



# BLUEPRINT READING FOR COMMERCIAL CONSTRUCTION

## A FUNDAMENTAL SKILL FOR ANYONE INVOLVED IN THE CONSTRUCTION INDUSTRY

Construction drawings can be difficult to understand and mistakes can be costly. Being able to read and understand construction drawings is a fundamental skill for anyone involved in the construction industry. In this series, participants will gain the skills necessary to read and understand typical construction documents - blueprints and specifications.



### SESSION #1: GENERAL CONSTRUCTION / CIVIL / PROJECT DELIVERY METHODS

This session will provide the participant with an introduction to the life cycle of a construction project from project conception, through design, construction, and project closeout. Participants will learn about project delivery methods, such as the traditional Design-Bid-Build, as well as alternative delivery methods, including Design-Build and Construction Management. Roles of the various parties in each delivery method will be discussed: owner, architect, engineer, contractor, and subcontractor.



PROJECT  
MANAGEMENT



ECOLOGICAL

Cancellation Policy: Registration cancellations must be submitted to Master Builders of Iowa via email to [nfry@mbionline.com](mailto:nfry@mbionline.com). Cancellation requests submitted at least 14 days prior to the start of this program will be refunded 100%. Cancellations received between 7 and 14 days prior to the start of this program will be refunded 50%. No refund for cancellations less than 7 days prior to the start of this program. No refund for No-Shows.



The Master Builder designation program will offer various credits for completion of these sessions. For more information on becoming a 'Master Builder', please visit MBI's website at: [www.mbionline.com/master-builder-designation](http://www.mbionline.com/master-builder-designation)

### SESSION #2: ARCHITECTURAL / STRUCTURAL

This session will focus on the reading and use of architectural and structural plans and specifications. Architectural and structural plan reading topics to be discussed include the following:

- Standard symbols, plan organization, specification organization
- Use of standard architectural scales
- Architectural plan views, details, elevations, and sections
- Use of architectural schedules, notes, and symbols
- Structural foundation plans
- Plan reading for structural building systems, including precast concrete, structural steel, site cast concrete, and masonry



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PRESENTED BY  
**BRAD PERKINS**  
CONSTRUCTION ENGINEERING  
IOWA STATE UNIVERSITY

Brad graduated from the Iowa State University Construction Engineering program in 1997. He has worked at Black & Veatch in Overland Park, Kansas, ACI Mechanical in Ames, Iowa, and KJWW Engineering in Des Moines, Iowa. In 2001, he passed the Iowa PE exam, and is a licensed professional mechanical engineer. Some of the larger projects that Brad has worked on include the Lungmen Nuclear power plant (Taiwan), Valley High School remodel (Des Moines), State of Iowa Laboratory (Ankeny), and Allied Insurance Building (Des Moines).

### SESSION #3: PLUMBING / MECHANICAL / ELECTRICAL

This session will focus on the reading and use of mechanical, electrical, and plumbing plans and specifications. Topics to be include the following:

- Standard symbols, plan organization, specification organization
- Mechanical systems, equipment, ductwork, and schedules
- Plumbing systems, equipment, piping, and schedules
- Electrical systems, equipment, wiring, conduit, one-line diagrams, and schedules
- Electrical site plan
- Mechanical, plumbing, and electrical details



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**NEW**

## ADVANCED BLUEPRINT READING

**DES MOINES: OCTOBER 26, 2018**

8:00 am - 4:00 pm

**WATERLOO: MARCH 8, 2019**

8:00 am - 4:00 pm

REGISTRATION MATERIALS COMING SOON