

■ ACHA DETAILED CONTENT OUTLINE

1. PLANNING

Total 20 questions

- A. Context Awareness and Analysis
 - 1. Confirm and advise on strategic plan
 - 2. Confirm and advise on feasibility
 - 3. Establish clear goals and objectives
 - 4. Determine constraints
 - a. Regulatory
 - b. Physical
 - c. Budgetary
 - d. Schedule
 - 5. Identify the review and approval process and participants
 - 6. Identify relevant trends in
 - a. healthcare practice
 - b. technology
 - c. market
 - d. healthcare delivery patterns
 - e. licensing, regulations and standards
 - 7. Collect information on community context, existing site, and buildings
 - 8. Collect or create documentation of existing conditions
 - 9. Assess existing conditions for obsolescence/current code compliance
- B. Site and Facilities Master Planning
 - 1. Evaluate access and accessibility of site (e.g., parking, entrances, etc.)
 - 2. Establish internal and external circulation patterns
 - 3. Establish functional adjacencies and synergies
 - 4. Determine expansion and phasing opportunities and constraints
 - 5. Match space needs with facility type
 - 6. Develop alternative scenarios for physical solutions
 - 7. Assess alternative solutions relative to objectives
 - 8. Establish infrastructure strategies
 - 9. Assist in selection and refinement in preferred solution
 - 10. Assist in communication and approval of plan

2. PROGRAMMING

Total 19 questions

- A. Workload Analysis
 - 1. Exhibit understanding of healthcare procedures and processes
 - 2. Identify workload trends as related to capacity
 - 3. Calculate room and equipment utilization
 - 4. Recognize industry norms and specific factors influencing utilization
- B. Existing Facility Capacity Analysis
 - 1. Compare existing conditions and capacity to projected needs
 - a. Quality
 - b. Quantity
 - c. Adjacencies
 - 2. Compare existing conditions to norms and best practices
- C. Facilities Programming
 - 1. Establish key room types and quantities
 - 2. Develop a comprehensive space list
 - 3. Establish total net, departmental gross, and building gross given facility type (e.g., academic, pediatric, etc.)
 - 4. Develop functional description
 - 5. Establish diagrammatic relationships
 - 6. Establish major equipment requirements
 - 7. Identify viable mechanical systems

- 8. Estimate mechanical system space types and requirements
- 9. Produce unit/cost estimates
- 10. Assess scope against operational/construction cost and revise as necessary

3. DESIGN

Total 27 questions

- A. Facilities Planning and Design
 - 1. Confirm project goals and objectives
 - 2. Confirm project constraints and opportunities
 - 3. Confirm functional service components and location options
 - 4. Confirm overall program requirements for departments and common areas
 - 5. Conduct building and health facilities code research
 - 6. Establish interdepartmental relationships and vertical/horizontal adjacencies by preparing
 - a. stacking diagrams
 - b. plan diagrams
 - 7. Design and plan circulation, structural, and infrastructure concepts
 - 8. Design and plan building flexibility and expansion options
 - 9. Synthesize and integrate the design and planning of
 - a. functional arrangements
 - b. building massing and envelope
 - c. site and context (e.g., access points, parking, topography, etc.)
 - 10. Study major internal and exterior form and space elements
 - 11. Coordinate architectural design with building systems design
 - 12. Research/study major building materials and systems options
 - 13. Assess and prioritize design and planning options
 - 14. Present, refine, and develop consensus
 - 15. Present final options for review
 - 16. Sign off on proposed building concept
- B. Departmental Planning and Design
 - 1. Confirm intradepartmental space requirements and adjacencies
 - 2. Confirm departmental constraints and opportunities
 - 3. Design and plan intradepartmental circulation, structure, and infrastructure concepts
 - 4. Plan and design flexibility and expansion options
 - 5. Prepare departmental plans to include
 - a. the size and arrangement of all department spaces
 - b. horizontal/vertical intradepartmental circulation
 - c. horizontal/vertical intradepartmental materials movement
 - 6. Coordinate architectural design with building systems design
 - 7. Assess and prioritize design and planning options
 - 8. Present, refine, and develop consensus
 - 9. Present final options for review
 - 10. Signoff on approved plan
- C. Space Planning and Design
 - 1. Develop room data sheets for all functional spaces
 - 2. Develop enlarged floor/ceiling plans of primary activity areas
 - a. patient care and treatment spaces
 - b. primary staff work areas
 - c. other key departmental spaces

3. Develop enlarged interior elevation studies of above spaces
4. Prepare full scale mock-ups of key patient care and treatment spaces
5. Test mock-ups under simulated and real patient care scenarios
6. Coordinate equipment layouts and requirements
7. Coordinate architectural design with building systems design
8. Refine design of spaces as necessary
9. Assess and prioritize design and planning options
10. Present, refine, and develop consensus
11. Present final options for review
12. Sign off on room data and space design documents

D. Equipment Planning

1. Present, refine, and develop consensus
2. Present final equipment list and data for review
3. Sign off on equipment list and data

4. DOCUMENTATION

Total 17 questions

A. Contracts

1. Prepare, review, and execute Owner-Architect Agreement
2. Prepare, review, and execute Architect-Consultant Agreements
3. Analyze and incorporate language specific to healthcare facility licensing requirements
4. Prepare schedule for coordinating and completing project documentation

B. Construction Documents

1. Prepare code analysis to verify compliance with local, state, and federal requirements
2. Prepare analysis to verify compliance with AIA Guidelines or similar state requirements
3. Prepare analysis to verify compliance with requirements of JCAHO and HCFA
4. Prepare Life Safety plans and narrative
5. Prepare drawings to convey the full intent of the project design
6. Prepare analysis to verify compliance with zoning and land use requirements
7. Review project with consultants at regular intervals to verify complete understanding of all requirements for design, codes, and standards
8. Review project with appropriate Authority Having Jurisdiction and building officials to ascertain agreement on code/licensing issues
9. Prepare sequence of documents completion for possible phasing or staggered permits
10. Prepare complete list of construction documents
11. Prepare final construction documents for Owner review and sign-off

C. Specifications

1. Prepare bidding requirements, contract forms, and General Conditions
2. Prepare special general requirements appropriate to a healthcare project
3. Prepare technical sections that include unique requirements appropriate to a healthcare project
4. Ascertain specific Owner input on unique facility requirements for construction and product selection
5. Prepare complete list of Project Manual divisions and sections required
6. Prepare final specifications for Owner review and sign-off

5. CONSTRUCTION ADMINISTRATION

Total 11 questions

- A. Ensure government and licensing agencies review Construction Documents
- B. Ensure all subcontractor submittals and fees are being processed appropriately in a timely manner
- C. Set meetings with governing authorities to ensure proper understanding of project and schedule
- D. Ensure that contractor has coordinated MEP subcontractors' work prior to actual construction of healthcare projects
- E. Ensure contractors have owner vendor drawings (i.e., fixed medical equipment)
- F. Hold pre-construction meetings with appropriate subcontractors
- G. Schedule regular project coordination meetings
- H. Review all State and other governmental agencies that may require applications for approval including Certificate of Need, Licensing, and other related approvals
- I. Assist contractor with checklist
- J. Review owner provided fixed medical equipment submittals for coordination with contract documents
- K. Review owner revisions to fixed medical equipment and telecommunications throughout the project as changes and upgrades are made
- L. Issue changes to Contractor
- M. Issue CCD's (Construction Change Directives) as required and review costs by contractor for healthcare projects
- N. Assist the owner in Variance or Waiver requests as required for attaining final approval, licensing, or Certificate of Occupancy issued by local and governmental authorities

6. POST CONSTRUCTION SERVICES

Total 6 questions

A. Commissioning

1. Identify and review appropriate safety and code authorizations
2. Communicate essential building system and operations information to owner staff
3. Complete and transmit "as-built" documents to owner
4. Assemble and archive critical project documents, correspondence, meeting notes, and other relevant material
5. Confirm completion of all relevant construction tasks to owner

B. Post Occupancy Evaluation

1. Assess the correlation between original project goals and actual building function
2. Document building systems and current operational performance
3. Direct studies and evaluate results of space utilization and user satisfaction
4. Develop recommendations relative to planning and design of similar facilities

C. Research and Development

1. Define research objectives and anticipated outcomes
2. Select effective research methodologies related to healthcare procedures, behavioral responses to healthcare environments, functional design of healthcare spaces, and other related topics
3. Access relevant sources of printed, Internet, and other sources of knowledge bases
4. Evaluate research for accuracy, appropriateness, and implications to healthcare planning and architecture

TOTALS 100 questions