Department of
MANAGEMENT
SERVICES
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REAL ESTATE DEVELOPMENT AND MANAGEMENT

Professional Services Guide

PROFESSIONAL SERVICES GUIDE

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Please Note:

All Forms which will need to be obtained from the Project Manager are *italicized*. The Architect-Engineer or Contractor will need to contact the Project Manager to request the required form.

All Forms and Checklists available on the Department of Management Service's Webpage will be underlined. The webpage address is below.

DMS. Division of Real Estate Development and Management webpage:
https://www.dms.myflorida.com/business_operations/real_estate_development_and_management/building_construction/forms_and_documents

1.00 INTRODUCTION

1.01 PURPOSE:

This manual is furnished as a guide to the Architect-Engineer providing services to the State of Florida (State), Department of Management Services (DMS), Division of Real Estate Development and Management (REDM), Bureau of Building Construction, also referred to as the Owner. The Professional Services Guide is intended to assist the Architect-Engineer in fulfilling both the contractual and the professional responsibilities to the State. The Professional Services Guide is organized in the normal sequence of services to be provided, from the selection of the professional through the warranty period of a project.

This edition of the Professional Services Guide supersedes all previous editions. If questions arise regarding any of Bureau of Building Construction's policies or procedures, contact the DMS Project Manager for assistance and clarification.

1.02 ROLE OF REDM BUREAU OF BUILDING CONSTRUCTION:

The Bureau of Building Construction provides project management services by coordinating and supervising the construction of state buildings or other contracted work-, including but not limited to planning, selection, design, construction, and occupancy. Additionally, the Bureau of Building Construction provides project management services on design and construction for state facilities for other State agencies pursuant to Section 255.31, Florida Statutes, Client Agency Agreements.

The Project Manager is responsible for the management of projects from appropriation through construction warranty. Project Managers are located in Tallahassee, Florida. The Project Manager reviews Agency programs, chairs selection committees, administers the Architect-Engineer's contract, assists the Architect-Engineer, acts as liaison with the Client Agency, coordinates plan reviews and approvals, chairs bid openings and initial construction conferences, attends construction meetings, reviews Architect-Engineer invoices and Contractor's pay requests, and assists with project close out and warranty questions.

The Contracts Administrator is responsible for preparing contracts, awarding Construction Contracts, coordinating contract execution, and tracking and monitoring project budget information.

1.03 ROLE OF THE ARCHITECT-ENGINEER:

The Bureau of Building Construction utilizes private consulting firms almost exclusively to design, bid, and administer construction projects. The Architect-Engineer is selected for the qualifications relative to a specific project. The Owner, therefore, looks to the Architect-Engineer to take a lead role in the project; be responsible for the design and maintaining the design schedule; and keep DMS and the Client Agency, through the Project Manager, informed of the progress of the project at all times.

The Architect-Engineer is expected to schedule services, design phases, and request Additional Services including but not limited to soil borings, surveys, testing, and permits when necessary. The Architect-Engineer is expected to be competent in design practices and technical specifications and methods, leading to a design solution and products that will be durable, economical, maintainable, sustainable, and of high quality. Documentation is expected to be thorough and coordinated; incorporate all of the code and permitting requirements of the agencies having jurisdiction applicable to the project; and ensure all permits are applied for and received in a timely fashion. The Architect-Engineer is expected to make the inspections and observations necessary to administer the Construction Contract and to work with the Contractor to see that construction is meeting the requirements of the Construction Documents.

Just as the Contractor is expected to meet the construction schedule or face penalties, the Architect-Engineer is expected to do the same. All too often it is not recognized delays in the Design Phase are just as costly, if not more so, as delays in the Construction Phase. After the Architect-Engineer has developed the project schedule and the schedule has been approved, the

Architect-Engineer is expected to ensure the project schedule is maintained.

Outlined below are documents important in fulfilling the Architect-Engineer's basic responsibilities. The Architect-Engineer's firm members and consultants must become familiar with these documents, especially as they affect procedural and legal issues in the performance of the Architect-Engineer's Agreement and of the Contractor's Agreement.

- Agreement between Owner and Architect-Engineer.
- Agreement between Owner and Construction Manager.
- Agreement between Owner and Contractor for Competitive Build Projects.
- A.I.A. Document A201, General Conditions of the Contract for Construction (latest edition available) for Design - Bid - Build projects.
- The Bureau of Building Construction's *Construction Contract Project Manual for Non-Technical Specifications Section of Division One*.
- Any other documents or requirements provided by the Project Manager.

The Bureau of Building Construction's Project Manager will be the prime contact with the Owner. While the Architect-Engineer may deal directly with the Client Agency's Representatives and other members of the Bureau of Building Construction's team, the Project Manager must be kept informed of all meetings and communications. All changes or modifications will be submitted to the Project Manager. The Project Manager will assist the Architect-Engineer through the State's procedures and will participate in design reviews and construction inspections. The Project Manager will participate and assist as necessary, but the Architect-Engineer is expected to assume a lead role in the process.

The Architect-Engineer must have electronic mail capabilities. It is the intention of DMS to use electronic communication for all projects, whenever possible. The Architect-Engineer shall provide the firm's email address with points of contact within the firm for electronic communications.

2.00 SELECTION OF THE ARCHITECT-ENGINEER

The selection of the Architect-Engineer is accomplished in accordance with Section 287.055, Florida Statutes, commonly referred to as the Consultants' Competitive Negotiation Act. This procedure is used to select architects, engineers, landscape architects, and registered land surveyors based on qualifications rather than price being the primary determinate.

The procedure is further defined in Form AE12 - Selection of the Architect-Engineer. The guide is intended to inform the professional community of the methods for announcement, application requirements, and the procedure for the selection by the Owner's Selection Committee.

3.00 CONTRACT NEGOTIATION AND INVOICING

3.01 PREPARATION:

After being selected as the Architect-Engineer for a project, a professional service agreement will need to be negotiated. In order to prepare for your negotiation, the Architect-Engineer should receive a copy of the following from the Project Manager:

A. Bureau of Building Construction's Professional Services Guide;

B. The Authority letter authorizing negotiations with the Architect-Engineer's firm;

C. A program statement outlining the scope of work to be performed, the proposed budget, and a suggested schedule. The prepared program may need to be further clarified or amplified. The Architect-Engineer should do so by calling and discussing the scope of work with the Project Manager and the various Client Agency Representatives listed in the program. A site visit is recommended prior to negotiation, and;

D. The Client Agency Representative(s) name(s) and telephone number(s), if applicable.

The Architect-Engineer shall prepare a detailed proposal for Basic Services. This proposal should give the step-by-step tasks required to accomplish the program objectives; the hours and discipline of each individual for each task; a summation of the hours for each individual for each applicable phase: Conceptual Schematic Design Phase, Advanced Schematic Design Development Documents Phase, Construction Documents Phase, Bidding Phase, and Construction Phase Administration of the Construction of the Project; each individual's hourly rate times the number of hours spent by the individual on each phase; a summation of all personnel cost per phase; the personnel cost per phase times the overhead multiplier justified for the firm; and the total times the profit multiplier for the firm. A spreadsheet format is recommended. A detailed breakdown of the Reimbursable Expenses for each phase including but not limited to travel and reproduction; a summation of the basic cost per phase; and a summation of all costs for Basic Services must be provided.

The Architect-Engineer shall provide with the proposal a justification of the firm's overhead rate, a listing of personnel salaries, the project design phases proposed, a proposed project schedule, any proposed Additional Services, and the frequency or proposed number of construction site visits during construction. The names of prime personnel and those of consultants shall be listed for each Phase, including those providing construction visits.

It is recommended to discuss the project scope and proposed services with the Project Manager and Client Agency Representative(s) prior to the negotiation to assure a common understanding. On large or complex projects, a scope meeting will be held with the Architect-Engineer and Consultants at the site or at the Project Manager's office to discuss and agree upon the scope of services and the approach to be used. This meeting may also be used for a preliminary discussion of fees, use of special consultants, or other topics pertinent to the Project. Basic Services are to be segregated from Additional Services on the proposal. A partial list of Additional Services appears in Section 4.06. Additional Services may be authorized either as a Lump-Sum Fee or with Not-To-Exceed limits based on pre-approved hourly rates.

When the fee proposal, including Consultant proposals, has been prepared, it should be e-mailed to the Project Manager. The Project Manager will then schedule a negotiation with the Contracts Administrator. A *Review Checklist Architect-Engineer Proposal* and a sample Agreement Between Owner and Architect-Engineer are available.

3.02 THE NEGOTIATION:

The negotiation may be scheduled as a face-to-face meeting, telephone call, or on-line video negotiation. The negotiation is chaired by the Project Manager and may be attended by the Contracts Administrator, the Client Agency Representative, and the Architect-Engineer along with any key consultants, such as the Mechanical, Electrical, Plumbing (MEP) Engineer(s). On large projects, the MEP Engineer will play a key role in formulating the systems design parameters and may play a role in commissioning the building prior to occupancy.

The Architect-Engineer's fee proposal will be reviewed, discussed, and modified as necessary during the negotiation. The budget, phases of submittal, the schedule, and assigned personnel will be reviewed and agreed upon. Once an agreement has been reached, the Contracts Administrator will prepare an Agreement and e-mail a copy to the Architect-Engineer to sign, seal, and return. The Contracts Administrator, with the assistance of the Bureau of Building Construction, will execute the contracts and will transmit a fully executed copy to the Architect-Engineer.

3.03 INVOICING:

A. GENERAL:

It is the intention of the Bureau of Building Construction to expeditiously approve all invoices properly rendered for professional services and Reimbursable Expenses. To assure processing of invoices in a minimal amount of time, all invoices should be properly prepared and contain the appropriate information and back-up documentation.

Invoices are to be addressed to the Project Manager. Do not address invoices to the Contracts Administrator. Improper addressing of invoices may cause unnecessary delays. Invoices may be submitted at the completion of a phase of service or monthly, as authorized by the Agreement.

Documentation required for invoicing may be found on the DMS Bureau of Building Construction webpage:
https://www.dms.myflorida.com/business_operations/real_estate_development_and_management/building_construction/forms_and_documents

Invoices not properly prepared as to form, content, or back-up documentation will be returned to the Architect-Engineer for correction and resubmission. Invoices not certified as true and correct will be returned to the Architect-Engineer for signature.

The Architect-Engineer shall submit invoices only for those Basic Services, Additional Services, and Reimbursable Expenses specifically authorized by the Agreement or by a written Authorization from the Contracts Administrator.

Please Note: Work may not proceed until an approved Agreement or Authorization for the work is received and work may not be started before the date of approval. Failure to comply will result in non-payment for the work accomplished prior to the date of approval. This is especially important with not-to-exceed authorizations.

1. The Project Manager will approve the invoice promptly if everything is in order and the services have been approved. Generally, the approval of an invoice by the Project Manager should not take longer than two (2) to three (3) business days once the Bureau of Building Construction and the Client Agency have approved the work product.

2. The invoice is then transmitted to the Client Agency for vouchering and then to the Department of Financial Services for payment. The time for processing and payment is usually fifteen (15) to twenty (20) business days, including mailing time.

3. To assure prompt processing of invoices, the invoices should be properly prepared and contain the appropriate information and back-up documentation. Invoices shall include:
   a. DMS Project Number,
   b. DMS Project Name,
   c. Minority Vendor Number, if applicable,
   d. Architect-Engineer's Federal Tax Identification Number as it appears on the agreement,
   e. Copy of the Contract Authorization,
   f. The Architect-Engineer's Invoice Routing Transmittal Form,
   g. The AE Invoice Form,
   h. The Architect-Engineer's Status Report of Certified Business Enterprise (CBE) Subcontractors.

   Invoices shall be supported by such data substantiating the Architect-Engineer's right to payment as the Project Manager may require, such as, but not limited to, copies of invoices from subconsultants, receipts for supplies and Reimbursable Expenses, and records of description of services performed, time and names of personnel performing the services, and any other reasonable back-up documents requested.

   Any required forms may be accessed at:
   https://www.dms.myflorida.com/business_operations/real_estate_development_and_management/building_construction/forms_and_documents

B. FORMAT, NUMBER OF COPIES:
   1. INVOICE FORMAT: A sample invoice may be obtained from DMS website.

2. NUMBER OF COPIES: Invoice Routing Forms are available on the DMS website referenced above and shall be completed and attached to each invoice submitted. The Architect-Engineer shall submit by e-mail the invoice with the required attachments. The backup data should be highlighted where applicable and include check numbers and dates paid when applicable. All invoices must include copies of Activations or Authorizations, as required. Please organize the backup in order of the invoice format.

3. CONTENT: All invoices must show the following: Services, Total Fee, Percentage of Completion, Previously Billed Amounts, Amount Due, and the Billing Period start and end dates.

4. NUMBERING: Invoices shall be numbered consecutively beginning with number one (1) and continuing in numerical order throughout the life of the contract. To expedite payment, the number of invoices submitted should be kept to a minimum by combining as many items as possible on each invoice.

C. JUSTIFICATION, BACK-UP DOCUMENTATION REQUIRED:
To comply with the Comptroller's Rules promulgated to meet the requirements of Section 287.057, Florida Statutes, the back-up documentation outlined below is required for payment of the item invoiced. All services must have prior written authorization to be eligible for payment. Basic Services are authorized by the Agreement between Owner and Architect-Engineer, while Additional Services and Reimbursable Expenses may only be authorized in writing by the Contracts Administrator.

D. SPECIFIC REQUIREMENTS FOR BACK-UP DOCUMENTATION:
1. Basic Planning or Design Phase Invoices. For payment at the submittal of a Phase, the work product specified in the Agreement must be submitted prior to or with the invoice.

2. Basic Bidding Phase Invoices. A copy of the Bid Tabulation Form and the recommendations of contract award **must** have been submitted to the Project Manager prior to or concurrently with the invoice. Copies of the bids do not have to be attached to the invoice. Note: This is not applicable to Construction Management projects.

3. Basic Construction Administration Phase Invoices. A copy of the Owner's Certificate of Partial Payment must be attached to the invoice. The invoice must be in proportion to the percentage of completion shown on the Owner's Certificate of Partial Payment. This is calculated as the total completed to date divided by the contract sum. Failure to do so will delay the processing of invoices.

4. All Lump-Sum Authorizations. A copy of the work product prescribed in the Authorization must be submitted prior to or with the invoice and a copy of the Authorization **must** be attached to the invoice submitted.

5. Personnel Time Expenditure Charges Authorized on a Not-To-Exceed Basis. Attach to the invoice:
   a. A copy of the Authorization,
   b. Time sheets, or a recapitulation sheet indicating the individual's name, specific days, hours, and tasks performed. A highlighter may be used to highlight the personnel time and to differentiate it from other assignments on the time sheets,

6. Charges for Premium Portions of Overtime Authorized on a Not-To-Exceed Basis. These types of charges require the same back-up data as specified for Personnel Time Expenditures Charges in Paragraph 5 above.

7. If applicable, charges for Reproduction of Drawings and Specifications Authorized on a Not-To-Exceed Basis. Attach to each invoice:
   a. A copy of the Authorization.

b. Copies of paid invoices and receipts for all printing, copying, and mailing costs. All in-house printing costs shall be at the current market rate per vicinity.

8. If applicable, fees paid for Securing Approval of Authorities Authorized on a Not-To-Exceed Basis. Attach to the invoice:
   a. A copy of the Authorization.
   b. A copy of the Consultant's invoice with a copy of the Authorities' approval document attached indicating approval by the Architect-Engineer on its face.
   c. The back-up documentation described in Section 7 above, as applicable.
   d. If the Authorization specifies a Cost-Plus-Not-To-Exceed Amount in accordance with a Consultant's Fee Proposal, a copy of the approved Fee Proposal must be attached.

9. If applicable, Advertising Costs Authorized on a Not-To-Exceed Basis. Attach to the invoice:
   a. A copy of the Authorization or the *Approval to Solicit Bidders Letter*.
   b. A copy of the newspaper or advertising agency paid invoice and receipt.
   c. An original notarized proof of advertisement.

10. Final Payment. The final invoice must have a copy of the completed Contractor's Affidavit of Contract Completion and a copy of the completed Final Pay Request Checklist attached to the invoice and each copy submitted.

E. PAST DUE INVOICES:
When submitting a new invoice and there are outstanding or past due billings, please indicate any past due invoices in the lower right-hand corner of the invoice form. In no case should an item previously invoiced be shown on a later invoice in the amount due column; show only as previously billed. Call or e-mail the Project Manager if there is an inquiry about the status of an invoice.

4.00 DESIGN SERVICES

4.01 GENERAL INFORMATION:
The Bureau of Building Construction recognizes the basic design phases of Conceptual Schematic Design Phase, Advanced Schematic Design Development Phase, Design Development Documents Phase, Construction Documents Phase, Bidding Phase, and Construction Administration Phase. During negotiations, the Design Phase submittals will be discussed and agreed upon. Some projects are small and may not require all the standard phases of submittals. Some projects may be large enough to require additional submittals, such as Conceptual Schematics, Advanced Schematics, 50% Design Development Documents, and 50% Construction Documents. The Agreement with the Owner will reflect the agreed upon phases and their scheduled submittal times. The Architect-Engineer's proposal will reflect the number and distribution of copies at each phase.

The Bureau of Building Construction delivers a large variety of building types. Please refer to the Design and Construction Guidelines for State Facilities in Florida. The Architect-Engineer is also encouraged to utilize the National Institute of Building Sciences *Whole Building Design Approach* listed on the website www.wbdg.org to achieve high performance buildings within the available funding. Furthermore, the Architect-Engineer shall focus special attention to integral building envelopes and advanced HVAC systems that provide quality indoor air environments. The building design should work in every way to enhance the agency's mission that it is housing while being secure, energy efficient, easy to maintain, and constructed of long life-cycle building components. It is anticipated the Architect-Engineer may have to shift emphasis from building design geometry issues to building systems issues in the effort to deliver an affordable and approvable design.

Three basic design phase submittals and their requirements are detailed hereinafter. Additionally, the expectations of other basic responsibilities of the Architect-Engineer are explained in Section 4.05. A partial list of Additional Services is given in Section 4.06.

4.02 SCHEMATIC DESIGN PHASE:

The Architect-Engineer should utilize this phase to gather a complete understanding of the project's basic requirements. Conferences may be needed with the Client Agency or others having jurisdiction, either in the office or on site, to gather more project information. These conferences are to be coordinated with the Project Manager. Should soil borings, surveys, or other information be required, the Architect-Engineer should promptly request authorization via a proposal to acquire such services.

During the negotiation, it should be agreed upon whether design submittals will be presented and discussed at a review meeting or whether the submittals will be e-mailed and reviewed independently. The location of any review meetings should also be agreed upon at negotiation.

The Architect-Engineer will arrange a review meeting, attended by the Project Manager, the Design Review Team, and the Client Agency. A copy of all required materials should be sent to all participants by the Architect-Engineer a minimum of five (5) working days prior to the meeting. At the meeting, the Architect-Engineer will explain the design and the influences that led to the proposed solution. The Architect-Engineer will show the design meets all the requirements of the program with particular emphasis on space allocation, function, site adaptation, codes, and local zoning requirements. The Architect-Engineer shall make minutes of the meeting and address them to the Project Manager with copies to all other attendees.

A. SUBMISSION REQUIREMENTS:

The Architect-Engineer shall present enough documentation to ensure a full understanding of the proposed design. Exterior and interior perspective sketches and mass models may be necessary to fully present the concept. Sketches and mass models are considered basic design tools and are inherently a part of Basic Services. Detailed models and perspective renderings are not expected at the schematic stage and are considered Additional Services.

Schematic Design Documents should include fundamental design decisions such as: functional organization; building and site circulation; massing; scale; conceptual appearance; neighborhood context; basic exterior and interior finish material and product concepts; conceptual structural, mechanical, and electrical systems; and circulation and conveying systems.

On large projects, the Schematic Phase may be divided into a conceptual and an advanced submittal. On smaller projects only one schematic submittal may be required. Regardless, the Architect-Engineer is responsible for seeing all Schematic Requirements are included in the schematic submittal(s).

B. CONCEPTUAL SCHEMATIC DESIGN PHASE REQUIREMENTS:

The Conceptual Schematic should include, but not be limited to, any of the following that are applicable:

1. A study of the existing Master Plan, if one exists, or a statement the project does not have a Master Plan. If there is a need for a Master Plan and there is none, the Architect-Engineer should discuss this with the Project Manager.

2. The soil and ground water conditions, including but not limited to contours, accessibility, utilities, flora, zoning, and governing codes should be described as related to the project.

3. Topographic studies of terrain shall emphasize features contributing to the solution or require significant alteration in the solution. A flood hazard evaluation must be included. The Architect-Engineer should determine whether the building site is in a 100-year flood plain. This information, including the 100-year flood elevation, must be shown on the building site plan and lowest (ground level) finished floor elevation set one (1) foot above the 100-year flood elevation. The probability of water over-running the site shall be investigated and reported. The 100-year flood elevation and contour shall be indicated.

4. A site plan indicating orientation, site use, demolition, placement of structures, building construction, circulation, and parking. The site plan must indicate utility systems and show existing utilities with different tonal qualities or line types from proposed utilities. The site plan must indicate different landscapes, hardscape concepts, and forms.

5. Block diagrams or floor plans for each proposed level. Repetitive levels may be grouped.

6. At least two (2) sections, perpendicular to each other at same scale as plan or block diagrams to establish vertical control.

7. Exterior elevations, blocking out to illustrate massing and context while avoiding detail.

8. Larger scale (l/4"=1'-0") drawing of repetitive modules such as individual offices, medical exam rooms, or dormitories which are part of the project should be included, if applicable. Provide larger scale drawing of complicated rooms such as kitchens.

9. In the case of additions or renovations to existing buildings, show existing and proposed facilities in their relative arrangement and relationship and provide a brief description of the existing construction and systems indicating the current and former uses of the facility.

10. Proposed accommodations for the handicapped, as regards both program needs and code requirements.

11. A general description of architectural, engineering, and construction concepts, and the architectural, structural, plumbing, fire protection, HVAC, communications, electronics, and electrical systems to be used.

12. A listing of codes to which the projects design complies.

13. A fact sheet indicating names, addresses, and telephone numbers of the Project Manager, Client Agency Representative, Architect-Engineer, and consultants.

14. A statement that the Department of State has been contacted and any conflicts between the project and conservation or historical interests of the Department of State have been or are being resolved. This contact should be made with the Compliance Review Staff, Historic Preservation Section, Division of Historic Resources, Department of State, R.A. Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250.

15. Cost and area analyses correlated to the program requirements and established budgets.

C. ADVANCED SCHEMATIC DESIGN DEVELOPMENT PHASE REQUIREMENTS:
The Advanced Schematic Design Development Phase should include, but not be limited to, any of the following that are applicable:

1. If required by the Project Manager, provide a Basis of Design Booklet or binder explaining the basis of design and describing how the design solution satisfies the program. The Basis of Design should summarize the opportunities and constraints influencing the design and the rationale behind the design. The Booklet will also serve as a vehicle to acquaint interested upper management and lay persons with the particulars of the project. Provide a narrative description of the design and construction concepts and how they are responsive to the program. This requirement will be conveyed to the Architect-Engineer prior negotiation and execution of the Agreement.

   The Basis of Design Booklet must summarize the opportunities and constraints influencing the design and rationale behind the design. The Booklet should contain:
   a. Introduction – Provide a brief description of the project scope, purposes, data sources and contents.
   b. Provide a fact sheet indicating names, addresses and telephone numbers of Project

Manager, Client, Agency Representative, Architects, and consultants.

c. Goals – Provide a statement of the Architect-Engineer's understanding of the owner's project objectives stated in terms of function, form, quantity, quality, economy, and time.
d. Facts – Identify pertinent data, amenities, configuration, and operations including general site planning, functional organization, design, site use, and development. Identify the existing facility's structural, mechanical, and electrical systems.
e. Zoning – Provide a description of existing zoning and restrictions, any other site factors controlling development, and recommendations for resolutions.
f. Code Requirements – Provide an identification and presentation of code requirements and any authorities having jurisdiction. Provide a review of codes having bearing on the project and report specific problems encountered in conforming to specific codes or any problems which may arise in satisfying permitting agencies, as well as solutions, waivers, or variances, if any, being pursued.
g. Needs – Provide space and functional program requirements, schedule requirements, and compatibility with established budget requirements.
h. Problem Statement – Provide summary statements identifying unique and essential project design and construction criteria. Provide recommendations regarding additional required services, surveys, soil borings, detailed cost estimates, and models.
i. Provide a preliminary project description. Describe major site, architectural, structural, mechanical, plumbing, fire protection, cathodic protection, communications, electronics, and electrical systems with proposed construction products and materials, including off-site improvements, if applicable. Provide a description of the features and provisions provided in the facility for use by disabled persons.
j. Provide a cost analysis with summary and project schedule.
k. Appendix – Provide relevant information such as directives, relevant correspondence, graphical data referenced in document, functional diagrams, space planning tables, and reduced drawings.

2. A plan showing how the project fits into the Master Plan for total facility development, if applicable.

3. Site plans showing existing and proposed roads, walks, circulation elements, on-site and off-site utility systems, accessible route(s), plantings, and special site features, including flood plain considerations.

4. Studies and reports relative to the site and its topographical, ecological, botanical, and other features contributing to the solution or requiring significant alteration of the existing site.

5. Floor plans indicating accessible route(s). A plan for each proposed level must be provided. Repetitive levels do not need to be shown separately but may be grouped. Horizontal control dimensions should be indicated.

6. If the project is an addition or is otherwise related to existing buildings on the site, the plans shall show the existing facilities and their general arrangement and relationships.

7. A life safety plan indicating class of construction; occupancy; exiting patterns; exit width calculations; smoke compartments, if applicable; and fire ratings for walls, doors, and other openings. If smoke control systems are planned, the systems must be indicated. The life safety plan must be provided at the same scale as the floor plan.

8. Floor plans and interior elevation studies of typical repetitive modules such as individual offices, medical exam rooms, or dormitories, if applicable. Complex areas such as kitchens should also be enlarged at 1/4"=1'-0" scale or larger, if applicable. The footprint, volume, and organization of repetitive components should be established along with plumbing, HVAC, and

electrical services.

9. Building sections at least two perpendiculars to each other and at the same scale as the floor plans. Dimensions to establish vertical control must be provided.

10. Exterior elevations must be shown at the same scale as the floor plans.

11. Structural framing plans must be shown at the same scale as the floor plans and indicate primary vertical and horizontal structures.

12. HVAC plans must be shown at the same scale as the floor plans and must show proposed distribution for primary vertical and horizontal HVAC systems, including shafts and schematic arrangements of primary equipment.

13. Plumbing plans must be shown at the same scale as the floor plans and indicate primary plumbing risers, chases, fire service risers, roof drains, and overflows with storm-water leaders and proposed primary horizontal distribution, including the locations and schematic arrangements of primary equipment.

14. Electrical plans must be shown at the same scale as the floor plans and indicate vertical and horizontal electrical primary and stand-by power and communication distribution, including locations and schematic arrangements of primary equipment, switchboards, and panel boards.

15. Details of non-typical construction, materials, and building components.

16. Provide project product material binder and specification notebook based on design decisions reflected by the schematics arranged in Construction Specifications Institute (C.S.I.) format.

17. When required by the Architect-Engineer's Agreement, provide presentation materials including study sketches, perspectives, and other drawings as appropriate to convey design intent; provide study model(s) when appropriate.

D. AREA ANALYSIS:
If applicable, at the completion of the Schematic Design Phase the Architect-Engineer shall provide a spreadsheet comparing the square footage in the building program to that of the plans, as submitted. An Area Analysis must show all rooms and indicate which rooms and/or suites have increased or decreased in size, any additional spaces added or deleted from the program, and the tabulated total square footage. Remarks or reasons should denote any variance greater than ten percent (10%) from the programmed square footage.

The Project Manager and Architect-Engineer shall review any effects of the actual square footage and how such changes affect the Owner's Construction Budget. Appropriate action may need to occur, such as reducing the size of the planned facility or the Owner procuring more funds for the Project.

If the square footage does not occur in future design phases, no further Area Analysis needs to be accomplished. However, if future increases or decreases occur in other phases, the Architect-Engineer will provide an Area Analysis for those phases and provide a statement of how those changes affect the Owner's Construction Budget.

E. COMMENT AND APPROVAL:
After the presentation meeting, or upon receipt of the submittal, the Project Manager will coordinate the review and, if appropriate, approve the schematics. Approval of schematics by the Project Manager is required before proceeding to Design Development Phase.

A Schematic Design Phase approval is given with the explicit understanding all expectations of

the program, codes, rules, regulations, and laws will be capable of satisfactory evolution in later phases and the economic constraints of the budget will not be exceeded.

F. RESPONSE TO DMS REVIEW COMMENTS:
The Architect-Engineer shall respond in writing to DMS review comments using the format provided or specified by the Project Manager. The response shall be submitted to the Project Manager. Any other changes in the design contemplated by the Architect-Engineer because of the review comments shall be noted in the response.

4.03 DESIGN DEVELOPMENT PHASE:

A. SUBMISSION REQUIREMENTS:

1. General: All design decisions should be documented in the Design Development Documents, as these documents, when approved, will provide the basis for the Construction Documents. At the completion of the Design Development Phase, it is expected that all design, technical, administrative, and cost challenges will have been resolved and there will be no carry over of design or basic research to the next phase. The Architect-Engineer shall present enough documentation to fully explain the quality level decisions and solutions reached. This documentation shall consist of drawings, outline specifications, perspectives, models, cost estimates, material samples, and a booklet of design criteria such as sketches, calculations, notes, and economic or engineering analyses. Specification cut sheets for lighting, plumbing, hardware, HVAC equipment, architectural specialties, special equipment, and other key elements are to be included.

2. Development Procedures: Any conferences needed with the Client Agency or other agencies having jurisdiction, either in the office or on site, shall be coordinated with the Project Manager. The Architect-Engineer will provide minutes of each meeting to the Project Manager, with copies to all attendees.

   The Project Manager on behalf of the Architect-Engineer may arrange a formal review meeting. The meeting may be attended by the Project Manager, the Client Agency, and other assigned review staffs. In weeks prior to the meeting, the Architect-Engineer shall send the contracted number of copies of review materials to the Project Manager for the invitees. At the meeting, the Architect-Engineer will explain the design and the decisions leading to it. The Architect-Engineer will explain how the design meets the requirements of the program, with particular emphasis on space allocation, function, budget, codes, engineering concepts, and local building requirements. The Architect-Engineer shall complete and provide minutes of the meeting to the Project Manager with copies to other attendees.

3. LIFE-CYCLE COST ANALYSIS SUBMITTAL OF ENERGY CONSUMING OR HVAC EQUIPMENT:
   - This only applies to buildings with over 5,000 gross square feet. After schematic approval, but prior to submittal of Design Development, the Architect-Engineer shall submit at least three (3) HVAC or equipment schemes and life-cycle analysis results for review and approval as required by Sections 255.251 through 255.254, Florida Statute. The analysis shall comply with the Florida Energy Modeling Program (FEMP) procedures and may be obtained from the Project Manager. The submittal shall be bound and include the project number, project name, and relevant data, results, FEMP summary sheets, the Architect-Engineer's recommendation concerning the scheme with the lowest life-cycle cost, and the Architect-Engineer's signature and seal.
   - This submittal is considered Additional Services when complex or multiple systems are evaluated. However, to minimize the cost impact, the Architect-Engineer should utilize the same FEMP-approved software for calculating the building heating and cooling loads for the lifecycle cost analysis. Other programs, such as Trane Trace, are available; the Architect-Engineer should check with the Project Manager for program acceptance.

B. SITE:
The information pertaining to the site and its development should be presented as a single entity

passing across professional disciplines. It should include, but not be limited to:

1. Informational Data - Location plots, property and topographical surveys, subsurface boring logs and plans, ecological and botanical surveys, easements, zoning, and other appropriate information.

2. Master Plan - A copy of the Master Plan, indicating the location of the project and total scheme, if applicable.

3. Flood Hazards - In accordance with Section 255.25(6), Florida Statutes, show the proposed construction is in compliance with the flood plain management criteria for mitigation of flood hazards, as prescribed in the rules and regulations of the Federal Emergency Management Agency (FEMA) or what is to be designed and constructed to bring the proposed construction into compliance with flood plain management criteria.

4. Environmental Consideration - Necessary design data, specifications, and cost estimates for preservation, dust, erosion, sedimentation, and run-off control, where applicable, as an integral part of the design and construction project. Such controls will be limited to the area involved in the construction operation and those required by applicable ordinances, rules laws, and agencies having jurisdiction. Environmental control is not to be confused with landscaping. The information provided will include statements regarding the type of treatments selected, the affected areas, and the reasons for the selection of the type of controls chosen.

5. Grading and Site Development - The data provided, in addition to the proposed development, should include a statement of the general soil conditions with a brief outline of the soil exploration and testing performed. Grading elevations shall be shown.

6. Site Construction - All permanent features to be constructed on the site must be indicated on the plans, including the footprint of buildings and different design disciplines.

C. ROADS, WALKS, PARKING, AND HANDICAPPED ACCESSIBILITY:
Indicate the type and volume of traffic, speed limit on roadways, controlling wheel loads, classes of surfacing under consideration, with justification for same, and any deviation from criteria for those classes. Parking requirements, including but not limited to code, program, and occupant load should be provided. Provide for handicapped accessibility in the site elements and to the building in accordance with applicable codes and the Florida Accessibility Code for Building Construction (FACBC). Any exceptions shall be documented in writing, discussed, and agreed upon.

D. UTILITY SERVICES:
All existing and proposed utility services including runs, locations, capacities, sources, characteristics, materials, and installation methods should be fully described. The energy sources should be evaluated for the equipment to be installed. Indicate on the site utilities plan all above and below-ground utilities, points of connection to off-site services, buildings, and facilities. Distinctions must be made between existing and new work with different line types or tonal qualities.

E. ELECTRICAL:
A statement relative to the adequacy of the primary supply at the point of source. If the source is inadequate, measures proposed to correct the deficiency must be stated. The Architect-Engineer should determine electrical demands and the consumption profile of the proposed electric utility and possibly with competing companies for the most advantageous rates, including off-peak loading and reducing demand charges. Grounding and lightning protection requirements and solutions must be addressed. The electrical site plan must show lighting, site power locations, service locations, and sizes.

F. FUEL DISTRIBUTION AND STORAGE INFORMATION:

As related to the site, the following information shall be provided:

1. Fuel Gas:
   a. Statement of type, location, size of take-off from supply, and available pressure.
   b. Statement of type and material for pipes and valves.
   c. List applicable codes for installation, permitting, licensing, maintenance, and future replacement and a statement indicating compliance and impact. Include any certifications and compliance requirements from the Department of Environmental Protection, the State Fire Marshal, and any agency having jurisdiction.

2. Liquid Petroleum Products:
   a. Statement of type, location, size of take-off from supply, and available pressure.
   b. Description of the type of system and proposed features.
   c. Statement of the basis for storage capacity, rate of pumping, and number of dispensing outlets.
   d. Description of power supplies and power requirements.
   e. Selection of type of materials for pipe, tanks, and valves.
   f. List applicable codes for installation, permitting, licensing, maintenance, and future replacement, and a statement indicating compliance and impact.
   g. List applicable codes for installation, permitting, licensing, maintenance and future replacement and a statement indicating compliance and impact including the Department of Environmental Protection tank certifications and compliance requirements.
      Note: Underground storage tanks (USTs) over 110-gallon capacity and aboveground storage tanks (ASTs) over 550-gallons capacity shall comply with Chapter 62-761, Florida Administrative Code (F.A.C.) and Chapter 62-762, F.A.C, respectively. All USTs must be double-walled or installed within an FDEP approved secondary containment system. All ASTs must be double-walled or installed within an impervious secondary containment. All facilities are required to have internal and external release detection equipment or methods for their storage tank systems. Contact the DMS Environmental Health and Safety Coordinator for questions regarding tanks.

G. DOMESTIC WATER AND FIRE PROTECTION:
   1. A complete description of the source; minimum and maximum pressure at each building and in the system; an explanation of the existing system covering particularly the type, capacity, present flow, condition, and present water use; and any unsatisfactory elements of the component parts.
   2. A statement of the type of construction proposed, materials for water mains or wells, and any other components must be provided.
   3. The distribution system, a statement of design, domestic and fire flow usage of well pressure, elevation differential, and the Architect-Engineer's preliminary estimate of tentative pipe sizes.
   4. A statement of tentative sizes, elevations, and capacities as can be readily determined without long computations or design consideration for reservoirs, treatment units, plumbing plants, well pumps, and other similar units.
   5. Fire mains shall conform to National Fire Protection Association (NFPA) 24.
   6. Separate fire mains from potable water supply by a listed backflow preventer.
   7. Determine source, availability, and adequacy of fire protection water supply by obtaining test data from local authorities on flow and pressure of existing or proposed water supply systems.

H. SEWERS AND SEWAGE DISPOSAL SYSTEMS:
   1. An explanation of existing systems, particularly the type, capacity, condition, present flow, and unsatisfactory elements or components.
   2. The interpretation of the degree of treatment necessary by field requirement and units necessary for treatment.
   3. A statement of the design factors with present design population per various units for the sewage treatment plant.
   4. Statements of materials to be used for the sewage system, sewage collection system, and the sewage treatment plants.

5. Means of effluent disposal.

J. STORM WATER RETENTION, DETENTION, AND CONVEYANCE SYSTEM:
   1. An explanation of the existing system covering particularly the type, capacity, condition, and any unsatisfactory elements or components.
   2. A statement of the type of construction proposed and materials to be used.
   3. A statement of the design requirements, calculations, and tentative pipe sizes.

K. CHILLED WATER SUPPLY AND RETURN:
   1. Chilled water supply and return with indication of connection points shall be indicated on the plan.

L. ELECTRONICS AND INSTRUMENTATION:
   As related to the site, the following information shall be provided:
   1. System engineering concepts.

   2. Site and location considerations.

   3. Antenna requirements such as types, separation, heights, aircraft clearance, and area requirements.

   4. Site communications and control linkages.

   5. Electronic security considerations.

M. CATHODIC PROTECTION
   In addition to the proposed design, provide:
   1. Results of soil resistivity measurements.

   2. Variations in soil make-up.

   3. Soil moisture content and normal seasonal variations.

   4. Results of temporary cathodic protection tests, if any.

   5. Results of structure to soil potential measurements where protection is to be provided.

N. SITE IRRIGATION SYSTEMS
   Provide tentative layouts, materials, sizes, and any other required information. Utilize the parameters outlined in Section 373.185, Florida Statutes, *Local Florida-Friendly Landscaping Ordinances*, and in Chapter 60D-14, F.A.C., *Xeriscape, or Efficiency in the Use of Water in the Maintenance of Landscape*. Specify that tracer wire shall be laid on top of all piping, prior to backfilling of trenches. Sprinkler heads shall be visible.

O. FENCING
   As related to the site, provide type, height, and justification for fencing.

P. LANDSCAPING:
   Provide preliminary data on plant species, size, and massing layout.
   1. Utilize the parameters outlined in Section 373.185, Florida Statutes, *Local Florida-Friendly Landscaping Ordinances*, and in Chapter 60D-14, F.A.C., *Xeriscape, or Efficiency in the Use of Water in the Maintenance of Landscape*.

   2. Landscape plan shall include plant lighting, landscape, hardscape, site furniture, and recreational elements and any other information requested.

   3. Lateral and transverse sections through the site shall indicate development of the site, when

it is necessary, due to substantial elevation changes or circulation at more than one (1) level.

Q. BUILDING:
Each building should be fully described. Drawings should be organized for subsequent use as Construction Document drawings. Include title sheets with zoning, building, fire, life safety, plumbing, mechanical and electrical code summaries, and calculations; area and location maps; and a drawing index. Architectural drawings shall include, but not be limited to the following:

1. Abbreviations, symbols, legends, room numbers, keynotes, general notes, and room material code index, if used.

2. Key Floor Plans - A plan of each floor with dimensions; room names; room numbers; room material codes, if used; wall and partition type indications; ceiling heights; openings, including but not limited to window, door, and louver locations with symbols; plumbing fixture locations; casework; collateral equipment; building specialties; shafts; chases; suspended slab openings; and depressed slab locations.

3. Large scale, l/4" to l/2" per foot, floor plans, reflected ceiling plans, and elevations of typical repetitive elements including but not limited to exam room, offices, and dormitories.

4. Life safety plans indicating the class of construction, occupancy, exiting patterns, exit widths and calculations, smoke compartments, and fire ratings for walls, doors, and other such openings, exit signs, and fire detection and protection devices. If smoke control systems are planned, so indicate.

5. Reflected ceiling plans with light fixture locations and ceiling materials; coffers, vaults, domes, and other special constructions; and operable partitions.

6. Roof Plans showing all equipment locations, penetrations, slopes, and drainage.

7. Interior elevations - Transverse and lateral sections through the building, indicating heights, vertical circulation, and relationship. The finished floor elevation of each level should be given.

8. Exterior elevations, giving floor elevations at each level and showing finish materials.

9. Exterior wall sections and details necessary to indicate the methods of construction and to determine the overall "U" values achieved as required.

10. Preliminary opening schedules including but not limited to doors, windows, and louvers and all sizes, types, constructions, finishes, hardware, frame types, and fire ratings.

11. Wall and partition schedules.

12. Preliminary architectural finish and color schedules. Applied finish colors may be omitted at this phase. If a third-party interior designer is involved, ensure the architectural room finish schedule differentiates between architecturally selected finishes and interior designer selected finishes. Indicate where interior designer finishes are documented.

13. Conventional and accessible toilet accessory schedules with fixture related mounting locations and heights.

14. Toilet partition types and supports.

15. Casework and countertop locations, profiles, configuration, and materials.

16. Architectural woodwork location, profiles, and materials.

17. Building specialties with locations.

18. Exterior, horizontal, and vertical closures and roofing systems.

19. Horizontal and vertical circulation including chutes, shafts, and fire ratings and ancillary and equipment spaces.

20. Fire-resistive assemblies and locations.

21. Sound-rated assemblies, including operable partitions and locations.

22. Provide for handicapped accessibility to all areas of the building in accordance with applicable codes. Any exceptions shall be documented in writing, discussed, and agreed upon.

23. Area recap and square footage should be indicated for the project in comparison to that required by the program.

24. Provide a list of all safety equipment, including costs included in the project.

25. Other information considered necessary for the development of the program or explanation of the design, including a threshold building statement as defined in Section 553.71, Florida Statutes.

26. Sketches as necessary to portray the design concept.

27. A description of the materials used for all major items of construction.

R. STRUCTURAL:
   1. A description of foundation conditions, types of foundations to be used, the method by which the allowable bearing value is to be determined, and the maximum allowable bearing capacity for the foundation.

   2. Statement as to the type of construction adopted and reasons with capacities, dimensions, or other size criteria.

   3. Floor plans showing structural foundation systems and sub-slab construction, horizontal and vertical framing systems showing slab or equivalent edges, suspended slab openings, depressed slab locations, lateral load cross bracing, and typical construction details. Indicate proposed length and spacing of principal members. Note floor elevations.

   4. The description of the structural roof system proposed with principal members' dimensions.

   5. Provide structural building sections, transverse, and longitudinal, indicating vertical relationships and headroom.

   6. Note limited load carrying capacities and statement of live loading to be used, including but not limited to floor loads, wind, and earthquake, with justifying data.

   7. Provide calculations and design criteria when requested.

   8. A statement of any special considerations affecting the design.

   9. Provide general notes, but do not duplicate information in specifications.

S. HEATING, VENTILATION, AND AIR CONDITIONING (HVAC):
   1. Provide floor plans showing major plant equipment sizes and locations, heating and

refrigerant supplies and returns, air-handling equipment locations and air-handling distribution, air-handling supply systems and discharge locations and sizes, air handling exhaust systems and intake locations and sizes, and shafts and chases. Provide exhaust and ventilation riser diagrams for multi-story buildings or those with complex systems.

2. Provide sections showing equipment and locations of ductwork.

3. Energy Conservation - Provide assumption, calculations, and criteria in the form and detail required to fully convey the design intent and show compliance to the Florida Building Code. For projects over 5,000 square feet, the HVAC Design shall reflect the lowest life-cycle cost alternative resulting from the life-cycle cost analysis.

4. All Building Automation System devices shall use the Niagara Framework and be integrated to the Tridium Niagara supervisor at the Department's Operations and Controls (OPCON) section in Tallahassee. DMS Division 25, Integrated Automation Standards, are available on the DMS public website.

5. Heating Systems:
   a. Statement of indoor and outdoor design temperatures and "U" factor for walls, ceilings, floors, and any other relevant areas to be used in the design.
   b. Heating medium, including but not limited to steam, hot water, baseboard, forced warm air, and unit heaters.
   c. Type of heating system, including but not limited to converter, baseboard, forced warm air, and unit heaters.
   d. Types of building temperature control and energy management control systems.
   e. Location and type of heating plant.

6. Brief explanation of the basis for selection of type of fuel, including an economic comparison with other fuels.

7. Provide heat in all buildings with full-time occupants within the state. Deviations shall be requested in writing.

8. Ventilation:
   a. Statement of type of system and the design intent.
   b. Show in the Design Development Documents the selected design approved for maintaining indoor air quality, including but not limited to outdoor air quantity and recirculation through air purification devices. Provide a building ventilation schedule and a floor-by-floor air balance schedule to demonstrate positive building pressure.
   c. Indicate the ventilation air quantity during cooling and heating seasons, assumptions, and occupant load. Calculate the critical space and adjust outside air quantity accordingly. Specify the code-compliance methodology.
   d. Demonstrate compliance to American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 62. Delineate assumptions. Show each space ventilation flowrate based upon occupancy, ratio of ventilation to supply air, critical space, and calculation to determine the final outside air flowrate.

9. Air Conditioning:
   a. Provide a brief description of the air conditioning system proposed, such as factory assembled or built-up system, variable air volume (VAV), variable-volume variable–temperature (VVT), constant air volume (CAV) (acceptable only in small spaces and/or where outside air pretreatment system is used), number of zones (if applicable) or unit type, chilled water system, or direct expansion, type of refrigerant.
   b. List and describe areas to be air-conditioned.
   c. List applicable code standards and editions approved by the authority having jurisdiction, and other governing requirements such as ASHRAE. Delineate inside design temperatures and relative humidity, outside wet- and dry- bulb design temperatures, "U"

factors for the roof, walls, windows, and the type of construction proposed and a statement of the economics of applying insulation and sunshades.

d. Description of equipment to be used including but not limited to reciprocating or centrifugal compressor, condenser, air-handling equipment, and duct system piping.
e. Type of building temperature control system, such as electric, electronic, or pneumatic and the sequence of operation.

T. REFRIGERATION (COLD STORAGE):

1. Statement of areas to be refrigerated, indicating their usage, and temperatures to be maintained.

2. Outside dry- and wet- bulb design temperatures.

3. Type of refrigeration equipment.

4. Type and thickness of refrigeration insulation.

U. ELECTRICAL:

1. Indicate electrical service entrance power characteristics including but not limited to phase, voltage, configuration, and transformer requirements.

2. Indicate electrical characteristics of each circuit, including but not limited to phase, voltage, and number of wires. Provide a breakdown of the estimated connected load to show:
   a. Lighting and convenience outlet load.
   b. Power load for building equipment including but not limited to heating and air conditioning.
   c. Loads for special operating equipment including but not limited to compressors, x-ray equipment, pumps, and loads for power receptacles being provided to energize special equipment. Apply an appropriate demand factor to each to compute a total demand load.

3. Indicate the location of the main switchboard or power panels, light panels, transformers, and all equipment panels.

4. Indicate the type of wiring system, including but not limited to rigid conduit, and electrical metallic tubing and the location proposed for use.

5. The type of conductors, insulation, and other components and the proposed location.

6. Specify breaker types and acceptable and reasonable ampere-interrupt capacities for the required service.

7. Show the location of all lights, power outlets, switches, ground-fault circuit interrupters (GFCI), or other components.

8. Describe the proposed pertinent standards of design such as voltage drop, lighting intensities, and types of lighting fixtures, in accordance with lifecycle cost analysis.

9. Describe the short-circuit duty required for all protective devices and switchgear.

10. Indicate the requirements for the emergency electrical system.

11. Ensure the electrical information for the facility is fully coordinated with the site electrical requirements and with the low voltage communications systems requirements.

12. Describe the lightning protection system. Indicate resistance and continuity tests to be performed.

13. Indicate the requirements for surge arrestors.

14. Show the location of nurses' call stations and tamper proof receptacles, when required.

15. Provide any other information deemed necessary.

V. COMMUNICATION, ELECTRONIC AND INSTRUMENTATION PROVISIONS:

1. Provide sufficient information, including engineering concepts for review purposes of the systems proposed, including but not limited to intercom systems, telephone systems, public address systems, radio and antenna systems, television antenna systems, protection alarm systems, respond tie-ins, and any other data or systems deemed necessary.

2. Indicate equipment selection.

3. Site or location considerations for equipment.

4. Required radio paths and propagation.

5. Antenna requirements such as types, separation, tower heights, aircraft clearance, and area requirements.

6. Antenna transmission lines, terminations, and switching.

7. Bonding and grounding requirements.

8. Communication, control cables, and radio links.

9. Test equipment, repair shop, and spare parts storage requirements.

10. Equipment and instrumentation arrangement and space requirements indicating requirement for racks, consoles, and individual mounting.

11. Wiring and cable requirements, including terminations.

12. Power and lighting requirements, including emergency or standby requirements.

13. Air-conditioning requirements, including humidity and dust control requirements.

14. Interference and clearance requirements.

W. PLUMBING:

1. Provide preliminary layout of utility lines and building construction service lines with elevations and sizes fundamental to design.

2. Provide fixture schedule and floor plans showing domestic hot-water and cold-water supplies and returns, major horizontal and vertical services, the location and sizes of fixtures, equipment and the number of persons served.

3. Preliminary building sections showing riser and branch lines, fixtures, and equipment.

4. Provide the estimated number of fixture units, demand, and gallons-per-minute (GPM) for all plumbing fixtures.

5. Provide the estimated minimum and maximum water pressure at each building.

6. Indicate the type of heater and capacity for hot water supply when hot water is authorized.

7. Indicate requirements for acid dilution tanks including but not limited to laboratory waste, grease separators, and foodservice wastes.

8. Additional details as necessary to describe or clarify any other conditions.

X. FIRE PROTECTION:
1. Indicate service hydrants, post indicator valves, standpipes, and test valves.

2. Indicate risers and hose cabinets. Provide a riser diagram.

3. For sprinkler systems indicate the hazard rate of occupancy; the type of sprinkler system, wet or dry; and the water volume, pumps, and pressure required. Delineate any special system including but not limited to carbon dioxide and foam that will be required.

4. Layout sprinkler head coverage based on National Fire Protection Association (NFPA) 13.

5. Indicate the type of protection for sprinkler pipes and heads located in unconditioned spaces.

Y. SPECIAL EQUIPMENT:
If equipment is to be purchased by others, indicate Not In Contract (N.I.C.), and specify who is to assemble, set-up, and provide the utility rough-ins and final connections of this equipment. Indicate any and all equipment, such as:
1. Kitchen equipment.

2. Auditorium seating.

3. Stage curtain and equipment.

4. Gym layout and equipment.

5. Window coverings.

6. Hospital equipment.

7. Lawn irrigation equipment.

8. Vacuum cleaning systems.

9. Material handling equipment.

10. Telephone and data communication systems.

Z. BASE BID AND ALTERNATES:
The Architect-Engineer should recommend the scope of the base bid and the additive alternates proposed in order of priority to receive a base bid within budget. Alternates must be listed in order of priority and will be awarded in sequence as funds allow. The base bid must be structured so the project will function as intended if the alternates cannot be awarded.

AA. BASIS OF DESIGN BOOKLET:
If applicable, the Architect-Engineer must update the Basis of Design Booklet from the Schematic Phase but is not required to update the preliminary project description unless changes have been made to the scope of the Project. The Booklet should include an estimate of probable construction cost with the Design Development Phase submittal. This shall be compared with the Owner's approved budget.

The Booklet should also include an Area Analysis of the project. This shall be compared to the approved program. The Area Analysis should include the net and gross square footage and

efficiency factor by floor and overall.

BB. OUTLINE SPECIFICATIONS:
Provide outline specification and arrange according to Construction Specifications Institute (C.S.I.) format.

CC. PROJECT PRODUCT BINDER MATERIAL:
Update the product binder from the Schematic Phase and update with the addition of new materials and products as they are selected.

DD. COMMENT AND APPROVAL:
Upon receipt of the review materials, the Project Manager will coordinate the review meeting of the Design Development Phase submittal. Approval of Design Development must be given prior to proceeding into Construction Documents Phase. Approval of the Design Development Documents does not transfer to the State any of the liabilities and responsibilities of the Architect-Engineer.

EE. RESPONSE TO DMS REVIEW COMMENTS:
The Architect-Engineer shall respond in writing to DMS review comments using the format provided or specified by the Project Manager. The response shall be submitted to the Project Manager. Any other changes in the design contemplated by the Architect-Engineer because of the review comments shall be noted in the response.

4.04 CONSTRUCTION DOCUMENTS PHASE:

A. GENERAL:
At completion of 100% of the Construction Documents it is expected that all design, technical, administrative, and cost challenges will have been resolved and there is no carry over of work from this phase to the Bidding Phase.

B. NON-TECHNICAL SPECIFICATIONS (Design / Bid Projects Only):

1. The latest edition of the DMS Non-Technical Specification Sections of Division One is found on the DMS webpage and must be reviewed prior to and utilized during the Construction Document Phase. Do not use previous editions of the Non-Technical Specification Sections of Division One without checking with the Project Manager to make sure it includes the latest revisions. The Architect-Engineer shall use the Non-Technical Specification Sections of Division One as is, without retyping, except for the following:
   a. Cover Sheet - Retype the cover sheet, providing the missing information and the current date. When the final bid set of the Contract Documents is prepared, the current date will be the date the Contract Documents are made available to prospective bidders; all drawings and specifications are to bear this date and the drawings are to be without revisions. Any required revisions to the Contract Documents after this date shall be made by addendum during the bidding period.
   b. Table of Contents - Add the Table of Contents for the Technical Specifications by continuing the Non-Technical Specification Sections of Division One Table of Contents utilizing the same page numbering system and using as many pages as necessary.
   c. Advertisement for Bids - Utilize and insert the advertisement provided by the Project Manager, as an attachment to the *Approval to Solicit Bidders*. The type of licensed Contractor(s) capable of performing the project are to be shown in the *Invitation for Bids* and should be discussed and decided upon by the Architect-Engineer and the Project Manager before the Architect-Engineer prepares the *Invitation for Bids*. Refer to the Department of Business and Professional Regulation's website at http://www.myflorida.com/dbpr/pro/cilb/cilb_code.shtml for a list of Contractors requiring licensing.
   d. *Invitation for Bids* - Retype the entire letter on the Architect-Engineer's letterhead with filled-in blanks from data provided in the *Invitation for Bids*.
   e. Include the Owner's Project Name, Project Number, and other blanks listed in the instructions for completing the Non-Technical Specification Sections of Division One.

f. The Architect-Engineer is to complete the section listing permits and impact fees required of the Contractor. If known, the amount of impact fees should be given. If not available, either indicate an allowance or indicate the fee is to be paid by Owner. Indicate if this is a threshold-building project.
g. Time of Completion and Liquidated Damages, if applicable - Fill in the blanks. Discuss the contract times and liquidated damages with the Project Manager. As a minimum, liquidated damages should cover the Architect-Engineer's fees for extended construction administration based on a daily rate.
h. Alternates - Make certain to list all alternate bid items. Give the alternate number followed by a brief work description, the word "add" or “deduct”, and then a blank for the lump sum amount. The alternate shall be fully described elsewhere in the documents. The Project Manager must approve the use of any alternates in advance and in writing.

2. The qualified bidder will be the bidder who has submitted the lowest price for the base bid, or the base bid plus additive alternates or less deductive alternates, not to exceed the budget determined by the Owner. Alternates must be taken in the numerical order listed in the bid documents unless the order of alternates does not affect the designated qualified lowest bidder.

C. UNIT PRICES:
If unit prices are desired from the Contractor, prepare a form for the prices desired using the example as shown in the Non-Technical Specification Sections of Division One. If unit prices are not desired, delete this paragraph from the form. It is recommended unit prices be the price for adding or deleting work from the project. This will require the Architect-Engineer to include a reasonable number of units in the base bid which is expected to be used by the Contractor. Indicate unit prices are exclusive of overhead and profit.

D. LIST OF SUBCONTRACTORS:
Retype this sheet from the Non-Technical Specification Sections of Division One. Insert only major licensed subcontractors applicable to this project and remove all unused blanks.

E. SPECIAL CONDITIONS:
The Architect-Engineer should tailor this section to the needs of the Project, adding, deleting, or modifying paragraphs as necessary to fit the particular project. On smaller projects eliminate the Architect-Engineer trailer. On small projects, and where the work is not visible to the public, eliminate the project sign. Make any necessary adjustments to previous non-technical sections.

F. AGREEMENT BETWEEN OWNER AND CONTRACTOR, PERFORMANCE BOND, LABOR AND MATERIAL PAYMENT BOND:
Do not fill in any of the blanks in these documents. The Bureau of Building Construction’s Contracts Section will prepare these documents when a contract award has been made.

G. CODES:
The Architect-Engineer shall provide a certification with signature listing all codes and local ordinances to which the Project complies.

H. COST ESTIMATES:
At the end of each phase of design, an Estimate of Probable Project Construction Cost is required of the Architect-Engineer. The information should be presented by discipline or Construction Specifications Institute (CSI) format and given in recognizable units for estimating purposes including but not limited to square feet, cubic yards, and tons. The Opinion of Probable Cost must be compared to the budget given in the program and in the Agreement between Owner and Architect-Engineer.

I. DRAWING REQUIREMENTS:
The Architect-Engineer should ensure the drawings are final and complete with all elements thoroughly checked and coordinated to ensure there are no conflicts between architectural,

structural, mechanical, electrical, civil, and other portions of the work. Emphasis shall be placed on coordination when elements of the design are performed under subcontract to another firm.

The drawings should be prepared so Change Orders to the Construction Agreement will not be necessary due to errors, omissions, inadequacies, lack of coordination among the various design disciplines, or conflict between various component parts or with the specifications. When applicable, the design data should be shown on the drawings, including but not limited to:

1. Occupancy classification of all areas both for Building Code and National Fire Protection Association (NFPA) 101, Life Safety Code.

2. Floor areas and occupancy classification areas in square feet.

3. Loads - Roof and floor live loads, wind loads for roof, walls, fenestration, total loads, and any other required data.

4. Basic working stresses for concrete, structural steel, wood, concrete block, and masonry.

5. Foundations - Allowable soil pressure for spread footings and bearing value for piles.

6. Means of egress should be identified clearly on drawings.

7. Construction type and occupant loads.

8. Smoke partitions.

9. Fire and smoke barriers with fire resistance ratings, as appropriate.

10. Details of fire stopping for all penetrations.

11. Sprinkler system design criteria; head locations and riser diagrams.

J. MEDIUM:
Unless otherwise instructed, the drawings should be prepared by AutoCAD (Computer Aided Design & Drafting) version 2020 or later. Many Client Agencies are interested in obtaining copies of plans and specifications on electronic media. DMS requires this for both the contract-set and record-set documents. Each AutoCAD (.dwg) drawing file shall be bound with no extraneous X-refs such that it can be opened in its entirety by the end user via the electronic media. All .dwg files shall be saved to one properly labeled electronic media.

K. LETTERING:
Lettering size should be a minimum of 1/8" high.

L. SIGNED AND SEALED DRAWINGS:
All engineering drawings, including sprinkler systems, shall be signed and sealed by the responsible Engineer, in accordance with the rules of the Florida Board of Professional Engineers.

M. SPECIFICATION REQUIREMENTS:

1. General: The specifications shall be comprehensive and address all facets of requisite construction, tailored to the specific project, complete and final with all elements thoroughly checked and coordinated. Particular emphasis should be placed on the coordination of various elements of the specifications or portions of the specifications prepared by other firms employed by the Architect-Engineer.

2. Standard Specifications: Maximum use shall be made of standard materials and methods of construction and Standard Specifications. Specifications for classifications of work and material issued by an approved association, such as ASTM and ASME, may be included.

Each referenced specification must be examined, before its use, to ensure it is suitable for its intended purpose and proper choice is made of the options given. Federal and military specifications may be used. When a small quantity of material is needed and a standard commercial product would be suitable, reference to a specification is not required.

When specifying by product or model number, three (3) acceptable manufacturer's products should be specified. The Architect-Engineer must assure that each manufacturer listed does in fact manufacture an equivalent product. However, when this is not possible, the words, "or Architect-Engineer approved equivalent," must be included with the one (1) or two (2) specified products. Sole source specifications are not allowed without prior approval from the Project Manager. In referencing Standard Specifications, the following rules should be followed:

a. Avoid reference to specific paragraphs in the Standard Specifications, since this limits the requirements to the paragraph referenced.
b. Avoid repeated references to a Standard Specification within the same section.
c. Specify types, classes, weights, and similar applicable characteristics required to ensure an accurate description.
d. The Architect-Engineer shall submit a copy of each referenced Standard Specification when requested by the Project Manager.

3. Code Compliance: Include in the Construction Documents a complete listing of applicable codes and regulations with current edition dates. Refer to Paragraph 4.05N for the source of these codes.

N. SIGNATURES AND SEALS:
The Architect-Engineer shall submit bid documents and final drafts of reports under the signature, seal, and date of the principal representing each firm performing services on the Project. This shall be done in accordance with the rules of the respective Board for the registered profession.

O. COMMENT AND APPROVAL:
Plans and specifications submitted for review shall be sent directly to the Project Manager, the Client Agency Representative, the State Fire Marshal, and others, as directed. The Architect-Engineer shall give a reply to each comment, and if a change to the design is to be made because of the comment, then this should be referenced and described in the reply. It may be more appropriate to send a drawing, sketch, Architect's Supplemental Instructions (ASI), or other relevant document showing the changed design along with the response.

P. DESIGN SCHEME AND SCHEDULES / SAMPLES:
After approval of the Design Development Documents, but prior to completing the Construction Documents, color schemes and schedules for all areas, interior and exterior, must be provided. Material and sample palettes shall be provided, including exterior materials.

4.05 OTHER BASIC REQUIREMENTS:
The Architect-Engineer plays a key role in a successfully managed Project. The Architect-Engineer is expected to keep the Project Manager and the Client Agency informed of the schedule and status of the Project. The Architect-Engineer is expected to be aware of all the laws, codes, rules, ordinances, permitting, and authorities having jurisdiction over the Project. The Architect-Engineer is expected to anticipate the needs of the Project for additional information or services including but not limited to soil borings, surveys, and asbestos testing. The Architect-Engineer is expected to alert the Project Manager and initiate any proposals for Additional Services not a part of the basic Architect-Engineer's Agreement. The following is a partial list of expectations the Owner has of the Architect-Engineers.

A. DOCUMENT SUBMITTAL:
The quantity and distribution of documents should be discussed during negotiations. In addition, other agencies having jurisdiction may require multiple submissions or multiple copies for review. Send document submittals directly to any reviewing agency and provide a copy of the transmittal

to the Project Manager.

B. PROJECT SCHEDULE:
The Architect-Engineer shall submit a schedule with projected calendar dates indicating the key steps leading to completion of design and construction. This should be submitted after receipt of the signed Agreement and be updated as required. Copies should be submitted to the Project Manager for approval and distribution. On large or complex projects, the schedule must be sufficiently detailed to show all interrelated activities, including but not limited to concurrency application and approval, programming, space planning, and permitting. The schedule should show the sequence of events with projected calendar dates for start and finish of planning, design, bid, construction, and occupancy. The schedule should show all tasks necessary to complete each phase of the Project; show intervals for review between phases; and indicate all permits, licenses and approvals by agencies having jurisdiction, whether application is made by the Owner, Architect-Engineer, or Contractor.

C. STATUS REPORTS:
The Agreement for professional services requires the Architect-Engineer to prepare monthly status reports to be submitted by the first of each month during design, and monthly status reports to be submitted by the first of each month during construction. These reports must cover all work through the end of the previous month, with special emphasis on items of critical importance to the extent these items may cause future delays or problems. Information provided shall be in sufficient detail to give a concise overview of the Project. The Architect-Engineer shall submit these reports to the Project Manager with a copy to the Client Agency. Do not make entries referencing earlier reports. Formats and examples may be obtained from the Project Manager.

D. PUBLIC INFORMATION RELEASE:
Any proposed press releases must receive approval by the Project Manager and the Chief of the Bureau of Building Construction, or designee, prior to release. The nature of the services of the Architect-Engineer requires discretion be used in the release of any information throughout the Project.

E. MINUTES OF MEETINGS, CONFERENCES AND CALLS:
The Architect-Engineer shall take notes of the proceedings of all conferences, meetings, and conference telephone calls which deal with matters of scope, design, basic input, or project development. From these notes, the Architect-Engineer shall develop minutes of the proceedings and send copies to the Project Manager, the Client Agency, and all participants. It is recommended a log and notes on all incoming and outgoing calls related to the Project be kept. Any notes may be valuable later in resolving any disputes that may arise.

F. FORMAL DESIGN PRESENTATIONS:
During the negotiation, the required phase submittals and the manner of submittals will be discussed. Some submittals will be by mail. Others may require design review meetings. Larger projects may require formal presentations to Agency heads or other dignitaries. For these, the Architect-Engineer should prepare adequate copies of materials for all attendees. Large boards, slides, and models may be necessary for review and approval in a large conference setting. Reduced scale copies of these should be included in any handouts. The Architect-Engineer may be asked to give a preview of the presentation material to the Bureau of Building Construction management prior to the formal design presentation to the Client Agency. The location and cost of these formal design presentations should be discussed and agreed upon at negotiation.

G. SITE INFORMATION:
1. The Project Manager will furnish the Architect-Engineer with any available information relative to existing conditions at the site. The Architect-Engineer should exercise due caution with these materials, including original Construction Documents, as-built drawings, and shop drawings, and be satisfied by actual site investigation as to their validity before utilizing the data.

2. If authorized as an Additional Service, the Architect-Engineer shall prepare measured drawings and investigate hidden conditions. When removal is necessary, the Architect-Engineer must contact the Project Manager about planning for the removal. When the Project requires more site information than is provided, such as surveys and subsurface investigations, the Architect-Engineer shall make arrangements and submit a proposal to obtain the additional information as an Additional Service. See Section 4.06.

H. MATERIAL AND EQUIPMENT SELECTION:

1. The Bureau of Building Construction encourages the use of quality building materials. In general, materials should be selected to provide optimum service and lowest maintenance for the dollars spent. Products and materials manufactured in the United States and Florida should be specified when possible.

2. Drawings and specifications should be prepared so the bidder will be permitted a choice of materials or methods which are equally satisfactory for the purpose intended and are comparable in cost and quality when subjected to open market competition.

3. Drawings and specifications must clearly establish a standard of quality for all materials and equipment. Restrictive requirements should not be used if possible. The drawings and specifications should permit competition consistent with the work involved. When it is necessary to designate equipment and materials by product name, three (3) equivalent products should be named and the opportunity provided for other products to qualify before and after the bid date. Substitutions after the bid are generally not accepted unless quality can be proven equal and if a proper credit is given. Proprietary or sole source specifications are not allowed unless prior approval is obtained from the Chief of the Bureau of Building Construction, or designee.

4. The use of asbestos or asbestos-based materials, including vinyl asbestos tile, is prohibited in buildings being renovated, remodeled, or constructed for ownership or lease by the State. Both the Architect-Engineer and the Contractor will be required to complete affidavits stating no asbestos containing materials have been specified or installed in the Project.

I. PROTECTIVE CONSTRUCTION, SHELTER IN PUBLIC BUILDINGS:

1. The State of Florida, in accordance with Section 255.042, Florida Statutes, has instituted a policy of consideration of protective construction and fallout shelters in public buildings. The degree of protection to be provided will depend on factors varying with the type, size, location, and cost of the individual structure or facility. These features may provide immediate improvement or may facilitate later conversion for such purposes. When the Program Manager so instructs, the design of a Project will consider such protection and shall provide an evaluation of its costs.

2. The planning and design of a Project will provide for protective construction by slanting. Slanting is defined as the incorporation, without appreciable extra cost or reduction in efficiency, of certain architectural and engineering features into a new permanent type structure and portions thereof to improve their resistance to damage or to protect materials, function, and personnel. Where slanting can be provided at no appreciable cost, it should be applied to all permanent new construction.

J. DOCUMENT REVIEW AND COORDINATION:

The Architect-Engineer shall thoroughly review, check, and coordinate all elements of each and every submittal including those of consultants to avoid omissions and conflict. These checks should be made by persons other than those preparing the material. The name of the checker shall be indicated on all drawings, computations, and other submittal. Upon review of submitted materials, if the Project Manager determines that it has not been reviewed, checked, and fully coordinated, the submittal may be rejected and returned to the Architect-Engineer for satisfactory completion.

K. JURISDICTION OF OTHER AGENCIES:

1. Many State and local agencies have specialized knowledge or jurisdiction over certain aspects of building projects. Such agencies should be contacted early in the design process for consultation and coordination to ensure timely inputs and approvals. The Architect-Engineer shall review the Project with the Project Manager to determine which agencies may be involved.

2. The State and the Architect-Engineer must follow all local zoning, building, and permitting requirements. This includes but is not limited to storm-water management, tree-removal, landscaping, and concurrency.

L. UTILITY SERVICES AND CONNECTION:

It is the responsibility of the Architect-Engineer to investigate any utilities available or are being made available, the characteristics and capacities of the utilities, and the application and permitting requirements for connections. The Architect-Engineer shall ensure the Construction Documents are fully coordinated with the utilities to be connected, the service and capacity is available, and permits can be obtained for each.

M. CODES, RULES, REGULATIONS, AND PERMITS:

The Architect-Engineer shall provide with each design submittal a listing of all codes and regulations followed in the design of the Project. The Architect-Engineer shall further certify by signature that the design documents fully comply with those codes and regulations as stipulated by the governing boards of their discipline.

The design, construction, erection, alteration, modification, repair, and demolition of all public and private buildings are governed by the Florida Building Code and the Florida Fire Prevention Code, which are enforced by local jurisdictions or local enforcement districts unless specifically exempted by Section 553.80, Florida Statutes. Exceptions to local jurisdictions are as follows: facilities constructed under the authority of Chapters 944, 945, 985; the Governor's Mansion and grounds thereof, as described in 272.18; and the Capitol Building and environs; see Section 255.31, Florida Statutes.

Codes applicable to state office buildings and structures managed by the Bureau of Building Construction are found in the following documents: Chapter 60D-4, Florida Administrative Code, Rules for Construction and Leasing of State Office Buildings to Insure Energy Conservation; and Chapter 69A-3, Florida Administrative Code, Fire Prevention-General Provisions.

N. LIFE SAFETY AND FIRE PROTECTION:

It shall be the responsibility of the Architect-Engineer to ensure the design provides optimum measures for life safety and fire protection. The Architect-Engineer shall abide by the governing codes and regulations. The Division of the State Fire Marshal is responsible for reviewing all plans for compliance with fire safety provisions for all State-owned facilities. Where a question of Life Safety Code interpretation exists, the Architect-Engineer shall contact the State Fire Marshal's Office for resolution. In the continuation of decision-making, the following order of precedence shall be observed:

1. Prevention of loss of life and personal injury;
2. Protection of materials and equipment of high monetary value;
3. Protection of difficult to replace records;
4. Protection of buildings and their components.

4.06 ADDITIONAL SERVICES

In addition to Basic Services, the Architect-Engineer may be requested to provide additional compensable services for the Owner. Such services must be agreed upon in advance and authorized in writing by the Contracts Administrator. Additional Services will either be agreed upon for lump sum amounts or for hourly rates with a maximum fee amount. The more common Additional Services are:

A. PROGRAMMING:
A Program is a statement, prepared by or for the Owner, setting forth the conditions and objectives for a building project which includes its general purpose and detailed requirements, including but not limited to a complete listing of required rooms and room sizes, special facilities, and interior environmental and energy requirements. Normally the Program is provided to the Architect-Engineer prior to negotiations, but for certain projects the Architect-Engineer may be requested to prepare the Program or refine an existing program. This work shall be negotiated and authorized prior to commencement of the work.

B. SURVEYS:
If available, a survey of the Project Site will be provided to the Architect-Engineer by the Project Manager. If a survey is not available, the Architect-Engineer shall, upon authorization by the Project Manager, arrange to have a survey made, the cost of which is paid as an Additional Service. The purpose of a site survey is to obtain all information necessary for drainage design, development of the site, and for making utility connections to the building. Any existing structures or improvements on the site will be so designated on the survey drawings. The survey description and legal description by the surveyor shall be copied onto the drawing. If the survey is of a partial plot, it shall be so indicated. In securing a survey there shall be:

1. Determination of Need: The Architect-Engineer shall determine the surveying needs in detail. These needs shall be defined and sent to the registered surveyor(s) of choice for pricing and availability to schedule the work. The surveyor is considered a special consultant to the Architect-Engineer.

2. Authorization: The Architect-Engineer shall review the surveyor's service proposal and send it with a recommendation to the Project Manager, who, after review, will recommend to the Contracts Administrator who will authorize the services.

3. Upon receipt of the survey the Architect-Engineer shall verify its completeness, and to the extent possible, its accuracy.

4. Upon receipt of the survey, the Architect-Engineer shall send one (1) copy to the Project Manager and one (1) copy to the Client Agency either as a paper copy or electronically, as determined by the Project Manager and the Client Agency.

5. Survey content, minimum requirements:
   a. Survey shall meet the standards required under Chapter 5J-17, Florida Administrative Code. The Surveyor should contact the Department of Environmental Protection, Division of State Lands, Bureau of Survey & Mapping for any updated requirements.
   b. Boundary Survey - the typical boundary survey of property should indicate the following:
      - All headings and distances of property lines of all parcels comprising the site;
      - The dimensions and locations of buildings, structures, easements, rights-of-way, setbacks, and encroachments on the site, and the presence of any undeveloped mineral rights to which the site is subject;
      - Details of all party walls, walls, and foundations adjacent to, or within five feet of, the property lines;
      - Certification on the survey drawings by the city engineer or other qualified official that the officially established street lines, grades of curbs, sidewalks, and sewers are correctly given;
      - All surveys shall designate the full legal description of the parcel shown. The legal description shall also indicate if the parcel is part of a parent tract; and,
      - The survey shall be certified, sealed, signed, and dated by a land surveyor registered in the State of Florida.

C. TOPOGRAPHIC SURVEY - The typical topographic survey drawings must indicate:
1. Items one through five (1-5) as referenced above in Section 4.06B.

2. The position, dimension, elevation, and contours of all cellars, excavations, wells, backfill areas, and the elevation of any water bodies.

3. Generally, only trees six inches (6”) or larger in trunk diameter need be shown. This should be discussed with and approved by the Project Manager. The Survey should note their identity, trunk sizes, and approximate foliage area.

4. Existing major shrubs, undergrowth, and ground cover areas.

5. Detailed information required to established curb and building lines, streets, alleys, sidewalks, and curb grades and lines at, or adjacent to, the site and the materials of which they are constructed.

6. Floor elevations of all existing buildings to be renovated or to which additions will be made.

7. All known utility services including pipe sizes, pressures, and electrical characteristics. The location and invert elevations of all piping, mains, sewers, poles, wires, hydrants, and manholes upon, over, or under the site, or adjacent to the site, if within the limits of the Survey.

8. The probability of water overrunning the site shall be investigated. The one-hundred-year flood elevation and contour shall be indicated.

9. The official data upon which elevations are based and the benchmark established on, or adjacent to, the site shall be clearly indicated. Only one (1) such data point or benchmark shall be used on any site for establishing the grades for a Project.

10. Contours and elevations or a grid system of not more than fifty-foot (50’) intervals shall indicate changes of slope over the portion of the site to be developed. The intervals for contours shall be tailored to the site where construction is anticipated.

11. The contemplated data and description of any known or proposed improvements to the approaches or utilities on or adjacent to the site shall be given.

D. SUBSURFACE INVESTIGATIONS :

1. When the Architect-Engineer determines information on subsurface conditions is needed, the arrangements for the necessary investigations should be made upon written authorization from the Project Manager.

2. The cost of these investigations will be paid by the Bureau of Building Construction when properly authorized. Any investigation undertaken should be extensive enough to provide all the information needed to complete the design and should be closely monitored by the Architect-Engineer. Upon receipt of a geo-technical report, the Architect-Engineer shall send copies to the Project Manager and to the Client Agency. In securing a subsurface investigation there shall be:
   a. Determination of Need - The Architect-Engineer shall determine the testing needs in detail. This should be sent to the testing laboratories serving the Project vicinity.
   b. Authorization - The Architect-Engineer shall evaluate the replies from the testing laboratories and determine which testing laboratory will provide the services required. The Architect-Engineer shall forward the selected proposal with recommendations to the Project Manager. The Project Manager will recommend the proposal to the Contracts Administrator who will authorize the Architect-Engineer to proceed. The Architect-Engineer may not proceed with subsurface investigations until the authorization is approved.

3. Typical Requirements for Subsurface Investigation:
   a. The Architect-Engineer shall arrange for a full and comprehensive report prepared by a

qualified professional with graphical indication of the soil strata in each test location and a written narrative analysis of the tests and their meaning with regard to design of the proposed construction.

b. Borings and test pits shall extend to stable soil below the bottom of all proposed foundations. A field log of each boring shall be made, recording the thickness, consistency, and character of each soil layer encountered. Samples of each layer shall be taken and retained for later reference.

4. The amount and elevation of ground water encountered in each pit or boring and the possible variations during the seasons and the effect on the subsoil shall be determined. High and low levels of nearby bodies of water affecting the ground water level should also be determined and noted.

5. Appropriate laboratory tests shall be performed to determine the safe bearing value, compressibility, and characteristics of the various soil strata encountered.

6. Tests shall be made to determine if the soil has chemical characteristics which would adversely affect foundations or metallic conduits or pipe.

7. Percolation tests.

E. ROOF INVESTIGATIONS:
When moisture or precipitation has occurred during roof installation, an infrared thermographic analysis, nuclear roof moisture profile inspection, or some other form of non-destructive analysis should be made after completion of the roof. The Architect-Engineer should obtain quotes from at least two (2) firms and send the proposals to the Project Manager with a letter of recommendation. The Architect-Engineer shall not proceed with the investigation until the Authorization is approved. For re-roofing projects that may not require a complete replacement down to the deck, a roof investigation is recommended prior to designing this work. Additionally, roof cuts or cores are recommended to determine the roof composition and to determine if asbestos material is present. Again, an Authorization from the Contracts Administrator is required for this work.

F. APPLICATION FOR DEVELOPMENT AGREEMENTS: May be negotiated with lump sum parts or totally on an hourly fee with a maximum limit.

G. REZONING: Normally authorized on an hourly fee with a maximum limit.

H. MEASURED DRAWINGS: Normally authorized on an hourly fee with a maximum limit.

I. ASBESTOS SURVEYS, LEAD SURVEYS, TESTING, AND ABATEMENT:
1. General:
   a. Prohibition: In accordance with Section 255.40, Florida Statutes, "The use of asbestos or asbestos-based fiber materials is prohibited in any building, construction of which is commenced after September 30, 1983, which is financed with public funds or is constructed for the express purpose of being leased to any government entity." The Construction Documents must include this prohibition.
   b. Awareness: Assume all existing buildings may have asbestos containing material and/or lead paint. After authorization, obtain the necessary and current (less than five-years-old) asbestos, lead survey, and clearance tests from prior abatement projects prior to initiating design.
   Note: For DMS facilities, the Project Manager shall contact the DMS Facilities Environmental staff and provide direction to the Architect-Engineer regarding their involvement.
   c. The Architect-Engineer overseeing asbestos or other hazardous material abatement projects shall comply with all state, federal, and local laws, rules, and regulations.

2. It is recommended to abate hazardous materials prior to commencing construction. This eliminates the coordination issue between the abatement contractor and the Contractor and subcontractors and minimizes risks overall. In the event hazardous materials remain in the facility, an appropriate section of the specifications must be provided containing the requisite coordination information. Procedures to be followed if potential or suspect asbestos containing material (ACM) is encountered must be included.

3. The following list suggests several actions the Architect-Engineer and the Project Manager should accomplish as part of the consultant's services:
   a. Develop a work plan and a schedule for having survey teams in the building as well as for construction monitoring;
   b. Coordinate and review the plans with the Client Agency representative or DMS building manager;
   c. Review the plans with the building occupants, including Administration;
   d. Hold right-to-know meetings with the building occupants, involving the building manager and maintenance, HVAC, and electrical personnel, when applicable;
   e. Assure the Department of Environmental Protection and any other regulatory agencies have received notification prior to commencing abatement projects.

J. ENVIRONMENTAL SITE ASSESSMENT:
Levels I and II: May be a lump sum or an hourly fee with a maximum limit.

K. ART SELECTIONS:
1. Certain State projects have up to 0.5% of the appropriation designated for the commissioning or purchase of artwork for public spaces in the Project. A committee is formed including representatives of the Client Agency, local artists or educators, the Architect-Engineer, the Project Manager, and the Department of State, Florida Arts Council.

2. The Architect-Engineer may be asked to provide copies of floor plans and elevations. A brief description or statement about the building may be requested. The Architect-Engineer is requested to plan for art display in the building during the design of the Project. This may affect lighting, space for sculpture or wall hangings, structural support, or rigidity for hangings, lobby layouts, or other needs. An hourly proposal with a maximum limit is the normal method of Authorization.

L. ADDED PROJECT SCOPE:
During the course of the Project, the Architect-Engineer may be asked to design additional elements by the Client Agency, the City or the County, a Permitting Agency, or another agency having jurisdiction. The Architect-Engineer must consult with the Project Manager and refer back to the program, the original fee proposal, and the negotiation minutes. If this is not a Basic Service, or if this has not been discussed and agreed upon at negotiation, then this service may be authorized as an Additional Service. Some common examples of added scope may include:
1. Designing alternate bids outside the scope of the original program or designing alternates over the budget once the Architect-Engineer has advised the Project Manager and the Client Agency of this during the Design Phase.

2. Securing and paying for permits including but not limited to driveway permits, stormwater permits, permits from the Department of Environmental Protection or an agency having jurisdiction.

3. Designing off-site utility or roadway improvements not in the original program or discussed and agreed upon during the original negotiation.

M. FULL TIME PROJECT REPRESENTATIVE: Sometimes referred to as the Clerk of the Works. This is usually authorized as a lump sum amount.

N. EXTENDED CONSTRUCTION ADMINISTRATION: Refer to the Agreement between Owner and

Architect-Engineer for definition.

O. MECHANICAL TEST AND BALANCE AND OTHER TESTING:
   1. The Technical Specifications should clearly state the Contractor is NOT to be responsible for test and balance of heating, ventilating, cooling, and hydronic systems, but will be required to assist an independent test and balance company who will perform this work. This work will be done as a separate service by an independent specialist, authorized through either the Project Manager, when requested, or the Mechanical Engineer. The Mechanical Engineer will be asked to recommend a qualified firm who has experience with projects of similar scope.

   2. The Mechanical Engineer of record shall accompany the test and balance company during a portion of its work to assure accuracy and validity, and review and comment on preliminary and final reports.

   3. Similarly, the Architect-Engineer may be required to perform other testing services, or retain testing sub-consultants, to safeguard the Owner's interest.

   4. Some commonly authorized tests include but are not limited to witnessing factory chiller tests; lightning protection resistance and continuity tests; paving and materials tests; concrete cylinder tests; fire flow tests; and water pressure tests.

P. BUILDING COMMISSIONING:
   Building Commissioning is a term describing bringing the building systems from the static state to complete operation to meet both the design intent and the user's needs. It is a period for fine-tuning building equipment and controls by running through the various cycles and load conditions. When commissioning is required, the Architect-Engineer should coordinate with the commissioning consultant, if used, to delineate the operational design features to be accomplished and provide operational instructions and sequencing to assure the systems operate as intended. This service will be further defined by the Project Manager and may be authorized hourly or lump sum either to the Architect-Engineer or commissioning consultants.

Q. WARRANTY AND GUARANTEE INSPECTION:
   Prior to the expiration of the one-year warranty and guarantee, the Architect-Engineer may be authorized to schedule an inspection of the facility. A time would be selected when the Contractor, Project Manager, Client Agency, and other interested parties can attend. This inspection shall completely cover the constructed facility and the Architect-Engineer shall generate a list of all items requiring corrective action for the Contractor. While the Client Agency is expected to contact the Contractor or his Subcontractor about deficiencies occurring during the warranty period, the Architect-Engineer, if contacted, is expected to assist the Client Agency or the Bureau of Building Construction in obtaining satisfactory correction.

R. POST OCCUPANCY EVALUATION:
   It may be desired to evaluate selected buildings after they have been occupied to provide feedback for designing and constructing future buildings. The Architect-Engineer's team may be authorized to evaluate the building usage, its systems, and materials. The building occupants, maintenance staff, and the building committee members may be interviewed for their input.

S. FORMAL ARCHITECTURAL RENDERING:
   The formal architectural rendering, if required by the Authorization should be submitted at the time agreed upon in the Authorization.

5.00 PLAN REVIEWS AND APPROVALS

At each design phase, as called for in the Agreement with the Owner, the Architect-Engineer shall submit documents to the Project Manager, the Client Agency, and other reviewing agencies for approval. To keep the process moving as quickly as possible, the Architect-Engineer should transmit copies to all entities directly. The best method is to address the transmittal letter to the Project

Manager and at the bottom of the transmittal show copies with attachments to the other applicable agencies.

Likewise, each agency may respond directly back to the Architect-Engineer and should copy the appropriate Project Manager and Client Agency with their comments. If the Project Manager and Client Agency are not copied on another entity's response, the Architect-Engineer must contact the Project Manager to see if the comments were received. This simultaneous distribution and commenting may cause some duplication or conflicts, but the time saved is advantageous. Face-to-face plan review meetings and referenced in Section 4 can be beneficial in getting comments and approvals more quickly and in resolving problems. The Architect-Engineer should discuss this with the Project Manager prior to each design phase submittal.

5.01 DMS PROJECT MANAGER:

The Project Manager will review documents with an emphasis on function, program, budget, aesthetics, design quality, schedules, and construction materials. The Project Manager will coordinate the comments of others and help resolve any conflicting comments. The approval of a Design Phase submittal is issued only after the Project Manager is satisfied the documents meet the requirements for each phase and all others' comments have been resolved or answered. Do not proceed into the next phase without the written approval of the Project Manager.

5.02 OTHER AGENCIES:

The following is a list of regulatory agencies that should be coordinated with by the Architect-Engineer and to whom plans submittal shall be made, if applicable:

- Client Agencies;
- State Fire Marshal & local fire authorities;
- Florida Department of Environmental Protection for asbestos or other hazardous materials;
- Florida Department of Environmental Protection or the United States Corps of Engineers;
- Florida Water Management Districts;
- Florida Fish and Wildlife Conservation Commission for fauna and flora management plans;
- Department of Management Services, Florida Digital Service;
- Florida Agency for Health Care Administration, Bureau of Plans and Construction;
- Florida Department of Transportation;
- Local Authorities for zoning, comprehensive planning, and land use development permits;
- Florida Department of Business and Professional Regulation, Bureau of Elevator Inspection;
- Florida Department of Business and Professional Regulation, Division of Hotels and Restaurants for Public Food Service Establishments.

6.00 BIDDING AND CONTRACT AWARD (Design/Bid Projects Only, except as noted)

6.01 APPROVAL TO BID:

Once 100% of the Construction Documents have been reviewed and approved by the Project Manager, the Client Agency, and all applicable agencies listed in Section 5.02 above, the Project Manager will issue the Bureau of Building Construction’s approval of the submittal. Some entities, such as the Fire Marshal or other agencies with jurisdiction, may issue their approvals directly.

At this point, the bid time and location are to be established by the Project Manager in cooperation with the Architect-Engineer. The Project Manager shall issue the *Approval to Solicit Bidders* letter to the Architect-Engineer. Upon receipt of this information, the Architect-Engineer shall fill in the appropriate blanks in the *Construction Contract Project Manual for the Non-Technical Specifications Section of Division One*. Three (3) to four (4) weeks should be allowed for preparation and receipt of bids; a longer time may be permitted on large projects. The Architect-Engineer shall transmit a completed *Invitation to Bid* to the Project Manager for review and approval. The Architect-Engineer is not to proceed with bidding until the Project Manager has given approval. The Architect-Engineer must be familiar with Chapter 60D-5, Florida Administrative Rules. These procedures serve as the guide for bidding and awarding State projects.

6.02 ADVERTISEMENT:

For Level One, Level Two, and Level Three projects, as defined in Rule 60D-5, F.A.C., the Architect-Engineer must review Rule 60D-5, F.A.C., for advertising requirements. Under no circumstances will the Architect-Engineer advertise or release the documents for bid until an approved bid date is received from the Project Manager.

Level Four projects, as defined in Rule 60D-5, F.A.C., will be advertised by the Project Manager in the Florida Administrative Register and on the Florida Vendor Bid System website https://www.myflorida.com/apps/vbs/vbs_www.main_menu. The advertisement must appear at least twenty-one (21) days prior to the established bid date.

Level Five projects, as defined in Rule 60D-5, F.A.C., will be advertised by the Project Manager in the Florida Administrative Register and on the Florida Vendor Bid System website https://www.myflorida.com/apps/vbs/vbs_www.main_menu. The advertisement must appear at least thirty (30) days prior to the established bid opening. The Architect-Engineer is to place the advertisement for bids in at least one (1) newspaper's legal section with a general circulation in the county where the Project is located so the advertisement appears at least thirty (30) days prior to the established bid date.

The newspaper(s) should send the invoices and notarized proof of advertisement to the Architect-Engineer for payment. The Architect-Engineer is required to pay for the advertisement and invoice the Bureau of Building Construction for this amount. The Architect-Engineer shall send invoices and notarized proof of advertisement to the Project Manager.

The Architect-Engineer shall also solicit bids from Contractors through personal contacts; through mailing or e-mailing out the Invitation to Bid letter, found in the *Non-Technical Specification Sections of Division One*: and through builder exchanges, in order to obtain adequate bids from qualified Contractors. Builder Exchanges serve the construction industry by posting notices to prospective bidders.

6.03 ADDENDA:

During the bidding period, the Architect-Engineer shall issue addenda as necessary to clarify or modify the Construction Documents. The Architect-Engineer shall not give oral explanation of the plans and specifications and no oral instructions shall be given before the award of a contract. All instructions or clarifications shall be in the form of written addenda. Addenda shall be given to all prospective bidders. Bidders must be directed to acknowledge receipt of addenda on the bid form.

Addenda should be kept to a minimum. The Architect-Engineer shall not use addenda to respond to Agency comments from the 100% Construction Document review. All addenda sent to the Bureau of Building Construction shall be signed, sealed, and dated. Addenda should not be issued too close to the bid date to avoid confusion. If a late addendum is necessary, then the bid date should be postponed giving an adequate number of days to review and include it in the bid.

6.04 PRE-QUALIFICATION OF BIDDERS:

All Bidders shall comply with the requirements in the specifications entitled Prequalification Requirements and Procedures in Rule 60D-5, Florida Administrative Code, which includes the Contractor having a current certificate issued by the Florida Construction Industry Licensing Board and a current corporate license or charter renewal from the Florida Department of State, Division of Corporations, if the bidder is a corporation. The DMS contact information is included in the *Non-Technical Specification Sections of Division One* for the Contractor's convenience. If a specialty Contractor is required, a separate prequalification period may be established to limit bidders to those with specialized experience. Consult the Project Manager for more information.

The bid proposal form requires the bidder to identify the major Subcontractors the Architect-Engineer and the Project Manager have considered important to the Project. However,

Subcontractors are not prequalified. The bidder is responsible for listing only qualified Subcontractors who are licensed to perform the work. The listing of unlicensed Subcontractors will disqualify the bid of a bidder.

6.05 RECEIPT AND OPENING OF BIDS:

Transmission of bids may be by hand, mail, or courier**.** Facsimile bids or modifications are not allowed. No bid will be accepted after the published time of bid opening has passed. Only bids from qualified bidders will be considered for the award of the contract. The Project Manager will receive and open the bids at the appointed time and place in accordance with the procedures established in Rule 60D-5, Florida Administrative Code. This duty may be delegated to the Architect-Engineer.

The Architect-Engineer shall attend and assist in the bid opening and supply Bid Tabulation Form for the bidders use during the bidding. The Architect-Engineer shall be responsible for completing the Bid Tabulation Form and recording the minutes for the bid opening. The Architect-Engineer shall indicate in ink the submission of all required documents by a check in the proper column and the price quotations of each bid as read aloud. The Project Manager, the Client Agency representative, other witnesses present, and the Architect-Engineer shall sign the Bid Tabulation Form. The completed Bid Tabulation Form is to be given to the Project Manager.

After the bid opening and the pre-qualification of all bidders, the Project Manager, Architect-Engineer, and Client Agency will confer to determine what contract award they will recommend. The Architect-Engineer shall submit a letter of recommendation of the lowest responsive bidder to the Project Manager. If a recommended award is made, the Project Manager will post the Bid Tabulation Form at the place of the bid opening. If a Notice of Award is required by Rule 60D-5, Florida Administrative Code, this Notice is published on the Vendor Bid System. The Project Manager will give the Architect-Engineer a copy of each bid and the completed Bid Tabulation Form. The Project Manager will then submit the bids to the Contracts Administrator.

6.06 AWARD RECOMMENDATION:

For Level 4 and Level 5 projects, as defined in Rule 60D-5, Florida Administrative Code, , the Architect-Engineer must review and evaluate the Low Bidder's Contractor Experience Questionnaire and Financial Information form following the bid opening. All data submitted by the low bidder shall be forwarded simultaneously to the Project Manager and evaluated concurrently by the Bureau of Building Construction.

The Architect-Engineer shall review the low bidders proposed management staff, references, and capability to perform the work and shall make a recommendation to the Project Manager. The low bidder will be judged as either qualified or unqualified. Should the bidder be judged unqualified the bid will be rejected and the bidder submitting the next lowest responsive bid will be given seven (7) calendar days to submit the required qualification data. This process may continue until a bidder is deemed qualified. The Architect-Engineer shall provide the recommendation to the Project Manager.

6.07 CONTRACT PREPARATION:

After the award recommendation has been determined, the Contracts Administrator will prepare the Agreement and send it to the Contractor for bonds, insurance, signing, and sealing. After the Contractor completes the Contract Documents, the Contractor will return all copies to the Contracts Administrator for execution and distribution.

7.00 PERMITTING

The award of a contract does not give authorization to proceed to construction. The Contractor shall be cautioned by the Architect-Engineer that work shall not begin until the building permit, all other necessary permits, and the *Notice to Mobilize on Site and Proceed with Construction* is received.

7.01 BUILDING PERMITS:

Projects shall be designed and permitted in accordance with the Florida Building Code and Florida Fire Prevention Code.

The Contractor must obtain building permits, except in certain locations as referenced herein, from the authority having jurisdiction and the State Fire Marshal prior to starting work. In order for the Contractor to initiate this permit process, the Contractor must first obtain multiple complete sets of signed and sealed final Construction Documents with all addenda from the Architect-Engineer. The Contractor will then sign the cover of each document and submit a set with a permit application to the authority having jurisdiction as well as two (2) sets to the State Fire Marshal if the task has not been accomplished by the Architect-Engineer.

7.02 OTHER PERMITS AND APPROVALS:

It is the responsibility of the Architect-Engineer to determine which authorities have jurisdiction, assure the development of the Project is fully coordinated with these agencies, and see the requirements are accommodated in the documents so all approvals can be readily obtained. This coordination begins with the Schematic Design Phase and must be completed prior to the taking of bids so delays in the start of construction do not occur. Some agencies require fees for permits and approvals. Discuss this with the Project Manager. The Bureau of Building Construction may be able to pay these fees directly through electronic transfer of funds to the agencies. This should be coordinated with the submittal of the permit application by the Architect-Engineer.

A. FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION:

The Florida Department of Environmental Protection is responsible for the implementation of Chapter 403, Florida Statutes, concerning pollution control of the environmental water supply and discharge. To meet the intent of the law, the Florida Department of Environmental Protection has issued several rules of the DEP-62 series and some require permits. There are similar rules regarding stormwater and wastewater requiring permits. The Architect-Engineer should ensure the design meets the requirements of all Florida Department of Environmental Protection rules applicable to the Project.

B. ZONING AND COMPREHENSIVE PLANNING:

All local governments, as required by Part II of Chapter 163, Florida Statutes, entitled “Growth Policy; County and Municipal Planning; Land Development Regulation”, have or will adopt comprehensive plans and zoning. The State, as any Owner, is obligated to develop property in accordance with the adopted comprehensive plans and zoning ordinances and obtain reviews and approvals, including any variances as required. The Architect-Engineer should begin this coordination early in the design process and carry it through to the end to ensure the Project meets all local requirements and to resolve all conflicts as they arise. This includes but is not limited to zoning, landscape ordinances, tree removal permits, and drainage.

C. USE AND DEVELOPMENT PERMITS:

Certain use and development permits are required by local, state, and federal agencies prior to the commencement of construction. These permits, covering items including but not limited to sewage, water, and air quality, must be obtained prior to the release of documents for bidding. It is the responsibility of the Architect-Engineer to identify each such permit and to apply for these on behalf of the Owner.

D. CONNECTION FEES:

The Owner, through the Contractor will pay for connection and impact fees for utilities such as water, sewer, storm drainage, and electricity connected to an external system. A notice to obtain permits is issued to give the Contractor time to arrange for these connection fees. These fees, if any, are to be identified in the *Non-Technical Specification Sections of Division One* by the Architect-Engineer.

E. STATE FIRE MARSHAL AND THE LOCAL FIRE DEPARTMENT:

The Architect-Engineer is expected to work closely with the Fire Department serving the Project area and to accommodate fire-fighting methods, equipment, hose threads, and any other relevant needs. The State Fire Marshal must approve the Construction Documents prior to bidding. The Bureau of Building Construction will pay the plan review fees directly to the State Fire Marshal. The State Fire Marshal will also inspect projects at substantial completion, prior to occupancy.

F. THE BUREAU OF ELEVATOR INSPECTION:
The Architect-Engineer shall submit elevator drawings and specifications to the Department of Business and Professional Regulations, Bureau of Elevator Safety or to any County or City agency requiring elevator permitting and inspections, if appropriate. A copy of the transmittal letter shall be sent to the Project Manager.

G. CONSTRUCTION IN NAVIGABLE WATERS:
Construction in navigable waters or wetlands requires permitting by the United States Department of the Army, Corps of Engineers, and the Florida Department of Environmental Protection, in addition to local permits.

H. FLOOD PRONE AREAS:
Every site plan shall be evaluated for flood hazard and meet the minimum building requirements mandated by the National Flood Insurance Program as a mandatory requirement for obtaining a building permit. The Bureau of Building Construction is responsible for assuring all state-funded facilities meet or exceed the FEMA requirements pursuant to Section 255.25(6), Florida Statutes. The Architect-Engineer or the Contractor must provide documentation indicating conformance prior to the issuance of the Certificate of Occupancy. Flood criteria information may be obtained from the Flood Mitigation Assistance Program at the Division of Emergency Management, 2555 Shumard Oak Boulevard, Tallahassee, Florida 32399

I. LIFE-CYCLE COST ANALYSIS:
Every building is subject to the provisions of Section 255.251, Florida Statutes, and Chapter 60D-4, Florida Administrative Code. This program is administered by the Bureau of Building Construction.

J. WATER MANAGEMENT DISTRICTS:
Plans must be submitted to the local Water Management District for review and approval. Water Management District plan review fees are paid directly by the Bureau of Building Construction. The cost of any fees for permits, which the Contractor is required to obtain, shall be identified in the *Non-Technical Specification Sections of Division One*.

8.00 CONSTRUCTION ADMINISTRATION

8.01 NOTICE TO PROCEED:
Award of a contract does not give the Contractor authorization to start construction. The Project Manager gives this authorization separately. The Contractor shall be cautioned by the Architect-Engineer not to commence construction until both a building permit and a *Notice to Mobilize on Site and to Proceed with Construction* (NTP) is received.

The Agreement will be issued to the Contractor after preparation by the Contracts Administrator. The Project Manager will then send the Contractor a *Notice to Secure Permits and Pay Required Fees* from all other agencies having jurisdiction over the Project. The Contractor is allowed up to sixty (60) days from the time of the *Notice to Secure Permits and Pay Required Fees* the required permits and pay permitting and connection fees. If additional time is required, the Contractor may request approval of a time extension for the purpose of obtaining any permit(s) required,

When the Project Manager has been notified by the Architect-Engineer that the Contractor has secured all required permits, the *Notice to Mobilize on Site and to Proceed with Construction* will be issued. The date specified in the *Notice to Mobilize on Site and to Proceed with Construction* marks the start of construction of the Project.

8.02 INITIAL CONSTRUCTION CONFERENCE:

Immediately prior to starting construction, or as soon as possible after the construction has started, the Project Manager and the Architect-Engineer will arrange a meeting with the Contractor, the major subcontractors, the Client Agency, federal representatives, if applicable, and any other interested parties approved by the Project Manager. The purpose of this meeting is to discuss the requirements and responsibilities of the various parties. The Project Manager will chair the Initial Construction Conference. To be a productive meeting, the Contractor should bring questions regarding schedules, schedules of values, substitutions, submittals, and any other relevant questions to the meeting to be discussed. The Architect-Engineer should be prepared to review the technical aspects of the Project. This meeting may require the Architect-Engineer to issue clarification drawings or supplemental instructions. The Architect-Engineer shall keep detailed minutes and after the conference have the minutes typed and distributed to the Project Manager and all attendees. Items to be discussed include the following:

A. ROLES:

The Project Manager will be the liaison between the Client Agency, federal agencies, and any other interested parties approved by the Project Manager. During construction the Client Agency has no contract responsibility or authority. All instructions to the Architect-Engineer from the Client Agency must come through the Project Manager. All instructions to the Contractor must come from the Architect-Engineer. Only the Architect-Engineer can interpret the Construction Documents, however, the Architect-Engineer cannot obligate the Owner to changes in the contract for either time or money.

B. SCHEDULE OF VALUES:

The Architect-Engineer shall review and approve the schedule of values to ensure it is sufficiently detailed and accurate to give a true indication of the distribution of costs in the Project and reflect the total contract amount. The breakdown shall clearly identify cost of site work and outside utilities. The Architect-Engineer's approval of the schedule of values signifies it is of sufficient detail for evaluation of the Contractor's request for payment and fairly represents the apportioning of costs. If the Architect-Engineer does not agree with the schedule of values, this disagreement should be discussed with the Project Manager. The schedule of values shall be broken out in Construction Specifications Institute (C.S.I.) format. The schedule should show costs for items including, but not limited to, rough-in, setting of fixtures and equipment, satisfactory operation, as-builts, warranties, and demobilization. The schedule of values, when approved by the Architect-Engineer, becomes the basis for payment request submittals and must be transmitted to the Project Manager and the Client Agency.

C. PROJECT SCHEDULE (Design / Bid Projects):

A project schedule is required to be submitted by the Contractor within thirty (30) days of the issuance of the NTP. Schedule requirements are referenced in the Agreement between Owner and Construction Manager and the *Non-Technical Specification Sections of Division One*. Projects greater than $2,000,000 require a Critical Path Method (CPM) for scheduling. The Architect-Engineer shall review the schedule for reasonableness and adherence to contract times. The schedule shall be of sufficient detail to indicate precedent and antecedent work items. Copies of the accepted schedule must be provided to the Project Manager and the Client Agency. If the Architect-Engineer does not agree the Contractor's proposed schedule is reasonable, this disagreement should be discussed this with the Project Manager. The Contractor's schedule and monthly updates serve as a focal point for most claims for time or delay costs.

The Architect-Engineer shall determine whether the Contractor has met the schedule requirements with the initial schedule and with the required updates which are a condition for payment approval each month.

D. SUBMITTALS:

The Architect-Engineer's specifications should require the Contractor provide submittals to the Architect-Engineer for approval. It is the responsibility of the Contractor to properly schedule the

submission of submittals and the manufacture and shipment of items to the job site in sufficient time to prevent delays in the progress schedule. The Architect-Engineer is expected to complete submittal review within ten (10) working days of receipt or sooner if items are on the critical path. The Architect-Engineer shall send to the Project Manager copies of all transmittals of submittal correspondence, approvals, and disapprovals and shall keep a running log of all submittals. The Architect-Engineer will receive one (1) copy of shop drawings for the Project Manager and should discuss with the Project Manager at the initial construction meeting if these are to be retained by the Architect-Engineer until Project closeout, or whether the Project Manager wishes to receive some or all submittals during the course of the Project.

The Architect-Engineer shall also retain one (1) copy of all approved submittals to be turned over to the Client Agency together with all guarantees, warranties, and as-built drawings at completion of the Project. A copy of the transmittal to the Client Agency must be furnished to the Project Manager prior to approval of the final payment for the Contractor and Architect-Engineer.

E. RECORD DRAWINGS:
Either the *Non-Technical Specification Sections of Division One* or the Architect-Engineer's specifications shall require record drawings accurately reflecting the as-built conditions at the completion of the Project. These shall be maintained and updated daily by the Contractor and subcontractors and checked monthly by the Architect-Engineer when the Construction Manager submits pay requests.

The specifications shall require the Contractor and the subcontractors to record, on a daily basis, exact locations, as installed, on their field sets of drawings all walls and doors, and all conduit, pipe, and duct lines, and any other relevant items whether concealed or exposed. Where manholes, boxes, underground conduits, plumbing, hot or chilled water lines, inverts, or other relevant items are involved as part of the work, the Contractor shall furnish true elevations and locations. All must be properly referenced by using the original benchmark used for the institution for this Project.

Where the work was installed exactly as shown on the Construction Documents, the drawings shall not be disturbed other than being marked "As-Built". In showing the changes, the same legend shall be used to identify any items as was used on the Construction Documents. Each sheet shall bear the date and name of the subcontractor submitting drawings.

If separately authorized and prior to completion of the Project, the Architect-Engineer shall review and input via AutoCAD 2020 or later edition (.dwg file type) all "As-Built" information on the electronic drawing set and rename these as Record Drawings. All as-built changes must be shown as a revision with cloud, providing the revision note and date, and the Architect-Engineer shall submit preliminary sets to the Contractor for review, comment, and markup.

Note: Each drawing shall be bound (no x-refs) such it can be viewed and printed without access to any external (x-ref) files.

The Contractor shall review the completed or preliminary Record Drawings to ascertain all data furnished on the drawings and input by the Architect-Engineer is accurate and truly represents the work as actually installed. The Contractor shall return one (1) marked up preliminary set to the Architect-Engineer, if applicable. The Architect-Engineer shall incorporate the Contractor's comments and markups and issue one (1) electronic and one (1) paper final set of Record Drawings to the Contractor. The Contractor may request the format, electronic or paper, of the copies received.

8.03 PERMITTED PLANS AND SPECIFICATIONS:
The Contractor shall bring the permitted plans and specifications to the Initial Construction Conference. These plans and specifications must be the sets approved by the Building Department or authority having jurisdiction and the set approved by the State Fire Marshal with approval stamps and signatures thereon. The Contractor's set of these documents are to be

used for construction and shall be available at the site at all times for code inspectors, State Fire Marshal's inspectors, and others as requested.

8.04 PROJECT SIGN:

If a project sign is called for in the contract, the location and colors should be agreed upon during the initial Construction Conference. The Project Manager will provide the required layout and specifications of any signage. The Architect-Engineer is responsible for verifying the content of the project sign with the Project Manager, and the Client Agency if applicable, and transmitting this information to the Contractor in a timely manner.

8.05 CONSTRUCTION INSPECTIONS:

Under the Agreement between Owner and Architect-Engineer, the Architect-Engineer shall provide adequate inspections during construction to assure the Project is being built in accordance with the plans, specifications, and other Construction Documents. Reference should be made to the contract negotiation minutes for the minimum number of trips, disciplines making inspections, expected frequency, and other relevant requirements. Each time the Architect-Engineer makes a visit to the site, a written report shall be issued describing the construction status and reporting any problems requiring resolution. Entries must not be made requiring reference to earlier reports. Copies of field reports must be provided to the Project Manager and the Client Agency. These reports may be submitted by e-mail.

8.06 INSPECTIONS AND RESPONSIBILITES OF THE ARCHITECT-ENGINEER:

The Architect-Engineer should understand visits to the site by Code Inspectors or by the Project Manager in no way substitutes for inspections by the Architect-Engineer or the Architect-Engineer's consultants. These inspections and visits also serve the secondary purpose of evaluating the adequacy of the inspection being provided by the Architect-Engineer and the Architect-Engineer’s consultants. During construction, the Project Manager may evaluate the services provided by the Architect-Engineer.

8.07 CLARIFICATIONS:

When necessary, the Architect-Engineer shall issue additional drawings and/or specifications to the Contractor to clarify the Construction Documents. Copies of these documents shall be sent to the Project Manager. Transmittals by e-mail are required to save time. All transmittal letters to the Contractor for clarification documents shall bear the following disclaimer: "If these additional plans or specifications result in a modification of the scope of the basic Agreement in either time or money, the Architect-Engineer and the Project Manager shall be notified immediately."

When clarification documents are issued to the Contractor, copies must be provided to the Project Manager and the Client Agency. If the Contractor makes a claim for time or money as a result of a clarification, the Architect-Engineer must evaluate the claim and recommend to the Project Manager if a Change Order should be issued. The Project Manager must be notified immediately when any claim is received.

8.08 MONTHLY PAY REQUEST MEETINGS:

A construction meeting will be called monthly, or as required by the Project conditions and agreed to by the Architect-Engineer and the Project Manager.

For Construction Management projects, the Contractor will invite the following persons: Project Manager, Architect-Engineer, appropriate subcontractors, appropriate consultants, and the Client Agency Representative. The Contractor shall invite attendees, chair the meeting, keep detailed minutes, and after the meeting have the minutes typed and distributed to the Project Manager and all attendees. If the meeting is recorded, a transcript must be provided.

For Lump Sum Bid projects, the Architect-Engineer will invite the following persons: Project Manager, Contractor, appropriate subcontractors, appropriate consultants, and the Client Agency Representative. The Architect-Engineer shall invite attendees, chair the meeting, keep detailed minutes, and after the meeting have the minutes typed and distributed to the Project Manager

and all attendees. If the meeting is recorded, a transcript must be provided.

Certain essential areas of information should be sought and reported in every meeting, including but not limited to:

- Project progress as it relates to the schedule;
- Schedule updates;
- Payment requests and status;
- Change Orders and status;
- Special problems and remedial action required;
- Results of previous agenda items, including status, action taken, and results.;
- Any inspections or site visits by agencies having jurisdiction over the past month and the results of the inspections or site visits;
- Code violations as reported by inspections or site visits and any remedial action required, including the status of any required actions;
- Submittals and approvals; and
- Request for Information (RFI) / Architect's Supplemental Instructions (ASI) logs and status of outstanding issues.

8.09 CONTRACTOR'S PAY REQUESTS:

The Architect-Engineer, the Contractor, and Project Manager shall agree in advance on the date selected for the monthly pay request meeting. There are two (2) preferred methods for reviewing monthly pay requests:

- One method is for the Contractor to supply the Architect-Engineer with copies of the construction payment request at least five (5) business days prior to the meeting date for review. This pay request is to be reviewed, and if found correct, approved at the monthly meeting. No corrections are to be made on the pay request approved for payment. The pay request must be revised and submitted without annotations.
- A second approach is to review a draft of the pay request at the monthly pay request meeting. Once agreed upon, the Contractor types, signs, and transmits the final version to the Architect-Engineer for signature. After certifying, the Architect-Engineer shall transmit the Contractor's pay request directly to the Project Manager for processing. One notarized copy, with back-up documents, is required. Pay requests are to be transmitted electronically.

A copy of the routing slip must be on the front of the payment request forwarded by the Contractor. Instructions for its use are printed directly thereon. If a payment request is returned for any reason, a new one is prepared by the Contractor for the resubmission. The RUSH Contractor's Partial Payment Routing Transmittal and a copy of the Owner's Certificate of Partial Payment are required.

8.09.1 – Purchased Materials – On-Site Storage

Materials must be stored at the site and cannot be removed from the site after the payment has been made. An itemized listing of materials stored on-site should be prepared on the Contractor's letterhead, listing those items stored at the end of the period and those items listed in the previous month's request now incorporated in the Project. The date on this list must match the date on the Owner's Certificate for Partial Payment. The detailed description of stored materials should show quantities and sizes of materials. The usual terms of reference such as tons of steel and types of windows will be acceptable. Shipping tickets or invoices may be required of the Contractor as back up to substantiate quantities. A copy of the stored material list shall accompany each copy of the Owner's Certificate of Partial Payment request.

8.09.2 – Purchased Materials – Off-Site Storage

If the Contractor deems it necessary, and both the Architect-Engineer and the Project Manager recommend it, the Contractor may store material off the construction site only if there is a prior written agreement between the Owner and Contractor. The Contractor must provide the following:

- Proof of applicable insurance;
- A written guarantee of delivery on the job site;
- A written title to all materials covered by application for payment, which will pass to the Owner; and
- An on-site inspection of facilities by the Architect-Engineer to verify the authenticity of quantities of stored materials. The Contractor will be responsible for reimbursing the Architect-Engineer for all incurred expenses resulting from each inspection. A copy of materials requested to be stored off-site should be submitted with each Owner's Certificate of Partial Payment request.

8.10 MONTHLY STATUS REPORTS:

The Architect-Engineer will supply the Project Manager and the Client Agency with a report of construction progress each month and an updated summary schedule for the construction furnished by the Contractor. A Status Report example is contained in Exhibit J of the Architect-Engineer Agreement.

These reports shall begin upon issuance of the Contractor's contract and will not terminate until transmittal of the Contractor's final payment request. Numbered in consecutive order, reports shall be prepared at the end of each month and be e-mailed in time to be received by the fifth (5th) day of each month.

8.11 TESTING:

The Architect-Engineer shall clearly set forth in the Technical Specifications the tests to be carried out during construction. Responsibility for payment for tests is generalized in the *Non-Technical Specification Sections of Division One* but must be defined in the Technical Specifications for frequency, quantity, and quality. The Architect-Engineer shall arrange for all tests that are to be paid by the Bureau of Building Construction. The Architect-Engineer is cautioned not to proceed with any testing until a written Additional Services authorization from the Contracts Administrator is approved. The Architect-Engineer should also ensure the Contractor does not obligate the Bureau of Building Construction for payment of tests not authorized in writing by the Project Manager. The arrangement for an Authorization for testing is considered an Additional Service of the Architect-Engineer.

8.12 CHANGE ORDERS:

A. GENERAL:

Changes in the work shall be held to a minimum and be consistent with the original scope and budget of the Agreement. The Architect-Engineer shall not permit the exchanging or swapping of extras and credits except through a written Construction Contract Change Order. All changes in the work, regardless of the amount, must be thoroughly documented by a Construction Contract Change Order. Where a change is made at no cost, or where added and deleted work balance in cost, a Construction Contract Change Order shall be initiated to record the fact such changes were made and a full description and explanation shall be given.

B. INITIATION OF CHANGE ORDERS:

The Architect-Engineer should actively involve the Project Manager with full details and price quotations on proposed Change Orders in order to provide guidance on how to proceed. The Architect-Engineer should discourage changes in the work requested during the later stages of the construction period.

The Architect-Engineer must promptly prepare and review the Change Order request and the backup data. The Change Order shall:

- Utilize the required Construction Contract Change Order form;
- Fully specify the scope of the work explaining completely what each item entails, the cost or credit, and the time extension involved;
- Have attached a letter from the Architect-Engineer giving adequate justification as to the conditions necessitating the change and the Architect-Engineer's concurrence in the pricing;
- Have attached the written proposal from the Contractor with a detailed breakdown of cost

showing quantities and sizes of materials, unit costs, labor, and profit and overhead.

Should an emergency change item occur requiring immediate action, the Project Manager must be contacted immediately for advice and procedures to follow. The cost of any changes not receiving prior authorization from the Project Manager shall be the liability of the person authorizing such changes.

Change Orders must be processed as developed on a timely basis. The parties must not wait until the Project is scheduled for completion or items are accumulated before processing a Change Order. It is the Bureau of Building Construction's policy not to process any Change Orders near the end of construction which would delay the final completion unless the change is of a critical nature.

C. REVIEW:

The Architect-Engineer shall discuss any Change Order proposals with the Project Manager. After the Contractor's pricing and the draft Change Order have been discussed with the Project Manager, the Architect-Engineer shall notify the Contractor of preliminary approval, denial, or request for more information. The Contractor shall draft and sign the Construction Contract Change Order and send the form and supporting documentation to the Architect-Engineer. The Architect Engineer shall review the Construction Contract Change Order.

The Architect-Engineer shall review quantities and costs carefully and determine the quantities and costs are reasonable and proper before submitting the Change Order to the Project Manager. The Architect-Engineer shall transmit an approved and signed copy of the Change Order, justification, the Contractor's cost proposal, and any other related material, including the Contractor's proposal and breakdown of costs, any applicable supplemental instructions or requests for proposals, and the justification letter. The full set of the Change Order package must be submitted to the Project Manager.

The Bureau of Building Construction shall pay a fair value for the end result to be achieved under the Agreement. Where items of material, equipment, or work have been inadvertently omitted from the Construction Documents and are necessarily included in the Agreement Change Order, the Owner shall pay the first cost of the omitted items since such cost was not included in the bid.

Extra cost to the Owner because of corrections or modifications resulting from omissions or for removal of installed work which has to be torn out and replaced because of error, omission, or fault attributable to the Architect-Engineer shall be assessed to the Architect-Engineer. This shall include the Contractor's overhead and profit and other charges resulting from the error or omission.

Extra costs to the Owner because of construction not installed in accordance with code or specification standards, including work covered up prior to code inspection, will be assessed to the Contractor. Extra cost to the Owner because of corrections or modifications resulting from omissions or for removal of installed work which has to be torn out and replaced because of error, omission, or fault attributable to the Contractor shall be assessed to the Contractor. This shall include the Contractor's overhead and profit and other charges resulting from the error or omission.

The Project Manager and the Chief of the Bureau of Building Construction, or designee, will carefully review each Change Order. If required information is found to be lacking, the Architect-Engineer will be called on to provide the information required to complete the package. The Architect-Engineer will keep an accurate and up-to-date log so the Project Manager will know at all times the status of each Change Order and when it was approved.

D. TIME EXTENSIONS:

The Architect-Engineer shall review the Construction Documents for the basis upon which a time extension request may be granted. The Contractor shall indicate what the affect is upon the schedule and why work cannot be done concurrently. Substantiating data must be submitted with

requests for time extensions. Such time extensions, if justified, will be granted by Change Order only.

Time extensions will not be granted for normal amounts of inclement weather but may be granted for periods exceeding the norm. Normal weather conditions will be based upon the records of the National Weather Service for the geographical area of the Project. Time extensions will be based on the type of project, the effect of the weather on the project schedule, and discussions with the Construction Team and the Bureau Chief of the Bureau of Building Construction.

Time extensions for changes in work must be included on the Construction Contract Change Order authorizing such changes. The Architect-Engineer and the Contractor should not wait until the end of construction to process time extension change orders. The Agreement between Owner and Construction Manager must be reviewed for requirements and processes.

8.13 CLAIMS:

The Contractor should submit claims directly to the Bureau of Building Construction as required in the Agreement. However, when the Architect-Engineer is presented with any written request for damages by the Contractor, for money or time, the Architect-Engineer must immediately forward the notification to the Project Manager. The Architect-Engineer acting as the Owner's agent, shall make a thorough and objective analysis of the claim in a timely manner and shall advise the Bureau of Building Construction of the Architect-Engineer's opinion. The Bureau of Building Construction will respond to all claims as required by the conditions of the Agreement.

It is required that written Notices of Claim be submitted to the Architect-Engineer and the Project Manager within twenty (20) days of when the Construction Manager was or should have been aware of the occurrence of the event giving rise to the claim. Within ten (10) days of submitting its Notice of Claim, the Construction Manager shall submit to the Owner its Construction Contract Change Order, which shall include a written statement of all details of the claim, including a description of the work affected.

8.14 SUBSTANTIAL COMPLETION:

Prior to the inspection for Substantial Completion, all previously uncorrected code violations shall have been corrected and passed inspection by the code inspector(s). The Architect-Engineer shall arrange an inspection for verification of Substantial Completion after notification by the Contractor the work is ready for inspection. The Architect-Engineer shall select a time when the Contractor, Project Manager, Client Agency, and other interested parties can attend.

The Architect-Engineer's Substantial Completion inspection shall be detailed and complete. The Contractor shall inspect the Project and prepare a pre-substantial punch list of known incomplete items prior to the Architect-Engineer's inspection and provide the punch list to the Architect-Engineer. The Architect-Engineer shall then prepare a punch list to include the comments of all attendees to the meeting referenced above and any corrections needed with provisions for indicating the room or location and provisions for indicating correction at a later date. This punch list shall be assembled and transmitted to the Contractor expeditiously.

Should it become apparent there will be numerous items to be added to the Contractor's punch list, the Architect-Engineer should cancel the inspection and instruct the Contractor to request the inspection be rescheduled when the Project is ready. When the Project is deemed substantially complete, the Architect-Engineer shall prepare the Certificate of Substantial Completion by Contractor form and forward it to the Contractor for signature. The Contractor shall electronically transmit a signed copy of the Certificate of Substantial Completion by Contractor and the punch list to the Architect-Engineer for signature. The Architect-Engineer submits the Certificate of Substantial Completion by Contractor with the punch list to the Project Manager. Once executed, the Project Manager will electronically transmit the Certificate of Substantial Completion by Contractor and punch list back to the Contractor, the Architect-Engineer, and the Client Agency.

The term Substantial Completion shall mean the Project under the Agreement is sufficiently

completed in accordance with the Construction Documents, so the Owner can occupy or utilize the work or designated portions thereof for the use for which it is intended as expressed in the Construction Documents, and a Certificate of Occupancy has been issued by the permitting authority. Note: The issuance of a Certificate of Occupancy, in itself, does not constitute Substantial Completion.

8.15 INSPECTION BY OTHER AGENCIES:

Where other agencies are involved with inspecting the Project, it is generally the Contractor's responsibility to notify these agencies of the need for inspection and certification. The Architect-Engineer should prompt the Contractor of this need at least sixty (60) days before scheduled Substantial Completion. Such items requiring coordination of inspection may include, but are not limited to:

- Fire Alarm inspection and certification by the State Fire Marshal;
- Sprinkler inspection and certification by the State Fire Marshal;
- Elevator inspection and certification by the State Elevator Inspector;
- Emergency Generators Certification by the Manufacturer, and Emergency Generators inspection by the State Fire Marshal, the Florida Department of Environmental Protection (DEP), or the delegated agency having jurisdiction;
- Water Systems Certificate to Construct and Water Systems Certificate to Operate by DEP;
- Sewage Systems Certificate to Construct and Sewage Systems Certificate to Operate by DEP;
- Storm-Water Systems inspection and certification by the applicable Water Management District;
- Medical Facilities inspection and approval by the Agency for Health Care Administration;
- Kitchen and Food facilities inspection by the local Health Department;
- School Classrooms inspection by the Florida Department of Education;
- Certificate of Occupancy by the local Building Department;
- Manufacturer inspection of roofs;
- Manufacturer inspection, start-up, and testing of air conditioning equipment; manufacturer inspection, start-up, and testing of boilers and inspection of boilers by the State Fire Marshal.

8.16 OCCUPANCY PRIOR TO COMPLETION:

The Bureau of Building Construction discourages the occupancy of any project prior to final completion of all punch list items by the Contractor. If the Client Agency must occupy the project, or a part thereof, prior to final completion and acceptance of construction, the following items shall be accomplished prior to occupancy:

- A Certificate of Occupancy from the authority having jurisdiction for the portion to be occupied;
- Written agreement from the Contractor stating none of the provisions of this contract are being violated;
- Written approval from the Contractor's insurer resident agent stating the Builder's Risk Insurance coverage provisions will not be violated;
- All arrangements shall have been made in writing between the Client Agency, the Bureau of Building Construction, and the Contractor pertaining to the payments for utility costs, maintenance, and repairs during the period of joint occupancy;
- A written statement from the Architect-Engineer indicating any punch list items outstanding in the area proposed for occupancy by the Client Agency and the Contractor;
- The Client Agency shall have notified the State Division of Risk Management so the building will be covered by fire insurance. The Client Agency should provide a copy of the notification and the response from the State Division of Risk Management to the Architect-Engineer, the Contractor, and the Bureau of Building Construction;
- Any other items the Bureau of Building Construction deems necessary. The Project Manager will furnish a copy of these items.

8.17 FINAL INSPECTION:

Final inspection shall be arranged by the Architect-Engineer after notification in writing by the

Contractor stating the punch list work has been completed and the Project is ready for final inspection. The Architect-Engineer shall select a time when the Contractor, Project Manager, Client Agency, and other interested parties may attend the final inspection of the Project.

The final inspection is to verify all corrections from previous inspections have been made. Following the inspections, the Architect-Engineer shall prepare a new list of items, if any, requiring correction and shall make another inspection, if necessary, to ensure all the work has been completed. All punch list items found at the time of Substantial Completion shall have been completed by the time stated in the Construction and prior to the final inspection.

A. CONTRACT COMPLETION:
A copy of the Certificate of Contract Completion by Contractor shall be prepared by the Architect-Engineer after Final Completion. The Contractor shall complete, sign, and notarize the Contractor's Affidavit of Contract Completion and submit the form to the Architect-Engineer.

The total amount of the contract shown on the Contractor's Affidavit of Contract Completion shall include the sum of all approved Change Orders. The Substantial Completion date on the Certificate of Contract Completion by Contractor must be the same as shown on the Certificate of Substantial Completion by Contractor form.

The actual final completion date should be the same or earlier than the contract completion date. If not, the Architect-Engineer must recommend charging liquidated damages as provided in the Agreement or recommend a Change Order justifying any extension of time. Approval of any late Change Order can delay the processing of final payment to the Contractor; therefore, this requirement should be addressed early. The Architect-Engineer should retain both the Contractor's Affidavit of Contract Completion, and the Certificate of Contract Completion by Contractor and hold them until the Contractor's request for final payment is furnished. Attach the certificates to the Final Pay Request Checklist and forward the complete package to the Project Manager.

B. GUARANTEES AND OPERATING INSTRUCTIONS:
The Architect-Engineer is responsible for obtaining all guarantee documents from the Contractor. The Contractor shall be responsible for collecting, identifying, indexing, and collating the materials from the subcontractors and will deliver one (1) hard copy and one (1) electronic copy of the collated documents to the Architect-Engineer for review. When the Architect-Engineer has approved the collated documents, the Architect-Engineer shall send one (1) hard copy and one (1) electronic copy of all documents to the Client Agency with a notification to the Project Manager and the Contractor. The Architect-Engineer shall send one (1) electronic copy to the Project Manager. The Architect-Engineer shall retain a copy of all documents for their office files.

The hard copy for the Client Agency is, as applicable, complete equipment diagrams, operating instructions, maintenance manuals, parts lists, wiring diagrams, pneumatic and/or electrical control diagrams, test and balance reports, inspection reports, and guarantees and warranties for every piece of equipment furnished under this contract are to be supplied in a ring binder, hard-cover book, properly indexed for ready reference. Also, specific information including but not limited to manufacturers' names and addresses, nearest distributors and service representative's names, addresses, office and home telephone numbers, make and model numbers, and operating design and characteristics will be required. All information submitted shall be updated to reflect existing conditions.

The specifications must include the provision the Contractor and/or subcontractor(s) shall provide competent and experienced personnel, thoroughly familiar with the work, for a period of time to instruct the Client Agency personnel in operation and maintenance of equipment and control systems, subsequent to the time of Substantial Completion and receipt of as-built drawings, operations, and maintenance books, but prior to the date of final acceptance. This instruction will include but is not limited to: normal start-up; run, stop, and emergency operations; location and operation of all controls; and alarms and alarm systems. The instructions will include tracing the

system in the field and on the diagrams in the instruction booklets so operating personnel will be thoroughly familiar with both the system and the data supplied. Evidence this instruction has occurred must be included on the Contractor's Final Pay Request Checklist.

C. KEYS:
The specification must also provide the Contractor will deliver keys and key blanks to the designated building operator and provide a signed receipt to the Project Manager and the Architect-Engineer.

D. RECORD DRAWINGS:
The Contractor shall include completed Record Drawings in the close-out document submittal in accordance with previous sections mentioned herein. The Architect-Engineer shall verify accuracy and the number and type of paper or electronic copies submitted as part of the close-out package review and before approving final payment. Once approved by the Architect-Engineer, the Contractor is responsible for distributing the paper and electronic copies of the Record Drawings to the Project Manager and the Client Agency at the time of Final Completion. The Architect-Engineer may be provided with median electronic version of the Record Drawings.

E. NON-BONDED PROJECTS:
For Level One, Level Two, or Level Three Projects, as defined in Rule 60D-5, Florida Administrative Code, for which bonds were waived by the Owner prior to bidding, do not require bid bonds, performance bonds, or labor and material payment bonds. The Architect-Engineer is directed to carefully read and direct the Contractor to follow the procedures outlined in the *Non-Technical Specification Sections of Division One*.

F. FINAL PAY REQUEST CHECKLIST:
The Bureau of Building Construction has a Final Pay Request Checklist which is to be used for bonded and non-bonded projects to assist both the Contractor and Architect-Engineer in gathering the required materials for the final payment. The Contractor's request for final payment will not be processed until all items on the Final Pay Request Checklist have been completed and submitted.

9.0 DEFINITIONS

Whenever the following terms are used in the Construction Documents, the intent and meaning shall be interpreted as follows:

AGREEMENT: An Agreement represents the entire integrated agreement between the parties and supersedes all prior negotiations, representations, or agreements. An Agreement may be amended only by an Amendment issued by the Owner. For the purposes of the Professional Services Guide, the Agreements referenced herein are the Agreement between Owner and Architect-Engineer and the Agreement between Owner and Construction Manager.

ARCHITECT-ENGINEER: The Design Professional (Architect/Engineer, Architect, Engineer, or A/E) engaged through an Agreement with the Owner to provide work for the Project. The term Architect-Engineer shall mean the Architect-Engineer and its authorized representatives.

ASME: American Society of Mechanical Engineers

ASTM: American Society for Testing and Materials

BUILDING CONSTRUCTION: Same as the Bureau of Building Construction within the Department of Management Services, Division of Real Estate Development and Management. See definition of Owner.

OWNER'S CERTIFICATE OF PARTIAL PAYMENT: Attached as Exhibit g attached to the Agreement between Owner and Construction Manager. See Articles 3.7.1 (7) and 3.7.1(8) of the Agreement between the Architect-Engineer and the Owner for the Architect-Engineer's responsibilities. This document is available on the DMS webpage.

CHANGE ORDER: The Owner, without invalidating the Agreement, may order changes in the Project within the general scope of the Agreement consisting of additions, deletions, or other revisions, the Guaranteed Maximum Price, and the Final Completion Date, being adjusted accordingly. All changes in the Project not covered by an authorized contingency shall be authorized by Change Order signed by the Owner before the change is implemented. The form used in the Construction Contract Change Order.

CLIENT AGENCY: The State Agency that will occupy and use the project upon Substantial Completion. The funds with which the compensation for work performed in connection with the Project will be paid, may be under the control of the Client Agency, based on approval of each payment by Real Estate Development and Management. Client Agency is defined in Rule 60D-5.002, Florida Administrative Code, as the Agency for which the project is being constructed. The relationship between the Owner and the Client Agency is governed by Section 255.31, Florida Statutes, and by Rule 60D-5, Florida Administrative Code.

CLOSE-OUT DOCUMENTS: Those documents required from the Contractor to complete the Project. A list of Close-Out Documents is found in Exhibit H - Final Pay Request Checklist, attached to the Agreement between Owner and Construction Manager.

CONSTRUCTION AUTHORIZATION: The term Construction Authorization shall mean a written work order based on a defined scope of work prepared by the Project Manager and issued to the Contractor. Construction Authorizations may be used by the Owner prior to the date of the Guaranteed Maximum Price Amendment and all work performed pursuant to Construction Authorizations shall be included in the Guaranteed Maximum Price.

CONSTRUCTION DOCUMENTS: The Construction Documents are prepared by the Architect-Engineer utilizing the approved Design Development Documents. The Construction Documents consist of the working drawings and specifications and set forth in detail the work required for the architectural, civil, structural, mechanical, electrical service-connected equipment, civil/sitework, and the necessary bidding information. The Architect-Engineer shall submit the Construction Documents to the Owner who will supply the Construction Documents to the Contractor. Any changes to the Construction Documents by the Contractor, the Architect-Engineer, or the Owner will be shared with the other parties. All documents to be incorporated into the Agreement, including

- The General Terms and Conditions;
- Any Supplementary Terms and Conditions;
- The plans, drawings, and specifications for the Project;
- Any Addenda issued pursuant to Section B-7; and
- Any Modifications are components of the Construction Documents.

CONTRACTOR: The Contractor responsible for construction of the Project. The Contractor shall be the single point of interface for all trade bidders and subcontractors for the duration of the Project. For the purposes hereunder, the Contractor, including but not limited to its employees, contractors, and subcontractors, is an independent contractor, and is not and shall not by its performance hereunder be deemed or construed under any circumstance to be an employee, agent, representative, or servant of the Owner or the State of Florida. The Contractor may also be referred to as the Construction Manager.

CONTRACT SUM: For Projects utilizing a Construction Manager, the total sum of items in Article 8 and Article 9 of the Agreement between Owner and Construction Manager. For lump sum bid projects, the amount stated in the Agreement which is the total amount payable by the Owner to the Contractor for completing the Project. The Contract Sum may be modified by Change Order(s).

CONTRACT TIME: The period of time, including authorized adjustments, established in the Agreement with the Contractor and allotted in the Construction Documents for Substantial Completion of the Project. Contract Time is from the date of the Notice to Mobilize on Site and Proceed with Construction until Substantial Completion of the Project.

DESIGN DEVELOPMENT DOCUMENTS: The Design Development Documents consist of the plans, elevations, and other drawings including perspective sketches, and outline specifications to fix and illustrate the size and character of the entire Project in its essentials as to kinds of materials, type of structure, mechanical, electrical systems, civil/site work, and other such work as may be required. The Design Development Documents are prepared by the Architect-Engineer and submitted to the Owner who will supply the Design Development Documents to the Contractor. Any changes to the Design Development Documents by the Contractor, the Architect-Engineer, or the Owner will be shared with the other parties. The Design Development Documents are used by the Architect-Engineer to prepare the Construction Documents and the Estimate of Probable Project Construction Cost.

ESTIMATE OF PROBABLE PROJECT CONSTRUCTION COST: The Architect-Engineer's estimate of the probable construction cost of the Project based on area, volume unit pricing, or similar conceptual estimating techniques.

FINAL COMPLETION: The time when all the items listed from the Substantial Completion inspection by the Construction Team and all permitting authorities having jurisdiction have been completed and all the items listed on the Final Pay Request Checklist have been completed and submitted to the Owner for review and acceptance.

MODIFICATION: A document issued after execution of the Agreement with the intent of amending the terms thereof, including:

- A written amendment to the Agreement signed by both parties,
- A Change Order,
- A written order for a minor change in work issued by the Architect-Engineer.

OWNER: The State of Florida, Department of Management Services, Division of Real Estate Development and Management, acting through its Secretary or those persons designated to act on behalf of the Secretary, as Agent for the Client Agency pursuant to the Client Agency Agreement. The entity that will occupy, use, and own the project upon Substantial Completion. The funds with which the compensation for work performed in connection with the Project will be paid are under the control of the Client Agency, based on approval of each payment by Real Estate Development and Management. All duties of the Owner hereinafter shall be performed by the Division of Real Estate Development and Management.

OWNER'S CONSTRUCTION BUDGET: Owner's funds budgeted and requested for construction of the Project. The Owner's Construction Budget is identified in Exhibit B of the Agreement between Owner and Construction Manager and includes all Contractor fees, costs of the work, and the Owner's and Contractor's construction and interface contingencies as defined in Article 7 of the Agreement. This acknowledgement of the Owner's budgeted funds is not to be construed as the Contractor's Guaranteed Maximum Price. A Guaranteed Maximum Price will be identified by separate documentation as outlined in Article 7 of the Agreement.

OWNER'S REPRESENTATIVES: The Contracts Administrator or Project Manager and their superiors or designees.

PERMITTING AUTHORITY: The authorities with jurisdiction over the Project.

PROJECT: The Project is the total work to be performed under the Agreement. The Project consists of all planning, design, permitting, construction services, code inspections, and associated site work necessary to fully complete the Project, as contemplated in the Owner's Construction Budget.

PROJECT MANAGER: The person designated by the Owner to provide direct interface with the Architect-Engineer with respect to the Owner's responsibilities. Information identifying representatives for the Project may be found on Exhibit A - Construction Team Assigned Representatives of the Agreement.

SUBSTANTIAL COMPLETION: Substantial Completion shall mean the Project is sufficiently completed in accordance with the Construction Documents, so the Owner can occupy or utilize the work or

designated portions thereof for the use for which it is intended, as expressed in the Construction Documents. The term Substantial Completion shall not mean the inclusion of such minor alterations and patching as the Final Inspection shall disclose. Further information and definition may be found in the Agreement.

10.0 FORMS

All Forms which will need to be obtained from the Project Manager are *italicized*. The Architect-Engineer or Contractor will need to contact the Project Manager to request the required form.

All Forms and Checklists available on the Department of Management Service's Webpage will be underlined. The webpage address is below.

DMS, Division of Real Estate Development and Management webpage:
https://www.dms.myflorida.com/business_operations/real_estate_development_and_management/building_construction/forms_and_documents