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LANDSCAPE AND VISUAL IMPACT ASSESSMENT

relating to

An area proposed for polytunnels at Groves Farm, Colworth, West Sussex (LPA ref BE/81/10)

on behalf of

The Hall Hunter Partnership

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1 Introduction and background

1.1 David Huskisson Associates (DHA) is a firm of Chartered Landscape Architects, established in 1987 and registered since then with the Landscape Institute. DHA has been a member of the Institute of Environmental Management and Assessment since 1992. The practice is Quality Assured to BS ISO 9001:2008. The directors are all Chartered Members of the Landscape Institute.

1.2 The practice has undertaken a range of landscape and visual assessment work for many clients including public bodies, private companies and individuals. The practice has experience in the assessment of polytunnels and has advised in connection with extensive areas at Tuesley Farm in Godalming, Surrey, for the Hall Hunter Partnership and on several sites in Kent for F W Mansfield and Son, for Mr Adam Shorter and for Mr Muhammad Rahmat. DHA has also acted for objectors to two areas proposed for polytunnels on sites adjacent to the Greensand scarp slope near Maidstone and at Mereworth.

1.3 DHA are now retained by The Hall Hunter Partnership to undertake a landscape and visual impact assessment of a proposal for an area of polytunnels on land known as Jack's Dyke forming part of Groves Farm, Colworth, West Sussex. It is understood that the application was registered as valid by Arun District Council (ADC) on 26th July 2010.

1.4 The application site lies at the southern end of the farm holding. A larger part of the farm lies in a neighbouring authority's area where two areas of polytunnels have been granted permission (LPA Refs O/08/027777/FUL and 0/09/00433/FUL).

1.5 The Jack's Dyke area would extend to about 12 Ha of polytunnels. No other building, either temporary or permanent is proposed as part of the application. Fruit grown on the site would be transported to Groves Farm.

1.6 The dimensions of the tunnels are shown on the Douglas Briggs Partnership plan 0810.12. Each tunnel row would be 7.8m wide. The frames would be set at 2.2m centres on telescopic legs which allow the height of the crest of the tunnel to be adjusted from about 2.8m in the spring and autumn up to about 3.9m in the summer.

1.7 The submitted substituted flood risk assessment by Envireau Water shows that the tunnels would be aligned in rows running nearly west to east in line with the natural gradual slope of the land, draining to an existing ditch augmented by new storage ditches and tunnel row storage. Thus no open water storage lagoons are proposed.

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1.8 By their letter of the 13th September 2010 Arun District Council (ADC) suggested that an Environmental Statement was required. ADC identified that they considered landscape, hydrological, biodiversity and habitat attributes as being potentially impacted by the proposals.

1.9 It is understood that the applicant does not accept this interpretation but nevertheless has undertaken to provide additional information. This report therefore seeks to address the landscape and visual effect of the proposals.

Local Plan and other relevant documents

1.10 The Arun District Local Plan 2003 was adopted on in April, 2003 and covers the period up to 2011. It forms a statement of Arun District Council's planning policies, which will be used as a basis for decision making in planning applications albeit certain policies no longer apply. However, in this instance, a saved policy of relevance to the site is Policy Area 10 Strategic Gaps. The application site lies in the Bognor Regis and Chichester Strategic Gap, as identified on the Local Plan Proposals Map and shown on DHA2.

1.11 Proposals for development within a Strategic Gap will be subject to the most rigorous examination and development will only be permitted if:

- *it is demonstrated to be necessary to meet the requirements of, or is consistent with, other policies of the Development Plan; and*
- *it would not compromise, either individually or cumulatively, the objectives and fundamental integrity of the strategic gap; and*
- *attention is given to the long term enhancement of the landscape, amenity and conservation value within the gap and, where possible, to the improvement of public access.*

1.12 The Local Plan also safeguards a corridor for a new road near the site and this is also shown on DHA2 by way of context.

1.13 Other relevant documents /sources include:

- The Countryside Agency, Countryside Character, Volume 7: South East & London, published 1999;

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- Strategy for the West Sussex Landscape (November 2005) published by West Sussex County Council;
- The West Sussex Landscape, Land Management Guidelines, Sheet SC9, Chichester to Yapton coastal plain.

Scope of Work

1.14 The assessment has involved both desk and site based work. An initial site visit was carried out 7 October 2010 in good weather conditions with a further visit on 6th January 2011 in poor weather conditions. The visits involved walking over the site, viewing the site from public vantage points on the A259 to the east and from the public rights of way network. Long distance views from the South Downs were not possible at the last visit due to the poor weather but representative viewpoints on the Downs had been inspected at the initial visit. These long distance views have been carefully considered as these now lie in the recently designated South Downs National Park.

1.15 The appraisal has sought to determine the local landscape and visual context of the site and to identify the key landscape features and visual attributes. It describes the site and the baseline landscape against which an assessment of the landscape and visual effects of the proposal has been made.

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2 Location, site description and context

2.1 As noted above, the application site extends to about 12.0 hectares. Its location in the wider context relative to the South Downs National Park is shown on **DHA 1** whilst the location and local context is shown on **DHA 2.**

2.2 The site lies about 0.5Km northwest of North Bersted, once a small hamlet but now part of the expanse of Bognor Regis, the centre of which lies a further 2.5km to the south east.

2.3 The Ordnance Survey Explorer Sheet 121 indicates that the site was formed of two roughly rectangular, elongated fields, aligned approximately north to south along their long axis. They were separated from each other by a drainage ditch but this has been filled in to create one large field. Ditches occur at the site boundaries. These flow north and eastwards from the site before entering a larger southerly flowing drain, the Aldingbourne Rife.

2.4 The site is not adjacent any public road or public right of way. The buildings of Groves Farm lie about 1.5 km to the north west of the site with the farm buildings being accessed via a farm road direct from the A259 Chichester Road. The nearest building is Primrose Cottage Kennels located approximately 200m to the northeast of the site.

2.5 The site appears virtually flat but in fact rises slightly to the south west.

Site boundaries

2.6 The south western site boundary is about 600m long. At its northern end it is open onto a ditch but after a short distance there is a variable shrubby band of vegetation about 2m high including thorn, dogwood and bramble and some small trees. The ditch is on the western side of this vegetation which extends south for about 250m. This boundary then becomes essentially open other than for a few individual small trees along the ditch. However, offsite on the western side of the ditch is an earth bank rising to about 2.5m above general ground levels which forms a bund around a farm water storage lagoon. This is set behind chain link fencing. South from this feature, the balance of the south western boundary is essentially open although there are some intermittent patches of thorn and bramble.

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2.7 The southern boundary is about 300m long and is marked by a generally well established outgrown hedgerow and tree line for most of its length. Trees include oak, field maple, and some willow and thorn are also present. The western end of this boundary is a stronger landscape feature than the eastern end which has fewer trees and is lower. Approximately mid way along this boundary, a relic section of the ditch that once divided the site remains along which some semi mature but stunted oaks occur.

2.8 The north eastern boundary is about 550m long and has the ditch on the site side and an intermittent hedge on the eastern side along the adjacent field which is also in the control of the applicant. This hedge is mainly comprised of thorn and dogwood and is in the order of 2.0m – 3.0m high. Clematis vitalba occurs sporadically.

2.9 The northern boundary is dog legged on plan and measures about 450m overall. Over the eastern section are some individual semi mature oaks trees, field maple and recent plantings of hedgerow species including thorn, now about 1m high gapping up this section of the boundary. One ash tree was noted. To the north is a grass farm access track and then the ditch. The grass track links eastwards to the kennels and joins the A259. About two thirds of the way along the northern boundary, the track passes through the hedge and the boundary planting becomes more established with a greater number of trees and stronger hedging. At the western end, where it meets the south western boundary, the site extends to form an apex.

On site features

2.10 Other than for the limited vegetation noted above that occurs around the boundaries, there is no vegetation of landscape or visual significance on the site.

Local Context

2.11 The balance of Groves Farm is in the applicant's ownership and most of the holding lies to the north, where other areas of consented polytunnels have been erected. As noted above, the field to the east of the site, which extends to the A259, is also in the holding. The character of fairly level or very gently undulating fields separated by ditches and variable quality hedgerows and trees, as noted at the site, extends over the whole farm area and much of the surrounding agricultural land, augmented in places by prominent poplar shelter belts and occasional small thickets and copses. Sporadic Holm oaks are notable features of the area, a non native species suited to maritime locations.

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2.12 The water storage lagoon abutting approximately one third of the site's south western boundary has already been noted. This separates the site from the cluster of buildings at Park Farm including one dwelling which has views of the site. To the south of the site and separated from it by a narrow field is the Orchard Caravan Park mobile home site, to the south east of which lie the residential areas on Brazwick Avenue, New Barn Lane and Winston Crescent.

2.13 To the east, the A259 Chichester Road is a heavily trafficked route with a mixture of farm buildings, occasional dwellings and commercial development scattered along it, including two car dealerships. The road alignment has been improved and former sections of the old route now provide large well used lay-bys with mobile catering units which are locally unattractive features in the road corridor.

2.14 East of the site and the A259 Chichester Road lie the extensive farm buildings of Babsham Farm and Elbridge Farm. The former open agricultural land south of Babsham Farm is currently being developed with housing thus significantly extending North Bersted.

2.15 West of Elbridge Farm and the A259, a Honda dealership on a former petrol filling station site is locally prominent and this is set in front of Primrose Cottage Kennels which are along the track that leads to the site. To the rear of the Primrose Cottage is an area of fenced kennel compounds and sheds which extend towards the site's north eastern corner.

2.16 Other than for the other areas of polytunnels on Groves Farm there is no development to the immediate north and northwest of the site until the Groves Farm buildings are reached whilst to the west, beyond Park Farm, there are several large areas of glasshouses at Runcton.

Wider context

2.17 The main feature of national landscape and visual interest, as discussed below, is the rising land to the north formed by the dip slope to the escarpment of the South Downs that forms a prominent backdrop to the coastal plain. The face of the rising ground is locally irregularly rounded and is characterised by some large areas of woodland. This area now lies in the recently designated South Downs National Park, the closest point of this designated area being near Boxgrove, some 5.8 Km from the site, with the higher parts of the dip slope being even further away to the north.

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2.18 Another feature of note is the spire of Chichester Cathedral that provides a focal point in the flat landscape at the toe of the Downs. It can be seen from the site and lies about 5.5 Km to the northwest.

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3 Topography and Visibility

3.1 **DHA 1** shows the site. It shows the setting of the site on the essentially flat ground of the coastal plan that extends south from the toe of the South Downs to the coast. The site is estimated to be at a level of about 3m Above Ordnance Datum (AOD). The levels in the locality only vary by a few metres with the older properties tending to occupy the shallow knolls at about 5 or 7 m AOD as at Babsham Farm and Morells Farm.

3.2 It is not until towards Chichester that the levels gradually rise but here they are only at about 11m AOD. These levels contrast with the South Downs which reach 206m AOD at St Roche's Hill near Goodwood Race Course and 245m AOD at Glatting Beacon.

3.3 The site visits have enabled a primary visual envelope of the site to be determined. It is shown in an orange broken line on **DHA 2**. Not all areas within the primary visual envelope will be exposed to views. Similarly there will be locations outside the primary visual envelope, for example viewpoints on the higher land in the South Downs National Park, which may potentially have views. The primary visual envelope represents those parts of the surrounding area from where it is considered that views of the polytunnels are most likely to be possible and which are considered most likely to experience a visual change as a result of the proposals.

3.4 It will be noted that the primary visual envelope generally has a well defined cut off. To the east it is formed by the line of the A259 Chichester Road and the properties along its eastern side. The westernmost houses being constructed south of Babsham Farm will define the envelope here. The views available from the A259 are essentially only fleetingly available through gaps in the hedgerow. In places the road is also set slightly below the flanking field levels and this also assists in screening.

3.5 Views would be clearer from the first floor windows of properties on the eastern side of the road but for these views, the road would be a major intrusive element, allied to the fact that it is usual practice to regard views from what are normally expected to be bedrooms or bathrooms as being less sensitive in terms of visual amenity issues. However, for precautionary purposes such views have not been discounted.

3.6 To the south, the visual envelope is mainly defined by the Orchard Caravan Park, the mobile homes of which can be seen from the site through the boundary vegetation in winter. To the east of this, the houses at the north end of Brazwick Avenue and to the west, Chalcraft Lane, define the balance.

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3.7 From near the junction of Chalcraft Lane with the A2166 Lower Bognor Road, the visual envelope boundary runs north and there are some filtered and some more open views available to the south western part of the site until Morells Farm is approached when the site becomes screened from the road. At Morells Farm the visual envelope is formed by buildings and vegetation but parts of Public Right of Way (PROW) 135, which runs north on a farm track from the farm, and PROW 134, south of Park Farm lie within the envelope.

3.8 Those sections of footpath that are considered to be exposed to an open view of the south western corner of the site are shown in a bold green chain notation on **DHA 2**. West of Park Farm, PROW 134 is screened by the farm buildings, machinery yard and a young shelterbelt on the north side of the path whilst, on the eastern side of the envelope, PROW 134 becomes screened by the Orchard Caravan Park.

3.9 North of Park Farm, the north western part of the visual envelope boundary is less well defined and includes the area of existing polytunnels and several intervening hedgerows and intermittent tree cover.

3.10 To the north, PROW 200 is considered to lie just outside the primary visual envelope as the footpath is on the north side of a well established poplar shelterbelt. Whilst fragmented winter views through the shelterbelt are possible, the line of sight is at right angles and thus in the summer, visibility would be even more restricted.

3.11 For those other viewpoints outside the primary visual envelope, two locations in the higher land in the South Downs National Park have been selected as representative views. These locations are indicated on **DHA 1**. The first one is from a viewpoint at about 170m AOD at a picnic location on Selhurst Park Road, approximately 10.5 km from the site. The second is from the public car park above Lavant Down but lower than nearby St Roche's Hill, 9.5km from the site and at a level of about 160m. Other higher viewpoints will occur at greater distances but the added distance means that less small detail is distinguishable in the view.

3.12 Like other vantage points in this higher tract of attractive countryside, these two view locations offer far reaching panoramic views over the coastal plain to the sea. Whilst the location of the site is just discernible in clear visibility, the views are quite complex in terms of their constituent components, with significant urban areas and other development such as glasshouses in view.

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3.13 By way of an overview, visually, the site is quite well contained at the local level and there are in fact a limited number of locations on either the public highway or on the local rights of way network where any part of it is in clearly open view. The views north east from PROW s 134 and 135 to the open south western corner of the site are the most obvious locations whilst from the A259, the views are fragmented. Some houses have views from first floor windows and the mobile homes at the Orchard Caravan Park have heavily filtered ground level views north through the intervening boundary hedgerows in winter.

3.14 The site is just discernible in long distance views from locations in the South Downs National Park. However from these elevated viewpoints significant areas of development and numerous other built features within the landscape can be seen, the site being a small element in the wider scale panorama.

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4 Landscape character

4.1 At the regional level the site lies in the extensive South Coast Plain (Joint Character Area 126) which lies between the dip slope of the South Downs and the English Channel. It stretches from Southampton Water in the West widening out to about 15km to form the Manhood Peninsula and Selsey Bill before tapering eastwards towards Brighton.

4.2 Key characteristic's of the South Coast Plain of relevance to the site and its immediate context are stated as:

- *Major urban developments including Portsmounth, Worthing and Brighton linked by the A27/M27 corridor dominate much of the open intensively farmed, flat, coastal plain;*
- *Trees are not a dominant feature - there are some small woods and a few windswept individual trees in the farmland or the occasional poplar shelter belt;*
- *A pattern of large arable fields, defined by low hedgerows, are often interspersed by horticultural glasshouse 'estates' and isolated remnants of coastal heath.*

4.3 With regard to the local character area in which the site lies, the West Sussex County Council Landscape Character Assessment identifies that the site lies in the Chichester to Yapton Coastal Plain character area (SC9). The land management guidelines are reproduced at **Appendix 1** from which it will be noted that some of the key characteristics are:

- *A low density of hedgerows and hedgerow trees with occasional shelterbelts;*
- *Large-scale arable farming and market gardening. Extensive farms with both traditional and modern farm buildings and silos;*
- *Clusters of glasshouses;*
- *Long views to Arundel, the Downs and to the distinctive spire of Chichester Cathedral;*
- *Frequent urban fringe influences of horse paddocks, light industry and disused airfields, with busy minor and major roads;*
- *The urban fringes associated with Bognor are particularly obvious, with sporadic urban development in suburban settlements of Tangmere, Barnham, Yapton and Westergate;*
- *Few trees or hedgerows.....although, where they do exist, they form prominent features.*

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4.4 With regard to landscape change, some of the issues of relevance are:

- *Loss of mature elm trees in the 1970s and 1980s due to Dutch Elm disease;*
- *Loss of floodplain and wet woodland due to changes in agricultural drainage practices;*
- *Loss of tree and hedgerow cover from agricultural intensification since World War II.*

4.5 With regard to landscape and visual sensitivities, some of the key sensitivities of relevance are:

- *Key views to the South Downs, Chichester Cathedral and Arundel;*
- *Fragmentation and loss of hedgerows and connections between hedgerow and woodland;*
- *Replacement of mature treescape.*

4.6 With regard to land management guidelines, some of the key sensitivities of relevance are:

- *Create a new, large scale tree and hedgerow framework which complements the open intensively farmed landscape, whilst maintaining significant views of Chichester Cathedral, the South Downs and local features;*
- *Maintain and strengthen field boundaries such as hedgerows and shelterbelts;*
- *Link up existing remnant hedgerows and tree lines to re-establish coherent field boundaries and wildlife corridors;*
- *Restore and strengthen the landscape of the gaps between settlements;*
- *Establish new vegetation features by the planting of hedgerows and tree clumps in field corners and along roadsides, especially those approaching settlements;*
- *Maintain, restore and enhance floodplain woodland and associated species, including native black poplar, where appropriate.*

4.7 All of the above characterisations are considered to aptly describe the intrinsic landscape character of the site and its immediate surrounding area. Furthermore they also provide firm guidance as to the appropriate form of the mitigation strategy.

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5 Landscape and visual mitigation

5.1 The mitigation strategy has been informed by the consideration of the landscape character, the setting of the site, the fact that locally the structure of the landscape has been weakened by substantial historic field boundary removal, and by the nature of the proposal.

5.2 The preceding section highlighted the importance of views to the backdrop of the South Downs and to the spire of Chichester Cathedral. Because of the limited height of the polytunnels and the fact that they would not be close to any public view point from which these important features can be seen, mean that these characteristics would not be affected by views being blocked.

5.3 Also, because of the limited height of the polytunnels, the most effective and appropriate mitigation would be the safeguarding and extension of the hedgerow pattern, judiciously augmented by individual hedgerow trees. Oak are common in the area, although they do not gain great stature because of the high water table. Thus oaks would be an appropriate species but augmented by field maple and black poplar, a species that is in national decline.

5.4 The main components of the mitigation strategy, which is recommended should be the subject of suitable conditions, are shown in diagrammatic form on **DHA 3**.

5.5 **DHA 3** also shows in diagrammatic form several elements of landscape work that, whilst not considered essential for the mitigation of adverse effects, would bring about worthwhile localised landscape and visual enhancements that would be appropriate and in keeping with the area. Taking a longer view, the applicant is encouraged to consider these additional, relatively modest works, as part of an ongoing whole farm management plan.

5.6 The mitigation strategy would establish a new native broadleaved hedgerow at the largely open south western corner of the site extending from the western end of the southern boundary north westwards until the site is screened by the rising land form of the offsite reservoir. This is proposed to provide a screen for the views into the site from PROW's Nos134 and 135 and from Chalcraft Lane and the Lower Bognor Road. Part of the additional non-essential work is the recommendation to extend this hedgerow north to join the extant hedgerow north of the reservoir thus strengthening this boundary in both landscape and biodiversity terms.

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5.7 The second element of the mitigation strategy would be carried out off site but on land in the applicant's control. It would involve the full gapping up of the hedgerow along the eastern drainage ditch on the eastern side of the site. Again it is recommended, but not considered essential, that similar work be undertaken to the short field boundary within this adjacent field and to the field's boundary alongside the A259.

5.8 The third element of the essential mitigation is the long term management of the balance of the existing site boundaries with localised gapping us as may be necessary, management being aimed primarily at strengthening the screening value and continuity of the hedgerow, whilst also fostering biodiversity.

5.9 The final element of the recommendations, albeit again not considered essential, would be to utilise three field corners the site, where polytunnel alignment would not be ideal, for the establishment of small copse features. Not only would these be of landscape value in providing replacement small woodland features, they would provide additional opportunity for some black poplar regeneration as well as enhancing biodiversity. The position of the two northern copses would, over time, mask a portion of the site in the longer distance views from the South Downs, albeit views that, in the circumstances of this application, are not considered to be critical or determining ones. The copses would also punctuate the application site relative to the consented areas of polytunnels to the north.

5.10 Should planning permission be granted, pre-commencement conditions should be imposed requiring the approval of a detailed landscape plan, specification and management strategy.

5.11 Overall, it is considered that the landscape strategy set out above would be robust and appropriate to the local character of the landscape and, once established, benefit the wider countryside in the locality. The benefits would be increased if the additional non-essential works identified were also implemented.

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6 Assessment

Identification of Effects

6.1 Effects on landscape character, value and visual amenity can arise from many causes, for example, perceived changes to:

6.1.1 the scale, grain and pattern of the landscape, for example by alien or engineered landform or out of context planting;

6.1.2 deterioration or erosion of the rural landscape by the urbanising effects of traffic, hard surfacing, structures and built development, lighting and signs and associated loss of tranquility;

6.1.3 views or loss of views between surrounding locations and the scheme.

6.2 The significance of landscape effects can be described as an evaluation of the value of the landscape against the magnitude of the effects that the proposal will have on that landscape. Similarly, the significance of visual effects can be described as an evaluation of the sensitivity of the visual receptor against the magnitude of the changes in the view resulting from the proposal.

6.3 Visual assessment is normally based on Winter Views at "Day 1" as these tend to represent the "worse case" views, particularly where mitigation is reliant on new planting. The situation at either "Year 10" or "Year 15" is also usually considered as this is deemed to be adequate time to have allowed for at least some benefit from mitigation by planting to have taken effect. In this case, "Day 1" has been taken to be when the tunnels are first covered which is understood to be from March or April, thus still when little screening is available from deciduous planting. The summer view in Year 10 has been adopted for the second assessment.

6.4 Effects can be positive (beneficial), negative (adverse) and are sometimes neutral.

Assessment methodology

6.5 The assessment methodology adopted follows current guidance, in particular Guidelines for Landscape and Visual Impact Assessment (GLVIA) published by The Landscape Institute and the Institute of Environmental Management and Assessment In 2002.

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6.6 The objective of the methodology is to set out a transparent assessment process, albeit one that inevitably still relies on experience and professional judgement.

6.7 The evaluation criteria and landscape and visual significance thresholds used for this assessment are set out in the following tables to which, where appropriate and marked *,a summary has been added to the table.

Table 1 * sets out the Thresholds for Landscape Receptor Value.

Table 2 * sets out the Capacity of the Landscape to accept change.

Table 3 * sets out Thresholds for Landscape Magnitude of Change.

Table 4 sets out Visual Receptor Sensitivity.

Table 5 sets out Thresholds for Visual Magnitude of Change.

Table 6 shows Significance of Effects Thresholds for either landscape effects or visual effects. Here the landscape receptor value or visual receptor sensitivity is correlated with the Magnitude of Change to give an effect ranking /range. Inevitably there is often a merging or overlap between rankings and / or the terms of the categorisation of effect.

Table 7 sets out a summary of the Landscape Effects assessment.

Table 8 sets out the Visual Effects assessment.

6.8 Landscape Value (or Landscape Importance) is defined in the GLVIA as:

"The relative value or importance attached to a landscape (often as a basis for designation or recognition), which expresses national or local consensus, because of its special qualities including perceptual aspects such as scenic beauty, tranquillity or wildness, cultural associations or other conservation issues."

6.9 Landscape Condition (or Landscape Quality) is defined in the GLVIA as being:

"based on judgements about the physical state of the landscape, and about its intactness, from visual, functional and ecological perspectives. It also reflects the state of repair of individual features and elements which make up the character in any one place."

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6.10 Landscape Capacity (or Landscape Sensitivity) is defined in the GLVIA as:

"The degree to which a particular landscape character type or area is able to accommodate change without unacceptable adverse effects on its character. Capacity is likely to vary according to the type and nature of the change being proposed."

6.11 GLVIA confirms (para 2.29) that the capacity (sensitivity) of a landscape is different from the importance or value of the landscape and thus these issues are dealt with separately. The degree to which a particular landscape can accommodate change will vary with a range of attributes including the pattern, scale and value of the landscape, visual enclosure / openness, location of visual receptors and the scope or appropriateness of mitigation. Capacity informs the magnitude of landscape change assessment. As will be appreciated from the definition given above, capacity is considered in relation to the development proposed.

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TABLE 1 *Thresholds- Landscape Receptor Value and Summary Assessment*

LANDSCAPE / TOWNSCAPE RECEPTOR VALUE	RANK	SUMMARY VALUE ASSESSMENT
EG: Important components or particularly distinctive positive character and may be susceptible to relatively small changes. Usually all National Parks / AONB's and some areas with County / District notations and some Conservation Areas and settings of some Listed Buildings. Probably limited minor detracting features. Landscape components may be nationally rare whilst locally abundant or locally rare but nationally abundant. Landscape condition likely to be fair to good.	High Value ↕	
EG: an area of moderately positive characteristics and possibly reasonably tolerant of changes, occasionally parts of AONB's, Conservation Areas and settings of some Listed Buildings, usually County / District notations, and with few detracting features. Landscape components not rare either nationally or locally. Landscape condition likely to be fair.	Medium (Good) Value ↕	It is considered that the **Landscape Value** of the site and its immediately adjacent area should be regarded **Low / Medium** , primarily on account of its poor condition, weak structure, lack of intactness, the increasingly intrusive effects from the A259 and encroachment of the urban edge near Babsham Farm and the Orchard Caravan Park.
EG: A relatively unimportant area, weak landscape structure or character, the nature of which is potentially tolerant of substantial change and probably has frequent detracting features. Landscape components common nationally and locally. Landscape condition likely to be fair to poor.	Low (Ordinary) Value ↕	
EG: A degraded landscape structure, characteristic landscape patterns and combinations of landform and landcover are masked by land use. Landscape components common nationally and locally. Landscape condition likely to be poor.	Poor Value*	

(* Poor value has been excluded from Table 6)

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6.12 In terms of landscape capacity the following evaluation criteria have been adopted.

TABLE 2 *Capacity of the Landscape to Accept Change and Assessment*

Evaluation Criteria	Capacity	Summary Capacity Assessment
A landscape, including topographic form, that would be unlikely to tolerate the change(s) envisaged which would be out of scale and out of character. Effective, in character, mitigation would be difficult to achieve, would be unlikely to enhance. Often highly valued.	**Low**	In its present state the site is considered to have **Medium** capacity for the development proposed on account of the lack of a strong and intact hedgerow or shelterbelt structure. The mitigation strategy would be wholly in character and once it becomes established, the capacity could possibly be considered Medium /High.
A landscape, including topographic form, that would be reasonably tolerant of the change(s) envisaged which themselves would not be wholly out of character and effective, in character, mitigation would be possible, but results may take time to be effective and could give rise to an element of enhancement. Usually moderately valued.	**Medium**	
A landscape, including topographic form, that would be likely to be tolerant of the change(s) envisaged which would be in scale and, if required, effective, in character, mitigation would be readily achievable and might enhance. Often of ordinary value.	**High**	

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TABLE 3 *Landscape Magnitude of Change - Thresholds and Summary Assessment*

MAGNITUDE OF CHANGE (Day 1 - excluding proposed mitigation)	RANK	SUMMARY MAGNITUDE ASSESSMENT
EG: Total loss or major alteration to key elements / features characteristics of the baseline i.e. predevelopment landscape and /or introduction of elements considered to be totally uncharacteristic when set within the attributes of the receiving landscape.	High Adverse	
EG: Partial loss of or alteration to one or more key elements / features / characteristics of the baseline i.e. predevelopment landscape and /or introduction of elements that may be prominent but may not necessarily be considered to be substantially uncharacteristic when set within the attributes of the receiving landscape.	Medium Adverse	
EG: Minor loss of or alteration to one or more key elements / features / characteristics of the baseline i.e. predevelopment landscape and /or introduction of elements that may not be uncharacteristic when set within the attributes of the receiving landscape.	Low Adverse	Allowing for its Medium capacity it is considered that development as proposed would result in a Magnitude of Change that would be **Low adverse** at Day 1. This would be expected to reduce over time as a result of the landscape mitigation
EG: Very minor loss of or alteration to one or more key elements / features / characteristics of the baseline i.e. predevelopment landscape and /or introduction of elements that are not uncharacteristic with the surrounding landscape.	Negligible/ No change	
EG: Very minor introduction of one or more key elements / features / characteristics of the baseline i.e. predevelopment landscape and /or introduction of elements that are not uncharacteristic with the surrounding landscape.	Low Beneficial	
EG: Moderate Introduction of one or more key elements / features / characteristics of the baseline i.e. predevelopment landscape and /or introduction of elements that are not uncharacteristic with the surrounding landscape.	Medium Beneficial	Allowing for its Medium capacity once the mitigation is effective after about 10 years it is considered that the Magnitude of Change that would be **Low Beneficial.**
EG: Substantial Introduction of one or more key elements / features / characteristics of the baseline i.e. predevelopment landscape and /or introduction of elements that are not uncharacteristic with the surrounding landscape.	High Beneficial	

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TABLE 4 *Visual Receptor Sensitivity*

TYPICAL VISUAL RECEPTOR SENSITIVITY	RANGE of RANKING	RECEPTOR SENSITIVITY ADOPTED IN ASSESSMENT
EG: some residential properties and most rural public rights of way, views from moving vehicles, all where view can be considered to be a primary feature / main aspect.	High ↕	**High** - Pedestrians equestrians and cyclists on rural rights of way and minor rural lanes and all viewers in the South Downs National Park
EG: some residential properties, recreational facilities, some rural and semi rural public rights of way, views from commercial premises or from moving vehicles, all where view is occasional / glimpsed / secondary feature.	Medium	**Medium** - Pedestrians and equestrians on suburban /rural fringe rights of way. Pedestrians on rural roads other than minor rural lanes or in the National Park. Residents in isolated rural dwellings.
EG: places of work, most suburban/ urban residential properties, some rural and most urban public rights of way, views from moving vehicles, where view is glimpsed / infrequent or adjacent features already detract or largely obscure.	↕ Low	**Low** - Pedestrians and equestrians on roads other than rural lanes and rural roads. Vehicle Travellers. Residents in settlements. Agricultural workers / office workers / industrial workers.

TABLE 5 *Thresholds- Visual Magnitude of Change*

RANKING	MAGNITUDE OF CHANGE (Day 1 - excluding proposed mitigation)
High ↕ Medium ↕ Low ↕ Minimal	EG: the majority of viewers affected / major change(s) in open direct close view or notable change in more distant view. Could be either adverse or beneficial.
	EG: many viewers affected / moderate change(s) in view, could be some fragmentation of view or sequence of views. Could be either adverse or beneficial.
	EG: few viewers affected / minor change(s) in view or very small changes in wide scale /panoramic view or oblique / fragmented views etc. Could be either adverse or beneficial or possibly neutral.
	EG: few viewers affected / change(s) in view barely discernible. Could be either adverse or beneficial but usually neutral.

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TABLE 6 *Significance of Effects Thresholds – Landscape or Visual Receptors*

	Landscape Value or Visual Sensitivity		
Magnitude of Change (Day 1 - excluding mitigation by new planting)	**Low**	**Medium**	**High**
High	Moderate Effect	Moderate / Substantial Effect	Substantial Effect
Medium	Slight / Moderate Effect	Moderate Effect	Moderate / Substantial Effect
Low	Minimal / Slight Effect	Slight Effect	Moderate Effect
No / Minimal Change	No Effect	No / Minimal Effect	No / Minimal / Slight Effect

- *Substantial adverse or beneficial effect* - where the proposal would cause a very significant deterioration or improvement in landscape value or appearance. Could be a determining issue in its own right.
- *Moderate adverse or beneficial effect* - where the proposal would cause a noticeable and clear deterioration or improvement in landscape value or appearance. Could be a determining issue, especially where combined with other similar rankings.
- *Slight adverse or beneficial effect* - where the proposal would cause a perceptible but small deterioration or improvement in landscape value or appearance. Unlikely to be a determining issue.
- *Minimal adverse or beneficial effect* - where the proposal would cause a barely perceptible deterioration or improvement in landscape value or appearance. Can be regarded as "de minimis" or "not material" and may thus be regarded as neutral.

Landscape effects -approach

6.13 The development proposals would not result in a direct physical loss from the landscape resource and could easily be reversible.

6.14 However, as the proposal is not time limited, the polytunnels would be more than a mere transient feature in the landscape. Considered in isolation, whilst erected and covered, they would neither conserve nor enhance the landscape. When not covered, the frames would still be visible, unless these were also to be dismantled. But this would be a wholly inappropriate and unbalanced way to consider and evaluate the

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proposal. The landscape effects should be looked at in the round with any identified harm from one element having the potential to be offset, in whole or in part by potential beneficial effects.

6.15 Thus consideration needs to be given to the landscape effects arising from the mitigation over time. The mitigation strategy would provide a suitably strengthened landscape structure, in keeping with the typical characteristics of the South Coast Plain, the hedgerows and tree planting containing the polytunnels more effectively than they would have done in the absence of mitigation.

6.16 Considered by themselves, the strengthened landscape structure and the associated long term management inputs that will be necessary to secure its establishment, which should be conditioned, would help secure the conservation and enhancement of the countryside.

Landscape effects assessment

Value

6.17 In overall terms, the site and some of its surroundings have suffered hedgerow loss and boundary changes as part of farm rationalisation, as well as the effects of unsympathetic or locally intrusive elements such as, for example, the Orchard Caravan Park and the exposed and rather stark new urban edge by Babsham Farm. Thus both the scale of landscape and its intrinsic character have been altered and eroded. The site and the local area are also undesignated in terms of their intrinsic landscape quality. In terms of its character, intactness, scale and setting, it is considered that the site should be ranked as having a **Low / Medium** landscape value (**Table 1**).

Capacity

6.18 The site is considered to have a **Medium** capacity (**Table 2**). However, having regard to the mitigation strategy, it is clear that the capacity of the landscape to assimilate polytunnels could be increased whilst being fully in keeping with the general characteristics and attributes of the wider Local Character Area SC9.

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Magnitude of Change

6.19 Taking account of the medium capacity arising from the weakness of significant containing landscape structure means that the development would be locally discernible but not wholly uncharacteristic when set within the attributes of the receiving landscape, given the intensively farmed nature of the area. This indicates that the Magnitude of Change would be **Low adverse** at "Day 1" (**Table 4**).

Significance of Landscape Effect

6.20 In terms of the Significance of Landscape Effect, (**Table 6**) it will be seen that a Low / Medium Landscape Value experiencing a Low adverse Magnitude of Change gives rise to a **Slight adverse** effect at "Day 1", ie. *"where the proposal would cause a perceptible but small deterioration in landscape value"*. This is considered unlikely to be a determining issue.

6.21 Over time, the beneficial effects arising from the establishing mitigation would increase. It is considered that after 10 years, the Magnitude of Change would be ranked as Low beneficial. **Table 6** shows that in a Low/ Medium Value Landscape, if a low beneficial change occurs, the effect would be would be ranked as a **Slight beneficial effect**, ie. *"where the proposal would cause a perceptible but small improvement in landscape value".*

TABLE 7 *Summary of Landscape Effects Assessment*

Landscape Value	***Capacity***	***Magnitude of Change***	***Significance of Effect at Day 1***	***By Year 10***
Low/ Medium	*Medium, but would be increased by mitigation strategy*	*Low adverse*	*Slight adverse*	***Slight beneficial***

6.22 Further enhancement would be secured by the implementation and long term management of the non-essential works indicated on **DHA 3**.

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Visual effects

6.23 The visual effects arising from the proposed development have been assessed from public vantage points on existing roads and the existing rights of way network for vehicle travellers and pedestrians.

6.24 An estimate of the visual effects that might be experienced from nearby dwellings is also given.

6.25 The assessment has assumed full coverage of all the tunnels at "Day1" and "Year 10" using uncoloured tunnel covering. Whilst glare can be caused in certain conditions this has not been assumed to be the case. When it occurs the visual effects would be more prominent, in particular for the longer overlooking views.

6.26 **Table 4** sets out the receptor sensitivity rankings used.

6.27 The Magnitude of Change thresholds are set out in **Table 5**. It varies as a function of distance, the proportion of the proposed development estimated to be in view and also has regard to the line and type of view, ie oblique, glimpsed or fragmented.

6.28 The findings of the visual assessment are set out in **Table 8** below.

TABLE 8 *Visual Effects Assessment*

Receptor, viewpoint and distance	**Sensitivity**	**Magnitude of Change**	**Significance of Effect at Day 1**	**Comment and Year 10 (summer) effect**
Pedestrians (and allowing for equestrians on bridleways)				
On A259 Chichester Road (250m+)	Low	Low	**Minimal / slight adverse** effect	Mitigated by eastern hedge and hedge along roadside. Probably largely **neutral** by Year10
PROWs 134 and 135 (400- 900m)	High	Low change	**Moderate adverse** effect	Reducing over time with screen planting to **neutral** or **slight beneficial** effect by Year10
PROW 200 north west of site. (900m)	High	No / Minimal change	**No/ Minimal /slight adverse** effect	Existing recently reinforced northern boundary planting will strengthen screening of what is a very limited view giving **slight beneficial** effect by Year 10.
A 2166 and Chalcraft Lane Farm (1km -1.5kmm)	Low	Minimal Change	**No effect**	Site discernible but change not material. Site would be screened by Year 10 by planting at south western site boundary. **Neutral.**

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Receptor, viewpoint and distance	Sensitivity	Magnitude of Change	Significance of Effect at Day 1	Comment and Year 10 (summer) effect
Residential properties (estimate of effects)- views from upper floors not discounted				
Primrose Cottage Kennels (300m)	Medium	Minimal	**Minimal adverse** effect	Very oblique view from first floor through /over eastern hedgerow which would be strengthened by Year 10 giving **slight beneficial** effect.
Orchard Caravan Park (100m- 600m)	Medium	Low	**Slight adverse** effect	Ground floor views only and screened by existing intervening vegetation. **Neutral** Year 10.
Properties on east side of A259 at Babsham Lane/ Babsham Farm including properties under construction (300 -400m)	Medium	Low	**Slight adverse** effect	Ground floor views considered screened. Views from upper floors overlook site. View significantly affected by presence of A259 in foreground. Some mitigation from eastern hedge. **Neutral** by Year 10.
Dwelling at Park Farm (300m)	Medium	Medium	**Moderate adverse** effect	Ground floor views considered screened. View from first floor. **Slight adverse** by Year 10.
Pair of cottages at Morells Farm. (900m)	Medium	Low	**Slight adverse** effect	Ground floor views screened by fencing. Views from first floor. **Neutral** by Year 10.
Receptor, viewpoint and distance	**Sensitivity**	**Magnitude of Change**	**Significance of Effect at Day 1**	**Comment and Year 10 (summer) effect**
Vehicle travellers				
On A259 Chichester Road (250m+)	Low	Low	**Minimal / slight adverse** effect	Mitigated by eastern hedge and hedge along roadside. Probably largely **neutral** by Year10
A 2166 and Chalcraft Lane Farm (1km -1.5kmm)	Low	Minimal Change	**No effect**	Site discernible but change not material. Site would be screened by Year 10 by planting at south western site boundary. **Neutral.**
Long Distance views from South Down National Park				
Viewpoints generally in excess of 9 km	High	No/ minimal change	**No / minimal /slight adverse** effect	Views dependent upon weather conditions but site is barely discernible. Possible effect not considered material in context of panoramic nature of view and the widely varying component parts. **Neutral.**
Others				
Agricultural workers and occupants at Groves Farm and Park Farm	Low	Minimal	**No Effect**	**Neutral.**

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6.29 Overall, the visual assessment shows that for public views the effects of the proposed development would only be ranked as moderate adverse from the limited sections of PROW 134 and 135 from where there are open views to the south western corner of the site. The assessment shows that these would be screened by Year 10 by the proposed boundary planting and that these effects would vary from neutral to slight beneficial effect at that time.

6.30 The assessment has considered the views from the distant higher ground in the South Downs National Park and has ascribed all receptors in the area a high sensitivity. However, the site is barely discernible and this together with the substantial distance of these views allied to their complexity of what is already visible in these wide panoramas indicate that the visual effects of the proposal would not be material, either on its own or cumulatively with other areas of polytunnels that can be seen in the vicinity.

6.31 In terms of views from private dwellings, whilst none have been inspected internally, the dwelling at Park Farm is considered to be most exposed, albeit from the first floor, and has been ranked as moderate adverse as a precautionary measure and not discounted. The property would allow views to be gained to the southern part of the site and as well as across the top of the raised earthwork of the reservoir to the central part of the site, with the upper parts of the polytunnels being in view. Whilst this part of the proposal would not be screened by the mitigation strategy, the southern portion would be partly screened by the south western hedgerow that is proposed. Thus the effect by Year 10 is considered likely to reduce to slight adverse.

6.32 The overall visual effects of the proposal are considered to be minor, localised and capable of mitigation by straightforward, in-character, planting proposals.

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7 Conclusion

7.1 This assessment has described the context of the site and the proposals.

7.2 The existing landscape character in the area has been eroded by loss of field boundaries and some intrusive development, consequentially it is considered to have only a Low /Medium Value. The site is exposed to a range of views but none are close range. There are some viewpoints on the public rights of way network to the south west and from the A259 to the east as well as from Chalcraft Lane and Lower Bognor Road. The site is in view from distant locations on the higher ground to the north which lies in the South Downs National Park.

7.3 The mitigation strategy has drawn from the West Sussex Land Management Guidelines and would be in-character. In time, this would give an improved degree of containment to the site and a slight landscape enhancement. Other non-essential works have been suggested which, if implemented, would augment the mitigation strategy and in time secure an additional landscape enhancement.

7.4 The landscape capacity of the site has been considered and has been ranked as medium. The magnitude of change at "Day 1" is considered to be low which would give rise to a **slight adverse** landscape effect at "Day1", becoming **slight beneficial** by Year 10 as a result of the maturing mitigation strategy.

7.5 The overall visual effects of the proposal are considered to be minor, localised and capable of mitigation by straightforward, in-character, planting proposals. The most notable effects from a public vantage point would give rise to a **moderate adverse** effect on a short section of two linked footpaths at "Day1". This would become **neutral** or **slight beneficial** by Year 10 as a result of the maturing mitigation strategy. The distant views from the South Downs National Park have been considered and have been assessed as not material in this instance.

7.6 The limited height and contained visual effects of the proposal allied to the mitigation strategy would ensure that there would be no conflict with the objectives of the strategic gap. Furthermore there would a small landscape enhancement in accordance with one of the criterion of strategic gap policy.

7.7 The mitigation strategy should be secured by pre-commencement conditions which should include full planting details, specification and long term management protocols.

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Appendix 1

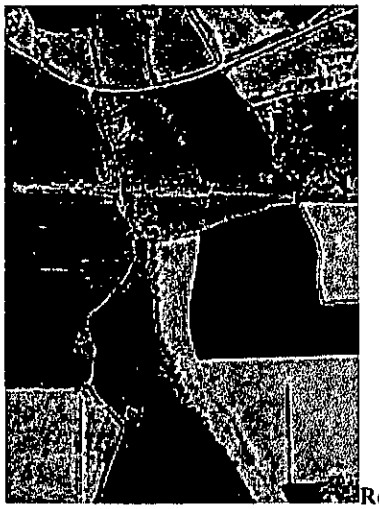
Extract from the West Sussex County Council

Land Management Guidelines

Sheet SC9: Chichester to Yapton Coastal Plain

Sheet SC9: Chichester to Yapton Coastal Plain

The West Sussex Landscape: Chichester to Yapton Coastal Plain - Land management guidelines



Regional Character Area - South Coast Plain

The area covered by the Sheet is derived from:

Chichester to Shoreham Coastal Plain (C1) Landscape Character Area as defined in the unpublished West Sussex Landscape Character Assessment (November 2003).

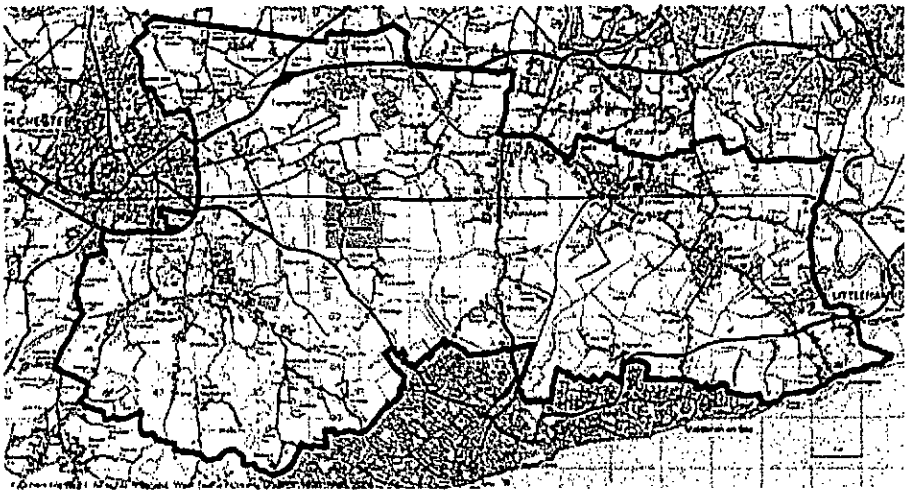
The guidelines should be read in conjunction with:

- County-wide Landscape Guidelines set out in A Strategy for the West Sussex Landscape (October 2005) published by West Sussex County Council.
- Climate Change Adaptation Management Plan, 2006.
- South Downs Shoreline Management Plan - Beachy Head to Selsey Bill (under review).
- Black Poplar Species Action Plan for Sussex, June 2005.

Overall character and key characteristics

Overall character

This Character Area extends from Chichester in the west to the edge of the Arun Valley in the east, and around Bognor Regis to the south. Over time a large part of this area has been reclaimed from the sea, and remains below the current high spring tide level. It comprises a mainly flat, open landscape crossed by meandering rifes. Dominated by highly productive arable fields and modern farm buildings, it has a fragmented hedgerow and hedgerow tree pattern. The spire of Chichester Cathedral is a widely visible feature. Rows of large light reflecting glasshouses, equestrian facilities, horse paddocks and industrial buildings, for instance in the Ford and Tangmere areas, are strong suburban elements. Where these occur, they create visual confusion and poor definition between town and countryside, and erode distinctive landscape character. Major suburban settlements in the area are Tangmere, Barnham, Yapton, and Westergate. In contrast, there are areas of a smaller scale, more varied rural landscape with quiet hamlets and traditional villages enclosed by small pastures.



Key Characteristics:

- Low lying flat open landscape
- Meandering rifes and straight drainage ditch systems, with associated unimproved grassland and edged by reed beds
- A low density of hedgerows and hedgerow trees with occasional shelterbelts
- Large-scale arable farming and market gardening. Extensive farms with both traditional and modern farm buildings and silos
- Clusters of glasshouses
- Scattered, historically nucleated villages with mixed building materials of flint, brick, half timber and stone
- Large farmsteads along roads, and on dead-end tracks
- Long views to Arundel, the Downs and to the distinctive spire of Chichester Cathedral
- The relatively open character of much of the area allows long views so that village church towers are important landmarks in views
- Frequent urban fringe influences of horse paddocks, light industry and disused airfields, with busy minor and major roads
- The urban fringes associated with Bognor are particularly obvious, with sporadic urban development in suburban settlements of Tangmere, Barnham, Yapton and Westergate
- Large gravel pit lakes around the edge of Chichester
- Few trees or hedgerows, partly as a result of Dutch Elm Disease, from the 1970s and the Great Storm of 1987 and overall high quality agricultural land, although, where they do exist, they form prominent features
- Light industry in the countryside at Ford and Tangmere

Historic features



- Area settled and resources exploited from prehistoric times onwards. Few visible prehistoric monuments apart from crop marks
- Distinctive medieval manor houses at Shripney and Barnham Court
- Important medieval churches with spires which distinguish this otherwise flat landscape
- Large regular fields, mostly the product of Parliamentary enclosure

- Remains of the line of the Arundel to Chichester Canal. This formed part of an important late 18th century barge route
- Excavations at Westhampnett, in advance of the bypass, demonstrated that Roman, iron age and earlier settlement evidence may lie just below plough soil level
- At Aldingbourne, beside the Rife, lie the remains of a medieval castle. In those days Aldingbourne Rife was a navigable waterway
- Disused airfields, such as at Tangmere and Yapton

Biodiversity



- Semi-natural habitats are scarce due to intensive arable agriculture
- Hedgerow pattern is fragmented with occasional isolated woods, for example, Hunston Copse (Site of Nature Conservation Importance, SNCI)
- Low lying species-rich grasslands adjacent to the rifes, artificial water bodies of Chichester canal (SNCI) and gravel pits together with remnant semi-natural broadleaved woodlands form pockets of high nature conservation importance
- Occasional species-rich meadows along rifes, for example, Kingston Manor meadows, Runcton
- Artificial lakes of the Chichester Gravel Pit complex are particularly important for wintering and breeding birds as the largest collection of inland water bodies in the county
- Occasional village ponds and greens provide local havens for wildlife
- Invasive floating pennywort in Pagham Rife

Change - Key issues



- Urban development pressures, especially in the gaps between settlements and on the edge of Chichester
- Major road improvements
- Loss of mature elm trees in the 1970s and 1980s due to Dutch Elm disease
- Loss of floodplain and wet woodland due to changes in agricultural drainage practices
- Loss of tree and hedgerow cover from agricultural intensification since World War II
- Conversion of agricultural buildings to light industrial uses
- Farm diversification and garden centres leading to introduction of signs and fencing
- Introduction of large scale industrial buildings and glasshouses with distribution sheds
- Derelict glasshouses
- Climate change may increase the risk of storm surges associated with flooding. This will have consequences for inter-tidal habitats, increasing pressure for possibly insensitive coastal defences
- Management and possible realignment of sea defences due to predicted sea level rises will have significant implications for landscape over the coming decades

Landscape and visual sensitivities



Key sensitivities are:

- Key views to the South Downs, Chichester Cathedral and Arundel
- Fragmentation and loss of hedgerows and connections between hedgerow and woodland
- Replacement of mature treescape
- Changes in drainage patterns
- Industry in the countryside associated with horticulture and light industry, resulting in large clusters of glasshouses and industrial buildings
- Loss of archaeological remains to ploughing
- Development on settlement edges of Bognor and suburban settlements of Tangmere, Barnham,Yapton and Westergate
- Loss of distinction between different settlements due to urban expansion
- Changes in transport infrastructure due to urban development pressures
- Managed retreat of the coastline may be particularly influential in the future, providing opportunities for the creation of new coastal and inter-tidal habitats, and could result in a more naturally functioning landscape

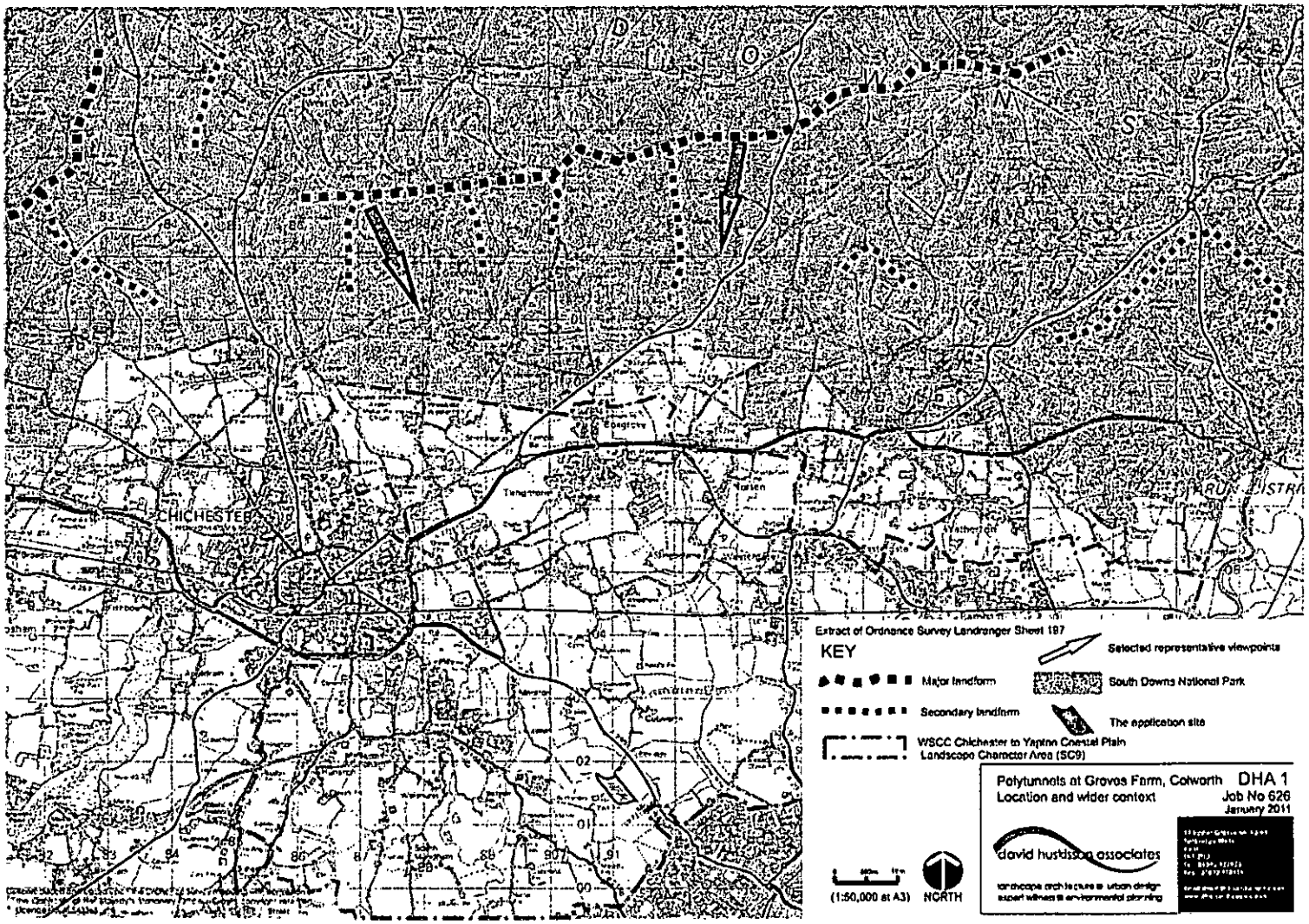
Land management guidelines



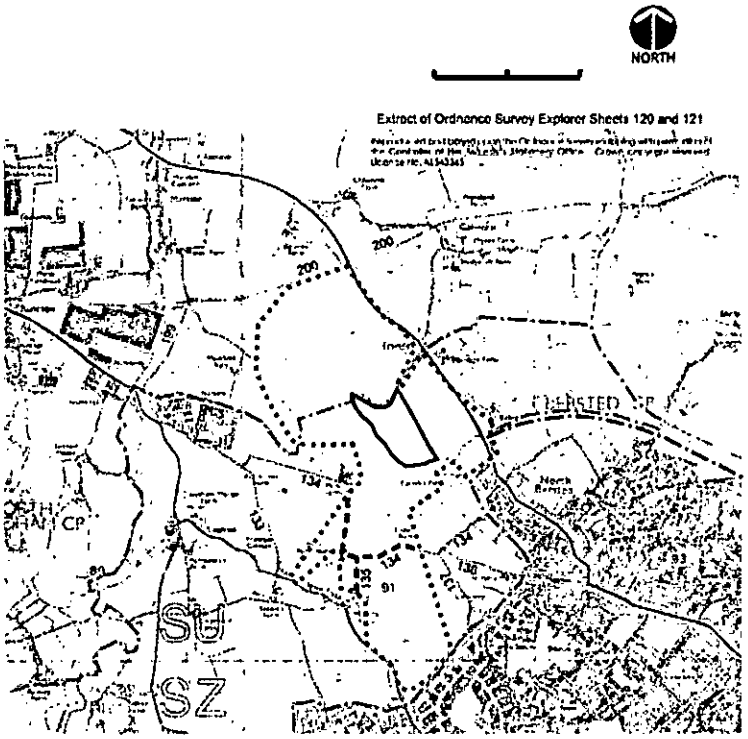
Conserve the significant views to Chichester Cathedral and the South Downs.

- Create a new, large scale tree and hedgerow framework which complements the open intensively farmed landscape, whilst maintaining significant views of Chichester Cathedral, the South Downs and local features
- Maintain and strengthen field boundaries such as hedgerows and shelterbelts
- Link up existing remnant hedgerows and tree lines to re-establish coherent field boundaries and wildlife corridors
- Encourage a full tree survey of the area with a view to conserving and managing existing feature tree groups and individuals
- Encourage and promote land management schemes to increase species rich grassland areas
- Promote management and establishment of grassland regimes of grazing, hay cutting and silage
- Establish landscape management plans for urban edges, notably Bognor Regis, to enhance the distinction between the urban and rural landscape

- Restore and strengthen the landscape of the gaps between settlements
- Encourage landscape enhancements around villages and on their approaches
- Establish new vegetation features by the planting of hedgerows and tree clumps in field corners and along roadsides, especially those approaching settlements
- Encourage the planting of shelter belts around horse paddocks, using native species, to give visual and wildlife benefits
- Promote sympathetic design of new road schemes, particularly associated with transport infrastructure for Bognor Regis
- Encourage the production of a colour and design study for new and existing agricultural and industrial buildings
- Encourage bold tree planting associated with large agricultural buildings, glasshouses and industrial buildings to attempt to assimilate them into the landscape more satisfactorily
- Restrict extensive areas of tree planting to poorer quality agricultural land
- Encourage the replacement or restoration of derelict glasshouses where these appear detrimental to the landscape
- Maintain and enhance the landscape and biodiversity of rifes and other existing habitats. Re-profile banks and encourage more diverse flora by lengthening clearance cycles
- Enhance the visual prominence of rifes through the establishment of waterside vegetation features
- Maintain, restore and enhance floodplain woodland and associated species, including native black poplar, where appropriate


CHICHESTER
Extract of Ordnance Survey Landranger Sheet 197
KEY
Selected representative viewpoints
Major landform
South Downs National Park
Secondary landform
The application site
WSCC Chichester to Yapton Coastal Plain Landscape Character Area (SC9)
Polytunnels at Groves Farm, Colworth DHA 1
Location and wider context
Job No 626
January 2011
david huddisson associates
(1:50,000 at A3)
NORTH




NORTH
Extract of Ordnance Survey Explorer Sheets 120 and 121
SU
SZ
289
Public Rights of Way of relevance
Primary visual envelope
Boundary of ADC Strategic Gap
Safeguarded line for road improvement
Site under development for housing
The application site
Polytunnels at Groves Farm, Colworth DHA 2
Location and local landscape context Job No 626
January 2011
david huskisson associates



0 100m 200m

NORTH

Proposed Mitigation Strategy

- Native broadleaved hedgerow planting, to south west corner of site, double staggered row at 400mm centres, with intermittent oak and field maple selected standards and some black poplar transplants
- Gap up existing offsite hedge planting, to east of site, double staggered row at 400mm centres, with intermittent oak and field maple selected standards and some black poplar transplants.

Note: All other vegetation at site boundary to be retained and managed to enhance screening with any gaps being planted with native hedgerow species.

Non essential planting that would strengthen landscape character

- Native broad leaved hedgerow planting to west of site opposite reservoir, double staggered row at 400mm centres
- Native broad leaved woodland planting, at field corners to create small copse. Poplar and alder as nurse species with oak and field maple.
- Local gapping up of existing offsite hedges to east of site, double staggered row at 400mm centres, with intermittent oak and field maple selected standards and some black poplar transplants

Polytunnels at Groves Farm, Colworth — DHA 3
Proposed mitigation strategy and possible enhancement works — Job No 626
January 2011

david huskisson associates

landscape architecture urban design
environmental planning

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1 View south from Selhurst Park Road,10.5 km from site. View point in South Downs National Park.



2 View south from near St Roche's Hill, 9.5 km from site View point in South Downs National Park.



3 View north from north eastern corner of site. Other polytunnels in view and Sourn Downs visible as backdrop. Traffic on A259 can be seen.



4 View south west across site. Earthworks to off site reservoir seen. Note open south west boundary to left of reservoir.



5 View south east through typical gap in site hedgerow to A259 and new development at edge of North Bersted.



6 General view south across site. Eastern hedgerow to left and larger trees along southern boundary in distance, left of centre of view.



7 View east along southern boundary showing relic field boundary. Area could be used to establish small copse.



7 View northwest along western boundary showing off site reservoir earthworks and fencing. Non-essential mitigation could provide hedgerow along boundary.

Photographs taken on 7th October 2010 and 6th January 2011.

Polytunnels at Graves Farm, Colworth DHA 4
Photographs Job No 626
January 2011

david huskisson associates

landscape architecture urban design
expert witness environmental planning