







## 'Tunstall Realignment'

Measure analysis 39 in the framework of the Interreg IVB project TIDE

S. Manson <sup>1</sup>, N. Pinnington <sup>2</sup>

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<sup>&</sup>lt;sup>1</sup>Environment Agency

<sup>&</sup>lt;sup>2</sup>'Halcrow - A CH2M Hill Company'



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Susan Manson Nancy Pinnington

Environment Agency, UK

http://www.environment-agency.gov.uk/

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## Part 1: Description of measure

Measure category: Hydrology/ Morphology

Estuary: Humber

Salinity zone: polyhaline

Pressure: Habitat loss and degradation during the last about 100 years: Intertidal

**Country:** United Kingdom

**Specific location:** Sand le Mere, Tunstall, East Yorkshire **Responsible Authority:** East Riding of Yorkshire Council

Costs:

Measure technical factsheet (link):

Downloads:

Links:

Map/Picture:

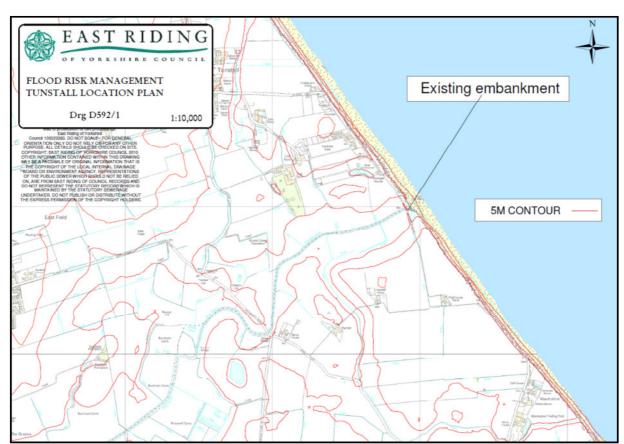


Figure 1: Location Plan (East Riding of Yorkshire Council)







#### 1.1 Description of the issue and measure

#### Outline details of the scheme

The Tunstall Flood Defence Scheme is in early stage of development, but the proposed earth embankment(s) will provide a defence against the sea breaching and causing coastal flooding to inland villages, farms and farm land.

The embankment(s) design is not completed, but it is anticipated that it will run for a distance of between 250m and 450m and rise to a height of 6m to 8m above ordnance datum. The footprint of the embankment(s) will cover an area of approx 0.08ha.

The embankment(s) will prevent saline water contaminating an extensive freshwater system that traverses the Holderness Plain, east to west, to the Humber Estuary.

The construction of the embankment(s) would result in the severance of a land drain that feeds into Tunstall Drain. This drain will be re-routed through agricultural land and feed into Tunstall Drain, West of the proposed works.

The embankment(s) will also sever an existing sewage treatment plant outfall that serves Sand le Mere caravan park and this will have to be diverted downstream of the embankment(s) (it is possible that this outfall may be abandoned and liaison with the caravan park will be undertaken to determine their drainage arrangements).

Materials for the construction of the embankment are to be sourced from borrow pits located north and south of Tunstall Drain, between the existing coastal defence and the new realigned embankment(s). It will be necessary to strip, store and return topsoil to existing horizons.

#### **Current Stage of Project**

A consultant is currently preparing options for the scheme for discussion with landowners and the IDB's.

Early contractor involvement is required to assist in the scheme design, costing, method of delivery and negotiations with landowners. This will enable the option appraisal and working drawings to be produced.

#### **Identified Scheme Restraints**

Planning permission will be required for the final scheme and delays may result from Land acquisitions.

Environmental Impact will have to be assessed and any constraints complied with. Natural England has intimated that no assessment will be required under the Habitat Regulations (letter dated 8th February 2010 to the Environment Agency).

Scheme Approval and legal agreements will be required from funding partners.

#### **Identified Risks**

- Adverse weather could affect the earth moving works;
- Maintaining a statutory defence against the sea breaching during the works;







- Scheme costs could exceed the available budget; and
- Possible location of service utilities.

### 1.2 Status of the measure

This measure has yet to be implemented.



