



Our Design Thru Construction services consist of the following:

## **Preliminary Design Phase:**

### **I. Program Development**

- A. Coordination of project team (contractor, interior designer, equipment supplier, etc.)
- B. Budget review
- C. Lease review and Tenant Improvements (T.I.'s) analysis
- D. Visiting/reviewing similar projects
- E. General design considerations and completion of a detailed Programming Questionnaire:
  - 1. Philosophy of practice
  - 2. Staff projections
  - 3. Office procedures and staff responsibility review
  - 4. Operatory design
  - 5. Design of ancillary rooms
  - 6. Inventory of existing equipment and projected needs

### **II. Project Site Analysis of Building Conditions**

- A. Field measure all existing conditions and analyze space for structural and mechanical limitations:
  - 1. Structural walls, columns, beams, floors and ceilings
  - 2. Window locations and operation
  - 3. Solar orientation
  - 4. Exterior views
  - 5. Handicap accessibility
  - 6. Parking considerations
  - 7. Plumbing service
  - 8. Electrical service
  - 9. Heating, ventilating and air conditioning requirements (HVAC)
  - 10. Access above ceiling and below floor
- B. Review existing or proposed building plans and specifications
- C. Take on site record photographs
- D. Review special building problems and hidden structural elements with building owner or his representative

### **III. Design Presentations**

- A. Includes scaled CAD (Computer Aided Design) drawings showing the location of all major equipment, furnishings, cabinets and storage, etc., so as to facilitate a complete understanding of the proposed scheme(s).

**IV. Design Modifications**

- A. Refining the Preliminary Design until the client is completely satisfied that maximum usage has been made of the project site.

**Design Development Phase:**

**I. Reviewing the Preliminary Design with the interior designer to achieve a coordinated finished product**

- A. Floor coverings
- B. Wall coverings
- C. Furnishings
- D. Window coverings
- E. Special lighting
- F. Color coordination
- G. Special interior design details

**II. Reviewing the Preliminary Design with the Client and developing appropriate details**

- A. Final equipment selection
- B. Intercom system
- C. Background music selection
- D. Computer system
- E. Special construction details

**III. Preliminary Ceiling Design**

- A. Location of lay-in and gypsum board ceilings
- B. Design and location of gypsum board soffits
- C. Locations and generic specifications of all lighting fixtures
- D. Other ceiling element locations (exhaust fans, dental lights, speakers, etc.)

**IV. Perspective Studies**

- A. Computer generated three dimensional perspectives of some of the critical areas of the office suite in order to enhance an early understanding of the finished project

**V. Preliminary Cabinetry Design**

- A. Three dimensional isometric drawings
- B. Location of all doors and drawers
- C. Location of all accessories and plumbing fixtures
- D. Special built-in cabinets and furniture

## **Construction Document Phase:**

- I. **Architectural Plans**
  - A. Demolition plan
  - B. Partition locations, heights & details (e.g., soundproofing, finishes, etc.)
  - C. Door and Window schedules and details
  - D. Door and Window elevations
  - E. Toilet Room wall elevations (and others as necessary)
  - F. Wall and building sections, where applicable
  - G. Special carpentry and detailing (e.g., backing for x-rays, etc.)
  
- II. **Reflected Ceiling Plan**
  - A. Ceiling construction and specifications
  - B. Location of ceiling grid
  - C. Ceiling support and soffit details
  - D. Location of all ceiling elements, including lights, exhaust fans, speakers, dental lights, etc.
  - E. Ceiling and soffit height designations
  - F. Special carpentry for hanging fixtures (e.g., ceiling mounted dental lights)
  - G. Mechanical system notes and exhaust fan specifications
  
- III. **Electrical Plan**
  - A. Location of electrical panel and telephone board
  - B. General electric service for utility outlets
  - C. Dental equipment wiring specifications
  - D. X-ray wiring specifications
  - E. Dedicated circuits for computers and other equipment (as required)
  - F. Dental Junction Boxes and all equipment requiring electrical service (view boxes, refrigerators, etc.)
  - G. Location of computer outlets, telephone jacks, speaker volume controls, intercom units, etc.
  
- IV. **Lighting Plan**
  - A. Lighting schedule, including descriptions, manufacturer's stock numbers and lamping specifications
  - B. Light fixture locations and switching design
  - C. Special lighting installation details
  - D. Coordinate required documentation for energy conservation
  
- V. **Plumbing Plan**
  - A. Waste lines and venting (loop vent detail, etc.)
  - B. Water manifold and cold water lines to Dental Junction Boxes
  - C. Central high volume evacuation system
  - D. Compressed air system
  - E. Natural gas lines
  - F. Medical gas system (nitrous oxide, oxygen and nitrogen)
  - G. Location and specifications of all plumbing fixtures

- VI. **Cabinetry Drawings**
  - A. Specifications for finishes, hardware, accessory dispensing boxes, etc.
  - B. Operatory cabinets
  - C. Sterilization cabinets
  - D. Laboratory cabinets
  - E. Reception desk and counters
  - F. Dark Room cabinets
  - G. Office cabinets
  - H. Staff Room cabinets
  - I. Special built-in cabinets as the project may dictate
  
- VII. **Building Department Permitting**
  - A. Submission to building department for plan check review.
  - B. Respond to building department plan check comments to secure a building permit.

### **Bidding Phase:**

- I. Selection of Bidders—general construction and cabinet makers
- II. Invitation to Bidder—separate documents for general contractors and cabinet makers
- III. Analysis of bids
- IV. Selection of General Contractor and his sub-contractors and Cabinet Maker
- V. Agreement between Client and General Contractor
- VI. Construction schedule

### **Construction Phase:**

On-site observation of construction to help assure that the project as related in the Construction Documents is carried out by the general contractor and his sub-contractors in an effective and satisfactory fashion. These observations may include the following:

- I. Preliminary construction meeting and review of project
- II. Check the wall layout
- III. Check the underground plumbing and electrical installation
- IV. Check the construction of the rough framed walls and review the locations of the plumbing and electrical services with the respective sub-contractors
- V. Check the plumbing and electrical installation prior to closing access to the interior of the walls
- VI. Check the wall finishes and the ceiling installation
- VII. Check the cabinet installation in progress
- VIII. Final job check (Punch List): finished carpentry, plumbing, electrical, interior finishes and cabinetry