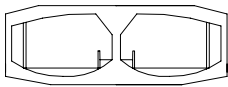


TUNNEL NAME/LOCATION/DATE COMPLETED: Havana Harbour Tunnel; Havana, Cuba; 1958		T.16 - Havana 	
TUNNEL TYPE AND USE: Prestressed concrete box elements; Vehicular tunnel		LANES/TRACKS: Two tubes; two lanes each	
NO OF ELEMENTS: 5	LENGTH: 4 - 107.5 m 1 - 90.0 m	HEIGHT: 7.10 m	WIDTH: 21.85 m
TOTAL IMMERSED LENGTH: 520 m		DEPTH AT BOTTOM OF STRUCTURE: 23 m	
UNUSUAL FEATURES:	First fully prestressed immersed tunnel. Both longitudinal and transverse prestressing was utilized.		
FABRICATION METHOD: All by timber formwork in a casting basin in groups of two		JOINT TYPE: Tremie concrete joints.	
PLACEMENT METHOD:	Placed from catamaran placing barges. pontoons were used to assist flotation of element prior to sinking.		
FOUNDATION METHOD:	Final support for each element consisted of two rows of concrete chairs, each about 9 m long, poured under water in special formwork with jute sacking at the bottom and closed wire mesh on the sides.		
VENTILATION TYPE:	Partly longitudinal and partly semi-transverse		
ADDITIONAL INFORMATION:	OWNER: Government of Cuba DESIGNER: Société des Grands Travaux de Marseille CONTRACTOR: Société des Grands Travaux de Marseille		