CONTENTS

Early Engineering in the American Southwest by Steven R. Rae and Joseph E. Minor	143
How Local Communities Can Meet Financial Obligations to Accomplish the National Environmental Goal	
by Joseph M. Grant	
The Critical U.S. Energy Situation by John J. McKetta	171
Iron, Engineers, and Urbanization by Antoinette J. Lee	179
The Challenge of Environmental Protection by Dwight F. Metzler	197
Professionalism in Construction by Walter L. Meyer	205
American Engineering Unions by Hatim M. Hajj	213
Ethical Optimization in Engineering by Emilio Rosenblueth	223
Maritime Extensions of Trans-Alaska Pipeline by Steven Flajser and Edward Wenk, Jr	245

This Journal is published aperiodically by the American Society of Civil Engineers. Publications office is at 345 East 47th Street, New York, N.Y. 10017. Address all ASCE correspondence to the Editorial and General Offices at 345 East 47th Street, New York, N.Y. 10017. Allow six weeks for change of address to become effective. Subscription price to members is \$3.00. Nonmember subscriptions available; prices obtainable on request. CO, PO, PP, SU, UP.

The Society is not responsible for any statement made or opinion expressed in its publications.

by Subhash C. Anand		259
	DISCUSSION	
	Proc. Paper 9638	
duth (Jan., 1972. Prior Discu	Engineering Projects, by Charles G. Sudssion: Oct., 1972).	275
Ethical and Social Responsibi neering Projects, by David Ma 1972).	ility in the Planning and Design of Engiann (Jan., 1972. Prior Discussions: Oct.,	
		276
	Operated with Simulation, by John M.	
Tettemer (Jan., 1972). errata		277

INFORMATION RETRIEVAL

The key words, abstract, and reference "cards" for each article in this Journal represent part of the ASCE participation in the EJC information retrieval plan. The retrieval data are placed herein so that each can be cut out, placed on a 3×5 card and given an accession number for the user's file. The accession number is then entered on key word cards so that the user can subsequently match key words to choose the articles he wishes. Details of this program were given in an August, 1962 article in CIVIL ENGINEERING, reprints of which are available on request to ASCE headquarters.