

Dewatering design for the construction of a new deep water port with container terminal, quay & access channel

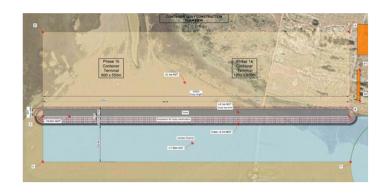
Tel: 01953 454540 enquiries@stuartwells.co.uk www.stuartwells.co.uk



Dewatering design by our team of experienced and qualified engineering geologists, geotechnical engineers and civil engineers



On behalf of the Republic of Tunisia, Ministry of Transport, Stuart Wells developed a conceptual groundwater control scheme for the construction of a deep water port at Enfidha.





Scope of Works

Using the site investigation data provided by the client, we produced a dewatering design report which incorporated the following:

- An assessment of ground conditions including hydrogeology and groundwater levels
- Proposed structure details and construction phasing
- Recommendations for any further investigation and identify data gaps/project risks associated with dewatering
- Dewatering design including engineering calculations with estimated radius of influence and abstraction flow rates (pump volumes)
- Detailed dewatering system information including well specifications, power requirements, fuel usage, as well as section and layout drawings



Solution

The final dewatering design report detailed a six stage deep well dewatering system to match the construction sequence which included the following elements:

- Surface water control measures
- Shallow groundwater control during installation of piling platform
- Main works dewatering. Number and flow rate of the dewatering wells around the perimeter of the excavation works to lower and control groundwater within the upper aquifer
- Automated monitoring network

Services	<u>Dewatering design</u>
Location	Tunisia
Industry	Ports