Broad Character: Navigation

Character Type: Maritime safety

Irish Sea Regional Perspective

Introduction: Defining/Distinguishing Attributes

The majority of features associated with this Character Type are typically found on or adjacent to the coast. The region is characterised by extensive sand and mud flats with constantly shifting shoals that are dangerous to navigate.

There are lighthouses along the entire length of England's Irish Sea coastline, as well as smaller lights at the entrance to channels and harbours to guide vessels away from shallow waters and submerged rocks and debris. There are two lighthouses marking the entrance to Silloth Docks, for example, and two lighthouses marking the barriers to the former Millom iron mines, as well as lighthouses marking the approach to Walney Channel and Barrow Docks. Further south, a number of lighthouses at the north end of the Wirral guide vessels into the Mersey. Offshore, buoyage marks areas of shoals and flats, for example off the coast of Cumbria at the shallow waters of Robin Rigg and Workington Bank, as well as around the outlet pipes of Sellafield nuclear plant.

Daymarks are also common. They are highly visible and distinctive features on the coast that can be used by mariners for navigation during daylight only. Numerous features were deployed as daymarks for sighting, navigation and survey, and amongst those on this coastline are churches, windmills, factory chimneys, small settlements, individual buildings and various natural features on which this cultural role has been bestowed.

The Pharos, Fleetwood. As well as a lighthouse to guide ships into the docks, it was also a focal point in the classically planned town

Historical Processes; Components, Features And Variability

The use of landmarks to guide ships safely along the coast and into ports and harbours is a common aspect of maritime safety and probably the oldest method of navigation. These can include distinctive topographic features such as Black Combe Fell, which lies close to the south west Cumbrian coast and is marked as a significant feature of historic charts and views. More commonly, landmarks are man-made features, particularly church spires, windmills and factory chimneys. An 1876 chart of the Solway coast, for example, has an annotation that explains, "between Maryport and Harrington are numerous high chimneys and blast furnaces, the fires of the latter make them conspicuous at night".

One of the earliest surviving lighthouse structures along England's Irish Sea coast is at Hoylake on the Wirral. It was built in brick after an Act of 1761 by the Corporation of

Liverpool, with an adjacent wooden lighthouse which has now gone (Merseyside HER 2189-015). Nearby Leasowe Lighthouse was built in 1763 and, although it went out of use in 1908, survives as a Listed Building (Merseyside HER 2591-002). There are many daymarks and lighthouses which mark the approaches to Liverpool, indicating the difficulty of navigating the extensive and shifting shoals and flats around the mouth of the estuary. As well as the lights at Hoylake and Leasowe, there is Bidston Lighthouse, Grange Beacon (NMR 66241; Merseyside HER 2286-017), Perch Rock (Merseyside HER 3094-007 and 3094-023), as well as several windmills, which were all used as navigation marks on the Wirral. On the Formby and Crosby shore, historic charts show numerous windmills, church spires and chimneys marking the approaches, as well as landmark towers at Formby Point. The approaches to Fleetwood and the River Wyre were also marked with lights on the flats, and the many windmills of the area were used as daymarks.

Values And Perceptions

Maritime safety features form part of the coastline or shoreline and are generally easy to recognise, having a visual impact on today's landscape/seascape. Lighthouses, beacons, and daymarks are iconic monuments bridging the boundary between land and sea. However, some sites are less obvious. For example, church spires and towers, or other buildings and monuments were not originally designed for maritime safety but, in some cases, had a secondary use for that purpose. In many cases, these lesser landmarks have gone, particularly the numerous windmills which marked larges stretches of the coastline from the Wirral up to Lancaster, and many of the industrial chimneys around Liverpool and along the Cumbrian coast. As they became obsolete in a post-industrial era, the removal of symbols of industrial north-west England has also removed a significant historical feature of coastal navigation.

Research, Amenity And Education

The use of landmarks and navigation aids facilitated the development of surveying techniques and the drafting of maritime charts and coast profiles. Plotting the location and understanding the development of these features as navigation safety features along the coast would give valuable information about the distribution of maritime hazards and how they change over time, such as the shifting sediments common to the region. These features may be the only mapped record available constituting an important resource for landscape and seascape studies.

Little Marton windmill. A relatively rare survivor in the Fylde and west Lancashire where windmills once formed a common daymark

Lighthouses are often used as amenity resources, open to the public. The John Barrow monument, for example, which sits on the Hoad Hill above Ulverston and was known as 'the lighthouse without a light', has been the subject of a programme of repair and restoration,

and is now open to the public (http://www.sirjohnbarrowmonument.co.uk). On the Wirral, which had several lighthouses and other daymarks which guided ships into the Mersey and the Dee, a community archaeological excavation was undertaken at Leasowe Lighthouse, one of the north west's earliest lighthouses, in 2007 (http://www.wirral.gov.uk/my-services/environment-and-planning/built-conservation/archaeology). Features such as Grange Beacon, a Scheduled Monument, stands land with public access and is visited and appreciated as a local beacon for mariners (http://www.oldwirral.com/westkirby.html). Further educational initiatives could be developed to enable a better understanding of the development of maritime safety in England.

Condition And Forces For Change

Although navigation aids, particularly those at sea, are often replaced and renewed, their mooring sites may still hold evidence of successive use and re-use. This is exemplified in the use of fixings, piles and other materials to anchor these features to the seabed.

Terrestrial markers are increasingly becoming disused, since these traditional methods are being replaced with radio, satellite navigation, digital marine charts and seismic technologies. This is the case with many lighthouses which are becoming redundant because they are costly to maintain. Some want to retain them as a fail-safe should GPS systems fail. But of particular relevance to their role in land- and sea-scape character, many have objected for fear of the loss of a feature they see as iconic in their perceptions of a particular part of the coast. The importance of such features as iconic features is exemplified by the Hoad Monument, at Ulverston, Cumbria. Built as a monument to Sir John Barrow and modelled on the Eddystone Lighthouse, it was known as 'the lighthouse without a light' (http://www.sirjohnbarrowmonument.co.uk), and was intended to act as a daymark and to be seen from the whole of Morecambe Bay. It is now become a symbol for the town of Ulverston, over which it stands.

Rarity And Vulnerability

Navigational aids are vulnerable due to their location as well as technological advances. Technology is replacing traditional methods, therefore, the monuments and features associated with these methods are becoming obsolete. Along the Irish Sea coastline, some lighthouses and beacons have been preserved as monuments, such as Grange Beacon, Perch Rock Lighthouse and Leasowe Lighthouse on the Wirral, the Sir John Barrow monument at Ulverston, and the Hodbarrow Lighthouse at Millom. Other features, not specifically maritime in character, but which fulfilled a maritime function as prominent features, have already disappeared and may be discernible only through the archaeological studies and interpretations. This is particularly true of windmills and industrial chimneys, of which historic charts show there were once many on the English Irish Sea coastline.

Websites

http://www.oldwirral.com/westkirby.html. Retrieved February 2011

http://www.sirjohnbarrowmonument.co.uk. Retrieved February 2011

http://www.wirral.gov.uk/my-services/environment-and-planning/built-conservation/archaeology. Retrieved February 2011