





the SHRP pavement project on U.S. 23 north of Delaware, Ohio. At three of these locations tensiometers, which are designed to measure negative pore pressures, were added to the instrumentation package. The pore pressures as recorded by the tensiometers have increased from initially negative to positive values at each location and throughout the profile in the first year after installation of the instrument package was completed. At the same time, data collected from the moisture probes were showing a corresponding increase in soil moisture content. Samples of an aggregate base and clayey subgrade material were collected at several locations on the DEL 23 project by ODOT. They were delivered to the OSU soil mechanics laboratory for classification and permeability determination. The aggregate base conformed to ODOT material specification Item 304. Measured permeability coefficients ranged between  $2 \times 10^{-2}$  and  $2.9 \times 10^{-2}$  cm/sec. The clayey material was classified as a low plasticity clay (AASHTO Classification A-6 to A-7-6) with permeability coefficients ranging between  $1 \times 10^{-6}$  and  $4 \times 10^{-8}$  cm/sec.

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A generation of construction-management students has learned from the easy-to-follow, understandable material in *Soils in Construction*. By keeping math simple and emphasizing construction operations and applications over engineering theory, the authors have created an ideal resource for non-technical, management-focused courses. Students interested in the field applications of soils will gain the knowledge they need to interact confidently with geotechnical engineers in their careers. The book's extensive discussion of soil materials in the first five chapters is supplemented by an appendix describing testing methods that can easily be adapted to the hands-on component of a course. The remaining seven chapters cover the role that soil materials play in various aspects of construction contracting. Every chapter ends with problems presenting students with the kinds of scenarios they'll face in the field.

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Rigorous and technically deep -- yet accessible -- this up-to-date introduction to geotechnical engineering explores both the principles of soil mechanics and their application to engineering practice -- emphasizing the role of geotechnical engineering in real design projects. An accompanying CD provides supplementary software developed specifically for learning purposes -- e.g., SETTRATE. Discusses site exploration and characterization; soil composition; soil classification; excavation, grading, and compacted fill; groundwater -- fundamentals and applications; stress; compressibility and settlement; rate of consolidation; strength; stability of earth slope; dams and levees; lateral earth pressures and retaining walls; structural foundations; difficult soils; soil improvement; and geotechnical earthquake engineering. Makes extensive use of photographs and example problems. For geotechnical engineers, soils engineers, ground engineers, structural engineers, and civil engineers.

For undergraduate/graduate-level foundation engineering courses. Covers the subject matter thoroughly and systematically, while

