

# PROJECT: RIVERSIDE QUAY, PORT OF TYNE PHASE 4

VALUE: £6M  
ROLE: MAIN CONTRACTOR  
START DATE: JANUARY 2007  
COMPLETION: DECEMBER 2007

CLIENT: PORT OF TYNE AUTHORITY  
MARITIME HOUSE  
TYNE DOCK, SOUTH SHIELDS  
NE34 9PT

- 167no 1220mm dia. Piles 35m long
- 450m sheet piling
- 168no precast units weighing 7t – 10t
- 300ln.m. of crane rail
- 380ln.m. of waling
- 18,000m<sup>3</sup> of earthworks
- 300t of in situ reinforcement
- 2600m<sup>3</sup> of in situ concrete
- 620m<sup>3</sup> of in situ micro silica concrete
- 1,600m<sup>3</sup> of concrete ground slab

## RIVERSIDE QUAY 4

Towards the end of Riverside Quay Phase 3, Southbay tendered for and were successful in being awarded Riverside Quay Phase 4 which was a similar type of contract with an increased value. The contract was also won competitively against major contractors. On this occasion, as well as winning the tender traditionally, Southbay took the initiative and offered the client an alternative tender saving £250k. The contract differed from phase 3 mainly by the size of the reinforced concrete structural part of the project which consisted of a deck area 200m x 65m constructed over water. Riverside Quay phases 3 and 4 included the removal of existing link spans and demolition of mooring dolphins. The works were adjacent to a grain gantry that was in constant use by the Port of Tyne. Throughout the contract vessels were berthing and Southbay continued to work around the berthing and other constant Port operations.



Sheet piled retaining wall with tie rods 300m length. Installation of rock armour & associated earthworks, 12,000m<sup>3</sup>



## DEMANDING PROGRAMME REQUIREMENTS

The project received 75 changes over the duration of the works including an accelerated sectional completion required by the Client to allow essential shipping to berth against the new quay. The changes were offset against the design alterations and the close working of the Client, Consultant and Contractor to enable the project to be completed on time.

## BUDGET

The contract was completed to budget and the final account was settled within 1 week of substantial completion.

## MANAGEMENT OF RISK

Throughout the contract Southbay reviewed and refined each operation. The congested and restricted site was a logistical test for the project management team. The site was bounded on two sides by water, the third side was an overhead conveyor and the fourth side was a busy internal PTA road. Detailed planning for every crane move was essential. The tubular piles were delivered by ship and unloaded and transported through the busy port via lorry. In addition, the deck was constructed to high tolerances with crane rails set at + / - 2mm for the permanent new Gottweld dock cranes. Every sequence of progress was drawn out and checked to ensure all the required plant could operate safely within the area available. Southbay completed this contract with no accidents or incidents, no pollution or environmental issues while working next to the Tyne, to budget, to programme and to a quality that enabled the contract to be handed over the day after it was completed.