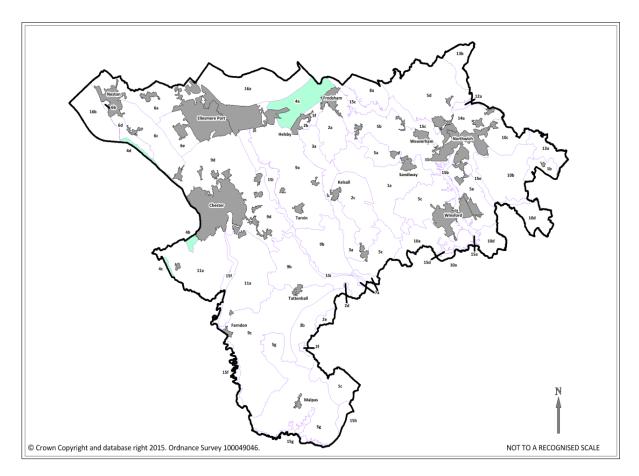
LCT 4: DRAINED MARSH



General Description

This landscape character type is located on former saltmarsh or mudflats adjacent to the Dee and Mersey estuaries. It is drained by inter-connecting networks of drainage channels arranged in a regular, often linear pattern, and this gives the impression of an open unenclosed landscape. This character type is significantly reduced in size; it formerly covered a much greater area. Today the reclaimed land is mainly used as grazing land, with some arable crops.

The flat, open nature of this landscape often provides expansive views of the surrounding area including the Dee and Mersey estuaries, which are intrinsic to its existence and character. The close proximity to industrial sites and the open views of these areas also has a significant impact.

Visual Character

This landscape type appears as a very flat, open and large scale landscape. The combination of flat topography and low field boundaries such as drainage ditches or post and wire fences allows extensive panoramic views out to the surrounding character areas. Within this landscape the general absence of development or higher ground means that visually dominant elements, such as upland areas or large structures, are located in the surrounding character areas and this exerts a strong influence upon landscape character.

Major transport corridors can be visually prominent. For example, the M56 and main railway transport corridors traverse the *Frodsham, Helsby and Lordship Marshes* character area on embankments. This slight elevation combined with the scarcity of high hedges or hedgerow trees

can lead to a high level of visual disruption from moving traffic. Artificial embankments along the northern boundary of the *Frodsham, Helsby and Lordship Marshes* character area, separating it from the Manchester Ship Canal and the open Mersey Estuary, and around the canal deposit dumps, are prominent, highly visible features in the landscape. Similarly, a number of large scale overhead power lines running parallel with the M56 and railway are dominant features.

Physical Influences

This character type occurs on very low-lying flat topography with an elevation of between 0-13m AOD. The former marsh resulted from the marine and alluvial deposits of clay, salt and silt deposited under tidal and estuarine influence. This overlies Kinnerton Sandstone, Chester Pebble Beds and Wilmslow Sandstone. Soils comprise humic and alluvial gleys on the improved reclaimed coastal floodplain.

Small patches of scrub are common, with few trees. Where there are hedgerows they are mostly grown out and in poor condition. Reeds and other aquatic or emergent plants are mainly restricted to ditches. The drained marsh has ornithological interest as a wintering ground for wading birds and wildfowl as well as birds of prey.

Cultural Influences

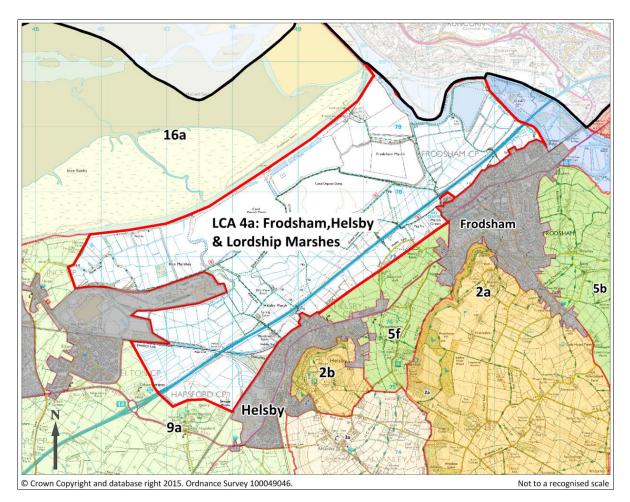
This is marginal land that has been created through reclaiming former estuarine marshland and manually digging drainage ditches and installing pumps in more recent periods. This was undertaken to increase the available land for agriculture and to improve food production. For example, the *Frodsham, Helsby and Lordship Marshes* area was reclaimed in 1894 as part of the opening of the Manchester Ship Canal, with further extensive drainage undertaken in the Second World War. The reclaimed sediments are amongst the best in the county and potentially very fertile, able to sustain crops of barley, winter wheat and potatoes.

Marshland is an unappealing location for settlement and as such these areas have remained largely unsettled, restricted to a few isolated farms. However, industry has utilised similar reclaimed marshland, for example the landscape character type wraps around the GrowHow Fertiliser Plant to the west of the Frodsham and Ince Marshes, and further west is the extensive Stanlow oil refinery.

Development of the Ince Resource Recovery Park has been approved on Ince Marshes. The Frodsham Wind Farm comprising 19 wind turbines is under construction and will occupy much of the land within the northern half of the *Frodsham, Helsby and Lordship Marshes* between Lordship Lane and the Mersey Canal.

There are four Landscape Character Areas within LCT 4:

4a: Frodsham, Helsby and Lordship Marshes
4b: The Lache Eyes
4c: Dodleston Drained Marsh
4d: Burton & Shotwick Drained Marsh



LCA 4a: Frodsham, Helsby and Lordship Marshes

Location and Boundaries

The northern boundary of this landscape character area is formed by an artificial bank which separates it from the Manchester Ship Canal and open *Estuary* of the Mersey Estuary beyond. The southern boundary is marked by the railway and urban edges of Frodsham and Helsby. The River Weaver lies to the east and industrial development to the west.

Key Landscape Characteristics of LCA 4a: Frodsham, Helsby and Lordship Marshes

- A flat, low lying landscape (up to 13m AOD) of former mudflats and saltmarsh alongside the Mersey Estuary, contrasting with surrounding built development (previously designated as an Area of Significant Local Environmental Value ASLEV)
- Strong interconnection and intervisibility with LCT 16 *Mudflats and Saltmarsh* to the north
- Reclaimed as part of the opening of the Manchester Ship Canal in 1894, with further drainage following the Second World War to produce productive farmland
- The flat landscape is etched with a distinctive pattern of straight drainage ditches which delineates the field pattern of planned 19th century enclosure
- There is an extensive ditch system, a stronghold for water voles in the borough
- Incomplete hedgerow boundaries provide partial enclosure along some field boundaries
- Land to the north of Lordship Lane is used as a deposit ground for dredgings from the Manchester Ship Canal and supports a range of wetland habitats
- Land to the south of Lordship Lane is in agricultural use a mixture of pasture and arable with incomplete thorn hedgerows
- Canal dredging grounds defined by high earth embankments
- The area is of local, national and international importance for its breeding, wintering and passage birds which add movement to the landscape
- An isolated, bleak and open landscape settlement is limited to isolated farms linked by rough tracks between ditches
- A system of surfaced tracks and bridleways serve the area, including National Cycle Route (NCR) 5
- The M56 and railway utilise the flat landscape, crossing the marsh at the base of the *Helsby to Frodsham Undulating Enclosed Farmland* that gently rises to the south
- Running parallel to the M56 area a number of large scale overhead power lines which are dominant features in this flat landscape
- The flat, open landscape provides clear views to and from the adjacent *Frodsham Sandstone Ridge* and *Helsby Hill*
- Industrial works at Ince Marshes, and at Halton and Rocksavage in Runcorn, form a backdrop in views to the west and east respectively
- Permitted windfarm will become dominant creating a 'windfarm landscape' when constructed

Key Landscape Sensitivities, Qualities and Value

Natural / Physical

- Extensive alluvial deposits of sand, silt and clay left by the Mersey River overlying a solid bedrock of Chester Pebble Beds, the erosional base of the Sherwood Sandstones;
- Once contiguous with the saltmarsh and mudflats of the Mersey Estuary, the area was embanked, ditched and drained in 1894 following the opening of the Manchester Ship Canal which lies to the north;
- Pumps and new ditches added following the Second World War to produce productive farmland that are some of the most fertile soils in the county;
- Influenced by alluvial drift deposits, clayey humic and alluvial gley soils are deep and well drained, and well suited to both pasture and arable crops;
- Field pattern delineated by the pattern of drainage ditches, with some fields also bounded by gappy hawthorn hedges;
- The extensive ditch system is a stronghold for water voles in the borough;

LCA 4a: Frodsham, Helsby and Lordship Marshes

- Important roosting sites for wildfowl and waders at high tide from the Mersey Estuary SSSI the whole area provides a wintering ground for waders and raptors and extensive habitat for breeding birds and is designated as a Local Wildlife Site;
- Large areas of land to the north of Lordship Lane are dredging deposit lagoons associated with the Manchester Ship Canal, exhibiting a sequence of ecologically rich habitats from bare mud to agricultural land.

Cultural / Heritage / Historic

- The field pattern characterised by straight-sided fields bounded by ditches, dating from the 19th century planned enclosure of marshland;
- Land north of Lordship Lane modified by 20th century field improvements (around Frodsham Marsh Farm) and creation of deposit dumps associated with the Manchester Ship Canal;
- Traces of human activity are indicated by the discovery of Bronze Age (c 2000 BC) spearheads on Frodsham and Ince Marshes. More recently, this marginal area was used as a WWII bomb decoy;
- The extensive network of public rights of way across the marshes, including NCR 5, which follow tracks and field boundaries and are used for passive forms of recreation such as jogging and dog walking. The Thornton-le-Moors to Frodsham Greenway crosses the area;
- Small consented developments including model aircraft strip and Hoverforce (leisure hovercraft and segways) provide recreational facilities.

Built Development and Settlement Pattern

- The absence of settlement except for scattered farms including Meadow Farm, Spring Farm, Hill View Farm, and Frodsham Marsh Farm, linked by a network of rough tracks that follow field boundaries and drainage ditches;
- The M56 and railway transport corridor that utilise the flat land;
- A number of large scale overhead power lines run parallel with the M56;
- Industrial works at Ince Marshes, and at Halton and Rocksavage in Runcorn, form a backdrop in views to the west and east respectively;
- Development of the Ince Resource Recovery Park has been approved on Ince Marshes;
- The consented Frodsham Wind Farm comprising 19 wind turbines will occupy much of the land within the northern half of the *Frodsham, Helsby and Lordship Marshes* between Lordship Lane and the Mersey Canal.

Perceptual / Visual

- The flat landform and long views contribute to the perception of a large scale, exposed landscape;
- Presence of man-made embankments foreshorten views to the north across the Mersey Estuary;
- Important views to and from the Frodsham Sandstone Ridge and Helsby Hill;
- The consistent field pattern through planned enclosure gives the perception of a reclaimed, tamed landscape;
- Vegetation-fringed ditches and rough ground and lagoons provide texture in the landscape;
- Parts of the marsh are remote, but the presence of traffic on the M56 motorway brings noise and movement to the area; the presence of birds and proximity to John Lennon Airport also contribute to noise and movement;
- Sense of naturalness of the marsh is diluted by man-made features and development;
- No prominent skyline, but embankments, pylons and industrial development are visually prominent;
- The open character means there is little opportunity for screening any large scale elements or for mitigating visual impact without the mitigation measures in themselves being highly visible -

LCA 4a: Frodsham, Helsby and Lordship Marshes making it a visually sensitive landscape. There are relatively few sensitive visual receptors in the area, limited to a few residential properties and users of the PRoW network, but in adjacent areas overlooking the marsh there are views from Frodsham and Helsby as well as visitors to the viewpoints at the top of Helsby Hill and the War Memorial above Frodsham.

Landscape Condition

Although much of the area is actively farmed, the degraded hedgerows and broken fencing shows this to be a landscape in need of improved management. Some land to north of Lordship Lane remains in use for canal dredgings and has undergone change as a result of the preliminary works for the permitted windfarm. Wet grassland species have been lost and ditches are eutrophic as a result of the intensive agricultural use of the land.

CWaC Local Plan policies with an influence on the character of LCA 4a: *Frodsham, Helsby and Lordship Marshes*

- Green Belt;
- Natural heritage sites of international, national, regional and/or local significance;
- Flood risk and water management.

Forces for Landscape Change

Past change

- Reduction of cultivated areas and increase in set-aside;
- Loss of wet grassland communities;
- Reduction in dredging lagoons with loss of wildlife interest;
- Increase in horse grazing around peripheral areas with associated changes to field boundaries and use of informal animal shelters, sheds etc.;
- Loss and fragmentation of hedgerows, and decline in fencing condition;
- Ditches are eutrophic as a result of nutrient run-off due to the intensive agricultural use of the land;
- Approved development of the Ince Resource Recovery Park on Ince Marshes;
- Small consented developments including model aircraft strip and Hoverforce (leisure hovercraft and segways);

Potential future change / key issues affecting LCA 4a: *Frodsham, Helsby and Lordship Marshes*

- Continued dredging and dumping is likely to continue to affect the landscape of the marshes;
- Pressure for increase in transport infrastructure / improvements;
- Encroachment by industrial development and infrastructure: pressure for expansion of industry on the marshes, including renewable energy development;
- Visual impact of prominent development and traffic could be reduced by tree planting but this would change the open character of the area;
- Cost of artificial drainage could lead to withdrawal of pumping and loss/under-management of historic drainage systems and change in water levels on farmland;
- Climate change could lead to increased flooding affecting the use and management of the land;
- Improved drainage measures could lead to local modification to hydrological characteristics of field system and may threaten paleo-environmental remains;
- When constructed the Frodsham Wind Farm will dominate the landscape, reduce the openness of the marshes and create a 'windfarm landscape'.

Overall Landscape Management Strategy for LCA 4a: Frodsham, Helsby and Lordship Marshes

The overall management strategy for this landscape should be to *enhance and restore* the condition of habitats and features of the marshes whilst safeguarding its open character.

Landscape Management Guidelines

- 1. Encourage recreational development as a means of managing some of the more derelict and degraded areas of the landscape. Encourage use of the area by walkers, cyclists, rowers and horse riders (including provision of picnic facilities and viewing opportunities) whilst safeguarding the nature conservation interest of the area, particularly its importance for birds.
- 2. Maintain the distinctive field pattern that reveals the planned 19th century enclosure of the marsh.
- **3.** Seek to restore thorn hedgerows that are falling into decline.
- 4. Maintain and ecologically enhance the ditch system and riparian habitats and land supporting breeding, over wintering and passage birds. Seek opportunities to re-create habitats such as species rich grassland and reed beds.
- 5. Increase the biodiversity of intensively managed grassland and arable land create and link buffer strips along linear features such as hedgerows and ditches to create a continuous network of wildlife corridors.
- **6.** Improve water quality by encouraging less-intensive agricultural practices to reduce fertiliser run-off and nutrient levels in the ditches.
- **7.** Encourage restoration of derelict industrial land including re-creation of salt-marsh and reintroduction of grazing to maintain the open character of the marsh.
- 8. Consider opportunities to create views across the Mersey Estuary.
- **9.** Conserve the 'remote' character of the marshes away from the main transport corridor of the M56.
- **10.** Retain the open character of the marsh by restricting planting to low growing scrubby species typically found in the local landscape, taking into account the importance of the area for ground nesting birds and wintering/passage birds. Woodland planting /screening using tall or ornamental species is not appropriate in the open marsh.

Built Development Guidelines

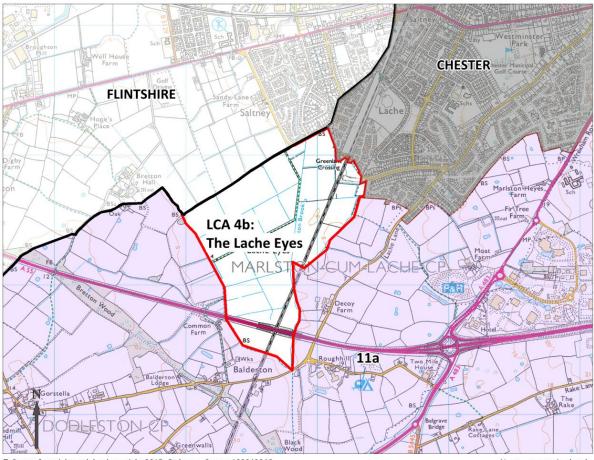
- **1.** Conserve the remaining open, undeveloped areas of the marsh.
- 2. Consider using native scrubby vegetation to screen views of traffic on the north side of the M56 motorway (taller species may be appropriate on the southern side of the motorway adjacent to the *Helsby to Frodsham Undulating Enclosed Farmland*).
- **3.** Consider views to and from the *Frodsham Sandstone Ridge and Helsby Hill* when planning any change.



LCT 4: Drained Marsh

LCA 4a: Frodsham, Helsby and Lordship Marshes

LCA 4b: The Lache Eyes



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Not to a recognised scale

Location and Boundaries

The Lache Eyes is a very small landscape character area immediately to the southwest of Chester. Formerly part of the larger Saltney Marsh in the Dee Estuary, it continues to the north beyond the Cheshire West and Chester borough boundary, west of Saltney.

Key Landscape Characteristics of LCA 4b: The Lache Eyes

- A very flat, low lying landscape (up to 5m AOD) of former tidal marsh alongside the Dee Estuary, contrasting with surrounding built development
- Regular flooding occurs in the winter
- An area originally part of the tidal estuary of the River Dee before silting up after the Roman period, embanked and reclaimed during the 18th & 19th centuries to produce productive farmland
- Land predominantly used for grazing and horsiculture north of the main footpath crossing the LCA (land to the south has recently been sprayed off and reseeded)
- Areas of species rich grassland of nature conservation interest
- The flat landscape is etched with a distinctive pattern of straight drainage ditches and channels which delineate the regular field pattern
- Ditches and drainage channels criss-cross the area and are of important nature conservation value
- The area supports red and amber listed bird species of conservation concern including snipe and starling
- Incomplete, low cut hedgerow boundaries and post and wire and wooden fencing provide variety in field boundaries
- Lack of trees provides a very open, exposed, windswept landscape
- Absence of settlement, and lack of roads and rights of way across the area; one main footpath crosses the LCA
- The A55 cuts across the southern end of the character area, and the railway transects the eastern edge, on embankment and utilising the flat landscape
- The transport corridors add movement and noise to an otherwise remote, empty landscape
- The flat, open landscape provides clear views to the hills of north Wales to the west
- The presence of two duck decoys, used to trap wildfowl

Key Landscape Sensitivities, Qualities and Value

Natural / Physical

- The flat nature of the land was formed when Lache Eyes was originally part of the tidal estuary of the River Dee before silting up after the Roman period;
- Formerly part of the larger Saltney Marsh in the Dee Estuary, the Lache Eyes was embanked and reclaimed during the 18th & 19th centuries to produce productive farmland;
- Subsequent drainage and industrial development of the wider Saltney Marsh beyond the borough boundary has reduced its extent;
- Influenced by alluvial drift deposits, clayey and alluvial gley soils are deep and well drained, and well suited to both pasture and arable crops;
- Areas of species rich grassland of nature conservation interest;
- Field pattern delineated by the pattern of drainage ditches, with some fields also bounded by low cut hawthorn hedges, in some places gappy, or post and wire fences and wooden fences;
- Drainage works included straightening the Balderton Brook.

Cultural / Heritage / Historic

- The field pattern characterised by straight-sided fields bounded by ditches and drainage channels, dating from the 18th and 19th century planned enclosure;
- The presence of two duck decoys, used to trap wildfowl, close to Decoy Farm although both are now only faint depressions in the ground. The one to the immediate north of the pond (known

as the 'Mermaid's Purse Decoy') is of unknown age but the main decoy to the west was known to have been constructed in 1634 and a map dated 1733 shows it located on the coastline;

- The second decoy is called Brereton's Duck Decoy and was constructed between 1631 and 1634 by Sir William Brereton and his relatives as a commercial venture. Its construction caused controversy and protests from more traditional landowners which resulted in a number of lawsuits. These indicate that Brereton was supplying the market towns of Cheshire and South Lancashire with cheaper and better quality fowl than his rivals. Although it is uncertain exactly when the decoy fell into disuse, it was definitely out of use by 1846, when the Chester-Wrexham Railway drove their line through the centre of the pond. Both are Mermaid's Purse Decoys in terms of morphology, the more northerly example is un-named;
- A public footpath follows the drainage ditches/channels and field boundaries through the character area.

Built Development and Settlement Pattern

- The absence of settlement, although a number of farmsteads are located along the character area boundary, including Decoy Farm and Common Farm which are visually prominent due to the lack of screening in the flat landscape;
- Lack of roads, although the A55 and Chester to Wrexham railway transport corridors utilise the flat land.

Perceptual / Visual

- The flat landform and long panoramic views contribute to the perception of a large scale, exposed landscape;
- Woodland within the Eaton Estate Farmland provides a backdrop in views to the south;
- Important views westwards to the Clwydian Hills of north Wales and south-eastwards to the *Sandstone Ridge*;
- The consistent field pattern through planned enclosure gives the perception of a reclaimed, tamed landscape;
- Vegetation-fringed ditches and rough ground provide texture in the landscape;
- Parts of the area are remote, but the presence of traffic on the A55 dual carriageway brings noise and movement to the southern part of this character area; the presence of birds and aircraft using the Hawarden (Chester) Airport also contribute to noise and movement;
- No prominent skyline, but traffic on the embanked A55 is visually prominent;
- Huge sheds and hangers of the Broughton Aircraft Factory are visually dominant in views to the northwest;
- The open character means there is little opportunity for screening any large scale elements or for mitigating visual impact without the mitigation measures in themselves being highly visible making it a visually sensitive landscape. There are relatively few sensitive visual receptors in the area.

Landscape Condition

The degraded hedgerows and broken fencing shows this to be a landscape in need of improved management. Wet grassland species have been lost and ditches are eutrophic as a result of the intensive agricultural use of the land.

CWaC Local Plan policies with an influence on the character of LCA 4b: The Lache Eyes

- Green Belt;
- Flood risk and water management.

Forces for Landscape Change

Past change

- Reduction of cultivated areas and increase in set-aside;
- Loss of wet species-rich grassland communities;
- Loss and fragmentation of hedgerows, and decline in fencing condition;
- Ditches are eutrophic as a result of nutrient run-off due to the intensive agricultural use of the land.

Potential future change / key issues affecting LCA4b: The Lache Eyes

- Pressure for increase in transport infrastructure / improvements;
- Pressure for renewable energy; wind turbines in the open, exposed, windswept landscape, and Solar PV farms;
- Visual impact of prominent development and traffic could be reduced by tree planting but this would change the open character of the area;
- Cost of artificial drainage could lead to withdrawal of pumping and loss/under-management of historic drainage systems;
- Climate change could lead to increased flooding affecting the use and management of the land.

Overall Landscape Management Strategy for LCA 4b: The Lache Eyes

The overall management strategy for this landscape should be to *conserve* the open, undeveloped character and the distinctive network of drainage ditches and channels, and to *enhance* the condition of habitats and features of the drained marsh.

Landscape Management Guidelines

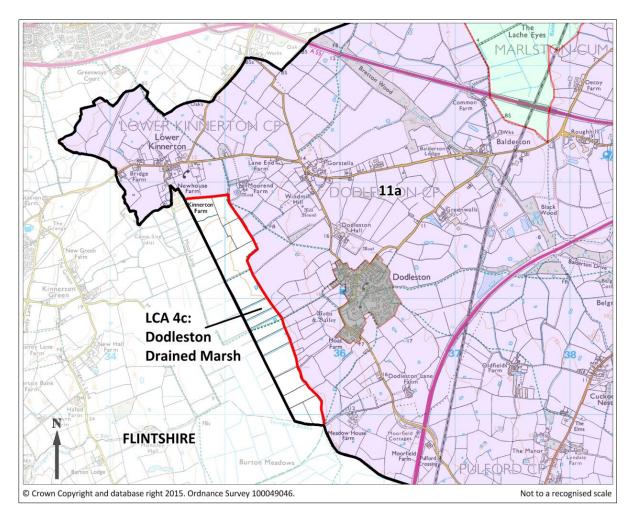
- 1. Encourage management of derelict and degraded areas of the landscape.
- 2. Maintain the distinctive field pattern that reveals the planned 18th and 19th century enclose of the former Saltney Marsh in the Dee Estuary.
- 3. Seek to restore and manage thorn hedgerows that are falling into decline, to maintain the age and species diversity.
- 4. Encourage management and maintenance of the network of drainage ditches and channels in a way that retains these as important characteristic features of the landscape and protects their ecological value.
- 5. Maintain and manage semi-improved species rich grassland.
- 6. Increase the biodiversity of intensively managed grassland and arable land create and link buffer strips along linear features such as hedgerows and ditches to create a continuous network of wildlife corridors.
- 7. Improve water quality by encouraging less-intensive agricultural practices to reduce fertiliser run-off and nutrient levels in the ditches.
- 8. Conserve the 'remote' character of *The Lache Eyes* away from the main transport corridors of the A55 and railway.
- 9. Retain the open character of the drained marsh by restricting planting to low growing scrubby species typically found in the local landscape, taking into account the importance of the area for ground nesting birds and wintering/passage birds. Woodland planting /screening using tall or ornamental species is not appropriate in the open marsh.
- 10. Encourage controlled public access through the area via clear way marking to prevent people straying from the public footpath network.

Built Development Guidelines

- 1. Conserve the open, undeveloped character of the drained marsh. Even small scale built development is likely to be conspicuous and any attempt at screening with trees would itself be prominent and uncharacteristic.
- 2. Renewable energy development is likely to be prominent in the open landscape, with potential for cumulative effects which should be avoided.
- 3. Consider using native scrubby vegetation to screen views of traffic alongside the A55 dual carriageway.
- 4. Consider views to the Welsh hills and the *Sandstone Ridge* when planning any change.



LCA 4c: Dodleston Drained Marsh



Location and Boundaries

The *Dodleston Drained Marsh* is a narrow elongated landscape character area straddling the border with Wales to the southwest of Chester. It forms part of the wider Burton Meadows, reclaimed and artificially drained from the former Dee Estuary. It lies between Lower Kinnerton and Dodleston and continues to the west beyond the Cheshire West and Chester borough boundary.

Key Landscape Characteristics of LCA 4c: Dodleston Drained Marsh

- A very flat, low lying landscape (10m AOD) of former tidal saltmarsh alongside the Dee Estuary, reclaimed during the 18th and 19th centuries to produce productive farmland
- An underlying geology of Kinnerton Sandstone and Chester Pebble Beds overlain by alluvial deposits;
- Cattle grazing is the dominant land use, although there are also fields in arable cultivation
- Areas of species rich grassland of nature conservation interest
- The flat landscape is etched with a distinctive pattern of straight drainage ditches and channels which delineate the regular, rectangular field pattern
- Ditches run perpendicular to the main drainage channel
- Ditches and drainage channels are of important nature conservation value
- Low cut hedgerow boundaries, some incomplete, and occasional post and wire fencing provide uniformity in field boundaries
- Lack of trees provides a very open, exposed, windswept landscape
- Occasional field ponds
- Absence of settlement and roads through the area provides an empty, remote landscape
- A footpath from Dodleston crosses the landscape
- The flat, open landscape provides views to the hills of north Wales to the west and to the *Sandstone Ridge* to the southeast

Key Landscape Sensitivities, Qualities and Value

Natural / Physical

- Alluvial deposits of sand, silt and clay left by the River Dee overlying a solid bedrock of Chester Pebble Beds Formation, the erosional base of the Kinnerton Sandstones;
- Once contiguous with the saltmarsh and mudflats of the tidal Dee Estuary, the area was ditched and drained during the 19th century to produce productive farmland;
- Areas of species rich grassland of nature conservation interest;
- Regular, rectangular field pattern delineated by the pattern of drainage ditches running perpendicular to the main drainage channel which runs in a northwest to southeast direction from Lower Kinnerton, along the borough boundary;
- Fields bounded by low cut hawthorn hedges, in some places gappy, with occasional post and wire fences providing uniformity in field boundaries.

Cultural / Heritage / Historic

- The regular, rectangular field pattern characterised by straight-sided fields bounded by ditches and drainage channels, dating from the 19th century;
- Field ponds along the eastern boundary of the character area are more typical of the adjacent *Estate Farmland* and *Cheshire Plain West*;
- A public footpath follows the drainage ditches/channels and field boundaries through the character area.

Built Development and Settlement Pattern

- Settlement and any other built development is absent from this landscape, although a number of farmsteads are located along the character area boundary, including Newhouse Farm, Kinnerton Farm, Moat Farm and Meadow House Farm which are visually prominent due to the lack of screening in the flat landscape;
- Absence of roads.

Perceptual / Visual

- The flat landform and long panoramic views contribute to the perception of a large scale, exposed landscape;
- Woodland at Hawarden, including Bilberry Wood, provides a backdrop in some views to the west, although there are more distant views westwards to the Clwydian Hills of north Wales and south-eastwards to the *Sandstone Ridge*;
- The consistent field pattern through planned enclosure gives the perception of a reclaimed, tamed landscape;
- Vegetation-fringed ditches and rough ground provide texture in the landscape;
- Field ponds and irregular field boundaries along the eastern edge of the character area are more typical of the adjacent *Estate Farmland* and *Cheshire Plain West* giving this part of the character area a more transitional feel;
- The absence of any development and roads provides a remote landscape, but the presence of birds and aircraft using the Hawarden (Chester) Airport contribute to noise and movement;
- No prominent skyline, but farm silos and the huge sheds and hangers of the Broughton Aircraft Factory are visually dominant;
- The open character means there is little opportunity for screening any large scale elements or for mitigating visual impact without the mitigation measures in themselves being highly visible making it a visually sensitive landscape. There are relatively few sensitive visual receptors in this landscape, limited to farm workers and people using the footpath network.

Landscape Condition

The land is actively farmed and managed, although there are some degraded hedgerows and broken fencing.

CWaC Local Plan policies with an influence on the character of LCA 4c: *Dodleston Drained Marsh*

- Countryside;
- Flood risk and water management.

Forces for Landscape Change

Past change

- Loss and fragmentation of hedgerows, and decline in fencing condition;
- Loss of wet species-rich grassland communities.

Potential future change / key issues affecting LCA 4c: Dodleston Drained Marsh

- Loss and under management of the drainage system would affect the key characteristic feature of this landscape character area;
- There could be pressure for wind energy development in the open, exposed, windswept landscape, and Solar PV farms;
- Tree planting could reduce the visual impact of prominent structures on neighbouring farms but this would change the open character of the area;
- Climate change could lead to increased flooding affecting the use and management of the land.

Overall Landscape Management Strategy for LCA 4c: Dodleston Drained Marsh

The overall management strategy for this landscape should be to *conserve* the open, undeveloped character and the distinctive network of drainage ditches and channels, and to *enhance* the condition of boundary hedgerows on the drained marsh.

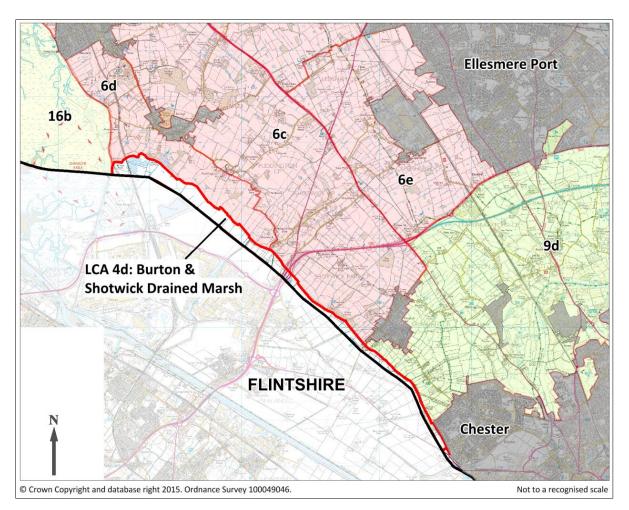
Landscape Management Guidelines

- 1. Maintain the distinctive regular, rectangular field pattern that reveals the planned 18th and 19th century enclosure of the former tidal Dee Estuary.
- 2. Seek to restore and manage thorn hedgerows that are falling into decline, to maintain the age and species diversity.
- 3. Encourage continued management and maintenance of the network of drainage ditches and channels in a way that retains these as important characteristic features of the landscape and protects their ecological value.
- 4. Maintain and manage species rich grassland and field ponds for their nature conservation value.
- 5. Increase the biodiversity value of the land create and link buffer strips along linear features such as hedgerows and ditches to create a continuous network of wildlife corridors.
- 6. Conserve the remote character of the *Dodleston Drained Marsh*.
- 7. Retain the open character of the drained marsh by restricting planting to low growing scrubby species typically found in the local landscape, taking into account the possible presence of ground nesting birds and wintering/passage birds. Woodland planting / screening using tall or ornamental species is not appropriate in the open marsh.
- 8. Encourage controlled public access through the area via clear way-marking to prevent people straying from the public footpath network.

Built Development Guidelines

- 1. Conserve the open, undeveloped character of the drained marsh. Even small scale built development is likely to be conspicuous and any attempt at screening with trees would itself be prominent and uncharacteristic.
- 2. Renewable energy development is likely to be prominent in the open landscape, with potential for cumulative effects which should be avoided.
- 3. Consider views to the Welsh hills and the *Sandstone Ridge* when planning any change.
- LCT 4: Drained Marsh





LCA 4d: Burton & Shotwick Drained Marsh

Location and Boundaries

The Burton & Shotwick Drained Marsh is a very narrow, elongated landscape character area marking the transition between the *Undulating Enclosed Farmland* and the low lying Dee levels. It straddles the national boarder, the western edge of the character area marking the English/Welsh boundary. The Burton & Shotwick Drained Marsh extends from Burton to Blacon on the outskirts of Chester.

Key Landscape Characteristics of LCA 4d: Burton & Shotwick Drained Marsh

- A very flat, low lying landscape (up to 5m AOD) of former tidal marsh alongside the Dee Estuary, contrasting with farmland sloping down from the east
- An area originally part of the tidal estuary of the River Dee before silting up after the Roman period, reclaimed during the 18th & 19th centuries to produce productive farmland, with further improvement at the northern end as part of the development of the Wrexham to Bidston railway
- Mixed agricultural pasture and arable land use
- Ditches and areas of species rich grassland are of nature conservation interest
- The flat landscape is etched with a distinctive pattern of straight drainage ditches and channels which delineate the regular, rectangular field pattern
- Incomplete hedgerow boundaries provide partial enclosure along some field boundaries
- Lack of trees provides an open, exposed, windswept landscape
- Absence of settlement and roads
- A number of rights of way cross the area and National Cycle Route (NCR)5 follows a disused railway (now the Chester Millennium Greenway) near the southern end
- The A550 cuts through the centre of the character area, and the Wrexham to Bidston railway passes along the eastern edge
- The transport corridors add movement and noise to an otherwise remote, empty landscape
- The flat, open landscape provides clear views across the Dee Estuary to the hills of north Wales to the west and to the Shotton industrial area where Connah's Quay power station and the Dee Bridge are visually prominent
- Recreational fishing ponds and RSPB Burton Mere Wetlands reserve with a mosaic of wetland habitats important for birds including internationally designated Ramsar site
- Iron Age promontory fort at Burton Point

Key Landscape Sensitivities, Qualities and Value

Natural / Physical

- Alluvial deposits of sand, silt and clay left by the River Dee overlying a solid bedrock of Chester Pebble Beds Formation, well suited to both pasture and arable crops;
- Once contiguous with the saltmarsh and mudflats of the tidal Dee Estuary, the area was ditched and drained during the 19th century to produce productive farmland, with further improvements at the northern end as part of the development of the Wrexham to Bidston railway ('The Borderlands Line');
- Ditches and areas of species rich grassland of nature conservation interest;
- Regular, rectangular field pattern delineated by the pattern of drainage ditches running perpendicular to the main drainage channel which runs in a northwest to southeast direction along the borough boundary from Burton Point to Blacon on the outskirts of Chester;
- Field pattern delineated by the pattern of drainage ditches, with some fields also bounded by gappy hawthorn hedges;
- Includes the 'Shotwick Fields', prone to flooding in the winter;
- RSPB Burton Mere Wetlands Reserve is internationally designated as a Ramsar site as an extension of the Dee Estuary.

Cultural / Heritage / Historic

- The regular, rectangular field pattern characterised by straight-sided fields bounded by ditches and drainage channels, dating from the 19th century;
- Iron Age promontory fort at Burton Point;
- The northern end of the LCA was the site of a bombing decoy during the Second World War;
- A number of footpaths cross the character area, linking to the network of rights of way through farmland around Burton, Puddington, Shotwick and Saughall to the east;
- The Chester Millennium Greenway provides an important recreational route along the disused railway linking Chester and Connah's Quay as part of NCR5;
- Fishing ponds provide recreational activity;
- RSPB Burton Mere Wetlands Reserve provides a mosaic of habitats including wetlands with reed beds, fenland, woodland with wildflowers and farmland, important for wildfowl and wading birds the reserve has recently expanded and includes a visitor centre;
- Good palaeo-environmental potential.

Built Development and Settlement Pattern

- Settlement and any other built development is absent from this landscape, although a number of villages lie within the *Undulating Enclosed Farmland* to the east, namely Burton, Puddington, Shotwick and Saughall;
- Absence of roads.

Perceptual / Visual

- The flat landform and long panoramic views contribute to the perception of a large scale, exposed landscape;
- The consistent field pattern through planned enclosure gives the perception of a reclaimed, tamed landscape;
- Vegetation-fringed ditches and rough ground provide texture in the landscape;
- The absence of any development and roads provides a remote landscape, but the presence of the A550 and railway bring noise and movement to the area; birds and aircraft using the Hawarden (Chester) Airport also contribute to noise and movement;
- No prominent skyline, but the Deeside / Shotton industrial area including Connah's Quay power station, pylons and the Dee Bridge are visually dominant;
- The flat, open landscape provides clear views across the Dee Estuary to the hills of north Wales to the west;
- Topography and woodland in the Undulating Enclosed Farmland limit views to the east;
- The open character means there is little opportunity for screening any large scale elements or for mitigating visual impact without the mitigation measures in themselves being highly visible making it a visually sensitive landscape. There are relatively few sensitive visual receptors in this landscape, limited to farm workers and people using the footpath network.

Landscape Condition

Although much of the area is actively farmed, the degraded hedgerows and broken fencing shows this to be a landscape in need of improved management. Some land appears to be set-a-side or is not being actively managed and the long grasses and scrub vegetation create an impression of neglect. Recreational fish ponds and the RSPB reserve are well managed.

CWaC Local Plan policies with an influence on the character of LCA 4d: *Burton & Shotwick Drained Marsh*

- Green Belt;
- Natural heritage sites of international, national, regional and/or local significance;
- Nationally designated heritage assets (on Historic England's National Heritage List for England) and locally significant heritage assets;
- Flood risk and water management.

Forces for Landscape Change

Past change

- Reduction of cultivated areas and increase in set-aside;
- Loss of wet grassland communities;
- Loss and fragmentation of hedgerows, and decline in fencing condition;
- Recently extended RSPB Burton Mere Wetlands reserve has increased visitor numbers to the area;
- Expansion of fisheries has resulted in 'suburbanisation' by signage, car parking, fencing etc.

Potential future change / key issues affecting LCA 4c: Dodleston Drained Marsh

- Pressure for increase in transport infrastructure / improvements across the area;
- There could be pressure for wind energy development in the open, exposed, windswept landscape, and Solar PV farms;
- Visual impact of prominent development and traffic could be reduced by tree planting but this would change the open character of the area;
- Further 'suburbanisation' of the landscape, for example signage, fencing and car parking associated with new or improved fishing ponds;
- Climate change could lead to increased flooding affecting the use and management of the land.

Overall Landscape Management Strategy for LCA 4d: Burton & Shotwick Drained Marsh

The overall management strategy for this landscape should be to *enhance* the condition of habitats and features of the drained marsh whilst safeguarding its open character.

Landscape Management Guidelines

- 1. Encourage appropriate management of the more derelict and degraded areas of the landscape to enhance the nature conservation interest of the area.
- 2. Maintain the distinctive field pattern that reveals the planned 19th century enclosure of the marsh.
- 3. Encourage management and maintenance of the network of drainage ditches and channels in a way that retains these as important characteristic features of the landscape and protects their ecological value.
- 4. Seek to restore thorn hedgerows that are falling into decline, to maintain the age and species diversity.
- 5. Maintain a range of habitats, from open water to agricultural land. Seek opportunities to re-create habitats such as species rich grassland and reed beds.
- 6. Increase the biodiversity of intensively managed grassland and arable land create and link buffer strips along linear features such as hedgerows and ditches to create a continuous network of wildlife corridors.
- 7. Conserve the 'remote' character of the *Burton & Shotwick Drained Marsh* away from the main transport corridors of the A550 and railway.
- 8. Retain the open character of the marsh by restricting planting to low growing scrubby species typically found in the local landscape, taking into account the importance of the area for ground nesting birds and wintering/passage birds. Woodland planting / screening using tall or ornamental species is not appropriate in the open marsh.

Built Development Guidelines

- 1. Conserve the remaining open, undeveloped areas of the marsh.
- 2. Consider using native scrubby vegetation to screen views of traffic on the A550.
- 3. Ensure features associated with new development do not lead to 'suburbanisation' of the landscape, for example signage, fencing and car parking at fishing ponds.
- 4. Consider views to the north Wales hills when planning any change.



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