# Attachment 1 – Design Scope Details New Mixed-Use Building Project

# **Schematic Design:**

- Preliminary life safety and building code analysis.
- Schematic Floor Plans, Sections, and Exterior Elevations.
- Review building concept with building code and planning department officials and HAF.
- Schematic site plan showing new and proposed site utilities, parking, site improvements, and preliminary grading.
- Establish structural framing and foundation concepts.
- Mechanical/Electrical/Plumbing/Fire Protection narrative describing preliminary building system selections.
- Presentation to the Design Review Board.
- Assist Aiken Corporation in issuing Schematic Design Package to Construction Manager at Risk (CM@R) General Contractor for pricing feedback.
- Assist Aiken Corporation in review of CM@R Preliminary Estimate.

# **Design Development: Architectural:**

- Overall Floor Plans, Building Sections & Exterior Elevations.
- Preliminary design for vertical circulation components, building core elements/support spaces.
- Assist CM@R in the refinement of the estimate of probable construction cost.
- Includes bi-weekly meetings with Project Team to review progress and get questions answered.

# Structural Engineering:

- Confirm structural framing and foundation systems.
- Develop preliminary framing plans.
- Preliminary meeting with Authority Having Local Jurisdiction (AHJ) to discuss seismic category, etc.

## Mechanical/Plumbing:

- Schematic HVAC Floor Plans.
- Flow diagrams for major systems.
- Preliminary load calculations.
- Preliminary system selections.
- Preliminary Floor Plans indicating major plumbing components.
- System component selections.
- Review of owner-furnished cut sheets and load requirements for new and relocated lab equipment.
- Incorporation of equipment's mechanical and/or plumbing requirements into the Design Development package.

### **Electrical/Low-Voltage:**

- Establish major equipment systems and space requirements.
- Power Plan single line diagram.
- Electrical schematic description or floor plans of all electrical systems with connections to site
- Preliminary systems selections.

## **Fire Protection:**

• Narrative describing fire protection system and coverage requirements.

### **Construction Documents:**

### **Architectural:**

- Final life safety and building code analysis.
- Overall Floor Plans and Reflected Ceiling Plans.
- Roof Plan.
- Enlarged Core Floor Plans, as required.
- · Building and Wall Sections.
- Interior Details and Elevations, as required.
- Room Finish Schedule, Door Schedule, Window Schedule, and Details.
- Specifications.
- Assist GC in the development of a final construction cost.
- Includes bi-weekly meetings with Project Team to review progress and get questions answered.

# Structural Engineering:

- Foundation and Framing Plans.
- Details and Sections as required.

## Mechanical/Plumbing:

- Floor Plans with double line layout for ductwork.
- Schedules, Sections, and Details.
- · Control diagrams.
- Details as required.
- · Specifications.
- Equipment room layouts, as required.
- Flow Diagrams for major systems.
- Typical Details and Schedules.
- Specifications.

## **Electrical/Low Voltage:**

- Lighting Floor Plans and Fixture Schedule.
- Power Floor Plans.
- Panel Schedules.
- System Diagrams.
- Equipment room layouts.
- Specifications.
- Fire Alarm riser diagram.
- Power riser diagram.
- Communications (voice/data) pathways, backboxes, and cabling.
- Security system (CCTV, intrusion, and card access). Please price this as an additional service and not in the base cost

# Fire Protection:

• Design Criteria / Specification Sheet.

### **Construction Administration:**

- Regular site visits to ensure conformance with design intent.
- Attend weekly Owner/Architect/Contractor (OAC) meetings.
- Review and approve submittals and shop drawings.

# As-Constructed Record Drawings: Please price this as an additional service and not in the base cost - Based on the CM@R's marked-up field drawings, the design team will revise their Construction Documents to reflect the as-constructed conditions of the project.

# Civil Engineering + Landscape Design: Pre-Design:

- Establish the client's needs, desires, and vision for the project as it relates to civil and landscape and define the overall project goals, objectives, and potential constraints.
- Gather any existing site plans, utility maps, and any previous studies or reports related to the site and review zoning laws, land use regulations, and any other applicable municipal codes or ordinances.
- Consult with local planning and zoning departments to identify challenges/constraints.
- Identify key site components (e.g. building locations, parking areas, green spaces) and outline space requirements, desired amenities, and special considerations including trees that will be retained on the site and any special considerations required to keep the trees healthy during construction.
- Based on the gathered information, develop a conceptual design option.
- No more than two public or stakeholder meetings included in this phase.

# Schematic Design:

- Preliminary layout of the entire site, showcasing the placement of buildings, roads, parking areas, pedestrian paths, and other major elements.
- Preliminary grading plan including an indication of cut and fill areas, proposed elevations, and general drainage flow patterns.
- Preliminary design of access points to the site from existing infrastructure.
- Design of internal roadways, walkways, and other circulation routes.
- Preliminary parking lot layouts.
- Initial concepts for stormwater collection and detention/retention.
- Preliminary locations of utility lines, such as water, sewer, electricity, gas, and telecommunications and identification of connection points to existing public utilities.
- Initial concepts for landscaping, including plant selection and placement, hardscape elements, and amenities.
- Presentation of schematic designs to clients, stakeholders, or relevant committees for feedback as requested. Incorporation of feedback into the design, leading to potential revisions or refinements.
- No more than two public or stakeholder meetings included in this phase.

# **Design Development:**

- Finalization and detailed layout of buildings, roads, parking areas, pedestrian paths, and other primary elements.
- Dimensions and specific placement of site elements.
- Finalize grading contours, detailed slopes, and proposed elevations.
- Detail cut and fill calculations to balance the site.
- Specific design of any retaining walls or grade separation structures.

- Detail design of entrances, exits, internal roadways, pedestrian pathways, crosswalks, and other circulation elements.
- Finalize parking layouts with exact dimensions, ADA spaces, etc.
- Detail design of stormwater infrastructure, including catch basins, pipes, channels, detention/retention ponds, and bio-retention areas.
- Calculations for stormwater runoff, detention volume, and treatment capacities.
- Erosion and sediment control plans with specific measures and locations.
- Detail design and alignment of public utility lines and infrastructure.
- Profiles showing utility depths, manholes, connection points, and other specific elements.
- Coordination with public utility providers for tie-ins and capacities.
- Finalized landscape plans with specific plant species, sizes, and locations.
- Details of hardscape elements (e.g. benches, light fixtures, fountains, etc.).
- Specific plans for irrigation and any water features.
- Integration of feedback from stakeholders, clients, and regulatory agencies.
- No more than two public or stakeholder meetings included in this phase.

#### **Construction Documents:**

- Site Plans: Detailed layouts with exact dimensions, labels, and notes showcasing the complete design.
- Grading Plans: Detailed plans showing finished grades, contours, spot elevations, and slope annotations.
- Utility Plans: Plans for water, sewer, and storm drainage to include alignments, sizes, materials, connection details, and profiles. Plans will include location of electrical, gas, and telecom.
- Landscape Plans: Detailed plans indicating the location, species, size, and planting details for vegetation. Also, details of hardscape elements, planters, and other features.
- Landscape Plans: Include Low Voltage accent lighting for Building elevations and landscape elements. Coordinate with Electrical Engineer and Architect on this scope.
- Erosion and Sediment Control Plans: Plans that identify the location and details of erosion control measures.
- Details Sheets: provide specifics on certain elements to include a minimum of stormwater infrastructure, pavement cross-sections, public utility, landscape, irrigation, and others as required.
- Prepare technical specifications for civil and landscape items as needed to document the standards, quality, materials, and workmanship methods to be used for the project.
- Submit required permitting documents to the proper permitting authorities.
- Prepare specific documents and forms that will be included as part of the permit application(s).
   Permits anticipated include SCDOT encroachment permit for driveway and utilities, NOI submittal to the City of Aiken for approval, if required a NOI submittal to SCDHEC for NPDES permit for greater than one-acre land disturbance, and site plan submittal to the City of Aiken Planning Department.
- Incorporate feedback from permit reviews and any requirements from various stakeholders, including utility providers, local agencies, and others.
- Issue addendum as needed in case of changes or additions to the construction document set after initial distribution, the architect will ensure a structured format for issuing addendums or revisions to all stakeholders is followed for all drawings.

## **Bidding/Negotiation:**

- Attend a pre-bid meeting for potential CM@R bidders to discuss the project specifics, clarify questions, and visit the site.
- Issue RFI or addendum as it relates to site questions during the bidding process.
- Provide a review of the quantities and values of the civil and landscape and make any recommendations on the responsiveness of the bidders and accuracy.

### **Construction Administration:**

- Coordinate and attend the pre-construction meeting with the City of Aiken for the Utility and Stormwater.
- Review contractor product submittals and shop drawings for civil and landscape architecture site elements.
- Attend OAC meetings on a bi-weekly basis.
- Respond to contractor's RFIs.
- Review contractor's pay applications.
- Issue change orders as required or requested by the Owner's PM.
- Complete monthly periodic site visits to observe and document general compliance with the drawings and specifications.
- Prepare a punch list of identified site design deficiencies that need to be corrected prior to processing the final pay application for the project.
- Inspect and check off punchlist items after completion of items from CM@R and subcontractors.
- Schedule and attend final inspection with the owner and regulatory agency officials, if required.
- Review as-built survey of the constructed site provided by the Client or contractor's licensed surveyor, as necessary.
- Provide final Engineer's Letter, if required.
- Submit appropriate documentation in the form of a closeout package to the City of Aiken and appropriate regulatory agencies, if required.

### **Interior Design and Finish Selections:**

- Prepare 2-3 preliminary color/finish palette options (carpet, paint, hard tile, etc.) and present them to the project team.
- Refine preferred interior design palette concept and create final finish boards.
- · Specify all final finish materials.
- Create floor finish and wall accent patterns as required to be included in Construction Documents.

# **Furniture Design and Specification:**

- Develop preliminary furniture layout.
- Assist Owner PM in the development of an estimate of probable cost for the Furniture scope of work.
- Furniture vendor research and recommendation 2-3 vendors to submit bids.
- Create final furniture plans to be used as the basis of vendor bidding.
- Specification of products to be the basis of vendor bidding.
- Review of vendor bids and assistance with final pricing and furniture selections.
- Coordination of furniture installation.
- Punch List and follow up.

## Audio / Visual Design:

- Please price this as an additional service and not in the base cost Design and specification of televisions, cameras, speakers, touch panel controllers, microphones, etc. for office, conference, and meeting spaces.
- Construction Documents and Specifications for A/V raceways and boxes are included in our Electrical scope of work.

# **Interior Signage Design:**

- Develop a comprehensive, unified signage design for the locations described below:
  - Typical Building Code + Life Safety Signage.
  - Conference Rooms + Focus Rooms.
  - Private Offices.
  - Individual Workstations.
  - Miscellaneous Interior Signage.
  - Interior Wayfinding.
- Work with the Owner's PM and tenant(s) to establish the locations, size, material, and conceptual design for each type of sign.
- Assemble a basis of design bid package to be distributed to local sign vendors for competitive bidding.
- Assist in the selection of a vendor

# **Insurance Requirements of Architect and Engineering Firms:**

COVERAGES Worker's Compensation	LIMITS OF LIABILITY Statutory Requirements
Employer's Liability	\$500,000
General Liability, Including Bodily Injury, Property Damage and Contractual Liability	\$1,000,000 each Occurrence
Automobile Liability Including Bodily Injury and Property Damage	\$1,000,000 each occurrence/combined single limit
Professional Liability	\$1,000,000 each Occurrence

The Aiken Corporation shall be listed at Certificate Holder.