

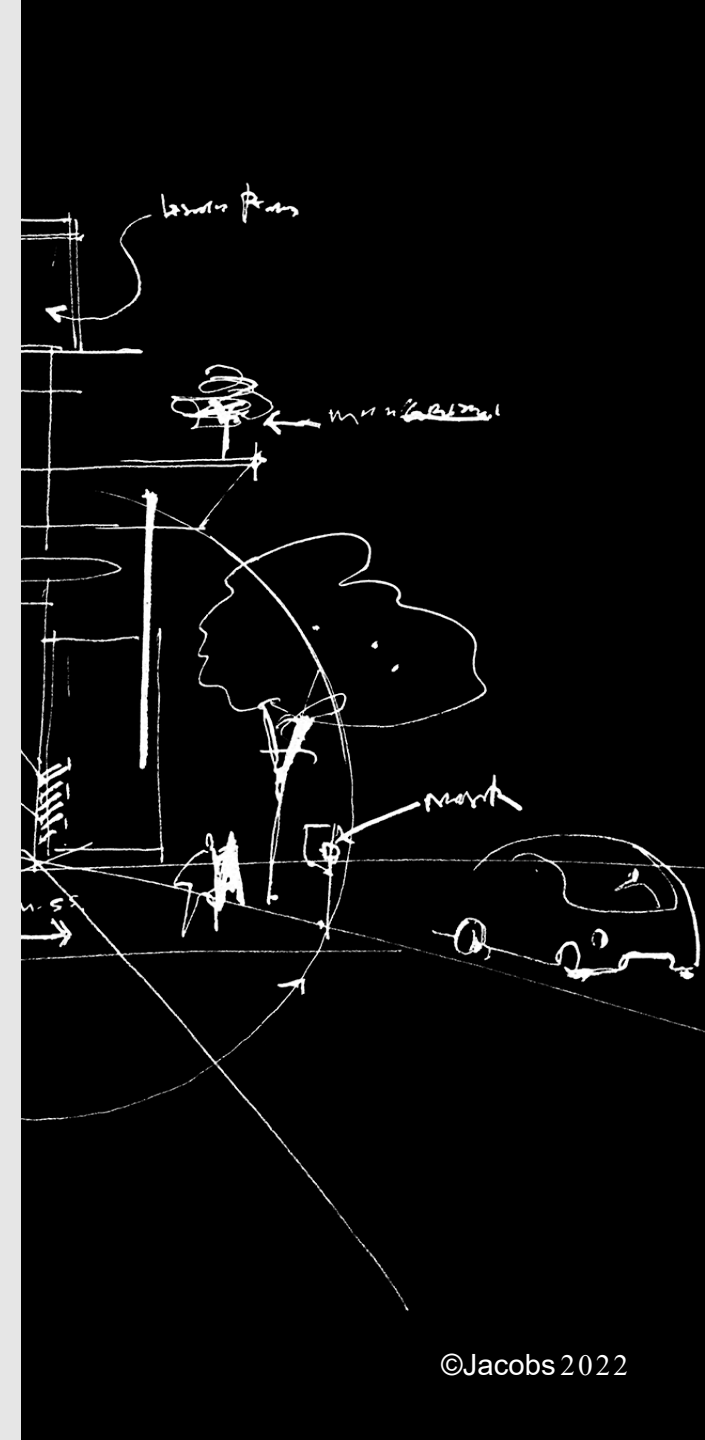
Delivering Capital Projects

A Young Professional's Introduction to
Construction Contracting

PNWS April 2022

Roadmap

- Terminology
- What are Contract Documents?
- Industry Standards
- Organization of Contract Documents
- Owner Coordination
- Construction Administration
- How to Learn More



Introduction

- The design engineer's role is to prepare documents that tell a contractor what they need to know to deliver the project that satisfies the Owner's objectives.
- Ideally, the documents **communicate to the contractor what they need to know to build the project, not more and not less.**
- The foundation of every construction project is the method in which it will be delivered, and the contract which describes that method;
- **No amount of technical detail in the plans and specs will overcome a poorly written contract.**

Terminology

- **Contract Documents**
- The process by which a Contractor and an Owner enter into an agreement to use a certain set of conditions and requirements to deliver a certain work result.
- What's that word?
 - Construction Documents
 - Specifications
 - Project Manual
 - The Spec Book
 - Front-Ends
- **Construction Contract Administration**
- Assisting the owner to administer the contract for construction, often performed by the Engineer or Architect
- What's that word?
 - Construction Administration (CA)
 - Services During Construction (SDC)
- What's it not?
 - Construction Management

What are the “Contract Documents?” (*Traditionally)

- Legally binding
- Written and Graphical
- Defined
- Contracting Requirements
- Specifications
- Drawings

- The “Work”
- Roles and Responsibilities
- Administrative and Organizational
- Performance and Payment
- Risk Assignment and Claims
- Changes and Modifications

Industry Standards

Industry Organizations Publishing Standards

- Engineer's Joint Contract Documents Committee (EJCDC)
- American Institute of Architects (AIA)
- Design-Build Institute of America (DBIA)
- Association of General Contractors (AGC)
- Construction Management Association of America (CMAA)
- State Departments of Transportation (DOT)
- Construction Specifications Institute (CSI)

Why Use Industry Standards?

- Comprehensive (Nothing missing)
- Created and peer-reviewed by industry experts
- Updated regularly
- Reflect changes in industry practices
- Consistency in the location of information
- Tested for years on real projects
- Interpreted by courts in various jurisdictions
- Balanced and fair to all parties (Risk allocation)

Organization of Contract Documents

CSIMasterFormat

Organization of Documents





Division 00: Procurement and Contracting Requirements

Procurement Requirements

- Invitation and Instructions to Bidders
- Bid Form
- Pre-qualifications

Contract Forms

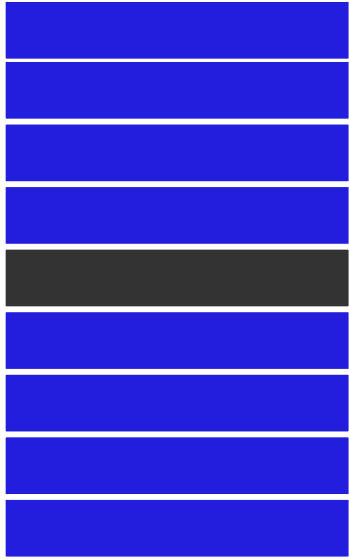
- Agreement

Project Forms

- Performance Bond and Payment Bond
- Insurance
- Certifications

Conditions of the Contract

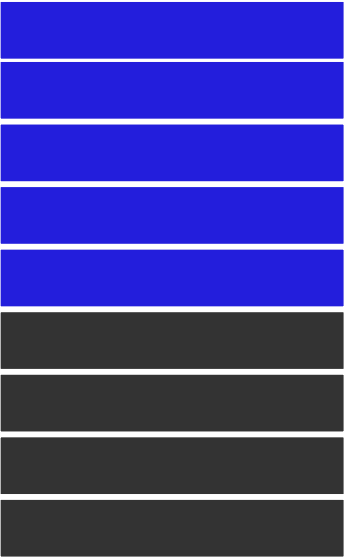
- General Conditions
- Supplementary Conditions



Division 01: General Requirements

General
Requirements

Section	Title
01 10 00	Summary
01 20 00	Price and Payment Procedures
01 30 00	Administrative Requirements
01 40 00	Quality Requirements
01 50 00	Temporary Facilities and Controls
01 60 00	Product Requirements
01 70 00	Execution and Closeout Requirements
01 80 00	Performance Requirements
01 90 00	Life Cycle Analysis



Technical Requirements, Addenda, and Contract Amendments

Technical Requirements

- Division 02 through 49 Specifications

Drawings

Addenda

- Issued Prior to Submission of Bids

Contract Modifications

- Change Orders, Field Orders, and Work Change Directives
- Contract Amendments

Preparing Contract Documents

Owner Collaboration – Engage Early!

- Owner's needs, concerns, past issues
- Owner's experience with construction contracting
- Owner's resources to administer the contract
- Owner's funding source and mechanism to pay for the Work
- Owner's specific purchasing and procurement requirements
 - Local, State, or Federal procurement rules
 - Grant or Loan rules
- Owner's roles and responsibilities during construction

Why NOT Use Industry Standards?

- Owner uses a custom contract
- Type of available standard contract does not fit the project type
- Local contractor familiarity with existing Owner documents
- Owner's contracting policies are not likely to be easily changed
- Getting new contract documents approved could take a long time

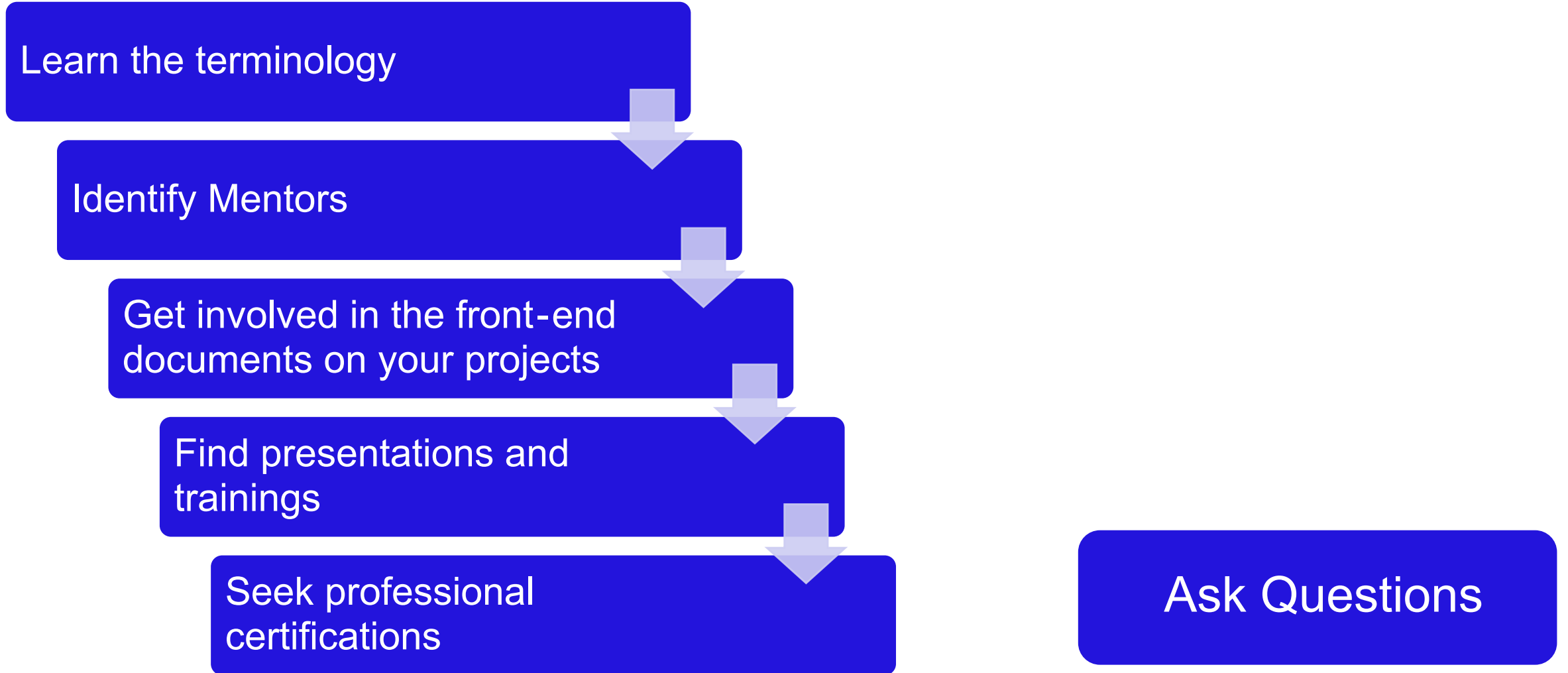
Administering the Contract

Construction Contract Administration

- Engineer's Roles during Construction
 - Permits, Bonds, and Insurance
 - Contractor Pay Application Review
 - Interpretation of Contract Documents (Requests for Information – RFIs)
 - Submittal and Shop Drawing Review
 - Substitutions
 - Defective Work
 - Claims and Disputes
- Resident Project Representative

[Learn More](#)

How You Can Learn about Construction Contracting



Takeaways

- Seek Out Industry Standards
 - Standard Contracts
 - Organization of Documents
- Engage with the Owner Early

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