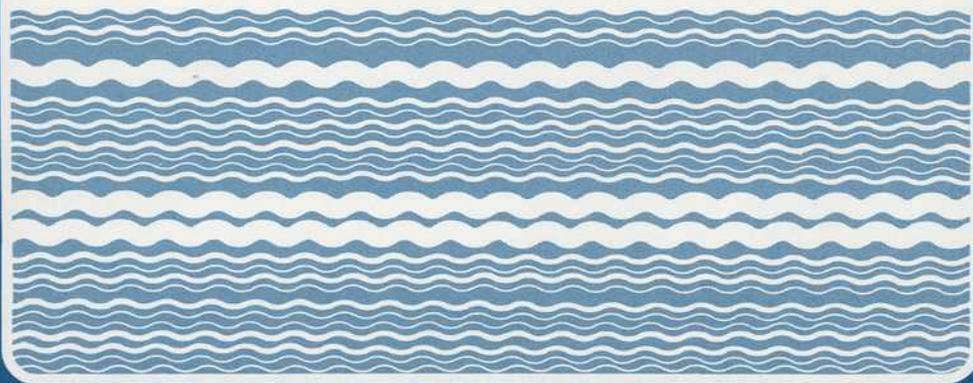


# Hydraulic Barriers in Soil and Rock



Johnson/Frobel/Cavalli/Pettersson  
*editors*

ASTM STP 874

# HYDRAULIC BARRIERS IN SOIL AND ROCK

A symposium  
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on Soil and Rock in  
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on Large Dams of the  
International Commission  
on Large Dams  
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## Foreword

This publication, *Hydraulic Barriers in Soil and Rock*, contains papers presented at the Symposium on Impermeable Barriers for Soil and Rock, which was held in Denver on 25 June 1984. The symposium was sponsored by ASTM Committee D18 on Soil and Rock in cooperation with the U.S. Committee on Large Dams (USCOLD) of the International Commission on Large Dams. A. Ivan Johnson, Woodward-Clyde Consultants, and Ronald K. Frobels, U.S. Bureau of Reclamation, presided as symposium cochairmen. They were assisted in developing the program and as session cochairmen by Nicholas J. Cavalli, ICOS Corporation of America, and C. Bernt Pettersson, Brown & Root, Inc. All are coeditors of this publication.

## Related ASTM Publications

**Special Procedures for Testing Soil and Rock for Engineering Purposes, STP 479  
(1970), 04-479000-38**

**Dispersive Clays, Related Piping and Erosion in Geotechnical Projects, STP 623  
(1977), 04-623000-38**

**Permeability and Groundwater Contaminant Transport, STP 746 (1981),  
04-746000-38**

**Hazardous Solid Waste Testing: First Conference, STP 760 (1981),  
04-760000-16**

## A Note of Appreciation to Reviewers

The quality of the papers that appear in this publication reflects not only the obvious efforts of the authors but also the unheralded, though essential, work of the reviewers. On behalf of ASTM we acknowledge with appreciation their dedication to high professional standards and their sacrifice of time and effort.

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