

## **MAJOR PHASES AND STEPS IN THE PROCESS**

The following sections outline the major phases of a construction project and examples of the tasks that need to be accomplished during each phase. To the right of each activity is a chart that indicates which of the major participants plays the primary (P), secondary (S), or optional (O) responsibility role with the activity.



## PLANNING PHASE (PRE-DESIGN)

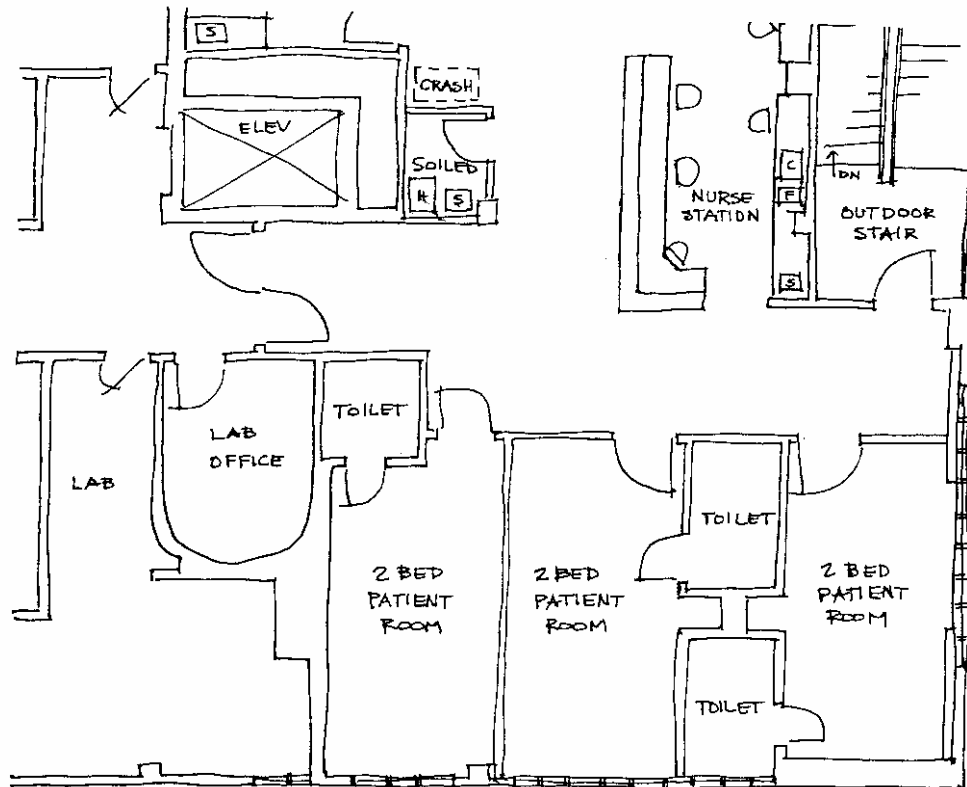
| PLANNING OR PRE-DESIGN STEPS     | Owner | Designer | Contractor |
|----------------------------------|-------|----------|------------|
| PROJECT FEASIBILITY              |       |          |            |
| Marketing studies                | P     |          |            |
| Economic feasibility studies     | P     |          |            |
| PROJECT DEFINITION               |       |          |            |
| Space and Functional Programming | S     | P        |            |
| Project budgeting                | S     | P        | O          |
| Project scheduling               | S     | P        | O          |
| SITE ANALYSIS                    |       |          |            |
| Site Evaluation and Selection    | P     | O        |            |
| Site analysis                    | S     | P        |            |
| Site master planning             | S     | P        |            |
| Utility studies                  | S     | P        |            |
| Soils studies                    | S     | P        |            |
| Site surveys                     | S     | P        |            |
| Environmental studies            | P     | S        |            |
| Building surveys                 | S     | P        | O          |



## SCHEMATIC DESIGN PHASE

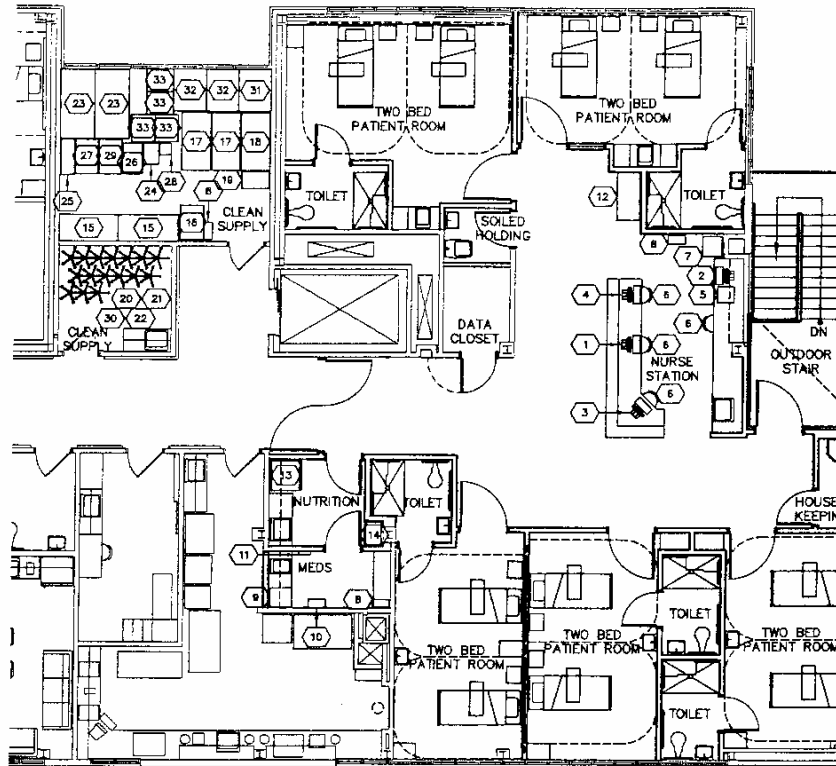
### SCHEMATIC DESIGN PHASE

|  | Owner | Designer | Contractor |
|--|-------|----------|------------|
| Owner meetings                                 | S     | P        |            |
| Collection of Owner supplied data              | P     |          |            |
| Development of alternatives                    |       | P        |            |
| Review alternatives with Owner                 | P     | S        |            |
| Refine alternative until approved              |       | P        |            |
| Code study                                     |       | P        |            |
| Materials research                             |       | P        |            |
| Architectural and Engineering schematic design |       | P        |            |
| Preliminary review with Agencies               | S     | P        |            |
| Planning and Zoning review and permitting      | S     | P        |            |
| Statement of Probable Construction cost        |       | P        | O          |
| Value Engineering                              | S     | P        | O          |
| Project scheduling                             | S     | P        | O          |



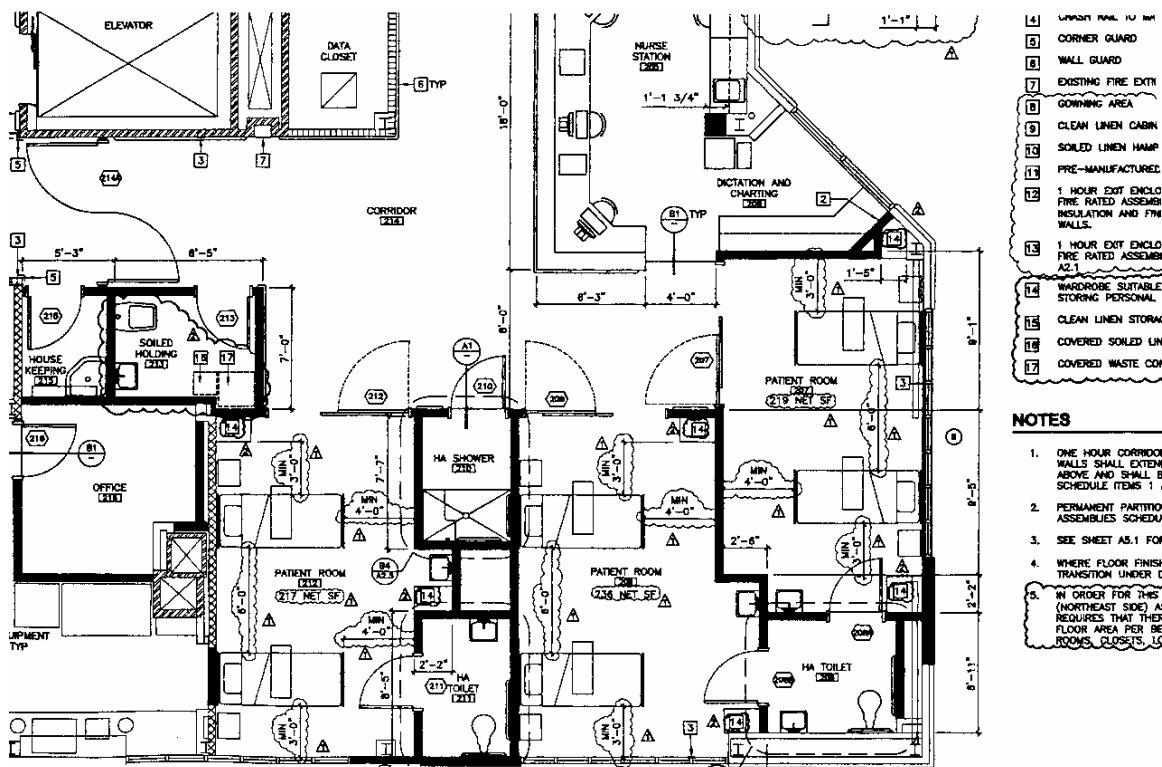
## DESIGN DEVELOPMENT PHASE

| DESIGN DEVELOPMENT PHASE                         | Owner | Designer | Contractor |
|--|-------|----------|------------|
| Owner meetings                                   | S     | P        |            |
| Collection of equipment, furnishings info        | P     |          |            |
| Architectural and Engineering design development |       | P        |            |
| Addition of equipment, furnishings to drawings   |       | P        |            |
| Decisions on all utility systems                 | S     | P        |            |
| Review design development with Owner             | P     | S        |            |
| Revise design development until approved         |       | P        |            |
| Outline specifications                           |       | P        |            |
| Update the probable construction cost            | S     | P        | O          |
| Value Engineering                                | S     | P        | O          |
| Update the project schedule                      | S     | P        | O          |



## CONSTRUCTION DOCUMENTS PHASE

| CONSTRUCTION DOCUMENTS PHASE                   | Owner | Designer | Contractor |
|--|-------|----------|------------|
| Architectural and Engineering drawings         |       | P        |            |
| Architectural and Engineering specifications   |       | P        |            |
| Coordination of disciplines                    |       | P        |            |
| Materials and details research and development |       | P        |            |
| Bid Documents ('front end')                    | P     | S        | O          |
| Quality assurance reviews (check set)          | S     | P        | O          |



### AGENCY REVIEW PHASE

| AGENCY REVIEW PHASE               | Owner | Designer | Contractor |
|-----------------------------------|-------|----------|------------|
| Agency application forms          |       | P        |            |
| Submit project documents          |       | P        |            |
| Respond to Agency review comments |       | P        |            |
| Revise until approved             |       | P        |            |



## BIDDING PHASE

| BIDDING AND NEGOTIATION PHASE     | Owner | Designer | Contractor |
|-----------------------------------|-------|----------|------------|
| Select bidders                    | P     | S        |            |
| Issue bid documents to bidders    |       | P        |            |
| Develop pricing for project       |       |          | P          |
| Issue addenda                     |       | P        |            |
| Pre-bid conference                | P     | S        |            |
| Receipt of bids (develop bid tab) | P     |          |            |
| Evaluation of bids                | P     | S        |            |
| Analysis of Alternates            | P     | S        |            |
| Contract award                    | P     |          | S          |



BLACKBIRD

ASSOCIATES

2320 J STREET, SACRAMENTO, CALIFORNIA 95816-4714  
TEL 916.446.6227, FAX 916.446.7877 LESLIE@BLACKBIRDASSOC.COM

## CONSTRUCTION PHASE

| CONSTRUCTION PHASE                          | Owner | Designer | Contractor |
|---|-------|----------|------------|
| Pre-construction conference                 | P     | S        | S          |
| Obtain building permit                      |       | P        | S          |
| Schedule of Values (contract sum)           |       | S        | P          |
| Approved project time (contract time)       |       | S        | P          |
| Project Meetings                            | S     | S        | P          |
| Shop drawings/submittals                    |       | S        | P          |
| Deferred approvals                          |       | P        | S          |
| Requests for Information (RFI)              |       | S        | P          |
| Architect's Supplementary Instruction (ASI) |       | P        | S          |
| Inspections                                 | P     |          | S          |
| Agency Inspections                          |       |          | P          |
| Materials Testing                           | P     |          | S          |
| Equipment purchasing and coordination       | P     |          |            |
| Signage                                     | P     |          |            |
| Changes to the work                         | P     | S        | P          |
| Contractor quotes                           | S     | S        | P          |
| Change Order                                | P     | S        | P          |
| Pay Application                             | P     | S        | P          |
| Schedule monitoring                         | S     | S        | P          |
| Close out                                   |       | S        | P          |
| Punch list                                  |       | P        | S          |
| Record Documents                            |       | P        | S          |
| Operating and Maintenance manuals           |       | S        | P          |
| Warrantees                                  |       | S        | P          |
| Agency approval                             |       |          | P          |

| POST CONSTRUCTION PHASE               | Owner | Designer | Contractor |
|---------------------------------------|-------|----------|------------|
| Equipment and furnishing installation | P     |          |            |
| Owner move-in                         | P     |          |            |
| Commissioning                         |       | S        | P          |
| Post Occupancy Evaluation (POE)       | S     | P        |            |

