

Chapter Three

PROJECT DESIGN

3.01 INITIATING DESIGN

- A. The Designer provides professional services** for the project in accordance with the terms and conditions of the [Owner/Designer Agreement](#). Toward fulfilling those obligations, the Designer shall adhere to the following procedures unless specifically approved otherwise by the Owner.
- B. General Procedures (all phases)**
1. Exact State Building Commission project title and SBC number and current phase shall be included on all project related communications, correspondence, documents, and deliverables (i.e. e-mails, reports, submittals, drawings, etc.).
 2. All document submittals to Owner shall bear a reference date (i.e. date of issue.)
 3. All digital deliverables to Owner shall be labeled according to Owner's file naming convention and, unless directed otherwise, submitted in a PDF format.
 4. All building measurements and area calculations must comply with the ANSI/BOMA standards specific to the building type(s) of the project.
 5. Unless specifically indicated herein, the Designer must coordinate with the Project Manager for all project related matters.
 6. Standard Design Phases and associated submittals reflect Owner's typical project. Variations will be considered for projects of limited scope. Designer must review the project requirements and recommend alternative phasing to Owner for approval during the Programming Phase.
 7. Unless specifically indicated herein, the Designer must receive written authorization regarding the required number and distribution of document submittal sets. See Paragraph 3.06, A.9, for limits on printing costs for the bidding phase.
 8. Unless indicated otherwise, Designer is responsible for the scheduling, organizing, preparation of agendas and recording of all project team meetings/events whenever they are in attendance. Designer shall provide draft written minutes within two (2) working days of the meeting/event. Owner will review and issue comments, if any, within two (2) working days of receipt. If necessary, Designer shall revise and issue final written minutes within six (6) working days of meeting/event date.
 9. Designer will receive written approval, in the form of a Notice to Proceed (NTP), from the Owner upon initiation of the Programming Phase and at the satisfactory completion of each subsequent phase.
 - a. Designer shall NOT proceed to the following phase without receipt of an NTP from the Owner.
 - b. For Design Phases requiring submittal of a construction cost estimate: These phases cannot be considered complete until the submitted design and deliverables support a construction cost estimate with a value at or below the SBC-1 Bid Target.
 10. Refer to [Chapter 2](#) for Designer Agreement and payment procedures.
 11. Designer shall participate in the tracking and resolution of design issues through an Issues/Comments Log.
 12. Designer shall create and maintain a Design and Construction Quality Management Plan through the life of the project.



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13. At a minimum, the Owner will conduct a written performance audit of the Designer upon completion of each Design Phase, as a formal means of feedback to the Designer. This audit will comprise the basis for completion of the [SBC-7 Designer Evaluation Form – Design Phase](#) and [SBC-8 Designer Evaluation Form – Construction Phase](#), both found in Appendix 1 – *Administrative Forms*. These forms are available to the SBC for their review.
- C. The design must follow three prescripts as required by the State Building Commission (SBC):
1. The design shall be within the project Scope;
 2. The design's construction cost estimate shall be within the Bid Target (Maximum Allowable Construction Cost (MACC) less contingency as shown on SBC 1)
 - a. A cost estimate that is less than the Bid Target does not allow for the addition of out-of-scope design elements unless approved by the SBC.
 - b. A cost estimate that is greater than the Budget Target must be approved by the Contracting Agency and the State Architect for Owner assurance that a sufficient contingency will be available to complete the construction work.
 - c. Bid alternates are used only to bring the base bid cost estimate to within the Bid Target, (i.e., the MACC less the Owner-approved contingency). Bid alternates can only be used for in-scope items, shall be no more than three in number, with the item(s) listed in descending order of need; and,
 3. The design shall meet all applicable requirements of the Sustainable Design Guidelines, High Performance Building, and/or Building Information Modeling, as defined by the Office of the State Architect.
- D. **Building Codes and Regulatory Requirements**
1. A listing of applicable building codes and regulatory requirements used on SBC projects, and their sources, are identified in [Section 01 41 15 - Basic Regulatory Requirements](#), found in Appendix 2 - *Bidding Documents*.
 - a. Depending on the use of the building, other codes or regulations may also apply.
 - b. Designer is responsible for a comprehensive code review/analysis specific to the project and a full determination of all applicable requirements.
 - c. Applicable codes/regulations may be revised or augmented during the execution of the Project Design. Designers shall keep themselves apprised of code revisions and their adoption dates. Design must be compliant with applicable regulatory requirements in effect at the time sealed Bid Ready Documents are submitted to the Owner's Contract Administration Group.
 2. Projects related to buildings or districts fifty (50) years or older fall under the jurisdiction of the [State Historical Commission \(SHC\)](#). Designer is responsible for determination and coordination of all SHC requirements and reviews on applicable buildings.
 3. Designer is responsible for quantifying all associated regulatory fees/costs required for the completion of the project.
 4. Designer will cooperate with representatives of Owner, the State Fire Marshal's Office, and other regulatory authorities to develop solutions to conflicts arising between code/regulatory requirements and user requirements. Final solutions shall meet the criteria for the project and be in compliance with all applicable regulations.



E. State Fire Marshal (SFM) Review

1. Designer shall obtain a written determination from the SFM as to the requirement to, or exemption from, submitting for SFM review and approval. Construction is defined in Tennessee Code Annotated 0780-02-03-.01(1)(b). Project review exemptions must be forwarded to the Owner early in the design process.
2. For all projects requiring SFM reviews:
 - a. Obtain a concept review from the SFM early in the project, to allow ample opportunity for early identification of problems,
 - b. Tennessee Code Annotated 0780-02-03-.02(1) requires plans and specifications to be submitted to and approved by the SFM prior to commencing construction on a State building. The SFM final approval and/or no review letter must be obtained and forwarded to the Owner before a bid date will be assigned by the Owner's Contract Administration Group, and
 - c. Designer shall make submittals directly to and coordinate submittal requirements with the SFM's office. The Plans Review Submittal Form needed with the first submittal is available from the SFM's Office.
3. Designer calculates but does not pay review fee; Owner is responsible for costs associated with the SFM review. In estimating the review fee for the Plans Review Submittal Form, pay careful attention to the fee table and exemption provisions on the back of the form. Forward a draft to the Project Manager for review prior to submittal to the SFM.
4. The duration of time necessary for the processing of and subsequent review by the SFM falls within the contracted design timeframe. Designer is responsible for preparing, submitting, and receiving SFM approvals with sufficient time to meet the contracted CDP submittal deadlines. No additional time will be granted for this purpose.



3.02 PROGRAM VERIFICATION PHASE

- A. Owner will have a Program sufficiently well developed**, as called for under the terms of the Owner/Designer Agreement for the project. This may include a Project Charter, a Project Management Plan (PMP), testing reports, and other pre-planning documents, which will be presented and discussed at the Pre-Design Conference. These documents will establish the Owner's functional objectives, including space requirements and relationships, time and budget constraints, and other special criteria in sufficient detail to allow the Designer to carry out the design.
- B. The Programming Phase of the project will begin with a Pre-Design Conference (PDC).** Prior to the PDC:
1. The Project Manager shall:
 - a. Schedule and prepare an Agenda for the Pre-Design Conference. The meeting will include personnel representing Owner, the User Agency, the Designer, and other related project stakeholders; and,
 - b. Prepare a Notification to Proceed to Programming, have it authorized, and distribute to the Designer at or before the Pre-Design Conference.
 2. The Designer shall:
 - a. Establish a Design Project Team and provide all contact information to the PM;
 - b. Source and/or request necessary project/property documents and data; and,
 - c. Become familiar with the requirements of the Owner/ Designer Agreement, the Designer's Manual (<http://tn.gov/generalservices/article/designers-manual-2014>), the Sustainable Design Guidelines (SDG), the High Performance Building Requirements (HPBR), and/or Building Information Modeling (BIM), the State Building Commission By-Laws, and other related documents.
- C. Suggested agenda for a Pre-Design Conference**
1. The Team
 - a. Introduction of PDC attendees,
 - b. Other team members not in attendance, and
 - c. Design team sub-consultants.
 2. The Program: Discussion/review of Project Charter and PMP, to include:
 - a. Scope,
 - b. Budget,
 - c. Schedule,
 - d. Review of Owner's needs,
 - e. Constraints and opportunities,
 - f. Accessibility, SDG, HPBR, BIM, Commissioning criteria,
 - g. Applicability of Storm Water Pollution Prevention Plan (SWPPP), and
 - h. Real property considerations.
 3. Procedures:
 - a. Roles and responsibilities of the Designer, Owner, State Building Commission, and User Agency,
 - b. Sources of funding,
 - c. Centralized vs. non-centralized projects,
 - d. Adherence to the Designers' Manual,
 - e. Adherence to State mandated requirements (State Fire Marshal, SDG, HPBR, BIM, Historic, etc.),
 - f. Adherence to other regulatory requirements (local, regional, federal, and special authorities, etc.),
 - g. Requests for additional services,



3.02 PROGRAM VERIFICATION PHASE

- h. Obtaining existing project documents and data (original drawings, utility providers, energy usage, etc.),
- i. Designer and Construction Schedule,
- j. Designer Submittals/Deliverables,
- k. Architectural/Engineering Graphic Standards and minimum size/formatting requirements,
- l. Owner's file naming convention,
- m. Design reviews (PM, Owner's Contract Administration Group, and Regulatory),
- n. Designer Invoices and Reimbursable Expenses,
- o. Communications protocol,
- p. Project Authority protocol,
- q. Site visit/access protocol, and
- r. Resolution of conflicting instructions.

D. Designer shall verify the Program. Program verification leading to a successful design solution by the Designer shall include, at a minimum:

- 1. Site visit/evaluation(s), to include:
 - a. Site visit to become familiar with site conditions,
 - b. Site/property conditions assessment relevant to the project/scope,
 - c. Interview facility managers, staff, end-users, and
 - d. Photography relevant to the project/scope.
- 2. Articulation of the functional and departmental objectives of the project based on the Program.
- 3. Advisement with respect to confirmation of:
 - a. Scope,
 - b. Budget,
 - c. Schedule,
 - d. Site selection
 - e. Relationship of the project to other structures and facilities,
 - f. Functional aspects,
 - g. Required Design Phases, and
 - h. Permitting fees.
- 4. Acknowledgement of project related requirements, as applicable, including but not limited to:
 - a. State Fire Marshal,
 - b. Storm Water,
 - c. ADA,
 - d. Life Safety and Egress,
 - e. Environmental/Hazardous issues,
 - f. Applicable Regulatory Authorities,
 - g. SDG, HPBR, and/or BIM compliance,
 - h. Commissioning by third party,
 - i. Historic designation and compliance,
 - j. Design and Construction Quality management,
 - k. Additional services, and
 - l. Coordination with Owner provided items (i.e. Furniture, Fixtures).

E. Programming Phase Submittal:

- 1. Programming Deliverables:
 - a. The components of Paragraph 3.02D, in narrative form, at a minimum,
 - b. Any other pertinent programming considerations, analysis, findings,
 - c. Design Issues/Comments List, and
 - d. Designer's Quality Management Plan.



3.02 PROGRAM VERIFICATION PHASE

2. Programming Reviews

- a. Owner shall review and return comments to the designer within the designated project review times.
- b. A Program Phase review meeting may be required, depending on the complexity of the project and the extent to which the Owner needs to clarify the Program.

3. Programming Approval

Upon acceptance of the content, level of completion, and quality of the Programming Phase Submittal by the Project Manager:

- a. The Designer shall request written approval, and
- b. The PM shall issue a Notice to Proceed to Schematic Design, or the next approved design phase.



3.03 SCHEMATIC DESIGN PHASE

A. Additional Services, as required

1. Upon determination and acceptance of a programmatic need, and as early as possible within the Schematic Design Phase (SDP), the Designer is to pursue the required components of a formal Additional Services Request (ASR), as follows:
 - a. Prepare and issue an RFP that includes recommended preliminary scope of work, with detailed follow-up studies and reports,
 - b. Distribute to sufficient qualified service providers to solicit a minimum of three (3) responses, and
 - c. Identify a timetable for obtaining services that provides adequate time for Owner to review and approve proposal.
2. The ASR submittal will include:
 - a. Listing of firms that submitted proposals, their prices, and the recommended firm for providing services (cost should be considered as one of the factors in determining which firm to recommend; however, cost may not necessarily be the controlling factor),
 - b. Scope for the Additional Services,
 - c. Detailed entitlement statement with contract references,
 - d. Listing of expected deliverables,
 - e. Itemization of direct costs from the service provider,
 - f. Projected maximum Owner's cost including applicable Designer multiplier,
 - g. Impact to the project schedule due to ASR, and
 - h. Any related SDG, HPBR, and/or BIM Checklist items.
3. Owner shall review the submittal and if found acceptable, authorize its inclusion into the Owner/Designer Agreement.

B. Designer shall develop a Schematic Design, including the following items (if applicable):

1. An analysis of Owner needs, including but not limited to:
 - a. Egress/ life safety,
 - b. Functional Relationships,
 - c. SDG, HPBR, and/or BIM compliance with identification of sustainable features to be incorporated into the Design,
 - d. Utility connections,
 - e. Commissioning, and
 - f. Permitting Fees.
2. An analysis of the site, including but not limited to:
 - a. Determination of Flood zone designation(s), based on highest risk flood zone for insurance purposes,
 - b. Relationship to master plans,
 - c. Land use/Zoning,
 - d. Site, Building, Environmental permits,
 - e. Other applicable permits,
 - f. Circulation,
 - g. Mass transportation,
 - h. Traffic, and
 - i. Parking.
3. An analysis of the existing building(s) or scope-related portions of the building(s).



4. An analysis of scope related considerations, including but not limited to:
 - a. Site, Building, Environmental permits and reviews;
 - b. Other applicable permits and reviews;
 - c. Life safety and egress;
 - d. Fire safety and access;
 - e. Utility providers;
 - f. Utility usage patterns and history;
 - g. Projected utility costs;
 - h. Lifecycle operations and maintenance;
 - i. Projected operational costs;
 - j. Environmental considerations, including air quality;
 - k. Hazardous materials and exposures;
 - l. Building Systems and Equipment;
 - m. Telecommunications;
 - n. Security; and,
 - o. Construction and operational safety.
5. An estimate of probable project construction cost.
6. Confirmation of the remainder of the schedule.
7. Any other pertinent schematic design considerations, analysis, or findings.
8. Additional consultant services, reimbursable expenses, etc.

C. Schematic Design Phase Submittal

1. SDP Deliverables:
 - a. Conceptual diagrams, visual studies, graphs, charts, models, and/or schematic drawings representing the listed components of Paragraph 3.03B;
 - b. A narrative description of the listed components of Paragraph 3.03B., that cannot be defined graphically;
 - c. A listing of proposed SDG, HPBR, and/or BIM features to be included in the design;
 - d. Technical and operational information related to new building systems or equipment;
 - e. Estimate of Probable Construction Cost arranged by CSI section;
 - f. Updated Schedule;
 - g. Updated Issues/Comments List;
 - h. Updated Designer's Quality Management Plan;
 - i. Preliminary Drawing Sheet Index; and,
 - j. Preliminary Specification Table of Contents.
2. SDP Submittal Reviews
 - a. Owner shall review and return comments to the designer prior to the SDP review meeting.
 - b. A schematic design review meeting will be scheduled, within seven (7) days of submittal.
3. SDP Approval

Upon acceptance of the content, level of completion, and quality of the SDP Submittal by the Project Manager:

 - a. The Designer shall request written approval, and
 - b. The Project Manager shall issue a Notice to Proceed to Design Development.

D. State Fire Marshal Concept Submittal

1. If applicable, prepare and issue a SFM concept review submittal.
2. Forward all comments and findings to Owner.



E. Suggested agenda for the SDP review meeting:

1. Submittal Review:
 - a. Scope development,
 - b. Cost Estimate/Budget confirmation,
 - c. Schedule confirmation,
 - d. Site Considerations, and
 - e. Interim review/determination of SDG, HPBR, and/or BIM criteria, energy analysis and proposed energy efficiency and water conservation strategies.
2. Design solutions and alternatives.
3. Final Code/Permitting analysis and associated costs.
4. Unit Costs.
5. Specifications requirements:
 - a. Specifications shall only be included in the Project Manual. They shall not be included in the drawings except for items with very limited scope.
 - b. Include sections representing all known components of the project.
 - c. Coordinate with drawing content.
 - d. Tailor to represent the specific scope and conditions of the project. Unedited boiler plate sections shall not be used.
6. Review of Designer's Quality Management Plan.
7. Outstanding issues.



3.04 EARLY DESIGN STAGE PRESENTATION

A. EARLY DESIGN STAGE PRESENTATION (EDP)

When the project involves a new facility or major addition, a presentation of the design concept to the State Building Commission (SBC) is required.

1. The Designer shall make such presentation during a regular-scheduled SBC meeting.
2. Presentation of this "Early Design Stage" may occur as soon as the Schematic Design Phase is complete, and is required before the Design Development Phase can be approved as complete.
3. Under special circumstances, such presentation may be required within the course of other design phases, or at other forums.
4. The Owner may request that a rehearsal presentation be made to the Owner prior to SBC presentation.

B. Prepare to discuss any aspect of the design and to present:

1. **Preliminary drawings**, to be presented in digital format (.ppt or .pdf.) for projections in the SBC meeting, conceptual and accurate, but not so detailed as to detract from the legibility and functional relationships of structures. Designer shall be prepared for brief oral comments on any project aspect in response to questions from SBC members. A perspective study is not required and may be included only if it helps explain the project. Include:
 - a. A vicinity plan showing the relationship of the project to the surrounding campus or community,
 - b. A site plan showing relationships to site features and adjacent structures,
 - c. Floor plans, and
 - d. Elevations or perspective (preferred).
2. **Project Summary**
 - a. Purpose of project, brief project description, and general program spaces, along with overall square footage.
 - b. The site, its location, and the results of geotechnical investigations and other test reports.
 - c. The facility plan, relation to Master Plan, and major functional relationships of the building.
 - d. The systems used for foundation, structure, walls, roof, windows, finishes, plumbing, HVAC, and electrical service.
 - e. Energy efficiencies and applicability of the HPBr.
 - f. Fire protection systems, barrier-free accommodations, and other special features contributing to the solution.
 - g. Commissioning scope, if required.
 - h. Efficiency analysis of gross, net, and usable square footage.
 - i. SBC approved bid target versus Designer's construction cost estimate.
 - j. Building cost estimate and cost per square footage.
 - k. Site cost estimate.
 - l. Anticipated construction start date and completion date and compliance with schedule.



- A.** Designer shall execute **Design Development** based on the approved Schematic Design Phase, which will include at a minimum:
1. Progression, refinement, and representation (graphic and written) of all the components defined in Paragraph 3.03B, to a fifty percent (50%) of CDP (Bid Ready) completion level.
 2. Consideration/resolution of internal and external coordination issues such as for land acquisition, utility connections, site staging & closures, equipment, furniture, etc.
 3. Gross and net area calculations.
 4. Specialized consultation and incorporation of related design requirements, with the following project stakeholders ([see 1.03](#)).
 - a. **F&A Office of Information Resources (OIR)** shall be consulted whenever a project involves telecommunications/computer networks.
 - b. **Owner's Interior Design** shall be consulted whenever a project involves space utilization (but normally office space) involving complex spatial relations.
 - c. **Owner's State Building Energy Management** shall be consulted to review/clarify SDG criteria.
 - d. **Owner's State Environmental Management** shall be consulted whenever a project involves the installation or removal of hazardous substances, radioactive materials or equipment, or their containers (such as fuel storage tanks).
 5. A concept review with the State Fire Marshal's office once design development is considered by the Designer to be complete. Concept review must be completed prior to DDP review meeting.
 6. Determine if a building plaque is required. If so, Owner will provide a conceptual plaque layout. Refer to the [sample plaque](#) in Appendix 1. The layout will include the verbiage required and general order of appearance necessary for the Designer to develop a scaled design.
 7. Initiation of SDG submittals such as energy use analysis, projected utility operational costs, energy efficiency and water conservation approach and design features, and energy management systems to demonstrate compliance with Owner's energy efficiency design requirements.
 8. Resolution of drawing sheet size and formatting.

B. Design Development Phase Submittal

1. DDP Deliverables:
 - a. Scaled drawings in final sheet size,
 - b. Site plan, with contours and applicable cross-sections,
 - c. Floor plan,
 - d. Elevations,
 - e. Building sections,
 - f. Design detail,
 - g. Exterior perspectives, model, or renderings, if required,
 - h. Preliminary furnishings and equipment list and plans, if required,
 - i. Plumbing, Electrical, Mechanical, and Structural Plans,
 - j. Preliminary specifications,
 - k. Building systems narrative,
 - l. Updated Designer's Quality Management Plan with listing of any special quality control issues/requirements and possible third party delivery method,
 - m. Quantity-based cost estimate, with escalation factors to projected bid date,
 - n. Final design fee adjustment, if needed,
 - o. Updated Schedule,
 - p. Updated Issues/Comments List,
 - q. Fire Marshal Concept Review Letter/Findings,
 - r. Draft of SDG, HPBR, and/or BIM checklist/submittals,
 - s. Conceptual [Building Plaque layout](#), if required,
 - t. SDP markup set, and
 - u. [Proprietary Products Request](#) back-up/attachments, if needed.



3.05 DESIGN DEVELOPMENT PHASE (DDP)

2. DDP Submittal Reviews

- a. Owner shall review and return comments to the designer prior to the DDP review meeting.
- b. A design development review meeting will be scheduled within seven (7) days of submittal.

3. DDP Approval

Upon acceptance of the content, level of completion, and quality of the DDP Submittal by the Project Manager:

- a. The Designer shall request written approval,
- b. The Project Manager shall finalize the MACC budget,
- c. The Project Manager shall set the final Designer Fee, and
- d. The Project Manager shall issue a Notice to Proceed to Construction Document Phase that formally notifies the Designer of the final MACC budget and Designer Fee.

C. Suggested agenda for a DDP review

1. Submittal Review:

- a. Final Scope,
- b. Cost Estimate, including MACC and Designer budget confirmation,
- c. Project Schedule confirmation,
- d. DDP submittal reviews/comments,
- e. Final determination of SDG criteria., and
- f. Status of concept/preliminary reviews by regulatory authorities.

2. Bidding and Contract Documents:

- a. Evaluate administrative and procedural needs,
- b. Begin defining [Allowances](#), [Alternates](#), and [Unit Prices](#), if any are to be used,
- c. Select front-end documents to use based on cost and scope,
- d. Confirm that Designer has current Designers' Manual, plus updates, and
- e. Agree on overall format, organization, compilation, and production.

3. Review of Designer's Quality Management Plan.

4. Outstanding Issues.



- A. During the Construction Document Phase**, the Designer shall execute Bid Ready Construction Documents based on the approved Design Development Phase, which shall include, at a minimum:
1. Full development, resolution, and representation (graphic and written) of all the components defined in Paragraph 3.05B, in the following incremental completion levels:
 - a. Ninety-five percent (95%) of Bid Ready CDP at PM & Fire Marshal Final Review,
 - b. Ninety-eight percent (98%) of Bid Ready CDP at Owner's Contract Administration Group Initial Review, and
 - c. One hundred percent (100%) of Bid Ready CDP at Bid Advertisement/Release and Owner's Contract Administration Group On-Street Review.
 2. A Project Manual which shall be in compliance with [Chapter 4 - Project Manual Guide](#), and shall utilize [Appendix 2- Bidding Documents](#); both as included in the current Designers' Manual. Designer shall:
 - a. Review information required in the [Invitation to Bid](#) for completeness (except establishment of bid date);
 - b. Review [Instructions to Bidders](#), and applicable supplementary instructions;
 - c. Confer and agree with Owner on construction timetable, Contract Days, and Liquidated Damages; and,
 - d. Include List of Drawings that matches the Drawing Index on the Plan set.
 3. On federally funded projects ONLY, incorporation/final revisions of Owner-provided Department of Labor and Workforce Development, Division of Labor Standards forms for:
 - a. Wage Rate Determination,
 - b. Notice of Pre-Construction Conference, to be completed by the Designer and returned to Labor Standard Division per instructions, and
 - c. Job-Site Postings - Building Rates and/or Highway Rates provided in English and Spanish for issue at the Pre-Construction Conference to the Contractor for posting at the Job Site.
 4. Confirm scope compliance and advise Owner in writing of any change.
 5. Confirm schedule and advise Owner in writing of any change.
 - a. Determine timetable for completion of CDP and commencing to Bid Phase as outlined on the following pages.
 - b. Designer is to make revisions identified by Owner prior to printing.
 6. Confirm cost estimate and advise Owner in writing of any change.
 7. Confirm SDG, HPBR and/or BIM compliance, and advise Owner in writing of any change.
 8. Confirm distribution and status of documents submitted to the regulatory authorities (Fire Marshal, etc.), so that approvals are in-hand or are due prior to release for bids.
 9. Confer and agree with Owner on cost and number of bid sets. Obtain an estimate from the printer prior to proceeding. If the estimated amount exceeds One Thousand Two Hundred Dollars (\$1,200.00), written pre-approval from the Project Manager must be obtained prior to execution of printing.
 10. Coordinate Bidding Phase, with particular emphasis on:
 - a. Public advertisement,
 - b. Document distribution,
 - c. Pre-Bid Conference and agenda,
 - d. Bid opening procedures and Bid Tab,
 - e. Bid notifications and recommendations, and
 - f. Determine if a Pre-Bid Conference is to be held, and if so, notify holders of record documents in writing.
 11. Advertisement for Bids is published in newspaper(s) by Owner's Contract Administration Group.



B. Construction Document Phase Submittal

1. Fifty percent (50%), ninety-five percent (95%), ninety-eight percent (98%), and one hundred percent (100%) Bid Ready CDP Deliverables:
 - a. Scaled drawings,
 - b. Title sheet to include site location map, and list of drawings,
 - c. Site plan, with contours and applicable cross-sections,
 - d. Floor plans,
 - e. Elevations,
 - f. Building sections,
 - g. Wall sections,
 - h. Design details,
 - i. Exterior perspectives, model, or renderings, if required,
 - j. Final furnishings and equipment list and plans, if required,
 - k. Plumbing, Electrical, Mechanical, and Structural Plans,
 - l. Project Manual/Specifications,
 - m. Final Building systems narrative,
 - n. Final SDG, HPBR and/or BIM submittals including energy use analysis, projected utility operational costs, energy efficiency and water conservation approach & design features, and energy management systems to demonstrate compliance with Owner's energy efficiency design requirements and SDG, HPBR and/or BIM,
 - o. Updated quantity-based construction cost estimate,
 - p. Updated schedule,
 - q. Updated Issues/Comments List,
 - r. Updated Designer's Quality Management Plan,
 - s. Final [Building Plaque layout](#), if required, and
 - t. Markup set of previous submittal with corrected mark-ups highlighted and omitted mark-ups explained.
2. Fifty percent (50%) of Bid Ready CDP Deliverables ONLY:
List of Items with warranties beyond one (1) year
3. Ninety-five percent (95%) of Bid Ready CDP Deliverables ONLY:
 - a. Set of Scaled drawings in digital (.pdf) format,
 - b. Project Manual in digital (.pdf) format, and
 - c. Front-End Checklist completed.
4. Ninety-eight percent (98%) of Bid Ready CDP Deliverables ONLY:
 - a. Submit two (2) sets of scaled drawings in final sheet size, blackline, and comb bound (Half-size sets may be requested of bid document sets larger than 11X17),
 - b. Submit two (2) sets of Project Manual in 8.5 inch wide by 11-inch pages, printed two-sided with each section beginning on a right-hand page, and bound (comb) on the left margin,
 - c. All of the above must have professional seals, signatures, and dates of all architects and engineers of record,
 - d. All of the above must reflect corrections/revisions necessary to resolve all open Issues/Comments from previous submittal reviews,
 - e. Fire Marshal Approval Letter, and
 - f. [Proprietary Products Request Approval](#), if needed.



3.06 CONSTRUCTION DOCUMENTS PHASE

5. One hundred percent (100%) of Bid Ready CDP Deliverables ONLY:
 - a. Submit two (2) sets of scaled drawings in final sheet size, blackline, and comb bound (Half-size sets may be requested of bid document sets larger than 11X17),
 - b. Submit two (2) sets of Project Manual in 8.5 inch wide by 11-inch pages, printed two-sided with each section beginning on a right-hand page, and bound (comb) on the left margin,
 - c. All of the above must have professional seals, signatures, and dates of all architects and engineers of record,
 - d. All of the above must reflect corrections/revisions necessary to resolve all Contract Review Issues/Comments,
 - e. Designer completes [00 11 16 Invitation to Bid](#) and transmits to plan rooms, User Agency, and Owner, and
 - f. Ninety-eight percent (98%) of Bid Ready CDP markup set.
6. Fifty percent (50%) of Bid Ready CDP Submittal Reviews:
 - a. Project Manager shall review and return comments to the designer, and
 - b. If necessary, a Fifty percent (50%) of Bid Ready CDP review meeting will be scheduled.
7. Ninety-five percent (95%) of Bid Ready CDP Submittal Reviews:
 - a. Project Manager shall review and return comments to the designer prior to the CDP review meeting, and
 - b. A ninety-five percent (95%) of Bid Ready CDP review meeting will be scheduled, within seven (7) days of ninety-five percent (95%) of Bid Ready CDP submittal.
8. Ninety-eight percent (98%) of Bid Ready CDP Submittal Reviews:

Owner shall review and return comments to the Designer within two (2) weeks of Bid Date Request Approval.
9. One hundred percent (100%) of Bid Ready CDP Submittal Reviews:

Owner shall review and return comments to the Designer within two (2) working days of receipt.
10. One hundred percent (100%) of Bid Ready CDP Approval:

Upon acceptance of the content, level of completion, and quality of the one hundred percent (100%) of Bid Ready CDP Submittal by the all reviewers:

 - a. The Designer shall request written approval, and
 - b. The Owner's Contract Administration Group shall issue a Notice of Acceptance of Bid Documents.
 - c. All revisions after this notification will be issued as an Addendum to the released Bid Documents.



3.06 CONSTRUCTION DOCUMENTS PHASE

C. Suggested agenda for ninety-five percent (95%) of Bid Ready CDP review:

1. Scope compliance,
2. Budget compliance,
3. Schedule compliance,
4. SDG compliance,
5. CDP submittal reviews/comments,
6. Confirm schedule,
7. Pre-Bid Conference,
8. Contract award process and Pre-Construction Conference,
9. Confirm Design Team's Representatives for the Construction Phase,
10. Discuss commissioning specifications and implementation issues, if required,
11. Review of Designer's Quality Management Plan, and
12. Outstanding Issues.

CHAPTER 3 END

See Chapter 4- Project Manual Guide and 5 – Bidding for further and more detailed instructions with some of the above items.

