The Contract Administration portion of the examination will be administered daily in Computer Based Testing (CBT) format. The examination will consist of 50 equally weighted questions covering the management and operation activities of a construction company.

You should be prepared to respond to examination questions on any of the content areas listed. Questions asked and content areas tested on previous examinations should not be assumed to be the only possible questions to be asked or content areas to be tested on this examination.

The examination will have questions relating to the following content areas and necessary knowledge for each area includes:

- reading and interpreting plans and specifications
- reading and interpreting codes
- basic mathematics
  - (addition, subtraction, multiplication, division, calculations of area and volume, fractions, decimals, percentages, calculating the sides of triangles, square roots, powers of numbers, and solving simple algebraic equations for unknown variables)

The percentage of questions shown for each content area may vary by as much as plus or minus three (3) percent. Please refer to the Candidate Information Brochure and the Reference List for additional information.

### Content Area A 28%

#### Preconstruction Activities

1. Preparing cost-estimates
   - knowledge of cost-estimates in bidding estimate using take-offs
     - knowledge of material estimating and costing
     - knowledge of labor estimating and costing
     - knowledge of equipment estimating and costing
     - knowledge of overhead costs
     - knowledge of contract requirements

2. Obtaining and evaluating bids
   - knowledge of estimates from subcontractors and suppliers
   - knowledge of unit price and lump sum methods for bids
   - check bid specifications for completeness
     - knowledge of general specifications
     - knowledge of plans
     - knowledge of site and codes
   - determine proper bid by calculating margins of profit
     - knowledge of calculating profit
     - knowledge of fixed and variable costs
     - knowledge of profitability break-even point

3. Estimating using systems approach (square foot method)
   - ability to figure overall job costs
   - ability to interpret charts for square foot estimating

4. Understanding penalties and contingencies

### Content Area B 38%

#### Project Contracts

1. Types of contracts
   - lump sum
   - cost plus
   - guaranteed maximum price
   - unit cost

2. Form of contract and legal issues
   - knowledge of general conditions for contracts
   - knowledge of supplemental general conditions for contracts
   - knowledge of special conditions for contracts
   - knowledge of specifications for contracts
   - knowledge of lien laws
3. **Developing subcontracts**  
   knowledge of contract law  
   knowledge of work orders  
   knowledge of monitoring subcontracts  
   knowledge of contract documents  
   (e.g., addenda)

4. **Contract amendments**  
   knowledge of change orders  
   knowledge of authorizations (e.g., field orders)  
   knowledge of change directives

5. **Payment issues**  
   knowledge of payment methods  
   knowledge of payment procedures  
   knowledge of payment schedules  
   knowledge of schedule of values  
   knowledge of payment for onsite/offsite material storage  
   knowledge of partial release of lien  
   knowledge of change directives

6. **Contract closeout**  
   knowledge of the concept of and what constitutes substantial completion  
   knowledge of release of retainage funds  
   knowledge of warranties knowledge of final release of lien knowledge of final punch lists and their relationship to contract documents

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**Content Area D**  
**Construction Procedures and Operations**  
1. **Construction scheduling**  
   knowledge of follow-up with suppliers (submittals)  
   knowledge of time for architect and engineer to approve submittals  
   knowledge of shipping, scheduling, deliveries, storage, and lead times  
   knowledge of flow charts, Critical Path Method (CPM)  
   knowledge of progress, predictions (i.e., look ahead), deficiencies in scheduling

2. **Coordinating construction activities**  
   knowledge of subcontractor meetings  
   knowledge of daily logs for subcontractors and contractors  
   knowledge of scheduling personnel and contractors  
   knowledge of scheduling subcontractors and suppliers  
   knowledge of safety meetings  
   knowledge of inventory controls

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**Content Area C**  
**Obtaining Licenses, Permits and Approvals**  
1. **Identifying activities which do and do not require permits**  
   knowledge of licenses required for different work activities

2. **Obtaining permits**  
   knowledge of local requirements  
   knowledge of kinds available  
   knowledge of permit qualifiers  
   knowledge of exemptions from inspections, permits, and approvals

3. **Arranging for inspections**  
   knowledge of local requirements  
   knowledge of proper sequence of inspections  
   knowledge of special inspections  
   (e.g., threshold, environmental, plumbing)