

TUNNEL NAME/LOCATION/DATE COMPLETED: River Lee Tunnel; Cork, Ireland; U/C		T.104 - River Lee	
TUNNEL TYPE AND USE: Reinforced concrete box sections; Vehicular		LANES/TRACKS: Two tubes with two lanes each	
NO OF ELEMENTS: 5 and one boat element	LENGTH: 122 m	HEIGHT: 8.4 m	WIDTH: 23.8 m
TOTAL IMMERSSED LENGTH: 610 m of tunnel 120 m boat element		DEPTH AT BOTTOM OF STRUCTURE: 20 m	
UNUSUAL FEATURES:	Cast in south open approach structure. One approach ramp (north end) constructed in casting basin and floated into position.		
ENVIRONMENTAL CONDITIONS:	Sensitive scenic area downstream of Port of Cork. Internationally important site for some species of wading birds.		
FABRICATION METHOD: Cast in segments and temporarily prestressed		JOINT TYPE: Gina and Omega	
WATERPROOFING METHOD:	No separate membrane. Cooling of concrete adopted to control early age stresses and ensure watertightness.		
PLACEMENT METHOD:	Elements winched to position from casting basin ballasted and lowered onto temporary footings.		
FOUNDATION METHOD:	Sandflow		
DREDGING METHOD:	Backhoe generally. Cutterhead suction for underlying sands and gravels.		
VENTILATION TYPE:	Longitudinal		
COVER AND TYPE:	1 m thick layer of rock protection		
ADDITIONAL INFORMATION:	OWNER: Cork Corporation DESIGNER: Owner's engineer was Ewbank Preece O hEocha in association with Symonds Travers Morgan. Contract is design and build. Contractor's designer is Mott MacDonald. CONTRACTOR: J.V. of Tarmac Construction and (Irish) P J Walls		