

CWSF 2006 - Saguenay, Québec



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Go With The Flow

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Abstract: This project studied the question, "Which shape of bridge pier is the most hydrodynamically efficient?" Nine casted piers were set in a sluice, and the water's action around each pier recorded. Results depended on slope of sluice and introduction of a water break. Ideal piers were elliptical (low slope) and squared trapezoid (high slope). Findings have implications for new bridge designs and old bridge rehabilitation.