

Full Board Meeting July 13, 2022

Action Item

BOT 2.1 – Approval of Construction Manager at Risk (CMR) for Jackson Library Addition and Renovation

Background Information

The Jackson Library opened in 1950, with the tower addition coming online in 1973, and minimally updated since. The current facility does not reflect the evolving definition of a modern-day library: a dynamic, technology-rich learning environment and intellectual community hub. Growth in enrollment, new academic programs, and library support activities have generated a need for an increase in programmatic space, making it critical to renovate the existing areas. The library revitalization will innovatively and strategically support the University's institutional mission and enhance and strengthen the library's connection in the heart of UNC Greensboro's Main Campus.

The project's scope will consist of a comprehensive, transformative renovation of the existing building and new addition. The renovation will include updating the existing mechanical, electrical, plumbing, life safety, and audiovisual systems. The project also includes addressing ADA issues and an IT Core Distribution Facility. Located at the bustling hub that is the physical center of campus, the project is envisioned as a complex, phased construction of an occupied building that will include strategically coordinated moves. As such, implementation will require meticulous and proactive planning. The project will integrate high technology group studies, central convening spaces, and increased capacity for use by individual students. It is envisioned as a nexus of student academic success and transformative research resources. The library is considered at the core of the University's intellectual space, where learning, knowledge creation, and community are fostered.

The selected Construction Manager at Risk (CMR) firm will closely work with the Architects and Engineers to provide a construction perspective and expertise to the design process. The CMR will be responsible for providing constructability reviews, market-based cost estimates, and realistic schedule development. At the appropriate point in the design process, the CMR will provide a guaranteed maximum price (GMP) for the project, ensuring the work can be accomplished within the budget. The selected CMR firm will be retained for pre-construction services and, at the discretion of UNC Greensboro, be contracted through construction.

The University of North Carolina System website advertised the request for qualifications and letters of interest for this project's construction manager at-risk services. Six (6) firms submitted letters of interest, two of which were (2) from Guilford County.

The Construction Manager at Risk Selection Committee reviewed the letters of interest and invited three (3) firms to an interview on June 16, 2022, to present their qualifications and recommend the following in ranking order.

- 1. Skanska
- 2. LeChase
- 3. Blum

The firm, Skanska, is a General Construction firm and is recommended as the Construction Manager at Risk for the following reasons:

- 1. Skanska presented the most detailed plan for managing the project's construction phase to cause the least disruption to the building occupants. They best addressed the critical need to closely coordinate with the building occupants, the Design Team, and State Construction, with their approach to phasing strategy during the various stages of construction.
- 2. They demonstrated a clear understanding and presented the most thorough approach to mitigate risk in the multiple challenges that will need to be considered during the Design and Construction Phases of this project, including material procurement, cost escalation, Sub Contractor Bidding, and HUB participation.
- 3. The Skanska team best illustrated the depth of experience and breadth of resources that will be required to handle a project of this scale and complexity. The key members of the Skanska Team also live locally in the Greensboro area.

Attachment:

See Skanska Letter of Interest below (redacted at Skanska's request)

Requested Action

Based on the above information, the Board of Trustees of the University of North Carolina at Greensboro approves the firm of Skanska. If agreeable terms cannot be met with the recommended firm, then the Board authorizes the administration to negotiate terms with the other firms in ranking order.

Robert J. Shea, Jr.

Vice-Chancellor for Finance and

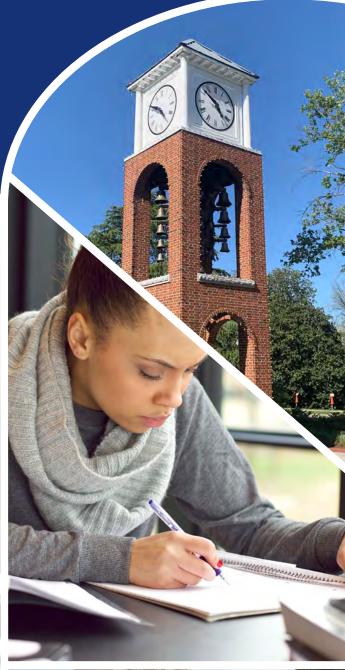
Bolon J. Sleaf

Administration

Requirements for Proposal

UNC Greensboro Jackson Library

Building the next chapter of Jackson Library







Section E: Information Sheet



Information Sheet

Firm Name	Skanska USA Building Inc.		
HUB Certified	If HUB, Female Specify Type Disabled	American Indian Asian-American	Hispanic Socially & Economically Disadvantaged
Point of Contact	Ben Huffman	E-mail Address	Ben.Huffman@skanska.com
Street Address	4309 Emperor Boulevard, Suite 200		
City	Durham	State NC Zip Cod	e 27606 County Durham
Phone #	919.201.1420	Fax#	919.941.0107

SKANSKA

April 29, 2022

Skanska USA Building Inc. 4309 Emperor Blvd., Suite 200 **Durham, NC 27703** www.skanska.com

Terrance "Buddy" Hale Project Manager UNC Greensboro Facilities Design & Construction tohale@uncg.edu

Dear Mr. Hale and Selection Committee:

At the crossroads of your historic campus, Jackson Library is both a window into the past and door leading to the future. As students enter to discover the world and themselves, leaders emerge equipped to share the power of what they've experienced and who they'll become. In the following pages, we have detailed why we're the partner to help UNCG transform Jackson Library into a next-generation hub for your bold innovators.

Our hand-selected team combines the experience of safely delivering complex projects on active campuses with the expertise to maximize value during every stage. Both as an organization and a team, we are ready to offer UNCG:

Seasoned and insightful leaders

are veterans of managing complex, occupied and phased construction—they are dedicated to keeping everyone safe and the library open. Building on that foundation, they will draw from their experience delivering successful State Construction projects during team engagement to develop solutions for this project's unique challenges. will pull from his work on UVA's Alderman Library to employ industry-leading tools and technologies for your project.

Precise and flexible phasing

Our team is committed to supporting your students, faculty, staff and programming throughout the restoration and addition. Through a collaborative and responsive partnership with UNCG, LS3P + Shepley Bulfinch and your stakeholders, we will collectively develop a comprehensive phasing and logistics strategy that adapts to your busy campus while protecting all resources—including the data hub. Our team has successfully delivered complex projects through meticulous planning at multiple UNC System campuses.

National resources and local connections

By choosing Skanska as your trusted CMR partner, UNCG will benefit from our ability to leverage our national assets with the personal touch of team members who call Greensboro home. The national purchasing power of our Strategic Supply Chain team along with our longstanding collaboration with Triad HUB partner Sterling Construction Services (SCS), are just two examples of how UNCG will benefit from our national and local presence. We will continue strengthening our community with established and new HUB firms as we restore and expand Jackson Library.

Cooperative and value-based management

We are the CMR partner with the right people and resources to help define UNCG's priorities and the scope of the project. We know exceptional results will come from honest and ongoing conversations and a rigorous preconstruction process that identify and incorporate the best ideas. Our team-based approach enables UNCG to make informed choices during early alignment meetings and throughout construction to ensure the design meets both your goals and budget.

We look forward to meeting with members of your selection team to present our capabilities and approach. You have my personal and corporate commitment to guide this project through to a successful completion. Please do not hesitate to contact me at 919.201.1420 with any questions you may have.

Sincerely,

Skanska USA Building Inc.

Ben Huffman Account Manager



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Confidentiality Statement

The sections of this proposal marked with the legend "Confidential Information" contain commercial and/or financial information (e.g., pricing and rates) that Skanska USA Building Inc. considers to be proprietary, confidential and/or trade secrets. Release of this Confidential Information would cause Skanska substantial competitive harm and would compromise the integrity of this procurement process by giving Skanska's competitors an unfair advantage. Skanska is furnishing this proposal with the understanding that the Owner will not disclose this Confidential Information to any third parties other than those engaged by the Owner to assist with the evaluation of this proposal and who have agreed to be bound by this restriction. Skanska requests that it be notified in writing at least five (5) days prior to any disclosure that contravenes this restriction.

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Construction Manager-at-Risk Solicitations

Full Details

Institution UNC Greensboro

Institution URL for Additional

https://facdc.uncg.edu/wp-content/uploads/2022/03/UNCG-JACKSON-LIBRARY_combined-CMR-RFP.pdf

Information about this Project (Optional)

Project Name Jackson Library Addition and Renovation

Project Manager Terrance "Buddy" Hale, Jr.

Phone Number (336) 334-4431
Contact Email tohale@uncg.edu
Pre-proposal Date 04/11/2022
Pre-proposal Time 9:00 am

Pre-proposal Location Remotely via Zoom (See URL for link in RFP document)

Closing Date 04/29/2022
Project Budget \$81,000,000
Project Description One-Two Sentences

UNC Greensboro is seeking proposals from qualified Construction Manager at Risk firms for the project entitled,

Jackson Library Addition and Renovation.

The Jackson Library opened in 1950, with the tower addition coming online in 1973, and minimally updated since. The current facility is not reflective of the evolving definition of a modern-day library: a dynamic, technology-rich learning environment and intellectual community hub. Growth in enrollment, new academic programs and library support activities have generated a need for an increase in programmatic space and make it critical that the existing spaces be renovated. The revitalization of the library will innovatively and strategically support the University's institutional mission, enhance, and strengthen the library's connection in the heart of UNC

Greensboro's Main Campus.

The scope of the project will consist of a comprehensive, transformative renovation to the existing building along with a new addition. The renovation will include updating the existing mechanical, electrical, plumbing, life safety and audiovisual systems. The project also includes addressing ADA issues and an IT Core Distribution Facility. Located at the bustling hub that is the physical center of campus, the project is envisioned as a complex, phased construction of an occupied building that will include strategically coordinated moves. As such, implementation will require meticulous and proactive planning. The project will integrate high technology group studies, central convening spaces and increased capacity for use by individual students. It is envisioned as a nexus of student academic success and transformative research resources. The library is considered at the core of the University's intellectual space, where learning, knowledge creation, and community are fostered.

The selected Construction Manager at Risk (CMR) firm will closely work with the Architects and Engineers to provide a construction perspective and expertise to the design process. The CMR will be responsible for providing constructability reviews, market-based cost estimates, and realistic schedule development. At the appropriate point in the design process, the CMR will provide a guaranteed maximum price (GMP) for the project, ensuring the work can be accomplished with the budget.

All proposals are due by Noon on April 29, 2022

mit To Electronic submissions only to:

Terrance "Buddy" Hale, Jr. UNC Greensboro fdc@uncg.edu cc: tohale@uncg.edu

Submit To

$\begin{tabular}{ll} \textbf{Jackson Library Addition \& Renovation} - \textbf{CMR Request for Proposals} \\ \end{tabular}$

RFP DATA SHEET				
Item	Datum			
Short Description of Project	The scope of the project will consist of a comprehensive renovation to the existing building along with a new addition.			
Issuing Office	UNCG Facilities Design and Construction			
Department, Agency/Institution, Location where the Project will be constructed	Facilities Design and Construction UNC Greensboro Greensboro, NC 27412			
Project Overview	The project includes the renovation of the existing 1950's main Jackson Library building and the 1973 tower addition. The renovation will include updating the existing mechanical, electrical, plumbing, life safety and audiovisual systems. The project also includes addressing ADA issues and an IT Core Distribution Facility. The Building's approximate gross square footage is 239,773 GSF. The project will include the construction of a new addition that enhances access to the existing building and connection to Campus. The project will require approval of design and construction by the State Construction Office.			
Website address (URL) for posting of notices regarding this project	https://facdc.uncg.edu/solicitations/			
Expected Date of Completion of Design	June 14, 2024			
Project Designer & Consultants	Designer Contract Pending			
Construction Manager at Risk Selection Schedule	Post Advertisement – April 1, 2022 Pre-Submittal Meeting – April 11, 2022 Proposals Due – April 29, 2022 Interview – June 16, 2022 Selection (BOT approval) – July 13, 2022			
Construction Management Fee (Section II Paragraph E.2)	The Construction Management Fee will be a fixed number based on a percentage of the Cost of Work. For this project, the fee will be reasonably negotiated in concurrence with the Owner and the State Construction Office			
Project Construction Cost	Total Project Budget: \$81,000,000 Less: Estimated Available for Construction (GMP): \$54,250,000			

Executive Summary



UNCG's Selecting Criteria

Our current workload allows us to fully staff the UNCG Jackson Library project and commit our team for the project's duration. We have successfully completed projects of similar scope without legal or technical problems—with over 20 years of executing State Construction projects for higher education clients. Our team has built libraries and projects with extensive, occupied renovations on active campuses. They have exceptional qualifications and are the A-team for this project. Working within the State Construction procurement and contracting framework, our team has a successful history of delivering complex, multi-phased projects.

Relevant Project Highlights



Main Library Addition and Renovation

Durham County, North Carolina

- Completed early and on budget
- Involved key proposed team members
- ✓ 28% HUB participation



Leonard J. Kaplan Center for Wellness

UNCG

- Completed 37 days early and on budget
- Involved key proposed team members
- Proximity and familiarity with the area
- 30.7% HUB participation



James B. Hunt Jr. Library and Parking Deck

NC State University

- Completed 30 days early and on budget
- Involved key proposed team members
- 21.5% HUB participation

Section 1 Profile of Proposer

"

The library is an arena of possibility, opening both a window into the soul and a door onto the world.

Rita Dove, poet and writer

Profile of Proposer

"Thanks to the Skanska team, we realized our vision of a new, sustainable, state-of-theart facility to support our mission of shaping future leaders in technology innovation and engineering. The Skanska team was truly a partner that worked in concert with the University."

Hector Hernandez, Project Manager, Duke University

Α.

Give corporate history of the company including organizational structure, years in business and evidence of authority to do business in North Carolina.



Skanska USA Building's evidence of authority to do business in North Carolina is shown above.

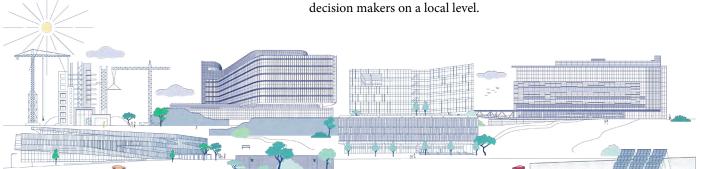
Skanska's North Carolina and Virginia Office

For over a century - since 1918 - Skanska's North Carolina and Virginia operations have been committed to providing clients with the highest standards of quality, service and integrity.

As a corporation, we provide complete preconstruction, construction management, design-build, program management and general construction services to public and private sectors.

Our office is committed to exceptional preconstruction services, an unwavering respect for the environment, creating a safe environment for our construction partners, fostering respect and integrity, providing our clients with exceptional quality in all aspects of our service, and securing these commitments through collaboration with our project delivery teams. Our teams are encouraged and expected to continually search for and utilize innovative tools, technologies, and processes to assure that all stakeholders in our projects are successful.

Organizationally, our local leadership office is empowered to make all business decisions affecting our clients and project, assuring you of access to



B.Provide annual workload for each of the last five (5) years; number of projects and total dollar value.

North Carolina and Virginia Region Volume				
Year	Volume (in millions)	Number of Projects		

The chart above represents ongoing projects that are in preconstruction or construction phase during the past five years.



We will bring best practices from the completed NC State James B. Hunt Jr. Library to the UNCG Jackson Library project.

C.

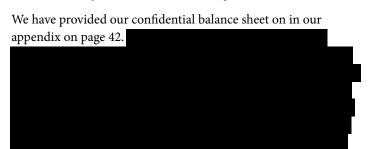
List projects for which the company is currently committed including name & location of each project, time frame to complete & dollar volume of each project.

North Carolina and Virginia Office Current Workload			
Project	Location	Value	Completion Date

Our proposed team is available for the duration of the UNCG Jackson Library project.

D. Financials

Attach latest balance sheet and income statement if available, based on company type. Audited statements preferred. If not available, attach a copy of the latest annual renewal submission to the relevant licensing board. Indicate Dunn & Bradstreet rating if one exists. (Firms must submit financial data and may clearly indicate a request for confidentiality to avoid this item becoming part of a public record.)





E.

Attach letter from Surety Company or its agent licensed to do business in North Carolina verifying proposer's capability of providing adequate performance and payment bonds for this project.

\$10 billion bonding capacity

With a bonding capacity of \$10 billion, we are one of the most financially-sound construction firms in the world.

Please find our Surety Letter in the Appendix on page 43.

F.

List all construction projects performed by the proposer for agencies and institutions of the State of North Carolina during the past 10 years.

Skanska's State of North Carolina Projects 2012-2022			
Project Name	Owner		
Fitts-Woolard Hall	North Carolina State University		
James B. Hunt, Jr. Library and Parking Deck	North Carolina State University		
Surgical Tower	UNC Hospitals		
Hillsborough Campus	UNC Hospitals		
North Carolina Cancer Hospital	UNC Hospitals		
Leonard J. Kaplan Center	University of North Carolina at Greensboro		
Tom Apodaca Science Building	Western Carolina University		

Benefit to UNCG: Our team will hit the ground running with knowledge of how to best work with State Construction within the UNC System.

Our team has been working with the State of North Carolina agencies and institutions for over 30 years and has a clear understanding of how to efficiently collaborate with State Construction.



NC State University - James B. Hunt Jr Library



UNC Greensboro - Kaplan Center

Section 2 Project Experience

"

What a school thinks about its library is a measure of what it feels about education."

Harold Howe, former U.S. commissioner of education

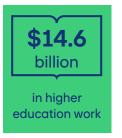
Project Experience

- A. List three projects of similar size, scope and complexity performed by the proposer
- B. For each of the three projects, include specific details on the extent to which preconstruction & construction phase services were provided.
- C. For the three projects listed above where CM services were provided, list the Guaranteed Maximum Price (if given), or if not given, the estimated cost provided by you, and the total cost of the project at completion.
- D. For each of the three projects above where CM services were provided, compare the number of days in the original schedule with the number of days taken for actual completion.
- E. For each of the three projects listed above, attach project owner references including the name, address, telephone and fax numbers, and e-mail address of the project owner representative.

Please find our three selected projects on the following three pages.

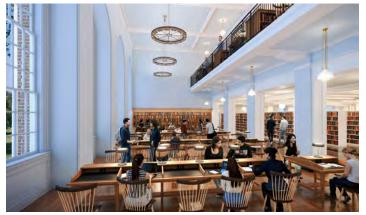
Building on our past for your future

Skanska has an unmatched portfolio of experience with all the key components of your project.

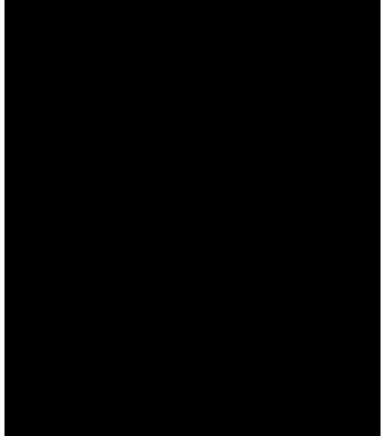








University of Virginia, Alderman Library Addition and Renovation











- Construction experience
- Library experience
- Active campus
- Proposed team experience
- LEED Silver
- Finished early and on budget

Preconstruction Services Full scope

Construction Phase Services Full scope

GMP

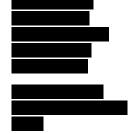
Cost at Completion



Number of Days Allocated



Owner Reference



North Carolina State University, James B. Hunt **Library and Centennial Campus Parking Deck**

Raleigh, North Carolina

On this new construction project, our team:

- Built one of the most advanced libraries in the world to house the Centennial Campus Library and the Institute for Emerging Issues, a think tank for leaders from business, nonprofits, government and higher education
- Created spaces for group learning, classes, conferences, research, offices, study, socializing and food service
- Constructed a 544-space precast parking deck and the Centennial Campus Academic Oval
- Installed a state-of-the-art, 1.8 million volume automated book retrieval system, in lieu of typical library stacks, allowing for more visually open space
- Incorporated cutting-edge technology, such as perceptive pixel displays and touch-screen displays

- Met the owner's early occupancy goal so books could be loaded into the library computer system months early to ensure an on-time opening
- Executed sustainable design elements to achieve LEED* Silver certification, including a green roof and a highly efficient heating, piping and air conditioning
- Worked closely with NC State and the design team to find creative solutions to reduce costs without impacting the project program or design quality when \$10 million was removed from the budget during design development
- Created a campus HUB for student gathering and activity
- Finished the project 30 days ahead of schedule









- Library experience
- Renovation and addition
- Proposed team experience
- LEED Gold
- Extensive community involvement

Preconstruction Services Full scope

Construction Phase Services Full scope

GMP

Cost at Completion

Number of Days Allocated



Number of Days Taken

Owner Reference



Durham County, Main Library Renovation and Addition

Durham, North Carolina

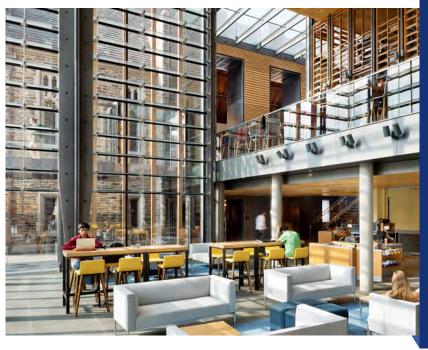
On this new construction and renovation project, our team:

- Updated the 40-year-old library to meet modern staffing, operational and program needs, giving it a new sense of prominence in the community
- Completed selective demolition, executing complex phasing to maintain the integrity of the building; abated asbestos and lead paint; and added a fourth floor, which resulted in approximately 30,000-SF in new space
- Replaced exterior skin, roof, interior partitions, finishes and building systems
- Provided galleries, study spaces, meeting areas, an exterior amphitheater, history room, skylight, monumental staircase and two-story auditorium
- Constructed a STEAM (science, technology, engineering, the arts and

- math) literacy center with areas for special programs and career skills training
- Created a "Community Corner" for the project with seating, project information, job opportunities, a lending library and project photos
- Hosted college students, allowing them to tour the project, learn the scheduling process, and create weekly 4D sequences of structural steel and MEP systems
- Achieved 28 percent HUB participation
- Outperformed from LEED* Silver to LEED* Gold certification
- Worked with the design team to ensure the exterior facade vision was achieved in the most cost effective manner possible, saving hundreds of thousands of dollars of the project budget









- Active campus adjacent to residence halls
- Addition and occupied renovation
- Proposed team experience
- LEED Silver
- ADA Compliance
- New MEP systems

Preconstruction Services Full scope

Construction Phase Services Full scope

GMP

Cost at Completion

Number of Days Allocated



Number of Days Taken

Owner Reference



Duke University, Richard H. Brodhead Center for Campus Life

Durham, North Carolina

On this addition and renovation project, our team:

- Completed the renovation of the 1920s-era student union, including complex restoration of the clay-tile roof and historic wood doors, windows and ceilings and met Duke's aggressive schedule—delivering some spaces months early
- Delivered the project in a multiple phased occupancy format to support Duke University's initiatives
- Demolished the building's core on a tight site bordered by an occupied dormitory and auditorium, leaving a 40' wide strip of the original building
- Installed new MEP systems, relocated utilities and brought the building up to code and into compliance with the Americans with Disabilities Act
- Constructed a modern, blackened steel,

- German glass atrium, refinished the gothic stone perimeter and seamlessly blended the two together
- Created gathering spaces, nine dining venues, an internal "street" at the plaza level, a demonstration kitchen and multipurpose spaces at every level
- Solved a groundwater infiltration issue by drilling wall "weeps" and directing groundwater to a floor drain, draining the pressure building behind basement walls
- Used multiple mockups to successfully execute the elevated concrete walkway with cast glass lenses that collect daylight and illuminate the pub below
- Achieved LEED® Silver certification with components, such as energy-efficient glazing, natural daylighting, low-flow toilets and LED light fixtures

Section 3 Key Personnel

"

Libraries store the energy that fuels the imagination. They open up windows to the world and inspire us to explore and achieve and contribute to improving our quality of life.

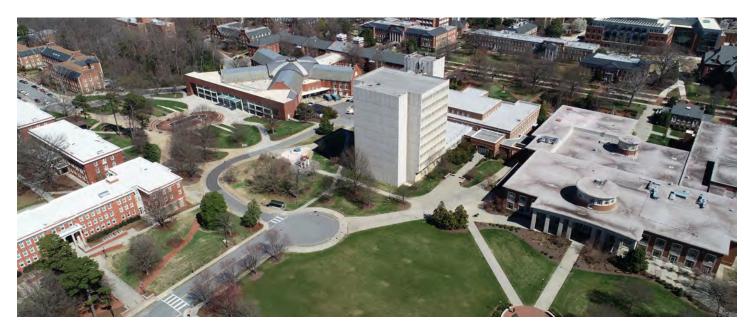
Sidney Sheldon, American writer and producer

Key Personnel

"It amazes me each time I see the James. B. Hunt Jr. Library. . . Your construction efforts have set a new standard for education, technology and engagement"

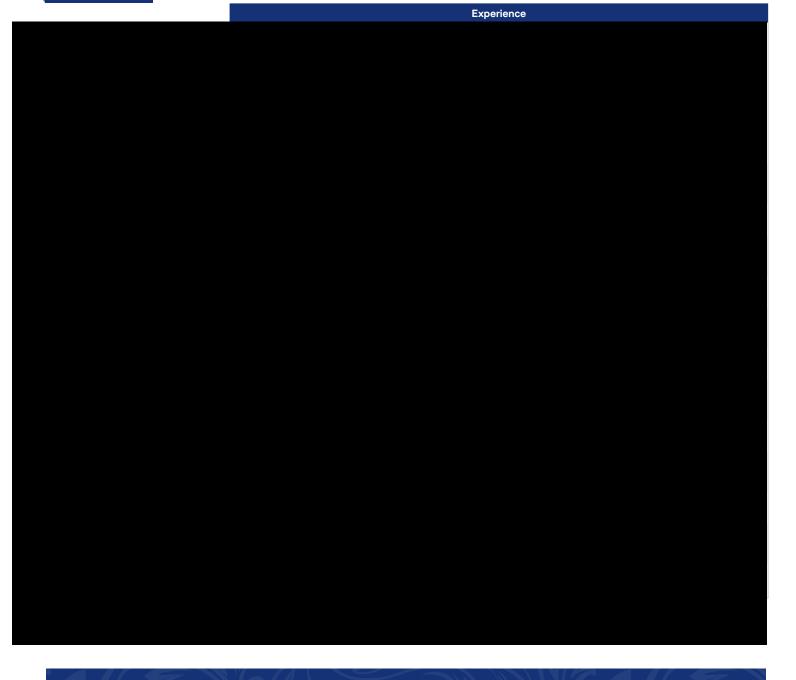
- James B. Hunt, Jr. Former Governor of North Carolina







List of key personnel who will be assigned to the project. Attach sworn statement that the above persons will be exclusively assigned to this project for its duration.



C. For each person listed in response to A & B above, list his/her experience with firm, other prior and relevant experience with projects of similar size and scope in construction/design, and the person's location. Attach the resumes and references for each person listed.

Resumes and references for each person listed are attached in the appendix on page 45.

D. Attach project organizational chart indicating the placement of each of the persons listed in response to A & B above.

Our project organizational chart is attached in the appendix on page 59.

Section 4 Project Planning

"

The library card is a passport to wonders and miracles, glimpses into other lives, religions, experiences, the hopes and dreams and strivings of ALL human beings, and it is this passport that opens our eyes and hearts to the world beyond our front doors...

Libba Bray, American Writer

Project Planning

Fitts-Woolard "is an extremely complicated and complex facility, so hats off to each of you and your entire team for your hard work and dedication. It's been a tough project for sure, but in typical Skanska fashion, you have not given up! Whether it's solving structural steel issues, coordinating MEP . . . or managing scores of subcontractors every day, I acknowledge the challenge and the difficulties of a project of this magnitude."

- Cameron Smith, Senior Director, Capital Project Management NC State University

Provide a brief, overall description of how the project will be organized and managed, and how the services will be performed in both Pre-Construction and Construction Phases. Project planning that offers the same project manager for pre-construction and construction phases shall be given preference.

Team Alignment to Achieve Your Goals

Skanska is a firm believer of team alignment—identifying success factors and goals is one of the first tasks in preconstruction. Through team partnering sessions and identifying key performance metrics, we will align all key stakeholders to achieve success.

Our approach to preconstruction and construction is based upon two pillars: rigorous project planning and continuous communication. Rigorous investigation during preconstruction facilitates the framework of best-in-class project planning. And, for proper execution we need to ensure there is frequent, clear communication. This boils down to a simple process: create a plan, schedule a plan and build the schedule. While the process

is simple, the details and execution require a balanced team of experienced professionals. Our approach includes an equal focus on preconstruction, project management and field operations.

The success of this approach will be driven by well-thought-out engagement during preconstruction. Dedicating appropriate time to multi-disciplined planning truly results in the best return on your investment. During preconstruction, our goal is to facilitate the alignment of the team's efforts to ensure early decisions are possible. This requires a focused, collaborative environment where UNCG, LS3P + Shepley Bulfinch and Skanska are all working together in concert.



An integrated approach

This approach supports a streamlined and collaborative project delivery by involving all project team members in key decision making from the onset to develop target costs that are managed and maintained throughout the preconstruction effort. The process graphic shown below outlines our plan to ensure effective and efficient preconstruction to execute the project quickly and eliminate rework. Our team's primary responsibility is to develop

a collaborative environment that starts with listening. It's essential that everyone understands UNCG's vision and goals before we define solutions. In a transparent environment, teams are better able to share ideas and explore alternative options. As teams identify plans together, everyone buys in, truly developing into one team with a shared goal.



a. Value Engineering

Our "Team First" approach drives us in providing continuous input to the project team to ensure best value for the project. This includes systems analysis, material selections, detail constructability, sustainability, etc. We know that the greatest opportunity to influence the design is early on, so we provide a concerted effort on this analysis during the advanced planning and SD phase, with the focus shifting to detail development in the later phases. We also realize that continuous involvement and feedback to the designer is critical to avoiding unnecessary schedule impacts from redesign efforts. This approach to continuous cost feedback is detailed in Section C - Cost Model/ Estimates.

The basis of value analysis is an organized effort focused on achieving the lowest life-cycle costs consistent with required performance, reliability, quality and aesthetics. We will also assemble the project team and initiate a formal integrated and collaborative Value Analysis Workshop during which the entire design is reviewed from a value perspective.

We will use Skanska Metriks to provide a smarter, data driven approach to value analysis. As the design progresses, we will compare the current design against similar projects within Skanska Metriks, not just from a cost standpoint, but also analyzing the hundreds of other non-cost building parameters. While this is helpful in identifying underdeveloped scope where we need to fill in gaps to provide a complete estimate, it is also critical in identifying systems or design components that may be targets for enhancement through value analysis because they trend above other similar projects. For example, if the building's air distribution system shows a higher ductwork density than comparable facilities with comparable facilities with similar mechanical systems, this data-driven analysis prompts further discussion within the team around the current design methodology and assumptions as well as potential alternate systems or design strategies.

The result of this effort is greater confidence that the final design will deliver best value, consistent with Jackson Library's goals and priorities.







Maximizing value on the facade at **Durham County Library**

With the exterior façade being a signature architectural element, the team worked closely with the architect to ensure the vision was achieved in the most cost effective manner possible. In the areas utilizing curtainwall, additional mullions were selectively added to reduce the cost premium that the project was incurring for oversized pieces of glass. On the metal panel areas, Skanska engaged a subcontractor partner to optimize panel sizes and thicknesses while maintaining the overall aesthetic. These strategies saved hundreds of thousands of dollars to the project budget.

b. Constructability Issues

Design document/constructability reviews

The design document/constructability review provides the team with an opportunity to resolve conflicts prior to construction and saves the team effort and costs up front. Document reviews are conducted early and continuously during the design process to develop an understanding of how the documents are being assembled and where information will be shown within the documents. Skanska provides ongoing feedback to the designers as a means to facilitate the design process.

The preconstruction team and the field operations team that will build the project will conduct the document reviews. They will provide realistic constructability comments from a builder's point of view considering the phasing, overall project schedule, logistics, equipment and construction means and methods that will be employed to build the project. This feedback will help the entire project team understand the impact of systems, materials and equipment selections prior to committing them to full design.

During the reviews, our team will look for ways to improve cost, schedule and quality. They will make suggestions on alternate methods and details, and implement best practices from other projects to avoid future problems. The team will study the designs and finishes and propose value management suggestions, review details between the different systems, and if necessary, propose systems that may be easier to construct and maintain.

Coordination of phasing and services

As the design develops, we will work closely with UNCG and LS3P + Shepley Bulfinch to develop a strategic phasing plan for all MEP and life safety systems. This input during the design process will be critical to ensuring your existing operations are not affected as we install and re-energize new equipment and systems. Our constructability reviews during design will also help confirm proper connectivity as each phase comes online and examine how entire systems will function once completed.

Document scrub

At major milestones, our team will scrub the developing documents and specifications for construction coordination issues that might arise, generating a drawing scrub list.

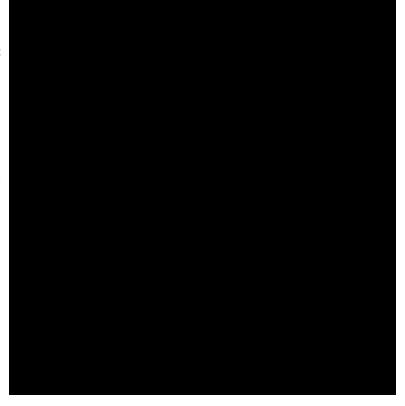
Complete, correct and coordinated documents

The Skanska team will review each specification section and drawing and strive to identify and document any potential inconsistency that could become a costly future change. Skanska utilizes the BIM software tool Navisworks to perform clash detections as part of the constructability review. This effort will lower the initial cost of work, increase construction efficiency and eliminate most change orders.



Using Virtual Reality (VR) During Preconstruction

VR places an end-user into a first-person, immersive experience that contextualizes the built environment and enables a personal connection to a space. This can be used during constructability reviews, help remove unknowns around design options, clarify assumptions to conceptual estimates, accelerate decision-making and promote stakeholder buy-in.



major design milestones. Updates are shared with the broader team in an interactive report developed in Microsoft PowerBI (example above) that allows the team to quickly identify and react to any instances where the design may be deviating from the initial target.

Preconstruction Cost Event (PCE) log

Throughout the TVD process, we will use the PCE log to track ideas that are being evaluated by the team but may deviate from the baseline estimate parameters. As ideas are accepted or rejected, we will update our cost estimate to reflect our current status in relation to the target budget. We will report out on the project estimate cost status weekly.

Design development estimate

UNCG + Skanska + LS3P + Shepley Bulfinch + **Key Subcontractor Partners**



Brainstorm—Options Presented

Throughout the development of the design, all partners will be asked to share their ideas to improve the project.



Analyze, Detail and Validate—for Cost, Schedule, Quality and Safety

Every suggested idea will be underpinned with its technical requirements in conjunction with our design partner and reviewed for constructability, safety, schedule and cost.



Resolution-Consensus Driven Selection

Each idea will be shared along with the positive and negative effects of the suggested changes.

The design team will have clear, consensus-based direction, allowing them to continue forward. Target values will be updated as appropriate once items have been accepted.

Once the design development documents are issued, we begin our final "in-design" pricing prior to finalizing the design for construction. Our local multi-disciplinary preconstruction group, which includes in house mechanical, plumbing and electrical expertise, will perform quantitative surveys for all materials and labor. We will also seek input from the local market on the various price components of the project, allowing us to confirm scope of work and current market pricing.

Overall, the design development estimating effort is focused on ensuring the design detailing is in line with the previously established control estimate. Any variances which are observed are documented and evaluated with the team, however these are generally limited as a result of the continuous ongoing collaboration with the design team between design deliverables.

Final cost estimate

Having reconciled the design development estimate with UNCG and the design team, our primary focus until the construction documents are complete will be monitoring the final design progress. We will remain engaged during the final design stage and will continue to attend design progress meetings, identifying, logging and providing "real-time" cost feedback on any proposed cost events (PCE) that are considered during this time period.

Once the design is complete, our preconstruction staff will begin the final cost evaluation prior to establishing the GMP. In all likelihood, we will consult with trade contractors to test assumptions we have made regarding cost and utilize detailed quantity surveys to finalize our opinion of cost for the project.

d. Project Tracking/Reporting

UNCG can rely on Skanska to deliver the Jackson Library project on time and within budget. Since ensuring your project is on track is one of our core responsibilities, Skanska will act quickly to minimize or eliminate any possible delays regarding the project. This process begins during the design phase. Our team is equipped with the latest tools to develop and produce project schedules, analyze and allocate materials and resources, and adjust schedules to help ensure timely project completion. Additionally, we customize our accounting and monthly reporting process to keep you well informed as to the status of the project at all times.

Our team offers you extensive experience in managing complex construction programs similar in scope to the Jackson Library project. We have developed the technology and management systems necessary to effectively track project data and report to owners and other team members.



Our approach to project tracking and reporting is proactive and structured so timely decisions can be made.

e. Request for Information (RFI) and **Shop Drawings**

Submittal management

Submittal tracking starts at the very beginning of the project, with submittals being entered into our overall project schedule. The submittals will be coded separately to allow us to create a report that produces a stand-alone submittal schedule. However, they will also be linked to the schedule, so we know when critical items must be submitted and approved. We will identify all submittals early and track them from start to finish. We will then generate a submittal schedule that lists each item and the subcontractor's due date.

Once the submittals arrive in our field office, we will assign each one a unique number and enter it into Procore for tracking. Our review process includes dimensional review, sequencing, coordination and general adherence to contract documents. Only after thorough review will our management staff forward a submittal to the designer for their review. We will distribute a submittal status report to the project team on a weekly basis that shows submittals that are outstanding beyond the agreed-upon turnaround time, as well as other reports, as required. This will help the entire team focus on the critical items, realizing that not everything has to be addressed at the same time.

Requests for Information (RFIs)

Requests for Information (RFIs), are items generated by the construction team to clarify items in the field or on the documents. When we generate a RFI, we often provide a proposed solution asking for designer confirmation, rather than just issuing a question. We will track these items in Procore similarly to how we track submittals, allowing us to track turnaround times so everyone can focus on keeping the information flowing. Once a question is posted on Procore, all parties will be notified, and the design team will answer it via Procore. This electronic process cuts down on the physical paper and ultimately results in a smoother, Leaner process.

f. Quality Control and Quality Assurance

Our commitment to quality

We view quality control/quality assurance (QC/QA) as the responsibility of all project team members, with Skanska spearheading the effort. Skanska will work closely with UNCG to understand your goals and collaborate with the design team and all consultants to achieve design quality. We will ensure that all project team members, including subcontractors and vendors, understand their responsibilities related to maintaining these goals and implementing a strict QC/QA program.

For the Jackson Library project, we will develop a project-specific Quality Management Plan (QMP), which will include all quality processes and procedures required through construction and post-construction. Our QMP will include the following activities.

During preconstruction, we will:

- Complete a constructability review of the construction documents for every deliverable
- Communicate expectations of quality control plans to subcontractors
- Establish primary inspection points to be reviewed and documented in the field at the point of installation
- Coordinate reviews between MEP systems and architectural layouts
- Require that each trade contractor attend a preconstruction conference for every major construction activity prior to beginning work
- Analyze quality aspects related to phasing, including how details will interface to ensure clean details

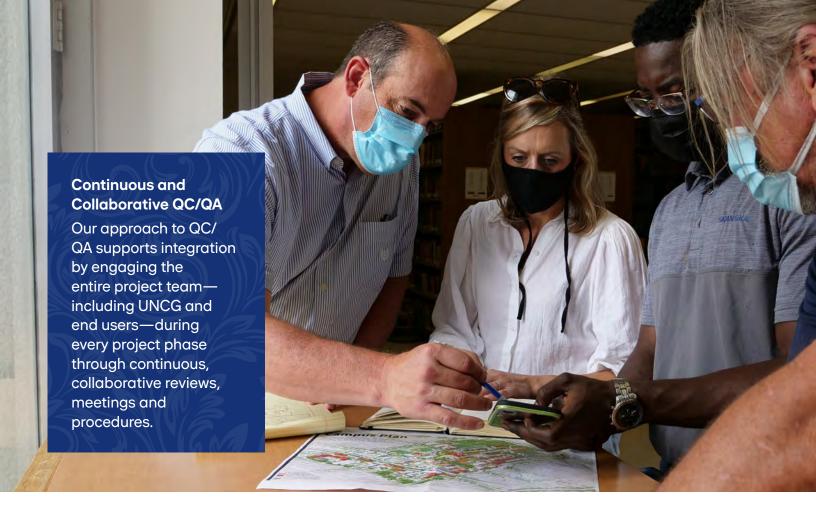
During construction:

- Hold regular quality control meetings and jobsite walks with UNCG and LS3P + Shepley Bulfinch
- Supervise the preparation and administration of testing and inspection plans, and witness all testing
- Review a QA checklist at the three critical phases of each component of work: pre-installation, mid-installation and activity completion
- Perform in-wall inspections before closure
- Review all non-conforming work activities during weekly progress meetings



"Throughout the 2 1/2 year construction project, Skanska always ensured that the library's needs came first, and for that, I am so appreciative. In our project meetings, communication was vital as your team kept us aware of any project happenings that may affect our timing or workflow... The final space is one that the entirety of Durham County can be proud to call its own. I certainly appreciated the attention to detail and care that went into each and every project element.

> Faith Phillips Former Manager of Durham County Main Library



- Use Procore on iPads to improve efficiencies with easy access to QA/QC inspections, work-to-complete lists, punch lists and daily reports—this live information will be accessible to all UNCG and the design team members for review and acceptance/rejection
- Manage the phasing processes, with the varying considerations for temporary barriers to provide a continual atmosphere appropriate for operations around the construction areas.
- Focus on required UNCG facility maintenance access to MEP above ceiling equipment such as valves, VAV boxes, filters, and electrical disconnects. During coordination and installation, we concentrate on how the building will be maintained by UNCG facilities and what will be required during SCO beneficial occupancy inspections. This attention to detail eliminates re-work and streamlines the schedule and quality of the installation.

During commissioning and close-out:

- Ensure that phased commissioning is coordinated with the design and occupancy schedule
- Oversee mechanical completion and pre-commissioning check-outs

- Ensure all equipment is properly tested and calibrated
- Administer quality control close-out procedures, including the punch-list process
- Distribute manuals, warranties and guaranties, as-built drawings and any other required record documents
- Manage training of operational and facilities management personnel

Tools we use to plan, create and confirm quality can be found on the following pages.

g. Schedule and Staffing Plan

Developing a realistic, reliable schedule is the first step in achieving your substantial completion date. To do this on the Jackson Library project, our team will facilitate early engagement, integrated planning processes and transparent communication.

Setting the Jackson Library project up for success:

- 1. Engage the entire project team in the scheduling process.
- Integrate planning processes across disciplines.
- Communicate transparently throughout construction.

We will use a combination of the Critical Path Method (CPM) and the Last Planner® System to create a streamlined schedule for the project. Our project team has extensive experience with both of these systems, and we will work with UNCG, LS3P + Shepley Bulfinch, our operations team and key subcontractors to help the team develop a predictable and reliable project schedule.

The graphic below shows how we will use the CPM and Last Planner System together to deliver a streamlined schedule for the Jackson Library project. This process will ensure that we answer all the questions necessary to create an accurate baseline that reflects real-world opportunities and constraints in the field.

Our office is a recognized leader in the construction manager approach. Since 2001, we have always met our contractual completion dates.

Additional information regarding our staffing plan can be found in Section Three: Key Personnel.

B. HUB Participation: Describe the program (plan) that your company has developed to encourage participation by HUB firms to meet or exceed the goals set by North Carolina General Statute 143-128.2. Please explain how the firm will address minority participation in the management levels of the company. Include a HUB plan in the proposal. Provide documentation of HUB participation that the firm achieved over the past three (3) years on both public and private construction projects. Outline specific outreach efforts that your firm will take to notify HUB firms of opportunities for participation. Indicate the minority participation goal that you expect to achieve on the project.

"I have worked with Skanska for the past five years. During that time Johnny Ortiz, and the Skanska project team assigned to Wake County Public School System projects has provided fantastic support to the WCPSS HUB Program. During the Lincoln Heights project he provided additional training for minority and women businesses that helped grow their businesses professionally. Skanska also partnered with a minority owned business which showed their dedication and commitment to supporting MWBE firms. In the end, WCPSS had a successful project delivered by Skanska, and I look forward to working with Johnny and their project team again on future projects."

> Pamela Gales, CLGPO, ECMCA Hub Program Manager Wake County Public School System

A long-standing commitment to the **North Carolina HUB community**

Skanska has been at the center of the North Carolina construction market for more than 100 years, and during our tenure, we have seen the industry evolve in many ways. We have had great success working with the local, minorityowned subcontractor community, and we remain committed to engaging them whenever possible—for both public and private work. Skanska will bring significant value to UNCG's efforts to create opportunities for local, regional and minority-owned subcontractors.

Our HUB strategy for the Jackson Library project



expand their opportunities while gaining valuable experience as we transition into the Jackson Library project. This partnership will provide key staff members to work alongside our Skanska project management and field supervision teams. The strengths to this cohesive partnership will provide a number of benefits to the project and our HUB team members:

- A project of this size offers countless learning and growth opportunities through mentoring and coaching
- At the completion of the Jackson Library project, Sterling will be poised to take on larger projects and assignments moving forward
- Increased amount of on-site team diversity, deepening the breadth and diversification of experiences
- Expanded outreach capabilities during preconstruction, increasing the number of diverse subcontractor bids
- Expanded relationships with key subcontractors which we can use to maximize second-tier opportunities and partnerships

A comprehensive, effective hub outreach effort The Skanska HUB outreach effort will be aggressive, comprehensive and targeted. We will identify local and HUB firms, communicate project opportunities and encourage those firms to participate in the Jackson Library project at a first-tier

We will consider the target plan as we finalize our trade contracting packaging plan, and we are committed to breaking down bid packages to allow smaller subcontractors the opportunity to prequalify.

Equally as important, we will also share a list of all HUB firms interested in participating on the project at a second-tier level with all prequalified first-tier firms. We will support and encourage all prequalified first-tier firms to engage these HUB firms and partner with them on the project. Our project-specific outreach effort will include interaction with minority firms, as well as prime contractors and first-tier subcontractors. We will participate in seminars and trade fairs sponsored by UNCG and/ or local minority contractor associations, and host workshops dedicated to assisting with the prequalification of minority and woman-owned businesses. These workshops will address prequalification requirements and introduce interested firms to the State's bidding requirements.

The UNCG team and Skanska will review the prequalification responses and mutually agree on each subcontractor's ability to participate. In the event that a small or disadvantaged minority contractor is deemed unqualified for a first-tier package, our project team will identify all prequalified trade contractors within that same package to assist the minority firm with an opportunity



The earlier a firm has access to project information, the earlier it can position itself to win work especially minority or disadvantaged firms.

as a second-tier participant, keeping the minority-owned contractor engaged in the project.

Diverse business is good business

Skanska will lead by example in our efforts to prequalify local, minority-owned, first-tier subcontractors and encourage prequalified non-minority, small business subcontractors to exceed the minimum Good Faith Efforts.

We will use the guidelines created by UNCG to ensure the Good Faith Efforts of all trade contractors, measuring those efforts against the criteria found in the State of North Carolina Affidavit A Listing of Good Faith Efforts.

Our proactive approach includes identifying those firms who are ready, willing and able to perform work on the project and introduce them to the prime and first-tier subcontractors.

Monitoring and reporting

During the project, Skanska will provide regular updates on the status of local HUB business participation through our monthly project report. A listing of all HUB contractors, contract amounts, paid-to-date amounts, etc. will be updated monthly and

included in the report. We will monitor and report involvement by contractor and supplier types, as requested by UNCG. We will include updated monthly narratives regarding schedule, payment, performance and any other critical issues.

Commercially Useful Function (CUF): Under federal, state and local regulations, HUB credit may only be awarded for subcontractors that perform a CUF. Reliance on public agency certifications alone has proven insufficient in identifying companies legitimately operating as HUB firms, so our team will internally verify all HUB firms' operations, labor force, equipment, supply sourcing and site supervision, among other criteria. This will help protect UNCG and allow you to rest assured that all HUB firms on your project are operating legitimately.

Appendix Attachments

a community is a cross between an emergency exit, a life raft and a festival. They are cathedrals of the mind; hospitals of the soul; theme parks of the imagination. On a cold rainy island, they are the only sheltered public spaces

A library in the middle of

Caitlin Moran, British journalist, novelist

where you are not a consumer, but a citizen instead."

Appendix

"....this is the best [project] we've ever had in terms of coordination, results and schedule. It's also the most difficult project we've ever done"

- Melvin Hurston, Senior Vice President of Professional and Support Services, UNC Health

Attachments

As requested, following attachments can be found in this section:

- Balance sheet and income statement
- Surety letter
- Sworn statement of personnel
- Resumes
- Project organizational chart
- Verification
- Appendix G, RFP Affidavit

Sworn Statement

Section 3.A. **Attach sworn statement** that the above persons will be exclusively assigned to this project for its duration.

Skanska is committed to the exclusive assignment of each of the full-time key personnel described herein for the duration of the Jackson Library project if selected as construction manager.

Ben Huffman, Vice President Skanska USA Building Inc.

**Skanska USA Building Inc.*

Attest: July & Rune og

Ben Huffman, Vice Presiden

(Corporate Seal)

VERIFICATION

I HEREBY CERTIFY THAT THE RESPONSES OF Skanska USA Building ARE CORRECT AND TRUTHFUL TO THE BEST OF MY KNOWLEDGE AND FOR THOSE RESPONSES GIVEN WHICH ARE BASED ON INFORMATION AND BELIEF, THOSE RESPONSES ARE TRUE AND CORRECT BASED ON MY PRESENT BELIEF AND INFORMATION.

This the 29th day of April, 2022



COUNTY OF Durham

**Skanska USA Building Inc. **

Ben Huffman, Vice President

Attested:

Evelyn Hennessy, Assistant Corporate Secretary

I, Joy Kirby, a Notary Public in and for the County and State aforesaid, hereby certify that Ben Huffman personally came before me this day and acknowledged that he is Vice President of Skanska USA Building Inc. and that by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by its Vice President, sealed with its corporate seal, and attested by Evelyn Hennessy is assistant corporate secretary.

Witness my hand and official seal, this the 29th day of April, 2022.

Official Signature of Notar

Joy Kirby, Notary Public Notary's Printed or Typed Name

My Commission Expires

Joy Kirby Notary Public Granville County North Carolina

APPENDIX G

Non-Collusion and Non-Suspension Statement

The undersigned certifies that Skanka USA Building, 4309 Emperor Blvd. Suite 200, Durham, NC 27703, North Carolina General Contractor License Number 15940, has not in connection with this proposal or in any instance engaged in any conspiracy, combination, or any other act in restraint of trade or commerce declared to be unlawful by the provisions of N.C.G.S. 75-1 and 75-2 where the combination, conspiracy or other unlawful act in restraint of trade involves a contract for construction, renovation or repair, let or to be let by a governmental agency or a subcontract for construction renovation or repair with a prime contractor or proposed prime contractor for a governmental agency. N.C.G.S. 133-24.

Furthermore, the undersigned certifies that it is familiar with the response to the RFP for Jackson Library Addition and Renovation and that said response, is fair and proper and is not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the undersigned or any of its agents, representatives, owners, employees or parties in interest. N.C.G.S. 133-30.

Finally, the undersigned certifies that it has not been suspended from bidding by the North Carolina State Building Commission or any other State building authority and that it is not an affiliate or subsidiary of any company suspended by the North Carolina State Building Commission or any other State building authority.

Joy Kirby Notary Public Granville County

North Carolina

Vice Franchest

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal this the

Official Signature of Notary

Toy Kirby
Notary's Printed or Typed Name ___, Notary Public

July 21, 2026

My Commission Expires:

SKANSKA

