Ductile-Iron Pipe
and Fittings

AWWA MANUAL M41

Third Edition

American Water Works Association

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Preface

This is the third edition of AWWA M41, *Ductile-Iron Pipe and Fittings*. This manual provides the user with both technical and general information to aid in the design, specification, procurement, installation, and understanding of ductile-iron pipe and fittings. It is a discussion of recommended practice, not an AWWA standard calling for compliance with certain specifications. It is intended for use by utilities and municipalities of all sizes, whether as a reference book or textbook for those not fully familiar with ductile-iron pipe and fitting products. Design engineers and consultants may use this manual in preparing plans and specifications for new ductile-iron pipe projects.

The manual covers ductile-iron pipe and fitting products and certain appurtenances and their application to practical installations, whether of a standard or special nature. For adequate knowledge of these products, the entire manual should be studied. Readers will also find the manual a useful source of information when assistance is needed with specific or unusual conditions. The manual contains a list of applicable national standards, which may be purchased from the respective standards organizations (e.g., AWWA, ASTM). Standards referenced in this manual refer to the latest editions.

Credit is extended to the Ductile Iron Pipe Research Association (DIPRA) for granting permission to reprint numerous graphics and tables found throughout this manual.