



What is 'Felixstowe South'?



Hutchison Ports (UK) Limited (HPUK), owner of the Port of Felixstowe, is redeveloping the southern end of the Port, to create a new deep-water container terminal.

In February 2006, the Government gave the go-ahead for the expansion of the area previously used by P&O North

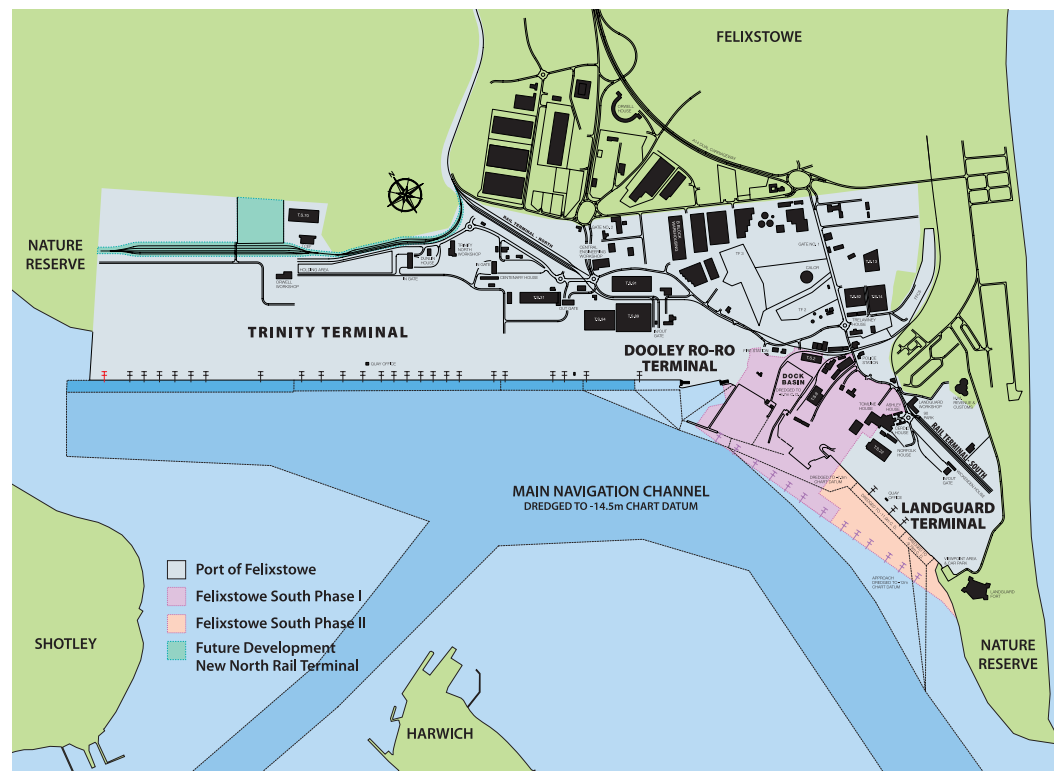
Sea Ferries Limited, Landguard Terminal, and the now largely redundant Dock Basin.

Felixstowe South will increase the quay length available for container handling by close to 1,000 metres, giving a total quay length of 1,285 metres. Together with the extension of the Port's Trinity Terminal,

Felixstowe will be able to provide a total of over four kilometres of deep-water container facilities, and total capacity at the Port will increase by nearly 50%.

The first phase of the redevelopment is scheduled to open in April 2010, with the second phase expected to be operational by 2014.

Facts and Figures	
Phase 1	
Quay length	730m
Depth alongside	16m
No. of quayside cranes	7
No of rubber-tyred gantry cranes	27
Terminal area	35.876ha
Storage capacity (TEU) (@ 100%)	21,000
Reefer points	300
Opening	April 2010 (first 440m)



Pictured, L-R: Chris Lewis - CEO, Hutchison Ports (UK); David Jenkins - Managing Director, Costain Limited; Clemence Cheng - Managing Director, HPH Central Europe; and Patrick Bruce - Commercial Director, Costain Limited

Opening Ceremony

The Port of Felixstowe held a groundbreaking ceremony on 1st September 2008 to mark the formal commencement of the Felixstowe South project.

Performed by John Meredith, Group Managing Director of Hutchison Port Holdings, the ceremony was attended by a range of port customers and local dignitaries, as well as representatives of Costain, the contractors for the project. Costain was appointed in May to construct what will be the

UK's first new deep water container capacity when it comes on stream in 2010.

When fully operational, Felixstowe South will create more than 600 direct jobs, with an additional 860 in associated industries. The Port of Felixstowe, already one of the largest employers in the UK's Eastern region, is a major driver of the local economy and contributes some £100 million to it each year in wages and pensions alone.

Project Director Profile



Channel Dredging

Phase 1 of the Felixstowe South programme consists of 730m of new deep-water container quay, with a container handling area of 200,000m². This will be created by installing a new quay in front of the existing port structures.

The dredging will be carried out by the highly experienced Westminster Dredging Company, which is part of the Royal Boskalis Group. Royal Boskalis is one of the world's leading dredging companies, specialising in the construction and maintenance of ports and waterways, land reclamation, coastal defence and riverbank protection.

The works at Felixstowe include initial dredging of silts and soft clays within the area

to be reclaimed to provide a firm base on which to build the terminal. Once this is done the original Dock Basin and the area between the present quay and future quay-wall will be backfilled.

In addition, the western section of the approach channel into Felixstowe will be widened and work will be undertaken to dredge the deep-water berth pocket in front of the new quay wall, and the future tug berth pockets.

To carry out the dredging activities, a number of trailer suction hopper dredgers will be used. These vessels 'hoover' up the silts as they sail along, retaining the material in hoppers on board prior to disposal at designated sites.

Key Build Programme Dates

Contract with Costain	Commenced 2nd May 2008
Dredging/general reclamation work	September 2008 to December 2008
Backland block paving	October 2008 - January 2010
On-shore demolition work completed	End of October 2008
Quay wall construction	Mid-January 2009 to March 2010
Infilling and compacting	February 2009 to July 2009
Quay wall handover	October 2009 to March 2010
First section of 1st Phase (440m of quay)	Operational April 2010
1st Phase fully operational	September 2010
2nd Phase to commence construction	Expected 2012

Key professional experience

David has nearly 30 years experience of managing major civil engineering projects, ranging from the construction of roads and bridges, to airfields, public health and marine works, with budgets from £25,000 to £200 million.

Experience record

David commenced his career with Costain Limited in 1969. Since then, he has worked on major national projects, including:

1980-1982: the £22 million construction of a 0.5km stretch of the M25, including an interchange with the existing M11 motorway.

1983-1984: the £8 million construction of sea defence revetments at RAF Stornoway, Isle of Lewis, Outer Hebrides, involving the movement of 250,000m³ of hardfill to form an extension to the existing runway.

Locally, in his capacity as East Central and Midlands Regional Manager from 1990 to 1996, David was involved in the 'Sizewell A Cell Duct B' project to extend the working life of the Power Station prior to its decommissioning.

In his role as Northern and East Central Area Regional Manager from 1996 to 1999, David also oversaw the A14 Huntingdon Railway Viaduct project to upgrade the existing A14 viaduct which covers a number of spans over both road and rail routes.

David is now Project Director of Felixstowe South. He says of his latest challenge:

"This project represents the largest deep-water container port in the UK, so it is very



David E Alefs, BSc, MICE, FIHT
Project Director – Costain Limited
Profession: Civil Engineer

important to the country's economy and a very significant project for Costain.

"The main challenges are the sheer logistics of a project this size. It's no bigger than Trinity Quay in terms of quay length, but the depth of water and size of ships means everything is so much bigger - the cranes, the loads etc.

"The 60-tonne tubes for the quay wall piling come nineteen to a ship. We've got to unload them onto our quay and get them back onto barges to place in the water. The area behind the wall will then be filled with three million cubic metres of sand dredged offshore at Great Yarmouth by specialist subcontractor, Westminster Dredging.

"Phase One is due for completion in April 2010, but will be handed over in stages, starting with the container park.

"There's always pressure to perform, but of course we want to work with Hutchison on Phase Two and even their Bathside Bay project at Harwich, so we'll be doing everything in our powers to deliver safely, to spec, to time and to budget."

Q&A



1) Why is Felixstowe South needed?

It is acknowledged throughout the shipping industry that the UK needs additional deep-water container capacity, and it needs it quickly. HPUK has been working on twin schemes to increase capacity at Felixstowe and Harwich since 2000.

International trade is an essential part of the UK economy, and one that continues to grow. In recent years, container traffic through UK ports has grown at 6-7% per annum. Although growth is expected to slow down slightly, rates of around 4% per annum are forecast in the period to 2020. Current UK container ports simply do not have the capacity to handle this growth, and additional facilities are therefore needed.

The shortage of capacity is especially acute for the largest container vessels, which represent a growing portion of the world container fleet. More and more ultra-large container ships are coming on-stream each month, and, importantly, Felixstowe South will increase by almost 200% the capacity available for the very largest ships at Britain's major container port.

2) Is the landside infrastructure able to cope with Felixstowe South?

Yes it is. The Eastern region, in which Felixstowe is situated, has some of the least congested trunk roads in the country. The UK's main East-West artery, the A14, runs from the M1/M6 junction in the Midlands straight to the Port's entrance, and is designated a national strategically important route.

A further set of improvements have either recently been made, or are planned for, the A14. A brand new stretch of the A14 between Haughley and Stowmarket, Suffolk opened in September 2008, and will significantly improve safety and journey time reliability. Major improvements between Cambridge and Huntingdon are due to commence in 2010, and work starts in February 2009 on a £90 million scheme to install traffic management technology along the entire route.

On the railways, Felixstowe is the only deep-water container port in the UK to benefit from high-cube connections to the strategic network. In addition

to the improvements being funded by the Port (see below), the Government has committed funding under the Transport Innovation Fund to provide additional gauge clearance on the important route connecting Felixstowe with the West Coast Main Line at Nuneaton.

3) Will more freight be transported on the rail as a result of Felixstowe South?

Yes. HPUK is committed to increasing the share of domestic containers transported by rail. In July 2008, HPUK received Government permission to increase the capacity of the Felixstowe Branch Line. It is also planned to construct three additional 24-wagon sidings within the existing Ipswich marshalling yard, and to undertake some modifications at Westerfield level crossing.

In parallel with these local rail improvements, HPUK is working closely with Network Rail to fund gauge and capacity improvements to the route between Ipswich and Peterborough and the East Coast Main Line, and its diversionary routes to South Yorkshire.

The capacity enhancement on the Felixstowe Branch Line will allow up to 41 freight trains per day to run in each direction by the year 2020, and will help the newly-configured Port of Felixstowe to achieve a rail modal share of 26% - taking up to one million lorry movements off the road per year.

As part of the plans for Felixstowe South, a new rail terminal - the 'New North Rail Terminal' - will be built at the Port, on land already reclaimed at Trinity Terminal.

4) What does the project involve?

- The new quay wall will be 730 metres long, the equivalent to 73 double-decker buses back-to-back!
- The total area to be paved is 333,000 m², the equivalent to 42 full size football pitches!
- The total volume of dredged fill is 3,000,000m³, enough material to be able to fill the new Wembley stadium to the top, three times over!
- The total weight of the tubular piles used to create the new quay wall is 20,000 tonnes, the equivalent to 17,021 Ford Focus cars.

