities where landscape views might be important but not necessarily the prime focus of their attention eg: Users of other public rights of way Occupiers of residential properties in open countryside Residents at home occupying principal daytime rooms. Motorists on rural scenic routes
Medium	People engaged in activities where landscape views provide a backdrop to their main activity eg: Motorists on minor rural roads Users of other open space/outdoor recreational facilities Occupiers of residential properties on existing farmsteads Occupiers of residential properties in urban fringe locations Residents at home occupying non-principal daytime rooms.
Low/Medium	People engaged in activities who might only get a fleeting glance or occasional view of a particular landscape eg: Users of public rights of way in urban areas Low usage or inaccessible public rights of way Motorists on rural A & B roads and motorways Users of railways Occupiers of residential properties in urban areas
Low	People engaged in activities whose attention is unlikely to be focused on the landscape eg: Motorists on urban roads People at their place of work

10.3 Visual Receptor Susceptibility Assessment

10.3.1 Potentially susceptible visual receptor locations are listed in Table 12 below. Each location is numbered and can be cross referenced to the Visual Receptor Plan at Appendix F. The susceptibility of each receptor is also assessed in Table 12, using the criteria from Table 11 above.

Table 12: Assessment of Visual Receptor Susceptibility			
Ref	**Receptor Location**	**User Type**	**Susceptibility**
	Public locations with potential views of site:		
1	Gwernygaseg Road	Pedestrians Motorists	Medium/High Low/Medium
2	Ruthin Road (A525)	Pedestrians Motorists	Medium Low/Medium
3	Minera Road (B5102)	Pedestrians Motorists	Medium Low/Medium
4	Brymbo Road	Pedestrians	Medium/High

		Motorists	Medium
5	Footpath BRY/60	Walkers	Medium/High
6	Footpath BRY/63	Walkers	Medium/High
7	Footpath BRY/61	Walkers	Medium/High
8	Footpath BRY/62	Walkers	Medium/High
9	Talwrn Road	Pedestrians Motorists	Medium Low/Medium
10	Minera Mountain	Walkers	High
	Private locations with potential views of site:		
11	Kalver/Cae-crwn	Residents/visitors	Medium/High
12	Dwellings at Gegin	Residents/visitors	Medium
13	Dwellings at Gwern-y-gaseg	Residents/visitors	Medium/High
14	Dwelling at Pentre Fron	Residents/visitors	Medium/High
15	Dwellings at Coedpoeth	Residents/visitors	Low/Medium
16	Dwellings at New Brighton	Residents/visitors	Medium/High

10.3.2 Walkers on Minera Mountain have been treated as having High susceptibility to change on the basis that these are people likely to be visiting a designated landscape primarily for recreational purposes where landscape views are likely to be an important contribution to that experience.

10.3.3 Walkers using the other public rights of way have been treated as having Medium/High susceptibility to change on the basis that these are also people likely to be engaged in recreational activities but using local routes rather than routes in a designated landscape. Pedestrians using minor rural roads such as Gwernygaseg Road and Brymbo Road have been treated similarly.

10.3.4 Pedestrians using Minera Road have been treated as having Medium susceptibility on the basis that this is a busy B road not particularly conducive to walking. Pedestrians using Ruthin Road and Talwrn Road have been treated similarly on the basis that these are urban fringe locations where people are more likely to be going about their everyday activities rather than taking a recreational walk in the countryside.

10.3.5 Motorists using the local roads have been treated as having Low/Medium susceptibility on the basis that these are also generally people going about their everyday activities rather than engaging in recreational trips.

10.3.5 Occupants of residential properties in open countryside have generally been treated as having Medium/High susceptibility. Those within the main urban area of Coedpoeth have been treated as having Low/Medium susceptibility, whilst those in fringe urban locations such as Gegin are in between (ie. Medium susceptibility).

10.3.6 The extent of potential visibility and degree of visual impact for each receptor location is discussed in Section 11.3 below.

11.0 MAGNITUDE OF VISUAL EFFECTS

11.1 Definition

11.1.1 GLVIA3 provides the following definition:
*"**Magnitude (of effect):** A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration."*

11.2 Magnitude of Visual Effects Criteria

11.2.1 The criteria in Tables 13, 14, & 15 below have been developed to provide a recognisable scale against which the magnitude of visual change can be assessed.

Table 13: Criteria for Scale of Visual Effects (adverse or beneficial)	
High	Substantial change in view where proposed development would be a dominant feature: commanding, controlling the view, foremost feature, prevailing, overriding.
Medium/High	Notable change in view where proposed development would be prominent: standing out, striking, sharp, unmistakable, easily seen.
Medium	Moderate change in view where proposed development would be conspicuous: noticeable, distinct, catching the eye or attention, clearly visible, well defined.
Low/Medium	Minor change in view where proposed development would be apparent: visible, evident, obvious, perceptible, discernable, recognisable.
Low	Slight change in view where proposed development would be inconspicuous: lacking sharpness of definition, not obvious, indistinct, not clear, obscure, blurred, indefinite, subtle.
Adapted from Guidance on the Assessment of the Impact of Offshore Windfarms: Seascape & Visual Impact Report. DTI (2005).	

Table 14: Criteria for Geographical Extent of Visual Effects	
High	Visual change over a wide area at the receptor location. (eg. over 2.5km length)
Medium/High	Between medium and high. (eg. 1250-2500m length)
Medium	Visual change over a moderate area at the receptor location. (eg. 500-1250m length)
Low/Medium	Between low and medium. (eg. 100-500m length)
Low	Visual change over a small area at the receptor location. (eg. less than 100m length)

Table 15: Criteria for Duration and Reversibility of Visual Effects	
Long Term	Permanent visual effects unlikely to be capable of reasonable mitigation within 20 years.
Medium/Long Term	Permanent visual effects capable of reasonable mitigation within 15 to 20 years.
Medium Term	Permanent visual effects capable of reasonable mitigation within 10 to 15 years.
Short/Medium Term	Permanent visual effects capable of reasonable mitigation within 5 to 10 years.
Short Term	Permanent visual effects capable of reasonable mitigation within 5 years.
Temporary	Temporary visual effects after which the view will be reinstated.
Seasonal	Seasonal visual effects.
Intermittent	Intermittent visual effects.

11.3 Assessment of Magnitude of Visual Effects

11.3.1 Potential visual receptor locations that could be affected by the proposed development are identified in Table 1 and on the visual receptor plan at Appendix F. The visual effect of the proposed development from each of these locations is considered below.

Gwernygaseg Road

11.3.2 Gwernygaseg Road abuts the eastern site boundary. There are close up views of the site from this road over a distance of approximately 420m. Photographs 1 & 2 illustrate the view from the southern and northern ends of this stretch of road respectively. The existing buildings at Tomlinsons Dairies are clearly visible from Gwernygaseg Road as are the pylons and overhead cables. However the parking and hardstanding areas are largely hidden by the roadside hedgerows.

11.3.3 The proposed cold store and blow moulding building extensions would be readily visible from this stretch of road although they would be seen in the context of the existing dairy buildings. Any judgements about the scale of visual effect need to take account of this baseline situation. In addition, both the proposed and existing structures would gradually be softened and screened as the new tree planting along the northern and eastern boundaries takes effect.

11.3.4 Taking account of the criteria in Tables 13, 14 & 15 the proposed development is assessed as having a Medium adverse scale of effect of Low/Medium geographical extent along Gwernygaseg Road. The duration of this effect would be Medium/Long Term until the new tree planting takes effect.

Ruthin Road (A525)

11.3.5 Ruthin Road (A525) runs through the small settlement of Gegin to the west of the site approximately 140m away. There are partial views of the existing buildings at Tomlinsons Dairies through the intervening vegetation along a short section of this road at this location as illustrated in Photograph 3.

11.3.6 It is likely that the proposed extension to the blow moulding building would be partially visible from Ruthin Road in the medium term, although recent tree planting has been carried out along the northern and western boundaries and once this becomes established the site as a whole will be substantially screened/softened from this direction. It is unlikely that the extensions to the cold store building would be visible, but the upper parts of the raw milk silos may just be visible.

11.3.7 The proposed development is assessed as having a Low/Medium adverse scale of effect of Low geographical extent along Ruthin Road. The duration of this effect would be Medium Term until the recent tree planting takes effect.

Minera Road (B5102)

11.3.8 Minera Road (B5102) lies some 350-800m away to the north. There are middle distance views of the existing buildings at Tomlinsons Dairies for a distance of approximately 350m along this road as illustrated in Photograph 4. From this direction the site is seen in the context of the existing pylons and against the backdrop of Minera Mountain.

11.3.9 The proposed cold store and blow moulding building extensions would be visible from this section of road although they would be seen in the context of the existing dairy buildings. Any judgements about the scale of visual effect need to take account of this baseline situation. In addition, both the proposed and existing structures would gradually be softened and screened as the new tree planting along the northern and eastern boundaries takes effect.

11.3.10 The proposed development is assessed as having a Low/Medium adverse scale of effect of Low/Medium geographical extent along Minera Road. The duration of this effect would be Medium/Long Term until the new tree planting takes effect.

Brymbo Road (B5102)

11.3.11 Brymbo Road lies approximately 700-800m away to the north where it crosses Minera Road. There are intermittent middle distance views of the existing buildings at Tomlinsons Dairies for a distance of approximately 200m along this road as illustrated in Photographs 5 & 6. From this road the site is again seen in the context of the existing industrial estate and pylons and against the backdrop of Minera Mountain.

11.3.12 Again the proposed cold store and blow moulding building extensions would be visible from this road in the context of the existing dairy buildings. However, the new screen planting along the northern and eastern site boundaries will benefit the development as a whole from this direction once established.

11.3.13 Given the context of the existing dairy buildings the proposed development is assessed as having a Low/Medium adverse scale of effect of Low/Medium geographical extent along Brymbo Road. The duration of this effect would be Medium/Long Term until the new tree planting takes effect.

Footpaths BRY/60, BRY61, BRY62 & BRY/63

11.3.14 Footpaths BRY/60, BRY61, BRY62 & BRY/63 provide a footpath network on the opposite side of the Gwenfro valley approximately 280-920m away from the site. There are open middle distance views of the site along BRY/60, BRY61 & BRY/63 as illustrated in Photographs 7 & 8. From these footpaths the site is seen in the context of the existing industrial estate and the wider urban area and against the backdrop of Minera Mountain. Views from BRY/62 are longer distance and north-west facing as illustrated in Photograph 9.

11.3.15 The proposed cold store and blow moulding building extensions and replacement silos would be visible from these footpaths in the context of the existing development. The new screen planting along the northern and eastern site boundaries will, once established, benefit the development as a whole from this direction.

11.3.16 Given the context of the existing development the proposed extensions are assessed as having a Low/Medium adverse scale of effect on Footpaths BRY/60, BRY61 BRY63 reducing to Low adverse along Footpath BRY62. The geographical extent of the effect would be Medium for Footpath BRY60 reducing to Low/Medium for the other footpaths. The duration of these effects would be Medium/Long Term until the new tree planting takes effect.

Talwrn Road

11.3.17 Talwrn Road runs along the northern edge of Coedpoeth offering intermittent middle and long distance glimpses of the existing buildings at Tomlinsons Dairies some 450-1550m away, as illustrated in Photograph 10. From this road the site is seen in the context of the existing urban area and against the backdrop of rising ground to the north-west.

11.3.18 It is likely that the upper parts of the proposed cold store and blow moulding building extensions and replacement silos would be visible from Talwrn Road in a similar way to the existing buildings.

11.3.19 The proposed development is assessed as having a Low adverse scale of effect of Low/Medium geographical extent along Talwrn Road. The duration of this effect would be Long Term.

Minera Mountain

11.3.20 There are several footpaths on Minera Mountain, as well as the road to Worlds End, with elevated long distance views of the rooftops of the Tomlinsons Dairies buildings as illustrated in Photographs 11 to 15. From these locations, which are approximately 1270-1820m away the existing buildings are generally seen in the context of the Five Crosses Industrial Estate and the wider urban area.

11.3.21 The proposed extensions lie to the north and east of the existing buildings and therefore they will be largely screened from view from this direction by the existing buildings. It is likely that the rooftops of these extensions will be visible beyond the existing buildings along with upper parts of the replacement silos. However at these distances any effects on visual amenity will be minimal given the context of the existing views.

11.3.22 The proposed development is assessed as having a very Low adverse scale of effect of High geographical extent across Minera Mountain. The duration of this effect would be Long Term.

Private Views from Residential Properties

11.3.23 The closest residential properties to the east are Kalver and Cae-crwn which are located adjacent to the site on Gwernygaseg Road. The site is largely screened from view from both of these properties by existing vegetation, although there may be views from the garden areas. In addition, further tree and shrub planting was carried out around Kalver as part of the original dairy development. Given the context of the existing dairy buildings the proposed development is assessed as having a Medium adverse scale of effect of Low geographical extent at these properties. The duration of this effect would be Long Term.

11.3.24 There are approximately 11 dwellings at Gegin visible from the site through the intervening vegetation approximately 80-220m away. These properties have potential partial views of the existing development similar to the view illustrated in Photograph 3. The proposed development is assessed as having a Low/Medium adverse scale of effect of Low/Medium geographical extent at these properties. The duration of this effect would be Medium Term until the recent tree planting to the north and west of the blow moulding building takes effect.

11.3.25 There are 6 dwellings in the vicinity of Gwernygaseg visible from the site approximately 400-800m away. These properties are likely to have relatively open views of the existing development similar to the views illustrated in Photographs 4, 5 & 6. Given the context of the existing dairy buildings the proposed development is assessed as having a Low/Medium adverse scale of effect of Medium geographical extent at these properties. The duration of this effect would be Medium/Long Term until the new tree planting takes effect.

11.3.26 There is a single dwelling at Pentre Fron, approximately 700m to the south-east with a potential middle distance view of the site. The relationship of this property with the site is illustrated in Photograph 9. The proposed development is assessed as having a Low/Medium adverse scale of effect of Low geographical extent at this property. The duration of this effect would be Long Term.

11.3.27 There are approximately 20-25 dwellings in various parts of Coedpoeth to the south-east with windows facing the site. These properties vary in distance from 520-1550m away. However, any views from these properties are likely to be dominated by the existing urban area of Coedpoeth in the foreground. The proposed development is assessed as having a Low adverse scale of effect of Medium/High geographical extent at these properties. The duration of this effect would be Long Term.

11.3.28 There are also several dwellings in the vicinity of New Brighton to the south-west with potential long distance elevated views of the rooftops of the existing buildings on the Five Crosses Industrial Estate as illustrated in Photograph 15. The proposed extensions lie to the north and east of the existing buildings and therefore they will be largely screened from view from this direction by the existing buildings although it is likely that the rooftops of these extensions will be visible beyond the existing buildings. The proposed development is assessed as having a very Low adverse scale of effect of Medium geographical extent at these properties. The duration of this effect would be Long Term.

12.0 OVERALL LEVEL OF VISUAL EFFECTS

12.1 Approach to Combining Judgements

12.1.1 With respect to determining the overall level of effects the GLVIA3 guidelines advise that there are two main alternative approaches to combining the individual judgements made under the various contributing criteria:

"1. They can be sequentially combined: susceptibility to change and value can be combined into an assessment of sensitivity for each receptor, and size/scale, geographical extent and duration and reversibility can be combined into an assessment of magnitude for each effect. Magnitude and sensitivity can then be combined to assess overall significance.

2. All the judgements against the individual criteria can be arranged in a table to provide an overall profile of each identified effect. An overview can then be taken of the distribution of the judgements for each criterion to make an informed professional assessment of the overall significance of each effect."

12.1.2 This appraisal follows the second approach.

12.2 Overall Level of Effects Criteria

12.2.1 The criteria in Table 16 below provide a recognisable scale against which the level of visual effects can be assessed. The criteria are based on Environmental Impact Assessment: A Guide to Good Practice and Procedures Consultation Paper (DCLG 2006)[(6)].

Table 16: Overall Level of Effect Criteria (adverse or beneficial)

Level of effect	Definition
Severe	Visual effects that represent key factors in the decision-making process. They are generally, but not exclusively associated with sites and features of national importance and resources/features which are unique and which, if lost, cannot be replaced or relocated.
Major	Visual effects that are likely to be important considerations at a regional/district scale and, if adverse, are potential concerns to the project, depending upon the relative importance attached to the issue during the decision making process.
Moderate	Visual effects that while important at a local scale, are not likely to be key decision making issues. Nevertheless, the cumulative effect of such issues may lead to an increase in the overall effects on a particular area or on a particular resource.
Minor	Visual effects that may be raised as local issues but are unlikely to be of importance in the decision making process. Nevertheless, they are of relevance in the detailed design of the project.
Negligible	Visual effects that are so slight that there is no need to take them into consideration in the design or mitigation of the development.

Adapted from Environmental Impact Assessment: A Guide to Good Practice and Procedures Consultation Paper (DCLG 2006)

12.3 Assessment of Overall Level of Visual Effects

12.3.1 All the judgements relating to visual amenity value, visual receptor susceptibility, scale of effect, geographical extent, duration and reversibility have been arranged in Table 17 below to provide an overall profile of each identified effect. An informed professional judgement has then been made of the overall level of each effect, as explained in the following paragraphs.

12.3.2 The main public views of the proposed development would be from the east and north-east including Gwernygaseg Road, Brymbo Road and Footpaths BRY/60, BRY/61, & BRY/63. Walkers using these routes have generally been treated as having Medium/High susceptibility, although the views are of Local level value only. The scale of effect from these locations varies from Medium to Low/Medium adverse, given the context of the existing industrial estate and the urban area generally. The geographical extent of the effect varies from Medium to Low/Medium and the duration of effect will be Medium/Long Term until the new tree planting takes effect.

12.3.3 Whilst such visual effects are important at a local scale they are unlikely to be regarded as overriding decision making issues given that the majority of the development will take place within the confines of the existing industrial estate and that the new planting will benefit the appearance of the existing development as well as the proposed extensions. The overall level of effect on the visual amenity of Gwernygaseg Road, Brymbo Road and Footpaths BRY/60, BRY/61, & BRY/63 is therefore considered to be Moderate adverse.

12.3.4 The residential properties at Gwern-y-gaseg will experience similar visual effects. The overall level of effect on these properties is also therefore considered to be Moderate adverse as is the effect at Kalver/Cae-crwn.

12.3.5 The overall level of effect on visual amenity along Minera Road and Footpath BRY/62 is considered to be Minor adverse as is the effect on private views from residential properties at Gegin and Pentre Fron.

12.3.6 The effect on all the other visual receptor locations assessed in this study is considered to be Negligible.

Allan Moss BA (Hons), BPl, MRTPI, Dip LA, CMLI
July 2016

Table 17: Summary of Assessment of Visual Effects							
		Sensitivity of Visual Receptor		**Magnitude of Visual Effect**			**Level of Visual Effect**
Effect		**Visual Amenity Value**	**Visual Receptor Susceptibility**	**Scale of Visual Effect**	**Geographical Extent**	**Duration & Reversibility**	
Ref	**Public views:**						
1	Gwernygaseg Road Pedestrians Motorists	Local	 Medium/High Low/Medium	Medium adverse	Low/Medium	Medium/Long Term	Moderate adverse
2	Ruthin Road (A525) Pedestrians Motorists	Local	 Medium Low/Medium	Low/Medium adverse	Low	Medium Term	Negligible adverse
3	Minera Road (B5102) Pedestrians Motorists	Local	 Medium Low/Medium	Low/Medium adverse	Low/Medium	Medium/Long Term	Minor adverse
4	Brymbo Road Pedestrians Motorists	Local	 Medium/High Medium	Low/Medium adverse	Low/Medium	Medium/Long Term	Moderate adverse
5	Footpath BRY/60 Walkers	Local	 Medium/High	Low/Medium adverse	Medium	Medium/Long Term	Moderate adverse
6	Footpath BRY/63 Walkers	Local	 Medium/High	Low/Medium adverse	Low/Medium	Medium/Long Term	Moderate adverse
7	Footpath BRY/61 Walkers	Local	 Medium/High	Low/Medium adverse	Low/Medium	Medium/Long Term	Moderate adverse
8	Footpath BRY/62 Walkers	Local	 Medium/High	Low adverse	Low/Medium	Medium/Long Term	Minor adverse
9	Talwrn Road Pedestrians Motorists	Local	 Medium Low/Medium	Low adverse	Low/Medium	Long Term	Negligible adverse
10	Minera Mountain Walkers	District/County	 High	Low adverse	High	Long Term	Negligible adverse

	Private views:						
11	Kalver/Cae-crwn Residents/visitors	Local	Medium/High	Medium adverse	Low	Long Term	Moderate adverse
12	Dwellings at Gegin Residents/visitors	Local	Medium	Low/Medium adverse	Low/Medium	Medium Term	Minor adverse
13	Dwellings at Gwern-y-gaseg Residents/visitors	Local	Medium/High	Low/Medium adverse	Medium	Medium/Long Term	Moderate adverse
14	Dwelling at Pentre Fron Residents/visitors	Local	Medium/High	Low/Medium adverse	Low	Long Term	Minor adverse
15	Dwellings at Coedpoeth Residents/visitors	Local	Low/Medium	Low adverse	Medium/High	Long Term	Negligible adverse
16	Dwellings at New Brighton Residents/visitors	Local	Medium/High	Low adverse	Medium	Long Term	Negligible adverse

REFERENCES

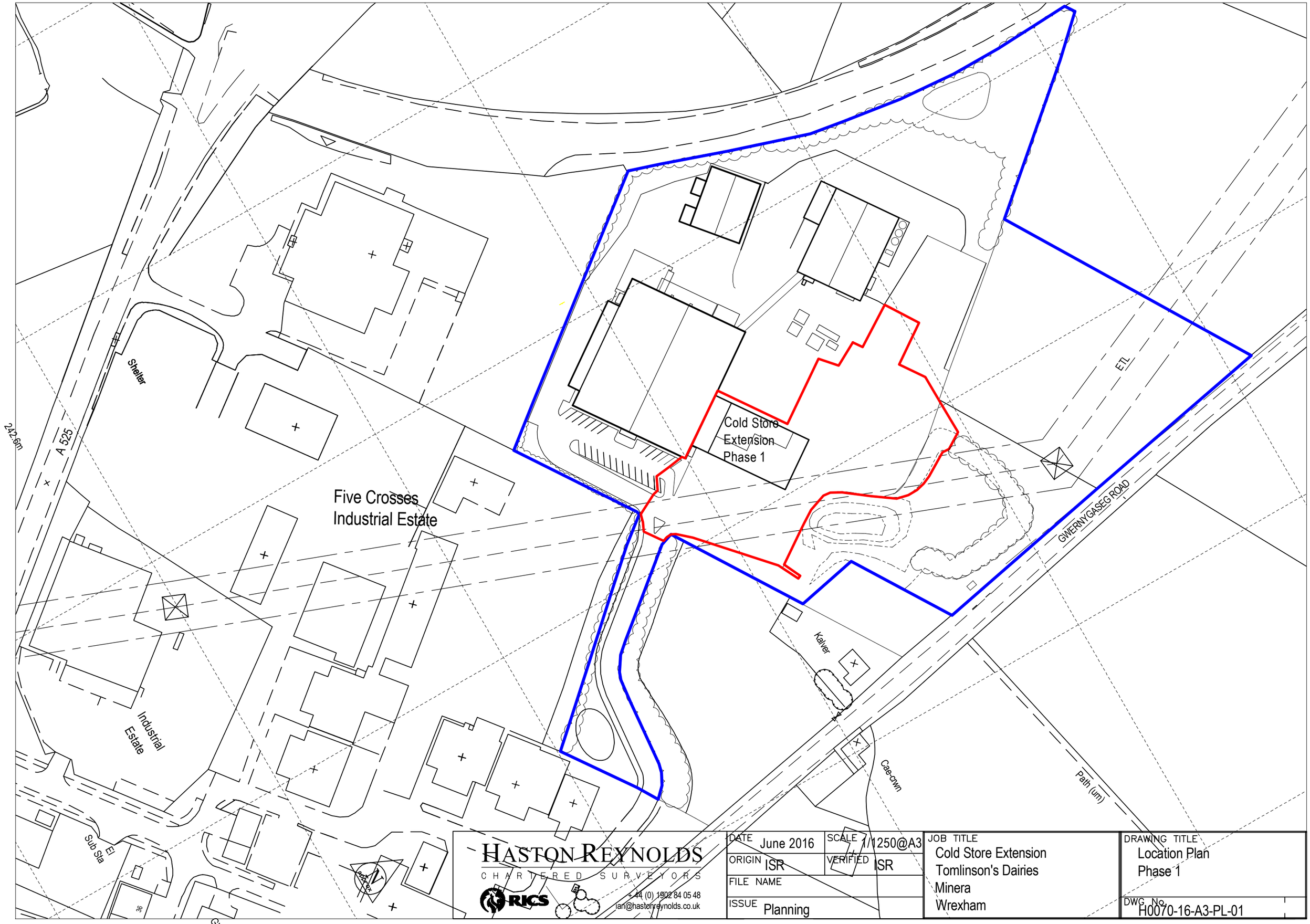
1. Guidelines for Landscape and Visual Impact Assessment: Second Edition. The Landscape Institute and Institute of Environmental Management & Assessment. April 2002.

2. Guidelines for Landscape and Visual Impact Assessment: Third Edition. Landscape Institute and Institute of Environmental Management & Assessment. April 2013.

3. Wrexham LANDMAP Supplementary Planning Guidance
   Wrexham Country Borough Council
   2007

APPENDIX A

Proposed Layout Plans
(Not to Scale)



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ian@hastonreynolds.co.uk

DATE June 2016	SCALE 1/1250@A3	JOB TITLE Cold Store Extension Tomlinson's Dairies Minera Wrexham	DRAWING TITLE Location Plan Phase 1
ORIGIN ISR	VERIFIED ISR		
FILE NAME			DWG No. H0070-16-A3-PL-01
ISSUE Planning			

Cold Store
Extension

Car Parking
for 143

Five Crosses
Industrial Estate

Industrial
Estate

Shelter

A 525

242.6m

GWERNYGASEG ROAD

Kalver

Cae-crwn

Path (um)

El
Sub Sta

GVC

36

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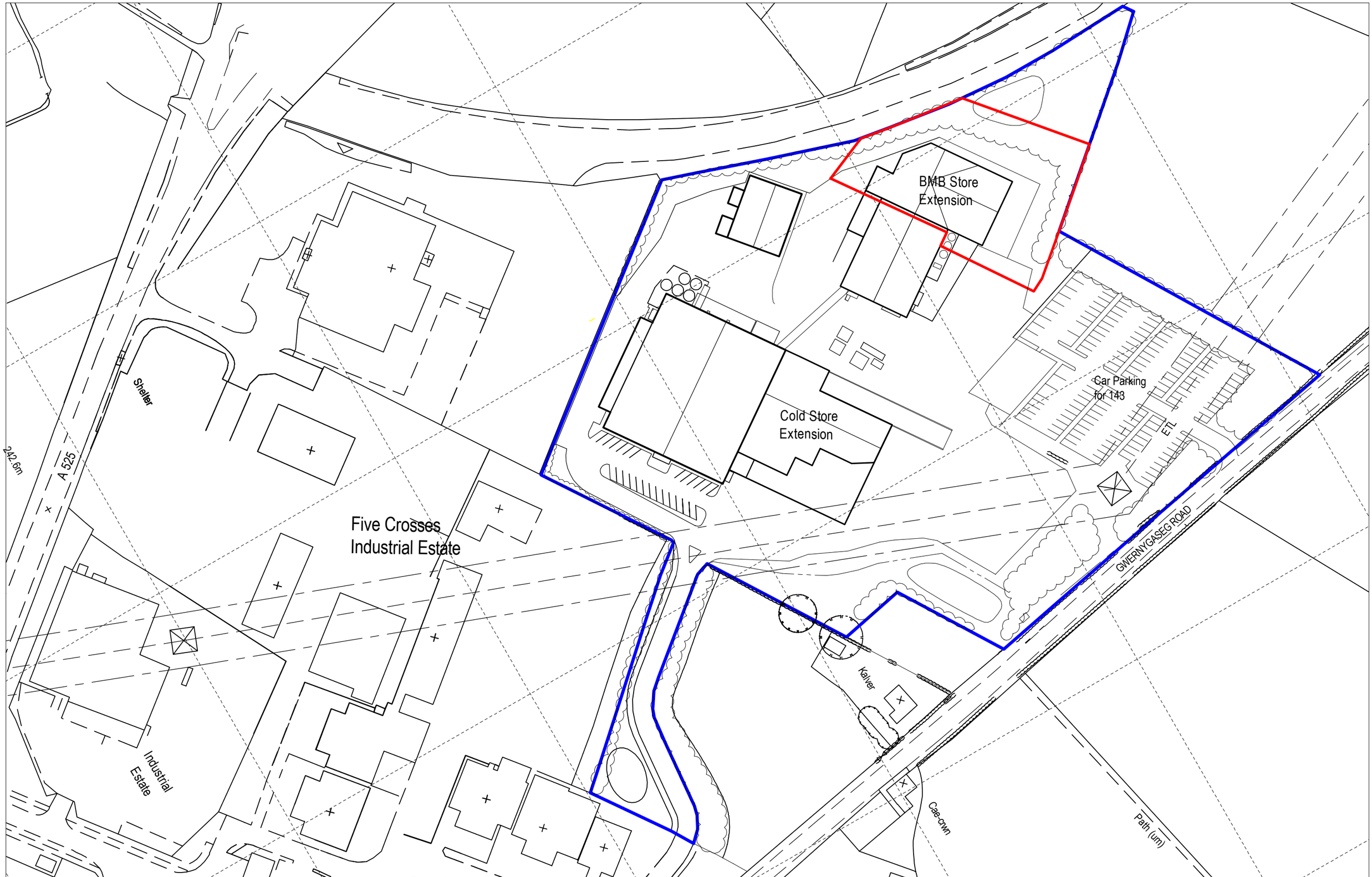
DATE June 2016	SCALE 1/1250@A3	JOB TITLE Cold Store Extension Tomlinson's Dairies Minera Wrexham	DRAWING TITLE Location Plan Phase 2
ORIGIN ISR	VERIFIED ISR		
FILE NAME			DWG No. H0070-19-A3-PL-01
ISSUE Planning			



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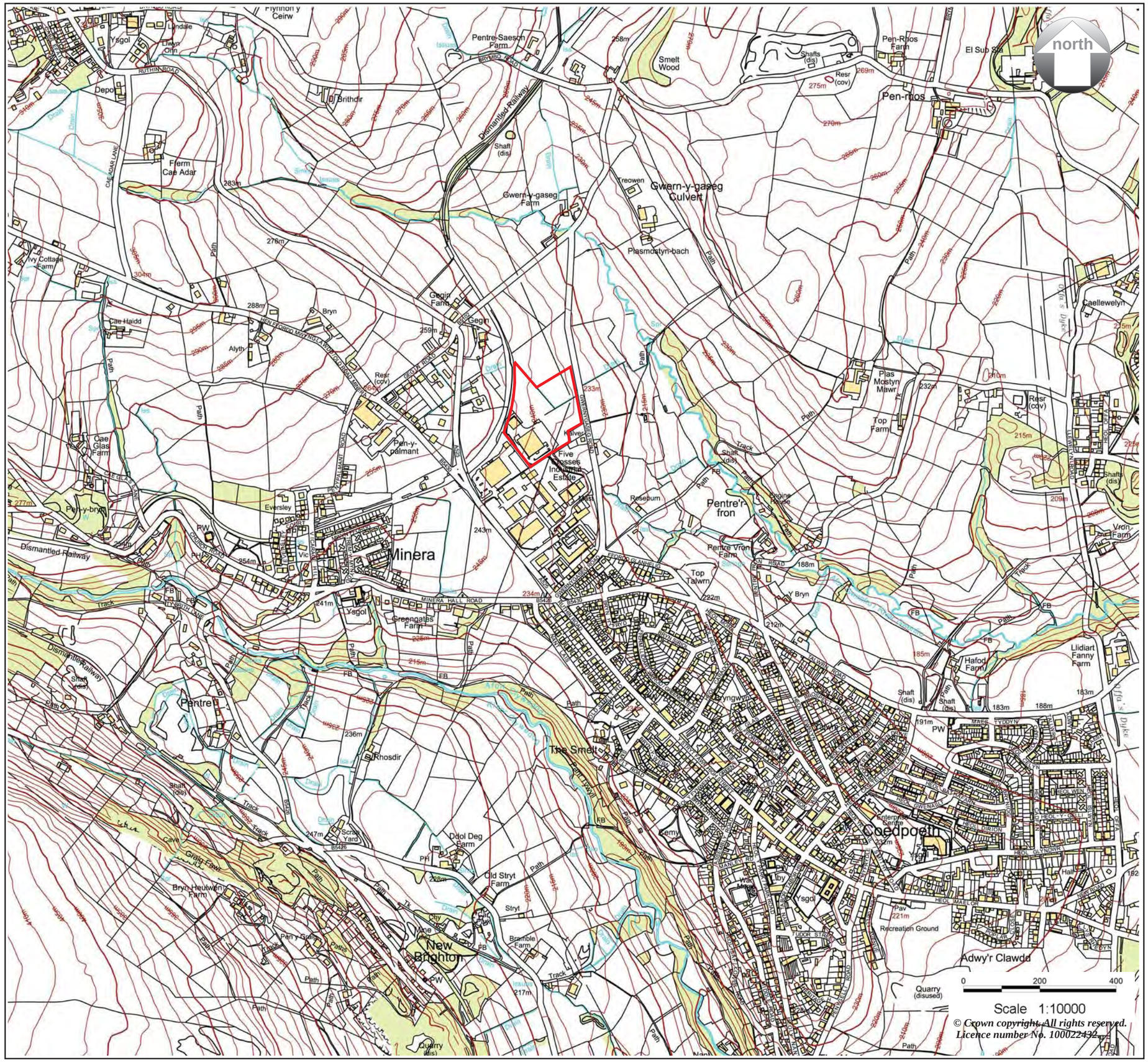
DATE July 2016	SCALE 1/1250@A3	JOB TITLE BMB Extension Tomlinson's Dairies Minera Wrexham	DRAWING TITLE Location Plan BMB Extension Phase 3
ORIGIN ISR	VERIFIED ISR		
FILE NAME			DWG No. H0070-20-A3-PL-01
ISSUE Planning			

APPENDIX B

Location Plan



KEY:

Site Location

Job: **Future Expansion of Tomlinsons Dairies, Five Crosses Industrial Estate, Minera, Wrexham**

Title: **Location Plan**

Scale: **1:10,000** Date: **June 2016**

Drawing No: **1473.01** Rev:

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APPENDIX C

Aerial Photographs (June 2013)

Aerial photograph of site (June 2013).

Aerial photograph of wider area (June 2013).

APPENDIX D

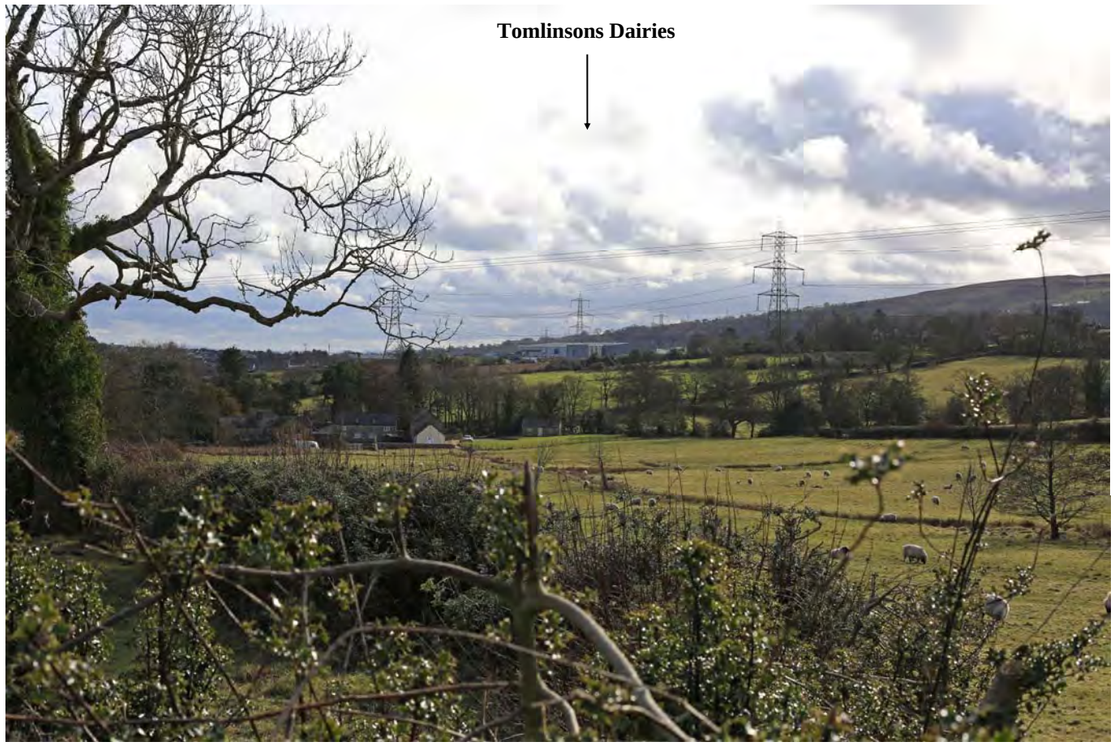
Photographs 1 to 15

Photograph 1: View from south-east on Gwernygaseg Road.

Photograph 2: View from north on Gwernygaseg Road.

Photograph 3: View from north-west on Ruthin Road (A525).

Photograph 4: View from north on Minera Road (B5102).



Photograph 5: View from north on Brymbo Road.

Photograph 6: View from north-east on Brymbo Road.

Photograph 7: View from east on Footpath BRY/61.

Photograph 8: View from north-east at junction of Footpaths BRY/60 & BRY/63.

Photograph 9: View from south-east on Footpath BRY/62.

Photograph 10: View from south-east on Talwrn Road.

Photograph 11: View from south-west on Footpath ESC/31 (Minera Mountain).

Photograph 12: View from south-west on Footpath MIN/21 (Minera Mountain).

Photograph 13: View from south-west on road to Worlds End.

Photograph 14: View from south-west on road to Worlds End.

Photograph 15: View from south at New Brighton.

APPENDIX E

Public Rights of Way

KEY:

Site Location

Job: **Future Expansion of Tomlinsons Dairies, Five Crosses Industrial Estate, Minera, Wrexham**

Title: **Public Rights of Way**

Scale: **1:10,000** Date: **June 2016**

Drawing No: **1473.03** Rev:

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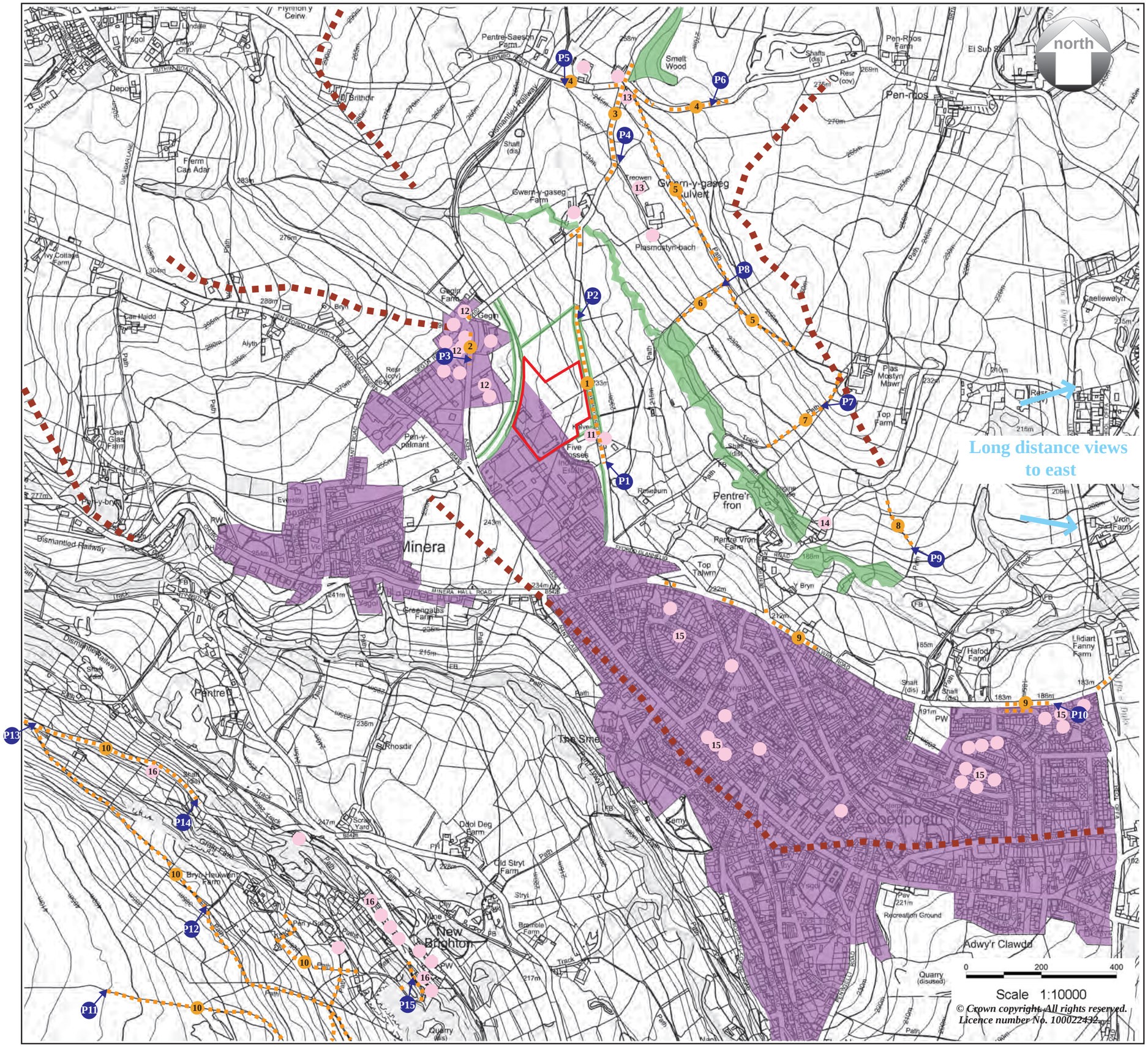
APPENDIX F

Visual Receptor Plan



KEY:

- Site Location
- Local ridgelines
- Important woodlands and hedgerows
- Major built development
- Photograph Locations
- Public locations with potential views of site:
  1. Gwernygaseg Road
  2. Ruthin Road (A525)
  3. Minera Road (B5102)
  4. Brymbo Road
  5. Footpath BRY/60
  6. Footpath BRY/63
  7. Footpath BRY/61
  8. Footpath BRY/62
  9. Talwrn Road
  10. Minera Mountain
- Private dwellings with potential views of site:
  11. Kalver/Cae-crwn
  12. Dwellings at Gegin
  13. Dwellings at Gwern-y-gaseg
  14. Dwelling at Pentre Fron
  15. Dwellings at Coedpoeth
  16. Dwellings at New Brighton

Job: **Future Expansion of Tomlinsons Dairies, Five Crosses Industrial Estate, Minera, Wrexham**

Title: **Visual Receptor Plan**

Scale: **1:10,000** Date: **June 2016**

Drawing No: **1473.02** Rev:

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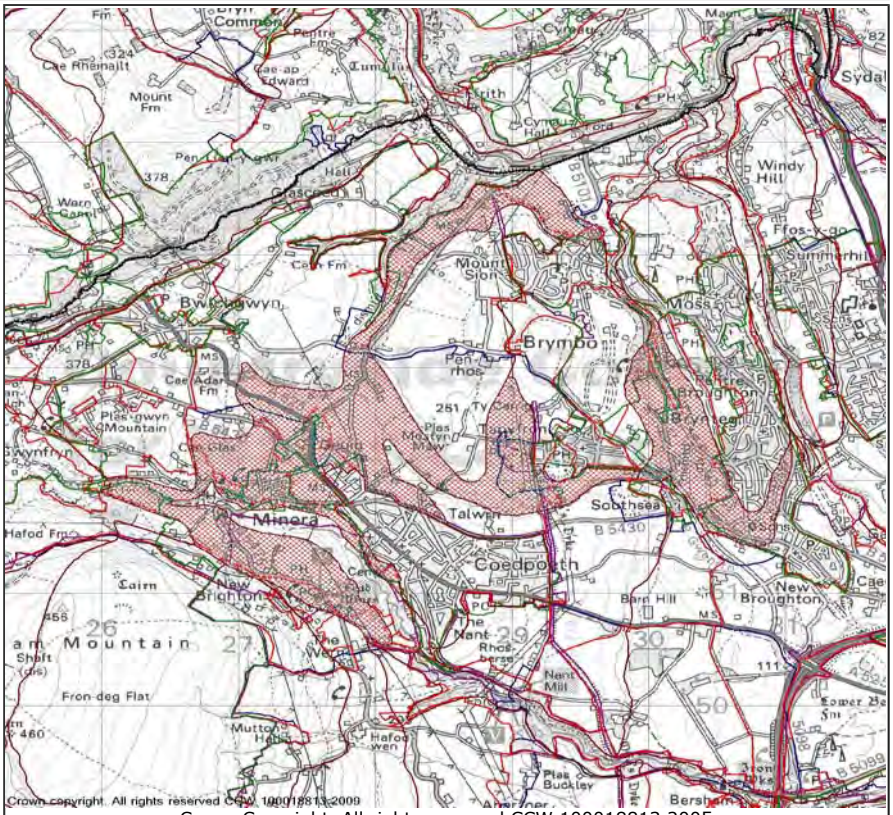
APPENDIX G

Extracts from LANDMAP

Geological Landscape

Aspect Area Name	**Minera- Llwyneinion**
Aspect Area Classification	**Lowland hills and valleys/Lowland glacial and fluvioglacial depositional terrain/Other (Level 3)**
Aspect Area Code	**WRXHMGL008**
Date Of Survey : 03/04/2007	



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Monitoring

Has the information ever been verified in the field?	Yes (Field traverse.)
Does this area have a special or functional link with an adjacent area?	No

Description

If Classification is "Other", specify here	Glaciodepositional topography/ veneer
What is the geographical and topographical character of this area?	Upper valley sides in the Minera area between the Clywedog ''gorge'' and the higher sandstone-controlled massifs of the Brymbo and Bwlchgwyn areas. Slopes generally relatively gentle around Minera but steepening below the Brymbo plateau. Includes a platform in the Ddol Deg Farm area, on the S side of the Clywedog gorge and below the Esclusham Mountain massif. Surface dominated by glacial clays (Quaternary: Pleistocene).
Where drift dominated, what is the dominant drift deposit?	Glacial
Where drift dominated, what is the major sediment that characterises the area?	Boulder clay/till
What is the characteristic Level 3 component of the area?	Other (Glaciodepositional topography/ veneer*)
Which of the following is a significant contributor to the geological character of the area?	Stratigraphic formation(s) (Very minor ''Millstone Grit '' [LOWER-UPPER CARBONIFEROUS (MISSISSIPPIAN-PENNSYLVANIAN)] including Gwespyr Sandstone Formation [PENNSYLVANIAN): ? NAMURIAN (YEADONIAN)- WESTPHALIAN (LANGSETTIAN)] and ''Coal Measures '', Bettisfield Formation (including Cefn Rock). [UPPER CARBONIFEROUS (PENNSYLVANIAN), WESTPHALIAN: LANGSETTIAN-BOLSOVIAN]. [N.B. Carboniferous stratigraphical terminology has been revised but not implemented on published mapping (see Waters and Davies 2006 British Geological Survey Research Report, RR/05/06 for details)]) Superficial deposits (Till dominates [QUATERNARY: PLEISTOCENE (DEVENSIAN)].) Active processes Past processes (Glacial)
What active geological and geomorphological processes are significant in this area?	Stream.
What Level 4 components are notable in this area?	Slope Urban / industrial development
Are there any pedological processes that are significant in the area or have had a landscape forming effect?	Not known
Are there components of significant hydrological importance?	Yes (Stream.)

Is there current mineral extraction?	No
Has there been mineral extraction in the past?	Yes (Coal?)
Are there SSSI/GCR sites here?	No
Are there geological SINC, 2nd tier, or RIGS sites in the area?	No

Evaluation

Value	Moderate (No regionally significant sites/ landforms noted during present survey and geology/ geomorphology considered to be typical of feature/ process and is either widespread, better exposed elsewhere or not currently known to be exceptional.)
Condition	Good (Dominantly rural area with limited significant development.)
Trend	Constant (Dominantly rural area with limited significant development.)

Recommendations

Existing management	Generally Appropriate
Existing management remarks:	Dominantly rural area with limited significant development. Aspect Area lies wholly or partly within the proposed extension to the Clwydian Hills AONB (2008).
Principal management recommendations	Ensure that no significant geological or geomorphological features are lost or damaged (e.g. due to development, forestry, etc) .
Guideline	Long Term (Ensure that no significant geological or geomorphological features are lost or damaged (e.g. due to development, forestry, etc) .)

Tolerance To Change

Are there any significant threats to the current integrity and condition of the Earth Heritage features of the area?	Not known

Aspect Area Boundary

To what level was this information site-surveyed?	Level 3
At 1:10,000, how much of the Aspect Area boundary is precise?	Most (Aspect Area boundaries surveyed at 1:10,000, mapped at 1:25,000.)
What baseline information source was used for Aspect Area boundary mapping?	Other (1:50,000 British Geological Survey maps, 1:10,000 aerial photographs (as stereo pairs), OS 1:25,000 Landranger topographical map.)
If OS Data was used, what was the scale?	1:25,000
What is the justification for the Aspect Area boundaries?	Break of slope at base of steeper slopes of bedrock-dominated areas above and top of lower slopes below. Also top of steep valley sides and margins of dense urban areas.

Evaluation Matrix

Evaluation Criteria: Research Value	Moderate (No regionally significant sites/ landforms noted during present survey and geology/ geomorphology considered to be typical of feature/ process and is either widespread, better exposed elsewhere or not currently known to be exceptional.)
Evaluation Criteria: Educational Value	Low (No regionally significant sites/ landforms noted during present survey.)
Evaluation Criteria: Historical Value	Low (No regionally significant sites/ landforms noted during present survey.)
Evaluation Criteria: Rarity / Uniqueness	Low (No regionally significant sites/ landforms noted during present survey and geology/ geomorphology considered to be typical of feature/ process and is either widespread, better exposed elsewhere or not currently known to be exceptional.)
Evaluation Criteria: Classic Example	Low (No regionally significant sites/ landforms noted during present survey .)
Evaluation Criteria: Overall Evaluation	Moderate (No regionally significant sites/ landforms noted during present survey and geology/ geomorphology considered to be typical of feature/ process and is either widespread, better exposed elsewhere or not currently known to be exceptional.)
Justification of overall evaluation	No regionally significant sites/ landforms noted during present survey and geology/ geomorphology considered to be typical of feature/ process and is either widespread, better exposed elsewhere or not currently known to be exceptional.

Bibliography

List the key sources used for this assessment	BENNETT, J. (ed.) (1995), Minera Lead Mines and Quarries (Wrexham Maelor Borough Council); BEVINS, R.E. and MASON, J.S. (1999), Welsh Metallophyte and metalogenic evaluation project: Results of a Minesite Survey of Clwyd (NMW); BRITISH GEOLOGICAL SURVEY (1994), Wrexham (Sheet 121); MALPAS, J.(2007), Clwydian Range Area of Outstanding Natural Beauty, Local Geodiversity Action Plan (AHNE Brynian Clwd / Clwydian Range AONB, NEWRIGS, CCW); ORDNANCE SURVEY (2000), Explorer 256 (1:25,000 scale) ; ROBERTS, R. (2004), Earth Science Technical Annex. In: Wrexham LANDMAP: Volume 2. (WCB and CCW); Review Series 17 (JNCC); WEDD, C.B. et al. (1927-1928), Memoirs of the Geological Survey, Sheet 121 (Wrexham).

Assessment

Additional Assessments	N/A
Additional Comments	

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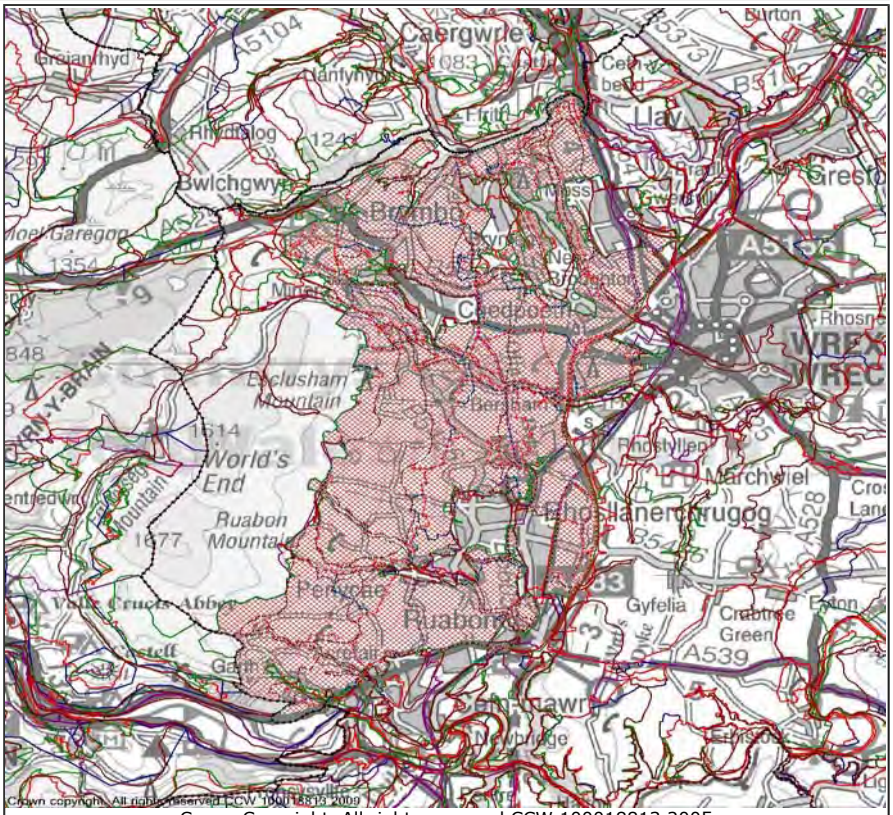
Landscape Habitats

Aspect Area Name	**Talwrn Grassland**
Aspect Area Classification	**Dry (Relatively) Terrestrial Habitats/Mosaic/Mosaic (Level 3)**
Aspect Area Code	**WRXHMLH031**
Date Of Survey : 10/08/2007	



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Monitoring

Date of monitoring?	
Monitoring undertaken by	
Has the information ever been verified in the field?	No
Does this area have a special or functional link with an adjacent area?	Yes (Many small streams link through this Aspect Area to the east, in particular the River Clywedog links through into WRXHMLH033 (Erddig Parkland Mosiac).)
What is the total land area within the boundary (in hectares)?	

Description

What are the dominant soil types? (specify up to 3 types)	Brown soils Surface-water gley soils
What Phase 1 habitat types are present? Only select the five most dominant types and, for each of these, specify below what percentage of the Aspect Area is made up of these.	Semi-natural Broadleaved Woodland (4) Improved Grassland (67) Arable (5) Buildings (3) Semi-improved Neutral Grassland (4)
Does the area contain habitats of international importance?	Yes
If yes, which habitats of international importance?	Lowland hay meadows Western acidic oak woodland Alder woodland on floodplains
Does the area contain BAP habitats?	Yes
If yes, which BAP habitats?	Upland Oakwood Upland Mixed Ashwood Wet Woodland Cereal Field Margins Lowland Meadows
Does the area contain protected sites?	Yes
If yes, which ones?	Local wildlife site (Cae Plas Mostyn Bach; Mount Zion; Moss Valley; Roseburn Fields; New Broughton Meadow; Big Wood; Afon Gwenfro; Crematorium; Bronwylfa; The Smelt; Plas Mostyn Mawr; Berse Drelincourt; Legacy Substation; Higher Berse Marsh; Gardden Fort Wood; Gardden Wood/Rocky Wood; Plas Bennion; Yew Tree Dingle; Bogbean Field; Cae Llwyd; Cae Penymynydd; New Brighton; Pen-Y-Nant, Minera; Sydallt Wood) SSSI (Stryt Las, GATEWEN MARSH) SAC (Johnstown Newt Sites)
Approximately what proportion of the Aspect Area is within the protected site?	11-20%

Does the area support important species?	Yes
If yes, which species? (for each of the species, also note the source of information)	This area is most notes for its population of great crested newt, Triturus cristatus, which is why the SAC has been designated. The newts use the ponds and waste ground surrounding Johnston, as do other commoner amphibian insect and bird species. CCW records and the previous survey record a very large number of different bat species using this area. Within the streams otter, Lutra lutra: water vole, Arvicola terrestris and several bird species such as linnet, Carduelis cannabina are recorded form the area. There are also other specific records for certain areas which we have not space to cover in this report.
Are there any significant threat species present in abundance? (Field visit required)	Not known
What other features significantly influence the biodiversity in this area?	Streams Hedgerows Veteran Trees Ponds
Are any of these features in a very good condition? (Field visit required)	Unknown
Are any of these features in a poor condition? (Field visit required)	Unknown
What are the main land management activities taking place in the area? (Field visit required)	Cultivation Stock grazing
Do any of the above appear to have an appreciable positive impact on biodiversity? (Field visit required)	
Do any of the above appear to have an appreciable negative impact on biodiversity? (Field visit required)	
Is the biodiversity in the area in any way threatened?	Not known
Are there clear opportunities to improve the biodiversity aspect of this area?	Yes (Maintaining the ponds without allowing them to silt up, also maintain and enhancing hedgerows, scrub and woodland will help enhance and preserve this important area for the many species which use it.)
Summarise the key features that define this area's biodiversity character	A very large area of mixed agriculture, mainly grassland but with some arable cropping. Fields are small to medium sized with hedges, and scattered trees, with some small woodlands. The area borders on Ruabon mountain SSSI to the west, and contains a number of SSSI''s itself, and a PSAC (Stryt Las A''r Hafod), as well as a number of local wildlife sites, including woodland, wetlands, rivers and water bodies.

Evaluation

Value	High (This mosaic of pasture, woodland and water contains a variety of habitats, and many interesting species including the largest known breeding population of great crested newts at Stryt Las A''r Hafod. It also provides a buffer to the Ruabon Mountain SSSI. The area is of high value as a landscape habitat.)
Condition	Unassessed
Trend	Unassessed

Recommendations

Existing management	Generally Appropriate
Existing management remarks:	The small fields are mainly grazing or cut for hay and silage.
Principal management recommendations	Maintain the ponds. Enhance gappy hedges and plant woodland to aid biological connectivity.
Guideline	Immediate (Protect hydrology of the area.) Medium Term (Where hedges are gappy, replant and lay.) Medium Term (Retain potential green networks particularly ponds, hedges and scrub.)

Aspect Area Boundary

To what level was this information site-surveyed?	Level 3
At 1:10,000, how much of the Aspect Area boundary is precise?	All
What baseline information source was used for Aspect Area boundary mapping?	Aerial photographs
If OS Data was used, what was the scale?	1:25,000
What is the justification for the Aspect Area boundaries?	The boundary to the east is marked by a change in slope and the A483 road which forms a hard barrier generally on this break of slope and marks a change in field pattern. To the west the boundary is formed with the upland of Eglwyseg and Ruabon mountain. To the north the upland grassland of WRXHMLH036 (Four Crosses Upland Grassland) forms the boundary. The southern boundary follows the edge of the county boundary.

Evaluation Matrix

Evaluation Criteria: Priority Habitats	High (The area contains a small area of internationally important habitat supported by a range of locally significant habitats giving a high value overall.)
Evaluation Criteria: Significance	High (The traditional field pattern, with hedges, trees and small wooded copses plus the numerous locally significant sites and the small area with a nationally significant site gives this area a high value.)
Evaluation Criteria: Opportunity	High (With active management of the landscape, creating more ponds and more work on hedges, the biodiversity of the area would be enhanced.)

Evaluation Criteria: Expansion rates	Unassessed
Evaluation Criteria: Sensitivity	Moderate (The ponds would be sensitive to an increase in agricultural inputs.)
Evaluation Criteria: Connectivity/Cohesion	High (The small field pattern with many hedges and mature trees provides a good degree of connectivity.)
Evaluation Criteria: Habitat Evaluation	High (The small fields bounded by hedges with scattered trees, together with a number of small woods, and the very many small but significant pond site gives this area a high evaluation.)
Evaluation Criteria: Importance for key species	Outstanding (The area is of fundamental importance for the the great crested newt, Triturus cristatus, which is an internationally significant species protected under both European and UK designations. The newts use the many ponds, hedges and woodlands, and therefore the area has been graded as outstanding for species.)
Evaluation Criteria: Overall Evaluation Habitat and Species	High (A moderate to high biodiversity landscape that supports some important national and international species giving a high overall value.)
Justification of overall evaluation	This mosaic of pasture, woodland and water contains a variety of habitats, and many interesting species including the largest known breeding population of great crested newts at Stryt Las A''r Hafod. It also provides a buffer to the Ruabon Mountain SSSI. The area is of high value as a landscape habitat.

Bibliography

List the key sources used for this assessment	Wales Vexcel photography (2006), Getmapping - Millennium Map digital aerial photography (2000). CCW - Phase 1 Habitat vector GIS data set. Wrexham County Borough Council 2004. Wrexham LANDMAP Volume 3: Biodiversity Technical Appendix (Please note BAP habitat information has largely been obtained from this survey). Countryside Council for Wales Species Information. Wrexham County Borough Council digital data set of Local Wildlife Sites.

Assessment

Additional Assessments	A large area of small and medium sized fields, bounded by hedges with an internationally significant ponds which support a wide range of species including great crested newt, Triturus cristatus and is of high to outstanding value.
Additional Comments	

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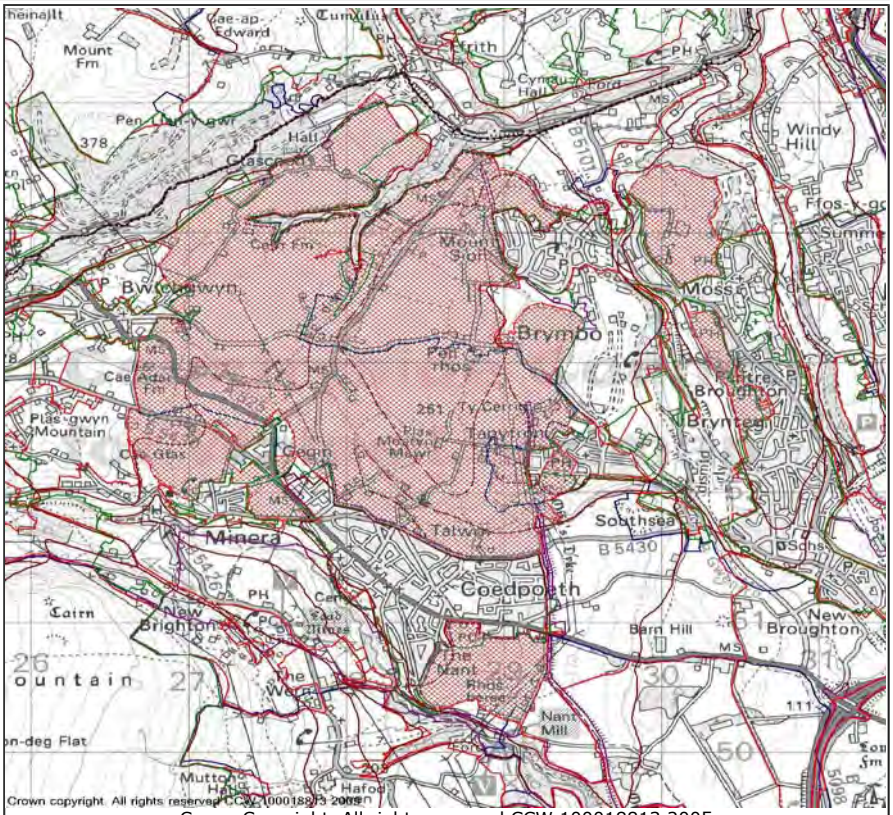
Visual and Sensory

Aspect Area Name	**West Wrexham Hill Slopes**
Aspect Area Classification	**Upland/Hills, Lower Plateau & Scarp Slopes/Hillside & Scarp Slopes Grazing (Level 3)**
Aspect Area Code	**WRXHMVS017**
Date Of Survey : 20/09/2007	



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Monitoring

Has the information ever been verified in the field?	Yes (N/A)
Does this area have a special or functional link with an adjacent area?	Yes (Strong visual and functional link as the setting for the communities of Brymbo, Pentre Broughton and Tanyfron)
During which season(s) was fieldwork carried out?	Summer

Description

Summary Description	A broad aspect area lying on a upland plateau area bounded by the River Clywedog to the north and the rising upland slopes of Ruabon Mountain and Minera to the west. The area has a strong physical and visual link in terms of the setting for a number of small to medium sized settlements across the area - Brymbo, Minera, Tanyafron and Pentre Broughton. The area is typified by a network of small to medium sized fields following the underlying topography and well defined by managed hedgerows and small wooded copses. Materials within the area tend to be traditional red brick and stone in older properties with modern development being a relatively homogenous red brick with little defining characteristic. The area is historically a mining area and still bears evidence of this in mine workings and areas of disturbed tips and former working. There is a feeling of height as good clear views are available form the upper reaches of the area looking over the adjacent valleys and lower lying land to the east. Much disturbed area, with mining remains, but agriculture is now main land use. Visually degraded by pylons, but some attractive pockets. Offa''s dyke crosses plateau.
Physical Form And Elements: Topographic Form?	Plateaux
Physical Form And Elements: Landcover Pattern?	Field Pattern/Mosaic
Physical form and elements: Settlement pattern	Scattered Rural/Farm
Physical form and elements: Boundary type	Mixture
Aesthetic Qualities: Scale?	Medium
Aesthetic Qualities: Sense of Enclosure?	Open
Aesthetic Qualities: Diversity?	Simple
Aesthetic Qualities: Texture?	Medium
Aesthetic Qualities: Lines?	Angular
Aesthetic Qualities: Colour?	Muted
Aesthetic Qualities: Balance?	Balanced
Aesthetic Qualities: Unity?	Neutral

Aesthetic Qualities: Pattern?	Organised
Aesthetic Qualities: Seasonal Interest?	Mixed
Other Factors: Level of Human Access?	Frequent
Other Factors: Night Time Light Pollution?	Moderate
Other Factors: Use of Construction Materials?	Generally Appropriate
What materials? Give Details:	Traditional stone in older buildings and some remnant boundaries - generally more modern brick in settlements
There are attractive views...	...both in and out (Feeling of height - views to the east over lowland Wrexham and to Hope Mountain and Ffrith valley to North west)
There are detractive views...	....out (Of settlement edge)
Perceptual and Other Sensory Qualities	Sheltered Noisy Settled Other (Strong remnants of mining heritage)
What is the sense of place/local distinctiveness	Moderate (Area once contained Brymbo steelworks which gave the area a distinctive character, now the area is mainly rural altohugh there is strong evidence of its mining heritage. Much disturbed area, with mining remains, but agriculture is now main land use. Degraded by pylons, but some attractive pockets. Offa''s dyke crosses plateau.)

Evaluation

Value:	Moderate (Refer to Q.51)
Condition:	Unassessed
Trend:	Unassessed

Recommendations

Existing management	Generally Inappropriate
Existing management remarks:	Farming vulnerable to changes in economic situation also pressure on urban fringe . Some land poor, and marginal in terms of farming but may have value in terms of habitat diversity- no obvious management of either.
Principal management recommendation:	Enhance existing vegetation cover - improve species diversity and habitats, reduce impact of overhead powerlines and integrate settlement edge
Guideline	Medium Term (Increase woodland cover to mitigate visual impact of adjacent development and settlement edge) Medium Term (Enhance and develop existing green network. Enhance countryside by hedgerow management, hedgerow tree planting) Long Term (Encourage reduction of overhead power line clutter) Medium Term (Consider woodland planting on derelict and neglected land with preliminary surveys undertaken to evaluate value of existing habitats)
Define the key qualities that should be conserved:	Open rural marginal land on the fringes of settlements
Define the key qualities that should be enhanced:	Quality, species diversity and habitat value of wooded and hedgerow vegetation cover
Define the key qualities that should be changed:	Degradation of aspect boundaries through over extension of adjacent settlement/innappropriate development
Define the key elements that should be conserved:	Open and marginal land on settlement edge with sensitive restoration of mining heritage where appropriate
Define the key elements that should be enhanced:	Species mix and age range of woodland, hedgerow boundaries and field margins
Define the key elements that should be changed:	Inappropriate /overly extensive development on settlement edge

Tolerance To Change

Are there any significant threats to the current integrity and condition of the visual & sensory features of the area?	Not known

Aspect Area Boundary

To what level was this information site-surveyed?	Level 3
At 1:10,000, how much of the Aspect Area boundary is precise?	All
What baseline information source was used for Aspect Area boundary mapping?	Other (OS data and Aerial photographs)
If OS Data was used, what was the scale?	1:10,000 and 1:25,000
What is the justification for the Aspect Area boundaries?	Distinctive area occupying a plateau area clearly defined by wooded river valleys to the north and east and rising upland to the west. An area of broadly similar marginal and rough grazing land that bears strong evidence of its former mining heritage.

Bibliography

List the key sources used for this assessment	Pre 2003 methodology LANDMAP study for WCBC

Evaluation Matrix

Evaluation Criteria: Scenic quality	Moderate (The area has some aesthetically attractive/pleasing views especially looking to the east over the lower lying Wrexham plateau. However much of the land is marginal and currently appears in relatively poor management which added to the frequency of overhead powerlines succeeds in degrading the overall appearance of the area.)
Evaluation Criteria: Integrity	Low (Although lacking in large scale development the area has suffered slight degradation in a number of areas across the area in terms of integrity by its poorly managed marginal land with many derelict areas and preponderance of overhead powerlines.)
Evaluation Criteria: Character	Moderate (There is a relatively distinctive and common character throughout the aspect area largely due to its common mining heritage. The aftereffects of mining have left a distinctive land type - derelict, marginal farmland now largely rough grazing and low intensity farmland, this also gives the area a relatively clear sense of place and unity across the aspect area.)
Evaluation Criteria: Rarity	Commonplace (The qualities and features of this aspect area are relatively commonly found throughout the study area - evidence of former industry, marginal farmland and settlement fringes. These features in their own right are not particularly valuable or representative for other Visual & Sensory criteria)
Evaluation Criteria: Overall Evaluation	Moderate (2 Moderate & 2 Low = Borderline Moderate/ Low)
Justification of overall evaluation	Although lacking in large scale development the area has suffered slight degradation in a number of areas across the area in terms of integrity by its poorly managed marginal land with many derelict areas and preponderance of overhead powerlines. There is a relatively distinctive and common character throughout the aspect area largely due to its common mining heritage. The after effects of which have left a distinctive land type - derelict, marginal farmland now largely rough grazing and low intensity farmland, this also gives the area a relatively clear sense of place and unity across the aspect area. No particularly distinctive characteristic the area once contained Brymbo steelworks which gave the area a distinctive character, now the area is mainly rural although there is strong evidence of its mining heritage. However there is no longer any distinctive purpose for the area - the agriculture is low key and does not have a particularly well defined pattern, mining has left its mark on much of the area leaving unmanaged and marginal land - rough pasture and settlement fringe in its place. Some areas of rough ground may have valuable habitats but the overall value of the area is not considered to be high. Visually the area has been further degraded by pylons, but some attractive pockets.

Assessment

Additional Assessments	None
Additional Comments	

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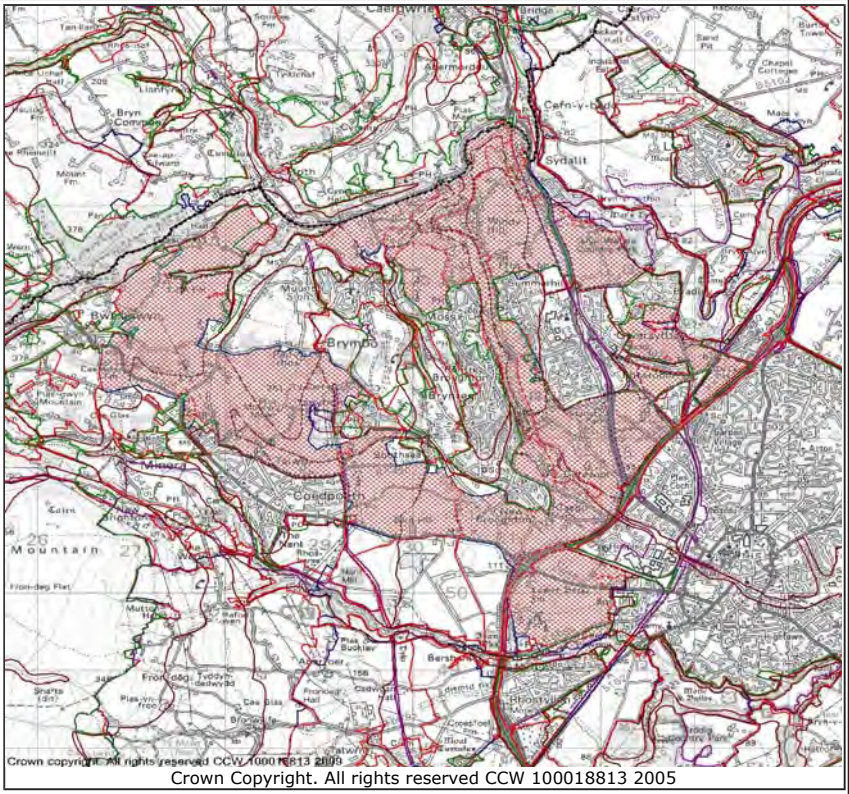
Historic Landscape

Aspect Area Name	**Windy Hill**
Aspect Area Classification	**Rural environment/Agricultural/Irregular Fieldscapes (Level 3)**
Aspect Area Code	**WRXHMHL008**
Date Of Survey : 06/11/2007	



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Monitoring

Has the information ever been verified in the field?	No
Does this area have a special or functional link with an adjacent area?	No

Description

If Classification is "Other", specify here	
Summary Description / Key Patterns and Elements	Swath of mixed irregular predominantly hedged fields occupying the Gwenfro and Moss valleys to the west and east of Brymbo and its former industrial areas... The area is characterised by isolated post medieval farmsteads and a wide variety of mines, collieries, brick and tile works and other industrial remains... It also contains the minor settlement of Berse Drelincourt and an isolated moated site at Lower Berse, and a small area of very degraded parkland at Gwersyllt... The south of the area is crossed by Offa'''s Dyke and it is bounded on its north by the line of the Roman road from Caer Gai to Chester...
If working at level 3, the classification describes the dominant historic pattern, but which other patterns are important to the historical pattern of this area? (Tick all that apply)	Woodland Extractive Processing/Manufacturing Designed Landscape
Which traditional boundary types prevail in the area? (Tick all that apply)	Hedgerow Hedgerow With Trees Wooden Fence
What is the nature of any significant archaeological interest in the area? (Tick all that apply)	Buried-dry Relict-Earthworks Relict-Stone Monuments Buildings & Structures Industrial Archaeology
Which chronological period is dominant in the area?	Prehistoric Roman Medieval (to 1536) Post Medieval (1536+) Industrial Recent
Has a Historic Landscape Characterisation been undertaken here?	No
Are there SMR sites here?	Yes
Are there SAMs here?	Yes
Are there Listed Buildings here?	Yes
Are there Registered Historic Parks and Gardens here?	No
Are there Conservation Areas here?	No
Are there World Heritage Sites here?	No

Is the area within a Registered Landscape of Historic Interest?	No

Evaluation

Value:	Moderate
Condition:	
Trend:	

Recommendations

Existing management	
Existing management remarks:	
Principal management recommendations	
Guideline	

Aspect Area Boundary

To what level was this information site-surveyed?	Level 3
At 1:10,000, how much of the Aspect Area boundary is precise?	All
What baseline information source was used for Aspect Area boundary mapping?	OS Raster
If OS Data was used, what was the scale?	1:10,000
What is the justification for the Aspect Area boundaries?	A distinctive area of fieldscape surrounding the industrial valley-settlements north west of Wrexham...

Evaluation Matrix

Evaluation Criteria: Integrity	Low (See overall justification.)
Evaluation Criteria: Survival	N/A (See overall justification.)
Evaluation Criteria: Condition	High (See overall justification.)
Evaluation Criteria: Rarity	Representative (See overall justification.)
Evaluation Criteria: Potential	Moderate (See overall justification.)
Evaluation Criteria: Overall Evaluation	Moderate (See overall justification.)
Justification of overall evaluation	Diffuse area of mixed fields wrapped around a number of industrial settlements but lacking significant historical foci, although the passage of Offa''s and Wat''s Dykes lifts its value slightly

Bibliography

List the key sources used for this assessment	For full bibliography see Wrexham LANDMAP Updated Historic Landscape Aspect, Technical Report, 2007 individual site details drawn from CPAT Regional Historic Environment Record

Assessment

Additional Assessments	
Additional Comments	

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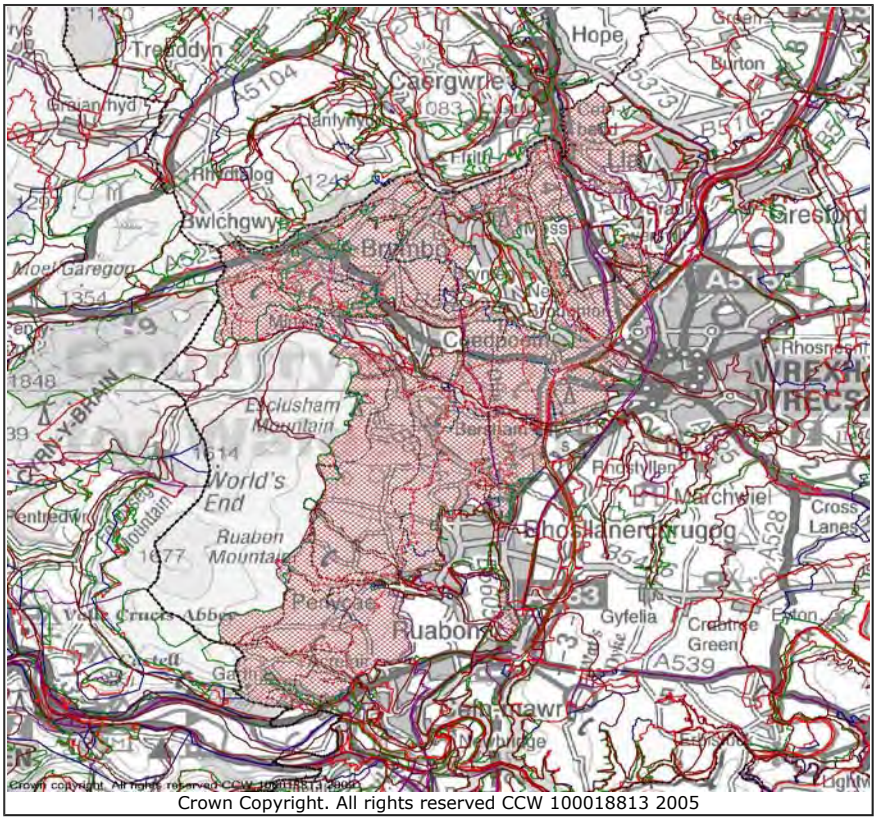
Cultural Landscape

Aspect Area Name	**Mynydd Rhiwabon Esclusham (lower slopes)**
Aspect Area Classification	**Influences/Material expressions/Rural/Agricultural (Level 4)**
Aspect Area Code	**WRXHMCL017**
Date Of Survey : 02/10/2006	



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Monitoring

Has the information ever been verified in the field?	Yes (Level 4.)
Does this area have a special or functional link with an adjacent area?	No

Description

If Classification is "Other", specify here	N/a.
The classification at level 3 describes the dominant cultural context, but which other contexts are important to the cultural landscape of this area?	Rural Industrial
Which level 4 classes are particularly significant to the cultural landscape character of this area - Influences?	Agricultural Rural Crafts Minerals & Mining Power Generation & Distribution
Which level 4 classes are particularly significant to the cultural landscape character of this area - Associations?	Sense of Place Land Holdings Leisure/Recreation
To what extent do the context and level 4 details selected contribute to the cultural identity, local distinctiveness or sense of place of the area?	Strong (Visibly an agricultural area, though there is evidence of former mining activity.)
To what extent is the cultural information widely recognised or appreciated?	Regionally (This is not a particularly well-known area.)
Are there any artistic expressions that are particularly famous or associated with the Aspect Area?	Not known
Are there any people / movements / institutions that are particularly famous or associated with the Aspect Area?	Not known
Is there any folklore or are there legends that are particularly famous or associated with the Aspect Area?	Not known
Are there any events/traditions that are particularly famous or associated with the Aspect Area?	Not known
Are there any technical / scientific discoveries that are particularly famous or associated with the Aspect Area?	Not known
What are the attributes of the cultural elements in the Aspect Area?	Evolved
What chronological periods are culturally dominant in the area?	Victorian & Edwardian Late Medieval
Are there certain place-names in the area that are particularly significant?	No
If yes, give examples of the place-names and their significance	

	N/a. N/a. N/a.
Summary Description: (no more than 150 words)	An area now devoted largely to sheep-rearing but which has historically been exploited for lead and coal. The lead-mining history of the area is interpreted at Minera. Less is known about coal-mining, ironworking or the agricultural past.

Evaluation

Value:	High (Of county value.)
Condition:	Fair (Though this aspect area may share in the problems which affect the agricultural sector generally it appears to be being actively exploited for sheep-rearing.)
Trend:	Unassessed

Recommendations

Existing management:	Unassessed
Existing management remarks:	It is not clear what management regime if any is in place for this aspect area.
Principal management recommendations	Support for interpretation of the area''s lead-mining history at Minera.
Guideline	Immediate (Support for interpretation of the area''s lead-mining history at Minera.) Medium Term (Support for interpretation of the area''s lead-mining history at Minera.) Long Term (Preservation of open character of hillslopes.)

Tolerance To Change

Are there any significant threats to the current integrity and condition of the Cultural Landscape features of the area?	Not known

Aspect Area Boundary

To what level was this information site-surveyed?	Level 4
At 1:10,000, how much of the Aspect Area boundary is precise?	Some (Boundaries are necessarily subjective.)
What baseline information source was used for Aspect Area boundary mapping?	OS Raster
If OS Data was used, what was the scale?	1:10,000
What is the justification for the Aspect Area boundaries?	WCBC boundary; edge of built-up areas; edge of Afon Clywedog landscape.

Evaluation Matrix

Evaluation Criteria: Recognition/transparency	Regional recognition (The area is manifestly an agricultural landscape with an industrial (mining) past, as interpreted at Minera.)
Evaluation Criteria: Period	Very apparent (High for the evidence of different periods and the different forms of economic activity and culture the aspect area sustained.)
Evaluation Criteria: Rarity	Rare (Although there are many other examples of areas with a history and culture such as this in Wales, this is an eloquent example.)
Evaluation Criteria: Documentation	Substantial (There are both primary and secondary sources available for this aspect area.)
Evaluation Criteria: Group Value	Considerable (For its visual relationship with the other aspect areas and for its prospect viewed from the east as the backdrop to Wrexham and the low-lying lands.)
Evaluation Criteria: Survival	N/A (For the survival of material evidence for former ways of life.)
Evaluation Criteria: Vulnerability	Unassessed
Evaluation Criteria: Diversity	Complex (Diverse in terms of the evidence of ways of life within the aspect area.)
Evaluation Criteria: Potential	Moderate (''Moderate'' in that potential has arguably been realised.)
Evaluation Criteria: Overall Evaluation	High (- for its historical value and for the interpretation of the lead-mining industry at Minera.)
Justification of overall evaluation	As an example of a landscape that is still seeing active farming use and which articulates the cultural meaning of former ways of wresting a living from the environment.

Bibliography

List the key sources used for this assessment	Principal bibliography: Bennett and Williams; principal consultees: J. Bennett; C.J. Williams.

Assessment

Additional Assessments	This has been identified as primarily an agricultural area despite the presence of the museum at Minera. lead-mining has been considered part of the (secondary) cultural essence of this landscape.
Additional Comments	

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APPENDIX H

Extracts from Wrexham LANDMAP SPG 2007

West Wrexham Ridges and Valleys 7d

This is one of a series of Local Planning Guidance Notes based on Wrexham LANDMAP (adopted November 2004), setting out recommendations for each Landscape Character area.

West Wrexham Ridges and Valleys summary:

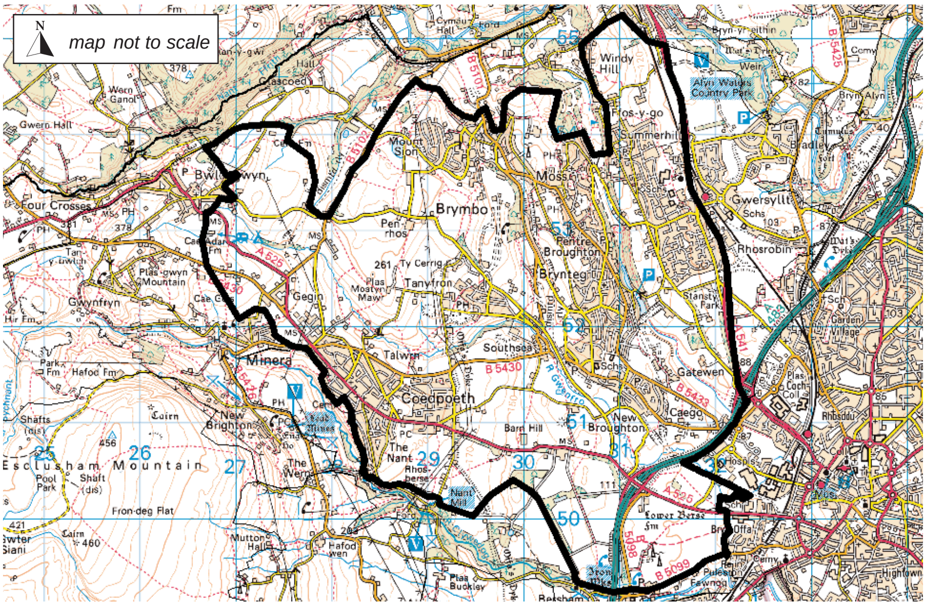
- Mixed rural and urban village character
- Strong NW-SE orientation, with alternating ridges and valleys
- Hilltop villages separated by woodland, former industrial land and farmland
- Widespread use of local Cefn sandstone in older buildings, and distinctive stone walls
- Changing landscape as post mining restoration and regeneration continue
- Variety of wildlife habitats including small but important wetlands
- Border area - Offa's Dyke and site of prehistoric hillfort

A complex area of former mining villages, industry, farmland and woodland in a landscape of distinct ridges and valleys which are aligned towards Wrexham town

Landscape context

West Wrexham Ridges and Valleys is the largest and most varied of four character areas in Wrexham which have a mixed rural and urban landscape. The other areas are Chirk, Rhosllannerchrugog - Rhostyllen, and Cefn Mawr

Map of West Wrexham Ridges and Valleys Landscape Character Area



Character Area boundaries should be considered transitional rather than precise
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Key characteristics

Visual character:

- Visually varied and complex, including lowland, valleys and hill and scarp areas
- Characteristic undulating hill slopes with wooded valleys
- Views towards Wrexham and the lowlands
- Urban villages and Wrexham linked by roads crossing open lowland farmland area
- Scattered groups of buildings in local Cefn sandstone and stone-built village cores, individuality in later additions but much standardised modern housing development

Geological character:

- The complex landform is related to geological faults, with alternating series of resistant sandstone ridges, and Coal Measure valleys of Carboniferous age
- Villages are built on outcrops of Cefn Rock (sandstone) which has been quarried for local building stone
- Glacial till covers much of the lower areas, with glacial sands and gravels towards Wrexham
- Many artificial landforms including the former Brymbo steelworks site

Ecological character:

- Much of the non-built area is improved grassland or arable of relatively low value

- Important wetlands include reed mace swamp at Gatewen Moss and rich swamp and marshy grassland at Higher Berse Marsh. Gwenfro valley has wet woodland and areas of valuable lowland pasture
- Plas Power tip and the former Brymbo Steelworks site are being restored mainly to broadleaved woodland

Historical character:

- Countryside has remnants of ridge and furrow, regular and irregular fields, but much land has been disturbed
- Most settlement is related to 19th and 20th century mining and industry
- Remnants of Bryn y Gaer prehistoric military hillfort at Pentre Broughton and the route of Offa's dyke can be identified
- Brymbo steelworks heritage area and Plas Power colliery buildings have been preserved
- Network of disused industrial railway lines crosses area

Cultural character:

- Urban villages retain their own cultural identity, but this is becoming weakened
- Area is affected by A483 corridor, which separates it from Wrexham, but increases accessibility to commuters
- Agriculture is still of some importance but horsiculture is an increasing land use

Landscape sensitivity

This area continues to accommodate profound changes, but is vulnerable to further loss of local distinctiveness, and coalescence of villages because of continuing development pressure. The small scale of the ridges and valleys means they are sensitive to large scale development, masts and power lines, and inappropriate engineered landfoms

Overall management strategy:

Conservation

Management Guidance

Aims	Guidelines
Enhance character of hill villages and wooded valleys	• Promote urban forestry, strengthen, restore and enhance wooded valleys • Keep settlements separate and maintain green barrier between villages and Wrexham town • Encourage the restoration and repair of rural and urban stone walls using local stone • Avoid standardised new developments using non-local materials and inappropriate highway design
Develop an accessible green network	• Maintain and develop green corridors for wildlife and people, linking rural and urban green spaces
Promote positive management of urban fringe countryside	• Encourage hedgerow retention and management and new hedgerow and tree planting along the urban fringe • Promote agri-environment agreements to encourage management for public access and wildlife as well as sustainable agricultural production • Areas for Horsiculture are to conserve traditional field boundaries Avoid the proliferation of fences, structures and buildings within the countryside, where this would erode character
Conserve geological features	• Maintain continuity and integrity of rock and glacial exposures and landforms
Enhance and extend existing habitats for wildlife	• Maintain high water table in wetland habitats and extend wetland habitats • Maintain secondary habitats in industrial redevelopments • Protect potential bat and owl roosting sites in old buildings and walls • Manage and extend woodlands to improve structure and wildlife value
Preserve archaeological features	• Maintain green areas to preserve surviving archaeology, carry out field and desk studies of fieldscape • Preserve by record Bryn y Gaer hillfort, evaluate in advance of any development or groundworks • Evaluate industrial sites in urban villages in advance of development • Preserve disused railway lines, and assess in wider industrial context • No development on or near Offa's Dyke - contact Cadw
Preserve local distinctiveness	• Support community cultural initiatives in urban villages, preserve historic appearance of buildings and settlements

For further information contact:

Planning Environment
Planning Department
Wrexham County Borough Council
Lambpit Street, Wrexham. LL11 1AR

Tel:01978 292019

www.wrexham.gov.uk/planning

All our information is available in accessible formats

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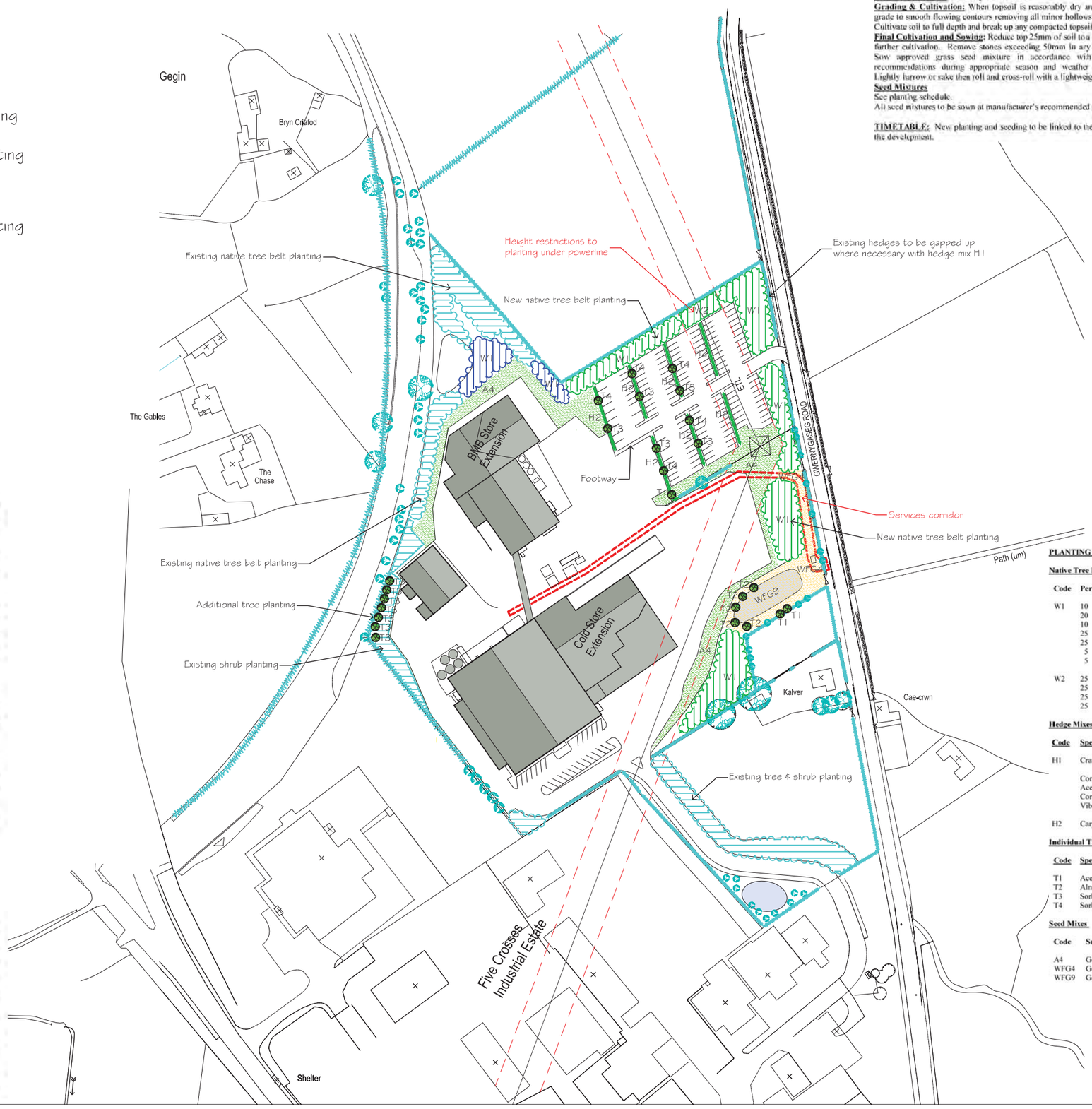
APPENDIX I

Landscape Proposals
(Not to Scale)

Key

- Existing trees retained
- Existing hedgerows retained
- Existing native tree belt planting
- Phase 2 native tree belt planting
- Phase 2 hedgerow planting
- Phase 3 native tree belt planting
- T1 Individual tree planting
- A4 Low maintenance grassland
- WFG4 Wildflower grassland



PLANTING SPECIFICATION

EXISTING TREES AND HEDGES ETC: All existing trees and hedges to be retained should be fully fenced and protected prior to the commencement of any works in accordance with BS5837 (2012) 'Trees in relation to design, demolition and construction - Recommendations'.

STRIPPING EXISTING TOPSOIL: Excavate existing topsoil from required areas and keep separate from excavated subsoil. All soil stripping, movement, spreading and cultivation is to be carried out only when the soil is dry and friable.

Appropriate earthmoving machinery is to be used to minimise damage and compaction to existing soil structure during stripping and stockpiling operations. Machinery should not run over areas to be stripped. Mechanical handling of stripped soils should be kept to a minimum. Do not strip soil from beneath canopy of trees to be retained or from areas where trees have stood. Do not strip soil from areas where the soil is heavily rutted or obviously compacted.

Stripped soil for reuse shall be stored in heaps not exceeding 2.0m in height. The storage area shall be cleaned of all waste and vegetation in advance. The soil should be placed in an 'as dug' condition and should not be re-worked in any way that is liable to cause compaction. Weed growth should be controlled with a glyphosate based herbicide during storage and prior to re-spreading.

TOPSOIL SPREADING & CULTIVATION: Thoroughly loosen sub-soil before spreading top-soil to allow free drainage and root penetration. Spread and grade all soils to smooth flowing finished contours. Cultivate to full depth and remove large stones and unwanted material over 50 mm diameter and dispose.

Make up any soil shortages with imported Multipurpose Topsoil to BS 3882: 2015. Sample and source to be approved before bulk delivery to site

MINIMUM SOIL REQUIREMENTS:

	Topsoil	Loosened Subsoil
Grassland areas	150mm depth	300mm depth
Tree planting areas	300mm depth	600mm depth
Standard/feathered tree pits	1200mm dia. x 750 depth	

PLANTS & PLANTING: All plants and planting to comply with the requirements of current/relevant British Standard Specifications including BS 3936: Parts 1 & 4 (Nursery Stock) and BS 4428: 1989 (General Landscape Operations). All planting to be carried out within the recognised planting season (November to March). All to be British Grown stock and fully hardened off. All native species to be of local origin. (Forestry Commission Seed Zone 304).

Root Dip: Proprietary root dip applied to all bare-rooted stock (1) at time of lifting at nursery and (2) prior to planting.

Watering: Thoroughly water-in all newly planted stock immediately after planting.

Tree Stakes and Ties: Stakes - to be pressure treated, round, smooth and peeled Larch or Chestnut, not less than 100mm diameter. Use proprietary tree ties applied in accordance with manufacturer's recommendations

Tree & shrub protection

All newly planted stock to be fully protected from rabbit damage by the use of proprietary tree/shrub guards applied in accordance with the manufacturer's recommendations.

GRASS SEEDING: Generally to BS 4428.

Grading & Cultivation: When topsoil is reasonably dry and workable grade to smooth flowing contours removing all minor hollows and ridges. Cultivate soil to full depth and break up any compacted topsoil.

Final Cultivation and Sowing: Reduce top 25mm of soil to a fine tilth by further cultivation. Remove stones exceeding 50mm in any dimension. Sow approved grass seed mixture in accordance with supplier's recommendations during appropriate season and weather conditions. Lightly harrow or rake then roll and cross-roll with a lightweight roller.

Seed Mixtures

See planting schedule.

All seed mixtures to be sown at manufacturer's recommended rates.

TIMETABLE: New planting and seeding to be linked to the phasing of the development.

ESTABLISHMENT MAINTENANCE PLAN (YEARS 1-5)

Tree Planting Areas: Regular visits (Years 1-5) required to maintain all newly planted stock in a weed free condition. A 1m diameter ring around each individual plant is to be maintained in a weed free condition using a combination of repeated applications of an approved translocated systemic herbicide during the growing season followed by an approved residual herbicide application during late winter/early spring.

Planting generally: Any plants affected by frost heave or wind rock shall be re-firmed. Protective fencing, stakes, ties and tree guards are to be checked at each visit and adjusted, repaired or replaced as necessary. Other maintenance will include watering, pest and disease control as necessary to maintain healthy growth.

Replacement Planting: Any tree/shrub losses to be replaced in accordance with original planting schedule & specification.

Low Maintenance Grassland: Grass mowing to be carried out at 4 week intervals during growing season. All grass edges adjoining hard surfaces and structures shall be kept trimmed to maintain a tidy appearance (minimum 2 visits per annum).

Wildflower Grassland: 3 cuts during Year 1 (March, May, September) to establish sward. Thereafter to be topped annually in autumn (September-November) to a height of 150-200mm. A second cut may be required in spring (March-April). Pernicious weeds to be controlled by hand pulling, topping or spot treating with approved herbicides.

Use of Herbicides: Several alternative herbicides may be suitable and any which is used must be listed in the current British Crop Protection Council UK Pesticide Guide. The use of herbicides is governed by the Control of Pesticides Regulations 1986 and all herbicides are to be strictly applied in accordance with manufacturer's recommendations. All operatives must hold a current recognised User Certificate of Competence.

Any damage to existing trees or newly planted stock shall be made good at Contractor's own expense.

LONG TERM LANDSCAPE MANAGEMENT PLAN (YEARS 6-20)

Woodland Planting Areas

The main objective for the new woodland planting is to develop effective screening to the proposed development as well as making an appropriate contribution to local landscape character and biodiversity.

The intention is to manage the main woodland mix in the longer term to favour Oak as the climax species. Management responsibilities will rest with the landowners and their appointed contractors.

Once the new woodland planting has begun to provide effective shelter and screening, positive management can be carried out to encourage structural diversity and assist the conservation value of the woodland. Selective coppicing of the quicker growing species such as Aspen and Wild Cherry, can be carried out to create space for the Oak to develop. Some coppiced timber can be left in situ as this will add to the wildlife value of the woodland.

The first full thinning would be undertaken after 15-20 years. Again the emphasis would be on the thinning of the quicker growing Aspen and Cherry and other secondary species to favour the longer term Oak whilst still maintaining a diverse mix of secondary species for wildlife value.

PLANTING SCHEDULE

Native Tree Belt Planting

Code	Percentage	Species	Size	Spacing	Grouping
W1	10	Acer campestre (Field Maple)	600-800mm/1+1	2.0 m centres	5-10
	20	Populus tremula (Aspen)	800-1000mm/1+1	2.0 m centres	5-10
	10	Prunus avium (Wild Cherry)	600-800mm/1+1	2.0 m centres	5-10
	25	Quercus petraea (Sessile Oak)	600-800mm/1+1	2.0 m centres	5-10
	25	Quercus robur (Oak)	600-800mm/1+1	2.0 m centres	5-10
	5	Corylus avellana(Hazel)	400-600mm/1+1	2.0 m centres	5-10
	5	Crataegus monogyna (Hawthorn)	400-600mm/1+1	2.0 m centres	5-10
W2	25	Corylus avellana(Hazel)	400-600mm/1+1	1.5 m centres	3-5
	25	Crataegus monogyna (Hawthorn)	400-600mm/1+1	1.5 m centres	3-5
	25	Prunus spinosa(Blackthorn)	400-600mm/1+1	1.5 m centres	3-5
	25	Salix caprea (Goat Willow)	600-800mm/0/1	1.5 m centres	3-5

Hedge Mixes

Code	Species	Percentage	Size	Spacing	Grouping
H1	Crataegus monogyna (Hawthorn)	50	400-600mm/1+1	5/lin m	Row 1: 100%. Row 2: Infill
	Corylus avellana (Hazel)	35	400-600mm/1+1	5/lin m	Row 2: 5 - 10
	Acer campestre (Field Maple)	5	400-600mm/1+1	5/lin m	Row 2: 3 - 5
	Cornus sanguinea (Dogwood)	5	400-600mm/1+1	5/lin m	Row 2: 3 - 5
	Viburnum opulus (Guelder Rose)	5	400-600mm/1+1	5/lin m	Row 2: 3 - 5
H2	Carpinus betulus (Hornbeam)	100	400-600mm/1+1	5/lin m	

Individual Trees

Code	Species	Description	Height
T1	Acer campestre (Field Maple)	Standard (Rootballed)	2500-3000mm
T2	Alnus glutinosa (Alder)	Standard (Rootballed)	2500-3000mm
T3	Sorbus aucuparia (Rowan)	Standard (Rootballed)	2500-3000mm
T4	Sorbus aria (Whitebeam)	Standard (Rootballed)	2500-3000mm

Seed Mixes

Code	Supplier	Mix	Location	Sowing Rate
A4	Germinal	A4 (Low Mainterance)	General	35g/m²
WFG4	Germinal	WFG4(Neutral Soils)	Swale banks/service corridor	5g/m²
WFG9	Germinal	WFG9 (Wetland & Pond Areas)	Swale bottom	5g/m²

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Description: Tomlinsons Daines, Five Crosses Industrial Estate, Minera, Wrexham	Drawing Name: Soft Landscape Proposals	
	Dwg number: 1473.04	Rev
Drawn by: AM	Scale(s): 1:1000 @ A1 size	Date: 28/07/16