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#### **<u>READ FIRST:</u>** <u>How to Use This Guidebook</u>

This guide for the Construction PE Exam is intended to help walk you through studying for the PM portion of the PE exam. Here, you will find all of the study material needed for the construction portion of the exam. We have spent countless hours reviewing material from the Civil Engineering Reference Manual (CERM), the NCEES design standards, study guides, the internet, and other engineering manuals to ensure that we have provided you with the most up-to-date and accurate resource available.

You are encouraged to study the other AM modules before you begin to study this book and prepare for the construction AM and PM. However, the majority of your study time should be on construction related topics. Remember that 48 questions or 60% of the exam is from the material within this book. If you ace the construction section and just get 2 out of 8 questions right on each of the other sections, you will pass the PE exam. The previous statement is just to make you understand the importance of construction depth module for your exam. Studying all the modules is highly encouraged. Use the self-study schedule to plan out how you are going to study. At least 50% of your time should be dedicated to construction engineering.

When you begin studying from the book use the following approach:

- 1. Buy all required design standard first thing.
- 2. Print out e-book and place in 3" binder. Tab each chapter.
- 3. Go to <u>http://www.learncivilengineering.com/pe-exam-study-smarter/construction-engineering/</u> and print off the construction engineering cheat sheet and put it in the front part of the book. Add to it as needed.
- 4. Read through one chapter at a time. As you read through and notice references to design standard sections make sure to tab those sections.
- 5. Once you complete each chapter, solve as many problems as you can that relate to the chapter you just covered. Do at least three problems from other sources. If you have any questions on a technique or a concept, ask the questions at either <u>www.learncivilengineering.com</u> or <u>www.engineerboards.com</u>.
- 6. Place those problems inside the construction binder behind the chapter and make a tab labeled "Problems". Also, if you use the design standards when solving problems, make sure to tab them as well.

If you follow this approach, you will have solved multiple problems for every section and you will have all your design standards, notes pages, and problems fully tabbed so that you can easily reference them during the actual exam.

# **TOPIC I: Earthwork Construction and Layout**

## **Chapter**

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