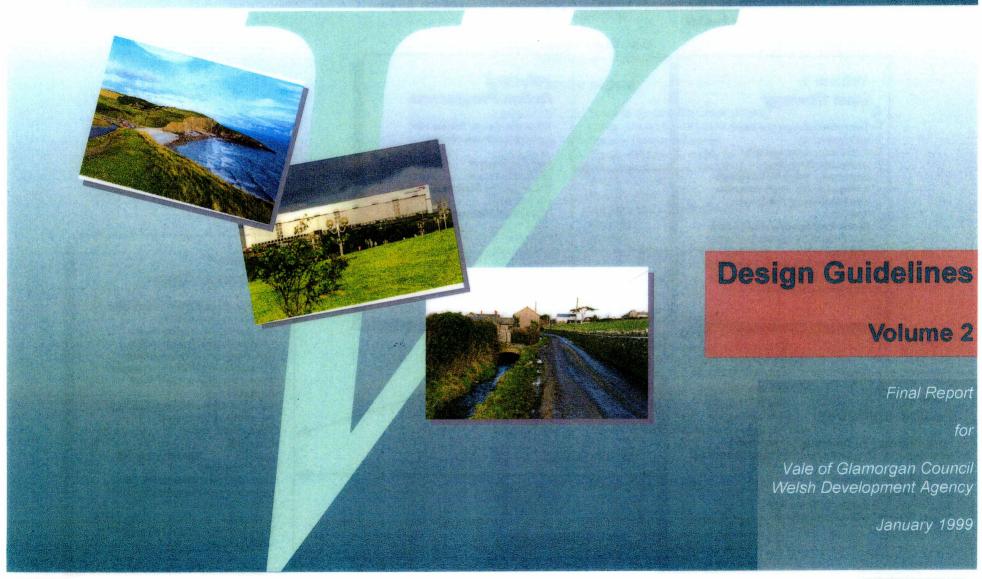
VALE OF GLAMORGAN





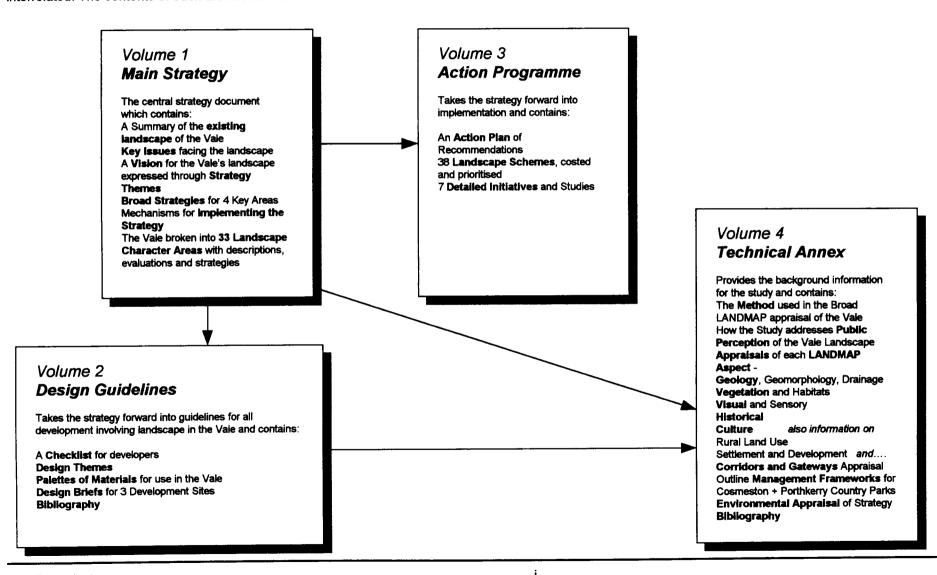






Guide to the Strategy Document

Each Volume of the Strategy has a specific function relevant to different people and organisations. All are interrelated. The contents of each are set out below:



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January 1999

1.0 INTRODUCTION

1.1 Purpose and Structure

This document is Volume 2 of a series of four documents which together make up the report 'Landscapes Working for the Vale of Glamorgan'. The Guide to the Strategy document at the front of this volume explains the titles and contents of the other three volumes.

The intention of this volume is to provide clear, free standing landscape design guidance for all those who are involved in the design, development, planning and management of the Vale landscape or whose proposals affect it.

The aims of the guidance are to promote best practice and to reinforce the sense of place of the Vale. It does this by tackling the types of development that are changing the character of the Vale, setting out a palette of materials and setting out references which may be of value to the reader.

These guidelines are not meant to limit innovative design but to provide a sound framework and information base from which good design and management can emerge.

The guidelines are structured as follows:

- Design themes applying to types of schemes throughout the whole borough
- Palette of materials for different areas of the Vale
- Landscape design briefs for three development areas
- Bibliography related to references on each design guideline

1.2 Checklist and Guide to Contents

To obtain maximum value from this document we suggest you follow the checklist below:

- 1. Is this the most appropriate document for your needs? Look at the **Guide to the Strategy Document** for the contents of the four volumes.
- Refer to the overall design themes for guidance relevant to your project type.
 Towards Sustainable Development DG1 is relevant to all schemes!
- 3. If you intend to carry out a scheme within the study area locate your area of interest in the **palette of materials** guidelines. Your scheme may also be within one of the **design brief** areas.

For further detail on particular aspects follow the reference guide below:

Geology, Geomorphology and Drainage - Volume 4 Technical Annex Section 4.0

Vegetation and Habitats - see Volume 4 Technical Annex Section 5.0

Visual and Sensory - see Volume 4 Technical Annex Section 6.0

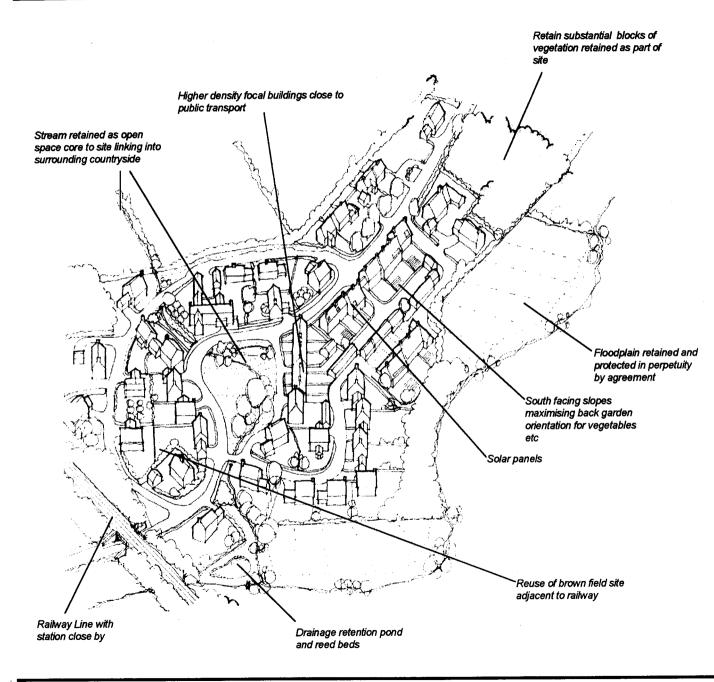
Historical - see Volume 4 Technical Annex Section 7.0

Culture - see Volume 4 Technical Annex Section 8.0

Rural Land Use - see Volume 4 Technical Annex Section 9.0

Settlement and Development - see Volume 4 Technical Annex Section 10.0

Public Perception - see Volume 4 Technical Annex Section 3.0



AIM

 Minimise non-renewable resource input to the construction and ongoing use of development.

DESIGN PRINCIPLES

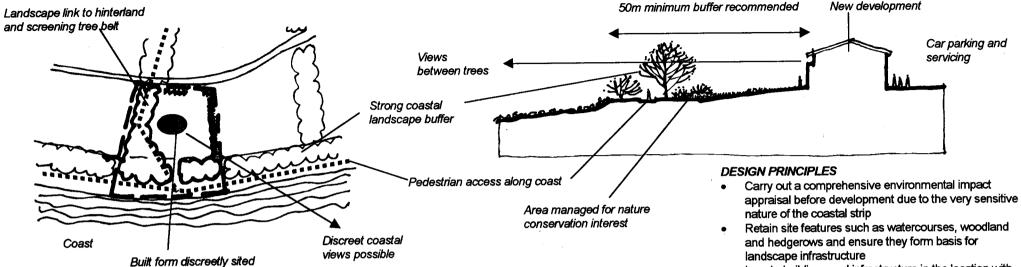
- Locate development on brown field sites where possible
- Thoroughly integrate and appraise site and its context in terms of physical characteristics, opportunities and constraints.
- Design layout to avoid/minimise impact on natural features which would require expensive and energy inefficient measures to control and remediate e.g. river floodplains, aquifer, wetlands i.e. design with not against nature.
- Conserve existing site features such as watercourses and seminatural vegetation. Link these with new planting and open space and with external wildlife corridors to enhance nature conservation. Design natural vegetation blocks to maximise aggregation and minimise boundary length.
- Allow maximum penetration of rainfall into ground avoiding contamination. Consider use of permeable surfacing, french drains and balancing ponds.
- Treat contamination on site if possible limiting impact on surrounding area.
- Use low cost and energy input construction techniques using local materials where possible. Design structures to have longevity and to be flexible to accommodate different uses over time or to be energy efficient to build and demolish.
- Orientate road layout and buildings to maximise solar gain where this does not conflict with above considerations. Building on south facing slopes is desirable. Orientate longest elevations within 45 degrees of south. Reduce exposure to winds [south west prevailing] by use of trees for shelter.
- Design buildings to minimise external wall area, north facing windows and maximise insulation.

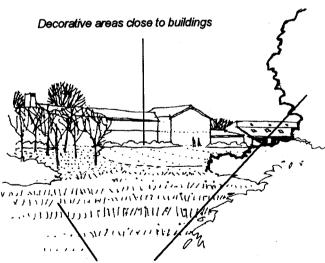
REFERENCES

Main Strategy Volume 1 Section 3.3
Design Guidelines Volume 2: DG17
Technical Annex Volume 4 Sections 4.0, 5.0 and 6.0
Barton et al [1995], Beer [1990], Bentley et al [1985]

Design Guideline DG1

TOWARDS SUSTAINABLE DEVELOPMENT





Nature conservation - grassland/woodland by coast

AIMS

- To conserve or recreate a strong coastal landscape strip without development near the water edge
- To maintain/create continuous access to and along the coast
- To minimise the impact of development

REFERENCES

Main Strategy Volume 1 Sections 3.7, 4.3 Design Guidelines Volume 2: DG2,3,21,22,24 Action Programme Volume 3 Sites 23, 24, 25, 26 Technical Annex Volume 4 Sections 4.0, 5.0, 6.0

- Locate buildings and infrastructure in the location with the least visual, ecological and archaeological impact
- Set buildings and infrastructure back from the coast to allow substantial strip for coastal woodland and other ecologically managed habitats
- Buildings should always address sea with no servicing or parking on coastal side
- Improve coastal path and provide access in perpetuity ensuring allowance is made for erosion of coast over
- Prevent general vehicular access to sea
- Manage sites to accommodate visitor pressure ensuring sensitive sites are protected from wear such as rare habitats or archaeological sites
- Use natural features of site and new planting in external spaces to optimise shelter from prevailing winds
- Ensure development responds to the site's sense of place and use coastal palette of materials

Design Guideline DG2

COAST - INTEGRATION OF DEVELOPMENT

Trees and shrubs in sheltered

areas and unused corners

AIM

 To conserve and enhance the special qualities of the entire coastline by providing high quality planning, design and maintenance of visitor facilities and other developments, where appropriate.

Limited parking spaces with views set back from edge Areas of wind-pruned shrubs separating coast from parking or other activities Informal path SHORELINE TREATMENT

DESIGN PRINCIPLES

- Wherever feasible a strip should be set aside along the coastline providing open access to pedestrians. At minimum, this should allow sufficient space for a wide paths and should preferably include space for trees, shrubs and natural vegetation, and to take into account future coastal erosion.
- Where there are sites vulnerable to damage by wear and tear, such as prehistoric earthworks, special geological formations and exposed cliffs, visitors should be directed away from them by the use of scrub vegetation, low level signing or discreet fencing and other barriers.
- Vehicular access and parking should be kept back from the coastline and sited to be naturally unobtrusive, away from skylines, and screened by vegetation or landforms.
- The minimum amount of hardstanding should be provided along main access routes with most parking being on grass.
- Vehicular access should be restricted by low bunding, ditches, posts or rocks, avoiding the use of fences if possible.
- Popular pedestrian routes such as those from parking areas to the beach should be clearly defined and kept well away from vulnerable sites.
- Surfacing of paths should be to minimum specification for each situation. In most places no surfacing should be required.
- A limited number of small parking areas should allow for car view points, orientated to preferred views. These should be below skylines, ideally adjacent to or under existing trees to prevent windscreen glare.
- Ancillary buildings related to parking and beach facilities in rural situations should be unobtrusive. They should be sited away from main views and be of a scale and shape to complement landforms. Materials used should be either of local origin or of muted colour and non-reflective. It may be appropriate to include temporary seasonal buildings.

- Beach access should be appropriate in scale and ease of use depending on the situation. In places it is appropriate to restrict access by the use of steep steps and ladders, especially where cliffs are susceptible to erosion.
- Popular view points should have safe and direct paths to them.
 Raised areas or platforms should be considered to provide safe viewing points, reducing danger and wear and tear on more vulnerable places.
- Signs should be used with discretion and be welcoming rather than prohibitive.
- Signs, interpretation boards, litter bins etc. should not be prominent, should be away from beaches and cliffs, and if possible incorporated into walls and other features.
- Design solutions using materials other than mass concrete should be sought, and should be sensitive to local geology and built form. Expert assessment should be made to enable sea defences to enhance habitats such as shingle vegetation, and to encourage the deposition of sand at bathing beaches.
- Limited tree and shrub planting should be carried out or, especially along rural parts of the coast, encouraged to develop naturally.
 Suitable places for trees and shrubs include:
 - · in sheltered hollows:
 - alongside existing hedges and in unused corners;
 - · to shelter/screen buildings, parking areas, etc.;
 - · to keep people away from dangerous cliff-tops;
 - to restrict access to sensitive areas.
- Linear and formal blocks of planting are inappropriate. Tree and shrub areas should appear natural and usually be irregular in shape.
- As well as native species, sycamore, holm oak and Scots pine are appropriate trees for parts of the coast associated with structures and buildings.
- Where industry etc. is adjacent to coast, security fences should be kept back from coastline and preferably softened with planting.

REFERENCES

Main Strategy Volume 1, Sections 3.7, 4.3, 4.4.

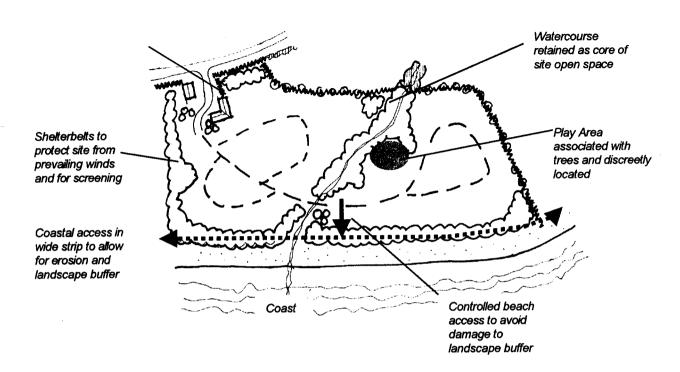
Design Guidelines Volume 2: DG2, 4, 5, 7, 9, 16, 17, 18, 21, 24.

Action Programme Volume 3: Sites 21 to 33, 40, 41.

Glamorgan Heritage Coast Plan Statement (1975)

Design Guideline DG3

COAST - DESIGN GUIDELINES





Caravans close to cliff edge look unsightly and restrict access



oodla. Setting caravans back, planting, possible profiling to allow views and v. over coastal landscape strip and access along coastal frontage dgercovs

Main Strategy Volume 1 Sections 3.7, 3.12, 4.3
Design Guidelines Volume 2: DG2,3
Technical Annex Volume 4 Sections 4.0, 5.0 and 6.0
English Tourist Board, 'Holiday Caravan Parks Caring for the
Environment – A Guide to Good Practice'

AIMS

- To conserve or recreate a strong coastal landscape strip without development near the water edge
- To maintain/create continuous access to and along the coast
- To minimise the impact of development

PRINCIPLES

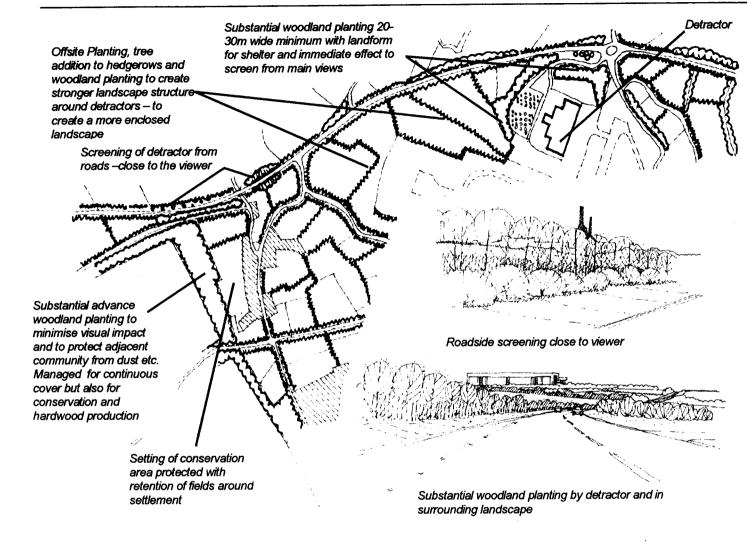
Follow DG2 for general principles and the following specific guidelines:

- Prepare management plan to manage site for sustainable access along and to the coast and for optimum landscape benefit
- Locate caravans and associated facilities away from coast /cliff edge to allow sustainable access and to allow coastal landscape buffer and screen
- Use planting to screen caravans with associated landform to create shelter
- Use native species on coast edge and boundaries of the site, keeping exotic planting to internal areas
- Colour caravans to minimise reflectiveness and visibility

 green is preferred colour
- Avoid regimented lines of caravans, roads or facilities follow contours where possible
- Provide open space within site optimising natural features
- Communal and focal buildings to be designed to respond to the local vernacular [see Volume 1 Section 3.6].
- Ensure screening of development from inland views particularly the main access
- Use signage discreetly to minimise impact of frontage
- Provide discreet interpretation of coast
- Avoid hard coastal defence solutions such as concrete walls

Design Guideline DG4

COAST – DESIGN OF LEISURE FACILITIES



Main Strategy Volume 1 Sections 3.4, 4.2
Design Guidelines Volume 2: DG2,3
Action Programme Volume 3 Sites 7, 15
Technical Annex Volume 4 Sections 4.0, 5.0 and 6.0
Beer 1990, IEA and LI 1995, Royal Fine Arts Commission 'Guidelines on Building Design'.

AIMS

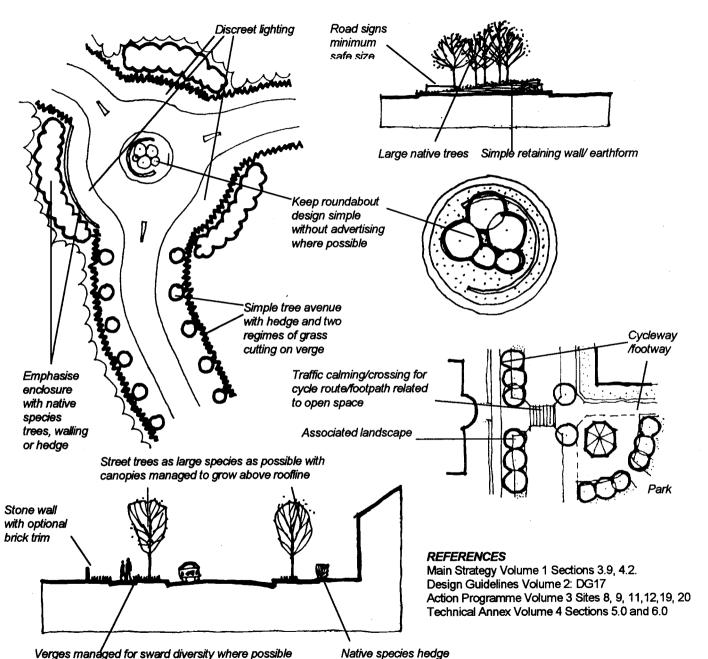
- Locate development avoiding areas of high landscape quality and their setting
- Avoid landscapes with high intervisibility
- Minimise the impact of development

PRINCIPLES

- Carry out a comprehensive environmental impact appraisal before development
- Retain site features such as watercourses, woodland and hedgerows and ensure they form basis for landscape infrastructure
- Locate buildings and infrastructure in the location with the least visual, ecological and archaeological impact
- Consider impact of related infrastructure [eg pylons] and minimise impact
- Design buildings and structures to a high quality with clean, elegant lines. Minimise visual clutter on all elevations including signage Follow RFC guideline on building design.
- Orientate building to ensure servicing is hidden from most sensitive and most viewed locations
- Colour building matt neutral light grey or buff minimising reflectiveness
- Minimise light pollution in countryside
- Ensure landform and planting screening is of sufficient scale to be effective with sufficient land purchased to provide mitigation
- Screening landform and planting should reflect the pattern of the surrounding landscape where possible
- Carry out offsite screening on surrounding roads within 5km radius to minimise significant views of detractor
- Carry out planting on adjacent land such as woodland and hedgerows/trees where possible to strengthen surrounding landscape infrastructure
- Use native species planting with appropriate nurse and quick effect species to be removed over time.
- Prepare management plan to optimise nature conservation value and ensure continuous cover and climax vegetation
- Carry out advance planting to mitigate impact

Design Guideline DG5

MITIGATION OF LARGE SCALE VISUAL DETRACTORS

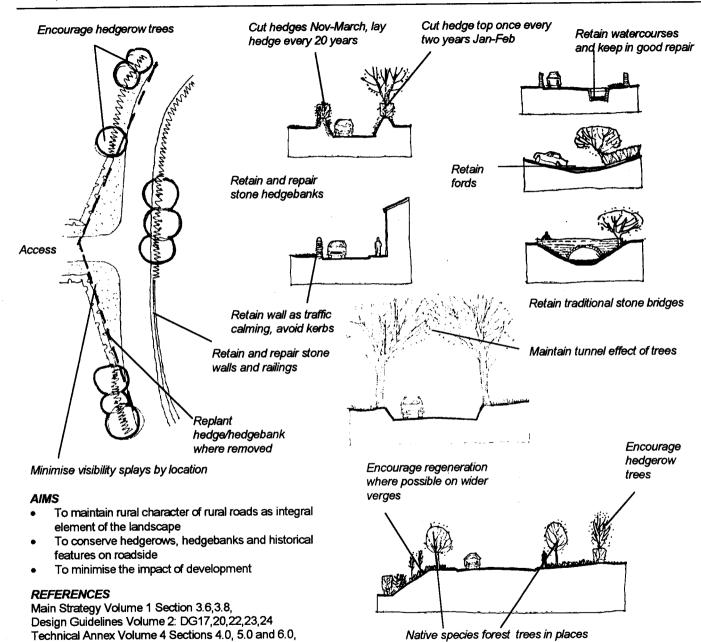


- To create a refined and subdued palette of materials and appropriate detailing to reflect the Vale's character
- To ensure that all road improvements incorporate landscape/environmental improvement
- To ensure road safety for pedestrians and cyclists as well as for motorists

PRINCIPLES

- Design gateway roundabouts and road detailing as simply as possible reflecting rural Vale character
- Use native trees and hedging species, meadow plants and bulbs primarily. Avoid exotic planting.
- Use a palette of material sympathetic to the Vale character maximising greys and buff colours [to reflect limestone]. Some use of pinks/browns possible in South East Vale to reflect mudstones and marls.
- Use traditional limestone walling or hedges/hedgebanks [laid] where possible as enclosure. Avoid chainlink fences and concrete posts and remove over time.
- Encourage nature conservation by management of verges [meadow regime with tidy edges], native species planting and regeneration. Avoid pesticide use.
- Lighting of roads to be minimised within safety requirements to avoid light pollution
- Incorporate landscape works as integral to traffic calming, road safety and pedestrian crossing measures
- Ensure pedestrian and cycle movement is as safe and convenient as car movement.
- Do not make urban landscape provision [e.g. large areas of decorative shrub planting] spread development out unnecessarily and ensure walking is convenient and safe.

Design Guideline DG6
ROADS - URBAN



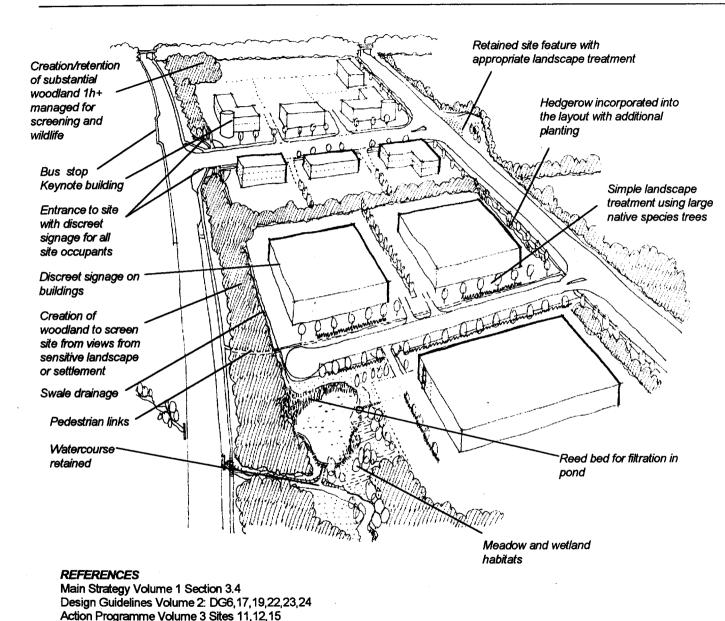
PRINCIPLES

- Carry out review of historical value of roads and associated hedgerows/banks, ditches and streams as part of historic landscape survey as resources allow
- Carry out ecological survey of identified roads verges as resources allow
- Protect important lanes identified above
- Maintain hedgerows, encouraging laying of hedges and allowing tree growth in places by incentive schemes
- Maintain stone walls and replace chainlink, concrete bollards and other unsuitable fencing
- Maintain traditional road features such as fords and stone bridges which add character and 'calm' traffic
- Avoid road improvement unless essential for safety purposes
- Avoid kerbs, coloured surfacing and excessive road markings. Use limestone aggregate topdressing as a road surface material change where needed.
- Avoid hedgerow removal, siting entrances in locations to optimise sight lines.
- Construct farm accesses as per Design Guideline DG15
 Minimise street lighting between settlements and where
 essential use high pressure sodium lamps on 5m poles
- Avoid excessive signage, using minimum size signage, combining signs on posts where possible. Avoid luminous colours where possible.
- Standardise rural signage and street furniture preferably avoiding Victorian style. Use locally available hardwood timber and local makers where possible
- Standardise colour of above using black or dark green
- Encourage vegetation regeneration where appropriate as low cost screening of detractors and to promote nature conservation
- Avoid use of pesticides and fertilisers
- Review management of roadside verges and planting to encourage nature conservation and tree growth.
 Prepare revised management schedules
- Prepare rural road guidelines for hardworks in the rural Vale to ensure their character is protected
- Ensure maintenance force have traditional skills to maintain hedgerows, walls etc with appropriate training

Design Guideline DG7
ROADS - RURAL

Road Design Guide'

Chilterns Conference [1997], Welsh Office 'Lowland



- To minimise impact of development on the landscape
- Create high quality commercial sites to reflect the Vale's high landscape quality
- To enhance the nature conservation value of a site
- To use land as efficiently as possible at high densities while ensuring an effective landscape infrastructure

DESIGN PRINCIPLES

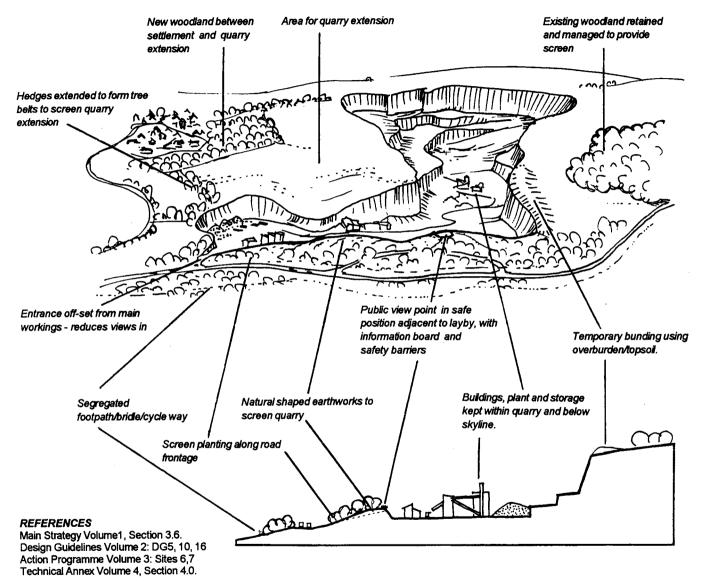
- Carry our environmental impact appraisal before development
- Design team to visit the site and prepare design statement
- Retain site features such as woodlands, watercourses and distinctive historical remains and also hedgerows where possible and use as a basis for landscape infrastructure and distinctive design for site
- Locate buildings and infrastructure in location with the least visual, ecological and archaeological impact
- Orientate buildings to ensure servicing is hidden from most sensitive and viewed locations
- Ensure layout is safe and secure for users
- Colour coordinate buildings to complement each other and location – eq matt neutral light grey and buff
- Create substantial woodland screen buffers 10-30m wide, possibly with landform where there are sensitive views in. Elsewhere gaps in high planting can allow views to signs on building facias
- Maintain grain of landscape with landscape infrastructure echoing adjacent landscape
- Create well designed entrances to the site with carefully designed discreet signage showing all site occupants
- Manage surface water on site with ponds, watercourses and swales to maximise water absorption on site and minimise run off to sewers
- Manage for site for biodiversity [see DG17]

Design Guideline DG8 INDUSTRIAL AND COMMERCIAL SITES

and Biodiversity

Technical Annex Volume 4 Sections 4.0, 5.0 and 6.0

Barton [1995], Beer [1990], Earthwatch, 'Business



Mid Glam. C.C. (1995): Mineral Local Plan for Limestone Quarrying

RMC Group p.l.c. (1994); Environmental Policy

HMSO (1989): RPG7: The Reclamation of Mineral Workings

AIMS

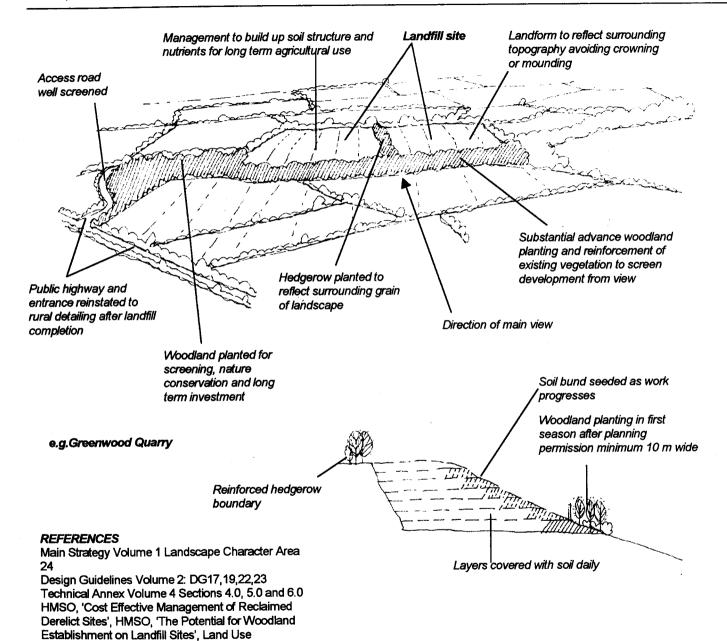
- To ensure that existing and future quarrying activities are integrated into the landscape.
- To ensure that afteruse of quarries adds to overall landscape value.
- To provide for local building stone requirements.

DESIGN PRINCIPLES

- Buildings and ancillary works should be as unintrusive as possible by -
 - · siting buildings within the quarry workings;
 - · keeping hoppers, crushers and conveyers below skylines;
 - using neutral colours for buildings and signs:
 - keeping stored material, parked vehicles and heavy plant, etc away from entrances and other exposed areas;
 - · keeping lighting to a minimum.
- Quarry entrances and access should be kept as narrow as practical with any buildings well back from road. Direct views into quarry should be avoided if possible by off-setting the entrance or by screening.
- Existing nearby woodlands and hedges should be managed to enhance their screening potential.
- Strategic screening should be carried out beyond immediate vicinity of quarry. This may include new community woodlands, extended hedges and woods, bunding.
- Overburden and topsoil being reserved for future restoration should be used for temporary screening bunds.
- All earthworks that provide screening, both permanent and temporary, should appear as extensions to natural topography.
- Segregated footpaths, bridle and cycle routes should be provided where quarry dust and heavy vehicles make roads unpleasant and unsafe.
- Afteruse and restoration plans should consider potential of workings for recreation, eg. rock climbing, biking, and habitat creation, particularly limestone cliffs, screes and wetlands.
- Interpretation boards and viewing places should be provided where well-used paths and roads are adjacent to quarries, and where the safety of the public can be assured.
- Small-scale workings for local building stone should be considered in former quarries and new locations, after assessment of potential requirements and careful environmental assessment.

Design Guideline DG9

QUARRIES



- To minimise the impact of development
- To ensure groundwater is protected

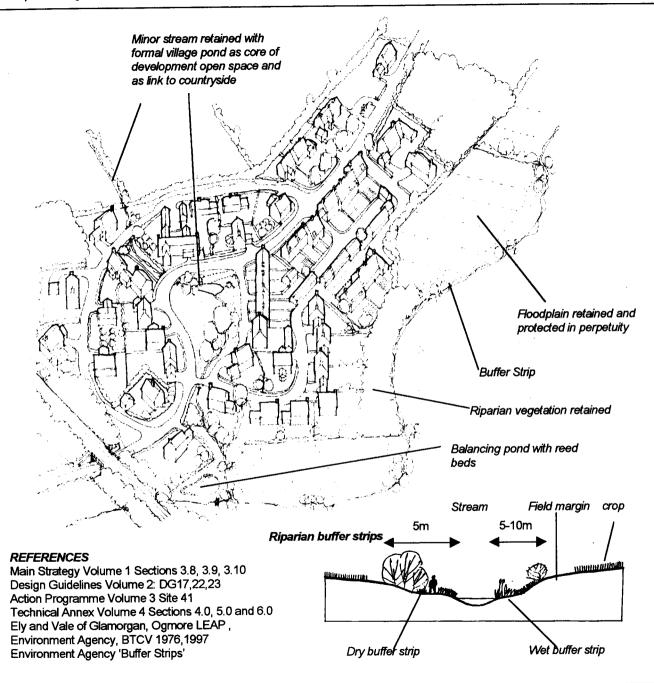
PRINCIPLES

- Follow best practice procedures in operational use and restoration of site. Particular care is needed in managing drainage, material handling and lorry movement
- Prepare landscape and management plan for phased restoration and after use
- Ensure public highway access is sensitively detailed and hedges etc retained. If widening or kerbing is carried out as part of landfill access this should be removed after landfill completion and restored to rural road detailing
- Minimise impact of entrance, access road, barriers, gates etc by careful siting and design e.g. paint metal work dark green.
- Retain as much existing vegetation on site as possible on boundaries for screening
- Planting to be native species as per planting palette design guidelines
- Manage on site woodland and tree cover for continuous
 cover
- Minimise litter blow by use of well maintained fences screened by planting and covering landfill daily with soil
- Build up landfill ensuring exposed face is graded to final contours and soiled as work progresses and is seeded or planted immediately
- Ensure final landform is suitable for proposed after use in terms of gradients, access etc
- Carry out phased restoration with planting and seeding on an annual basis

Design Guideline DG10 LANDFILL

[1987 rev 1993]

Consultants [1992], Welsh Development Agency



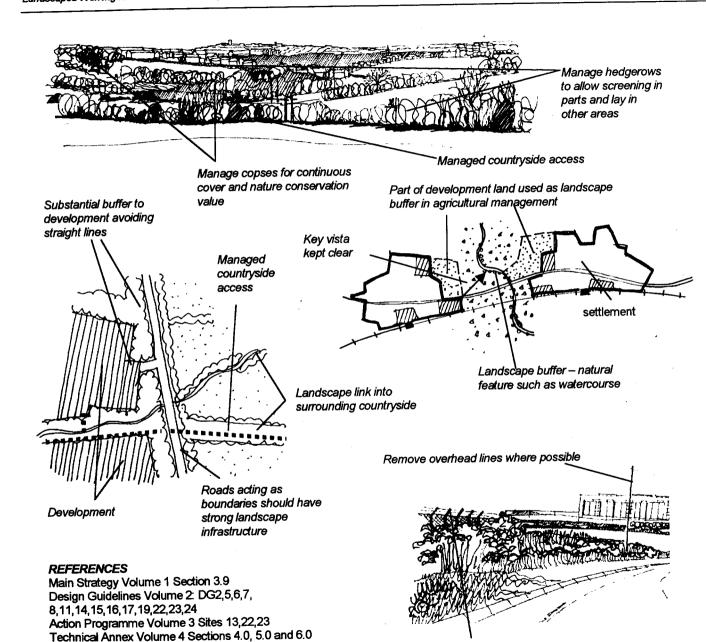
- To conserve river corridors as important landscape elements, wildlife corridors and for recreation
- To enhance watercourses where possible
- To minimise the impact of development

DESIGN PRINCIPLES

- Establish ecological value of watercourses through river habitat surveys
- Protect sensitive areas such as swamps/mires from access and development
- Avoid building in floodplain [and aquifers]. Incorporate floodplain land [water meadows] as managed in perpetuity for low intensity agricultural purposes as part of planning agreement where possible
- Avoid culverting or redirecting watercourses
- Enhance modified watercourses with 'soft engineering' for nature conservation value where appropriate
- Use watercourses including streams and ditches as integral part of development as core to open space and as wildlife link to wider countryside
- Encourage buffer strips along watercourses
- Manage surface water on site to minimise use of sewers and to minimise run off – use storage ponds, swales and porous surfacing
- Allow access for recreation on one side of watercourse in less sensitive areas where possible
- Avoid pesticides and waste disposal by watercourses
- Limit and control livestock access to watercourse
- Liaise with Environment Agency to gain maximum benefit for watercourses

Design Guideline DG11

RIVERS – MANAGEMENT AND INTEGRATION OF DEVELOPMENT



- To conserve the best landscape features adjacent to settlements, both natural and man-made, and create a strong landscape structure
- Support agricultural use alongside recreational use and nature conservation
- To create a definite edge between settlement and countryside
- Maintain settings for important settlements and buildings such as conservation areas

PRINCIPLES

- Encourage traditional field boundaries such as stone walls, hedgerows and hedgebanks, timber fences on land surrounding settlement, not urban detailing such as concrete and chainlink fences
- Identify features of particular value including nature conservation interest on land and encourage management agreements with farmer to conserve and enhance area
- Avoid development into natural barriers such as hillcrests [skyline] or floodplains
- Identify settings for conservation areas and important vistas and keep free from development
- Ensure all new development has substantial landscape buffer on countryside edge – minimum 10m wide woodland planted area
- Avoid straight lines and regimented buildings on settlement edge – respond to topography and echo rural settlement form mixing gable ends with backs etc
- Use planting on roads on settlement boundaries to screen development
- Provide well managed and signed access into the countryside
- Minimise lighting between settlements where not essential for safety
- Rationalise signage at settlement entrance to give positive impression
- Minimise overhead clutter of wires and in urban fringe
- Avoid exotic plant species on settlement edge and at gateways – use native species to soften transition

Design Guideline DG12 URBAN EDGE

Replace unsightly fencing and screen detractor

Barton [1995], Beer [1990]

- To provide a framework for the conservation and enhancement of all villages, hamlets and their settings throughout the Vale.
- To reduce, and wherever feasible, reverse the erosion of locally distinct rural character which results in suburbanisation.
- To allow changes in development and land use patterns related to settlements to become more sustainable whilst retaining an understanding and appreciation of the past.

DESIGN PRINCIPLES

- Apply design principles set out in Rural Conservation Areas SPG to development in all rural settlements.
- Promote and encourage production of Village Design Statements, JIGSO assessments, Parish Maps or similar "whole settlement" plans where appropriate, thereby adopting integrated approach to development, improvement and conservation.
- Promote and encourage community-based landscape improvement, planting and management projects such as CASH, Adopt-apath/hedge/pond/copse, community woodlands, "Woods on your Doorstep" (Woodland Trust).
- Ensure that development and improvements in and around rural settlements allow for continuance of existing appropriate land-based uses such as farms, small-holdings, allotments, with the traditional patterns of small fields, tracks, etc. Any rural grant scheme should recognise the importance of field boundaries, etc. around settlements and support their conservation.

Highways

- Design highway improvements, traffic management and calming schemes sensitively on approaches and through settlements to take account of historic and rural character. Achieve required safety standards by design rather than inflexible adherence to Department of Transport guidance notes, for instance, by -
 - reduction of road width and retention of "pinch-points" to ensure slow traffic speeds;
 - · separation of pedestrians/equestrians/vehicles;
 - · retention or inclusion of sharp bends and corners in carriageways
 - · shared road surfaces clearly defined
- Consider undergrounding or rationalisation of overhead services in conjunction with highway improvements.
- Use lighting in settlements only where essential for safety, using minimum acceptable lighting intensity. Orange sodium lights should be avoided. Where possible, lighting should be mounted on buildings
- Avoid wherever possible the use of materials and features usually associated with urban roads such as high concrete kerbs, standard traffic barriers, large-scale and highly-coloured directional signs and road markings, filter drains, concrete block paving and bollards.

Consider use of local stone, "conservation" and rural kerbs and surface dressings which will complement local building materials for carriageways and pavements.

Features Conserve, repair and enhance traditional features including walls,

- hedgebanks, stone stiles, gates, bridges, paving.
 Protect settlement-related water sources and feature such as ponds, wells, springs and streams from pollution, silting-up and becoming.
- Protect settlement-related water sources and reacure such as points wells, springs and streams from pollution, silting-up and becoming overgrown, and promote their restoration.
- Integrate street furniture, such as seats, bus shelters, litter bins, lights, signs and noticeboards, into the walls and fabric of the settlement wherever possible. Elaborate reproduction Victorian street furniture is usually inappropriate, while simple, refined contemporary designs using sympathetic materials appear wellmannered and generally age better.
- Retain and enhance paths into surrounding countryside especially where these are traditional links to commons, woods, water sources (wells and springs) and viewpoints.
- Promote use of distinctive village signs, allowing for individuality within a Vale-wide theme.
- Consider introducing low-key entrance features and improvements, where appropriate to the settlement pattern, to enhance appearances, such as copses and avenues, walls and hedges, to frame views and add to distinct character.

Visual

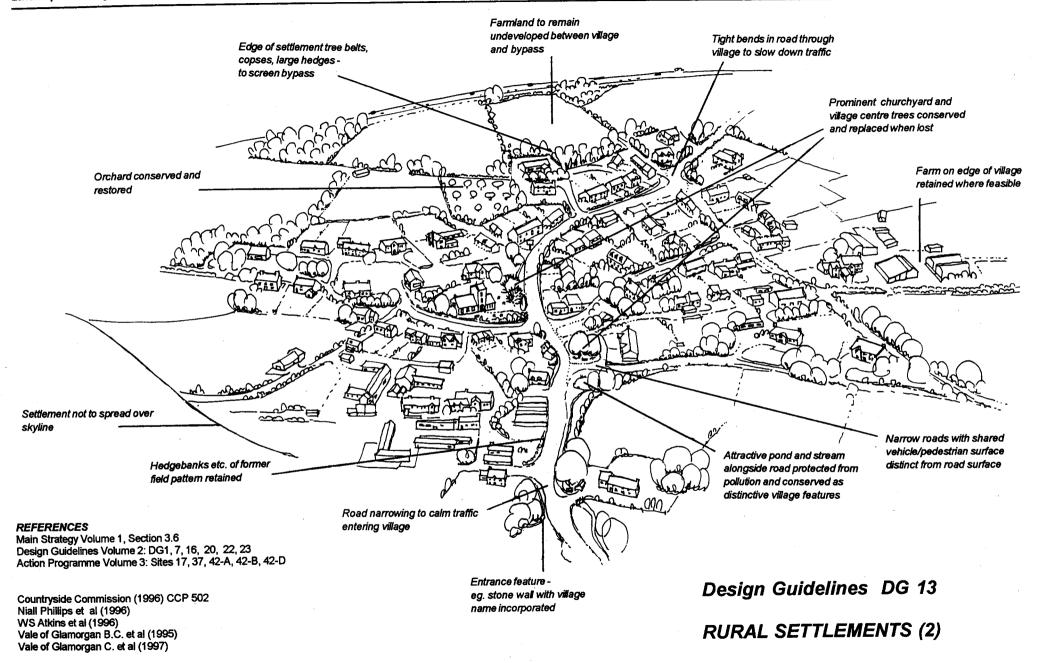
- Ensure that development does not intrude over skylines particularly where the original settlement is valley-based
- Protect from development the important visual envelope surrounding settlements to -
 - prevent intervisibility between settlements, and between settlements and major roads or other intrusive development;
 - · retain a sense of seperateness or remoteness;
 - retain views out from the settlement to skylines, across the Bristol Channel or to distant hills.



Planting

- Plant trees, woodlands, hedges, etc within the visual envelope of settlements in order to-
 - · screen intrusive features and developments, including main roads;
 - · frame good views;
 - retain a sense of enclosure, arrival, etc.;
 - provide focal features.
- Plant mainly native or local tree and shrub species.
- Planting of unsuitable and inappropriate trees and hedges in prominent positions should be discouraged. This includes fastgrowing conifers as hedging, ornamental, exotic and formal shaped trees within public realm.
- Manage and maintain public realm open spaces to be of an appropriate rural character, by -
 - discouragement of ornamental flower and shrub beds beyond private gardens;
 - encouragement of native wild flowers and grasses within verges, greens, etc. by mowing regimes whilst allowing for their use by pedestrians etc.
- Conserve and restore trees and hedges within and around settlements, in particular -
 - roadside hedgebanks forming propertiy boundaries;
 - hedges marking former field boundaries now absorbed into villages:
 - prominent trees such as those at entrances to villages, around churches, associated with greens and ponds or other focal places;
 - · old orchards and avenues
 - trees, hedges, etc. that screen the edges of settlements

Design Guidelines DG 13
RURAL SETTLEMENTS (1)



- To encourage approach by landowners to changes relating to farmsteads which respect the agricultural traditions and which fit into the countryside.
- To encourage appreciation of a more sustainable approach to landuse and buildings on a whole farm basis.
- To provide framework for the proposed control over development of farm-related buildings (Vale of Glamorgan Countryside Strategy -Landscape Action programme no. 9)

Courtvard/area for future

expansion screened by

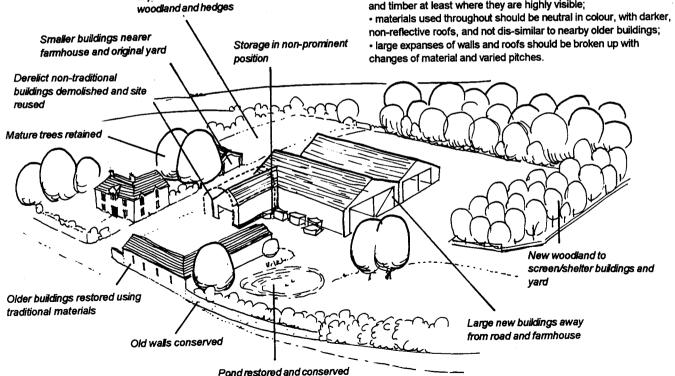
DESIGN PRINCIPLES

- New farm buildings should be sited and grouped in such a way as not to dominate original farmstead or surrounding countryside. This may include the following considerations -
 - if possible, be positioned beyond and below original farmstead, in relationship to approaches and general views of the group:
 - · not break skylines;
 - if large, not be sited immediately adjacent to smaller older buildinas:
 - · be grouped in such a way as to allow for future expansion. preferably in courtyard formation rather than alignments:
 - · grouped to provide usable spaces without awkward gaps:
 - · set back from roads, preferably behind existing screen of vegetation or buildings.
- Consideration should be given to outdoor storage areas so that these are not prominent. This may involve them being sited in a screened location, to rear or side of group of buildings, or as part of courtvard.
- The materials and design of new farm buildings should be sympathetic with their surroundings by -
 - · using natural and locally traditional materials such as stone, bricks and timber at least where they are highly visible;
 - non-reflective roofs, and not dis-similar to nearby older buildings;

- Restoration or additions to older buildings, whether for agriculture or other uses, should be carried out using traditional materials and be appropriate in scale with original complex
- Redundant farm buildings, especially non-traditional ones, should be demolished if they are unable to be made usable. Traditional materials such as stone and slates should be salvaged for re-use. The landscape restoration of sites of demolished buildings should be incorporated into plans for development, or the sites reused for agriculture.
- Preliminary assessments of the impacts on air, water and soil resources should be encouraged at an early stage when changes and developments are planned on farms. Aspects giving concern should be further assessed.
- Existing native trees and shrubs should be retained and conserved wherever possible within and around developments, especially where these form backdrops, soften facades and rooflines, screen storage and rubbish areas.
- Conservation and restoration of traditional planted features associated with farmsteads, such as hedges and orchards, should be encouraged.
- New planting of hedges, copses, shelterbelts, orchards, etc. should be encouraged to help integrate new buildings into the landscape and to screen unsightly areas and provide shelter. These should be mainly native or locally traditional hardwood trees and shrubs. Fastgrowing conifers such as cypresses are inappropriate in rural situations and should not be permitted.
- Conservation and restoration of built features other than buildings, especially ponds and wells or springs which may be required in future, walls, tracks/green lanes, gates and stiles, cobbled yards, etc

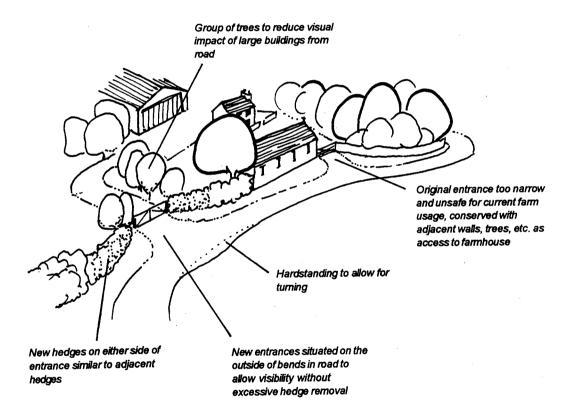
REFERENCES

Main Strategy Volume 1, Section 3.8. Design Guidelines Volume 2: DG1, 12, 15, 16, 20, 22, 23. Action Programme Volume 3



Design Guideline DG 14 FARM BUILDINGS

Main Strategy Volume 1, Section 3.8. Design Guidelines Volume 2: DG1, 7, 13, 14, 16, 20, 22, 23 Action Programme Volume 3



AIM

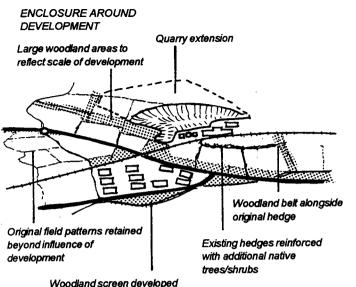
To conserve the character of rural roads and farms

DESIGN PRINCIPLES

- Changes or improvements to farm entrances and accesses should include for the retention of existing hedges and trees, or replacement.
- Informal hardstanding or widening of road opposite entrances should be considered to allow for large vehicles manoeuvreing.
- Where farm is alongside road, associated walls and hedges should be conserved and extended where necessary to link with new.
- Where farm activities are expanding it may be preferable to provide new entrances to accomodate greater usage and conserve original entrance for use by farmhouse. In this way, road safety can be ensured, farming activities can be separated from domestic or if near village or other buildings, farming activities can be made to be less intrusive for others.
- New farm entrances should be sited where there is good road visibility, preferably on outer side of curve in road, to reduce need for hedge removal and re-alignment.
- New entrances should be off-set from main farm so that buildings are not too intrusive.
- Where hedges have been breached or removed to accommodate sight lines these should be gapped up or replaced on new alignment using similar species and structure to adjacent ones, including banks and walls.
- Trees should be planted adjacent to or within farm entrance where they can soften the outlines of large buildings, frame views through, screen unsightly areas, etc.
- Chainlink, weldmesh, close-board and other forms of fencing and gates more usually associated with industrial or urban situations should not be used.

Design Guideline DG 15
FARM ACCESS

January 1999



Large mixed hedge on old Isolated valley-side woods boundary conserved as major linked with new woodland with landscape feature flowing outline

Gappy hedge re-planted

AIM

To conserve, maintain and improve a well-balanced matrix of woodland and hedges throughout the Vale, perpetuating, where possible, the pattern of small and medium-sized woods, large hedges with local variations relating to natural constraints such as degree of exposure, topography and soils and to the historic landscape.

DESIGN PRINCIPLES

- The proposed Woodland Strategy (V.OG.Countryside Strategy, Landscape Action Programme, no. 2) should take into account the balance of ecological, historic, visual and economic value of woodland throughout the Vale.
- All existing woodland should be brought into positive and sensitive management through Coed Cymru, Woodland Grant Schemes, and other incentives.
- Encouragement should be given to production and use of trees and shrubs of local provenance.
- Encourage the use of natural regeneration of mainly native species in the management of woods and hedges.
- Non-native species may be appropriate in exposed conditions, near settlements and developments. This includes sycamore, holm oak, horse chestnut and Scots pine.
- Encouragement should be given to development of small or medium scale new woodlands in situations such as where they serve as shelter, screening of development etc. on small brownfield sites, on old woodland sites or linking isolated woods together.
- Efforts should be made to conserve certain hedges that may not be protected by the Hedgerow Regulations. This may include roadside hedges, visually significant or prominent hedges, recent planting.

New woodland in scale with development, between old railway and stream

- Hedges should be managed to be stockproof, visually interesting. good for wildlife. This involves the traditional management of hedgelaying and coppicing.
- Neglect to cut, or allowing stock to graze, or continually severely cutting back should be discouraged.
- New hedges and gapping up should reflect those local and adiacent ones. This includes species mix, number of standard trees within the hedge, width and density, banks, walls, ditches and alignment.
- Develop new enclosure and planting patterns where these have been depleted or disrupted to reflect current requirements in relation to scale, screening, agricultural and forestry practice, recreational use, etc. This is most likely to be appropriate on restored quarries. around the urban fringes, in the vicinity of large-scale developement. where there has been considerable hedge loss due to agriculture.
- Public access to woodland for pedestrians and limited access for equestrians and cyclists should be encouraged where it is not unduly disruptive to wildlife.
- Diversity throughout the Vale and locally distinctive patterns of woodland and hedges should be recognised and perpetuated.
- Planted features that contribute to landscape character should be conserved, such as limited areas of coniferous plantation, orchards. parkland and estate plantings, avenues, unusual and exotic species.
- The contribution that prominent single trees make to the landscape should not be overlooked, including on skylines, corners in roads and prominent windpruned trees

REFERENCES

Main Strategy Volume1, Sections 3.8, 3.9, 3.13 Design Guidelines Volume 2: DG3, 5, 7, 8, 9, 10, 12, 13, 14, 17, 18, 22,

Action Programme Volume 3: Sites 2, 6, 7, 8, 9, 13, 15, 16, 18, 23, 24, 27, 34, 35, 36, 37, 39, 40, 41 42-B, 42-C, 42-C Technical Annex Volume 4, Sections 5.0, 6.0, 9.0.

M.A.F.F. (1997): The Hedgerows Regulations M.A.F.F. (1997): The Hedgerows Regulations. A Guide to the Law and Good Practice

Design Guideline DG 16 WOODLANDS AND HEDGEROWS

Area for future development

Woodland developing naturally

RURAL WOODS AND

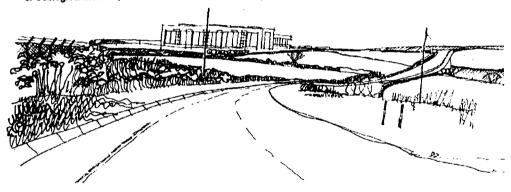
on unused land

HEDGES

on leftover land



Rural lanes and landscape - protection of hedgerows and verges, hedgelaying, inking fragmented areas of ecological interest, creation of headland for wild species and riparian vegetation protection



On larger roads, verge and roadside hedge management for nature conservation value, managing regeneration to encourage native species

CCW Tir Cymen and Tir Gofal Management Guidelines Ash et al (1992) BTCV Handbooks (various) Crofts & Jefferson (1994) Department of Transport (1993) English Nature (1996) Emery (1986) Forestry Commission (various) Kirby (1987) Newbold et al (1989) Sansom & Walmsley (1993) Warren & Fuller (1993) Main Strategy Volume 1
Section 3.10
Design Guidelines Volume 2:
DG 16,22,23,24
Action Programme Volume 3:
All Sites
Technical Annex Volume 4
Section 5.0

AIM

Maintain and enhance nature conservation resource in the Vale.

DESIGN PRINCIPLES

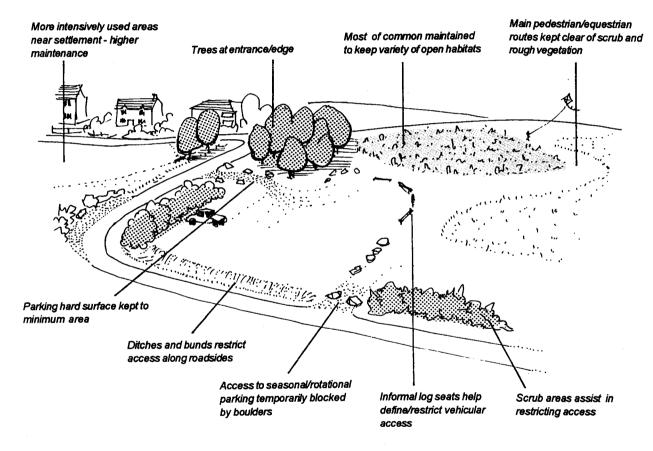
- Retain and enhance existing semi-natural habitats.
- Create new habitats, including semi-natural grasslands, broadleaved woodlands, wetlands and ponds.
- Avoid fragmentation of habitats. Increase linkage of habitats through 'green corridors'. linear habitat features etc.
- Provide 'buffers' of unintensively managed land around key habitat features.
- Do not drain, plough, fertilise or cultivate semi-natural grassland and marshlands. Use low intensity management or traditional farming methods, such as light grazing or hay cutting in grasslands, light winter grazing in wetlands. Clear any scrub encroachment.
- Create new semi-natural grasslands by sowing new sites, verges, unintensively
 used grass areas, improved pastures, arable field headlands etc with low
 productivity, native grass seed mixtures with a proportion of wild flowers.
- Avoid tree planting on grasslands and marshlands of interest. Create new woodlands of varied age-class and structure. Stock by natural regeneration or planting with native species of local provenance.
- Convert softwood plantations to native broadleaved or mixed. Exclude stock from all woodlands and encourage varied, flowery edges, rides and clearings.
- Use new woodland plantings to link existing woodlands. Limit recreational access to selected areas.
- Maintain hedges in stock-proof condition, ideally by periodic laying. Plant any gaps with native woody species of local provenance. Encourage tall, thick hedges with good canopy density at base. Avoid spraying into hedge bases with pesticides and avoid fertilisers.
- Trim a proportion of hedges in autumn or winter, once in every two years.
 Encourage development of hedgerow trees. Retain any existing large trees, with surgery rather than felling where unsafe.
- Plant new hedges of native woody species in traditional banked style alongside wire fences. Incorporate herbaceous species of local provenance.
- Maintain drystone walls and field banks in stock-proof condition, repairing gaps with local stone.
- Clear silt and scrub from ponds, retaining sloping bank profiles to encourage emergent vegetation. Clear overshadowing scrub, limiting shade to <40%.
- Create new ponds with gently-sloping bank profiles and encourage colonisation by native flora and fauna.
- Protect water quality in aquifers, rivers, streams and ponds, incorporating best practice guidance from Environment Agency such as buffer zones, biofiltration.

Figure DG 17

DESIGN AND MANAGEMENT FOR NATURE CONSERVATION

AIM

 To conserve the variety of common land as distinct land use with emphasis on nature conservation and informal public access.



REFERENCES

Main Strategy Volume 1, Section 3.10.

Design Guidelines Volume 2: DG1, 7, 12, 13, 16, 17, 20, 22, 23, 24

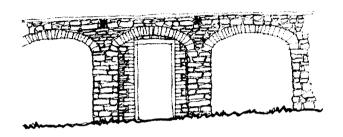
Action Programme Volume 3: Sites 3, 4, 32, 33 Technical Annex Volume 4, Sections 5.0, 9.0.

DESIGN PRINCIPLES

- Vehicular access and parking should be controlled/restricted by use of boulders, ditches/banks rather than high kerbs, bollards or fences.
- To prevent excessive erosion, access points and areas for parking should be available on a rotational basis.
- Vehicular access and parking should be kept near to edges of commons and to roadsides, and kept away from skylines or other prominent places.
- Hard surfaces and construction should be kept to minimum, be robust but informal/rural in character. Use of crushed stone and local rocks is appropriate.
- Seating, if it is necessary, should be rural in character. Picnic seating and park benches are not generally appropriate.
- Signs, litter bins etc. should be kept to minimum, and be rural in character.
- Tree planting may be appropriate in corners, at entrance points and near parking areas on commons.
- Use of native plants should be encouraged. Exotic and ornamental species are not appropriate.
- Development of new woodland is unlikely to be appropriate on common land as most is valuable as more open habitats.
- Re-introduction of grazing by commoners should be encouraged, facilitated by use of cattle grids, boundary fencing, etc.
- Where grazing is not feasible bracken and scrub should be managed to conserve mosaic of habitats. This includes areas mown in rotation, light control of bracken, mown 'rides', rotational scrub clearance.
- Smaller areas of common land and greens associated with settlements should be managed for more mixed use. Well-used areas and paths should be maintained more frequently than edges or other areas away from houses and roads.
- Means should be sought whereby the maintenance and management of common land can be adopted by the local community where approriate, working to approved management plans

Design Guideline DG 18

DESIGN AND MANAGEMENT FOR COMMONS



Mix of materials in outbuilding construction – limestones, sandstone, red brick

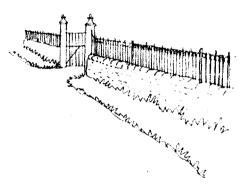


Mild steel railing detail

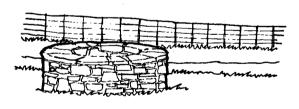
Main Strategy Volume 1 Section 3.6 Design Guidelines Volume 2: DG13,14,15,16,22,23 Technical Annex Volume 4 Sections 4.0, 5.0, 6.0, 7.0

AIM

To reinforce the distinctive character of the South East Vale using locally available materials



Mild steel railings on stone wall with cast iron gate posts



Estate mild steel railings, stone well

PREFERRED MATERIALS

Enclosure:

Limestone and sandstone walling
Red or yellow brick coping and quoins on stone walls in
some places
Hedgebanks/Laid hedges
Locally sourced hardwood timber rail fencing
Mild steel railings on walls, estate steel railings

Surfacing:

Conservation kerbs
Pennant surfacing
Limestone aggregate chippings rolled in bitumen emulsion
Limestone chippings to dust rolled for informal surfacing

Street Furniture:

Mild steel black painted and locally sourced hardwood timber furniture including seating, fingerposts
Timber bollards in rural edge, cast iron bollards in settlements
Colour – black or dark green [see below] for mild steel fittings
Timber /black mild steel signs

Structures:

Stone, natural render, white painted render, slate roofs Red or yellow brick coping and quoins on stone walls 'Teak' stained timber for bus shelters [very dark brown] or weather to grey

Lighting:

5-7m high pressure sodium columns painted black or dark green in settlements only [subject to Council requirements]

Key colours:

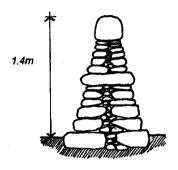
Grey, black, browns, dark green [BS 14C39 or equivalent], muted reds and yellows

Plants:

See Design Guideline DG23

Design Guideline DG19

PALETTE OF MATERIALS: HARD - SOUTH EAST VALE



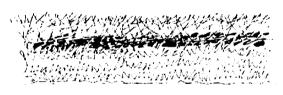
Limestone Wall



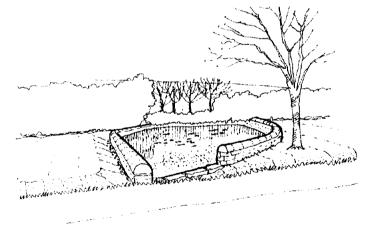
Typical bus shelter - stain sides dark brown teak colour and review roof colour - or allow to weather to grey



Typical sign post - use throughout rural Vale



Hedgebank in need of laying



Ponds and roadside watercourses are strong landscape elements

Main Strategy Volume 1 Section 3.6 Design Guidelines Volume 2: DG13,14,15,16,22,23 Technical Annex Volume 4 Sections 4.0, 5.0, 6.0, 7.0 BTCV [1989]

AIMS

To reinforce the distinctive character of the rural Vale using locally available materials

PREFERRED MATERIALS

Enclosure:

Lias and limestone walling Stone hedgebanks Hedgebanks Laid hedges Hardwood timber rail fencing

Surfacina:

Limestone cobbles/setts Limestone kerbs/conservation kerbs in settlement only Pennant surfacing Limestone aggregate chippings rolled in bitumen emulsion Limestone chippings to dust rolled for informal surfacing

Street Furniture:

Locally sourced hardwood timber and wrought iron [if necessary) furniture including seating, bollards, fingerposts Stone road markers, avoid bollards Colour - black or dark green [see below] for mild steel fittings Timber /black mild steel signs

Structures:

Stone, natural render, white painted render, slate roofs Teak stained timber for bus shelters [very dark brown]

Lighting:

5-7m high pressure sodium columns painted black or dark green in settlements only [subject to Council requirements]

Kev colours:

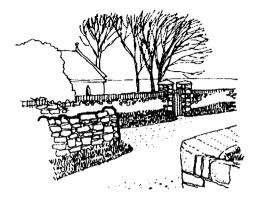
Grey, black, buff, dark green [BS 14C39 or equivalent]

Plants:

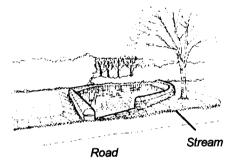
See Design Guideline DG23

Design Guideline DG20

PALETTE OF MATERIALS: HARD - RURAL VALE

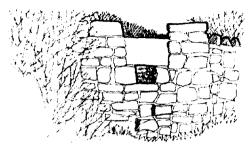


Three different kinds of stone coping to stone walls. Note lack of kerbs

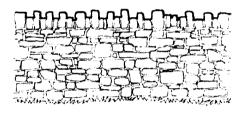


Water in ponds and roadside watercourses are strong landscape elements

Main Strategy Volume 1 Section 3.6
Design Guidelines Volume 2:
DG2,3,4,14,15,16,22,24
Technical Annex Volume 4 Sections 4.0, 5.0, 6.0, 7.0
BTCV [1989]



Typical slate stile in stone wall with blackthorn hedgebank



Lias stone wall with cock and hen coping



Typical hedgebank with stone and laid hedge [in need of attention]

AIMS

To reinforce the distinctive character of the coastal Vale using locally available materials

PREFERRED MATERIALS

Enclosure:

Lias stone walling, limestone in places Stone hedgebanks Hedgebanks Laid hedges Hardwood timber rail fencing

Surfacing:

Limestone cobbles/setts
Limestone kerbs/conservation kerbs in settlement only
Pennant surfacing
Limestone aggregate chippings rolled in bitumen emulsion
Limestone chippings to dust rolled for informal surfacing

Street Furniture:

Locally sourced hardwood timber furniture including seating, bollards, fingerposts
Stone road markers, avoid bollards
Colour – black or dark green [see below] for mild steel fittings
Slate signs

Structures:

Stone, natural render, slate roofs

Lighting:

5m high pressure sodium columns painted black or dark green in settlements only

Key colours:

Grey, black, buff, dark green [BS 14C39 or equivalent]

Plants:

See Design Guideline DG24

Design Guideline DG21

PALETTE OF MATERIALS: HARD - COASTAL VALE

		Coastal situations	Dry neutral soils	Wet neutral soils	Calcareous soils	NOTES: The species shown on this table may be used in suitable
			30113	*	1	locations throughout the Vale, including urban and urban fringe areas. Non-native decorative species should generally be avoided except within core areas of settlements and
alder	(Alnus glutinosa)				*	developments, and in gardens. See also Figures DG 23 and DG
apple, crab	(Malus sylvestris)		*		•	24 for guidance on grass, herbaceous and marginal species.
ash	(Fraxinus excelsior)	*	*			
aspen	(Populus tremula)		*	-		
beech	(Fagus sylvatica)				u	☐ Generally rare in the Vale: essential that only locally-
birch, downy	(Betula pubescens)	*	•	*		native stock is used.
birch, silver	(Betula pendula)	*	*			Hativo otook is assu.
blackthorn	(Prunus spinosa)	*	*	*	*	o Use at low densities only.
broom	(Cytisus scoparius)		*			o Use at low densities only.
buckthorn purgir	g (Rhamnus catharticus)	*	*		*	1 Where soil conditions are damp or wet.
cherry, wild	(Prunus avium)		*	*	*	1 Where soil conditions are damp or wet.
dogwood	(Cornus sanguinea)			*	*	In general, favour natural regeneration or stock propagated from
elder	(Sambucus nigra)		0		0	In general, layour hattiral regeneration of stook propagation from
gorse, common	(Ulex europaeus)	0	0		0	locally-native origin wherever possible.
_	(Viburnum opulus)	•	*	*	*	
guelder rose	on (Crataegus monogyna)	*	*	*	*	REFERENCES
	(Corylus avellana)	*	*	*	*	N
hazel	(llex aquifolium)	*	*	*	*	Main Strategy Volume 1 Section 3.10
holly	•					Design Guidelines Volume 2: DG 16,17,22,23,24
hornbeam	(Carpinus betulus)		<u> </u>			Action Programme Volume 3: All Sites
lime, small-leave			*		*	Technical Annex Volume 4 Section 5.0
maple, field	(Acer campestre)	*	*	*	*	CCW Tir Cymen or Tir Gofal Management Guidelines
	(Quercus robur)					BTCV (1988)
oak, sessile	(Quercus petrea)		⊢		*	Emery (1986)
privet, wild	(Ligustrum vulgare)	•			*	Forestry Commission (various)
rose, dog	(Rosa canina)	*				Kirby (1987)
rowan	(Sorbus aucuparia)		_		*	
spindle	(Euonymus europaeus)		•		4	
willow, crack	(Salix fragilis)	*		 -	1	
willow, goat	(Salix caprea)	*			1 .	
willow, grey	(Salix cinerea)	*	*		1	
willow, osier	(Salix viminalis)			*		DA AA
willow, white	(Salix alba)	*		*		Figure DG 22
						PALETTE OF MATERIALS:

PLANTING - GENERAL GUIDANCE

PRINCIPLES

- Conserve existing semi-natural habitats, especially unimproved grasslands and marshlands.
- Maintain/create traditional field boundaries, especially hedges on banks.
- Increase area of semi-natural woodland.
- Restore or create areas of species-rich seminatural grassland and marshland.
- Maintain/create ponds.
- Maintain main river systems, streams and other watercourses.

SPECIES

Woodlands, scrub and hedges

pedunculate oak (Quercus robur) ash (Fraxinus excelsior) beech (Fagus sylvatica - local provenance only, Eastern Vale) alder (Alnus glutinosa - on wetter ground) birch (Betula pubescens, pendula) wild cherry (Prunus avium) common hawthorn (Crataegus monogyna) blackthorn (Prunus spinosa) hazel (Corylus avellana) holly (llex aquifolium) quelder rose (Viburnum opulus) willows (Salix fragilis, cinerea, caprea, alba) wych elm (Ulmus glabra) yew (Taxus baccata - local provenance only Eastern Vale) Additionally, on calcareous sites: dogwood (Cornus sanguinea) field maple (Acer campestre) wild privet (Ligustrum vulgare) spindle (Euonymus europaeus) purging buckthorn (Rhamnus catharticus) wayfaring tree (Viburnum lantana)

Grasslands

common bent (Agrostis capillaris)
crested dog's-tail (Cynosurus cristatus)
red fescue (Festuca rubra - low productivity
cultivars only)
meadow foxtail (Alopecurus pratensis)
sweet vernal-grass (Anthoxanthum odoratum)
rough meadow-grass (Poa trivialis)

yarrow (Achillea millefolium)
bird's-foot trefoil (Lotus corniculatus - native
strain)
common knapweed (Centaurea nigra)
ribwort plantain (Plantago lanceolata)
primrose (Primula vulgaris)
yellow rattle (Rhinanthus minor)
cat's-ear (Hypochoeris glabra, radicata)
hawkbits (Leontodon autumnalis, hispidus)
self-heal (Prunella vulgaris)
meadow buttercup (Ranunculus acris)
vetches (Vicia cracca, sativa, sepium - native
strains only)

Additionally, on calcareous soils:
quaking grass (Briza media)
yellow oat-grass (Trisetum flavescens)
sheep's fescue (Festuca ovina)
upright brome (Bromus erectus)
crested hair-grass (Koeleria macrantha)

salad burnet (Sanguisorba minor)
lady's bedstraw (Galium verum)
agrimony (Agrimonia eupatoria)
kidney vetch (Anthyllis vulneraria)
field scabious (Knautia arvensis)
mouse-eared hawkweed (Hieracium pilosella)
perforate St John's-wort (Hypericum
perforatum)
burnet-saxifrage (Pimpinella saxifraga)
marjoram (Origanum vulgare)

Marshlands

tufted hair-grass (Deschampsia cespitosa)
meadow fescue (Festuca pratensis)
sweet vernal-grass (Anthoxanthum odoratum)
velvet bent (Agrostis canina)
Yorkshire fog (Holcus lanatus)
creeping bent (Agrostis stolonifera)
purple moor grass (Molinia caerulea)

ragged robin (Lychnis flos-cuculi)
sneezewort (Achillea ptarmica)
marsh marigold (Caltha palustris)
cuckooflower (Cardamine pratensis)
greater bird's-foot trefoil (Lotus pedunculatus)
marsh bedstraw (Galium palustre)
fleabane (Pulicaria dysenterica)
meadowsweet (Filipendula ulmaria)
purple loosestrife (Lythrum salicaria)
devil's-bit scabious (Succisa pratensis)

Ponds and wetlands

common reed (Phragmites australis)
great reedmace (Typha latifolia)
reed canary-grass (Phalaris arundinacea)
yellow flag-iris (Iris pseudacorus)
water mint (Mentha aquatica)
gipsywort (Lycopus europaeus)
brooklime (Veronica beccabunga)
lesser spearwort (Ranunculus flammula)
water plantain (Alisma plantago-aquatica)
water lilies (Nuphar lutea, Nymphaea alba)
broad-leaved pondweed (Potamogeton natans)
On more acid/ neutral sites:
bottle sedge (Carex rostrata)
marsh cinquefoil (Potentilla palustris)

Figure DG 23

PALETTE OF MATERIALS

PRINCIPLES

- Maintain and consolidate semi-natural habitats.
- Protect against degradation of habitats, especially from development, recreational use and adjacent agriculture.
- Maintain balance of scrub and trees to open grasslands.
- Maintain/create traditional-type field boundaries, ie walls or hedges.
- Maintain wooded stream-valleys as wet semi-natural woodlands.

SPECIES

Woodlands, scrub and hedges

pedunculate oak (Quercus robur)
ash (Fraxinus excelsior)
alder (Alnus glutinosa - on wetter ground)
holly (Ilex aquifolium)
hazel (Corylus avellana)
blackthorn (Prunus spinosa)
common hawthorn (Crataegus monogyna)
wild privet (Ligustrum vulgare)

Some additional non-native species suited to exposed coastal locations are acceptable in selected situations, especially near settlements, but should generally be at low densities, eg:

holm oak (Quercus ilex) sycamore (Acer pseudoplatanus) tamarisk (Tamarix gallica)

Sea buckthorn (Hippophae rhamnoides) should be avoided, as should any members of the rowan/whitebeam genus Sorbus.

Grasslands

red fescue (Festuca rubra - low productivity cultivars) sheep's fescue (Festuca ovina) crested dog's-tail (Cynosurus cristatus) sweet vernal-grass (Anthoxanthum odoratum) common bent (Agrostis capillaris) quaking grass (Briza media)

yarrow (Achillea millefolium)
bird's-foot trefoil (Lotus corniculatus - native strain)
kidney vetch (Anthyllis vulneraria)
common knapweed (Centaurea nigra)
wild carrot (Daucus carota)
buck's-horn plantain (Plantago coronopus)
ribwort plantain (Plantago lanceolata)
primrose (Primula vulgaris)
salad burnet (Sanguisorba minor)
lady's bedstraw (Galium verum)
agrimony (Agrimonia eupatoria)
musk mallow (Malva moschata)
thrift (Armeria maritima)

Figure DG 24

PALETTE OF MATERIALS
PLANTING - COASTAL VALE

SITE DESCRIPTION

The trading estate covers an area of 72 acres, 42 acres in Vale of Glamorgan Council ownership. It is located prominently on the coast east of Cadoxton River, south and east of the operational ABP Docks. It is isolated from the town of Barry. It was originally a MoD storage depot developed in 1940. The draft Barry Development Guidelines SPG [February 1998] seeks 'to enhance accessibility to the coastline and improve public awareness of the history of the estate' and 'to improve the general environment'. There is some open space with rough grass and vegetation regeneration adjacent to low cliffs and rock wave cut platform. The area is used occasionally by fishermen and others. However, there is no defined coastal path. There is much open space between isolated buildings which offers opportunities for development. There are current problems of tipping, isolation, unsightly buildings and storage areas, poor detailing [especially fencing] kerbs, limited access along the coast and to the beach [slipway access blocked by tipping].

A summary of the key features of the site are:

- Site is visible from Barry Island
- Positive views across Bristol Channel
- No defined access along coast
- Used by fishermen/informal recreation
- Unsightly tipping
- Poor buildings in poor condition
- Forms part of coastal strip and potential seascape trail with at least local access/value
- Existing green strip with regenerating vegetation offers opportunity for improvement and access
- Opportunity for positive estate development
- Historical significance of World War 2 origins

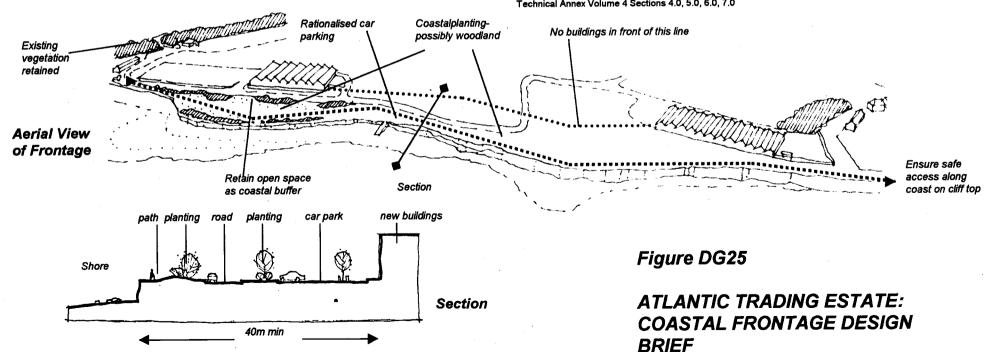
COASTAL DESIGN CONSIDERATIONS

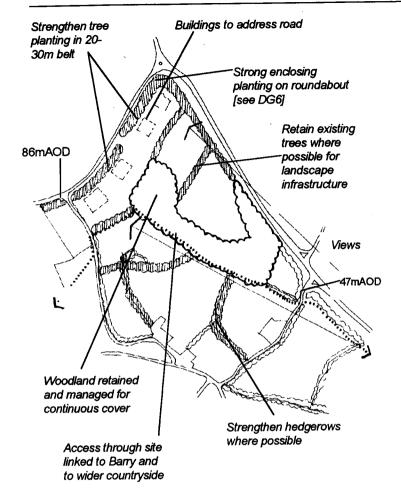
The following landscape design guidance should be taken into account:

- Create a green space with access along coast and allowing safe access onto shore.
- · Create low key parking for visitors [fishermen] to coast
- Create safe pedestrian link to east by setting fence back if possible
- Maintain option of safe link to west as and when this becomes feasible [if access can be negotiated to Barry Island across ABP land].
- Create safe link inland by provision of pedestrian footway on estate roads.
- Maintain option of opening up slip way in due course
- Screen existing and proposed buildings from long distance views with robust landscape infrastructure on sites and roads and coastal strip
- New units to face sea [and preferably estate roads] with parking and extensive planting to frontage with storage, service entrances to rear.
- New built form/structures [except fencing] to be no nearer than 40m from cliff edge. Height of new units next to coast not to exceed existing buildings adjacent to coast.
- Create coast edge improvements using robust low key palette of materials such as limestone gravel, robust hardwood benches and bollards, earth mounding and coastal soft palette planting only [e.g. ash, evergreen oak, sycamore, hawthorn].
- Analyse soil conditions, depth, type and also grassland types within development areas to inform choice of planting and seeding respectively
- Incorporate interpretation of site in appropriate manner

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Main Strategy Volume 1 Landscape Character Area 20 Design Guidelines Volume 2: DG1,2,8,17,22,24 Action Programme Volume 3: Site No. 25 Technical Annex Volume 4 Sections 4.0, 5.0, 6.0. 7.0





REFERENCES
Main Strategy Volume 1 Sections 3.3, 3.4, 3.6, 3.12
Design Guidelines Volume 2: DG6,8,19,22,23
Action Programme Volume 3 Sites 19
Technical Annex Volume 4 Sections 4.0, 5.0 and 6.0

SITE DESCRIPTION

The site is currently Pencoedtre Wood and pastoral farmland with overgrown hedgerows on the north east corner of Barry. It is bounded by the A4050 to the north and the Barry Docks Link Road, A4231 to the east. It is on a hillside rising from 15mAOD on its southern boundary to the skyline at 84mAOD on the northern boundary. Pencoedtre Wood is currently widely visible to the east and south east. It was once part of Coed Caerdydd run by the Forestry Commission and consists of mixed conifer and broadleaf plantation which is etiolated in parts.

The proposed development consists of 11.5H high quality business uses B1, around 25H for housing, education uses and 6.5H woodland and recreation. The site will be the first built form of Barry when approached from the M4 and from west Cardiff. The open space is intended to be linked into a north Barry open space and footpath network.

The key features to be taken into consideration are:

- The business use site will form the first impression of Barry after a semi-rural approach.
- The site will be highly visible from the east and south east including the Docks Link Road
- There is potential to utilise the woodland for recreation and as a core for landscape infrastructure



Existing view from south [A4231]



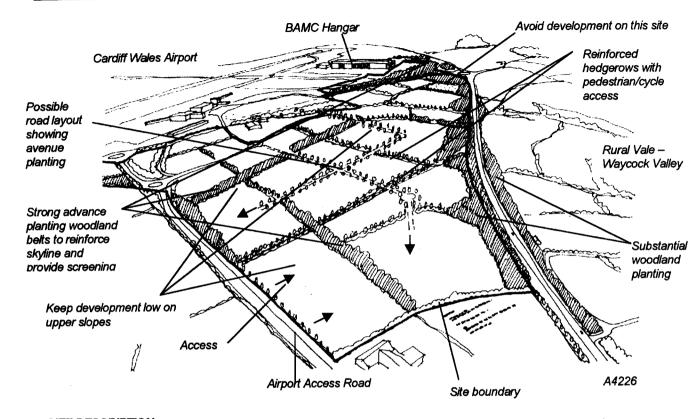
Possible view of development

LANDSCAPE DESIGN CONSIDERATIONS

The main aim should be to preserve the semi-rural character of the A4050 and A4231 as far as possible as boundaries to the Barry area and minimise views into the site from the rural surroundings. This supports the overall design objective of conserving the quality of the Vale's landscape as one of its prime assets. This can be achieved by the following:

- Ensure that no built form breaks the skyline. A
 substantial backcloth of trees on both sides of the A4050
 should be a minimum of 5m higher than buildings.
 Manage trees on skyline for continuous cover within site.
- Plan footprint of development as far as possible to retain existing woodland and hedges. Remove other vegetation only as phased development proceeds, avoiding a cleared overall site.
- Terrace site so substantial and frequent landscape screening infrastructure is possible on slopes between buildings – avoid large terraces as far as possible.
- No parking should be visible to the south east and east.
- Design building frontages on A4050 to address the road but with parking/services [if any] to the south.
- Tree planted strip on A4050 and A4231 frontages to be substantial mixed woodland belt 20m-30m wide retaining existing vegetation where healthy.
- Enclose the A4050 and A4231 roundabout with native species planting. [Avoid views into the site from this point]. An access further down the A4050 to the west is preferable if possible. The entrance to the site should be designed with high quality signage and native planting.
- Avoid any advertising and signage apart from the site entrance on either the A4050 or A4231. Lit signage viewed from the south should be avoided.
- Manage the woodland for continuous cover aiming towards oak/ash dominant species. Balance recreation with visual and nature conservation objectives. Build cycleway and footpath through the open space for easy linkage into the rest of Barry and into the countryside.
- Prepare a comprehensive management plan for landscape infrastructure with funds for implementation.
- Carry out environmental assessment including visual appraisal from most sensitive viewpoints.

Design Guideline DG26
PENCOEDTRE DESIGN BRIEF



SITE DESCRIPTION

The site is currently pastoral farmland with overgrown hedgerows and scattered settlement lying to the north of Cardiff Wales Airport. The site is bounded by the A4226 to the north and the airport access road to the east. It lies on the open north facing slopes of the lias coastal plateau running from 62mAOD close to the airport down to 45mAOD by the A4226. The site is drained by a tributary stream running to the Waycock to the north. The site is exposed to coastal winds.

Wide views are possible to the rural Vale to the north and the site is also highly visible from the A4226, Barry to Llantwit Major road, which is on embankment for much of its length. There has already been some development of the BAMC hangar to the west and a training facility and small scale offices/workshops on the site itself. The hamlet of Tredogan and more recent bungalow dwellings betray a lack of investment waiting for the development to take place. There is a marked lack of tree cover, this being limited to occasional hedgerow trees. Recent landscape improvements to the airport approach road are beginning to address this problem.

The proposed development is for employment on 58.9H which is primarily Council owned land.

The key features to be taken into consideration are:

- The site is highly visible to the north to the rural Vale and to the A4226
- There is marked lack of tree cover on the site
- There is a major opportunity for the Council as major landowner to develop the site sensitively with substantial advance landscape infrastructure

REFERENCES

Main Strategy Volume 1 Landscape Character Area 19
Design Guidelines Volume 2: DG6,8,19,22,23
Action Programme Volume 3 Site 15
Technical Annex Volume 4 Sections 4.0, 5.0 and 6.0

LANDSCAPE DESIGN CONSIDERATIONS

The main aim should be to minimise the visual impact of the site when viewed from the rural Vale to the north and to the enhance the rural character of the A4226. This supports the overall design objective of conserving the quality of the Vale's landscape as one of its prime assets. This can be achieved by the following:

- Carry out environmental assessment ensuring most valuable existing site features are retained. To include visual appraisal with photomontages of site from most sensitive viewpoints to ensure impact is minimised
- Ensure that no further built form breaks the skyline when viewed from the north and do not build on most visible sites
- Create a strong landscape infrastructure based on existing hedgerow lines and watercourse. This should become the skyline in higher parts of the site and start to act as a setting for the airport as well. Advance planting should be carried out based on a masterplan. Use only native species in main landscape infrastructure. Planting on A4226 frontage to be substantial mixed woodland belt 20m-50m wide to create a strong buffer.
- Terrace site where necessary so buildings are set down into the site using excess material for screening landform. Avoid large plateau terraces on slopes.
- Design building frontages on A4226 and airport access road to positively address the roads. Service areas should not be visible.
- Height and massing of buildings should minimise impact on surrounding landscape.
- Signage and advertising on A4226 and airport approach road to be limited to discreet unlit names of companies on the buildings themselves. Lit signage viewed from the north must be avoided.
- Lighting should be discreet on roads and on premises and minimise impact on Vale to the north. Use high pressure sodium lamps, Security lighting directed to the north to be avoided.
- Buildings should respond to the colours of the Vale. Preferred colours are matt grey or buff.
- Ensure cycleway and footpath through the green corridors is linked conveniently into the surrounding road network for easy access to Barry and to Rhoose
- Prepare a comprehensive management plan for landscape infrastructure ensuring sufficient funds for implementation.

Design Guideline DG27

CARDIFF AIRPORT BUSINESS PARK DESIGN BRIEF

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