



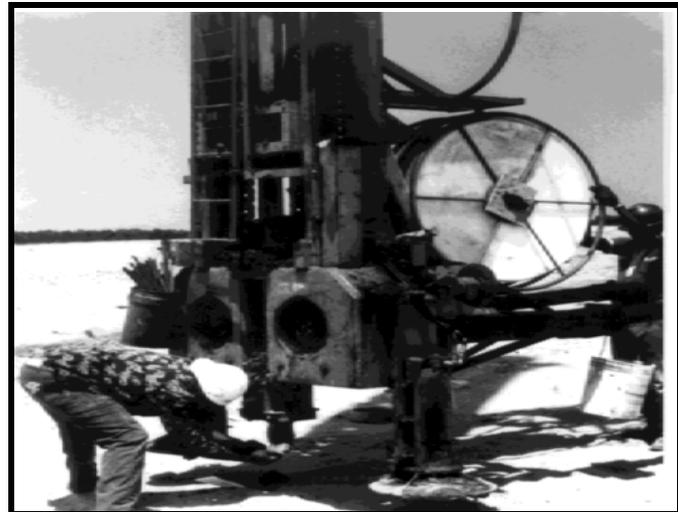
# GROUND IMPROVEMENT METHODS

## DEMONSTRATION PROJECT 116

The primary objective of Demonstration Project 116 is to enhance the acceptance and implementation of ground improvement methods by the transportation community. Ground improvement technologies are geotechnical construction methods used to modify and improve poor and marginal soil and rock conditions to meet project requirements. The ground improvement methods addressed in this project include: Grouting, Vertical Wick Drains, Soil Mixing, Stone Columns, Lightweight Fill Materials, Vibrocompaction, Dynamic Compaction, Soil Nailing, Mechanically Stabilized Earth Walls Reinforced Soil Slopes and Micropiles.

Implementing one or more ground improvement methods on a project can: increase bearing capacity, control vertical and lateral deformations, decrease imposed loads, provide lateral stability, increase resistance to liquefaction, and form a seepage cutoff and fill voids.

This Demonstration Project is intended for design generalists (project planners, roadway designers, consultant reviewers), design specialists (geotechnical, structural), construction engineers, and specification and contracting specialists involved with projects having problematic site conditions. The project scope of services can be tailored to adapt to local agency needs and issues. Federal, State and local public transportation agencies may select any or all of the project's available services.



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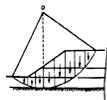
The showcase of this project is the development and distribution of a comprehensive ground improvement document which contains detailed technical summaries on each of the specific methods covered within the project. Each technical summary reflects current practice in design, construction, contracting methods and quality procedures. This publication was prepared with the practicing transportation specialist in mind and has been prepared with the benefit of extensive industry review. Services provided under the scope of Demonstration Project No. 116 include the following:

### Workshops/Seminars

- ! 2 1/2 Day Workshop on all ground improvements covering selection, preliminary design, construction methods, contracting methods and construction monitoring and inspection.
- ! Focused 1 Day Seminars on one or two ground improvement methods.

### Technical Assistance

- ! Site assessment, design development and review, specification development, and construction trouble shooting, inspection and monitoring.
- ! Experimental evaluations of unusual and major applications.



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### General Information

**Accommodations and Facilities** - Individual agencies, who host the seminars and workshops, will be responsible for designating a local coordinator to secure a suitable meeting room, supply all necessary visual aid equipment, and assist with other administrative details.



**Cost** - Free for Federal, State, and local government Transportation attendees. Attendance by non-Transportation agency personnel is at the discretion of the host agency.



**Workshop Material** - FHWA technical manuals, FHWA-SA-98-086, "Ground Improvement Technical Summaries"



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