

# HAYLE RUGBY FOOTBALL CLUB

## LANDSCAPE AND VISUAL IMPACT ASSESSMENT

PREPARED FOR HAYLE COMMUNITY RUGBY FACILITIES LIMITED

LL-LVIA-169-DOC001

**lavage.lonsdale**



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## 1.0 Introduction

Lavigne Lonsdale Ltd, Urban Designers & Chartered Landscape Architects were appointed by Hayle Community Rugby Facilities Ltd to carry out a Masterplan and associated Landscape & Visual Assessment for a proposed rugby club development consisting of two phases. Phase one contains a main team and second team pitch, clubhouse, parking and ancillary facilities with associated groundworks and landscape scheme, and phase two contains training pitches, also with attendant landscape planting. The development would occupy an area of land adjacent to the A30 trunk road to the northeast of Hayle, Cornwall, and would provide a new home for Hayle Rugby club, about 0.5km to the northeast of their present ground. The aim of the landscape and visual assessment is to establish if there would be any adverse landscape and visual impacts as a consequence of the proposals, and to identify any mitigation measures necessary.

### 1.1 Site Location & Description

The town of Hayle lies on the north Cornish coast, and has developed from the two earlier port settlements of Foundry and Copperhouse, which have now been joined by later development. It is situated 6km southeast of St. Ives, and 9km southwest of Camborne, in West Penwith (refer to Figure 1). The site is located close to the northeastern edge of the built up area of Ventonleague, between the A30 road to the north, and a local distributor road to the south.

The land the subject of this application is currently in agricultural use. A public road, Carwin Rise, forms the southern site boundary, and the A30 Camborne to Penzance road encloses the site to the north. Planted and naturalised trees enclose parts of this road corridor, and also provide some screening of the northwestern corner of the development site. There is a petrol filling station to the west, and further agricultural fields to the east. There are no public rights of way crossing the site. The site is currently subdivided into two fields, enclosed variously by post and wire fencing, mature tree belts and hedges. The larger field to the southwest has recently been used for vegetable growing, and the other part field in the northeast was cropped for barley. The application area is approximately 7ha, and the application includes proposals for enhanced facilities for the rugby club, including a new clubhouse with bars and committee rooms, a covered stand, match and training pitches, and car parking.

### 1.2 Approach & Methodology

This report is split into three sections. The first part identifies the existing baseline description for the Site and the surrounding Study Area, the second part describes the proposals in more detail, and the third part identifies the potential effects of the proposals on the existing baseline situation.

The assessment was carried out by an experienced Chartered Landscape Architect with considerable experience of Landscape & Visual assessment on sensitive sites throughout the UK and Ireland. The method of assessment is based on the “Guidelines for Landscape & Visual Impact Assessment (Second Edition)”, by the Landscape Institute and the Institute of Environmental Management & Assessment, and includes:

- Definition of Purpose
- Desktop research. Reference information and consultees included:
  - OS 1:25,000 maps,
  - The Cornwall and Isles of Scilly Landscape Character Assessment 2007
  - Countryside Agency ‘New map of England’,
  - Aerial Photographs,
  - Topographic surveys of the site and surrounding area, plus the proposed layout drawings
  - Penwith Local Development Framework Core Strategy Preferred Options Report, February 2008.
  - Topic papers on Landscape and Seascape, and Sport Recreation and Open Space (June 2010)

Earlier local and strategic plans and `saved` policies  
English Heritage `Images of England` website

- Field Surveys. The site and surrounding area were visited in October 2009 and on three days in March 2010, plus later short visits to complete data gathering, such as to record night-time views.
- Presentation of findings in written and graphic form.

### 1.3 Definitions and Terminologies

The 'Site' is defined as the area subject to the detailed planning application, as also shown on Figure 1.

The 'Site Area and surrounds' refers to Site and the immediate area, from where the site is fully or partly visible. This has been simplified for the purposes of the accompanying figures to a rectangular area centred on the Site, as also shown on Figure 1.

The 'Study Area' is the area within which possible views of the proposed structures on site were tested. The limits to this area were initially defined from map data, chiefly contour information, from Zone of Theoretical Visibility (ZTV) mapping based on a digital terrain model, and from the study of aerial photography to identify existing vegetation cover. The outer limit of the study area is a circle of 3km radius, centred on the site. The choice of this area is further explained in sections 6.4 and 6.4.1 below.

## 2.0 Planning Policy Context

### 2.1 Central Government Guidance:

Planning Policy Statement 7 (PPS7 – Sustainable Development in Rural Areas)

PPS7 provides a more detailed expression of the aims and objectives set out in PPS1 for Rural Areas. It aims to raise the quality of life and the environment in rural areas by the promotion of:

*-Thriving, inclusive and sustainable rural communities, ensuring people have decent places to live by improving the quality and sustainability of local environments and neighbourhoods;*

*-More sustainable patterns of development by focusing most development in or next to existing towns and villages, ensuring that any greenfield land is used efficiently;*

*-Good quality, sustainable development that respects and, where possible, enhances local distinctiveness and the intrinsic qualities of the countryside; and*

*-Continued protection of the open countryside for the benefit of all, with the highest level of protection for our most valued landscapes and environmental resources.*

(Objectives, p.6)

### 2.2 Strategic Guidance:

At a regional level, and as from May 8th 2009, the planning body was the South West Strategic Leaders' Board, the executive arm of South West Councils. This body took over the implementation of policies formulated in the Regional Spatial Strategy for the southwest, the final version of which was due to have been published in June 2009. Following the May 2010 General Election, the Coalition Government announced its intention to revoke Regional Strategies with immediate effect on the 6th July 2010, with the legal process for doing so being part of their proposed 'Localism Bill'. As a result, Regional Strategies no longer form part of the Development

Plan; however, evidence used in the compilation of the revoked RSS can be used by local planning authorities in the consideration of planning applications.

Section 7 of the draft RSS contained policies relating to protecting and enhancing the Region's natural and historic environment (ENV1), and using landscape character assessments to support the protection and enhancement of local landscape character (ENV2). These issues are being addressed and brought into effect via the current and emerging Development Plan Documents referred to below.

One of the documents supporting the draft RSS for the Southwest is entitled 'Culture and the Regional Spatial Strategy for the Southwest'<sup>1</sup>. This assesses the importance of cultural facilities (including sport) to the region, and recommends a more planned approach to their provision. The report is intended to inform local authorities and others involved of the key strategic considerations for the spatial development of the cultural and creative sectors in the region. It notes *inter alia* that the Region's wide range of sports facilities and venues encourage 575,000 people to participate in sport and physical activity each year, and that 34% of the South West's population participate in sport at least four times a month (para. 3.4, p.11). Sports provision also has significant health and economic benefits for the region, to which the proposed new rugby club and its facilities would contribute.

### **Structure Plan**

The site is covered by the Cornwall Structure Plan 204 (adopted 6th September 2004), which replaced the previous Structure Plan adopted in 1997. Policies from the SP are 'saved' until superseded by the new Development Plan Documents drawn up by Penwith District Council.

Saved policies in the Structure Plan having relevance to the proposed development are as follows:

#### **Policy 1 Principles for Sustainable Development** (extracts)

*"Development should bring about a long term and sustainable improvement to Cornwall's economic, social and environmental circumstances without harming future opportunity.*

*Development should be compatible with:*

- *The conservation and enhancement of Cornwall's character and distinctiveness;*
- *The regeneration of towns and villages in meeting the needs of their population and the surrounding area;*
- *Access for all sectors of the community to ... adequate services and facilities; and meeting needs where they arise"*

#### **Policy 2 Character areas, Design and Environmental Protection** (extracts)

*"The Quality, character, diversity and local distinctiveness of the natural and built environment of Cornwall will be protected and enhanced. Throughout Cornwall, development must respect local character and:*

- *Retain important elements of the local landscape, including natural and semi-natural habitats, hedges, trees and other natural and historic features that add to its distinctiveness;*
- *Contribute to the regeneration, restoration, enhancement or conservation of the area;*
- *Positively relate to townscape and landscape character through siting, design, use of local materials and landscaping;*
- *Create safe, aesthetically pleasing and understandable places*

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<sup>1</sup> Elson M. and Downing L. (2005) 'Culture and the Regional Spatial Strategy for the Southwest', Department of Planning, Oxford Brookes University, Final Report January 2005.

*Local plans should define Character Areas to inform planning decisions taking into account Regional and County-wide landscape assessments.*

... “

Within the limitations of the development site, the development proposals reflect this desire to integrate environmental values with land use, sporting and community needs. For example, significant new native tree and shrub planting is proposed along the site boundary with the A30 and around the new pitches to mitigate off-site views of the development, and characteristic local features such as a Cornish hedge will be created on the eastern boundary.

**Policy 13, Tourism and Recreation** (extracts)

*“The quality and opportunity for tourism and recreation should be enhanced by improvements to the existing resource and through appropriate new provision.*

*Development should seek, in the first instance, to improve existing tourism and recreation sites and infrastructure in sustainable locations. Major development should be in, or well related to, towns. Proposals that support the Plan’s regeneration priorities will be encouraged.*

*Outside towns and villages development should be limited to accommodation and facilities that could not, reasonably, be within them...*

The new facilities for Hayle Rugby Club would be well related to their catchment area, and would support this policy through the provision of enhanced new training and match pitches, plus an improved clubhouse.

**2.4 Local Guidance:**

The site is covered by the Penwith Local Plan, adopted 2004, which is now being superseded by new Development Plan Documents, but most of its policies are “saved” until the new Local Development Framework comes into effect. The application of these new LDF documents to the proposed development is considered in section 2.5 below.

**Planning and Landscape designations**

Study Area (Fig. 2)

In the wider study area, the SSSI, AGLV and LNR designations extend over other parts of the dune coast. Two Scheduled Monuments occur at Trevarnon Round and a nearby earthwork, 1 to 1.4km north of the site. Land within the urban area of Hayle is included in the World Heritage Site focussed on the Hayle estuary and harbour, which extends to within 0.5km of the western site boundary.

Site and Surrounds (Fig. 3)

There are no categories of protected land or scheduled sites within the area of the proposed development. In the immediate surroundings, Loggan`s Moor on the north side of the A30 trunk road is scheduled as an SSSI, while an area of the towans to the north is also covered by part of the Halsetown and St. Ives Bay Area of Great Landscape Value.

Saved policies from the Adopted Local Plan relevant to the landscape and visual impact assessment of the development proposals for Hayle Rugby Club are as follows:

**Policy ST-1: DEVELOPMENT WILL BE FOCUSED ON THE MAIN URBAN CENTRES OF PENZANCE/NEWLYN, ST. IVES (INCLUDING CARBIS BAY) AND HAYLE TOGETHER WITH, IN THE CASE OF SERVICED INDUSTRIAL LAND, THE ST. EARTH STATION AREA.**

The development site is close to the northeastern part of the existing settlement of Hayle (Ventonleague), and accords generally with this policy.

**Policy GD-1: DEVELOPMENT SHOULD BE INTEGRATED WITH ITS SURROUNDINGS IN TERMS OF SCALE, SITING AND DESIGN AND BE IN KEEPING WITH THE CHARACTER OF THE DISTRICT.**

Whilst the scale and orientation of the individual pitches are controlled by the requirements of the game, the overall design of the proposed development and its associated clubhouse and landscape have been carefully considered in order to accommodate the facilities in the local area and to minimise adverse landscape and visual impacts, as is further explained in the remainder of this assessment.

- Policy GD-2: (Extracts) THE DESIGN AND LAYOUT OF DEVELOPMENT SHOULD:-**
- (I) RESPECT TRADITIONAL PATTERNS OF DEVELOPMENT AND BUILDING STYLES, FORM AND DETAILING;**
  - (II) INCORPORATE MATERIALS THAT ARE IN KEEPING WITH THE LOCALITY;  
AND WHERE APPROPRIATE:-**
  - (VIII) RETAIN AND INCORPORATE EXISTING TREES AND OTHER FEATURES WHICH CONTRIBUTE TO THE CHARACTER AND VALUE TO WILDLIFE OF THE SITE OR TO THE AMENITY OF THE SURROUNDING AREA;**

The site is currently arable farmland of limited wildlife value, and the development would bring with it significant new tree and shrub planting, plus a new surface water swale, all of which would greatly enhance local wildlife potential. Only small losses of landscape features (hedges and small trees) would be required to form the new site entrance and layout, while a section of field hedge within the site would be re-created along the northern boundary. The proposed club house would also respond to the “barn” like character of the buildings associated with Carwin Farm.

- Policy GD-3: PROPOSALS FOR DEVELOPMENT SHOULD WHERE APPROPRIATE INCORPORATE LANDSCAPING AND PLANTING WHICH REDUCES THEIR IMPACT ON THE ENVIRONMENT AND WHICH REFLECTS THE CHARACTER OF THE SURROUNDINGS AND PROVIDES SCREENING SHELTER AND INTEREST. WHERE PRACTICABLE, SUCH LANDSCAPING AND PLANTING MUST BE CAPABLE OF SUPPORTING A VARIETY OF SPECIES AND INCLUDE PROVISION FOR WILDLIFE AND OTHER CREATIVE CONSERVATION MEASURES.**

The submitted site layout proposals show significant native tree and shrub planting and enclosing hedges, to screen and enclose the match and training pitches, all in accordance with this policy and in accordance with the recommendations of the consultant ecologist.

- Policy GD-4: PROPOSALS FOR DEVELOPMENT WILL NOT BE PERMITTED WHERE THEY WOULD CAUSE SIGNIFICANT HARM AS A RESULT OF INADEQUATE PROVISION FOR:-**
- (i) SEWERAGE, SEWAGE TREATMENT, SURFACE WATER DRAINAGE AND WATER SUPPLY;**
  - (ii) THE PREVENTION OF NOISE, LIGHT, AIR OR WATER POLLUTION;  
OR**
  - (iii) THE PREVENTION OF FLOODING, ON SITE OR ELSEWHERE.**

There is a natural fall in levels of about 13m between the eastern and western ends of the site, and the submitted proposals show how the site would be levelled and terraced in order to accommodate the pitches and other facilities. A full scheme of foul and surface water drainage forms part of the proposals, and the likely impact of floodlighting and its mitigation forms part of this visual impact assessment.

**Policy GD-5: PROPOSALS FOR DEVELOPMENT WILL ONLY BE PERMITTED WHERE THE SAFE MOVEMENT OF TRAFFIC CAN BE ACCOMMODATED WITHOUT THE NEED FOR ALTERATION TO THE PROPOSED ACCESS OR THE ROADS LEADING TO THE SITE THAT WOULD HAVE A SIGNIFICANT ADVERSE EFFECT ON THE CHARACTER OR AMENITY OF THE SURROUNDING AREA.**

The principal and secondary accesses off Carwin Rise would be designed to meet the required highway standards, and would not significantly affect the amenity of the surrounding area.

**Policy CC-1: DEVELOPMENT WILL NOT BE PERMITTED WHERE IT WOULD SIGNIFICANTLY HARM THE LANDSCAPE CHARACTER, AMENITY, NATURE CONSERVATION, ARCHAEOLOGICAL, HISTORIC OR GEOLOGICAL VALUES OF THE COAST AND COUNTRYSIDE.**

The site is currently in agricultural use, and is adjacent to a trunk road and an area of retail and service development. Sports development on this site, close to its catchment area, would support policy CC-1 both in its own characteristics and by avoiding development on a more sensitive site elsewhere.

Impacts on views and on the character of the surrounding landscape are fully assessed in this document, as required by paragraph 6.3.7 of the Plan text.

**Policy CC-5: DEVELOPMENT WILL NOT BE PERMITTED WHERE IT WOULD CAUSE SIGNIFICANT HARM TO THE CHARACTER AND AMENITY OF THE AREAS OF GREAT LANDSCAPE VALUE.**

At its closest, the boundary of the Upton Towans AGLV lies about 300m northwest of the site boundary, beyond the A30 and the B3301 roads. The proposed development would retain most of the site as green space, and with its densely planted boundary zone would not have a direct conflict with this policy.

**Policy CC-7: PROPOSALS FOR DEVELOPMENT WHICH WOULD SIGNIFICANTLY HARM THE NATURE CONSERVATION VALUE OR GEOLOGICAL INTEREST OF A SITE OF SPECIAL SCIENTIFIC INTEREST WILL NOT BE PERMITTED.**

**Policy CC-8: (Extracts) DEVELOPMENT WILL NOT BE PERMITTED WHERE IT WOULD SIGNIFICANTLY HARM THE NATURE CONSERVATION OR GEOLOGICAL INTEREST OF AREAS OF GREAT SCIENTIFIC VALUE, ...**

The landward boundaries of both SSSI and AGSV designations at Loggans Moor lie along the northern side of the A30, opposite the site. Due to the nature of the proposed development, including the landscape scheme, and the intervening trunk road, no adverse landscape or visual impacts on these designations are predicted to arise.

**Policy CC-10: (Extracts) PROPOSALS FOR DEVELOPMENT WHICH WOULD HAVE A SIGNIFICANT ADVERSE EFFECT ON THE INTEGRITY OR CONTINUITY OF LANDSCAPE FEATURES AND HABITATS OF MAJOR IMPORTANCE FOR WILD FLORA AND FAUNA WILL NOT BE PERMITTED.**

...

Apart from the relocation of one section of field boundary within the site, and the boundary hedge along Carwin Rise, no significant landscape features or habitats would be affected by the proposed development, and some new landscape features (e.g. native tree plantings and boundary hedgebanks) would be created.

**Policy CC-13: TREE PLANTING AND HEDGEROW SCHEMES WHICH ARE IN KEEPING WITH THE CHARACTER OF THE LANDSCAPE WILL BE ACCEPTABLE SUBJECT TO:-**

- (i) THE USE OF NATIVE SPECIES WHERE APPROPRIATE AND
- (ii) APPROPRIATE AFTERCARE AND MANAGEMENT MEASURES.

The proposed site landscape has been designed to accord with this policy.

**Policy R-1: (Extracts) THE PROVISION OF NEW OR IMPROVED RECREATIONAL AND SPORTS FACILITIES WILL BE PERMITTED IN OR ON THE EDGE OF TOWNS ... PROVIDED THAT:-**

- (I) THE PROPOSAL IS IN KEEPING WITH THE CHARACTER AND AMENITY OF ITS SURROUNDINGS ...

Although the proposal affects an area of agricultural land, the site is adjacent to a major traffic route and retail/service area, and is well connected to nearby residential areas through the inclusion of a new footpath, cycle path, coach parking and car parking. The development and site landscape are designed to add to the amenity of the locality, and to avoid conflict with local landscape character.

**Policy R-5: (Extracts) PROPOSALS FOR RECREATIONAL FACILITIES WHICH INVOLVE THE USE OF LAND IN THE COUNTRYSIDE WILL BE PERMITTED PROVIDED THAT:-**

- (i) THERE WOULD BE NO SIGNIFICANT ADVERSE IMPACT ON THE CHARACTER OF THE LANDSCAPE;

...

- (ii) THE SITE IS CAPABLE OF BEING EFFECTIVELY SCREENED BY LANDFORM, TREES OR PLANTING

...

**THE LIGHTING OF OUTDOOR FACILITIES IN OPEN COUNTRYSIDE WILL NOT BE PERMITTED WHERE IT WOULD RESULT IN LIGHT POLLUTION OR ADVERSELY AFFECT THE CHARACTER OF THE COUNTRYSIDE.**

The detailed assessment of likely impacts on landscape character is given below in section 6.2, and an assessment of visual impacts, including from artificial lighting, is in sections 6.4 and 6.5.

## 2.5 Penwith Local Development Framework (LDF)

The Penwith LDF Core Strategy 2006-2026 Preferred Options Report was published for consultation in February 2008. Policies within this DPD which are relevant to the proposed development, and which the proposals take into account, are as in the following table:

**Table 1: Core Strategy Preferred Options [PO]– Strategic Objectives and Policies**

<b>SO/Policy Reference</b>	<b>Scope and Content</b>
<b>Core Strategy Objectives</b>	
Vision Outcome 4b	To provide access to safe, well-designed recreational facilities for all residents, especially the young
Vision Outcome 6c	To ensure that development is of a scale and design that is in keeping with the special character and qualities of the District and its specific location.
<b>Development Strategy [DS]</b>	
PO DS 1: Infrastructure	<i>Development to be dependent the sufficiency of existing or planned local infrastructure.</i>
<b>Core Strategy [CS] Policies</b>	

PO CS1: Sustainable Development Principles	<i>CS policies to require proposals to promote sustainable development, including modes of travel, health of communities, efficient use of land, and avoidance of detriment to environmental resources.</i>
PO CS4: Principles for the natural Environment	<i>All developments over 500m<sup>2</sup> to produce a biodiversity survey; manage relationship between development and the natural environment to minimise risk; encourage improvement of biodiversity;</i>
PO CS21: Open Space, Recreational Land and Facilities	<i>Development proposals not to result in a loss of open space or facilities, unless replacement facility provides a net benefit to the community in terms of quality, availability and accessibility. New facilities will be encouraged if of appropriate scale and design, if they do not increase light pollution in open countryside, avoid adverse effect on neighbouring land uses, and enhance biodiversity links.</i>
PO CS24: Design of new Development	<i>New development to achieve high quality, by conforming to principles relating to local character and building form, natural environment and biodiversity, efficient use of land and resources.</i>

In relation to the above policies, the proposed development at Carwin Rise seeks to preserve boundary hedgerows and trees on site and to relocate a section of hedge bank from within the site to the northeastern boundary. Due to the need for safe visibility splays at the site entrance, there is also a need to relocate the hedgerow along Carwin Rise on a slightly different alignment. The scheme would also add a significant element of new tree, shrub and hedgerow planting, create high quality new sports facilities which will add to the range and variety of opportunity for sport and recreation in the vicinity, and achieve a development that delivers the required quality external public environment. The development is on greenfield land, but is already partly screened by existing vegetation and landform, and would reduce the need for development on less appropriate sites elsewhere.

In terms of light pollution, there is already a significant amount of light source from the A30 junction, retail and commercial parks and residential areas around Hayle for which this site is associated with. This is covered further in Section 6.5.

Since the publication of the Core Strategy Preferred Options report, a number of Topic Papers have been published for consultation. Two of these, which have relevance to the proposed development, are as follows:

### **Landscape and Seascape (Draft Version 2 – June 2010)**

Issues identified in this topic paper include:

- Spatial Planning Issue LS1 – Explore how the Core Strategy (CS) could ensure that landscape and seascape quality and local distinctiveness are maintained and enhanced throughout the county.
- That the CS can require landscape and seascape to be taken into account in the location of development.
- A significant amount of development is likely to be located on the edge of existing settlements and the CS can provide a strategic approach to green infrastructure management.
- That light pollution destroys our view of the night sky and has a harmful impact on the landscape, and should be controlled through better design.

### **Sport, Recreation and Open Space (Draft Version 2 – June 2010)**

Issues identified in this topic paper include:

- Spatial Planning Issue SROS1 – the Core Strategy should ensure the retention and provision of high quality accessible open spaces and recreational and sports facilities.
- That the CS can allocate sites for the provision of open space; and ensure that development does not have any negative impacts on the natural and coastal environments.
- *“The scale of new development required to meet the needs of population growth means that there is likely to be pressure to develop on open spaces ... If a need to remove existing spaces is justified it is important to ensure that any loss of open space, sport and recreation facilities is adequately compensated for through like for like replacement or provision of similar community value.” (p. 8)*

## **3.0 Baseline Existing Situation**

### **3.1 Landscape**

#### **3.1.1 Topography & Drainage**

##### Study Area (Fig. 04)

The main topographic feature in the study area is the extensive dune coast on the southeast side of St. Ives Bay, between Hayle Towans and Gwithian, backed by a landform of rounded hills and small valleys which rises to about 100m AOD at Wheal Alfred, 2km south of the site. The main watercourse in the study area is the River Hayle, which flows north into Hayle harbour at Griggs Quay. Tributary creeks and stream valleys run into the harbour from Loggan`s Moor and Hayle. Away from these valleys, the topography consists of rounded hills separated by small streams.

Some parts of valley bottoms are clothed with wet woodland associated with ponds, for example upstream from Angarrack. Roads and lanes within the study area are frequently enclosed by high vertical hedges, particularly at lower levels, affording only occasional views out across the landscape. Some sections crossing hill tops have a more open aspect.

The site lies between about +11m and +25mAOD, with land rising to the south to +99m AOD within 2.5km, above Wheal Alfred.

##### Site & Surrounding Area (Fig.05)

The site lies on a west-facing slope, falling from about +25m AOD in the east to about +11m AOD in the west down to a small stream along the western boundary. The site is enclosed on the northern boundary by the A30 trunk road which is in part in a cutting with verges and tree lines adjacent to the site. Beyond the main road lies an area of grassy moor, and beyond that the B3301 road and then the high dunes that back the beach of St. Ives Bay.

Outside the site, levels fall away to the southwest and northwest into grass and heather moor, with the existing retail and service premises accessed off the A30 roundabout prominent to the west. To the east and southeast, the land rises towards the top of Angarrack Hill, at a height of +85m AOD. The agricultural land classification has recently been identified as Grade 3b predominantly.

### **3.1.2 Vegetation Cover**

#### Study Area (Fig. 06)

The predominant vegetation cover in the study area is a mixture of arable and pasture, in small to medium sized fields enclosed mostly by hedges and tree belts that define the narrow lanes and tracks within the area. Northwest of the site is an extensive area of dunes, partly developed for holiday accommodation, but mostly under grassy dune vegetation, protected for its conservation and scientific interest. Tree cover is generally scattered within the study area, with some larger areas of valley-bottom woodland, particularly south of Angarrack. The A30 road corridor is enclosed by tree belts, and there are also belts and isolated clumps at higher elevations. The higher elevations within the study area tend to be more open, with fewer trees and generally lower hedges, allowing more open views.

#### Site & Surrounding Area (Fig. 07)

The site & surrounding area is typical of the wider study area, being partly under arable cultivation and partly under a vegetable crop at the time of the site assessment, with significant existing development close by to the west. The site is enclosed by a mixture of low hedge banks and taller hedges with intermittent tree belts. There is a short section of Cornish hedgebank within the northern part of the site. The tree belt alongside the A30 is denser and more continuous around the retail and service area to the west of the site, less continuous along the site boundary itself. Fields surrounding the site were generally under arable cultivation at the time of survey, with those to the north of the A30 being pasture or unmanaged grassland.

The application site is currently subdivided into two fields, with the smaller northeastern portion under cereals. The site is enclosed on its southern boundary next to Carwin Rise by an established field hedgebank which has been cut regularly to a low profile. Its northern boundary is marked by the roadside hedge and planting along the A30, which merges at its western end into more dense tree belts. The northeastern site boundary is marked in part by a hedge, but about two-thirds are not marked by any physical feature where the boundary cuts across the open field.

### **3.1.3 Land Use**

#### Study Area (Fig. 08)

The predominant land use in the Study Area is agriculture with nucleated villages, hamlets and farmsteads dispersed throughout. The town of Hayle is adjacent to the site to the west beyond the A30 and an area of open moor. The next closest village is Angarrack, located 1km to the southeast. Connor Downs lies 1.5km to the east, with Gwithian just beyond the 3km radius study area to the north. Parts of the extensive dune area to the north are used for holiday accommodation, in both permanent buildings and static and touring caravans and tents, which requires their own seasonal access and servicing infrastructure.

The general area of St. Ives, Carbis Bay, Lelant and Hayle is a regional focus for leisure and holiday traffic and accommodation, in addition to its year-round function as a service and commercial centre for the resident population. It is this latter use of the site that the development proposals are aiming to support.

#### Site & Surrounding Area (Fig. 09)

The western boundary of the site is enclosed by recent tree belts, and adjoins an area of service development, including a petrol filling station and a motel. The northern edge is defined by the boundary planting along the A30 trunk road, beyond which is an area of grass moor. To the east there are further agricultural fields on rising ground. The southern boundary is formed by a low hedgebank along Carwin Rise, with Carwin Farm immediately to the south which includes a number of large barns which are also used as a farm shop. Slightly further away from the site in the west is the eastern edge of the residential area of Hayle, while to the northwest and south are further areas of grass moor and scrub vegetation

#### **3.1.4 Access**

##### Study Area: (Fig. 10)

###### Vehicular

The main vehicular route through the study area is the A30, which connects Camborne in the east to Penzance in the west. The A3074 connects the A30 near St. Erth station to St. Ives. The B3301 and B3302 run along the coast, through Hayle and Gwithian and on to the Portreath. Minor roads give access into and through the study area from these A and B class roads. A number of both the main routes and the smaller lanes cross the local hilltops, providing good views over the surrounding area, but only for short distances. Conversely, many sections of road or track are in hollows or valley bottoms, or between high hedgebanks, and have only restricted views out.

###### Pedestrian and Cycle

There are several public footpaths throughout the study area, but none close to the boundary of the application site. The waymarked route of the South west Coast Path passes along the Atlantic shoreline through the northwestern part of the study area, connecting St. Ives with Lelant, Hayle Towans and Gwithian Towans. Other paths, bridleways and permissive pedestrian routes connect between some sections of minor road.

A section of National Cycle Network route 3 passes along the northern bank of the Hayle harbour, on its way from a minor road at Nanpusker in the east to St. Erth.

##### Site Area & Surrounds

###### Vehicular

The only vehicular route to the proposed site entrance is along Carwin Rise that connects the A30 roundabout west of the site to the village of Connor Downs to the east. This is a road bounded by mature hedges, and which carries mainly local traffic. The A30 trunk road runs along the northern site boundary, but there is no access to the site from this direction.

###### Pedestrian and Cycle

There are no public footpaths crossing the site nor are there any public footpaths currently connecting the site to the surrounding network. The nearest footpath to the site is 0.5km away to the east, and runs north-south along the western edge of Connor Downs. Whilst the local roads are accessible to walkers and cyclists, some are narrow, curving in part, and have no footways, making them dangerous walking routes. The nearest section of off-road cycle route is the part of NCN route 3, which lies 1.5km away southwest of the site, along the northern edge of Hayle Harbour.

#### **3.1.5 Landscape Character**

Landscape character has been described in a series of assessment studies, at national level in the Countryside Agency's 'Character Map of England', and at county level by the Cornwall and Isles of Scilly Landscape Character Assessment 2007<sup>2</sup>.

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<sup>2</sup> Diacono Associates and White Consultants, 2007, 'Cornwall and Isles of Scilly Landscape Character Assessment', Cornwall County Council. Available via Cornwall CC's interactive mapping at [www.cornwall.gov.uk](http://www.cornwall.gov.uk)

- 1) Character Map of England: The site falls at the western end of the 'Cornish Killas' Joint Character Area 152, which includes the majority of the county of Cornwall apart from the major granite uplands (e.g. Bodmin Moor or West Penwith) and of which the brief description of some of its features is as follows:
  - *Undulating slate plateau with little woodland and few trees;*
  - *Numerous broadleaved wooded valleys, varying greatly in size. Northern valleys generally narrow and densely wooded. In the south there are drowned valleys (rias) with wide estuaries;*
  - *Generally a dispersed settlement pattern of hamlets, farmsteads and small fishing villages;*
  - *Variable field pattern dominated by stone-built Cornish hedges.*
  - *Important archaeological and industrial archaeological sites.*
  
- 2) Cornwall and Isles of Scilly Landscape Character Assessment 2007: the county has been divided into 40 Landscape Character Areas (LCAs) and further subdivided into 420 Landscape Description Units (LDUs), of which 335 are non-urban. The relevant extracts for LCAs and LDUs within the Study Area are included in Appendix 4 to this section and are shown on Fig. 11. The site of the proposed development at Carwin Rise falls within LCA 05: St. Ives Bay, and close to its boundary with LCA 06: Mounts Bay East. The key characteristics of LCA 05 listed in the assessment relate to the bay, beaches and dunes, and not to the proposed development site and its surroundings. This suggests that the agricultural and developed land on the landward fringe of this character area is not typical of the area as a whole. It is merely noted under 'Land Use' that:

*"Agricultural uses of pastoral and arable land fringe the coastal area." (LCA description, p.4)*

The section on Settlement Pattern (p.3) contains the following text:

*"There is also a substantial area of twentieth century development on the eastern outskirts of Hayle, adjacent to the former industrial centres around the historic foundry and Loggan's Mill."*

At the time of the site assessment, the large mill building at Loggan's Mill was still under scaffolding, awaiting its proposed refurbishment as a West Cornwall Enterprise Hub, to include business, conference and training facilities.

In relation to Aesthetic and Sensory factors, the description contains the following (p.4):

*"There is a general impression of the inexorable spread of built development into the rural landscape, with a loss of rural landscape character as at ... the outskirts of Hayle."*

Whilst the scheme proposal is essentially development, the use as sports pitches will still maintain a sense of openness (rather than significant built development). None of the planning and land management guidelines listed at the end of the LCA description refer to the fringing agricultural landscape in which the site lies.

In relation to the adjacent LCA 06 (Mount's Bay East), this covers a large area from Marazion to Mullion Cove along the south coast, and extends northwards to Hayle and the outskirts of Camborne, and eastwards to beyond Helston. Away from the coast, it is described (Key Landscape Characteristics p.1) as:

*"... (a) gently undulating plateau intersected by distinctive flat-bottomed valleys."*

*“River valleys enclosed by woodland and wetland habitats, but dominated by agricultural use.”*

*“Mix of improved and semi-improved grassland and occasional arable on plateau, with neutral grassland in valleys.”*

Within LCA 05 are several Landscape Description Units (LDUs), the descriptions of which give additional analysis and detail. The western part of the application site lies within LDU 059, which is recorded thus:

Physiography: River valleys      Land Cover: Secondary wooded pastures  
Ground type: Dry meadowland      Settlement Pattern: Meadowland – small sized farms

The description notes the presence of an SSSI (Loggan`s Moor) and a County Wildlife Site (CWS), and that the dominant land uses are rough ground and post-medieval farmland. The prominent highway and urban fringe land uses are not recorded.

The eastern part of the site lies in LDU 148, a much more extensive area that includes the whole of the dunes (towans) and the rising hill slope west of Connor Downs. It is recorded thus:

Physiography: Hard rock lowlands      Land Cover: Open wildland  
Ground type: Dune sands      Settlement Pattern: Unsettled wildland

This LDU includes SSSI, SAM and CWS sites, and part of the Halsetown and St. Ives Bay Area of Great Landscape Value.

The above descriptions do not apply to the agricultural land between Carwin Rise and the A30.

### **Landscape Character – Site and Surrounds**

Figure 12 shows the detailed landscape characteristics in the site environs. The site itself is agricultural in its character although due to the close proximity of the A30 and the associated built developments (retail parks, hotels, petrol filling stations, commercial parks, existing rugby club and residential areas of Hayle) its character is already influenced by the presence of existing built development. The A30(T) and Carwin Rise form two linear features through the area, carrying high volumes of traffic at certain seasons and times of day. The commercial and retail developments to the west of the site are related to car use and have high levels of overhead lighting during hours of darkness. Beyond the A30 to the northwest is Loggan`s Moor, designated as an SSSI, and an area of wetland, rough grass and scrub.

### **3.1.5 Historical**

#### **Study Area**

The sequence of historic maps covering the late nineteenth and twentieth centuries (Figs 13 to 17) show how the town of Hayle has grown progressively over the last 120 years, from a small industrial settlement centred around its port to a local commercial and service centre. The attendant growth in population has led to extensions to the northeast (Phillack and Ventonleague) and to the south towards St. Erth. The most significant growth has occurred in the last 40 years around the A30 corridor. Local villages such as Angarrack and Connor Downs have also grown in recent decades, with smaller housing developments. Against this background of historic growth in the surrounding area, the current rugby club proposals can be seen as an element in this continuing pattern.

#### **Site & Surrounds (Fig 18-20)**

Both the OS 1:10,560 editions of 1888 and 1938 (six inches to the mile) and the 1979 1:10,000 series show the field pattern on and around the site substantially in its present form, with only

minor additional field boundaries which were probably removed at the time of the A30 trunk road construction. No significant changes to the local field or landscape pattern have occurred since then until the last 20 years, when development around the A30 junction with the B3301 (Hayle) took place, and this has grown further in recent years.

## **3.2 Visual**

### **3.2.1 Zone of Visual Influence (ZVI)**

The Zone of Visual Influence refers to the area in which the site could in theory be seen, in whole or in part, based on landform contours and some information on existing screening elements such as woodland and existing built-up areas. For the purpose of this study, a computer model of terrain up to 5km from the site was combined with assumed heights of significant woodland blocks and the existing buildings in urban areas. At a number of locations within the site, `target points` at various heights were added to the model, to represent the baseline situation, i.e. the undeveloped site, the clubhouse and the proposed floodlighting columns surrounding the development respectively, as these would be the most visually significant elements on the site. The ZVI program then calculates how many of these `target points` could in theory be seen from a `bald` land surface within the 5km radius study area. This gives a guide to be used during field assessment, to understand the likely visual effect of the proposals.

On Figure 21, the ZVI for the undeveloped site was tested by setting `target points` at the existing land surface, to represent the visibility of the agricultural fields. This area of visibility is termed the `visual envelope` of the existing site. On this plan, the area of theoretical visibility is mostly confined to within 2km of the site, with small areas off to the west 4.5km or more away. Given this distance and the scale of the existing landscape pattern, no visual effect occurs at these outlying areas, particularly when screening elements in the field are taken into account.

The undulating local topography restricts views out from lower levels within the study area towards the Towans in the north, and it should be noted that even with only landform and major woodland screening taken into account, there would be no views of the proposed development from the settlements of Connor Downs, Reawla, or Hayle itself. Even at the leading edge of nearby settlements, only properties closest to the site are likely to have any views.

### **3.2.2 Viewpoint Descriptions**

The site & study area were visited in October 2009 and in March 2010, with subsequent visits in September and October 2010 to review the data. The weather was clear and mostly sunny with some cloud, and visibility was good, although sun angles were low in some views, making clear views towards the site difficult. Photographic Views have been taken in order to describe the views available from specific areas. These are not exhaustive but provide an indication of the likely effects from areas within the Zone of Theoretical Visibility, and their locations are shown on Figure 22.

Viewpoint1 North and South (Eastern site boundary)

- View showing existing site boundary marked by hedgebank.
- Houses on road to Gwithian visible 1 to 1.5km away.
- Development would create new woodland belt along this boundary.
- Receptor numbers medium to high (residents and passers-by).

Viewpoint 2 (Farm shop car park, eastern site boundary)

- Site boundary marked by hedgebank.
- New woodland screen belt would extend across most of this view.
- Receptor numbers include farm shop customers and farm workers and residents.
- Sensitivity of viewpoint low, receptor numbers medium to high.

Viewpoint 3 (Adjacent to A30 junction, 200m southwest of site boundary)

- Roadside view north of Retail Park, with planted tree screen prominent on left, and commercial premises right of centre.
- Site is behind petrol filling station.
- Development would cause slight change to view, with new planting and lighting columns.
- Receptor numbers high, but fleeting views at road junction.

Viewpoint 4 (Northwest, 400m)

- A roadside view over parking area for Loggan`s Moor nature reserve.
- A low-level view across road, hedges and fields, with Carwin Farm visible in centre.
- Intermittent tree screen along near field boundary, but development would add substantial screen planting on north side of new pitches.
- No houses adjacent.
- Receptor numbers medium/high, but fleeting view oblique to direction of travel for road users.

Viewpoint 5 (On Loggan`s Moor, northwest, 0.5km)

- This is from the northern edge of the Loggan`s Moor nature reserve and SSSI, looking south.
- The A30 trunk road runs through the middle distance, only partly screened by roadside trees
- Buildings at Carwin Farm and farm shop clearly visible beyond the site, with the Angarrack railway viaduct behind.
- Development would occupy the middle distance in this view, between open farmland at the left and the industrial estate buildings on the right
- Receptor numbers low to medium depending on season, both visitors and residents.
- Viewpoint within SSSI.

Viewpoint 6 (Site boundary)

- View at northwestern extremity of site, boundary marked by field hedge in centre of view.
- High ground of Phillack Towans visible as skyline in centre.
- Mature trees in St. Ives holiday park visible below skyline.
- Roadside view with no properties near.
- Near portion of site would be planted as woodland.

Viewpoint 7 (Southwest, 400m)

- Viewpoint on footbridge over A30 Hayle bypass.
- Site partially screened by trees left of centre and commercial buildings right of centre.
- Receptor numbers high, but a momentary view whilst using the footbridge.
- Much foreground development and moving vehicles in view.
- Additional screen and boundary planting would appear in centre behind petrol filling station.

Viewpoint 8 (Southwest, 400m)

- Viewpoint on footpath adjacent to A30 roundabout.
- Site completely screened by trees on island and on highway boundary behind.
- Receptors on foot low-medium, in passing vehicles high to very high.

Viewpoint 9 (West 500m)

- View through roadside hedge over Loggan`s Moor.
- Site on rising slope in centre, extending behind white Travelodge building.
- New screen and embankment planting would reinforce enclosure along near site boundary.
- Receptor numbers low (gap view). Houses adjacent but low-level views screened by trees.

#### Viewpoint 10 (West Northwest, 1km)

- View from high ground on the east side of Phillack Towans, looking over modern housing.
- Valley leading away right of centre is crossed by prominent Angarrack rail viaduct.
- Site is clearly visible to left of white Travelodge building, and below Carwin Farm.
- Receptor numbers low to high, depending on season
- Viewpoint within SSSI, on open dune area and with some houses behind viewpoint.

#### Viewpoint 11 (North, 500m)

- Roadside view at Loggan`s Road and Treeve Lane junction.
- View down shallow valley towards industrial buildings on Marsh Lane.
- Development would add significant screen and embankment planting across centre of view.
- Receptor numbers medium-high, but most of short duration whilst travelling.
- Some houses near viewpoint on right hand side of road.

#### Viewpoint 12 (North, 800m)

- Outside houses on Loggan`s Road, Upton Towans.
- View towards site obscured by local screening from trees and hedges.
- Development may add an element of lighting effects at night, but significant illumination already exists close to site.
- Receptor numbers medium to high, but views mostly of short duration.
- Residents of adjoining properties would have similar views.

#### Viewpoint 13 (Northeast, 1.1km)

- View on footpath at Tregarnon Mound SAM.
- Power lines and poles prominent in view.
- Site at low level in valley bottom, partly obscured by field hedge.
- Tops of lighting columns may be visible from here.
- Receptor numbers low (judging by condition of some sections of footpath).

#### Viewpoint 14 (Northeast 1.7km)

- This view is at the start of the footpath leading southwest from Prosper Hill.
- High dunes along St Ives Bay in middle distance, with land beyond St. Ives forming the horizon.
- Views to site screened by field hedges at left in this view.
- Receptor numbers low-medium on this path.

#### Viewpoint 15 (Northeast, 900m)

- Elevated view from road bridge on Treeve Lane over A30.
- Road corridor in cutting and enclosed by tree belts.
- Site out of sight behind landform in middle distance.

#### Viewpoint 16 (East, 900m)

- View from the top of Carwin Rise, looking west down towards Loggan`s Mill.
- Open elevated view over to St. Ives.
- Site is below line of sight to right of Travelodge building, but some lighting may be visible from here.
- Receptor numbers high, but views of short duration whilst travelling down the hill.

#### Viewpoint 17 (East 750m)

- From the road leading west from Connor Downs, an elevated viewpoint across to the high land beyond St. Ives, with Phillack Towans in the middle distance.
- Holiday Park is in the dark trees in the centre of view, with houses near Loggan`s Mill to left.
- Site is at low level in middle distance left of centre.
- Receptor numbers high, but views of short duration when travelling.

#### Viewpoint 18 (East, 750m)

- View west on footpath south of Connor Downs.
- Open view over arable field towards Phillack Towans, with St. Ives Holiday Park on rising ground.
- Site is in valley bottom, just below the line of sight, but lighting columns and trees at maturity would be visible.
- Significant existing development already in view.
- Receptor numbers low to medium.

#### Viewpoint 19 (East, 900m)

- View through top of hedge beside footpath south of Connor Downs.
- Site in valley bottom, not visible from here.
- There may be some additional lighting glow at night, but significant illumination already exists from road and commercial premises.

#### Viewpoint 20 (East 1.1km)

- Broad view over hill top on footpath north of Angarrack Lane.
- St. Ives and high land beyond forms distant horizon.
- Site not visible.

#### Viewpoint 21 (Southeast, 750m)

- Roadside view west from the top of Steamers Hill, east of Angarrack.
- View constrained by landform at right, and trees and hedges at left.
- Commercial buildings at Marsh Lane visible at low level.
- One house nearby would have this view long-term.
- Receptor numbers medium-high, but a momentary view for most, whilst travelling.

#### Viewpoint 22 (Southeast 1.35km)

- View from footpath north of Trungle Farm towards Angarrack.
- Rail viaduct prominent at left.
- View towards site obscured by landform to right of centre.
- Receptor numbers low.

#### Viewpoint 23 (Southeast, 1.8km)

- View on Nanpusket Road west of Gwinnear along valley towards Angarrack.
- Railway viaduct prominent in centre.
- Site obscured by landform to right of centre

#### Viewpoint 24 (South, 550m)

- Viewpoint outside chapel west of Angarrack, looking through gap in hedge.
- View across small fields and Marsh Lane industrial area towards Dunes at Phillack Towans.
- Carwin Farm buildings right of centre, and roof of Travelodge left of centre.
- Site at lower level in centre of view.
- Some view of lighting column tops and trees at maturity will occur in this view

#### Viewpoint 25 (South 700m)

- Elevated view from Nanpusker Road at junction with lane leading down to Angarrack.
- Marsh Lane industrial buildings prominent in foreground.
- Site is in middle distance, beyond Travelodge and Carwin Farm.
- Traffic on A30 partly visible behind northern site boundary tree belt.
- Receptor numbers for this view low-medium (at road junction, no buildings near).

#### Viewpoint 26 (South, 4.4km)

- View from bridge over A30 on Nanpusker Road, with existing Hayle rugby ground in middle distance behind conifer screen.
- Site for new ground is in centre of view, just beyond grey Travelodge roof, extending uphill to the right.
- Some boundary tree planting would appear at maturity along this upper section.
- Receptor numbers high, but a fleeting view at right angles to direction of travel.

#### Viewpoint 27 (South, 1.3km)

- View at golf driving range.
- Views to north screened by rising landform.
- Site not visible.

#### Viewpoint 28 (South, 2.3km)

- Open view from top of Wheal Alfred Hill towards St. Ives Bay.
- Dune coast forms intermediate horizon.
- Site just visible in valley bottom, adjacent to prominent existing development.
- Receptor numbers medium to high (seasonal) as VP is at road/bridleway junction.

## 4 Future Baseline – The `Do Nothing Scenario`

The consequence of this proposal not going ahead would probably be the continuation of the present use of the land as arable land in the short term. However, the proximity of the A30 junction and the scale of other recent development in the vicinity suggest that pressure for other types of development already exists. While keeping the present land use would maintain its agricultural benefits for the owners, it would not allow the proposed increase in the local availability of high quality sports facilities. In addition, the proposed additional landscape planting would not go ahead, resulting in a loss of potential tree cover, with its associated wildlife and visual benefits.

Set against this, there would be no change to the view from existing properties and roads adjacent to the site in the short term, and no addition to the local night-time lighting.

## 5.0 Description of the Proposals

### 5.1 Proposed Layout

Figures 23 and 24 show the proposed scheme layout in plan and section, as produced by Lavigne Lonsdale Ltd and Ocean Architects Ltd. The scheme includes the following landscape elements:

#### Phase 1

1. Retention of the tree and shrub screen along the northern site boundary adjacent to the A30.
2. Extensive native tree and shrub planting around the pitch layout for screening and visual enclosure.
3. Terracing of the site, for two match pitches, spectator viewing areas, flood lighting and ball stop fencing.
4. Construction of new site access, coach and car parking areas with associated enclosing hedges and tree planting.
5. New hedge planting around the northern and western sides of the new pitches, to further enclose and sub-divide the area, and to provide wildlife corridors and links to the wider landscape.
6. Removal and re-construction of existing Cornish hedges along the Carwin Rise frontage and the northern site boundary. Whilst there would be 607 lin. m of existing hedgerow removal, 587 lin. m of this hedgerow would be relocated within the proposal.
7. The formation of a surface water cut-off ditch around the northern boundary.

#### Phase 2

1. Formation of terraced levels to accommodate three training pitches with associated ball stop fencing .
2. Further tree and shrub planting for screening and visual enclosure.  
(Note : surface water drainage would be carried out under Phase 1.)

## Construction Operations

The temporary construction operations would include:

- Removal of sections of internal and boundary hedge.
- Excavations for clubhouse foundations, and cut, fill and grading for new and soft and hard surfaces.
- Delivery of and storage of materials.
- Construction of new roadways parking areas and footpaths, new clubhouse, and the laying of new underground services.
- Installation of new floodlighting columns.
- Delivery and planting of trees and shrubs, and formation of new grass pitches and surrounding areas.

## 6.0 Likely Significant Impacts Arising During Construction and Operation

Impacts arising from a proposed development can be sub-divided into:

**Landscape character impacts** (effects on local landscape character types and landscape character areas);

**Landscape impacts** (changes to the fabric and features of the land); and

**Visual impacts** (changes to the appearance of the site when viewed from the local area).

Impacts are not necessarily adverse, but may be neutral (i.e. changes which make the existing situation neither better nor worse), or beneficial, as in the removal of an existing detractor. The degree to which a landscape is assessed to be sensitive is reflected in its ability to accommodate any changes in character and value that would be caused by the proposed development, without serious detriment.

Landscape character and landscape value are related but considered separately. This is done in order to distinguish between the ability of a landscape to accommodate a development in physical terms, as opposed to its effects on elements that are more subjective in nature. Thus, for example, a lowland landscape may be assumed to be highly sensitive (because of attractive scenery, woodland cover and designated status) but can often actually accommodate a development more easily (and may therefore be less sensitive to development) than an open or degraded landscape that is of low scenic quality. Sensitive landscape receptors are identified in relation to landscape characteristics and landscape value. It should be noted that the judgement of effect on landscape character is made by looking at characterising elements 'in the round' in an area, based on views in many directions within it, which differs from the assessment of visual effects (as set out in Section 6.4), which is made in relation to a specific viewpoint, and in a single direction.

The significance of the effect is a function of the magnitude of change or the extent to which the proposals would be visible, the degree to which the nature and appearance of the proposals would affect the character and quality of the existing landscape, and the degree of sensitivity of the landscape or receptor to change.

Table 1 indicates the significance of impacts, both adverse and beneficial, that would be expected to arise, by comparing the magnitude of each impact with the sensitivity of each receptor on which it would have an effect. This table was used to determine both landscape impacts in section 6.3, and visual impacts in Section 6.4. A description of the criteria denoted by the terms in Table 1 is set out in Table 2.

**Table 1: Assessment of Impact Significance**

Receptor Sensitivity	Impact Magnitude			
	High	Medium	Low	Negligible
High	Substantial	Substantial/Moderate	Moderate	Moderate/Slight
Medium	Substantial/Moderate	Moderate	Moderate/Slight	Slight
Low	Moderate	Moderate/Slight	Slight	Slight/Negligible
Negligible	Moderate/Slight	Slight	Slight/Negligible	Negligible

In the above table, when assessing for example a low magnitude of impact on a highly sensitive receptor, an impact of moderate significance would be expected to arise.

**Table 2: Impact Significance Criteria**

Significance of Effects (Landscape & Visual)	
<b>Substantial Adverse Effect</b>	Where the proposal would cause a major deterioration to the existing landscape resource and the contribution of the site to the local landscape character, or to the existing visual amenity
<b>Moderate Adverse Effect</b>	Where the proposal would cause a noticeable deterioration to the existing landscape resource and the contribution of the site to the local landscape character, or to the existing visual amenity
<b>Slight Adverse Effect</b>	Where the proposal would cause a minor deterioration to the existing landscape resource and the contribution of the site to the local landscape character, or to the existing visual amenity
<b>Negligible</b>	No discernible deterioration or improvement to the existing landscape resource and the contribution of the site to the local landscape character, or to the existing visual amenity
<b>No Change</b>	Where one might expect change but none is anticipated, or the proposals would not be visible
<b>Slight beneficial Effect</b>	Where the proposal would cause a minor change that is a perceptible improvement to the existing landscape resource and the contribution of the site to the local landscape character, or to the existing visual amenity
<b>Moderate Beneficial Effect</b>	Where the proposal would cause a noticeable improvement to the existing landscape resource and the contribution of the site to the local landscape character, or to the existing visual amenity
<b>Substantial Beneficial Effect</b>	Where the proposal would cause a major improvement to the existing landscape resource and the contribution of the site to the local landscape character, or to the existing visual amenity

## 6.1 Predicted Effects

The temporary construction activities (approximately 12 months for Phase 1 and 6 months for Phase 2) that would give rise to landscape and visual impacts for the scheme would include the following;

- Presence of construction activities and storage areas, (adverse)
- Soil stripping over the whole Phase 1 and Phase 2 areas, in order to accommodate a surplus of fill material arising in Phase 1 (adverse)
- Movements of Construction traffic on & off site (adverse)
- Presence and operation of excavation and construction equipment (adverse)

The permanent effects would be:

#### Phase 1

- Removal of internal field boundary hedgebank (adverse)
- Alteration of existing levels and excavation for foundations and pitches (adverse)
- Reconstruction of hedgebank on northern boundary (neutral/beneficial)
- Additional planting of trees shrubs and hedges on the boundaries, and within the development area (beneficial effect)
- Formation and establishment of new grass areas (neutral / beneficial effect)
- Formation of new paved and porous vehicle circulation and parking areas (change but not necessarily adverse)
- The appearance of new buildings in the view (change but not necessarily adverse)
- Movement of traffic and people during operation of the site (neutral)
- Operation of the floodlighting to pitches during hours of darkness (adverse)
- Floodlights and ballstop fencing during the day (adverse)

#### Phase 2

- Soil stripping at the start of Phase 1, surcharge of the area by about 300mm, and replacement of soils (neutral)
- Alteration of existing levels to provide new pitches (neutral)
- Additional planting of trees shrubs and hedges on the boundaries (beneficial effect)
- Formation and establishment of new grass areas (neutral / beneficial effect)
- Movement of people during use of the site (neutral)
- Installation of ball stop fencing (adverse)

These effects would be most noticeable in the immediate area of the site to the north and west, where there are existing residential properties, roads and accessible land; and from a few locations to the south, from where elevated views towards the site are obtained. We are not aware of any cumulative effects on the baseline situation as a consequence of other developments in the immediate locality.

## **6.2 Effects on Landscape Character**

The proposed rugby club facilities would extend urban fringe leisure development into an area currently in agricultural use, and would introduce new elements of building, landform and woodland planting into the landscape in this location. The growth to maturity of tree and hedge planting on new cut and fill embankments and elsewhere on the site would act to soften and screen the new development. Whilst there would be visible change within the site boundaries and from viewpoints immediately around it, and the new clubhouse and ball stop fencing would appear in some off-site views, the proposed development would not change the landscape character in the surrounding Landscape Character Area as a whole, given the scale of this development and that it would be seen in the context of existing development nearby. There would be a small change to the local field pattern by the removal of the internal hedge, but no land use change outside the site boundaries.

The Phase 1 development of main match pitches, clubhouse and parking areas would create the most significant and visible change, due to its greater area and its being on the highest part of the site. The Phase 2 development would remain as grassed green space and is at lower levels, already enclosed by existing trees along its western boundary

A new landscape character type (sports fields) would be formed in part of the immediately surrounding Landscape Description Unit 059, which although described as "Land cover: secondary wooded pastures; Settlement pattern: meadowland – small sized farms", is now about one third occupied by residential and commercial development, with a significant element of SSSI grassland on Loggan's Moor. It is concluded that effects on landscape character as a result of the proposed development would only occur in the immediate locality of the site, chiefly resulting from the Phase 1 development, and such change would not be significant outside this LDU.

### 6.3 Landscape Impacts

By relating the magnitude of each change to the sensitivity of each receptor, an assessment of the significance of impacts can be made. Tables 1 and 2 above show how in general terms the relationship between receptor sensitivity and impact magnitude is expressed, to identify the significance of impacts. The nature of impacts can be described by the following terms:

Direct impacts are those imposed on landscape elements on the site as a direct result of development, such as the loss of existing trees or changes to site levels.

Indirect impacts may occur some distance from the site, e.g. change to stream flows by de-watering.

Secondary impacts are those that follow on from the interaction of the above categories, such as a change in bird nesting patterns due to the loss of nest sites.

Cumulative impacts occur when additional developments appear in an area.

Short Medium or Long Term describes the duration of an impact.

Permanent or Temporary relates for example to additional impacts during construction compared to the permanent change caused by a new highway.

Beneficial, Neutral or Adverse: Adverse effects are those that cause detriment to the pre-development situation, beneficial effects are those that restore or improve it, and neutral effects make the existing situation neither better nor worse.

In the following descriptions of landscape effects for the construction period (Phase 1 in Table 3A, Phase 2 in Table 3B) and for the completed scheme after five years (Table 4A and 4B), the magnitude and nature of effects is recorded. Visual effects are similarly described in section 6.4. Predicted landscape impacts have been based on the current phased proposals including the on-site landscape elements described above. Landscape impact is assessed in relation to landscape characteristics and value. As set out in section 6.4.1 below, the sensitivity of the site to change is judged to be Low, in accordance with the sensitivity criteria set out in the Appendix.

**Table 3A: Predicted Landscape Impacts at a Local Level – Phase 1 Construction Period**

Landscape Characteristic	Predicted impact	Magnitude	Nature	Significance
<b>Topography and Drainage</b>				
Landform	The gently sloping fields would be significantly changed, to two terraces on which pitches would be laid out. Cut and fill of the order of 4m maximum would occur.	Very High	Direct Short Term Adverse	Substantial
Surface water drainage	A new drainage swale would be constructed along two thirds of the northern site boundary.	Low	Direct Short Term Adverse	Low
Soils	Soil stripping would take place over the whole area of level change (Phases 1 and 2). No soils would be lost from the site for the construction of the proposed development, but would be stored and re-used.	Very High	Direct Short Term Adverse	Substantial

**Table 3A: Predicted Landscape Impacts at a Local Level – Phase 1 Construction Period (cont`d)**

Landscape Characteristic	Predicted impact	Magnitude	Nature	Significance
<b>Vegetation Cover</b>				
Tree cover	The removal of hedgerows will involve a loss of vegetation cover although there are no significant trees.	Low	Direct Short term Adverse	Slight
	Extensive new planting installed on the new embankments along northern, western and southern boundaries, and within new hedge lines.	High	Direct Medium Term Neutral to Beneficial	Substantial
Site Boundaries - hedges	The hedgebank along the internal field boundary would be removed and replaced along the northern boundary.	Medium	Direct Short Term Adverse	Moderate
	The hedgebank along Carwin Rise would be moved back into the site along the required visibility splay	High	Direct Short Term Adverse	Moderate
<b>Land use</b>				
Sports Pitches	New playing facilities would be formed by grading, soiling and drainage on the new terraced landform.	High	Direct Short term Neutral	Substantial
Building and parking areas	Construction of a new clubhouse with changing and refreshment facilities in the centre of the site, designed to complement its setting.	Medium	Direct Short term Neutral	Moderate
Flood Lighting and ball stop fencing	Erection of the Ball Stop fencing and flood lights	Medium/High	Direct  Short term Adverse (Vertical element)	Substantial / Moderate
Off site footpath links	Construction works for the footpaths	Medium	Direct Short Term Neutral	Low / Moderate
Site Boundaries - Hedges, Walls and Fences	On-site hedge boundaries and around pitches	Medium	Direct Short Term Neutral	Moderate

**Table 3B: Predicted Landscape Impacts at a Local Level – Construction Period – Phase 2**

Landscape Characteristic	Predicted impact	Magnitude	Nature	Significance
<b>Topography and Drainage</b>				
Landform	The gently sloping fields would be changed, to a series of three terraces on which pitches would be laid out. Cut and fill of the order of 2.25m maximum would occur.	High	Direct Short Term Adverse	Moderate
Surface water drainage	A new drainage swale would be constructed along the northern site boundary.	Low	Direct Short Term Adverse	Low
Soils	Soil stripping would have taken place over the area at the start of Phase 1, and would be repeated at the start of Phase 2. No soils would be lost from the site for the construction of the proposed development, but would be re-used.	High	Direct Short Term Adverse	Moderate
<b>Vegetation Cover</b>				
Tree cover	New planting installed along northern boundary	Low	Direct Medium Term Beneficial	Slight
Site Boundaries - hedges	The hedgebank along Carwin Rise would have been moved back into the site along the required visibility splay during Phase 1 – no further change	No Change		None
Sports Pitches	New training pitches would be formed by grading, and soiling on the new terraced landform.	Medium	Direct Short term Neutral	Moderate

**Table 4: Phases 1 and 2 - Predicted Landscape Impacts at a Local Level – 5 Years After completion**

Landscape Characteristic	Predicted impact	Magnitude	Nature	Significance
<b>Topography and Drainage</b>				
Landform	Permanent change to local landforms within the site.	High	Direct Long Term Neutral	Substantial
Surface water drainage	Establishment of new ditch as a feature in the landscape.	Low	Direct Long Term Neutral	Slight
Soils	Stripped soils would have been re-spread and incorporated into the completed sports field layout.	Low	Direct Long Term Neutral	Slight
<b>Vegetation Cover</b>				
Tree cover	New planting would be established and growing on to maturity.	High	Direct Long term Beneficial	Substantial
<b>Land use</b>				
Buildings	The new clubhouse would have become an established part of the local settlement pattern.	Medium	Direct Long term Neutral	Substantial
Site Boundaries - Hedges, Walls and Fences	New hedges enclosing the two senior pitches and along the northern and Carwin Rise boundaries would have become integrated into the local landscape pattern	Medium	Direct Long Term Neutral/beneficial	Moderate
Floodlighting and Ballstop fencing	Daylight hours :  Night time hours :	Medium  High	Direct  Long term Adverse (Vertical element and lighting impact)	Moderate  Substantial
Off site footpath links	Use of footpath	Medium	Direct Long Term Neutral/ Beneficial	Low/ Moderate

Reference to the photomontages for 20 years after completion shows that the expected growth of boundary plantations would have an increasing effect in screening and softening views, particularly of the lower elements on site such as vehicles and the clubhouse building. For some locations, for example to the north (VP 11), this new woodland would begin to reduce views towards the existing retail and commercial developments south of the site.

As a result of the assessment of likely effects on the fabric and features of the landscape on site set out in Tables 3 and 4, and the predicted further growth of the landscape mitigation scheme, it is concluded that significant adverse landscape impact would arise from the construction of Phase 1 of the proposed development, whilst major soil stripping and land formation was taking place. Less significant adverse landscape impacts in the short term would result from the removal of part of the existing internal field boundary hedgebank, and its reconstruction along the northern site boundary, plus the re-alignment of the hedge along the Carwin Rise boundary, and the construction of the new surface water drainage system. Phase 2 of the development would also require soil stripping, land formation, soiling and seeding, but adverse landscape impacts would be of no more than moderate significance. There would be no change to landscape elements outside the site boundaries, and no long-term adverse landscape impacts, once the new grass pitches and the enclosing plantations have become established. The only long term adverse visual impact would be as a result of reflected light from the floodlighting when on. This is however only a temporary impact in the winter months, whilst the facilities are in use.

#### **6.4 Visual Impacts – Daylight hours**

As noted above in section 3.2.1, a computer visibility study was carried out within a 5km radius of the site, to test the theoretical visibility of the undeveloped site (baseline situation), and the proposed clubhouse and lighting columns

Figure 25 shows the zone of theoretical visibility (ZTV) of the clubhouse, tested with target points at the corners of the roof. In general, the ZTV coverage is almost the same as in Figure 22 (Visual Envelope), except for minor extensions north of the A30 at Trevarnon and a slight reduction just west of Gwinnear. This ZTV is for a single building, smaller in scale than some Already in existence locally, for example the M&S store, and therefore visual effects are likely to be slight more than 1km away.

On Figures 26 to 28 are the ZTV plans for the 14 proposed lighting columns, sub-divided between the eastern and western senior pitches and considered together. There appears to be almost complete visibility of all of the light columns up to 1km in any direction, with extensions out to over 2km to the northeast and south. Other areas of visibility appear towards the limits of the study area in the sector from west (beyond Lelant) to southeast, whilst a broad sector of theoretical views appears northwest of the site, out in St. Ives Bay. On this figure, it should be borne in mind that the objects studied are slender light columns, and for daylight impacts, these would not be significant more than about 1km away. This can be demonstrated by reference to KeyVP26, where, in a view along the A30 from the south, the light columns are hardly distinguishable at the Marsh Lane junction, which is only 600m from the viewpoint.

In summary, the ZTV studies have shown the following:

1. When no account is taken of distance and local screening effects, the lower level elements of the proposals such as the clubhouse, are predicted to be visible over distances of up to 2km.
2. The taller light columns are predicted to be visible over a wider area at distances up to and exceeding 5km, but their slender form means that they would not be distinguishable in daylight more than about 1km away.
3. This leaves the issue of night-time effects from floodlighting, which is addressed below in section 6.5.

Analysis of the likely predicted effects of the proposed development at completion of construction on views within the ZTV is given below, in section 6.4.1 to 6.4.5. Some viewpoints illustrate visual effects on more than one type of receptor: for example a fixed view from a residential property, and a peripheral view from a walker on the adjacent footpath. Photographs showing the views listed are included in the Appendix.

#### 6.4.1 Zone of Visual Significance (ZVS)

The ZTV maps described above are based purely on computer modelling, and make no allowance for distance, atmospheric conditions, or the interaction of local screening features such as hedgerows, hedgebanks or tree belts in affecting the view. Neither do they include the context of the viewpoint, for instance whether beside a main road, or within tranquil countryside.

Assessment in the field taking these additional factors into account is used to determine the Zone of Visual Significance. This very much smaller zone consists of those areas within which the proposed development is likely to form a noticeable and significant change to the existing situation, when clear views are possible. See Figure 22. This does not necessarily mean that all change is to be regarded as adverse, since in the normal course of events, changes will occur in the rural landscape, resulting for example from the erection of agricultural buildings and the planting and growth of trees.

Sections of roads, tracks, publicly accessible land and public and permissive footpaths within the ZTV were travelled in order to photograph views from the key viewpoints. These views are contained in Document LL-LVIA 169-DOC002. Routes on land falling away from the site or in valley bottoms, from where the ZTV indicated that no views of it would be possible, were omitted from the field walking. Public roads and lanes on higher ground within the study area, and some of the higher footpaths which are likely to have views of the site were also travelled in order to establish the extent of the ZVS. Additional areas on private land are likely to have some views, but the character of these views would be similar to those from viewpoints already identified.

As noted in 3.2.1 above, the local topography prevents views from many locations, for example from the village of Connor Downs, and even from some close locations within the ZTV, such as from the A30 roundabout (VP11), the site is completely obscured by trees and buildings.

Although the ZTV study was extended out to 5km from the site in order to discover the likely limits of theoretical visibility, reference to viewpoints in the Appendix such as 23 and 28 from the south, and 14 from the northeast, show that no significant effects are likely to be detected even at much shorter distances, and for this reason the study area for landscape and visual effects was limited to 3km radius from the site.

The ZVS covers three areas, as follows:

1. The area immediately around the site, extending up onto the Towans to the northwest (VP10), and to the edge of development north of the site, towards Gwithian (VP11) where there are existing residential properties which would have views of part of the new development. A larger area of likely significant visibility extends south and southeast towards Steamers Hill and the slope of rising ground west of Connor Downs. Although the A30 trunk road, which carries high volumes of traffic, passes through the ZVS along the northern site boundary, the site is partly screened by existing trees, and lateral views towards the site are likely to be fleeting.
2. The deck of the footbridge that crosses the A30 near the Retail Park, from where there are elevated views towards the site (VP7).
3. A section of Nanpusker Road just to the east of Ventonleague, from where there are intermittent elevated views out to the north over the industrial and retail area over a distance of just over 1km, although views are transitory and oblique to the direction of travel.

Due to local topography, the site enclosure by tree belts and hedges, and the presence of buildings on adjoining land to the southwest, visual effects would not be significant outside these areas. In line with the categories of sensitivity set out in the landscape sensitivity table in the Appendix 2, the degree of sensitivity of the landscape within the ZVS is mostly low:

*“Landscape areas with relatively ordinary characteristics, reasonably tolerant of changes,”*

given that the majority of the areas are private farmland of no particular landscape quality.

Most visual receptors apart from local residents will be travellers on foot or by vehicle on local roads, tracks or footpaths, and the sensitivity of these receptors is judged to be Medium / Low:

*“Views from rights of way and recreational areas / Views from roads and footways, ...industrial areas and trading parks.”*

In those cases where there are residential locations close to the site, from which views could be had, sensitivity to visual impacts is judged to be high. Residential receptors (i.e. people in and around their homes) are always regarded as of high sensitivity to visual change. In these cases, for example properties on the west side of Loggan`s Moor (near VP9), views are partly filtered by shrubs and trees along the roadside, but there may be some locations at higher elevations within the housing area, such that open views would be possible.

## **6.5 Photomontages : (See photomontages in Document LL-169-DOC002)**

In order to describe the likely visual effects, at completion and residual, a series of photomontages have been produced from Key Viewpoints that describe the Zone of Visual Significance. These have been used to inform the likely significance values attached to each view.

### **6.4.2 Views from the North (VPs 11 to 14)**

- In some views from the north from footpaths and roads (VPs 12, 13 and 14), the site is concealed either by landform or by woodland, and the proposed development would have no daytime effect. **Impacts assessed as No Change.**
- In closer views outside the site from the north (VP11), the site is generally screened at low level by mature field hedges. The new landform embankments and the clubhouse roof would appear below the distant horizon where local screening allows, mitigated in time as new tree and hedge planting matures. **Impacts assessed as: Direct, Long Term, Moderately Adverse initially (Phase 1), of Moderate Significance; becoming neutral to beneficial** once planting on embankments matures and screens existing commercial development in centre of view.

### **6.4.3 Views from the East (VPs 6, 15 to 22)**

- In close views on Carwin Rise (VP6), a new woodland plantation would appear between the existing roadside hedge and the northern site boundary as part of the Phase 1 landscape scheme. Beyond this would be a parking area parallel to the road behind a tree belt, and the senior rugby pitch. Phase 2 works would have no effect on this view **Impacts assessed as: Direct, Long-term, Moderately Adverse initially of Moderate Significance, becoming Neutral.**
- More distant viewpoints up to 1km to the east (VPs 15, 18 to 21) are limited by the intervening landform and hedges. On Carwin Rise, there is a sector of view towards the site when descending the hill (VPs 16 and 17), but views are partly enclosed by roadside hedges in the upper part, and close views are of short duration over less than 1km of travel when approaching the site. **Impacts assessed as: Direct, Long-term, Adverse becoming Neutral, of Moderate Significance.**

#### 6.4.4 Views from the South (VPs 1, 2, 3, 7,8, 23 to 28)

- Close views from the south are possible from the Carwin Farm shop car park (VP2) and the adjacent cottage (VP1). From these locations, Phase 1 of the development would be immediately across the road, with the boundary planting in the foreground, and behind this the access road and parking. While initial construction activity would be very close, in time the growth of the screen planting would replace current views towards the high dunes about 1km away. Phase 2 works are at a lower level on the western part of the site, and would take place on land falling away from the viewpoints, behind the re-constructed boundary hedge along Carwin Rise **Impacts assessed as: Direct, Long Term, Initially Adverse (Phase 1 only), of Substantial Significance, becoming Neutral in time.**
- Views from the southwest at ground level (VP3 and 8) would be mostly screened by existing trees until the viewer approaches the site boundary, with a foreground of traffic, service station and motel. In views from this direction, the Phase 2 works would be closer than Phase 1, although all works in the later phase would be behind the boundary hedge and at or below road level. At higher level at the corner of the footbridge over the A30 (VP7), there is an elevated view towards the site, which also has a foreground view of buildings, signs and moving and parked vehicles. **Impacts assessed as: Direct, Medium term, Slightly adverse becoming Neutral to Beneficial, of slight significance**
- In views in the 1 to 3km range (VPs 24-28), the site appears as a slender horizontal element among buildings and fields, but in general views from this sector are restricted due to extensive local screening. Residential locations in this zone having any view towards the site are very few. Being at the higher part of the site, the Phase 1 works, which include construction of the clubhouse and floodlighting, would contribute the major part of visual impacts in these views. **Impacts assessed as Direct, Long Term, Neutral to Slightly Adverse, of Slight to Negligible Significance.**

#### 6.4.5 Views from the West (VPS 4, 5, 9, 10)

- From the roadside and nature reserve west of the site (VPs 4 and 5), the formation of the new terraced landforms in Phase 1 would be clearly visible. There would be a significant change to the view, which would in time be moderated by the growth of the extensive boundary screen planting. Phase 2 works would only result in a slight change to the view, as permanent grassed pitches replace the existing arable fields **Impacts assessed as: Direct, Long-term, Adverse (Phase 1) becoming Neutral (Phase 2), of Substantial Significance.**
- From viewpoints in the 0.5 to 1km distance range (VPs 9 and 10), there would be similar views of the groundworks and planting stages of the Phase 1 development, although existing foreground elements have greater effect. As above, the Phase 2 works would have much less of an impact. **Impacts assessed as: Direct, Long Term, Adverse, of Substantial (Phase 1) to Slight (Phase 2) significance, decreasing with distance.**

### 6.5 Night Time Effects

The site of the proposed development is close to the eastern edge of the existing settlement of Hayle, but has open countryside in the sector from northwest to northeast. Its location adjacent to an area of existing residential, commercial and industrial development, means that light pollution impacts need to be addressed.

**Viewed from the west** (see KeyVP 10 in Appendix), the site forms an extension of development into an agricultural landscape, and while the proposed planting and green space would become integrated into the daytime view, high levels of floodlighting on Phase 1 would be an intrusive element. High levels of street lighting already exist on the nearby A30 roundabout and the adjacent commercial and industrial sites, and this has added an element of urban character to this location. Even where the site and the proposed pitch lighting would not be directly visible, the loom of floodlights could have an adverse effect on the night-time view. The site is therefore judged to be moderately sensitive to light pollution.

**Viewed from the East:** (see VP 6 in Appendix) The site would be seen within the context of light associated with the A30, Hayle and the retail and commercial areas along the A30. The illuminated Phase 1 pitches would however be screened predominantly by the levels and vegetation on site but the floodlights themselves would be visible. This would create a new dominant element in the views, which would be a moderate adverse effect when the lights are on.

**Viewed from the North:** (See VP 11 in Appendix) The extent of the existing light sources from the A30, petrol filling station, Hotel, Commercial areas and the retail park all create a noticeable light source from these views. The constant headlight traffic along the A30 also introduces a moving light source into the view although the site is seen as a dark zone in the existing view. The introduction of the flood lights on Phase 1 would form a temporary moderate/ substantial adverse impact on these views at completion.

**Viewed from the South:** (see VP 25 in Appendix) As with the other views, the existing light sources around the site do reduce the sensitivity of the site and any floodlighting would be seen within this context. However, at present, the site is seen as a "dark" agricultural zone from these elevated viewpoints and so the impact would be moderate/substantial adverse for temporary periods at completion.

In order to reduce the possibility of such adverse impacts, the lighting scheme has been designed to avoid direct light spillage outside the area of the development, and to reduce upward losses by reflection as much as possible. The period of time that the lights are on would also be restricted to periods of active use, and the impacts would be further reduced as the on-site vegetation continues to grow. The impact of lighting within the Phase 1 scheme would inevitably cause a change in the existing view which cannot be avoided given the nature of the impact and the necessity for pitch lighting, so it can only be reduced by mitigation measures.

## 7.0 Mitigation Proposals

As a result of the assessment of predicted landscape and visual impacts set out above, significant adverse impacts were identified in the partial loss of an existing landscape feature on the northeastern site boundary (landscape impact), and the potential for adverse views of the construction works to form the new Phase 1 terraced landforms in close views from areas to the south, north and west of the site (visual impact). Mitigation of adverse impacts can be achieved by the following measures:

- Avoidance, i.e. not carrying out the development.
- Reduction, i.e. reducing the scope, area or height of a proposed change.
- Remedying, i.e. taking steps to correct or undo an adverse impact.
- Compensation, i.e. replacing on another site a landscape feature removed or reduced as a result of the development.

Primary mitigation measures are those integrated into the design of the proposed development, which will inherently achieve one of the above. Secondary mitigation measures are those applied to the final design, which further mitigate any remaining adverse effects.

A site plan showing proposed landscape mitigation measures is on Figure 29. Aspects of the proposed development which address the mitigation of possible adverse landscape and visual effects are as follows:

- Lowering of pitch levels to reduce visibility.
- Retention of screening vegetation along the northern site boundary parallel to the A30.
- Extensive mitigation planting, both to enclose the Phase 1 playing pitches and to soften and ultimately screen off-site views from low level.
- Careful design of the Phase 1 pitch lighting scheme to prevent direct light spillage beyond the pitch boundaries, and reduce reflected glare as much as possible, thereby reducing the potential night-time impacts.
- Restricting the times of use for the flood lights
- Screening and enclosure of the on-site parking areas in Phase 1, to reduce views of and reflections and the car lights of parked cars and coaches in the open surrounding landscape.
- Design of the clubhouse to reflect the agricultural character of the surrounding buildings.
- Use of recessed “natural” colours for the building and ball stop fencing (green/black).

As a result of the assessment of likely landscape and visual effects resulting from the proposed development, a scheme of mitigation measures has been formulated, to reduce such impacts as far as possible. The mitigation scheme consists of the following elements:

1. The use of hedges and trees around and within the site to enclose and sub-divide the area, and reduce visibility of pitches in use from outside the site boundaries
2. The planting of new native woodland and tree belts, to form wildlife corridors across the site linked to the rural landscape beyond.
3. Protection and enhancement of the existing tree screen along the A30.
4. Reducing levels close to the Carwin Rise boundary and planting of a tree screen, to lessen the impact of parked vehicles

## 7.1 Residual Visual Effects

The effects described in section 6.4 above relate to the appearance of the completed Phase 1 and Phase 2 development at the close of construction, and before any landscape mitigation measures would have had time to mature. Landscape mitigation measures will be applied to the development, as described above, and in section 5.1. The table 4 below sets out the expected effect of these mitigation measures on any adverse visual impact of the development predicted to arise at completion, and five and ten years after completion. Any effects remaining after the maturity of mitigation measures (in this case assumed to be after ten years) are referred to as residual impacts. Note that only adverse effects are considered to require mitigation.

**Table 5: Mitigation measures and Residual Visual Impacts (During the day)**

VP No.	Visual Impact at Completion (Magnitude, Nature & Significance)	Effective Mitigation Measure	Impact 5 years after completion	Visual Impact 20 years after completion (Residual impact)
1N/1S.	High, Adverse,	Frontage planting,	Medium, Slightly	Medium, Neutral,

	Substantial / Moderate	Architectural design of clubhouse	Adverse, Moderate / Slight	Moderate
2.	High, Adverse, Substantial / Moderate	Frontage planting, Architectural design of clubhouse	Medium, Slightly Adverse, Moderate / Slight	Medium, Neutral, Moderate
3.	Low, Neutral, Slight	None required	None	Medium, Moderately Beneficial – (tree growth)

**Table 5: Mitigation measures and Residual Visual Impacts (cont`d)**

<b>VP No.</b>	<b>Visual Impact at Completion</b>	<b>Effective Mitigation Measure</b>	<b>Impact 5 years after completion</b>	<b>Visual Impact 20 years after completion* (Residual impact)</b>
4.	Medium, Adverse, Moderate	Retention of Existing trees, Planting belts around pitches	Medium, Slightly Adverse, Moderate / Slight	Medium, Neutral, Moderate
5.	High, Adverse, Substantial / Moderate (in SSSI)	Planting belt on northern boundary and around pitches, architectural design of clubhouse	Medium, Slightly Adverse, Moderate / Slight	Medium, Neutral, Moderate
6.	High, Adverse, Moderate	Tree planting in eastern corner	Medium, Neutral, Moderate	High, Beneficial, Moderate
7.	Medium, Neutral, Moderate / Slight	None required	Medium, Neutral, Moderate / Slight	Medium, Beneficial, Moderate
8.	None	-	-	None
9.	High, Adverse, Substantial / Moderate	Retention of Existing trees in middle distance, Planting belt on northern boundary and around pitches	Medium, Slightly Adverse, Moderate / Slight	Medium, Neutral, Moderate
10.	Medium, Adverse, Moderate	Planting belt on northern and eastern boundaries, and around pitches	Low, Slightly Adverse, Moderate / Slight	Medium, Neutral, Moderate / Slight
11.	Low, Neutral, Slight	Planting on north-facing slopes	Low, Neutral, Slight	Medium, Beneficial – (screening of industrial estate), Moderate
12.	Negligible, Neutral, Slight	-	-	None
13.	Negligible, Neutral, Slight	-	-	None
14.	None	-	-	None
15.	None	-	-	None
16.	Low, Neutral, Slight	None	Low, Neutral, Slight	None
17.	Low, Neutral, Slight	None	Low, Neutral, Slight	Low, Neutral, Slight

18.	Negligible, Neutral, Slight	None	None	None
19.	None	-	-	None
20.	None	-	-	None
21.	Low, Neutral, Negligible	-	-	None
22.	None	-	-	None
23.	None	-	-	None

**Table 5: Mitigation measures and Residual Visual Impacts (cont`d)**

VP No.	Visual Impact at Completion	Effective Mitigation Measure	Impact 5 years after completion	Visual Impact 20 years after completion* (Residual impact)
24.	Medium, Adverse, Moderate	Tree planting on southern site frontage, and around pitches	Low, Neutral, Moderate / Slight	Neutral / Slightly Beneficial – maturing tree plantations
25.	Medium, Adverse, Moderate / Slight – groundworks and terracing	Tree planting on southern site frontage, and around pitches	Medium, Neutral, Moderate / Slight	Medium, Beneficial, Moderate / Slight – maturing tree plantations
26.	Low, Neutral, Slight – groundworks and terracing	Tree planting on southern site frontage, and around pitches	Low, Neutral, Slight	Medium, Beneficial, Moderate / Slight – maturing tree plantations
27.	None	-	-	None
28.	Slight, Neutral	-	-	None

From the above table, it can be seen that when the architectural design of the proposed clubhouse and the mitigating landscape measures included in the proposals are taken into account from the selected assessment viewpoints, only from close viewpoints near the southern and northern site boundaries of the site might there be considered to be some medium-term adverse visual effect. This is due to the significant alteration in existing landform and levels during and just after the new Phase 1 pitch terraces have been formed and the addition of a new building in what is now open farmland. This effect would initially be judged as an adverse change from the existing situation. Once the proposed site landscape mitigation planting has established and begun to mature, it is likely that the development would no longer be seen in this way.

The effects of floodlighting during use of the Phase 1 site in hours of darkness have been addressed by the careful design of the lighting scheme to avoid direct views of the light sources outside the site perimeter. Some reflected glow from the pitch surfaces would inevitable occur, but this would only occur during the relatively short evening periods when the facilities are in use. This contrasts with the existing lighting to the A30 junction and the adjacent retail and service area, which are in use for extended periods at night.

From nearly all other locations tested, the visual impacts are judged to be either of no significance, or represent a neutral change to the view. From some locations to the northeast, where there are existing views towards the retail area and industrial estate, the proposed mitigation planting around the northern and eastern parts of the Phase 1 site are likely to have a beneficial screening effect at maturity.

## 8.0 Summary and Conclusions

1. This assessment concerns the proposed phased development of community rugby facilities on land close to the eastern edge of Hayle, in the Penwith District of Cornwall. The proposed development would provide senior and junior playing pitches, training areas and a clubhouse with social and meeting facilities. The development would be a replacement and improvement of existing rugby club facilities nearby.
2. An assessment of potential impacts on landscape character, landscape features, and views was carried out by an experienced Landscape Architect, within an area of possible visibility extending over about 28km<sup>2</sup>. The assessment used computer modelling, map and photographic information, and extensive fieldwork, to arrive at an assessment of impacts likely to arise from the development.
3. As a result of this assessment, adverse visual impacts of substantial / moderate significance were predicted to arise during and just after construction of Phase 1, from close viewpoints on the northern and southern boundaries, where two grassed terraces would replace the existing gently sloping agricultural fields. Similar works for Phase 2 of the development would have much lesser impacts. These impacts would be mitigated in time by the greening of the new pitches, and by proposed tree planting.
4. The configuration of the site would allow the layout of pitches, parking and surrounding green space with sufficient area for enclosing woodland, which in time would soften and partially or fully screen the site.
5. Due to the proximity of public roads to north and south of the site, lengths of ball-stop netting would be erected around parts of the main pitches during Phase 1. The support posts for this netting would be visible in some close views within 1km, but would not impose significant adverse visual impacts beyond this distance.
6. Slightly adverse impacts in the medium term were identified, from some locations on public roads in the 1 to 3km distance range from the site, and tree planting on or adjacent to the site would reduce these impacts in time to be of no significance. No other adverse impacts on residential properties, or on roads, footpaths and cycleways further afield are predicted to occur.
7. Such adverse impacts as were identified would in time be mitigated by the growth of recent and proposed planting of trees and shrubs on the boundaries and in the interior of the site. When mitigation measures have matured, no residual adverse landscape and visual impacts are predicted to remain during daylight hours.
8. In order to permit use of the facilities during evening hours, a scheme of pitch floodlighting forms part of the Phase 1 proposals. From close viewpoints to north and south during the day, the lighting columns would form a new feature in the view, in addition to the existing highway light columns and the proposed ball-stop fencing, but this would be of only low to moderate visual significance. When in use during evening hours, the floodlighting would impose moderate to substantial adverse visual impacts in close views from north, south and west, but these impacts would only be of short duration.
9. The assessment has shown that the site has the capacity to support development of the type proposed, and the character of the surrounding landscape would not be unduly adversely affected.
10. On the basis of this assessment of landscape and visual impacts, and when the quality of the architecture and associated landscape mitigation measures are taken into account, it is considered that the proposed development is an appropriate proposal for this site, and could be implemented without any significant long-term adverse landscape and visual impacts resulting therefrom.

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