

EA-Southern Box 8



ENVIRONMENT
AGENCY



Estuary

Lymington

Tidal Defence Scheme

Who We Are



Lymington

The Environment Agency was formed in April 1996 and brings together the former National Rivers Authority (NRA), Her Majesty's Inspectorate of Pollution and the County Council Waste Regulation Authorities.

The Agency is Europe's largest organisation dedicated to protecting and improving the environment and the first charged with looking after land, air and water as a whole. Southern Region is divided into three operational areas - Hampshire & the Isle of Wight, Sussex and Kent. We are responsible for providing effective protection from flooding from rivers and the sea and a flood warning service for the public in areas at risk of flooding. When flood warnings are in force, the latest information can be found by telephoning Floodcall 0645 88 11 88.

Environment Agency
Information Centre
Head Office

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Lymington Estuary



Tidal Defences

Flood Protection

Minor flooding has occurred in the Lymington area on a regular basis over the years, causing widespread damage and disruption. In December 1989 high tides breached the old defences along the whole of the Lymington estuary east of Hurst Spit, causing extensive damage to the sea walls and also to many homes and businesses over a wide area.



Following the serious 1989 flooding, the then National Rivers Authority (now the Environment Agency) commissioned a study which revealed major weaknesses in many of the Lymington Estuary Tidal Defences.

A strategy was produced for protecting property on both sides of the estuary over the next 50 years with priority being given to the west side of the river, from Lymington Town to Hurst Spit.

Pennington Sea Wa



Seawall construction



Keyhaven Harbour

II Construction

Pre Pennington Scheme



Post Pennington Scheme

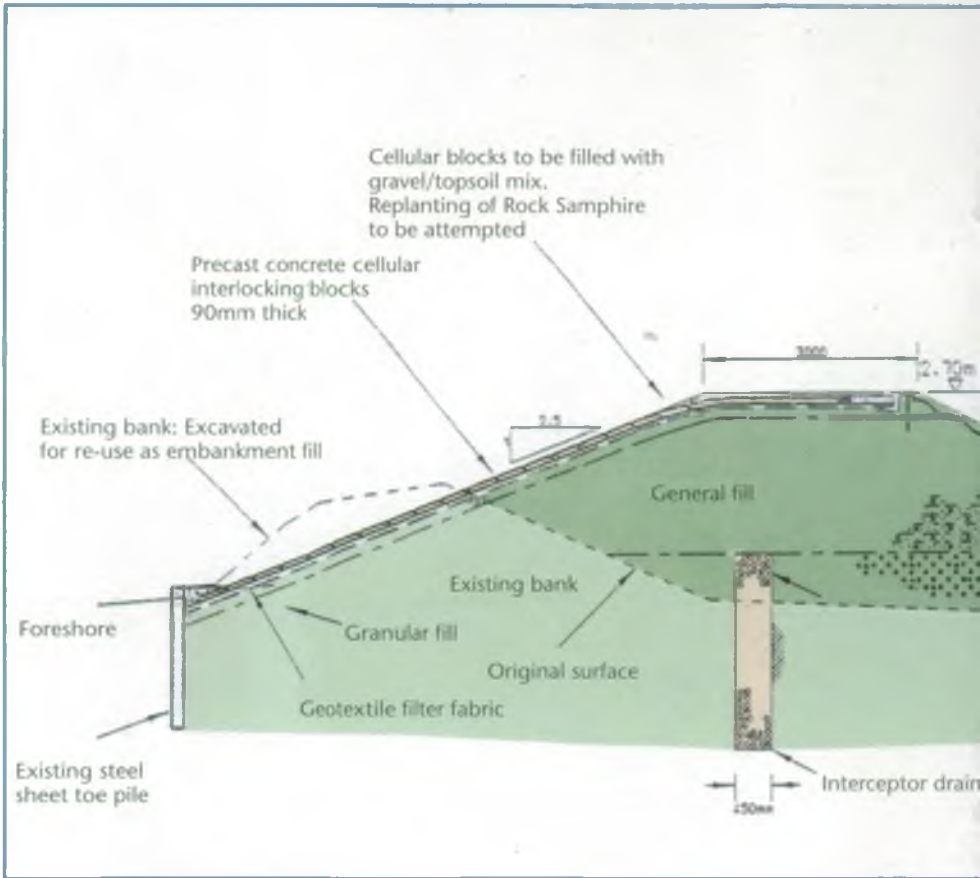


All of the existing alignment was improved and upgraded. The first section which involved constructing 2.4 kilometers of embankment faced with cellular

concrete blocks, was completed in 1990. The next 2.6 kilometers of embankment which was to be of a similar construction was delayed as rare, protected species of **shrimps** and **sea anemones** were found adjacent to the old sea wall and the new sea wall would fill in most of the lagoons where they lived.

Following negotiations between the Agency's predecessor the NRA with English Nature and the Ministry of Agriculture, Fisheries and Food (MAFF) a special licence was issued by MAFF in October 1991 which allowed the works to be built on the seaward side of the old wall so that the lagoons could remain. In some places the sea wall has been allowed to continue on the old line and compensatory lagoons have been built to replace those lost. Screens were provided during the works to shelter the surviving lagoons. All this was overseen by a specialist from Southampton University.

Pennington Sea Wa



A further 600 metres of sea wall was raised around Keyhaven, using heavy piling with concrete topping faced with masonry, in keeping with previous work. The final stage, 2.3 kilometres on either side of Keyhaven wall, was completed in Christmas 1993.

Lymington Tidal De



fences

The character of the riverbank changes according to the type of property fronting the river, so the defences have been individually designed using a range of civil engineering techniques, building as close to the water's edge as possible.

West Bank

This part of the scheme was to improve the defences in Lymington Town to a higher standard of protection. Many people have an interest in the riverside so it involved co-ordination and integration with others operating on the riverside. There was a need to maintain the character of the town and the defences were built, with stone clad flood walls and timber faced flood gates. These works were completed by the Spring Bank Holiday 1993.



Lymington Tidal De



East Bank Works and Tidal Gates

Following completion of the works on the west bank, a second investigation of the east bank of the river recommended a range of works to improve flood protection in Lymington town and the management water levels upstream of Bridge Road.

The new structure gives better protection from flooding and assists water level management in the Lymington River upstream of Bridge Road. It has been designed to allow fish and animals in the river to pass through the structure during normal flows and encourages reed growth.

Old Ferry House

The new defences have been built to blend in with the existing property and give protection not only to the house but also to the adjacent commercial and residential properties downstream.

Boat Building Works

The new wall made of reinforced concrete faced with box 'gabions' is built on the existing masonry wall.

This lightweight construction enabled the wall to be built quickly with minimum interference to the factory's business and allows them to continue to launch boats over the wall.





Crossing the Railway Embankment

A mass concrete cut-off wall located between sleepers was built with minimum interference to the railway timetable. It allows the defences to continue to be built on the river side of the railway line from the railway bridge to the crossing next to Lymington Harbour Station. The defences consist of timber planking between steel columns which blend in with the embankment.

Ferry Terminal

The defences at Wightlink's Ferry Terminal include concrete kerbing, precast and brick clad concrete walls, earth walls and new fencing, and have been built in keeping with the existing landscaping. Wooden 'stop-logs' have been provided to the access ramps to minimise interruption to ferry operations during the winter flooding season.

Undershore Road

A length of road has been raised close to the Wagon and Horses to prevent water flowing along the southern part of Undershore Road into residential and commercial properties.

Lymington Tidal De



RECREATIONAL

The recreational value of the area is self evident. The marinas are among the premier sites in the UK and have formed the basis for Britain's participation in international yachting events.

In addition to the nautical interest, Lymington town offers attractive

cobbled streets and diverse shopping and is ideally located for accommodating visitors to the New Forest.

FLOOD DEFENCES

Defences for land adjacent to the estuary are provided by a combination of flood walls, quays and earth embankments.



RESIDENTIAL

The Lymington River and estuary are bordered by a number of residential properties, which are at risk of flooding.



fences

NATURAL

The reedbeds upstream of Bridge Road provide an important habitat as breeding grounds for a variety of birds and as autumn roosts for migrant birds. The intertidal muds and marshes downstream of the estuary are important for breeding populations of wildfowl and supporting varieties of invertebrates and fauna.



Construction Costs

Pennington Sea Wall	£5.5 million
Lymington West Bank	£1.0 million
Lymington East Bank including Tidal Sluice	£1.0 million

These works were funded by the Environment Agency with the assistance of grant aid from the Ministry of Agriculture Fisheries & Food.



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Environment Agency
Orchard House
Endeavour Park
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ISLE OF WIGHT AREA

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HAMPSHIRE AREA

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If you think flood warnings are in force in your area call our 24-hour 'dial and listen' information line

**ENVIRONMENT AGENCY
F L O O D C A L L**

0645 88 11 88

For general enquiries please call your local Environment Agency office. If you are unsure who to contact, or which is your local office, please call our general enquiry line.

**ENVIRONMENT AGENCY
GENERAL ENQUIRY LINE**

0645 333

The 24-hour emergency hotline number for reporting all environmental incidents relating to air, land and water.

**ENVIRONMENT AGENCY
EMERGENCY HOTLINE**

0800 80 70 60



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