Sub type 5a

Ridge and Valley

Location

This sub type runs in an unbroken band from Carlisle to Workington alongside the Limestone Fringe landscape. It becomes broken up around Workington and continues in this way to Cleator Moor.

Key Characteristics

- A series of ridges and valleys that rises gently toward the limestone fringes of the Lakeland Fells
- Well managed regular shaped medium to large pasture fields
- Hedge bound pasture fields dominate, interspersed with native woodland, tree clumps and plantations.
- Scattered farms and linear villages found along ridges
- Large scale structures generally scarce

Physical character

This landscape is found mainly on carboniferous rocks overlain by extensive glacial till and riverine sand and gravels deposited in the glacial outwash plain. The glacial till formed some low subtle drumlins and the sand and gravel formed some long low eskers. These have helped shape the ridges and valley landscape. In some places, kettle holes occupy hollows in the surface of the glacial deposits and in places peat mires have formed. Coal seams can be found throughout the area. The ridges and valleys vary in height between 50-130m AOD.

Land cover and land use

The landscape rises gently to high wide ridges with long views or falls to small, narrow valleys. The Ellen Valley forms a distinctive feature.

The landscape is dominated by improved farmed pasture. Fields are typically regular in shape and are medium to

large in size. Arable fields provide an occasional contrast with the pasture. Field patterns tend to be oblong with straight boundaries enclosed by hedges, hedge banks or fences. These still reflect the planned enclosure of open common pastures in the 19th century.

The patchwork field pattern is interspersed with both native broadleaved and planted coniferous woodlands and some unimproved and features include dense high hedges, woodland, especially along narrow valleys, shelterbelts, remnant parkland and tree clumps. Some hedges are fragmented. Small areas of forestry plantation punctuate the landscape.

Scattered farm buildings are dispersed throughout the area and are often concealed by undulations in the land and woodlands. Villages are linear or nucleated in form, having developed this character largely in the later 19th and 20th centuries, and mainly sited along ridge tops.

Roads that connect the villages along the ridge tops are generally straight. Roads in the valleys tend to wind along contours and are flanked by high hedges or banks.

Industrial activities have influenced the landscape, with areas of reclaimed open cast land introducing modern field patterns, woodland and plantation features. Wind energy schemes are a reoccurring feature, and along with other vertical elements such as pylons, are often sited along ridge tops. They interrupt the skyline and form prominent features in the landscape.

Ecology

Much of the ecological interest of this agriculturally improved landscape lies in species-rich hedgerows and hedge banks, particularly where they are allowed to grow tall. Most woods are plantations, both of native broadleaves and of conifers, but native oak woodland is found along the more deeply incised river and stream valleys. Plantations are often found on Ancient

Woodland sites. The larger conifer plantations are important for red squirrels. Less common habitats include species-rich rush pasture and purple moor-grass wet grasslands and, in a few rare cases, hay meadows. Small patches of species-rich pasture are occasionally present along steep banks. West of Carlisle several small remnant lowland raised bogs are present, now largely covered by woodland. Several important river systems flow through these valleys, including the River Ellen and tributaries of the River Derwent, which are important for Atlantic salmon, otter and freshwater pearl-mussel.

Historic and cultural character

This sub type is culturally very varied. Fields are often planned enclosure of former arable common fields and common grazing land. In general nucleated villages developed late in a historically dispersed settlement pattern. It features ancient market centres such as Aspatria, Wigton and Dalston. Settlements are often surrounded by traditional field systems with some fossilised strips. On the outskirts of many settlements are the remains of former industries including iron mining and working, coal mining, quarrying and lime burning. Evidence of Roman occupation is prolific in places and includes Roman roads and settlements like Papcastle. More recent military sites are a feature as at Great Broughton and Great Orton.

Perceptual character

These are medium scale landscapes generally enclosed in valleys and around woodlands with a more open feel along the ridge tops. Here the experience of the landscape can be influenced by changes in the seasons and weather and there can be a more elemental experience on exposed ridge tops. There are strong associations both with the nearby limestone fringe and coast due to the long views from the ridge tops. In particular there are attractive views over the Solway Firth and to the Lakeland Fells. Despite the concentration of large scale wind energy schemes that dominate the landscape around Workington, many parts remain intact and retain the sense of a pleasant, peaceful working farmed landscape.

Sensitive characteristics or features

The peaceful pastoral atmosphere away from busier parts is sensitive to large scale development. Native broadleaved woodlands, shelterbelts and remnant parklands, species rich hedges and hedge banks, and the interest they provide to the farmed landscape, are sensitive to changes in land management. Discrete and dispersed farmsteads are sensitive to unsympathetic expansion. Ridge top locations of settlements are sensitive to village expansion. Undeveloped areas of ridge tops and valley rims are sensitive to large scale ridge line development where significant contrast could arise between small scale settlements and large scale features such as large scale wind turbines and pylons. Open and uninterrupted views from ridge tops to the Solway Firth and Lakeland Fells are sensitive to large scale infrastructure development.

Vision

This pleasant working farmed landscape will be enhanced and restored. This landscape will accommodate further agricultural intensification and limited field enlargement and removal of hedges but this will be balanced with the improved management of retained hedgerows and woodlands and traditional field patterns. Bold new woodland planting will provide visual contrast. In addition, harsh development edges will be softened and existing and new, peripheral development will be integrated within a stronger landscape framework. Ridge top clutter will be restricted to strengthen the rural environment and minimise the effects of urban influences.

Changes in the Landscape

Over the next 10 - 20 years this landscape could be subject to the following changes or issues:

Climate Change

- An increase in short rotation coppice, biomass or other woodland planting could help mitigate against climate change and support renewable energy production.
- An increase in rainfall and extreme weather events could result in an increase in flash flooding. Flood

risk management may result in man made mitigation measures such as strengthened river defences, reengineered bridges and access routes.

Management Practices

- Changes in agricultural practices could lead to the loss of traditional boundaries and field enlargement.
- Implementation of the Water Framework Directive could result in changes to water abstraction, pollution control, and changes in flood risk and river basin management. This could provide opportunities for enhancement and restoration of streamside features and river catchment areas.

Development

- There could be a trend towards the development of urban fringe characteristics where the sub type abuts towns and villages.
- Farm diversification could lead to an increase in the
 use of farm land for horse grazing and equestrian
 uses could result in changes to field patterns and
 boundaries. An introduction of stables and ménages
 could cause incremental change the character of the
 farmed areas.
- The continued need to support renewable energy schemes is likely to result in an increase in large scale wind energy schemes, energy crops and biomass planting. Large scale wind energy schemes have already changed the character of the sub type, particularly around Workington. Without careful control parts of this sub type could become defined by wind energy development. This could have knock on effects on the character of adjacent landscape types due to the far reaching visual effects of such development.
- Upgrades to the national grid to provide energy security and support new power generation could result in larger pylons and sub stations.
- There could be pressure to accommodate other large scale infrastructure development including, industrial buildings, roads, masts, and opencast coal mining. The latter could take place as markets for coal change.
 The exposed and open character of the ridgelines makes them sensitive to such development.
- Existing mineral sites could extend in the future which, if well planned, could provide opportunities for ecological enhancement during restoration.

Access and Recreation

- Public rights of way provide a network of routes that enable quiet appreciation and enjoyment of the countryside. Ongoing maintenance is needed to support this network in the future.
- Current farm stewardship grants provide the opportunity to develop more public access in the countryside. Future grant or other programmes may continue to support this.

Guidelines

Climate Change

- Encourage energy crops along valleys and away from ridge tops. These should avoid areas of sensitive habitat and seek to enhance hedge boundaries around fields. Planting should respect the scale of the local landscape features. The edges of short rotation forestry should be soft and follow the grain of the topography.
- Encourage appropriate woodland or other planting in landscapes higher up the river catchment areas to help provide natural alleviation to extreme weather events and reduce the amount of hard engineered solutions needed alongside rivers and close to settlements.

Natural Features

- Maintain and enhance the aquatic interest of rivers and floodplain environments.
- Use appropriate large scale new planting to integrate settlements and associated industrial development with the surrounding countryside and provide landscape frameworks for development expansion.
- Manage existing Plantation and Ancient Woodland sites to allow regeneration of broadleaved woodland.
- Undertake environmental improvement within villages and built up areas to complement planting proposals within the surrounding farmland areas: to include roadside tree planting and within public open spaces to create a more established appearance and a stronger identity to individual settlements.

Cultural Features

- Discourage the further nucleation of the settlement pattern.
- Manage and restock maturing hedgerow trees and woodlands.

- Reintroduce locally native hedges to enhance the strong matrix of field boundaries.
- Enrich depleted hedgerows following the pattern of the strong and dense hedgerows in certain areas while linking to woodland planting where possible.
- Enhance/restore hedgerows and encourage traditional management and maintenance.
- Discourage the permanent introduction of fences to replace or 'gap up' hedgerows.

Development

- Discourage the further nucleation of the settlement pattern.
- Improve visual awareness of the individual settlement, land uses, and cultural landmarks along each road and provide locations for stopping, viewing and picnicking.
- Introduce appropriate roadside planting to frame long distance views of fells and estuary and relieve bland farmland views and reduce the detrimental impact of straight major roads on ridge tops through the open countryside.
- Undertake environmental improvements within the settlements including traffic calming, crossing points, roadside tree planting and strong definition of the gateway entrance and exit from the individual settlement.
- Ensure that the capacity for tall and vertical development such as pylons and turbines is agreed and not exceeded to maintain views, particularly in area surrounding Workington.
- Ensure new development makes a contribution to the character of the area by respecting the form of villages e.g. linear along ridge lines, creates new focal spaces and takes advantage of attractive long views.
- Carry out village enhancement schemes including townscape environmental improvements, tree planting and establishment of attractive green spaces.
- Reduce the impact of large scale new buildings by careful location away from ridge tops and subservient to traditional farm and landscape proposals, and using a choice of sympathetic colours and non-reflective finishes.
- Conserve and enhance the traditional farm buildings and features within their own setting.
- Encourage horse grazing and equestrian uses to respect field boundaries and field patterns. Stables and other facilities should be sited sensitively with appropriate landscape mitigation to prevent the erosion of the pastoral farmland character.

- Large scale wind energy schemes should follow the guidance and capacity assessments of the Cumbria Wind Energy Supplementary Planning Document.
 Wind turbines and other energy infrastructure should be carefully sited and designed to prevent this sub type becoming an energy landscape.
- Encourage mineral sites to develop restoration schemes that reinforce the landscape features and provide ecological enhancement.

Access and Recreation

- Public rights of way should be well maintained and quiet recreational areas and facilities should be improved and developed to be compatible with the pastoral character of this sub type.
- Seek opportunities to enhance access to farmland through farm stewardship or other schemes.
- Disused railway lines could provide opportunities for discrete recreational routes and the enhancement of landscape features and ecological corridors.