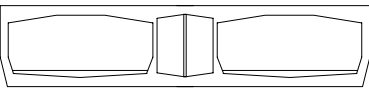


TUNNEL NAME/LOCATION/DATE COMPLETED: Lafontaine Tunnel; Montreal, Canada; 1967		T.29 - Lafontaine	
			
TUNNEL TYPE AND USE: Prestressed concrete box sections; Vehicular tunnel		LANES/TRACKS: Two tubes; three lanes in each tube	
NO OF ELEMENTS: 7	LENGTH: 109.7 m	HEIGHT: 7.84 m	WIDTH: 36.75 m
TOTAL IMMERSSED LENGTH: 768 m		DEPTH AT BOTTOM OF STRUCTURE: 27.5 m	
UNUSUAL FEATURES:	Because of difficulty in applying high prestressing forces after the element was placed, combined with the fact that the same forces could not be applied before placing, temporary vertical midspan prestressing was applied to prevent upward buckling of the roof slab. This permitted the transverse prestressing to be fully applied prior to placement.		
FABRICATION METHOD: In casting basin construction in conjunction with approach area		OUTFITTING: As part of fabrication in casting basin	JOINT TYPE: Gina-type rubber gasketed joint
WATERPROOFING METHOD:	Bituminous membrane on walls and roof. Steel membrane on bottom		
PLACEMENT METHOD:	Catamaran barges. Lowering using linear winches. Temporarily supported on four piles		
FOUNDATION METHOD:	Sandjetted foundation		
VENTILATION TYPE:	Semi-transverse		
ADDITIONAL INFORMATION:	OWNER: Department of Highways, Province of Quebec, Canada DESIGNERS: Brett & Ouellette, Lalonde & Valois and Per Hall & Associates. Christiani & Nielsen designed the sandjetting operation CONTRACTOR: Atlas-Winston, Janin (Joint Venture)		