

CIVIL ENGINEERING FOR THE COMMUNITY

Dennis Randolph



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ABSTRACT

Civil Engineering for the Community is intended as a source for the novice and more experienced civil engineer. This book provides a sense of the way an engineer can provide service to the public while recognizing that conflict can often occur when working for a local government organization. For this reason, non-technical aspects of engineering such as communication skills, the management of people and machines, and the need to change are stressed. By presenting a variety of ideas with examples to illustrate them, this book provides the civil engineer with ways to better serve the public. Therefore, this book can be used as a career guide for engineers at the local government level.

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"It must be remembered that there is nothing more difficult to plan, more uncertain of success, nor more dangerous to manage than the creation of a new order of things. For the initiator has the enmity of all who would profit by the preservation of the old institutions, and merely lukewarm defenders in those who would gain by the new ones."

(Machiavelli)

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INTRODUCTION

It used to be that everyone knew the Golden Rule “In everything, do to others what you would have them do to you.” (Matthew 7:12). But the apparent rejection of the golden rule has left our society drifting, with many of its parts floating about. The Civil Engineering profession is one of those parts and there can be no better illustration of this drift than the changing of the profession at the local government level.

In the past, many cities and counties hired civil engineers for top management positions, including public works directors, and such non-engineering positions as city or county managers. Now some local governments are hesitant to fill their most responsible positions with civil engineers. One reason is that they feel that the profession is not especially people oriented. This feeling comes from a concern about the negative impact civil engineering projects may have on the environment.

Still, civil engineering in local government remains an attractive and satisfying profession that draws new members each year. Satisfying and attractive because it offers security, monetary rewards, and the opportunity to do things for the community. But, beginning a career in civil engineering at the local government level is difficult. To a certain extent we expect this. Yet, though we expect difficulty there is little that most people can do to prevent such difficulty or to ease the change to the working world from the world of school and training.

Professional education emphasizes values necessary to succeed in the private sector, but these values, and even the technical skills taught are not all the skills needed for a successful career in city or county government. Because of this absence of skills, and the very negative connotation that government jobs have had for many years, it is difficult for the young engineer to get a good start in a public sector career.

The purpose of this book is to provide a guide for the engineer just entering a career in the public sector. I have not intended this book to be a road map to navigate the inner-most workings of a local government organization. Neither have I envisioned this as a workbook that has answers to the ten most common questions that engineers in local government get asked.

Instead, I have envisioned this book as a basic guide that will help engineers set a course for their career. I also want this book to be helpful for the more experienced engineer that needs support when the pressures to go along “because that is the way it has always been done” reach an intolerable level. For these people the book may provide a sense of the way in which we can provide service to the public.