Design-Build FOR Water AND Wastewater Projects

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Preface

Design-Build for Water and Wastewater Projects was published in response to a growing interest in alternative delivery methods for water and wastewater infrastructure projects in the United States. Most water and wastewater industry professionals know that the processes and procedures of design-build (DB) differ from those of design-bid-build (DBB); however, gaining an understanding of why those differences impact decisions about preliminary design and planning activities, procurement, and project execution is challenging. General information about DB for water and wastewater projects is not widely described in the literature, and DB practices are not currently common knowledge because only a small percentage of industry professionals currently perform DB. The idea for a new book that focuses on DB for water and wastewater projects was initially proposed by the American Water Works Association (AWWA). Preparation of text ultimately became a collaborative effort of the AWWA, the Design-Build Institute of America (DBIA), the Water Design-Build Council (WDBC), and Water Environment Federation (WEF).

The intent of this book is to provide a basic understanding of how DB projects can be planned, procured, and executed. Best practices are highlighted with the goal that future DB projects are successful for the owners, communities, design-builders, and other trade practitioners.

Design-Build for Water and Wastewater Projects provides water and wastewater utility management, engineers, operators, and water quality staff, as well as city officials, utility policy-makers, and DB practitioners (e.g., the design-builder and other trade professionals) with knowledge about:

- The history of DB,
- The status of DB in the United States,
- The current state laws which limit DB,
- Types of projects well-suited for DB,
- The preparation steps for DB projects,
- How to procure a design-builder,
- How to execute DB projects and perform acceptance tests, and
- Bonding, insurance, and dispute resolution for DB projects.

Utility management and operations staff (referred to as owners, both private and public) can also learn what organizational and operational changes can be implemented to enhance the performance of a DB project. Other relevant topics include planning and execution tasks for design and construction, permitting and regulatory agency approvals, and schedule development. Whenever possible, examples of recently completed projects are cited, helping to illustrate lessons learned.

Authors for the chapters in this book were solicited from all aspects of the DB industry. They are active in DB organizations and are enthusiastic about educating the water and wastewater industry about DB practices. They authored chapters with topics related to their areas of expertise and injected personal project experience to help convey pertinent concepts.
The development of *Design-Build for Water and Wastewater Projects* greatly benefited from the assistance of several people. Sarah Chittenden of the WDBC provided industry information and a link to several authors. Chuck Williams and Patrick Gallagher were willing advisors for technical and editorial decisions. The WDBC provided guidance on topics for the outline. Lisa Washington, John Young, and Jack Gallagher, leaders within DBIA, provided assistance and guidance throughout the book effort. Marlay B. Price of Gannett Fleming Inc. and past president of the American Water Works Association helped solicit the case studies. Black & Veatch Corporation supported the editorial activities. Beth Edie and Julie Farmer, both at Black & Veatch Corporation, worked diligently on formatting of text and figures.

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