VOL. 113 NO. 8. AUG. 1987

ISSN 0733-9410 CODEN: JGENDZ

Journal of Geotechnical Engineering

AMERICAN SOCIETY OF CIVIL ENGINEERS

GEOTECHNICAL ENGINEERING DIVISION

General Information

Journal of Geotechnical Engineering covers the field of soil mechanics and foundations, with special emphasis on the relationship between the geologic environment and man-made works. Computer applications are also examined. Topics include dynamic response of foundations, earth-retaining structures, earth-supported structures, and dam construction and slope stability, as well as soil failures and their solutions.

Journal of Geotechnical Engineering (ISSN 0733-9410) is published monthly by the American Society of Civil Engineers. Publications office is at 345 East 47th Street, New York, NY 10017-2398. All editorial correspondence should be directed to the Journals Department. Second-class postage is paid at New York, NY, and at additional mailing offices.

Postmaster: Send address changes to Journal of Geotechnical Engineering, ASCE, 345 East 47th Street, New York, NY 10017-2398.

Submission of papers: Submit four copies of papers, notes, and discussions to the Journals Department. Maximum length for papers is 10,000 words; for notes, 2,500 words; for discussions, 1,250 words. Multiple submissions are not accepted for review. Indicate division and, if applicable, committee to which material is being submitted. The use of SI units is preferred; if other units are used, SI equivalents must also be given. Write or phone Journals Department for ASCE Authors' Guide to Journals, Books, and Reference Publications for complete instructions for manuscript preparation.

Reprints for authors are ordered prior to publication; others may order them by using the coupon published in ASCE News and ASCE Publications Information or contacting the Reprint Department, ASCE.

Photocopies. Permission to photocopy for personal or internal reference beyond the limits in Sections 107 and 108 of the U.S. Copyright Law is granted by the American Society of Civil Engineers for libraries and other users registered with the Copyright Clearance Center, 21 Congress Street, Salem, MA 01970, provided the appropriate fee is paid to the CCC for all articles bearing the CCC code. Requests for special permission or bulk copying should be addressed to the Journals Reprint Department, ASCE.

Subscriptions. 1987 rates are \$25.00 for members and \$100.00 for non-members. Postage outside the U.S.A. is \$8.50 additional. Single copies are \$10.00. Address all member subscription inquiries and correspondence to Member Records, ASCE. Address all nonmember inquiries and correspondence to Publications Fulfillment Department, ASCE. Subscriptions are filled for the calendar year and must be prepaid. Notify the appropriate ASCE department of address changes as soon as possible; allow six weeks for it to become effective.

This publication is abstracted in ASCE Publications Information (bimonthly), Transactions of the ASCE (annually), and Civil Engineering Database (online), and indexed in ASCE Annual Combined Index. Address inquiries to Information Products, ASCE.

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

Copyright ©1987 by American Society of Civil Engineers.

Journal of

Geotechnical Engineering

Volume 115 Number 6 August 1967
THE RESERVE AS A SHARE A SHARE AS A SHARE A SHARE AS A SHARE A SHARE A SHARE AS A SHARE AS A SHARE AS A SHARE AS A SHARE A SHA
TECHNICAL PAPERS
Design Problems in Soil Liquefaction. H. Bolton Seed827 Elastic Foundation Settlements on Sand Deposits. Joseph E. Bowles
Evaluation of Settlements in Sands due to Earthquake Shaking. Kohji Tokimatsu and H. Bolton Seed
der Moving Loads. A. M. Trochanis, R. Chelliah, and J.
Bielak
TECHNICAL NOTES
Vibration Characteristics of Dams in Narrow Canyons. Panos Dakoulas and George Gazetas
1-D Seismic Analysis of Embankment Dams. Carlos A. Prato and Elver Delmastro90
Effects of Stress History on Ballast Deformation. Vishnu A. Diyaljee90
Effects of Selected Inorganic Leachates on Clay Permeability. J. Jeffrey Peirce, Goran Sallfors, Thomas A. Peel,
and Kelly A. Witter91
Discussions
Estimating Soil Moduli from Drilled Pier Load Tests. Zdeněk J. Bažant, Jr. By T. J. Pilecki92
Pullout Resistance of "H" Piles. Ervin Hegedus and Vijay
K. Khosla. By T. J. Pilecki. By S. M. M. Rice92
Footings and Constitutive Laws. Shamsher Prakash, Swami Saran, and U. N. Sharan. By V. A. Diyaljee 92
Active Earth Pressure Behind Retaining Walls. Sangchul Bang. By Ashok K. Chugh and John D. Smart. By D. R.
Phatak, Vistasp M. Karbhari, and Anil S. Paranjpe. By Sunil
Sharma and Adolfo Alarcon
Loading Rate Method for Pile Response in Clay. Jean- Louis Briaud and Enrique Garland. By B. Ladanyi93
Lateral Force-Displacement Response of Buried Pipe.

Charles H. Trautmann and Thomas D. O'Rourke. By	
Edward A. Dickin and Dennis HW. Liem. Closure by au-	
thors	. 937
Clay Liner Permeability: Evaluation and Variation. King-	
sley Harrop-Williams. By Yalcin B. Acar, Tissa H. Illan-	
gasekare, and Michael Richardson. By David E. Daniel. Clo-	
sure by author	. 943
Uncertainty of One-Dimensional Consolidation Analysis.	
Ching S. Chang. By Han Ping Hong and Emilio Rosen-	
blueth. By Sivajogi D. Koppula. Closure by author	. 949
Liquefaction Resistance of Thickened Tailings. Steve J.	
Poulos, Eli I. Robinsky, and Thomas O. Keller. By Rob-	
ert L. Dewey. Closure by authors	. 954
Earthquake Induced Displacements of Sliding Blocks. Jeen-	
Shang Lin and Robert V. Whitman. By M. C. Constan-	
tinou, G. Gazetas, and I. G. Tadjbakhsh. Closure by authors	958
Pattern of Volume Change Development. Kanakapura S.	
Subba Rao and Gifferd C. Satyadas. By Eulalio Juárez-	
Badillo. Closure by authors	. 962