The Contract Administration portion of the examination will be administered daily in Computer Based Testing (CBT) format. The examination will consist of 45 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 27%

**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 40%

**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 interior punch list

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

Content Area D 13%
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

Content Area C 20%
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)