

# Trenchless Pipeline Projects

Practical Applications

Edited by Lynn E. Osborne

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# Trenchless Pipeline Projects

## Practical Applications

Proceedings of the Conference sponsored by the Pipeline Division, ASCE

Co-sponsored by and in cooperation with:

ASCE Construction Division  
Boston Society of Civil Engineers Section  
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Water Environment Federation  
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National Utility Contractors Association  
Utility Contractors Association of New England  
National Association of Sewer Service Companies  
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Gulf Coast Trenchless Association  
Trenchless Technology Center

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**Edited by Lynn E. Osborn**

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## Abstract:

The proceedings, *Trenchless Pipeline Projects - Practical Applications*, consists of papers presented at the International Conference sponsored by the Pipeline Division of the American Society of Civil Engineers and held in Boston, Massachusetts on June 8-11, 1997. The papers explore topics from over 50 presentations at the conference covering such areas as case histories; microtunnelling; sliplining; pipe jacking; pipe rehabilitation; service laterals; manholes; inspection/evaluation methods; grouting/joint seals; gas pipelines; materials research; new construction; and the future of trenchless technology. Trenchless pipeline technologies are experiencing rapid and dramatic changes. This book provides a great opportunity to learn from the actual on-site experiences from leading experts in the field who describe recent and current projects, the challenges that had to be overcome, and the solutions used. Also presented are the technologies and methodologies being used today - as well as those that will be emerging in the years ahead.

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## FOREWORD

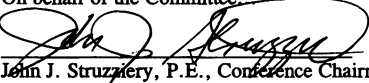
The Conference Steering Committee is pleased to present these proceedings for the "*Trenchless Pipeline Projects - Practical Applications*" on behalf of the Pipeline Division and the Boston Section of the American Society of Civil Engineers.

We take great pride in the continuation of the Pipeline Division specialty conferences. For the first time, all Technical Committees of the Pipeline Division have combined efforts to make this Congress an exceptional opportunity for learning more about trenchless technologies as they relate to pipeline infrastructure - crossings - location and installation - research - planning and design. The Congress topics apply to new pipeline installations and rehabilitation of existing pipelines.

Abstracts received for this Congress were reviewed by members of the Conference Steering Committee. Each paper contained in these proceedings was peer reviewed by members of the Steering Committee and Subcommittee task members from each Technical Committee, as well as from the Publications Committee. We thank everyone who contributed in this peer review process. All papers are eligible for discussion in the ASCE Journal of Transportation Engineering and are also eligible for ASCE awards.

Appreciation is extended to all those who worked for over the past two years to bring this conference together. These proceedings and the conference are the culmination of the volunteer efforts of many people, authors, committee and subcommittee members, and ASCE staff. The conference compliments the trenchless industry, and has been broadly supported by numerous co-sponsoring/cooperating organizations - ASCE Construction Division - Boston Society of Civil Engineers Section - North American Society for Trenchless Technology - Water Environment Federation - Trenchless Technology Magazine - National Utility Contractors Association - Utility Contractors Association of New England - National Association of Sewer Service Companies - Plastics Pipe Institute - American Society of Testing and Materials - Directional Crossing Contractors Association - Trenchless Technology Center - Northeast Trenchless Technology Society - Gulf Coast Trenchless Association.

On behalf of the Committee,



John J. Struzniery, P.E., Conference Chairman

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