

Teesside

Port Heritage Summary



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Cover illustration

Looking across the River Tees to the Seal Sands petrochemical works with the South Bank Wharf in the foreground.

Abbreviations

c	circa
HE	Historic England
HER	Historic Environment Record (Tees Archaeology)
HLF	Heritage Lottery Fund
ICI	Imperial Chemical Industries
LDO	Local Development Order
LEP	Local Enterprise Zone
LB	Listed Building
MA	Management Area (within a Policy Development Zone in SMP2)
MHW	Mean High Water
MSTC	Marine Safety Training Centre
NNR	National Nature Reserve
NRHE	National Record for the Historic Environment
NTL	Normal Tidal Limit
OS	Ordnance Survey
PDZ	Policy Development Zone (in SMP2)
POW	Prisoner of War
PPA	Planning Performance Agreements
RNLI	Royal National Lifeboat Institution
Ro-Ro	Roll on - Roll off
SDR	Stockton and Darlington Railway
SM	Scheduled Monument
SMP2	Shoreline Management Plan 2
SPA	Special Protection Area
SSI UK	Sahaviriya Steel Industries United Kingdom
SSSI	Site of Special Scientific Interest
TEU	Twenty Foot Equivalent (containers)
TNC	Tees Navigation Company

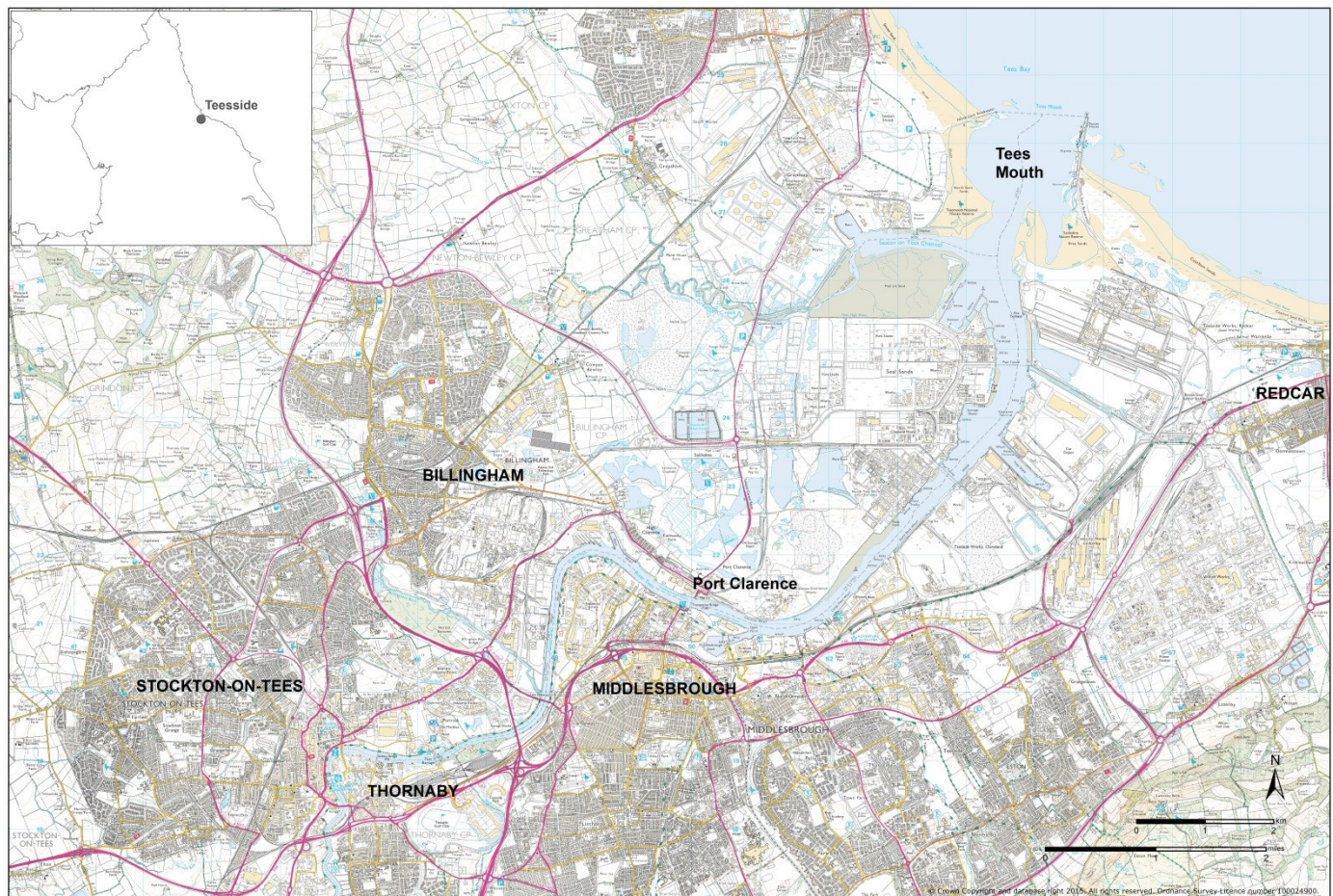


Fig 1 Location.

Introduction

The England's North Sea Ports project aims to improve the understanding of the heritage values, significance, vulnerability and adaptability to change of port-related heritage in nineteen major ports along England's North Sea coast, from Berwick upon Tweed, Northumberland, to Harwich, Essex. The project focuses on the historical development of each port, its present character and its port-related heritage, the values attached to that heritage and the issues and opportunities it presents for future development.

The review for each port is presented as an illustrated 'Port Heritage Summary', designed to be succinct and readable, raising awareness and understanding amongst all parties interested in that port's future development and so contributing towards the sustainable management of its port-related heritage.

This Port Heritage Summary relates to Teesside (The River Tees from the Tees Mouth to Victoria Bridge, Stockton-on-Tees), where twenty five individual areas of port-related character have been identified. The Summary explains how port heritage within those areas contributes to Teesside's distinctiveness today, to the interpretation of its historical development, and that of the North East and the

North Sea. This includes the cultural associations and feelings of local people and communities to the maritime past and how it is viewed and valued by them today.

A range of management options to build on the present values and roles of its heritage are summarised, enabling them to serve as a positive asset in Teesside's future, retaining its rich cultural distinctiveness while meeting its changing economic needs.

Location

Teesside is located between the counties of Durham and North Yorkshire, 25 miles southeast of Tyneside and 90 miles north of the River Humber.

The port is formed by the River Tees as it flows to the North Sea at Tees Mouth. The river is relatively narrow until Middlesbrough and Port Clarence but east of here it broadens to form a wider channel, now much enclosed by modern port development. Towards the mouth of the river, on the western side of the estuary entrance, is Seal Sands, a remnant of the inter-tidal mudflats that historically flanked the final 7.5 miles of the river.

The Tees is tidal for ten miles inland to the Tees Barrage but it formerly flowed a further seven miles inland up to Yarm (to the south west of Victoria Bridge).

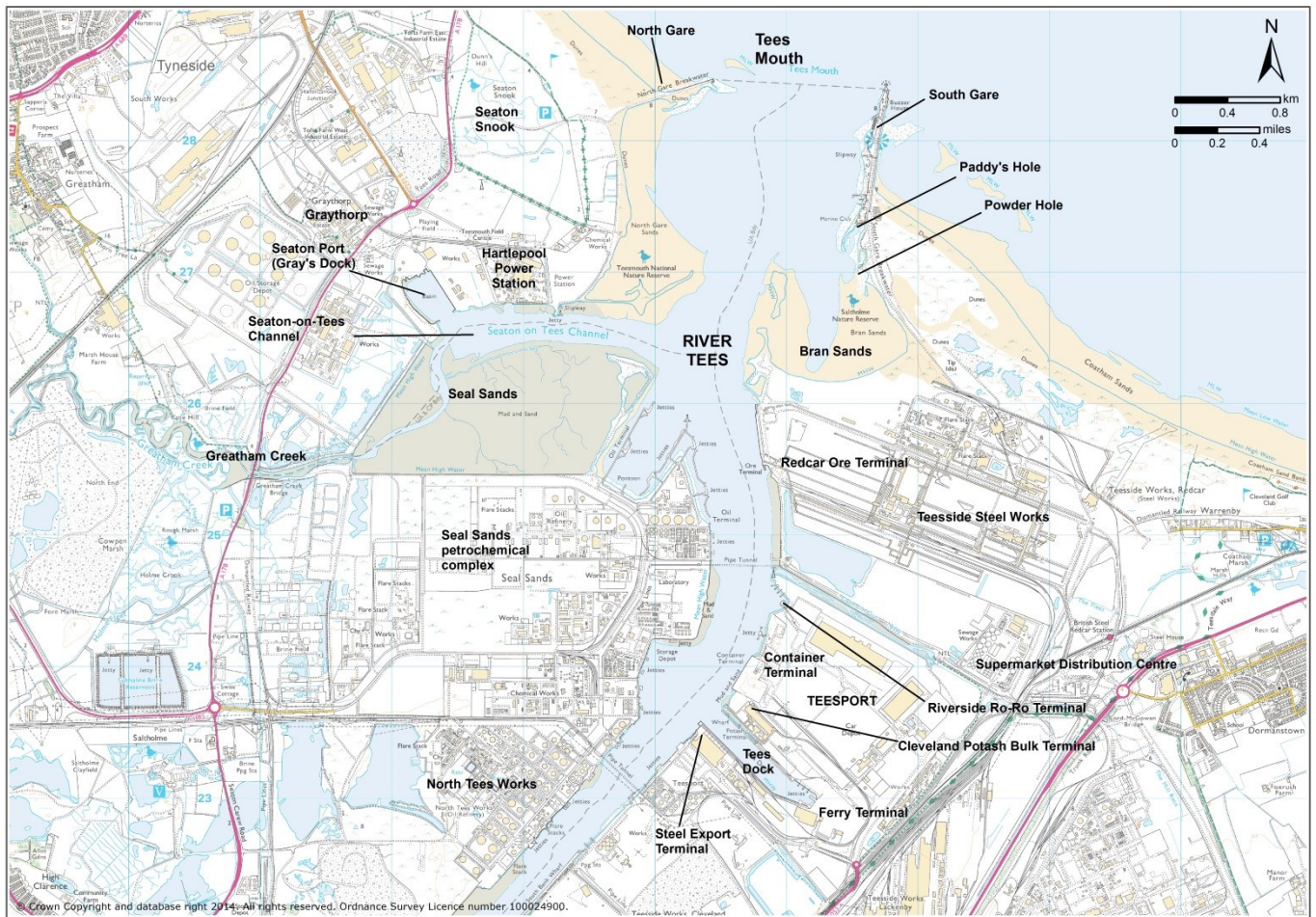


Fig 2 Topography, place-names and features - eastern area.

Teesside is now a major urban conurbation flanking either side of the Tees. It comprises of the formerly separate towns of Stockton-on-Tees and Billingham on the northern bank, and Thornaby and Middlesbrough on the southern bank. The conurbation has also incorporated several smaller settlements including Port Clarence.

Much of the modern commercial port is located downstream of Middlesbrough and Billingham in the final 8.5 miles of the river.

The Port

The port of Tees is an internationally significant port with a large number of companies who own, operate and/or lease port-related facilities and water frontage on the river.

The main commercial operation on Teesside is Teesport, owned and operated by PD Ports. Teesport is currently in the top five busiest ports in the UK, handling around 34 million tonnes of cargo per annum. Seventy percent of all cargo handled is liquid chemical and petrochemical products. It is also a feeder port with ship-based redistribution connections to 20 other European ports and a rail freight service with Grangemouth, Scotland (PD Ports 2013).

The range of cargos is wide: petrochemicals, steel, engineering cargo alongside manufactured and retail goods. Until recently, the Redcar Ore Terminal was used to import over 8 million tonnes of ore per

annum (mostly iron) for use at the Teesside Steel Works. The steel produced by the works was exported from Steel Export Terminal, however the Steel Works closed in October 2015. Every year over 1 million tonnes of potash and salt are exported from the Cleveland Potash Bulk Terminal, the majority of which comes from Boulby Mine on the edge of the North Yorkshire Moors. The Teesport Container Terminal consists of two quays that can deal with 500,000 Twenty-foot Equivalent Units (TEU) containers each year (PD Ports 2013).

From the Tees Dock P&O Ferries operates a Roll on – Roll off (Ro-Ro) freight service with Rotterdam and Zeebrugge. The facility also allows for the import of a large number of cars, and Renault and General Motors have storage facilities at the terminal.

A number of companies also use Teesport to operate landside facilities including Hanson (a cement works and landfill site), Asda and Tesco (storage and distribution facility), and when completed, the Teesport Renewable Energy Plant (operated by MGT Teesside).

On the northern bank of the river, opposite Teesport, PD Ports also owns the Seal Sands petrochemical refinery (operated by ConocoPhillips). This forms part of a huge complex of petrochemical works at Seal Sands, with several operators including Sabic UK Ltd and their North Tees Works.

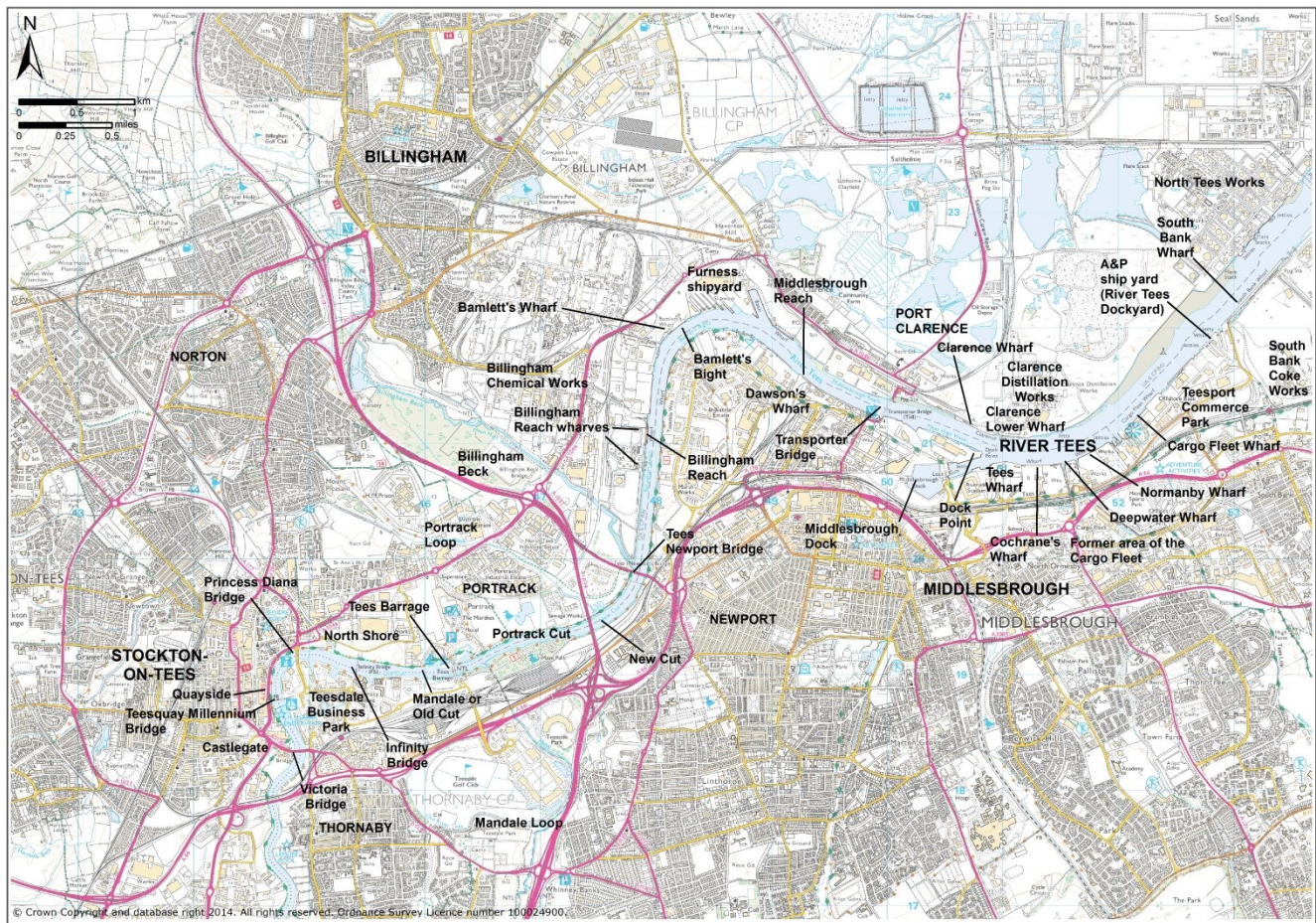


Fig 3 Topography, place-names and features - western area.

PD Ports are also the statutory port authority on the tidal part of the River Tees. Its duties include pilotage and maintaining depth by dredging operations. The upper limit of dredging extends to the southern end of the Billingham Reach, below the Tees Newport Bridge. The authority is also responsible for the North and South Gare breakwaters which defend the river mouth, and owns and operates the lighthouse on South Gare (PD Ports website).

There are many other port-related facilities owned and operated by private companies. Their wharves and quays can be found on both banks of the Tees from Billingham Reach downstream to the river mouth (PD Ports 2013).

On the north side of the river, the Billingham Reach wharves are operated by Able UK (a business park) and Inter Terminal (a bulk liquid and storage facility). On the same bank, Bamlett's Wharf is operated by Portrack Seafreight (a freight forwarding company) and below it the works of TAG Energy Solutions (a manufacturing company for the offshore energy industry), with Wilton Engineering (fabrication for the onshore and offshore energy industry) upstream of the Transporter Bridge.

On the southern river bank above the Transporter Bridge, at Middlesbrough Reach, is AV Dawson's North Sea Freight multi-modal distribution hub with Dawson's Wharf, a 500m-long quay.

The Transporter Bridge is owned by Middlesbrough and Stockton-on-Tees Borough Councils.

Downstream of the Transporter Bridge, on the northern bank, is the Clarence Works (Able UK) and Koppers UK Ltd Clarence Lower Wharf. On the northern bank of the river from Clarence Lower Wharf until the North Tees Works petrochemical complex there are no further wharves. As part of the Seal Sands complex there are several jetties including, at its far northern end, an oil terminal.

Crossing to the south bank of the river and returning just below the Transporter Bridge, at Dock Point, Able UK's Middlesbrough Port is a fabrication site which includes part of Middlesbrough Dock. Opposite the entrance channel to Middlesbrough Dock, for two miles on the southern bank of the Tees, is a sequence of wharves leading up to Teesport. This includes Tees Wharf, Cochrane's Wharf (used for importing dredged marine materials for Tarmac Aggregates), Deepwater Wharf, Normanby Wharf (River Tees Engineering) and Cargo Fleet Wharf.

Cargo Fleet Wharf forms the main part of PD Ports' Teesport Commerce Park, a major cargo handling facility of warehouses forming a redistribution park (PD Ports website).

Next door to the Commerce Park is A&P's Tees facility which includes quay frontage and two dry docks where offshore vessels, dredgers and tankers can be refitted. To the east of A&P's yard and adjoining Teesport is the former Sahaviriya Steel Industries' (SSI UK) South Bank Coke Ovens production plant which closed in September 2015. To

the north of Teesport are the extensive operations of the recently closed Teesside Steel Works.

On the western side of the Tees Mouth, on the edge of Seaton Channel is Hartlepool nuclear power station. To the west of the station is Able UK's Seaton Port which includes a 25 acre dry dock, one of the largest in the world.

Local Authorities and heritage organisations

Teesside falls within four unitary local authorities.

The Borough of Stockton-on-Tees lies within both County Durham and North Yorkshire. Billingham and Thornaby both lie within the borough. The authority borders the Borough of Hartlepool to the east, which covers the northern bank of the Tees Estuary.

Middlesbrough is run as a unitary authority, Middlesbrough Borough Council. To the east, the southern bank of the Tees Estuary lies within the Borough of Redcar and Cleveland.

As part of a Local Authority partnership for the area Tees Archaeology oversees the management of the Historic Environment Record (HER – database of historic buildings and archaeological sites and monuments) for Stockton-on-Tees Borough Council and Hartlepool Borough Council.

Redcar and Cleveland and Middlesbrough Borough Councils maintain their own HERs.

The Historic England (HE) North East office is in Newcastle. HE provides input and advice on heritage matters for Listed Buildings (LB) and Scheduled Monuments (SM), together with strategic overviews and support at local, regional and national levels.

Historical development of the port and its North Sea roles and relationships

Teesside's success as a port owes much to its strategic location at the mouth of the Tees and the natural resources of its hinterland, in particular, coal and iron ore. From these beginnings sprang a host of associated industries, most notably salt production, shipbuilding, steel making, chemical manufacture, and petrochemicals. The sites of these sprawling works clustered along the banks of the Tees making use of the river as the main means for the export and import of goods. The intensity of industrial development in the latter half of the 19th century enabled Teesside to become world renowned in the later 19th century for its shipbuilding and steel making industries.

The years following the Second World War were a difficult period for the area as long-established port-related industries died and local businesses collapsed, leading to high levels of unemployment and large areas of brownfield land.

The cyclical nature of the changes in its industry and economy has been an important characteristic of the area's history. The scale and breadth of the changes in successive periods is particularly striking, as is the

almost total disappearance of traces of many of these activities.

Early history

The remains of a Mesolithic (c10,000BC – c4,000BC) forest and a palaeo-channel survive nearby at Hartlepool. Submerged by the sea in prehistory, it contains archaeological evidence for woodland clearance, butchery and fishing. At this time, the coastline of the Tees may have been similar to that excavated at Hartlepool but coastal erosion has destroyed much of the evidence for human settlement and land use (Rowe 2008).

Limited archaeological evidence dating to the Neolithic, Bronze and Iron Ages has been found next to and in the River Tees, although the estuary is likely to have been a resource-rich area.

Although Roman coins have been found along the riverside, particularly around Stockton, there is a distinct lack of contemporary settlement in the South Tees Basin on the alluvium deposits, probably because this was marshland in the Roman period. However, at Coatham, two miles to the east of Tees Mouth, there is evidence for salt processing. Indeed maritime transport would have been important in the Roman period but little evidence for port infrastructure has, as yet, been revealed on the Tees (Tolan-Smith 2008).

In AD 686 a monastic cell was established at Middlesbrough by St Hilda, Abbess of Whitby. During this period the importance of Hartlepool as a natural harbour may have over-shadowed the Tees. Hartlepool was an important early medieval Northumbrian ecclesiastical centre with early port activity (Tolan-Smith 2008, 65).

Stockton dominates early trade

Yarm and Stockton were the focus of medieval port-related activity on the Tees. Their location on the upper tidal limits of the river provided easy access to their hinterland. Their location also benefitted from being further away from Hartlepool which was developed as the major port to Durham in the 11th century.

In the 12th century port activity is recorded at Yarm, which was the lowest bridging point on the Tees by AD 1305 and, as such, of great strategic value. By AD 1204 customs dues collected from the port amounted to £43. Records show trading connections with ports in Scotland, France and Flanders, with imports of wine, wool, hides and salt, and the main exports being agricultural produce (Page 1923b).

In the 14th century Stockton became a borough under the auspices of the Bishop of Durham and a castle was built. As the town grew so did its trade as a port, particularly in the export of wool. Its success led it to surpass Yarm in importance, as it became the main port for much of County Durham and North Yorkshire. By the 15th century the port was a centre for shipbuilding and associated smaller industries, such as sail and rope making, with lead and agricultural produce from its surrounding hinterland forming principal exports.

Documentary evidence also records the early history of two ferry crossings on the Tees when there was a crossing at Billingham, and another, the Bishop's Ferry, at Stockton (Page 1928a).

At this time the lower reaches of the estuary were still largely undeveloped. The River Tees had a meandering channel surrounded by extensive inter-tidal mudflats, salt marsh and inland, low-lying marshland. However, Caldecotes, now part of the eastern suburb of Middlesbrough, was a fishing port located near to where the Cargo Fleet, a tidal creek, joined the Tees.

On the northern side of Tees Mouth, at Seaton Common, salt processing was undertaken. The works are preserved as mounds of ash and silt, a result of boiling of sea water in flat-bottomed ceramic vessels known as pans which used coal for fuel (Rowe 2009).

Stockton continued as the major port on the Tees into the 17th century with Yarm continuing its trade in grain. Both came under the jurisdiction of Newcastle but at this time Stockton was considered to be the largest port in terms of trade between Hull and Tyneside.

During the English Civil War (1642-1651) Scottish forces occupied Stockton Castle and controlled the town for two years. Following the end of the Civil War the castle walls were ordered to be pulled down by Oliver Cromwell (This is Stockton website).

Despite the ruination of the castle Stockton was considered strategically important enough for refortification prior to the Second Anglo-Dutch war of 1665-7. The Tees was also often used as a hiding place for vessels fleeing Dutch privateers as well as a location to congregate into convoys (Page 1928b).

By the end of the 17th century both Stockton and Yarm were centres of shipbuilding and ever-larger ships were being built at Stockton. In 1680 the growing importance of the port resulted in the transfer of the Customs Office from Hartlepool.

This was coupled with the expansion of the port infrastructure with a Royal Commission of 1683 establishing free quays at the port, adding to the five private quays already there. This growth continued into the 18th century.

Meanwhile, on the lower reaches of the Tees, the importance of Caldecotes had grown. Now known as Cleveland Port, it developed as the point where larger ships offloaded or lightered their cargoes to smaller vessels for the voyage upriver to Stockton hence the name, 'Cargo Fleet' for the creek (Page 1928b).

The railways, coal and Port Darlington

In the early 19th century an increasing amount of coal was mined from the coalfields of Durham.

This led to the construction of the Stockton and Darlington Railway (SDR), linking the River Tees with the coal mines. The railway was designed by the engineer Robert Stevenson and its construction funded by Edward Pease, a local Quaker. It was the world's first passenger railway and opened in 1825.

The first coal staithes or jetties at Stockton opened in 1826 and the export of coal soon became the SDR's main business. However, the disadvantages of the location of Stockton so far upriver soon became apparent (Stockton and Darlington Railway Wikipedia page).

The meandering lower reaches of the River Tees and the reliance on tides to navigate its shallow course meant that it could take a ship as long to traverse the distance between Stockton and the mouth of the river, as it did to travel on from there to London.

Earlier attempts had already been made to improve the navigation. The Tees Navigation Company (TNC) had been founded by an Act of Parliament in 1809, for the purpose of improving the navigation of the Tees between Stockton and Middlesbrough. In 1810 the Mandale Cut (also known as Old Cut) was dug to the north of Thornaby, following nearly 20 years of attempts to pass the required legislation. Despite being only 220 yards (201m) long it shortened the river by 2¼ miles by crossing the neck of a large meander in the river.

The SDR soon proposed an extension of the railway from Stockton to Middlesbrough although it faced opposition from those who foresaw that Stockton would lose out. Meanwhile the TNC gained a further Act of Parliament in 1828 to dig the Portrack Cut, a new channel to bypass the islands and sandbars of the meander at Portrack, which lay to the east of the Mandale Cut. This was opened in 1831 (Tees Navigation Company Wikipedia page).

Despite these efforts to improve navigation on the Tees, in 1833 the Tees and Wearedale Railway Company opened the Clarence Railway with the aim of bypassing the Mandale and Portrack Cuts and to create a shorter link with the South Durham coalfield. By 1834 the railway had been extended to a newly-built coal terminal on the Tees' north bank at Port Clarence, on land reclaimed from the inter-tidal mudflats (Page 1928b).

Meanwhile the SDR completed their branch line to Port Darlington, a new terminal of eight coal staithes at Middlesbrough. The SDR had also invested in a steam-powered coal loading system designed by one of their engineers, Timothy Hackworth (Northern Echo website; Timothy Hackworth Wikipedia entry).

Joseph Pease, son of Edward, together with his father and other Quaker investors had developed Port Darlington after buying a farm situated on the south bank of the Tees. The farmstead became the centre of a planned new town built to house the labour supply for the new port.

The Clarence Railway was hampered by using lines operated by its rival and punitive charges meant that Port Clarence never achieved the growth rates of Port Darlington.

Port Darlington's success soon meant it was overwhelmed by the amount of commercial traffic so Middlesbrough Dock was developed by the SDR. Work started in 1839, and was completed in 1842 to the design of engineer William Cubbitt with the engineer George Turnbull overseeing construction.



Fig 4 Middlesbrough Dock.

The Dock and the increasing wealth generated by the port meant fuelled the growth of Middlesbrough.

The first edition 25 inch: 1 mile Ordnance Survey (OS) map for the Stockton area, surveyed in the mid-1850s, shows it on the cusp of change. On the northern bank above Stockton Bridge (later Victoria Bridge) were the SDR's original coal staithes and from Finkle Street downriver the map shows Martin's Wharf, Ingledew's Wharf, Wren's Quay, Sugarhouse Quay, Blue Anchor and Hubback's Quays. On the North Shore the map records the North Shore Iron Ship Yard and next door, a pottery, and to the east a further small cluster of coal staithes. Many of the older lanes and streets in Stockton once led to the river and these quays. At the bottom of Maritime Road was a passenger ferry leading to Thornaby; probably the Bishop's Ferry. To the west is a ford, which ran from the eastern end of Hubbacks Quay to Thornaby. The ford gives an indication of how shallow the Tees could be at this point.

Despite the Port of Darlington's success the River Tees was still a difficult river to navigate, dogged by shallows and shoals. Following an Act of Parliament in 1852 the Tees Navigation Company was replaced by the Tees Conservancy Board. The Board was responsible for improving the navigation on the entire river (Page 1928b).

Iron and Steel

The discovery of iron ore in the Cleveland Hills to the south of the town in 1850 was followed by the construction of the first blast furnace on Teesside by Bolckow and Vaughan. By 1861 there were over 40 blast furnaces in the area producing an annual output of half a million tons of pig-iron.

Throughout much of the latter part of the 19th century Teesside set the world price for iron and steel. In 1875 the first Bessemer Steel plant was opened by Bolckow and Vaughan, a company which played an important role in the early steel industry of Teesside. The rapid growth of first the iron industry, and then, by the 1870s, steel, stimulated the growth of both the town and the port facilities (Heggie 2013).

The increasing importance and volume of shipping arriving to and departing from Middlesbrough led to the administration of the port to be separated from Stockton in 1861 (Page 1923a).



Fig 5 Looking north up the River Tees – Stockton Character Area from Thornaby to the replica of HMS Endeavour moored against Stockton's quayside.

Mass immigration from around the UK, chiefly of ironworkers, swelled the population of the new town to just under 40,000 by 1871. As the town expanded rapidly to the south, the locations of both the town hall and railway station, originally planned in a central position, came to be more and more peripheral.

A useful by-product of the iron industry was the large amounts of slag. This was used to canalise the river with the construction of a training wall of sorts to confine and direct the flow of the river and tide, most probably under the auspices of the Tees Conservancy Board. From 1859 huge blocks of iron slag were emplaced along the banks of the Tees and backfilled with material dredged from the river. Over 20 miles of river walls were created in this way, enabling the Tees to scour itself through the actions of current and tides.

Following a great storm in 1861 in which 50 vessels were lost between Hartlepool and Redcar, the Tees Conservancy Board built two breakwaters, the North and South Gare, to defend the river mouth.

South Gare was built between 1861 and 1884 out of large quantities of blast furnace slag and cement, and a railway was used to move men and materials from Warrenby iron works. The lighthouse was built in 1884 but the breakwater was officially opened in 1888 by the First Lord of the Treasury, W H Smith. The North Gare breakwater is a little later in date, being constructed between 1882 and 1892.

The construction of the two breakwaters massively changed the character of Tees Mouth. They not only helped to provide a safe anchorage for vessels but their construction also stabilised the position and shape of the river mouth. Soon after their construction sand naturally began to be deposited next to them, extending the landward edge of Seaton Snook and Coatham Sands.

The ready availability of coal and steel, and the increasing port facilities, led to an expansion of other industries in the latter part of the 19th century including The Cleveland Salt Works and the Middlesbrough Pottery, both located on Vulcan Street.

The second edition OS 25 inch: 1 mile inch map (surveyed c1898) for Teesside shows the changes undertaken to improve the navigation of the port and the massive scale of its rapid industrial development.

From Tees Mouth upstream to Middlesbrough, large-scale industry was concentrated on the southern bank of the Tees, including a series of steel and iron works, phosphate and manure works, clay works, brick and tile works, salt works and shipyards.

Several, but not all, of these developments had quays and wharves and most were linked to the railway by branch lines and extensions from the North Eastern Railway (NER) Darlington and Saltburn branch.

At Tod Point, at the southern end of the South Gare, was the Redcar Iron and Steel Works. From the northern end of the works, the Redcar Jetty had been built to cross the inter-tidal area of Bran Sands, to feed Redcar Wharf, built on the edge of the deeper water channel.

On this part of the Tees, marking the edge of its deeper water channel, the training wall was marked by navigation beacons. Near the South Bank Iron Works the Clay Lane and Eston Wharves had been built. These were linked to the shore by two jetties, each approximately 600m long, crossing the inter-tidal mudflats.

In places, on the landward side, a sea defence embankment had been built to defend the areas of industry constructed on land reclaimed from the river's edge.

From Dock Point at the mouth of Middlesbrough Dock to Newport, following the southern shore of the river, are a series of ship and dock yards, and iron and steel works. To the south of Newport was a large railway siding and at Thornaby a large complex of steel and iron works, with South Stockton and Thornaby shipyards located next to the river.

The first ship to be built at Middlesbrough was launched in 1833 (called *The Middlesbro*). Rake Kimber were one of the first large shipyards to open at Middlesbrough in 1858 at the Cleveland Dockyard. They only produced four vessels before being bought by Richardson, Duck & Co in 1859.

The northern edge of the Tees from Stockton downstream to Haverton Hill had more limited industrial development. Here a riverside embankment had been built to protect the river edge, allowing the low-lying ground and former inter-tidal area behind it to be reclaimed. The former meander at Portrack survived as an earthwork. At Billingham the Tees salt works had been built.

The late 19th century salt industry at Teesside developed due to the discovery of rock salt underlying the area. It was mined hydraulically and formed the basis for the area's later chemical industry (Murphy 2009).



Fig 6 The entrance to the North Gare breakwater.

The area from Haverton Hill to Port Clarence had seen considerable industrial development and reclamation of the inter-tidal area to create a salt works and iron foundry. At Port Clarence, the large Iron Works had been established.

At this time, downstream from Port Clarence to Seal Sands, the river edge was greatly different to that of today. Seal Sands was a huge area of inter-tidal mud and sand flats. A sea defence wall had been built to defend the area of Cowpen Bewley marshes from inundation by the sea. This had enabled the further reclamation and enclosure of the western end of Greatham Creek. Nearby at Seaton Snook a wharf had been built.

On the edge of River Tees' leading up to the southern edge of Greatham Creek from Port Clarence was a training wall similar to that built on the southern side of the river.

Being a nationally important port, a battery to defend Tees Mouth was built on the South Gare breakwater in 1891. A barracks was also built near Paddy's Hole and a quay and magazine to supply ammunition built further to the south, at Powder Hole. By this time, South Gare breakwater also had a coastguard station.

Engineering, ship building and chemicals

In the 20th century Teesside developed as a nationally important centre for shipbuilding, engineering and the chemicals industry.

The natural resources of abundant coal and iron deposits in its hinterland helped Teesside to develop into an internationally important centre for the steel industry. As a by-product of the industry's success, coupled with the improvements to the navigation of the Tees, and building upon a tradition of shipbuilding, the area developed several large shipbuilding yards.

The River Tees Dockyard was constructed downstream from Middlesbrough, at South Bank, in 1908 and operated by Smith's Dock Company Ltd. It was built on land reclaimed from the inter-tidal mudflats. Adjacent to it was the Eston Steel and Galvanising Works.



Fig 6 Tees Transporter Bridge.

An even larger shipyard was built at the northern shoulder of Greatham Creek (now known as Seaton-on-Tees Channel), near Tees Mouth, by William Gray & Co of Hartlepool in 1913. The yard had a basin with a graving or dry dock able to handle large ships.

Supporting the shipbuilding industry were a number of manufacturing and fabricating businesses. One of these firms, Dorman Long, arose from an iron and steel works in 1875 which made iron bars and angles for shipbuilding. Following amalgamation with various companies, it developed into steel manufacturing, bridge building and production of sectional steel for shipbuilding. The company became a nationally important steel producer and responsible for some of the most iconic bridges in the world, including the Tyne Bridge (1929) and the Sydney Harbour Bridge (1932) and on the Tees, the Newport Bridge (1934). The company still produces high class structures, such as the new Wembley stadium, London, but have since relocated to Northamptonshire and Darlington (Grace's Guide website).

In the early 20th century two bridges were built to cross the upper reaches of the Tees estuary. Both were built in the location of earlier ferry crossings; one at Newport and the other between Port Clarence and Middlesbrough.

The Port Clarence and Middlesbrough ferry was replaced by the Transporter Bridge. Built in 1911 by Sir William Arrol and Company, Glasgow, it can carry up to 200 people and 9 cars (Tees Transporter Bridge Wikipedia page).

The Newport Bridge, built in 1934, was designed by Mott, Hay and Anderson, a London-based company. It was the first large vertical lift bridge built in Britain with two lifting towers at either end from which the span was lifted using an electric-powered winch system. The bridge could be lifted up to a maximum height of 37m to allow ships to pass underneath up to, or down from, Stockton (Tees Newport Bridge Wikipedia Page).

During this period existing industrial complexes had been adapted and further establishments built. At Seaton Snook, on the northern edge of the mouth of Greatham Creek, a zinc smelting works was operated by the Central Zinc Company from 1908 to 1963. This included the use of Seaton Snook Wharf.



Fig 7 Grade II* Listed phosphate rock silo at Billingham Reach.

On the opposite bank at South Gare breakwater a lifeboat house and slipway had been built by 1914, as well as a pilot house positioned next to the jetty serving the breakwater. There had been a lifeboat service on the Tees since 1829, the year that the Royal National Lifeboat Institution (RNLI) was founded.

In the First World War Teesport was developed as a naval depot, serving the 10th Flotilla of eight submarines designed for operations in enemy territory. The base had a depot ship, *HMS Lucia*, store buildings and offices with a series of small jetties projecting out into the Tees providing berthing space.

The depot had been built on the Tees edge of the South Bank area on reclaimed land. Once a large area of inter-tidal mudflats, it had been infilled in the early 20th century to create development land between the edge of the deeper water channel and the earlier sea-defence wall.

A seaplane base was built next to Seaton Snook Wharf in 1918 to defend against German submarines and surface vessels and to intercept Zeppelins, which targeted Teesside as a strategically important industrial centre and port.

At Port Clarence a Prisoner of War camp was built and at Stockton, the Royal Navy developed acoustic listening posts to pick up radio messages being sent between German ships and Zeppelins (WWI Teesside Project website).

At Haverton Hill, the Furness Shipbuilding Company built a large shipyard during the latter part of the First World War as an emergency shipyard to undertake repairs to ships damaged in the War. The Company was part of the Furness, Withy and Company shipbuilding empire based in Hartlepool (Grace's Guide, Furness Shipbuilding Company website).

The large yard had 12 building berths, each with a slipway and flanked by travelling cranes. At its eastern side a large fitting out basin was dug and the whole complex connected to the rail network. The first ship's keel was laid in 1918 and after the War the yard manufactured a number of vessels for the British Government along with orders from foreign companies.

Meanwhile, Stockton continued as a small scale port. Trade by 1928 was chiefly with the Baltic and the Netherlands, comprising iron and coal exports and imports of iron ore, timber, wheat, hemp, flax, tallow, and hides. Industry in the older port was still dominated by shipbuilding along with steam engine manufacture and rope making (Page 1928b).

The industrial boom during the First World War was followed by a period of high unemployment between the wars. However, it was at this time that the chemical industry on Teesside began to develop.

In 1917 Grange Farm, Billingham, had been chosen as a site for the production of synthetic ammonia to be used in the manufacture of explosives. After the War this was adapted to produce fertiliser, the new works taken over by Brunner Mond in 1920. In 1926 Brunner Mond merged with several other British manufacturers to form Imperial Chemical Industries (ICI). The early chemicals industry at Teesside was dominated by ICI who operated the huge plant at Billingham with a later works built at Wilton (to the east of Middlesbrough) in the 1950s (BBC News website, Billingham and Wilton chemicals industry article).

Meanwhile, there had been considerable re-organisation of the iron and steel industry in the area. The industry had been suffering in the 1920s and by the 1930s, Dorman Long had become the leader in UK steel construction. The rationalisation of the industry led to the closure of works at Port Clarence and Newport (Sahaviriya Steel Industries website).

In the Second World War the Billingham ICI plant was involved in the production of synthetic ammonia for explosives and aviation fuel. Of strategic importance as a port and as a centre of heavy industry the area was a target of German bombers.

The Tees was defended during the war by a formidable armoury. The South Gare coastal defence battery was upgraded with two six inch guns and was supported by four inch guns positioned at Redcar Jetty and North Gare breakwater in covering the mouth of the estuary from seaborne attack. Anti-aircraft batteries were sited at Redcar and Teesport, the latter having a radar station, searchlights, weapons stores and a barrage balloon. Bombing decoys were situated at Bran Sands and Seal Sands. At South Gare, the barracks near Paddy's Hole was reused as a submarine mine-laying depot.

Beach defence batteries were located along much of the coast and formed into Defence Areas or concentrations of defences at strategic locations. A good example is the Greatham Creek Defence Area.

Another beach defence battery was formed of anti-tank blocks, punctuated by pillboxes located between North Gare and Seaton Carew. Anti-glider obstacles were also placed at North Gare Sands, Greatham Marsh and Bran Sands (Tolan-Smith 2008).

A small yard, Teesside Bridge and Engineering Co Ltd, located at Middlesbrough, built tank landing craft during the Second World War. The Stockton Construction Co Ltd was engaged in the same activity further upriver.

At Haverton Hill, Billingham, the Furness Shipbuilding Company launched up to 50 merchant ships as part of the War effort (including several deep-sea tankers). To increase capacity four extra berths were built (Grace's Guide website).

Expansion of the port

The riverside areas of Middlesbrough and Billingham offered little space for the expansion of industry, whose works and operations were becoming increasingly large. Commercial ships were also increasing in size. As a result, major industrial development and port infrastructure was constructed in the lower reaches of the Tees including deep-water jetties and further industrial development on reclaimed land.

At the end of the Second World War Dorman Long concentrated its iron and steel production at its works at Redcar and Lakenby, with the closure of other smaller works. In the 1960s and 70s the closure of the iron mines in the Cleveland Hills and the importation of ore required the construction of an improved deep-water terminal at Redcar (PDP Ports 2013; Sahaviriya Steel Industries website).

In the 1960s three oil refineries were built. Two were built by Phillips Petroleum and ICI at the North Tees Works, developed on the north bank of the river, on the southern edge of Seal Sands. The third was built in 1968 by Shell Oil at Tees Dock. Tees Dock had been opened in 1963 to deal with some of the largest ships at the time, Panamax vessels, or the largest ships that could pass through the Panama Canal (PD Ports 2013; Teesport Wikipedia entry)

At Teesport, in the area of Tees Dock, a container terminal was developed in the late 1960s (Central Systems Autostore website).

Due to the success of the North Sea oil and gas industry, shipbuilding, ship refitting and repair was still carried out on the Tees despite increasing global competition.

In 1963 the Furness yard at Haverton Hill had been modernised so that it could build large supertankers and bulk carriers. In March 1968 the yard was sold to Swan Hunter with a handful of large bulk carriers built until its closure in 1979 (Grace's Guide website).

Meanwhile, the William Gray yard at Greatham Creek was taken over by Laing Offshore in 1970 who added dock gates to the facility, creating the largest dry dock in the world at that time, which was used to construct oil and gas rigs until 1990.

Like the Furness Yard, the River Tees Dockyard, on the eastern edge of Middlesbrough, had been nationalised as part of British Shipbuilders in 1977, and it managed to continue shipbuilding until 1987, building a range of ships including diving support vessels, bulk carriers, various cargo ships and ferries (Tees Built Ships website).



Fig 8 Teesside Steel Works (whilst still in operation) looking across Tees Mouth from the North Gare.

Whilst shipbuilding faltered the chemicals industry continued to grow.

In 1980 a pipeline from the Ekofisk oil field in the North Sea was built to feed gas to a new facility at Seal Sands at the mouth of the Tees. The Seal Sands development was on a massive scale and required major land reclamation and new jetties and quays, including the dredging of a new basin at its northern end for an oil terminal. In the same year, Middlesbrough Dock closed and Tees Dock took on greater importance within the port.

Under economic pressure, changes in technology and increasing economies of scale, the rationalisation of the iron and steel, shipbuilding and chemicals industries meant that many of the smaller works in Stockton and Middlesbrough closed completely, leaving many areas of brownfield land for redevelopment.

Stockton and Thornaby have witnessed a great deal of regeneration, particularly with the development of the Teesdale Business Park on the southern side of the Tees. Here new offices and a campus of Durham University have been built around a new network of waterways linking to the Tees.

Redevelopment also involved the updating and upgrading of road links across Teesside. A modern concrete bridge, the Tees Viaduct, built in 1975, now carries the A19 across the river, below the Tees Newport Bridge.

A major change to the upper reaches of the River Tees, and reflecting the loss of port activity from Stockton and Thornaby, is the construction of the Tees Barrage and several new bridges.

Completed in 1995, the Barrage was built to control the flow of the river to prevent flooding. In effect it has created an upper freshwater section of the river. A lock enables small boats and barges to pass through the barrier.

Upstream of the Barrage is the Infinity Footbridge which was opened in 2009, to connect the North Shore with the University of Durham Cleveland Campus and the Teesdale Business Park. At Stockton, a road bridge, the Princess Diana Bridge, built in 1992 connects the North Shore with the Teesdale Business Park, as does the Teesquay Millennium Bridge, a footbridge opened in 2000.

A major change in the history of port administration occurred in 1992 when The Port Authority of Tees and Hartlepool was privatised, eventually coming under the ownership of a single company, Powell Duffryn (PD Ports) in 1995.

With the increasing size of commercial shipping outstripping the scale of the port's facilities, PD Ports developed a second deep-sea container terminal in 2002 (TCT2) at Tees Dock (Teesport Wikipedia entry).

There have also been further changes to many of the other riverside areas of Teesside with portside businesses coming and going, amalgamating and expanding. For example, the Gray's Dock at Greatham Creek was taken over by Able UK in 1996 and the creek further deepened and widened (the work perhaps resulting in its renaming as Seaton-On-Tees Creek).

The yard at Gray's Dock is now used for the decommissioning of ships and oil and gas rigs. The work has proved controversial at times, in particular with regard to a contract for the scrapping of four US warships and the French aircraft carrier *Clemenceau*, which was carried out between 2003 and 2013.

At Seal Sands petrochemical complex many of the facilities have closed in recent times. However, the petrochemical industry still accounts for half of all the cargo, 26 million tonnes, that travels through Teesport each year.

Some small-scale shipbuilding continues to the present day, for example at the former Tees Conservancy Commission graving dock at Normanby Wharf, Cargo Fleet. The Tees is also still a centre for engineering and refitting services, which have often taken over historic quays, wharves and docks and have consequently updated them for modern commercial use. Many of these companies now service the offshore energy industry, and a significant future growth area is in the construction, maintenance and support of the offshore wind industry.

In September and October 2015 SSI UK closed the South Bank Coke Works and Teesside Steel Works, a decision which is likely to have a considerable effect on Teesport.

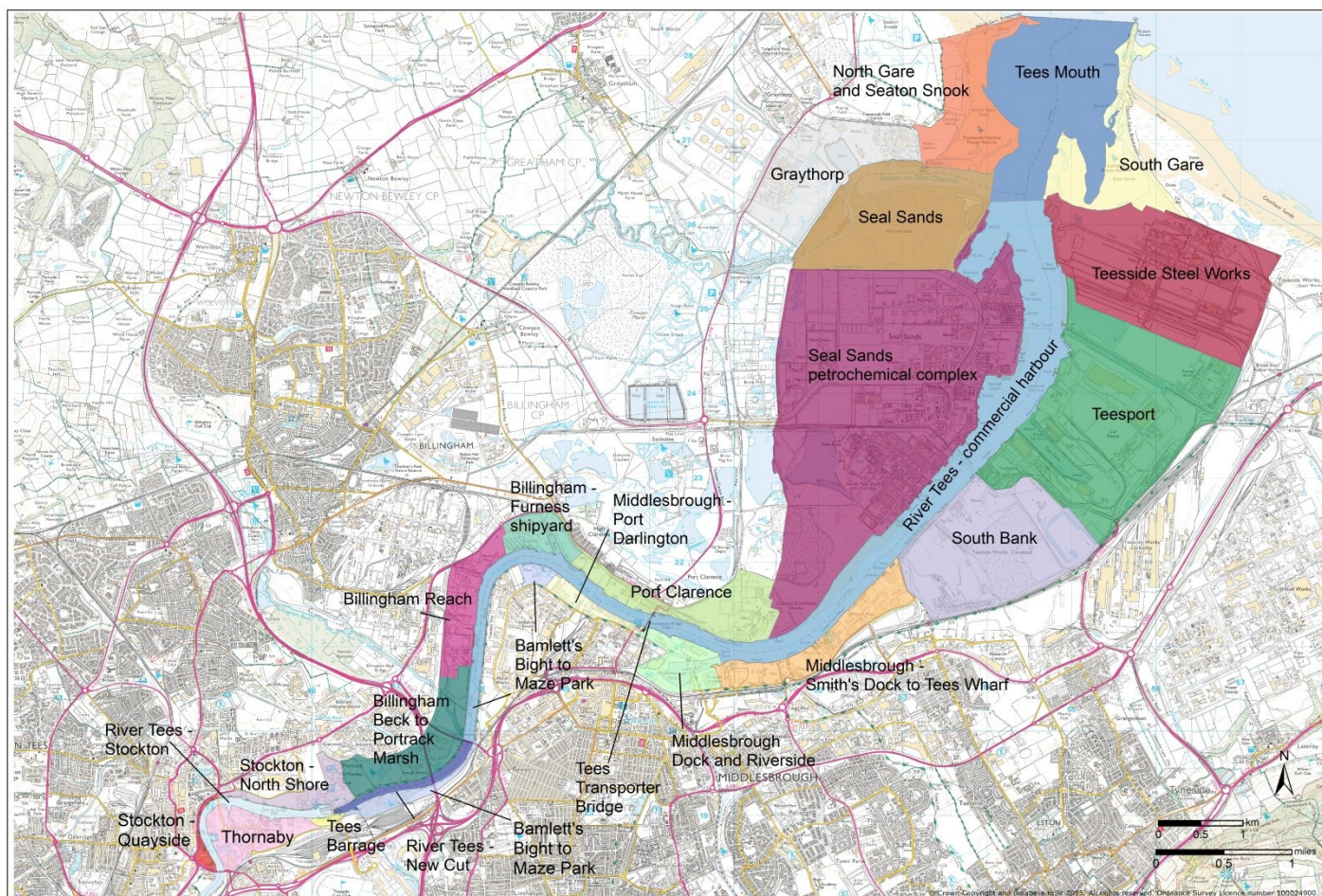


Fig 9 Character Areas.

Port-related heritage assets and contributions to present character

Teesside's overall port-related area has been divided into twenty five distinctive Character Areas (Fig 9).

The distinctive feel of a Character Area is shaped by its historical development and influenced in the present by the presence and patterns of the surviving heritage within it. That heritage can be many and various – place-names, street layouts, patterns of open space, whether public or private, or a sense of enclosure by closely spaced or large buildings, or the presence of readily recognisable historic buildings and features – they all provide a link to Teesside's past even if the original structures which influenced and defined present aspects of the townscape and streetscape may have long gone and been replaced by modern features. These distinctive features add interest, texture and unique character to the port. The way in which surviving historic aspects within the port's fine-grained landscape, often called heritage assets, interact with that present character serves as a tangible reminder of the cultural origins of the port's distinctiveness.

Whether or not people who live in or use Teesside have any interest in its heritage as such, its historical development has shaped the place which is familiar to them, with which they have cultural associations and where they undertake their recreational, industrial and commercial activity.

This section seeks to examine how the surviving port-related heritage contributes to present character of Teesside.

Character Area Summary

1. Tees Mouth

Where the River Tees meets the North Sea, the Area is defined by the North and South Gares, the breakwaters that defend Tees Mouth. Its present extent and character date to the late 19th century when the Tees Conservancy Board sought to improve the navigation of the Tees and the working of the port.

It is busy with the commercial shipping traffic including pilot boats and tugs, together with smaller recreational craft. This was formerly a more hazardous area of water with a meandering channel surrounded by shoals of sand banks but the depth and width of the deep-water channel has been significantly altered by dredging in the past 100 years, especially in the late 20th century as the size of the commercial vessels using the port dramatically increased.

2. South Gare

The extent of the Area owes much of its character to the late 19th century and the construction of the South Gare breakwater, built to defend the eastern side of Tees Mouth. As a vantage point since its construction, it has also been used as a point of

Character Area Summary

military defence and as a centre for maritime safety.

The breakwater is long as it extends from Tod Point for 2.5 miles (4km). Built of vast quantities of iron slag and concrete and at its tip, massive concrete blocks, it has greatly influenced the shape and form of the coastline. Since its construction Coatham Sands has grown naturally along the northern edge of the Gare.

Prior to its construction, the mouth of the River Tees was flanked by naturally-formed shoals of sand. A reminder of the former landscape is preserved by the surviving part of Bran Sands.

The tip of the breakwater is crowned by the South Gare lighthouse, the only privately owned lighthouse in the country. To the rear of the lighthouse lies the former radar station, now a Coastguard Station with a modern communication mast standing nearby.

As a promontory extending into the North Sea, and being publically accessible, it is a popular place for people to walk and to fish from. Views seaward are now dominated by the Teesside offshore wind farm, a visual reminder of the industry which is served by many of the present port-related businesses.

Travelling back along the spine of the breakwater, near the car park, are the surviving platforms of a number of Second World War gun emplacements and those of the South Gare Battery, first built in the late 19th century to defend the port. The grassed-over areas on the western side of the approach road retain earthworks once associated with further gun emplacements associated with the battery.

Situated on the road is the headquarters of Teesside Sub-Aqua Club, its clubhouse an extension and/or an alteration of the late 19th century Coastguard Station. Heading further south down the road is the modern station for Tees and Hartlepool Pilotage, reusing the site of the earlier pilot house built in the early 20th century. The jetty used as part of the pilotage services originally dates to the late 19th century although it has since seen refurbishment.

To the south of the jetty an area of building footings marks the location of the former lifeboat station, first developed on the site in the early 20th century it was demolished in 2010.

Below the former lifeboat station on the western side of the Gare there are three small man-made harbours, the largest being Paddy's Hole, followed upstream by the relatively small pools of Guy's Hole and Powder Hole; each formed by a protecting bank of waste iron slag.

Paddy's Hole is crowded with small fishing boats, being the focus of the Tees' fishing community. At its northern end is the boat park of the Marine Club that has been built in the area of the former barracks associated with South Gare battery, reusing some of the original late 19th and early 20th century buildings, including a boat house and slipway. The Marine Club is housed in a concrete enclosure wall with gun ports spaced at regular intervals. This was not only a barracks but also a late 19th century submarine mine-laying depot and, with the 20th

Character Area Summary

century pillboxes and anti-tank defences that lie along the Gare, this gives an extra layer of military character to the Area.

Surrounding Paddy's Hole is a collection of green-painted small wooden-built storage sheds used by fisherman to store their gear and tools. Over the road on the eastern side of the Gare is a larger group of fishermen's huts. Again, green-painted, single-storey high, often with metal chimney flues extending out of their roofs, they are laid out following an even grid pattern. Dating to the later 20th century the sheds and the activities of the Marine Club reflect the importance of the South Gare for local anglers.

Looking back towards Teesport the Area is dominated visually in scale by the Teesside Steel Works.

3. Teesside Steel Works

Up until the late 20th century most of this Area was formed by the inter-tidal sand banks and shoals of Bran Sands before being reclaimed and developed as an integrated steel works in the 1968.

The development swamped the late 19th century deep-water jetty once built to serve the Redcar Iron and Steel Works, the earlier works itself redeveloped as part of the new, now redundant, operation.

The steel works are vast in extent and scale, with its towers, chimneys, mills and storage areas covering a massive area and dominating the skyline. Conveyors load the iron ore and coal needed for the works from large storage areas located by the river. Adjacent to the river, the Redcar Wharf is a deep-sea bulk terminal capable of handling Panamax size vessels.

Redcar Wharf is modern-built with concrete walls and large cranes which fed the conveyors. Its southern end was built around the late 19th century wharf but little of the earlier structure survives.

With the closure of the Teesside Steel Works announced in October 2015, considerable uncertainty hangs over the future of this Character Area. As a working area of heavy industry the Area is not publically accessible.

4. Teesport

Up until the late 20th century most of this Area was formed by the inter-tidal sand banks and shoals of Bran Sands and the mudflats surrounding Dabholm Gut before being reclaimed and developed in the 1960s as Tees Dock, later known as Teesport.

The northern extent of the Area follows much of the same edge of the rough training wall built by the River Commission in the late 19th century, most probably built with blocks of waste slag from nearby iron works. The southern edge of the Area was developed on marshland reclaimed from the river, in either the 18th or 19th centuries as part of agricultural improvement, although no field boundaries or drainage ditches survive as evidence to show this.

The earliest development of Teesport was in the First World War as a Royal Navy submarine base, the site

Character Area Summary

located on the edge of the South Bank, now an area of gas/oil holders, to the west of Tees Dock.

Teesport is a large area of modern port development which includes large transit sheds, offices, storage and redistribution areas, including container parks, and areas of land awaiting development.

The river edge is lined with modern-built wharves and quays, mooring dolphins and jetties, built in several phases as part of each terminal. The quay frontage includes several travelling cranes and gantries, all modern in date. Tees Dock is a rectangular dock basin with several terminals along its length including a Ro-Ro jetty at its eastern end.

The Cleveland Potash Terminal contains a large storage shed fed by conveyors and, on its landward side, by a railway branch line.

At its northern end of the Area is Dabhom Gut, now canalised as a straight channel. Following the northern side of the Gut is a pipeline that feeds Wilton chemical plant.

As a working port this Character Area is not publicly accessible.

5. South Bank

The Area is a large area of brownfield land, much of which awaits redevelopment. However, it also includes the redundant coke ovens of the South Bank Cleveland Works, a small deport and modern-built jetty, and a waste processing area associated with the steel works at Lackenby and Redcar, all served by a service road.

Until the early 20th century the Area was partly inter-tidal mudflats and on its southern side, the Antonien Works (phosphate and manure) and the South Bank Iron Works are built on land reclaimed in the 19th century. The river edge of the Area follows the rough training wall built by the Tees Conservancy Board in the late 19th century.

The present river edge incorporates the wooden-built South Bank Wharf, developed in the early 20th century as an extension to the late 19th century Eston Wharf. In the early 20th century South Bank Wharf was fed by railway lines and travelling cranes associated with Cleveland Steel Works and the Eston Sheet and Galvanising Works. Although there is little surviving evidence, if any, of the railway lines that once fed the Wharf, the Wharf itself survives, unused and weather-beaten.

As working area it is not publicly accessible.

6. River Tees – Commercial Harbour

Stretching from the southern edge of Tees Mouth to the Tees Newport Bridge, a distance of some 13km, the Area forms the artery for commercial traffic using the port.

The character of the Area shows a complex phasing of time-depth as it has been successively enclosed and altered by land reclamation on both sides of its course in the 19th and 20th centuries.

The sinuous channel of the River Tees is partly a

Character Area Summary

result of its natural course but its present extent and depth is mostly a result of the 19th and 20th century improvements to the port and the successive reclamation of its surrounding inter-tidal land for quay and wharf frontage.

From Tees Mouth to Billingham Reach the channel is wide and open, offering long-ranging views up and down its length. To either side the workings of the port are clear to see. It has been much altered and dredged and is dominated by a modern looking water frontage but its course and shape is the cumulative inheritance from Teesside's successive port development over the centuries. Upstream of Middlesbrough Reach the river narrows to feel much more intimate and enclosed.

Open to view from several vantage points on either side of the river, the workings of the harbour draw people to it. A characteristic of the harbour is the intimacy at which large vessels can be viewed unloading and loading their cargos.

7. Middlesbrough - Smith's Dock to Tees Wharf

A long expanse of river frontage and industrial development located on the southern side of the Tees between the South Bank and Middlesbrough Dock. It is an area of ship repair facilities, modern warehouses and fabrication sheds, scrap metal yards, petrochemical storage, other storage areas and depots, aggregate plants and industrial units.

Historically, the Area's river frontage of quays and wharves dates to the late 19th century and the Smith's River Tees Dockyard, the Tees Conservancy Commission Graving Dock and Repair yard, Middlesbrough salt Works, and the sprawling Ormesby, Normanby, and Tees Iron Works.

These developments were all built on land reclaimed from the inter-tidal edges of the river in the late 19th century, their northern edge following the deeper channel of the river. Cargo Fleet Wharf retains in name the location of the former creek where goods were lightered for further transport upstream to Stockton.

There has been considerable change in the later 20th century. Most of the quays and wharves have been updated as part of modern commercial use with concrete and/or steel construction, and, at Cargo Fleet Wharf, with some sections of rough stone walling. A&P's River Tees ship repair yard reuses the shipyard of the River Tees Dockyard. The area is dominated by modern heavy-lift cranes and warehouses, with the dry docks of the original dockyard still used.

Off Dockside Road at the western end of Cargo Fleet Wharf is modern public space and viewpoint that has been built to enable the public to watch the workings of the port and to look across to Port Clarence and the Seal Sands petrochemical complex.

8. Middlesbrough Dock and Riverside

The Area was the focus of much of Middlesbrough's earliest port expansion in the mid-19th century, reflecting the effort invested in the port by the

Character Area Summary

Stockton and Darlington railway.

The plan and riverside extent of the Area owes its origins to the mid-19th century development of Middlesbrough Dock, developed on a mixture of inter-tidal land and marshland.

Historically the Area was used by industry including saltworks, ironworks, engineering works, Cleveland Dockyard and Middlesbrough Dock, the latter served by extensive railway lines and sidings, and its dock edge lined with cranes.

The Area has been extensively re-landscaped and re-developed with large areas of brownfield land awaiting redevelopment as part of the Middlehaven scheme. However, greater historic time-depth survives in the street plan of Dock Street and Scott's Road, the layout (albeit truncated) of Middlesbrough Dock, its lock entrance and entrance channel, the Dock clock tower, an early 20th century brick-built warehouse on Dock Street, South Wharf, and Cleveland Dockyard.

Adjacent to South Wharf is the modern-built Riverside Stadium, home to Middlesbrough Football Club, formerly an area of engineering works and dockside sidings.

Middlesbrough Dock is now used as Able UK's Middlesbrough Port operation. Its quay frontage is modern-built concrete and steel shuttering with large fabrication sheds. Near to Scott Road is a redundant modern gantry crane and adjacent to it, an unused brick building dating to the late 19th or early 20th centuries.

At the corner of Dock Street/Vulcan Street the Area is dominated by the late 19th century Clock Tower which doubled as a water tower to provide the hydraulic power to operate the dock gates and cranes.

The northern edge of Vulcan Street is lined by brick-built walls built in several phases dating to the late 19th century and early 20th century. The walls once defined the edge of Cleveland Salt Works and Middlesbrough Iron Works. In the former location of Middlesbrough Iron Works a large brick-built and metal-sheeted shed probably dates to the early 20th century and the use of the works.

9. Tees Transporter Bridge

This Teesside landmark opened in 1911 and was designed by William Arrol and Company of Glasgow.

It crosses the River Tees between Middlesbrough and Port Clarence in the location of a 19th century foot passenger ferry. Its huge towers and cantilever are steel-built and painted bright blue. The scale and size of the bridge draws the eye and it forms an iconic landmark in the hearts and souls of many Teessiders.

It not only represents the engineering prowess of the area, but also the investment made to ensure the River Tees remained navigable above the bridge.

10. Middlesbrough - Port Darlington

The heart of the original port of Middlesbrough, first developed in the mid-19th century by the Stockton

Character Area Summary

and Darlington railway as Port Darlington. The riverside extent dates to the late 19th century and the industrial development of Linthorpe Iron Works, Watson's/Dent's Wharf and Packet Wharf and, next to the Transporter Bridge, the dock and yard of Corporation Wharf.

The riverside frontage is still used as part of commercial port activity. It is lined with large modern fabrication sheds, warehouses and storage areas, dominated by Dawson's North Sea Supply Base, the largest independent dry cargo wharf on the Tees.

Due to re-use much of the river frontage has been updated with modern concrete and steel-built quay walls. However, the surviving wooden jetties of Corporation Wharf provide greater historic time-depth. Located between the Transporter Bridge and the Wharf is the modern Marine Fire Station, operated by the Cleveland Port Authority, and, beyond that, the Harbour Authority Conservancy Depot which reuses an early 20th century warehouse in its workings.

The street-name, Ferry Road, preserves the history and location of the Middlesbrough to Port Clarence foot passenger ferry, the role of which was replaced by the Transporter Bridge. The alignment of Vulcan Street also preserves the former path of the railway line that once linked Middlesbrough Dock to Linthorpe Iron Works.

11. Bamlett's Bight to Maze Park

This long stretch of the Tees' south bank was once dominated by steel and iron works and below the Tees Newport Bridge, extensive railway sidings. These were first developed from the mid to late 19th century following the reclamation of the inter-tidal edge of the Tees.

The eastern end of the Area, near to Bamlett's Bight, was once the location of Tar Macadam works, Acklam Steel Works, the Ayresome Iron Works, and the Britannia Iron and Steel Works. Its riverside frontage included wooden-built wharves running parallel to the shore. Evidence of the wharves survives as arrays of wooden posts standing in the foreshore, exposed more fully by the drop of the tide. The river edge is now softly engineered, mostly as a stone faced embankment.

At its western end, next to a large railway yard, is the stream known as Old River Tees, traceable as a loop for just under 2 miles following the southern edge of Goodwood square and golf course, outside the Area. The course of the stream marks the former course of the Tees before the Mandale Cut was made in the 1820s.

The Area is now a publically accessible open space with areas of grassland and small patches of woodland. At each end of the Area is a park: Maze Park to the west and, to the east, Teesaurus Park, containing steel-sculpted dinosaurs. The riverbank is followed by a cycle path, part of the Teesdale Way, from Teesaurus Park to Newport Bridge, where it crosses to the north bank. Cycle paths also run along the south bank to Maze Park and beyond. Located at

Character Area Summary

various points on the cycle paths are interpretation boards with information on local history.

12. River Tees - New Cut

The Area has its origins in the early 19th century and the effort made by the Tees Navigation Company to shorten and straighten the course of the River by removing the meanders of Mandale and Portrack.

The eastern edge of the Area is defined by the steel-built Tees Newport Bridge. Built in 1934 the bridge is a distinctive landmark, built by the local company, Dorman Long. Its vertical towers and lifting span dominate the skyline and are much loved and celebrated by the residents of Teesside. The efforts made to create such high clearance from the river and to ensure the easy lifting of the bridge span, show that this part of the river continued to be an active part of the commercial port in the early 20th century.

Downstream, the A19 road bridge, built in the mid-1970s, was also designed to allow commercial ships to pass up to Stockton, despite limited port activity at the time. Concrete-built and with six lanes of traffic, it demonstrates the road systems needed to link the north and south side of the Tees in the later 20th century.

This section of the River Tees is now quiet compared to times past when it was used as part of the commercial port activity. Now it is only used by the occasional small recreational craft - since 1990 the Tees Newport Bridge's span has been permanently fixed in its down position.

13. River Tees – Stockton

This stretch of the river retains much of its naturally-formed course and stretches from the Tees Barrage in the east, to Victoria Bridge at its western end. Now limited to small recreational craft it was once heavily used by commercial port traffic.

Its riverside edge was defined by the late 19th century following the reclamation of the narrow inter-tidal mudflats along its course as part of the industrial expansion of iron and steel works, timber yards and shipbuilding yards.

No longer tidal, the river's level is controlled by the tidal barrage. No longer dominated by commercial port activity it is today a relatively quiet stretch of water, feeling distant from the workings of the modern port.

In the past, foot passenger ferries linked the northern and southern banks of the river but now the Area is crossed by modern footbridges (Teesquay and Infinity Bridges) linking Stockton to the University College campus at Thornaby, and with the North Shore area of Stockton. The Princess Diana road bridge which links Stockton and North Shore was built out of concrete and steel in 1992.

14. Thornaby

In the 19th century the Area was dominated by industrial development. At its eastern end was the sprawling Thornaby Iron Works, served by its own

Character Area Summary

wharf, while near Stockton, the area was known for its shipbuilding yards including the South Stockton, Thornaby and Victoria yards. Near to Victoria Bridge was the Cleveland Flour Mill.

Since the closure of the yards and works in the late 20th century, the Area has been extensively redeveloped as the University College Stockton-on-Tees campus and various business parks. New waterways have been dug, and amongst the buildings, new basins built on the river edge. The extent of the historic river frontage has largely been retained although there has been much updating of the revetment walls with brickwork, concrete and steel shuttering.

15. Stockton - Quayside

The core of Stockton's historic waterfront and the main port on the Tees from the 14th century until the development of Middlesbrough in the 1830s.

The Area is a narrow stretch of development on the northern bank of the Tees below the higher ground of the town's market place and the former location of Stockton Castle. Historically, this was a mix of various quay and wharf frontages, including Hubbock's and Corporation Quays, and at the far southern end of the Area, the SDR's coal staithes built in 1826.

In the late 19th and early 20th centuries the Area was a mixture of small shipyards, timber yards, flour mills and quay areas. However, little of this historic time-depth is visible in much of the Area today as it has been extensively redeveloped in the later 20th century.

From Hubbock's Quay down to Quayside Road the quay frontage is modern in character, built with concrete and steel shuttering. The inland edge of this section has also been greatly changed by the development of the modern road, the A1305.

Next to Quayside Road is the Teesquay Millennium footbridge. Inland of Castle Wharf is a brick-built 19th century warehouse and a neighbouring single storey brick building. These historic buildings stand amongst modern buildings including cafes and a bingo hall, built on the site of the first coal staithes at Stockton.

16. Stockton - North Shore

The northern bank of the Tees from the Tees Barrage to the Princess Diana Road Bridge in Stockton.

Historically, this area had witnessed a variety of uses including marshland, a waste storage area for the South Durham Steel and Iron Works, and, nearer to Stockton, an iron works and the North Shore ship yard. However, in the later 20th century the Area was extensively re-landscaped. The riverside edge is now part of the Teesdale Way cycle path but inland there are several large areas of brownfield land awaiting redevelopment.

Once part of the commercial port-related activity on the Tees, the Tidal Barrage now prevents both the tide and large commercial vessels from reaching the Area. Its change in focus to recreational use is

Character Area Summary

reflected in the presence of the Tees Barrage Canoe Course and nearby campsite. To the west of the Tees Barrage Way is a modern sports complex which has been built on land reclaimed from the Tees in the early 20th century as part of the expansion of the South Durham Steel and Iron Works.

Near the Infinity Bridge, the river edge had been greatly cut back in the late 20th century, the change reflected in the modern stone-built revetment.

Towards Stockton is the clubhouse of the River Tees Watersports Centre which also has a slipway and canoe steps leading to the river. Here, the modern built concrete and steel shuttered quay walls give little indication that the area was once part of the North Shore Shipyard. To the west of the clubhouse, close to the Princess Diana Bridge, is a small boat park and berths used by small recreational craft.

17. Tees Barrage

The barrage was opened in 1995 to prevent tidal surges affecting the upper reaches of the Tees. It not only stops the tide flowing above this point but also prevents larger commercial port traffic reaching the former port of Stockton.

The barrage includes a river barrage, a road bridge and a foot bridge. On the south bank a lock has been built through which small craft can pass along the Tees. The lock was built on waste ground formerly on the margins of the Erimus goods yard and the waste dumps of the Thornaby Iron Works.

18. Billingham Beck to Portrack Marsh

An area of low-lying ground on the northern bank of the Tees. It has remained largely undeveloped until the construction of a modern sewage works to the west of Lustrum Beck.

The section of Lustrum Beck from the river up to the Portrack Lane was, until the 1830s and the construction of the Portrack Cut, part of the course of the River Tees. The Portrack Marsh nature reserve, at the western end of the Area, is a remainder of the loop of ground which once lay on the southern side of the Portrack meander.

19. Billingham Reach

The northern bank of the Tees from Bamlett's Bight to Billingham Reach was formed by the reclamation of the inter-tidal area in the late 19th century, but its modern waterside edge was also greatly influenced by industrial development in the 20th century as part of the Pioneer Cement Works and ICI's Billingham chemical plant.

When ICI built its chemical works in the 1920s Billingham Reach Wharf was built to allow vessels supplying the works to berth and discharge their cargo. This Area played an important role in Teesside's modern chemicals industry. The best known individual building is the phosphate rock silo dating from the late 1920s. A brick-built warehouse from the development also survives near to the Tees Salt Bridge. The historic buildings stand amongst a modern tank farm of gas and petrochemical holders.

Character Area Summary

A modern-built jetty to the south of Billingham Reach Wharf is used to supply petrochemicals to the tank farm, and the concrete-built Billingham Reach Wharf is perhaps only occasionally used by commercial vessels now. Bamlett's Wharf is still used commercially for freight and, correspondingly, its quay walls are modern in character, built with concrete and steel shuttering.

The Area is now the furthest point upstream that commercial large-scale port activity is found on Teesside.

20. Billingham - Furness Shipyard

The Shipyard was developed at the end of the First World War to replace shipping sunk by U-Boats but later became a major shipbuilder on the Tees, specialising in bulk carriers until the yard's closure in 1979. Despite its closure the Area still retains the yard's dry docks, slipways, quays and basin. Most of these features are unused except for the basin which is now operated by a company involved in the offshore wind energy industry.

Inland are modern-built fabrication sheds, packaging factory and office buildings although much of the inland area is scrubland. However, the extent and plan of the Area reflects much of its historical development.

The cycle path at its upper edge marks a late 19th century tramway, later a railway. Likewise, the riverside edge dates to the late 19th century and the sea defence wall behind which the land was reclaimed. It was this area that was later used for the shipyard.

As a commercial working site the Area is not publically accessible.

21. Port Clarence

The origins of the Area date to the mid-19th century and the development of coal staithes as part of the Clarence railway – an important development of the lower reaches of the Tees by port-related industry.

Built on land reclaimed from the inter-tidal area of the Tees the railway line formed a narrow promontory and isthmus to the serve the staithes. This is now the line of the Port Clarence Road, and the former railway line to the south of it.

Much of the present extent of the landward area dates to the later 19th century with the creation of salt works and iron works including at its eastern end, the Port Clarence Works. The construction of these works had required the further reclamation of land and the creation of new jetties and Clarence and Lower Clarence Wharves, both served by railway lines.

In the early 20th century there was further reclamation at the western end of the Area to build the Clarence Works.

The western part of the Area is mostly scrubland, with the Clarence Distillation Works reusing the site of the Clarence Works. Lower Clarence Wharf is still in use with a crane and conveyor and a terminal to a

Character Area Summary

pipeline serving the distillation works.

From the former location of Clarence Wharf westwards to the Transporter Bridge, the river now has a softer edge whereas upstream there are modern fabrication sheds and a quay frontage extended out into the river in the late 20th century.

The location of the Transporter Bridge and the road leading up to it recalls the location of the Old Ferry landing of the Middlesbrough - Port Clarence railway.

Whilst Port Clarence Road, and the A178 leading to the Transporter Bridge, are publically accessible, much of the Area is private property with no access.

22. Seal Sands petrochemical complex

A large petrochemical works first built in the 1960s but has been redeveloped in several phases since. The Area is a sprawling complex of pipelines, refineries and storage tanks owned and operated by several different companies. Interspersed amongst the works are areas of brownfield land and, inland, rough grassland and the occasional pool of fresh water.

It is an area of flat ground mostly reclaimed in the 1960s from the sand and mudflats of Seal Sands although at its far southern end, next to Port Clarence, reclamation of the inter-tidal area had begun in the early 20th century, most probably using waste from the iron works at Port Clarence.

Its riverside edge includes modern concrete and steel-built jetties, wharves and mooring dolphins. In places, the river frontage includes less hard engineering although the bank of the Tees is reinforced with stone boulders and, towards Port Clarence, stone-filled gabions.

23. Seal Sands

Located on the western flank of Tees Mouth, Seal Sands is an area of shallow water which at low tide reveals extensive mud and sand flats. The Area is the surviving remnant of a once much larger expanse of inter-tidal shoals.

Its western edge was defined by the sea defence wall built in the late 19th century but its southern and eastern limits were defined in the 1960s with the construction of the Seal Sands petrochemical complex and the basin for its oil terminal.

To accommodate the increasingly large vessels using the former Gray's Dock, Greatham Creek was dredged and widened. Now known as Seaton-on-Tees Channel the name change may date to the extensive dredging works.

The sands form part of the Teesmouth National Nature Reserve (NNR) and are popular with wildlife watchers keen to spot wading birds and, at low tide, seals basking on the sands.

24. Graythorp

Originally part of the large area of inter-tidal mud and sand flats at the mouth of the Tees estuary, the Area was reclaimed in the late 19th century behind a sea-defence bank built between Greatham Creek and

Character Area Summary

Seaton Snook Wharf.

From a port perspective the Area is dominated by the dock of Able UK's Seaton Port. Originally built as part of Gray's Tees Shipyard in 1913, it is one of the largest dry docks in Europe. Although much updated as part of the northern working of the yard, at its far northern end the entrance mouths of a former dry dock and an adjoining small basin survive. Surrounding the dock is a large working area used for storage of materials.

The dock is now home to a marine decommissioning and repair yard working mainly on vessels and rigs associated with the petrochemical industry. The influence of Gray's shipyard is also preserved in the name Graythorp, established when a small town was built to serve the dockyard but which has now been demolished.

To the east of Seaton Port is Hartlepool Nuclear Power station. Built in the 1980s it is dominated by the containment and turbine buildings of the plant; its riverside frontage a stone-built sea defence embankment. The western part of the Area is a modern petrochemical works, a northern extension of the Seal Sands complex.

25. North Gare and Seaton Snook

The extent of the Area owes much of its character to the late 19th century and the construction of the North Gare breakwater, built to defend the western side of Tees Mouth.

Originally built of waste slag it is now faced entirely by concrete. Defending the mouth of the Tees the breakwater is a naturally defensible position with traces of a Second World War battery surviving along its spine.

The breakwater has greatly influenced the shape and form of the coastline because both Seaton and Gare Sands have developed and moulded around its edges.

Prior to its construction, the mouth of the River Tees on this side was flanked by the naturally-formed shoals of sand and small islands.

At its far south western corner the slipway of the First World War seaplane base of Seaton Snook survives. Further to the west are the remains of Seaton Snook Wharf, built in the late 19th century as part of the construction of the North Gare breakwater. A tramway embankment led from the wharf to the breakwater, the line of which is now followed by a trackway. Inland of the tramway embankment a sea defence embankment had been built to help stabilise the coastal edge, but is now incorporated into the dune systems.

To the north of the Wharf, the area of rough grassland forming much of the landward edge here has been re-landscaped following the demolition of the early 20th century zinc works.

The dunes now form part of Seaton Carew Golf Links whilst the inter-tidal zone, sands and dunes of the Area form Teesmouth NNR, known for its wild flowers

Conservation values of the port heritage assets

In 2008, English Heritage published *Conservation Principles*, containing its framework and guidance for assessing the range of values pertaining to the historic environment (English Heritage 2008). *Conservation Principles* identifies four main types of values: Evidential, Historical, Aesthetic and Communal Values (*ibid*). The following subsection uses that framework to present a preliminary assessment of the values and significance attached to Teesside's present port-related heritage.

Evidential

– ‘the potential of a place to yield evidence about past human activity’

Teesside's later history of large scale change and successive phases of redevelopment on the sites of earlier port activity and industry gives the surviving features significant evidential value, contributing to the historic character and time-depth of the port's present landscape.

The redevelopment of Stockton's and Thornaby's riverbanks has seen the transformation of the historic shipyards, warehouses and industrial buildings that once lined both sides of the Tees. This makes any surviving historic features in these areas of strong evidential value. The Listed warehouse near Castle Wharf falls into this category. Originally part of the Tees Flour Mills complex on the wharf, the extant building appears to have seen significant alterations over the years and is now converted, sympathetically, into flats. The adjoining building to the north also appears to be of historical interest, albeit with substantial modification. The quays here also display evidence of time-depth, with many phases of use, a variety of styles and construction methods, and quayside furniture such as mooring posts.

In terms of navigation and maritime safety the North and South Gare breakwaters are good evidence for the improvements undertaken by the Tees Conservancy Board to develop the Tees as a modern port from the late 19th century onwards.

Teesside's historical success as a port from the late 19th century until the late 20th century was built on five principal industries; coal, iron and steel, engineering, shipbuilding and petrochemicals.

Little physical evidence survives of the coal trade that was fundamental to the foundation of Middlesbrough and Port Clarence. Therefore of evidential value to the Port Darlington, Middlesbrough Dock and Port Clarence Character Areas is the route of former railway lines that once led to the coal staithes which are preserved in the line of Vulcan Street, Middlesbrough, and Port Clarence Road, Port Clarence.

Little, if anything, survives of the numerous historic iron and steel works, built on the edge of the Tees in the late 19th and early 20th centuries – a time when Teesside was internationally important for this heavy industry. Many of the sites have either been comprehensively redeveloped for other uses or built over by the huge modern steel works and processing plants. Likewise, much of the port infrastructure, such as the wharves and jetties that served the early iron and steel works no longer survives except for South Bank Wharf in the Middlesbrough – South Bank Character Area. Built in the late 19th to early 20th centuries to serve the Cleveland Iron Works it is of significant evidential value.

Whilst there is little physical evidence surviving of the early steel works located close to the Tees, there is evidence of its related engineering industry. Of strong value in this respect are the Tees Newport and Tees Transporter bridges. Not only are they built in locally-produced steel but they are iconic landmarks. Both were designed in relation to the working of the port (in order to keep the Tees navigable) and the Tees Newport Bridge was also designed by local company, Dorman Long. The location of the bridges is also of value as they preserve the position of earlier foot ferry crossings, of which none now survive.

Shipbuilding has a long and proud history on Teesside, however the surviving physical evidence for industrial-scale shipbuilding docks is now limited to four yards: the Furness Ship Yard (and its Character Area); the former Tees Conservancy Commission Dock and Repair Works (Middlesbrough – Smith's Dock to Tees Wharf Character Area); the River Tees Dockyard (Middlesbrough – Smith's Dock to Tees Wharf Character Area) and the former Gray's shipyard (Graythorpe Character Area). Therefore the surviving historic dry docks, dock basins and jetties associated with the yards are highly valuable evidence to the historic workings of the port.

The Billingham Reach Character Area is significant in the story and role of ICI in terms of early development of the petrochemicals industry on Teesside. As the principal surviving built evidence of the early plant, the Grade II* Listed Billingham phosphate rock silo and the non-Listed brick-built warehouse to the north are of high evidential value.

The later port history of Teesside is related to the development of the railways and whilst many lines have been removed there are a few survivals of both routes and trackside buildings. In the Port Clarence Character Area the old station building has been converted into a dwelling, retaining a lot of its original character, a signal box survives, and the Station Hotel in Port Clarence Road is still trading.



Fig 10 Looking to the Middlesbrough Dock clock tower from Clarence Wharf.

These combine, with the surviving track route, to provide group evidential value. The South Gare, and in a more limited way, the North Gare, Character Areas provide highly significant evidence for the local military history of the estuary. Both have significant evidence for Second World War defences, whilst South Gare boasts a late 19th century barracks and later submarine mine-laying depot (now the Marine Club) which retains much of its original layout, and an associated quay at Powder Hole.

Historical

– *'the ways in which past people, events and aspects of life can be connected through a place to the present. It tends to be illustrative or associative'*

The understanding of Stockton, Port Clarence, Middlesbrough, Teesport and the lower reaches of the Tees as port developments is important to understanding the history of Teesside, to the successive changes of industry that crowded around it, and to the character of the people who lived with the river as a mainstay in their lives.

The move away from the coal trade, through shipbuilding into other heavy industry, is of value to the understanding of the local, regional, and national economic history of the past one hundred and forty years as well as the port's adaptability that has been a constant feature of its history and development.

The development of the coal trade and railways led to an astonishing period of growth at Middlesbrough in just over a generation. The evolution of the town is a fascinating topic in itself. Its early social mix is of high value to the history of the town as it involved an influx of people not only from the North East, both from the hinterland and from ports nearby, but also people from Cheshire, Wales, Scotland, and Ireland, as well as many from the continent.

An integral part of this story is the role played by the Stockton and Darlington railway in the formation of the modern port. Likewise, the role of the principal promoters of the scheme, including John Pease, is of historical value to the birth of Teesside as a significant port.

A highly important aspect to the historical development of Teesside as a successful modern port is the role played firstly by the Tees Navigation



Fig 11 Looking west down the River Tees – Stockton Character Area from Infinity Bridge and the redeveloped North Shore.

Company and later, the Tees Conservancy Board in improving the navigation of the Tees.

This was critical to the rise of the port's later success. Also noteworthy is the scale of the works needed to improve the port. This not only included two new cuts to straighten the river (the Mandale and Portrack Cuts), but also a huge amount of dredging and reclamation and the use of iron slag waste to help create training and revetment walls to define the deeper water channel.

For a time in the late 19th and early 20th centuries Teesside played an internationally important role in the steel industry, the development of its industrial processes and the global trade of its products. Likewise, the by-products of the industry in the form of shipbuilding and large-scale engineering led Teesside to become nationally important in the early to mid-20th century. Companies such as Dorman Long have not only played an important role in engineering projects locally, but also with other key landmarks nationally and internationally, such as the Tyne and Sydney Harbour Bridges.

As the most important later medieval and early post-medieval port on the Tees the story of Stockton is of historical value to the understanding of the region's trade and politics.

Aesthetic

– *'the ways in which people draw sensory and intellectual stimulation from a place'*

As a working port, the constantly changing port activity generates interest for many, whether from the coming and going of visiting ships, the type of cargoes being stored and redistributed, and the buildings and structures associated with its use. To some, these activities may not always be seen as attractive but nonetheless many find them stimulating and they arise as a direct consequence of the port's historic industrial development and its continuing industrial use today. The scale of the port infrastructure and the ships using it visually dominate the riverside frontage especially downstream of the Transporter Bridge.

There is also the interesting contrast of modernity with the historic features located in the Character Areas. While the heritage assets on Teesside can be dwarfed in scale by modern buildings and

redevelopment, the historic elements with the modern combine to give a distinctive landscape.

This is particularly strong where historic port-related structures survive; in particular the South Gare, South Bank, Middlesbrough Dock and Riverside, Middlesbrough – Smith's Dock to Tees Wharf Character Areas. It is also apparent in more localised parts of the Port Clarence, Furness Shipyard, and Billingham Reach Character Areas with reference to specialist activity, respectively the railways, shipbuilding and the chemical industry.

The aesthetics of the historic Transporter, Newport, and Victoria bridges, are a strong visual reminder of the engineering heritage of Teesside. The Transporter Bridge in particular has acquired an almost iconic status as a visual symbol of the area. They also offer a contrast, and an element of continuity, with the more modern feats of engineering, in particular the footbridges at Stockton and the Tees Barrage.

The North and South Gare breakwaters projecting either side of the river entrance draw people to them not only as reminders of the port's historic past, but as stunning places to walk in the summer sun and dramatic in winter when framed by spume from breaking waves.

The character of the river's upper reaches near to Stockton is now aesthetically quite different: much more sheltered, the river, smaller and no longer used by commercial port traffic, has a more intimate scale.

A number of portside areas are not publically accessible and for much of its length the visibility of port activity is limited. This puts a greater emphasis on the areas where public access to the riverfront is still possible.

Communal

– 'the meaning of a place for the people who relate to it, or for whom it figures in their collective experience or memory'

Port-related activity on the Tees has a huge influence on the economy of the local area and its continued success is seen as vital for the local community. There is a pride in the port, and its heritage, which forms a vital component of the local character.

Considerable pride is associated with the industrial history of the River Tees, its saltworking, shipbuilding, iron and steel working, chemical industries. It is a past which still has the power to emotionally move people and on the internet are several in-depth websites regarding the port and its industrial history.

The area has active heritage-focussed groups including the Cleveland and Teesside Local History Society, The Cleveland Industrial Archaeology Society, and the Teesside Archaeological Society.

In 2014 the Shipping and Shipbuilding Research Trust was founded with the main objective to encourage interest and facilitate research into the maritime heritage of North East England. The North East Maritime Trust, based in South Shields,

Tyneside, undertakes conservation work to historic vessels with the aim to educate the public about maritime history and in particular, that of the North East.

The North of England Civic Trust has been active in the area having played a key role in the Heritage Lottery Fund (HLF) bid for a Townscape Heritage Initiative for Middlesbrough Historic Quarter.

Current levels of heritage protection

The South Gare lighthouse in the South Gare Character Area is a Grade II Listed Building (LB 1140391).

The Middlesbrough Dock Character Area includes the Grade II* Listed Dock Clock Tower (LB 1139871) and on Vulcan Street, the Grade II Listed exterior walls of the former Cleveland Salt Company's work (LB 1312365).

A cluster of Listed Buildings lies in The Tees Transporter Bridge Character Area including the Transport Bridge itself, which is Grade II* Listed under two entries (LBs 1139267 and 1139845). At the southern end of the bridge its piers, railings and gates are Grade II (LB 1139846), as is the nearby Winch House (LB 1139847) and Bridgekeeper's House (LB 1139848).

Within the Billingham Reach Character Area the phosphate rock silo in the Billingham ICI works is Grade II* (LB 1115821)

The Branch Bridge, a 1930s road bridge over a disused railway branch line, in the Billingham Beck and Portrack Marshes Character Area is Grade II (LB 1248145).

Crossing the River Tees, in the River Tees – New Cut Character Area is the Grade II Listed Tees Newport Bridge (LB 1139837).

In the Stockton - Quayside Character Area are two Grade II Listed Buildings; near Castle Wharf, is a 19th century warehouse (LB 1329479), and downstream, Victoria Bridge (LB 1393672).

In terms of non-heritage based designations: the North Gare and Seaton Snook Character Area lies partly within the Seaton Dunes and Common Site of Special Scientific Interest (SSSI); the Graythorp Character Area lies partly within the Tees and Hartlepool Foreshore and Wetlands SSSI, whilst the Port Clarence and Seal Sands petrochemical complex Character Areas lie partly within another part of this SSSI; the Seal Sands Character Area lies within the Seal Sands SSSI, as does part of the Seal Sands petrochemical complex Character Area; the South Gare Character Area, and a small part of the Teesside Steel Works Character Area, lie within the South Gare and Coatham Sands SSSI.

Much of the coastline and estuary around Teesmouth has been designated as a Special Protection Area (SPA) under the European Birds Directive. Parts of the North Gare and Seaton Snook, Graythorp, Seal Sands, Clarence Works, Seal Sands Oil Refinery, and South Gare Character Areas fall within the SPA and the same areas form part of the Teesmouth and



Fig 12 South Bank Wharf.

Cleveland Coast RAMSAR site, which relates to the Convention on Wetlands of International Importance. The Teesmouth National Nature Reserve (NNR) falls within the North Gare and Seaton Snook, Tees Mouth, and Seal Sands Character Areas.

Pressures for change

The main pressure upon the port and other port-side operators is the economic need to remain commercially viable. The changing nature and focus of the area's industries, the increasing size of vessels and major changes in port technology and provision nationally, has meant that they have had to regularly revise their business models - a situation which will continue in the future.

The construction of the Tees Barrage has shaped the modern port dramatically as the upper reaches of the river are no longer accessible to large commercial vessels and as a result, are no longer dredged.

Due to the loss of port-related activity and industry the last 30 years have seen a massive transformation of much of the river's edge from Newport to Thornaby (south side of the river) and from Billingham to Stockton (north side). Redevelopment of these areas has been comprehensive, leaving only limited traces of former port-related activity and historic time-depth in the landscape.

Beneath the Tees Barrage the Commercial Harbour Character Area of the River Tees is regularly dredged by the port's fleet of two suction dredgers. Due to economies in scale it is probable that the size of ships will continue to increase in future which in turn will have a direct effect on the type of port-side trade and industry able to use the port, and the depth of dredging undertaken.

As a deep-water port able to handle large vessels Teesside is likely to be of national importance in terms of future port provision in the UK. Therefore, brownfield sites next to the river frontage will be prime areas for redevelopment.

Teesport has seen a major upturn in recent years and plans to turn parts of the port into a major redistribution centre for a number of large supermarkets are well underway. The proposed Northern Gateway Terminal, the growth in the offshore energy field with the continued success of



Fig 13 Plaque erected on the wall of the Cleveland Salt Works.

the petrochemical and chemical industries, and the resurgence of steel production means that there is likely to be a great deal of pressure to redevelop on a large scale over the next few years.

Plans to build The Northern Gateway were approved in 2008 but have been delayed by the economic downturn. The facility, on the site of the derelict Shell Oil refinery, would be capable of handling another 1 million TEU.

The Tees Valley Enterprise Zone was established in 2012 to streamline the planning process within 12 sites earmarked for development in the form of Local Development Orders (LDOs) and Planning Performance Agreements (PPAs).

At Stockton, partly within the Stockton - North Shore Character Area is the 'Stockton - Northshore' LDO. This covers five hectares to the northeast of the Princess Diana Bridge, and has been earmarked for offices, retail, leisure facilities and residential development.

An area of 11 hectares above the Tees Newport Bridge, and adjacent to Bamlett's Bight to Maze Park Character Area, is being targeted for development as the 'Teesside Advanced Manufacturing Park' with the LDO focused on attracting advanced engineering, manufacturing, chemicals or renewable energy industries.

To the west of the North Tees Works, partly within the Seal Sands petrochemicals complex Character Area, is the 43 hectare 'New Energy and Technology Park' LDO which permits the land to be developed for potentially high-hazard plant and energy generation.

Within the Teesport Character Area is the 'South Bank Wharf' LDO. This covers 81 hectares near Tees Dock including the river frontage at the western end of the Dock. This LDO is being targeted for renewable energy and advanced engineering sectors.

Redevelopment plans for the Middlesbrough Dock and Riverside Character Area have stalled and new proposals are awaited.

The drive and desire for regeneration on Teesside is high in response to the difficult economic times of the recent past. The challenge is to revitalise the area and port while retaining the distinctiveness of place and pride in its past achievements: its heritage offers a positive asset in achieving that goal.



Fig 14 An unused historic building near Middlesbrough Dock with the modern gantry crane in the background.

Another challenge the area must face is the threat of sea-level rise. The Shoreline Management Plan 2 (SMP2) provides a long-term risk assessment relating to future coastal evolution and presents a policy framework to address the risks to people and the developed, historic and natural environment in a sustainable manner.

The mouth of the Tees, including the North and South Gares, North Gare Sands, Seal Sands, and Bran Sands fall within the Little Scar to Coatham Sands Management Area (MA) of the River Tyne to Flamborough Head SMP2 (MA 13, Policy Development Zone 5) (Guthrie and Lane 2007).

The SMP2 recommendations for the areas at the mouth of the Tees focus on 'holding the line' to Seaton Carew, while allowing natural roll back of the Seaton Sands Dunes and the North Gare Dunes. In the short term it allows the natural development of the Bran Sands and Coatham Dunes, within the strategic control of maintaining the South Gare. In the medium term there is to be detailed consideration of flood risk to the area to the south of the North Gare Breakwater (Guthrie and Lane 2007).

Heritage risk assessment and opportunities

This summary has highlighted the essential character and heritage assets that underpin Teesside's port-related character. Regeneration planning which is informed and inspired by these elements can take a proactive approach to ensure that new developments are focused on enhancing Teesside's distinctiveness and strong 'sense of place', and ultimately be more successful for the local community.

The heritage asset at highest risk is the Grade II* Listed phosphate rock silo at Billingham, which is on Historic England's *Heritage at Risk* register and described as being 'unused' and in 'poor condition'. The brick-built warehouse at the northern edge of the Billingham Reach Character Area dates to the early 20th century and the construction of the ICI works. It is currently used as part of the plant and as such, is at low risk.



Fig 15 Offshore energy support barge at the former Furness Shipyard.

The Billingham - Furness Shipyard Character Area has recently been purchased by two companies with the intention to continue fabricating components for the offshore energy market on the site (The Journal website). Being a large brownfield site, with river frontage within the commercial harbour, it is a prime site for port-related redevelopment although currently there are no proposals. However, in the longer term, without reuse, the slipways and quay walls will come under moderate to high risk of deterioration.

Within the Middlesbrough Dock and Riverside Character Area the 'Middlehaven' redevelopment scheme has stalled in recent years. However, the Listed Dock clock tower, the Dock basin and its entrance will be retained in future development and therefore are at low risk. The historic walls fronting Vulcan Street, including those Listed, are currently in good condition and seem to be well-maintained and therefore are at low risk. However, in the area behind them, fronting the river is a brownfield site earmarked for redevelopment. Proposals that incorporate the walls into the future development, if sympathetically designed, could ensure that they continue to face a low risk of change.

Able UK's yard on the northern edge of the Area also includes a brick building dating to the historic use of the Dock. Located in an area where much of the surrounding historic fabric has been altered, the unused building is currently at risk of deterioration. Likewise, the modern gantry crane standing next to it appears unused and therefore is at high risk of deterioration.

South Bank Wharf, in the Middlesbrough - South Bank Character Area is at high risk. It is the last large wooden-wharf dating to the late 19th/early 20th century on Teesside. Once associated with the Cleveland Iron Works it is now unused as part of the modern commercial port and survives in a poor and deteriorating condition.

There is a huge amount of information available on the history and archaeology of Teesside's port heritage but it is not always easy to find an overview of the history of the entire port. There is also likely to be a wealth of oral history regarding the working of the port that would benefit from being recorded and celebrated. This could help influence the creation of heritage trails and/or a production of a book to

celebrate its past and present. A good example that could be of inspiration is that written for Tyneside and sponsored by the Port of Tyne (Chaplin *et al* 2012).

It is probable that with the sea-level predictions and the likely scenarios highlighted in the SMP2 reports that the North and South Gare breakwaters will require regular repair and, possibly, additions and updating, and therefore are at low to moderate risk of future change.

References and further reading

Chaplin, M, Aris, B, Bell, C, and Ducker, C, 2012. *Tyne View – A walk around the Port of Tyne, New Writing North*, Newcastle

English Heritage, 2008. *Conservation Principles: Policies and Guidance for the Sustainable Management of the Historic Environment*, English Heritage, London

Guthrie, G, and Lane, N, 2007. *River Tyne to Flamborough Head Shoreline Management Plan*, Royal Haskoning, Peterborough.

Heggie, JKF, 2013. *Middlesbrough's Iron and Steel Industry*, Amberley, Stroud

Hughes, D, 2009. *North and South Tees Industrial Development Framework – Archaeological Report*, Parsons Brinckerhoff Ltd, Manchester

Murphy, P, 2009. *The English Coast: A History and a Prospect*, Continuum

Page, W, (ed), 1923a. 'Parishes: Middlesbrough' in *A History of the County of York North Riding: Volume 2*, 268-273, Victoria County History, London (accessed via British History Online website)

Page, W, (ed), 1923b. 'Parishes: Yarm' in *A History of the County of York North Riding: Volume 2*, 319-326, Victoria County History, London (accessed via British History Online website)

Page, W, (ed), 1928a. 'Parishes: Billingham' in *A History of the County of Durham: Volume 3*, 195-203, Victoria County History, London (accessed via British History Online website)

Page, W (ed), 1928b. 'Parishes: Stockton on Tees' in *A History of the County of Durham: Volume 3*, 348-65, Victoria County History, London (accessed via British History Online website)

PD Ports, 2013. *Teesport and Hartlepool Port handbook*, 7th Edition

Rowe, P, 2008. The Mesolithic Period in Teesside in Tolan-Smith, C, *North East Rapid Coastal Zone Assessment*

Rowe, P, 2009. *Archaeological Desk Based Assessment – Seaton Carew Feasibility Study Hartlepool*, Tees Archaeology

Tolan-Smith, C, 2008. *North East Rapid Coastal Zone Assessment*, Archaeological Research Services Ltd, Gateshead

Websites

BBC News website -

http://www.bbc.co.uk/tees/content/articles/2009/01/12/teesport_northern_gateway_feature.shtml

BBC News website, Billingham and Wilton chemicals industry -

<http://www.bbc.co.uk/nationonfilm/topics/chemical-industry/background.shtml>

Central Systems Autostore website -

<http://www.central-systems.co.uk>

Cleveland and Teesside Local History Society -

<http://www.ctlhs.org.uk>

Cleveland Industrial Archaeology Society -

<http://www.teesarchaeology.com/partners/CIAS/CIAS.html>

England's North East -

<http://www.englandsnortheast.co.uk/Middlesbrough.html>

Flash Earth -

<http://www.flashearth.com>

Grace's Guide, Dorman Long entry -

http://www.gracesguide.co.uk/Dorman,_Long_and_Co

Grace's Guide, Furness Shipbuilding Company entry -

http://www.gracesguide.co.uk/Furness_Shipbuilding_Co

Historic England, Heritage at Risk -

<https://historicengland.org.uk/advice/heritage-at-risk/>

Key to English Place-Names -

<http://kep.notttingham.ac.uk>

North East Maritime Trust website -

<http://www.nemaritimetrust.co.uk>

Northern Echo -

http://www.thenorthernecho.co.uk/history/railway/stockton/3166692.Complex_birth_of_first_railway_town/?ref=rl

North of England Civic Trust -

<http://www.nect.org.uk>

PD Ports website -

<http://www.pdports.co.uk/en/our-locations/teesport>

Sahaviriya Steel Industries -

<http://www.ssi-steel.co.uk>

Shipping and Shipbuilding Research Trust -

www.shippingandshipbuilding.co.uk

Shipbuilding on the River Tees -

<http://www.teesbuiltships.co.uk>

Stockton and Darlington Railway Wikipedia entry -

https://en.wikipedia.org/wiki/Stockton_and_Darlington_Railway

Tees Archaeology -

<http://www.teesarchaeology.com/home/home.html>

Tees Built Ships -

<http://www.teesbuiltships.co.uk>

Tees Navigation Company Wikipedia entry -

https://en.wikipedia.org/wiki/Tees_Navigation_Company

Tees Newport Bridge Wikipedia entry -

https://en.wikipedia.org/wiki/Tees_Newport_Bridge

Tees Transporter Bridge Wikipedia entry -

https://en.wikipedia.org/wiki/Tees_Transporter_Bridge

Teesside Archaeological Society -

<http://teesarchsoc.com>

Teesport Wikipedia entry -

<https://en.wikipedia.org/wiki/Teesport>

The Journal -

<http://www.thejournal.co.uk/business/business-news/new-offshore-engineering-venture-planned-8151251>

This is Middlesbrough -

<http://www.thisismiddlesbrough.com/history>

This is Stockton -

<http://www.thisisstockton.co.uk/history>

WWI Teesside Project -

<http://teesarchsoc.com/projects/wwi-teesside-project>

Produced for Historic England by Cornwall
Archaeological Unit.

www.cau.org.uk