



Finance and Administration Committee
March 17, 2026

Action Item

FAC - 3 Selection of Designer – Moore Strong Plumbing Renovation

Background Information

The Moore Strong residence hall was constructed in 1961. The project will replace the aging plumbing fixtures and the supporting infrastructure with modern, accessible, and code-compliant materials and systems. The scope will include plumbing modernization of all common, multi-fixture, high-density washrooms and the common kitchen areas. The work will also update the existing electrical heaters in large multi-fixture rooms and create at least one new single-use shower facility in each building wing. The construction target is Summer 2027.

Per the November 11, 2025, BOT meeting, the Finance and Administration Committee approved **\$422,500** for **Advance Planning** (design and commissioning) for the Moore Strong Plumbing Renovation project.

Project Cost: \$4,225,000

The University of North Carolina System website advertised the request for qualifications and letters of interest for design services for this project. Nine (9) firms submitted letters of interest, two (2) from Guilford County.

The Designer Selection Committee reviewed the letters of interest and invited three (3) firms to interview on March 2nd and March 3rd, 2026, to present their qualifications and recommend the following in ranking order.

1. McKim & Creed, Inc., Raleigh, NC
2. Newcomb & Boyd, Durham, NC
3. CPL Architects and Engineers, P.C., Greensboro, NC

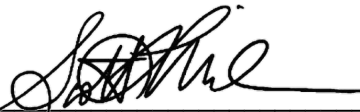
The firm McKim & Creed, Inc. is recommended as the Designer for the following reasons:

1. McKim & Creed assembled and demonstrated the most technically specialized team to strategically undertake this complex Housing plumbing modernization project.
2. McKim & Creed presented the most comprehensive methodology and deepest understanding of the project's unique, specific, and specialized challenges.

3. The McKim & Creed team presented the most proactive cost estimating strategy, through the development of both an in-house estimate and acquiring a separate external professional cost estimate to mitigate risk throughout the design process.

Requested Action

Based on the above information, the Board of Trustees of the University of North Carolina at Greensboro approves the firm of McKim & Creed, Inc. for the Moore Strong Plumbing Renovation project. 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.



Scott Milman
Interim Vice Chancellor for Finance *and* Facilities

Attachments:

- McKim & Creed, Inc. Letter of Interest



RFQ # 287-30705-DS

ELECTRONIC

UNC Greensboro

MOORE STRONG PLUMBING RENOVATION

JANUARY 28, 2026

SUBMITTED TO:

UNC GREENSBORO

105 Gray Drive | Greensboro, NC

336.334.5269

SUBMITTED BY:

MCKIM & CREED, INC.

4300 Edwards Mill Rd, Suite 200 | Raleigh, NC

919.233.8091 | mckimcreed.com



MCKIM & CREED
ENGINEERS SURVEYORS PLANNERS



1 INFO SHEET



Information Sheet

Firm Name

HUB Certified **If HUB, Specify Type** Female American Indian Hispanic Socially & Economically Disadvantaged
 Disabled Asian-American Black

Point of Contact E-mail Address

Street Address

City State Zip Code County

Phone # Fax #

Type of Firm (e.g. Architectural, Civil Engineering, Surveying, Etc)

Consulting Firms

Architectural: <input type="text" value="KEI"/> <input checked="" type="checkbox"/> Check If HUB	Mechanical: <input type="text" value="McKim & Creed, Inc."/> <input type="checkbox"/> Check If HUB
Electrical: <input type="text" value="McKim & Creed, Inc."/> <input type="checkbox"/> Check If HUB	Plumbing: <input type="text" value="McKim & Creed, Inc."/> <input type="checkbox"/> Check If HUB
Structural: <input type="text"/> <input type="checkbox"/> Check If HUB	Civil: <input type="text"/> <input type="checkbox"/> Check If HUB
Landscape: <input type="text"/> <input type="checkbox"/> Check If HUB	Interior Design: <input type="text"/> <input type="checkbox"/> Check If HUB
Other (specify type): <input type="text" value="35 N (Cost Estimating)"/> <input checked="" type="checkbox"/> Check If HUB	
Other (specify type): <input type="text" value="F&R (Environmental Consulting)"/> <input checked="" type="checkbox"/> Check If HUB	



January 28, 2026

Jeff Manter
UNC Greensboro Facilities Design & Construction
Gray Home Management House
105 Gray Drive
Greensboro, NC 27412



RE: UNCG Moore Strong Plumbing Renovation

Dear Mr. Manter and members of the Selection Committee:

Modernizing plumbing systems is essential for UNCG to maintain safe, functional, and comfortable living environments while supporting its mission to foster intellectual inquiry, prepare students for engaged citizenship, and serve as a source of innovation and leadership for the communities it serves. With Moore Strong Residence Hall requiring significant plumbing upgrades, UNCG seeks a design team with proven expertise in plumbing infrastructure to evaluate modernization options, improve efficiency, and deliver solutions that meet project goals on time and within budget. McKim & Creed understands the unique challenges of renovating aging residence halls and has extensive experience replacing outdated fixtures, upgrading multi-fixture washrooms and common kitchens, and integrating modern systems such as electric/gas water heaters, and implementing smart and efficient DHW controls strategies. Our team excels at developing comprehensive advanced planning strategies, including detailed assessments, phasing concepts, and cost evaluations, to establish a clear strategy that minimizes future disruption and ensures successful execution when the project moves into design and construction.

Beyond technical capability, we bring extensive experience with the State Construction Office (SCO), giving us insight into bid market conditions and equipment pricing. This expertise strengthens our cost estimating process, ensuring accurate budgets during advanced planning. Leveraging our SCO knowledge will help UNC Greensboro streamline approvals and set a clear, realistic roadmap for Moore Strong's plumbing modernization.

McKim & Creed will work with the project team and UNCG staff to meet the goals and objectives of this project. We are a design consultant that offers the following:

<p>▶ COLLABORATION</p>	<p>▶ EXPERIENCE</p>	<p>▶ LONG-TERM SOLUTIONS</p>	<p>▶ PHASING & SCHEDULING</p>
<p>Collaboration with UNCG is crucial for project success and effective issue management. Our team will engage staff throughout the project life cycle to confirm mutual objectives, understand UNCG's goals, and ensure seamless coordination, maximizing value within budget.</p>	<p>With 47+ years of experience working in the higher education sector, we are intimately familiar with designing for a university campus context as well as the ins and outs of SCO codes, standards and processes. Our direct experience with UNCG means we know what to expect to meet project goals, schedules and budgets.</p>	<p>Our team will work with UNC Greensboro to identify best-fit, long-term solutions for this project. We will involve UNCG facilities and maintenance staff in equipment selection for ease of management and efficiency, ensuring success for the long-term.</p>	<p>Our team understands that construction will need to be completed while campus facilities remain occupied and recognizes the importance of providing clear scheduling and phasing requirements in construction documents. We will coordinate closely with the contractor, design team, and UNCG staff to develop workable phasing strategies that minimize disruption and adhere to SCO and UNCG project requirements.</p>

McKim & Creed has the expertise, resources, and team to exceed the requirements of this project. Our experience with higher education plumbing renovations, familiarity with the UNCG campus, and deep knowledge of SCO requirements position us as a highly qualified partner. We will provide accurate assessments and reliable cost estimates during advanced planning to ensure long-term operational reliability. We look forward to the opportunity to serve UNCG and help modernize Moore Strong for safe, functional, and comfortable student living spaces.

Sincerely,

Josh Berard | McKim & Creed

Project Manager
607.743.1437 | jberard@mckimcreed.com



3

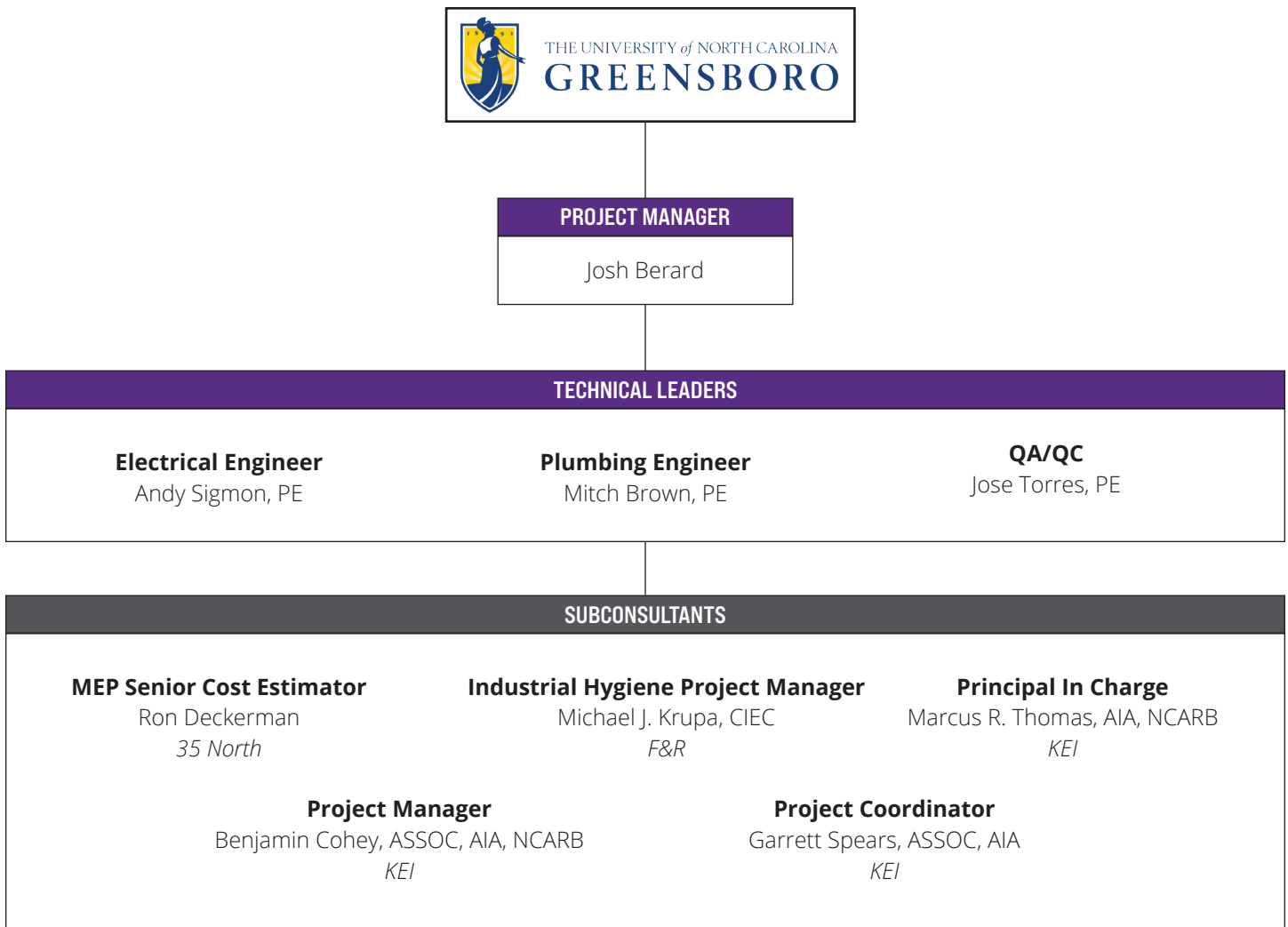
PROJECT TEAM ORGANIZATION CHART

3.1 ADEQUATE STAFF AND PROPOSED DESIGN OR CONSULTANT TEAM AND THEIR RELEVANT PROJECT EXPERIENCE

Our commitment and focus as a firm is to maintain the highest standards of service and quality while meeting our clients' technical, schedule and budget constraints. Our project team will function as an extension of the UNC Greensboro staff, making themselves readily available for hands-on support for this project. This will facilitate the quick identification of challenges resulting in unique, customizable solutions that are best suited for projects of this exact type. Our team brings over 100 years of combined MEP/FP experience to the project with consulting engineering and owner-side experience in design, operations, energy management, and maintenance.

Josh Berard will serve as our project manager for the duration of this project. He will act as the primary point of contact and will focus on project delivery, schedule, budget and resources. Supporting Mr. Berard is Electrical Engineer Andy Sigmon, PE; Plumbing Engineer Mitch Brown, PE; and QA/QC Jose Torres, PE. We also have Ron Deckerman from 35 North joining our team to provide cost estimating services to accurately assess the intention of the design, suggest improvements as needed, and predict other needs that might not yet be reflected on paper. Michael J. Krupa, CIEC, with Froehling & Robertson, Inc. (F&R), a SWaM and HUB minority-owned business, will provide environmental/hazardous materials abatement services to address any environmental risks and liabilities. Principal-In-Charge Marcus R. Thomas, AIA, NCARB; Project Manager Benjamin Cohey, ASSOC, AIA, NCARB and Project Coordinator Garrett Spears, ASSOC, AIA from KEI will be joining our team to provide architectural services, ensuring SCO and UNCG standards for safety, student experience, and long-term maintainability through coordinated design, room layout refinement, and compliance documentation.

Each team member has experience working with plumbing infrastructure and serving higher education facilities, particularly related to residence halls, and understands the needs of colleges and universities for these types of projects. Additionally, the McKim & Creed team has more than 130 MEP/FP professionals across our footprint who can serve this project should the need arise.





Josh Berard

PROJECT MANAGER

QUALIFICATIONS

- ✔ 15+ Years of Experience
- ✔ 8+ Years with McKim & Creed
- ✔ HVAC
- ✔ Hydronics
- ✔ Fire Protection
- ✔ Steam
- ✔ Plumbing

EDUCATION

B.S., Mechanical Engineering,
State University of New York
at Buffalo

AFFILIATIONS

American Society of Heating,
Refrigeration, and Air
Conditioning Engineers
(ASHRAE)

Mr. Berard has 15+ years' experience in HVAC and plumbing consulting working as a designer and project manager. Management of his projects includes successfully driving on-time completion while balancing both the construction budget and the owner's needs and requirements. On the design side, he has a demonstrated history involving domestic water, sanitary, and fire protection systems. Additionally, Mr. Berard is knowledgeable with regards to state building codes, NFPA requirements and ASHRAE guidelines.

► Project Experience

NCSSM Dorm Renovations, NC School of Science and Math / Durham, NC: Mr. Berard is serving as project manager and plumbing designer. McKim & Creed is providing MEP services for this project to renovate and upgrade six student residence halls at NCSSM. The project scope included an initial advanced planning phase to assess all residence halls and associated MEP upgrades. The renovations include upgrading MEP central systems, individual and community restrooms, furnishings in the rooms and lounges, and all adult apartments that are used by live-in staff members. Our scope included replacing the existing plumbing piping systems providing new exhaust fans and ductwork, replacing select air handling units, and providing MEP modifications to support architectural renovations (new lighting, receptacle layout modifications, and new diffusers). Size & Cost: 200,000 SF | \$10 million.

UNC CH Granville Towers HVAC Replacement, UNC Chapel Hill / Chapel Hill, NC: Mr. Berard served as mechanical designer. McKim & Creed responded to an urgent need from UNC Chapel Hill to replace the existing mechanical systems in three high rise residence halls, Granville Towers. The original systems were installed over 60 years ago when designers didn't have the understanding for controlling humidity as well as we do now. This resulted in mold growth in and around the restrooms and system replacement was a must, and schedule was the biggest driver. McKim & Creed explored different HVAC system solutions including considerations for budget, space, phasing, and performance. The best system type was determined to be dedicated outside air handlers coupled with variable refrigerant flow (VRF) room control.

FSU Hood, Harris & Joyner Residence Hall HVAC Replacements, Fayetteville State University / Fayetteville, NC: Mr. Berard served as mechanical designer. McKim and Creed provided MEP/FP design services for these HVAC replacement projects for Harris, Joyner and Hood Residence Halls to replace the existing fan coil units. The units in Harris and Joyner are ceiling mounted and were changed to vertical floor mounted units. The units in Hood were replaced with similar units. The project included replacing the dielectric union gaskets and insulation on the existing piping to prevent condensation during cooling mode. Size & Cost: Hood Hall (17,562 SF) / Harris Hall (24,735 SF) / Joyner Hall (22,031 SF) | Approx \$1.5 million.

UNC CH Everett, Lewis & Stacy Residence Hall HVAC Replacement, UNC Chapel Hill / Chapel Hill, NC: Mr. Berard provided mechanical design support. McKim & Creed responded to an urgent need from UNC Chapel Hill to replace the existing mechanical systems in three high rise residence halls —Granville Towers. The original systems were installed over 60 years ago when designers didn't have the understanding for controlling humidity as well as we do now. This resulted in mold growth in and around the restrooms and system replacement was a must, and schedule was the biggest driver. McKim & Creed explored different HVAC system solutions including considerations for budget, space, phasing, and performance. The best system type was determined to be dedicated outside air handlers coupled with variable refrigerant flow (VRF) room control.



Andy Sigmon, PE

SENIOR ELECTRICAL ENGINEER

QUALIFICATIONS

- ✔ 30+ Years of Experience
- ✔ Low Voltage
- ✔ Electrical Power Distribution
- ✔ Emergency Generators

EDUCATION

B.S., Electrical Engineering,
North Carolina State
University

LICENSURE & CERTIFICATIONS

Professional Engineer: NC
(#027325)

AFFILIATIONS

Professional Engineers of
North Carolina (PENC)

North Carolina Board of
Examiners for Engineers and
Land Surveyors (NCBELS)

Mr. Sigmon has 30+ years of experience in electrical design and application. He has been involved with consultation, electrical design, electrical specification writing and construction administration for institutional, educational, commercial and industrial facilities. His design responsibilities have included lighting, power, emergency generator, fire alarm, security, and communications systems.

► Project Experience

UNCG Bryan Building Air Handling Unit Replacement, UNC Greensboro / Greensboro, NC: Mr. Sigmon served as electrical engineer. McKim & Creed was selected to perform design, bidding, and construction administration services to replace Air Handling Unit #3 for the Bryan Building at UNC Greensboro. This is an informal project, with McKim & Creed being selected under our campus annual service agreement for engineering services. The scope of this project includes the complete replacement of Air Handling Unit #3 that serves the existing auditorium in the building. McKim & Creed provided load calculations to verify unit sizing, conducted meetings with UNC Greensboro staff to review and address controls strategies (in particular humidity control), and provided detailed air handling unit selections to ensure the dimensions of the air handling unit fit the space available while providing space needed for future maintenance and access. Electrical work included a new power feed for the fan motor and associated variable frequency drive, and also integration of new duct smoke detectors into the fire alarm system. A new floor drain was also designed for the mechanical room.

UNCG Coleman Building Fire Alarm System Replacement, UNC Greensboro / Greensboro, NC: Mr. Sigmon served as project manager. The Coleman building at UNC Greensboro needed upgrades to its fire alarm system to ensure a safe environment for all its occupants. McKim & Creed's scope included a complete fire alarm system replacement throughout the building (approximately 265K SF) and upgrading the system to an addressable fire alarm system that includes mass notification and voice evacuation per UNC Greensboro Design & Construction and SCO guidelines. Our team also modified the detection system, which included upgrades to the smoke detectors, duct detectors and beam detectors. The building will remain occupied during construction.

UNCG Phillips Hawkins Fire Alarm Upgrades, UNC Greensboro / Greensboro, NC: Mr. Sigmon served as project manager. McKim & Creed's scope included replacing the existing addressable fire alarm system, adding mass notification and addressing ADA deficiencies along with additional work to install security cameras for improved safety. The project also included the addition of a 100kW/125kVA standby generator to serve life safety loads including emergency lighting, and optional standby loads including an elevator. The total budget for the project is \$1.2M.

NCSSM Dorm Renovations, NC School of Science and Math / Durham, NC: Mr. Sigmon is serving as electrical engineer. McKim & Creed is providing MEP services for this project to renovate and upgrade six student residence halls at NCSSM. The project scope included an initial advanced planning phase to scope all residence halls and associated MEP upgrades. The renovations include upgrading MEP central systems, individual and community restrooms, furnishings in the rooms and lounges, and all adult apartments that are used by live-in staff members. Our scope included replacing the existing plumbing piping systems providing new exhaust fans and ductwork, replacing select air handling units, and providing MEP modifications to support architectural renovations (new lighting, receptacle layout modifications, and new diffusers). Size & Cost: 200,000 SF | \$10 million.



Mitch Brown, PE

PLUMBING ENGINEER

QUALIFICATIONS

- ✔ HVAC
- ✔ Plumbing Systems
- ✔ Medical Gas Systems
- ✔ Boiler and Chiller Plants

EDUCATION

B.S., Mechanical Engineering,
NC State University

LICENSURE & CERTIFICATIONS

Professional Engineer: NC
(#019692)

AFFILIATIONS

American Society of
Heating, Refrigeration and
Air Conditioning Engineers
(ASHRAE)

Mr. Brown is a professional engineer with 37+ years' experience. His principal areas of experience include the design of HVAC systems, plumbing systems, medical gas systems, steam and condensate systems, boiler and chiller plants and facility condition assessments.

► Project Experience

UNC CH Granville Towers HVAC Replacement, UNC Chapel Hill / Chapel Hill, NC: Mr. Brown served as mechanical designer. McKim & Creed responded to an urgent need from UNC Chapel Hill to replace the existing mechanical systems in three high rise residence halls, Granville Towers. The original systems were installed over 60 years ago when designers didn't have the understanding of how to control humidity as well as we do now. This resulted in mold growth in and around the restrooms and system replacement was a must, and schedule was the biggest driver. McKim & Creed explored different HVAC system solutions including considerations for budget, space, phasing, and performance. The best system type was determined to be dedicated outside air handlers coupled with variable refrigerant flow (VRF) room control.

NCSU Kilgore, Scott & Thomas HVAC Renovations, NC State University / Raleigh, NC: Mr. Brown is serving as plumbing and fire protection engineer. This project is a major, phased infrastructure upgrade focused on three buildings on NC State University's North Campus. With a total budget of \$24.3 million, the project addresses deficiencies in mechanical, electrical, plumbing, and fire protection systems, ensuring compliance with NC State Building Codes and regulatory laboratory requirements. The renovations are scheduled in phases to minimize disruption to ongoing academic and research activities. The primary goal of this project is to modernize these facilities to support advanced research and teaching in science and engineering fields. Upgrades will enhance the functionality and safety of laboratories and classrooms, creating an improved environment for scientific discovery and innovation.

UNCSA Sanford & Moore Residence Halls HVAC Replacement, UNC School of the Arts / Winston-Salem, NC: Mr. Brown provided plumbing and fire protection engineering services. As prime consultant, McKim & Creed completed a project study and HVAC upgrades. The HVAC upgrades project included new central HVAC systems and associated electrical power renovations for two new air-cooled chillers, four new boilers, two new domestic water heaters, and associated piping, pumps, and controls system upgrades. The existing chillers served each building separately, but the new chillers were tied together to provide partial redundancy to both buildings. Multiple boilers and pumps were provided to improve redundancy if a single piece of equipment were to fail. This project was completed on time, under budget and prior to students returning to campus.

FSU New Science & Technology Building, Fayetteville State University / Fayetteville, NC: Mr. Brown served as a plumbing and fire protection engineer for the new 55,000 SF Science and Technology Building. An award-winning, LEED Silver-certified project, the building complies with State Construction Office guidelines regarding sustainability to reduce energy and water consumption. A life cycle cost analysis was provided, and energy conservation strategies were put into place that included high-efficiency water-cooled chillers with a variable secondary flow system, high-efficiency condensing type boilers and water heaters, energy recovery for exhaust/outside air streams, high-efficiency T-5 HO lighting and lighting controls, and high-performance glazing and increased insulation values for the building envelope. Low-flow plumbing fixtures were utilized as part of a water reduction strategy.



Jose Torres, PE

QA/QC

QUALIFICATIONS

- ✔ 24+ Years of Experience
- ✔ Healthcare
- ✔ Project Planning
- ✔ Project Estimation
- ✔ Energy Conservation
- ✔ Construction Drawings
- ✔ Sustainable Design
- ✔ Value Engineering

EDUCATION

M.B.A., Business Administration, Wake Forest University

B.S., Mechanical Engineering, North Carolina State University

LICENSURE

Professional Engineer: NC (# 031493)

AFFILIATIONS

- ASHRAE
- NCHEA
- ASHE

Mr. Torres brings 24+ years of experience, with a proven track record of designing and implementing efficient and effective mechanical systems. Mr. Torres possesses extensive knowledge of HVAC, plumbing, and fire protection systems, and has a strong understanding of industry codes and regulations

▶ Project Experience

NCSU Polk Hall Renovation, NC State University / Raleigh, NC: Mr. Torres is providing QA/QC services. McKim & Creed is providing MEP services for the \$73 million renovation of Polk Hall (completed in 1926), which houses the Structural & Molecular Biochemistry and Animal Science departments. The project aims to enhance labs and student spaces and includes modernizing mechanical, electrical, and plumbing systems. Specific upgrades involve the fire alarm system, electrical switchgear, building power panels, air handling units, medium pressure ductwork, lab exhaust systems, lighting controls, and plumbing infrastructure. McKim & Creed led discussions in the planning phase for high-efficiency lab HVAC systems. The goal is to modernize the facility to support program growth and expansion.

FSU Butler & Telecom Building Renovations, Fayetteville State University / Fayetteville, NC: Mr. Torres is providing QA/QC services. Fayetteville State University selected McKim & Creed as the prime consultant to address outdated mechanical and electrical infrastructure in the G.L. Butler and Telecommunications buildings. For the G.L. Butler Building (which houses the Drama and Theater program (and the Butler Theater) of the Department of Performing & Fine Arts), the project includes fire alarm system replacement for code compliance, inspection and repair of air handlers on upper floors, and the installation of VAV boxes and new ductwork for better temperature control. The Telecommunications Building project involves the removal of DX units, installation of air handlers and VAV boxes, connection to the campus chilled water loop, and system upgrades including an emergency generator and fire alarm replacement.

WTCC Perry New Science & Health Education Building, Wake Tech Community College / Raleigh, NC: Mr. Torres is serving as mechanical engineer. McKim & Creed is providing mechanical, electrical, plumbing, and fire protection system design for the 106,000 SF Wake Technical Community College (WTCC) Perry Health Science Campus new Health Sciences building. This building will serve as the campus's state of the art hub for healthcare staff training with a direct adjacency to WakeMed for collaboration. Included in this building are simulation patient rooms, an ED, an OR, ultrasound training bays as well as functioning X-ray, MRI, and CT scanning spaces. This project consists of a unique balance of energy efficiency for Green Globes certification while maintaining robust systems that will meet the school's needs. Overall mechanical systems include penthouse air handlers, boilers and utility yard residing air cooled chillers.

NC Education Campus, State of North Carolina / Raleigh, NC: Mr. Torres is serving as mechanical engineer. McKim & Creed is providing mechanical, electrical, plumbing, and fire protection engineering services for the North Carolina Education Campus project. This new campus will support multiple executive-level agencies, including the Department of Commerce, Department of Public Instruction, Community Colleges System, and the UNC System. The building includes 300,000 SF of office space, high-technology board rooms and conference rooms, support space, and a below-grade parking deck. McKim & Creed's scope includes upgrades to underground chilled water distribution loop that will assist NCDOA with its long-term system upgrades plans. The project is currently in construction documents phase and the total budget is \$320 million.



Ron Deckerman

MEP SENIOR COST ESTIMATOR

Location: Durham, NC

Experience: 32 Years

QUALIFICATIONS

- ✔ 32+ years of industry experience + vast knowledge in MEP design development that exceeds the standard understanding of drawings and specifications

EDUCATION

B.A. in Humanities/Classical Studies, Biola University (Magna Cum Laude)

Ron brings over 32 years of experience in preconstruction services managing high-intensity projects at facilities across the country. He has provided cost estimating support for design projects ranging from \$25,000 to over \$900 million for education, healthcare, municipal, and federal sectors, among others. Ron successfully provides advanced planning, construction cost milestone estimating, and value engineering for all design phases for new facilities and renovations. He specializes in complex MEP estimating. Ron has a deep knowledge of plumbing, mechanical, and electrical utilities, coupled with a strong understanding of project requirements.

▶ Project Experience

- » **UNC Charlotte Cone Center - Restroom Addition**, University of North Carolina at Charlotte / Charlotte, NC
- » **NCSU Tri Towers Residence Hall Mechanical System Upgrade**, North Carolina State University / Raleigh, NC
- » **UNC Charlotte Friday HVAC & Electrical Repairs**, University of North Carolina at Charlotte / Charlotte, NC
- » **ECU Todd Dining Hall Renovation**, East Carolina University / Greenville, NC



Michael J. Krupa, CIEC

INDUSTRIAL HYGIENE PROJECT MANAGER

Location: Raleigh, NC

Experience: 30 Years

QUALIFICATIONS

- ✔ Over 30 years of experience in hazardous materials consulting
- ✔ Vast project collaborations with McKim & Creed including higher education institutions

EDUCATION

B.A., Geology, Rutgers University

M.S., Occupational Safety & Health, Environmental Management

LICENSURE

Asbestos Inspector, Asbestos Air Monitor, Asbestos Project Designer, Asbestos Management Planner / Lead Based Paint Inspector/Risk Assessor

Mr. Krupa is an Industrial Hygienist with extensive environmental project experience that has provided him with detailed industry knowledge and strong management and leadership skills. Mr. Krupa manages, conducts and assists with Indoor Air Quality Studies and Mold/Moisture Assessments, Hazardous Materials Inspections (including asbestos, lead-based paint, PCBs, mercury, universal waste, etc.), Industrial Hygiene Studies (including airborne chemical contaminants, noise, etc.), and Asbestos Air Monitoring activities. He develops reports and remediation designs and manages an assortment of industrial hygiene projects. Mr. Krupa also has experience in the development and maintenance of Respiratory Protection Programs and Personal Protective Equipment (PPE) Programs. **Mr. Krupa will help identify, mitigate and find solutions to any environmental risks and liabilities that may develop.**

▶ Project Experience

- » **Carver Hall Hazardous Materials Survey**, NC A&T / Greensboro, NC
- » **Coleman Athletic Center Building Fire Alarm Upgrade**, UNC Greensboro / Greensboro, NC
- » **Berryhill Hall**, UNC Chapel Hill / Chapel Hill, NC
- » **Everett, Lewis, & Stacy Residence Halls**, UNC Chapel Hill / Chapel Hill, NC
- » **Sitterson Hall Classroom Renewal**, UNC Chapel Hill / Chapel Hill, NC



Marcus R. Thomas, AIA, NCARB

PRINCIPAL-IN-CHARGE

Location: Charlotte, NC

Experience: 10 Years

QUALIFICATIONS

- ✔ 10+ Years of Experience
- ✔ Higher education
- ✔ LEED design
- ✔ BIM proficiency

EDUCATION

Master of Architecture,
Hampton University

LICENSURE

Registered architect: NC, VA,
SC, TN

Marcus brings experience from across a number of market sectors including, Sports & Entertainment, Higher Education, K-12, and Healthcare, overseeing the design and documentation of projects such as the \$14 Million North Charleston Athletic Center, \$12 Million Charleston Southern Residence Hall, and \$4 Million Barton College Athletic Stadium. Marcus has a reputation for efficient documentation throughout all design phases. He is proficient in BIM project execution and designing for LEED accreditation, consistently delivering his projects on time and within budget. Marcus has a keen understanding of how to build successful Owner/Architect relationships. Representative experience.

▶ Project Experience

- » **Hampton University Admin Building Renovation**, Client / Hampton, VA
- » **VSU HVAC Replacements**, Virginia State University / Petersburg, VA
- » **NCCU Art Museum**, NC Central University / Durham, NC
- » **WTCC Therapeutic Massage Renovation**, WTCC / Raleigh
- » **Lakeview Hall Renovation**, University of Richmond / Richmond, VA



Benjamin Cohey, ASSOC, AIA, NCARB

PROJECT MANAGER

Location: Charlotte, NC

Experience: 23 Years

QUALIFICATIONS

- ✔ 23+ Years of Experience
- ✔ Project management
- ✔ Higher education projects

EDUCATION

Bachelor of Architecture,
UNC Charlotte

A.A., Architecture, Anne
Arundel Community College

Ben Cohey is a seasoned project manager and technical design expert with a rich portfolio in higher education and complex architectural projects. With a Bachelor of Architecture from the University of North Carolina at Charlotte and an Associate degree in Architecture Anne Arundel Community College, Ben combines a solid academic foundation with extensive hands on experience in managing diverse and technically challenging initiatives.

▶ Project Experience

- » **Hampton University Admin Building Renovation**, Client / Hampton, VA
- » **Lakeview Hall Renovation**, University of Richmond / Richmond, VA
- » **North Elm Medical Office Building** / Greensboro, NC
- » **Cary Academy Classroom Addition** / Cary, NC
- » **WTCC Therapeutic Massage Renovation**, WTCC / Raleigh
- » **NCCU Art Museum**, NC Central University / Durham, NC
- » **Charleston Southern Residence Hall**, Charleston Southern University / Charleston, SC



Garrett Spears, ASSOC, AIA

PROJECT COORDINATOR

Location: Charlotte, NC

Experience: 9 Years

QUALIFICATIONS

- ✔ 9+ years of experience
- ✔ Revit experience
- ✔ Higher education

EDUCATION

Bachelor of Architecture,
Tuskegee University

As a Project Architect, Garrett launched his career 7 years ago where he focused on Sports & Recreation, Higher Education, K-12, Healthcare, and Community based projects. As a skilled designer, he uses the latest technology platforms such as Revit, Lumion, Enscape, and BIM (Building Information Modeling) to help create 3d models, renderings, and videos to help engage with clients to review and approve product selection. Garrett's passion is using design to help people feel comfortable in their abilities.

► Project Experience

- » **Cary Academy Classroom Addition** / Cary, NC
- » **Karl Strass Track Replacement** / Asheville, NC
- » **Health and Wellness Complex**, Claflin University / Orangeburg, SC
- » **NCCU Art Museum**, NC Central University / Durham, NC
- » **Charleston Southern Residence Hall**, Charleston Southern University / Charleston, SC



4

RELEVANT EXPERIENCE & OTHER
IMPORTANT FACTORS



4.1 SPECIALIZED OR APPROPRIATE EXPERTISE IN THE TYPE OF PROJECT

ABOUT MCKIM & CREED

Since 1978, McKim & Creed has been a company of people helping people solve complex, demanding infrastructure challenges, and that history continues to shape who we are as a firm. Because we remain grounded in tradition, accountability, and integrity while also embracing adaptability, innovation, and new technology, we have the capacity to fulfill our mission with nothing less than exceptional engineering and geomatics solutions.

We are a Top 500 Design Firm in the US as ranked by Engineering News Record. Our Buildings, Energy and Infrastructure (BEI) team includes 130+ full-time MEP/FP experts with a broad resume of projects for educational, state agencies, healthcare and municipal clients. With decades of experience providing MEP services to higher education clients, our team is well-positioned to dive right into this project with the confidence and knowledge that we can provide UNCG with customized and innovative engineering solutions. We also have established experience as a prime designer on State Construction Office (SCO) projects.

EXPERIENCE

With more than 47 years of experience, our team has successfully delivered numerous plumbing renovation projects, including extensive work in higher-education and residence halls. We have deep expertise serving as the prime consultant on large-scale plumbing modernization efforts, providing clear and consistent communication with the client team from initial planning through project completion. As prime consultant, we guide the project through every phase, facilitating collaboration among stakeholders, managing project schedules and budgets, ensuring regulatory compliance, and delivering innovative solutions that align with the client's vision and operational goals.

The McKim & Creed team has extensive experience in plumbing system replacement, renovation and modernization, including the renewal of aging fixtures piping systems, valves, and supporting infrastructure, as well as upgrades to high-density multi-fixture washrooms and common area plumbing. This experience equips us with a strong

project understanding, enabling us to consistently meet project goals, schedules, and budgets.

McKim & Creed has led plumbing renovations in numerous higher education facilities, including North Carolina Central University, Wake Tech Community College, A-B Tech and NC State University. For each of these projects, McKim & Creed evaluated a range of plumbing system modernization strategies, including replacement of aging fixtures, upgrades to supporting infrastructure, and improvements to high-density multi-fixture washrooms to enhance reliability, accessibility, code compliance and overall system performance.

When completing this type of project, there are numerous steps to take, but we've learned from experience that the success of these projects greatly hinges on four (4) fundamental questions for UNCG.

- » How do we design for plumbing infrastructure upgrades in an occupied residence hall to minimize disruptions to students and staff?
- » Are we familiar with UNCG's design standards and submission requirements for plumbing modernization projects?
- » What are the most effective ways to engage the full project team and strategies that support a smooth renovation process?
- » Do we have a clear understanding of the project goals and the needs of end users?

These are fundamental questions we have addressed while completing plumbing and other engineering-led MEP projects throughout the years. However, the one (1) common ingredient to the success of these projects is the same: **constant communication while creating a collaborative dialogue with the entire project team to lead to the best-customized solution.**

Our team has a strong history of providing this level of communication and client-focused service at UNCG and across the UNC System. For the Moore Strong Plumbing Renovation, we will maintain clear coordination through regularly scheduled meetings from Schematic Design through Closeout to support decisions related to fixture replacements, piping upgrades, washroom modernization, accessibility, and related infrastructure. McKim & Creed is highly experienced in delivering plumbing renovation projects by proactively planning around SCO review periods, bid schedules, shop drawing submittals, and material delivery timelines to keep the project on track and responsive to the University's needs.



TECHNICAL APPROACH & RISK MITIGATION

McKim & Creed integrates multidisciplinary building engineering expertise with a structured Advanced Planning methodology tailored to UNCG's objectives. In this phase, our focus is on defining feasible modernization pathways, validating scope, and developing clear options that reflect the constraints of the project. We emphasize early engagement with UNCG stakeholders, careful review of existing building conditions, and planning-level constructability considerations to ensure recommended approaches are aligned with the projected budget, anticipated schedule, and the construction window.

As part of this effort, we review existing building conditions to identify system constraints and modernization opportunities. This includes assessing current restroom layouts, evaluating aging infrastructure at a planning level, and determining how various renovation approaches may impact cost, feasibility, accessibility, and phasing. The outcome is a data-driven basis of planning that clarifies risks, highlights key decision points, and supports the development of reliable alternatives prior to full design. Building on this foundation, we develop planning-level, code-aligned, and accessibility-compliant configurations.

Our team evaluates multiple fixture and layout options, including the incorporation of single-user showers per wing to verify alignment with building code requirements, ADA standards, and UNCG's programmatic needs. These conceptual layouts and comparative analyses help establish a clear, well-vetted direction for the subsequent design phase.

With baseline conditions determined, our Advanced Planning effort shifts toward evaluating the factors that could introduce risk or uncertainty, ensuring they are addressed before the project progresses into full design. McKim & Creed's risk mitigation approach incorporates early constructability reviews and the application of lessons learned from previous projects. This proactive process enables the team to anticipate and address technical, environmental, regulatory, and schedule-related risks before they affect project outcomes. Each risk is evaluated for probability and severity, with mitigation strategies assigned and responsibilities clearly defined. The aggregated risk profile informs the development of project contingencies and schedule buffers, supporting informed decision-making and budget control. By embedding risk management and technical excellence into every phase, McKim & Creed delivers projects that are resilient, cost-effective, and aligned with client objectives.

4.2 PAST PERFORMANCE ON SIMILAR PROJECTS TO MOORE STRONG PLUMBING RENOVATION

The McKim & Creed team has experience with plumbing system replacements and modernization projects, including work in residence halls where we carefully coordinate activities to minimize disruption to building occupants. Throughout our history, we've partnered with higher-education clients, including UNC Greensboro, to deliver thoughtful solutions involving the replacement of aging fixtures, upgrades to piping and supporting infrastructure, modernization of high-density multi-fixture washrooms, and improvements to accessibility and code compliance. Our work on campuses across North Carolina and beyond has enhanced system reliability, improved user experience in shared facilities, and supported long-term operational efficiency.



NCSU POLK HALL RENOVATION

RALEIGH, NC



A unique challenge to Polk Hall Construction is working in an occupied building. A phased construction approach is being utilized. MEP system shutdowns have to be as limited as possible so as not to impact users. McKim & Creed is providing MEP services for the \$73 Million Polk Hall Renovation project at NCSU.

This multi-phased project is to renovate portions of Polk Hall, which houses the Structural & Molecular Biochemistry and Animal Science departments, to improve labs as well as student spaces. The scope of services also includes significant modernization of the mechanical, electrical, and plumbing (MEP) systems within the building. Specifics of this scope include upgrades of the fire alarm system, new electrical switchgear and building power panels, replacement of the air handling units, replacement of the majority of the medium pressure ductwork systems, upgrades to lab exhaust systems, lighting and lighting controls, and replacement of the majority of the plumbing infrastructure systems.

McKim & Creed led systems discussions in the advanced planning phase, including the planning for variable volume, high-efficiency lab HVAC systems, and associated controls. The goal of this infrastructure work is to modernize this lab building to allow for continued program growth and expansion.

KEY HIGHLIGHTS

- ✓ Multi-phased renovation
- ✓ MEP system modernization
- ✓ Infrastructure replacement
- ✓ Advanced planning
- ✓ AHU Replacement

PROJECT DETAILS

OWNER

NC State University

PROJECT DATES

Ongoing

PROJECT COSTS

\$73 million

PROJECT SIZE

128,000 SF



FSU RJSC SANITARY PIPING EMERGENCY REPLACEMENT FAYETTEVILLE, NC



This project was an emergency project to replace sanitary piping in the building that served as the main line from the upper level restrooms and the discharge from the grease separator. The Jones Center is the main dining hall on campus so the piping had to be fixed immediately.

The project was challenging in that the line that needed to be replaced ran down the center of the building and had an eighteen foot drop to a lower level that was inaccessible for replacement in kind.

McKim & Creed rerouted the sanitary main from inside the building where it was accessible in the kitchen prep area to outside the building. Once outside it was routed past the grease separator to a retaining wall. The discharge line from the grease separator was connected to the main line. At the retaining wall, the line passed through the wall and was rerouted down with a drop, then rerouted to the inside of the building in a mechanical room on the lower level to return to the existing main trunk in the building.

KEY HIGHLIGHTS

- ✓ FSU experience
- ✓ Response to emergency/urgent need
- ✓ Sanitary piping replacement and reroute
- ✓ Rapid design
- ✓ Infrastructure upgrade

PROJECT DETAILS

OWNER

Fayetteville State University

PROJECT DATES

2022

PROJECT COSTS

\$360,000

PROJECT SIZE

N/A



NCSU AVENT FERRY COMPLEX

RALEIGH, NC



This project provided the replacement of existing domestic cold water, hot water and hot water recirculation piping for two residence halls and also modified the hot water generation system(s). The piping was failing due to galvanic corrosion. The design provided for a new domestic cold water, hot water and hot water return risers where removed in the existing chases and replaces abandoned piping buried in concrete slabs between floors.

Additionally, insulation was installed on all domestic water piping along with any valves necessary for a complete and operational system. Zone isolation valves are required at each floor and circuit setters were specified to balance the return system where applicable. Additional capacity was provided for the instantaneous gas water heaters as well as thermal storage tanks for both buildings (E&F).

KEY HIGHLIGHTS

- ✓ Piping replacement
- ✓ System balancing
- ✓ Gas water heaters
- ✓ Thermal storage

PROJECT DETAILS

OWNER

NC State University

PROJECT DATES

2018-2019

PROJECT COSTS

\$500,000

PROJECT SIZE

70,000 SF

605 residents



NCSSM DORM RENOVATIONS DURHAM, NC



McKim & Creed is providing MEP services for this project to renovate and upgrade six student residence halls at NCSSM. The project scope included an initial advanced planning phase to scope all residence halls and associated MEP upgrades. The renovations include upgrading MEP central systems, individual and community restrooms, furnishings in the rooms and lounges, and all adult apartments that are used by live-in staff members.

Our scope included replacing the existing plumbing piping systems providing new exhaust fans and ductwork, replacing select air handling units, and providing MEP modifications to support architectural renovations (new lighting, HVAC and plumbing fixtures). These existing buildings were built in the 1960s and renovations of them took careful coordination to ensure all new piping was able to fit in the tight ceiling spaces available.

KEY HIGHLIGHTS

- ✓ Higher education/SCO experience
- ✓ Multiple residence hall building renovations
- ✓ Bathroom renovations and domestic hot water system replacement
- ✓ Complete new building HVAC
- ✓ Phasing that minimized impacts to student residents

PROJECT DETAILS

OWNER

NC School of Science and Math

PROJECT DATES

2025-2026

PROJECT COSTS

\$10 million

PROJECT SIZE

200,000 SF



UNC CHAPEL HILL KENAN LABORATORY INFRASTRUCTURE UPGRADES CHAPEL HILL, NC



McKim & Creed provided mechanical and electrical engineering services as part of UNC Chapel Hill's initiative to implement energy conservation measures at the 45+-year-old Kenan Lab. This \$21 million project included providing a new chilled water heat exchanger with associated pumps and controls to decouple the building from the central campus chiller plant as well as new supply valves, exhaust valves and laboratory controls. We also replaced the building's air handling units.

The project scope also included modification and extension of steam piping as part of the building's steam to hot water system. McKim & Creed also provided steam to the 3 new lab air handling unit humidifiers. Additionally, McKim & Creed provided a new sprinkler system for floors 3-9 of this building. In addition to the new sprinkler system, a new fire pump was provided as well as a new room for the fire command center and new front end fire alarm panel. Emergency power for the new fire pump was extended from the Murray/Venable generator.

During these infrastructure upgrades the client decided to expand the project again to include a comprehensive renovation of the top four floors of lab space. This involved the total renovation of 6 lab spaces and graduate student office support spaces to support chemistry, optics, and advanced sciences, which included 16 new fume hoods and associated exhaust systems, new lab casework, specialty gases and 208 Volt power for specialty lab equipment.

KEY HIGHLIGHTS

- ✔ New fire pump protection system
- ✔ Voice communication
- ✔ Electrical distribution system
- ✔ MCC replacement
- ✔ HVAC & controls infrastructure upgrades
- ✔ Energy conservation

PROJECT DETAILS

OWNER

UNC Chapel Hill

PROJECT DATES

2017-2019

PROJECT COSTS

\$21 million

PROJECT SIZE

115,000 SF



UNC HOSPITALS 7TH FLOOR BED TOWER CONVERSION

CHAPEL HILL, NC



UNC Hospitals is a network of public hospitals and community clinics serving more than 800,000 patients each year. For patients to receive the highest quality of care, these medical facilities need top-performing mechanical, electrical and plumbing systems for operating equipment, managing comfort conditions, and maintaining sanitary standards.

McKim & Creed is currently providing professional MEP services to the main campus, renovating the existing 7th floor into a new 45 bed surgical inpatient unit. Once complete, our engineering solutions will help provide a comfortable space for patients to recover post-surgery and equip medical staff with the underlying features and tools they need to offer exceptional patient care.

KEY HIGHLIGHTS

- ✓ Improved efficiency and functionality
- ✓ New MEP systems
- ✓ New surgical inpatient bed tower
- ✓ Modernized healthcare facility

PROJECT DETAILS

OWNER

UNC Hospitals

PROJECT DATES

2023/Ongoing

PROJECT COSTS

\$30 million

PROJECT SIZE

34,000 SF



DUKE HOSPITAL DIETARY EXPANSION & KITCHEN RENOVATION DURHAM, NC



McKim & Creed has provided comprehensive mechanical, electrical, plumbing, and fire protection engineering services for multiple renovation and expansion projects at the Duke University Hospital main kitchen. Most recently, the firm supported a 1,500 SF partial renovation of the main kitchen, focused on enlarging the pot washing area to improve workflow for kitchen and dishwashing operations. This project builds on McKim & Creed's longstanding relationship with Duke University Hospital, which includes a full renovation of the 13,000 SF main kitchen completed in 2014.

Previously, McKim & Creed partnered with Duke Medical Center to expand the capacity of the existing 17,000 SF main kitchen. This effort included a new 7,500 SF addition to house coolers, freezers, dry storage, and chemical storage areas, replacing the original adjacent spaces. The kitchen itself was renovated to add ranges, smokers, ovens, and auxiliary equipment, increasing capacity to serve the growing patient population associated with the new Cancer Wing. The Dietary Expansion Project was carefully phased to keep the kitchen operational throughout construction.

After the addition was completed, the kitchen renovation began, with outdated areas demolished to allow for expanded cooking and meal preparation spaces. The project was designed in 3D using the Revit Building Information Modeling System, which improved building systems coordination, reduced construction issues, and decreased construction time.

KEY HIGHLIGHTS

- ✓ Kitchen capacity expansion
- ✓ Phased construction
- ✓ Operational continuity
- ✓ Equipment upgrades
- ✓ Storage area Relocation
- ✓ 3D revit design
- ✓ Improved system coordination

PROJECT DETAILS

OWNER

Duke University Medical Center

PROJECT DATES

2012-2014

Est 2026 (partial renovation)

PROJECT COSTS

\$8 million

PROJECT SIZE

17,000 SF

1,500 SF (partial renovation)



UNCSA SANFORD & MOORE RESIDENCE HALLS HVAC REPLACEMENT WINSTON-SALEM, NC



McKim & Creed completed a project study and subsequently completed the HVAC Upgrades project for the UNC School of the Arts Sanford and Moore Residence Halls. The HVAC Upgrades project included new central HVAC systems and associated electrical power renovations for 2 new air-cooled chillers, 4 new boilers, 2 new domestic water heaters, and associated piping, pumps, and controls system upgrades. The existing chillers served each building separately, but the new chillers were tied together to provide partial redundancy to both buildings. Additionally, multiple boilers and pumps were provided to improve redundancy in a single piece of equipment failed.

This project was completed on time and under budget for UNCSA with the project's substantial completion in the summer of 2020 prior to students returning to campus.

The HVAC systems study included meetings with UNCSA staff and a review of first costs as well as life cycle costs for HVAC systems for the building. Based on available funding and overall maintenance considerations, the first phase of this project was to complete the central system renovations outlined above which were completed on time and under budget.

KEY HIGHLIGHTS

- ✓ HVAC systems upgrade
- ✓ Piping and controls upgrade
- ✓ Completed on time and under budget
- ✓ Multi-residence hall renovation project
- ✓ Life cycle cost analysis
- ✓ Phased design

PROJECT DETAILS

OWNER

UNC School of the Arts

PROJECT DATES

2019-2020

PROJECT COSTS

\$1.1 million

PROJECT SIZE

24,000 SF



UNCG PHILLIPS & HAWKINS FIRE ALARM UPGRADES GREENSBORO, NC



McKim & Creed's scope included replacing the existing addressable fire alarm system, adding mass notification and addressing ADA deficiencies along with additional work to install security cameras for improved safety.

The project also includes the addition of a 125kW generator to support emergency lighting, communications, and an elevator. New distribution equipment, feeders and branch circuits to support to circuiting of the new emergency systems are provided. The design included lighting calculations to ensure adequate lighting is provided for emergency egress throughout the building.

KEY HIGHLIGHTS

- ✓ Fire alarm system upgrades
- ✓ ADA compliance and life safety upgrades
- ✓ Voice communication
- ✓ Mass notification
- ✓ Higher education/UNC system

PROJECT DETAILS

OWNER

UNC Greensboro

PROJECT DATES

2017-2018

PROJECT COSTS

\$1.2 million

PROJECT SIZE

20,000 SF



UNC CHAPEL HILL EVERETT, LEWIS & STACY RESIDENCE HALL HVAC REPLACEMENT WINSTON-SALEM, NC



With buildings nearing 100-years-old on its historic campus, UNC Chapel Hill needed heating, cooling and fire protection system upgrades in several of its dorms. McKim & Creed was the prime consultant for the renovation to Everett, Lewis, and Stacy Residence Halls and provided efficient solutions to improve comfort levels and safety features for the students living there.

This included replacing all the HVAC piping as well as providing new fan coil units, a dedicated outside conditioning unit, HVAC controls, fire alarm system upgrades, and replacement of the building windows. The project also included new chilled water piping and a pumping bridge in the basement of each building. Additionally, hazardous materials abatement was part of the project design. As prime consultant, McKim & Creed provided detailed project documents including a project staging plan and project schedule requirements.

KEY HIGHLIGHTS

- ✓ UNC Chapel Hill experience
- ✓ Residence hall experience
- ✓ Heating & cooling upgrades
- ✓ HVAC renovation
- ✓ Piping and controls replacement
- ✓ Energy efficient solutions
- ✓ Multi-residence hall renovation project
- ✓ Expedited, aggressive design schedule
- ✓ Higher education/SCO experience

PROJECT DETAILS

OWNER

UNC Chapel Hill

PROJECT DATES

2017-2018

PROJECT COSTS

\$4.5 million

PROJECT SIZE

24,056 SF (Everett) / 24,084 SF (Lewis) / 23,745 SF (Stacy)

4.3 CURRENT WORKLOAD & STATE PROJECTS AWARDED

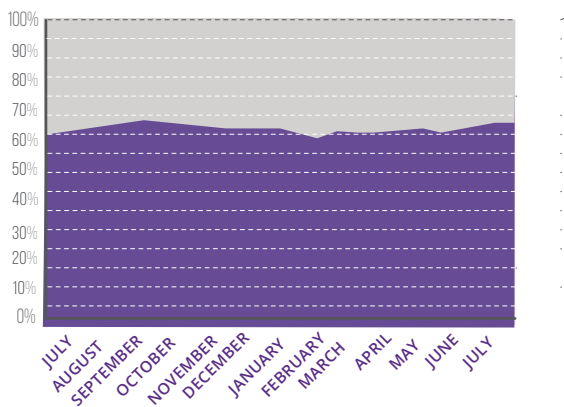
CURRENT WORKLOAD

McKim & Creed's decades of experience have enabled us to develop methods and controls that balance workload requirements while maintaining quality, schedule, and budget for our clients. Throughout our project history, we've repeatedly demonstrated our ability to provide the necessary staff to complete each job in a professional, responsive and cost-effective manner.

Our current workload is such that we are able to begin any project fully staffed upon a notice-to-proceed from UNCG. The McKim & Creed project team has the availability to meet all project assignments, and because of our highly-skilled workforce, future staff availability can be readily managed to meet each project's requirements.

While our Raleigh office will oversee this project, UNCG's campus is conveniently located between our Raleigh and Charlotte offices. This makes it easy for our team to be on-site quickly to respond to issues or allocate additional resources to protect critical milestones and the overall schedule.

AVAILABILITY



STATE PROJECTS AWARDED

McKim & Creed and our consultants have extensive experience with SCO projects across North Carolina. McKim & Creed has decades of success delivering projects on time and within budget, earning a 4.6/5 designer score and working with many UNC campuses, state agencies and community colleges. 35 North understands the impact of SCO guidelines on the design and estimating process, notably that projects must design to 90% of budget with well-established add-alternates for the remaining 10%. Our estimators prioritize early collaboration between the design team and estimator to define must-have program elements versus nice-to-have features that can be earmarked as alternates. KEi has extensive experience delivering State Construction Office (SCO) projects for higher education clients across

North Carolina, including renovations for North Carolina Central University's Art Gallery, the Karl Strauss Track Replacement at UNC Asheville, the Therapeutic Massage training suite at Wake Technical Community College, and Facilities Management renovations at UNC Charlotte. These projects highlight KEi's expertise in reimagining interior spaces, coordinating complex MEP/FP improvements, and enhancing functionality and user experience within campus environments.

- » Fayetteville State University
- » Guilford Technical Community College
- » North Carolina School of Science and Math
- » North Carolina State University
- » University of North Carolina at Asheville
- » University of North Carolina at Chapel Hill
- » University of North Carolina at Charlotte
- » University of North Carolina at Greensboro
- » University of North Carolina at Pembroke
- » University of North Carolina School of the Arts
- » University of North Carolina at Wilmington
- » Western Carolina University

4.4 PROPOSED DESIGN APPROACH FOR THE PROJECT

The advanced planning phase will focus on creating a clear, actionable strategy that anticipates potential challenges and aligns with UNC Greensboro's long-term objectives. This begins with a thorough review of the existing plumbing infrastructure and spatial limitations to guide schematic layouts and preliminary cost projections. Our goal is to establish a design framework that supports efficient construction while minimizing disruption and ensuring compliance with current codes and sustainability standards.

Our approach emphasizes open communication throughout planning, fostering collaboration to clarify project goals, risks, and constraints. By asking the right questions and analyzing responses, we can better understand impacts on cost, schedule, and occupant experience. During this phase, we will identify areas requiring plumbing upgrades and fixture replacements and incorporate these needs into the design strategy. We will also evaluate the building envelope to determine how it influences plumbing layout and system integration, ensuring that design decisions enhance overall performance.

Additionally, advanced planning will include coordination of plumbing modernization with electrical heater integration and fixture placement to achieve optimal functionality. These early insights will help refine design concepts and position the project for successful execution within the project timeline.

■ INTEGRATED, TEAM-ORIENTED DESIGN PHILOSOPHY

McKim & Creed will use a proactive and engaging team approach for the design of this project. It is critical to engage collaboratively with UNC Greensboro personnel from the start and to maintain that communication throughout the entire project. At the beginning of the project, McKim & Creed will lead team discussions to understand project needs and obtain valuable input from UNCG staff on critical issues including project design, deadlines and budget constraints.

Before we begin advanced planning, our team will conduct a comprehensive review of site conditions and existing building information, including available drawings, utility data, and prior studies. Collaboration will continue as we explore options and evaluate findings to inform planning decisions for this complex renovation. Throughout the advanced planning process, the McKim & Creed team will maintain consistent communication with UNCG personnel and stakeholders to ensure alignment and set the foundation for a successful project outcome.

Our team develops and executes work plans that foster collaboration among all stakeholders while aligning with UNC Greensboro's preferences and guidelines. We ensure the approach supports UNCG's vision as an inclusive, collaborative public research university that positively impacts students and communities.

■ OPERATIONAL DESIGN

As part of advanced planning, our team will work closely with UNC Greensboro's operations and maintenance personnel to ensure the plumbing modernization addresses any ongoing maintenance concerns and supports long-term functionality. We will review existing plumbing systems to identify opportunities for improved access and serviceability. Collaboration with UNCG staff will guide decisions on fixture types, shut-off locations, and maintenance points so that the renovated systems are practical and efficient for daily operations.

In addition, we will incorporate University standards into the planning process to ensure consistency for future upgrades and renovations. Our approach includes developing clear documentation and providing recommendations that simplify maintenance and reduce lifecycle costs. By engaging operations staff early, we will confirm that the proposed solutions meet performance expectations and allow for straightforward upkeep after construction.

■ DESIGN & CONSULTANT TEAM

Selecting the right design team is critical for project success given the complexity of plumbing systems and their impact on building performance. McKim & Creed brings decades of experience supporting higher education clients with plumbing and engineering design, leveraging the latest technologies and standards for efficiency and compliance.

Project Manager Josh Berard will serve as the primary point of contact and will ensure seamless coordination, timely communication, and resource optimization.

Our engineers will also provide innovative approaches to achieve project sustainability goals when applicable, and we will work with UNCG staff to find opportunities to save on budget without sacrificing project quality. For this team, we've included 35 North as our third-party cost estimator who will provide an extra layer of assurance that our designs are cost-effective. In addition to 35 North, we have F&R and KEI joining our team as subconsultants.



About 35 North | 35 North is a full-service program and project management firm with wide-ranging project experience focused

in the areas of cost estimating, scheduling, construction management, and compliance. Working on a variety of project sizes and types, we can turn challenging situations into actionable and realistic solutions. They are a North Carolina Historically Underutilized Business (HUB) and a Service-Disabled, Veteran-Owned Small Business (SDVOSB) that offers a host of construction support services to clients nationwide. 35 North excels at complex MEP estimating and has extensive experience with new builds and renovations for higher education institutions throughout North Carolina. Not only does their team hold professional trade and cost estimating certifications, but their senior MEP cost estimators' years of experience and knowledge in MEP design development far exceeds the standard understanding of drawings and specifications. This allows the team to accurately assess the intention of the design, suggest improvements as needed, and predict other needs that might not yet be reflected on paper. Their cost managers know how to account for associated project costs to aid in the design and ensure costs are known and planned for accordingly.



About KEI | KEI Architects is an award-winning full service architecture firm passionate about the built environment

and how it influences the world in which we live. They are a Minority-Owned, Small Business Enterprise focused on results and the satisfaction of their clients. KEI is centered on a continual conversation, they have conducted design

forums and charrettes to engage clients, communities and other stakeholders. It is important to KEI that they are in constant communication with their clients to achieve the best design outcomes. With over 35 years of experience, KEI has projects of varying types, sizes, and budgets, allowing them to compete with the best. KEI Architects, has developed a longstanding reputation as a distinguished, client-driven practice.



About F&R | Froehling & Robertson, Inc. (F&R) is a

third-generation, minority-owned firm providing geotechnical, environmental, materials testing, and special inspection services. Recognized as a Historically Underutilized Business, F&R has over 325 staff members in 11 Mid-Atlantic offices. The firm has supported numerous projects at UNC Greensboro and has partnered with McKim & Creed on more than 15 projects in the past five years, including multiple projects for North Carolina higher education institutions.

Ultimately, this design team is skilled at driving projects for clients to successfully deliver both functional and financial objectives while also ensuring long-term sustainability and occupant comfort. **Learn more about our team in Tab 3 of our qualifications package or Section E of our SF330 document.**

PROACTIVE CONSTRUCTION ADMINISTRATION

Once the project enters the construction phase, proactive construction administration will be a critical factor in this project. This includes a detailed review of the contractor's proposed project schedule, ensuring enough time is allocated for final reviews of the project. Once the project schedule is established, it will be essential to monitor its progress, respond in a timely manner to field issues, and communicate openly and quickly with the entire project team to ensure project success.

McKim & Creed is highly experienced in providing construction administration services and working with the SCO. We will provide these elements to help ensure the success of the project and ease the process

for UNC Greensboro and contractors by providing seamless and proactive construction administration in compliance with SCO guidelines.

QUALITY MANAGEMENT PLAN

McKim & Creed believes in the value of a Quality Management Plan. We emphasize communication, challenge decisions, confirm calculations, question operability, and create efficiencies. This approach will result in providing UNCG with the best value for this project. McKim & Creed's approach to quality is a combination of management and technical experts using established standards to ensure quality products and services.

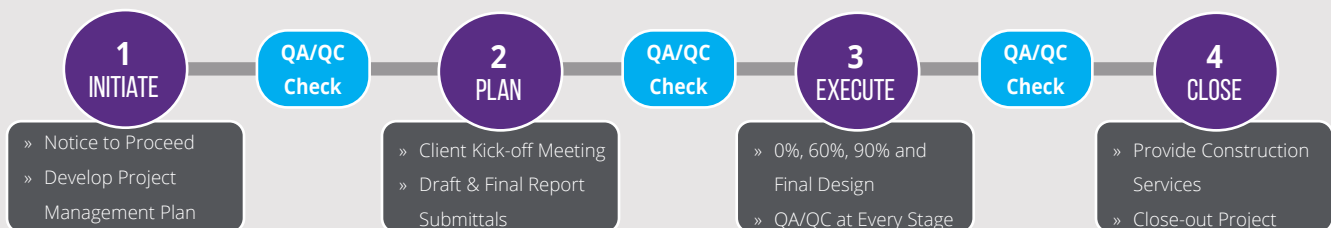
This process embraces accountability in each task lead, engineer, independent peer reviewer, and project manager. The process is led by our internal quality review team and includes rigorous technical reviews at key milestones.

Our first step is to document project goals and concerns from UNC Greensboro's perspective so we can work as a team to identify and define the critical success factors. It is at this time, during the project scoping process, when the McKim & Creed team will initiate our project quality assurance process. Once we receive authorization to begin, the project manager develops a detailed Project Management Plan (PMP), which includes the Quality Assurance (QA) Plan.

To ensure that UNCG is satisfied with our services, and to provide true cost-effectiveness, the quality of the work we perform is maintained at a high standard. Every project team member participates in our effort to provide quality services by taking responsibility for the quality of each members individual work effort. Each project work plan includes specifically scheduled QA reviews to enable us to generate studies and designs that attain the highest standard of quality.

Our QA approach will save time and reduce change orders by conforming to standards and by building quality into the design. We will develop a QA plan that communicates approaches, procedures, schedules, and responsibilities to the team and forms the basis for executing the Quality Control (QC) program for each phase of the project.

QUALITY MANAGEMENT PROCESS



4.5 RECENT EXPERIENCE WITH PROJECT COSTS AND SCHEDULES

COST CONTROL TECHNIQUES

Our State Construction designer evaluation scores have averaged 4.6 out of a possible 5.0 points. We have bid more than 400 projects and 97% of those projects have been bid under budget. Total cost of construction projects designed by McKim & Creed's MEP staff has exceeded \$400 million and our design-related change order rate has remained less than 1.0% of construction costs. The projects shown in Table 1 further illustrate McKim & Creed's ability to accurately estimate costs for our clients.

PROJECT	EST. BUDGET	ACTUAL BUDGET
PBS NC Bryan Center HVAC and Chiller Upgrades	\$3,800,000	\$3,600,000
UNC Health Chilled Water Infrastructure Upgrades	\$10,000,000	\$9,800,000
FSU McLeod Residence Hall HVAC Replacement	\$5,000,000	\$4,900,000
NCSU Watauga Hall HVAC & Chiller Replacement	\$1,700,000	\$1,600,000
UNCSA Sanford & Moore Halls HVAC Replacement	\$1,400,000	\$1,100,000
UNC Charlotte McEnry Chiller Plant Phase IV	\$1,439,200	\$1,418,000
GTCC Greensboro Chiller Plant Upgrades	\$267,300	\$194,000
UNC-CH Marine Biology Chiller Replacement	\$505,200	\$419,814

Table 1

Our team has a number of strategies we use to control costs, such as:

- ✔ Producing clear, concise construction documents
- ✔ Incorporating alternatives into construction documents for added cost control and flexibility
- ✔ Minimizing construction risk by the contractors
- ✔ Maximizing competition during bids (both material suppliers and contractors)

The development of an opinion of probable construction cost is a standard procedure for all projects completed by McKim & Creed. Selected members of the project team will analyze historical bid data and current market trends to complete the cost opinion. Our extensive experience completing cost opinions will facilitate the determination and control of the final project cost.

For additional support, 35 North (a certified SDVOSB HUB firm,) has joined the McKim & Creed team. Ron Deckham brings extensive expertise in cost estimating and project execution for higher education projects. He will ensure accurate budgeting and value engineering for UNCG.

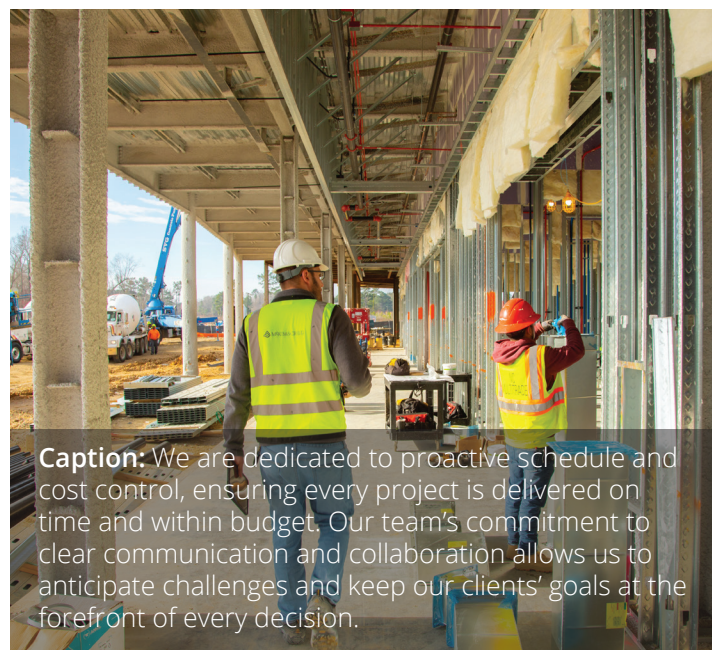
SCHEDULE COMPLIANCE

Schedule compliance is important to project success. McKim & Creed takes great pride in achieving client satisfaction through meeting project milestones. We have a simple but effective schedule compliance process that makes the project manager responsible for both internal and external schedule compliance.

We pride ourselves on our ability to think through projects and develop engineered responses to meet our client's goals and be on-time and in-budget. Our clients can expect the highest level of communication from our team to meet mutual project objectives.

At the beginning of the project, McKim & Creed will work with the University and the entire project team to begin an outline of the project schedule that will be customized and finalized as the design progresses. Critical dates will be identified, and McKim & Creed will be proactive to ensure these dates are met. McKim & Creed understands the importance of having this work completed on time to eliminate disruptions to the campus community.

Each member of the project team performs conscientiously in accordance with the carefully conceived and rigorously enforced schedule. All schedules are developed using the critical path method, with total project float to determine when delivery becomes critical. Schedule development is a team effort. Listening to the concerns of all team members ensures a firm level of commitment from all involved. Schedules are then developed using Microsoft Project to ensure a direct link between schedule, scope, and budget.



Caption: We are dedicated to proactive schedule and cost control, ensuring every project is delivered on time and within budget. Our team's commitment to clear communication and collaboration allows us to anticipate challenges and keep our clients' goals at the forefront of every decision.

Task-specific roles are assigned so that each team member is responsible for accomplishing certain duties. The entire team receives a copy of the task assignments so that each member is aware of the responsibilities of the individual team members. When tasks are assigned, schedules and man-hour budgets are distributed. Team conferences are held on a regular basis to provide for a smooth workflow for the duration of each project. Client meetings are scheduled at critical decision points in each project to reduce wasted efforts and undue delays. Agendas are prepared in advance to make the meetings as productive as possible. Meeting minutes are then prepared so that all conferees have a clear understanding of the decisions.

Additionally, weekly staff meetings are held to accommodate the scheduling needs. As a safety blanket, McKim & Creed has an integrated network of offices with a staff of 1000+ employees that communicates on a continual basis to determine workload and, if necessary, work-sharing opportunities.

PROJECT PHASING

McKim & Creed recognizes that phasing may be necessary for this project to minimize disruption on UNCG's campus. We will work through a phased approach with the university to minimize these impacts. Additionally, we will develop phasing needs for the construction of this project and convey this intent to the contractors on the drawings, in the specifications and throughout the bid phase so these expectations are understood by each bidding contractor. Understanding the desired construction time frame allows this project to be broken into efficient construction phases, and for the design schedule to be developed so that projects can be bid early enough to allow for equipment lead times prior to the start of construction.

There are numerous strategies we will implement for project phasing, including work after normal business hours as well as on weekends. It is imperative to have bid documents complete with all staging and construction requirements clearly defined. For the construction sequence itself, it is important to have all equipment

and materials delivered prior to removing existing system components with planned phasing. It is also critical for inspections and commissioning to have a designated time frame in the construction schedule.

Exact strategies will be developed during design to ensure central systems are ready and in accordance with SCO and UNCG schedule requirements.

4.6 CONSTRUCTION ADMINISTRATION CAPABILITIES

As mentioned, McKim & Creed takes a proactive approach to construction administration. Our designers will participate in the construction administration process through on-site visits to identify and resolve issues. This will ensure the quality of the construction and keep it on schedule. We always strive to build a total team effort among all parties involved to create a positive and collaborative working environment.

McKim & Creed's BEI staff is familiar with the requirements of the State Construction Office's construction and monitoring requirements.

In the construction administration process, we provide:



TIMELY REVIEW of shop drawings.



UP-TO-DATE LOGS for RFIs, RFPs, and COs.



WEEKLY MEETINGS with documented minutes.



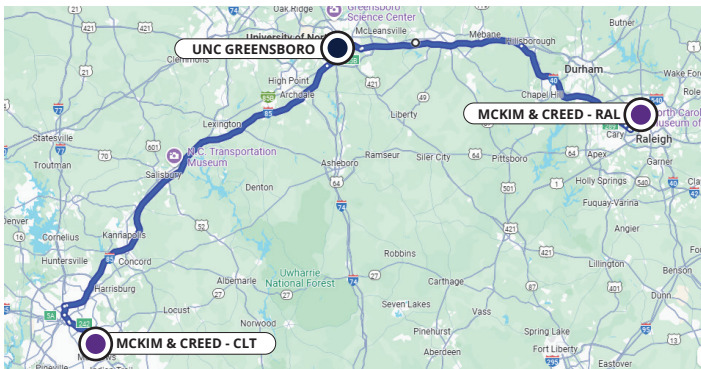
ADDITIONAL SITE VISITS AND REPORTS as required by the construction process.



Closeout and turnover are also critical phases of construction. We are experienced in project closeout procedures and aware of the importance of staff training for new equipment. We are also experienced with the SCO procedure for hearing claims/disputes and with their resolution process. Additionally, it is our policy to start assembling closeout documents before construction is complete to provide timely submission of closeout documents.

4.7 PROXIMITY TO AND FAMILIARITY WITH THE AREA WHERE PROJECT IS LOCATED

The McKim & Creed team has been working on the UNCG campus for almost 20 years, dating back to the Petty Science Building renovation. We are deeply familiar with the campus, operations and maintenance staff, and the local area. UNCG is conveniently located between McKim & Creed's Raleigh and Charlotte offices. Our Raleigh office will manage this contract and can be on site quickly if the need arises. Our Charlotte office will serve as backup support for Raleigh. We also have an overall team of 130+ MEP/FP professionals who can provide additional support should the need arise. Below is a map that demonstrates McKim & Creed's proximity to UNCG.



Similarly, our team is highly familiar with Guilford County and its neighboring municipalities. In addition to UNCG, other local clients we've served include Guilford County Government, Guilford Tech, and UNC School of the Arts.

4.8 RECORD OF SUCCESSFULLY COMPLETED PROJECTS WITHOUT MAJOR LEGAL OR TECHNICAL PROBLEMS

The projects included within this proposal have been completed successfully without any major legal or technical problems. However, McKim & Creed is currently (and has been over the past five years) involved in a limited number of legal claims. McKim & Creed is confident in its ability to

successfully defend, or settle on favorable terms, all such outstanding claims. Furthermore, for the protection of McKim & Creed and its clients, McKim & Creed always maintains a comprehensive insurance program that includes professional liability, workers' compensation, comprehensive general liability, automobile and umbrella policies, with limits sufficient to cover the defense and payment of all outstanding claims against McKim & Creed. In the opinion of McKim & Creed's management, no claim or lawsuit currently pending against McKim & Creed will materially affect McKim & Creed's ability to perform this project.

4.9 ENERGY CONSERVATION/LEED EXPERIENCE

With McKim & Creed, sustainability is at the core of our design philosophy. We prioritize energy efficiency, environmental responsibility, and occupant comfort in all our projects. Our team has expertise in incorporating renewable energy sources, optimizing the performance of building systems and minimizing environmental impact through innovative design strategies.

LCCA / WHOLE BUILDING ENERGY ANALYSIS

McKim & Creed is experienced working with clients to identify existing design features and cost-effective design change options that will help achieve conservation objectives and save money. McKim & Creed brings a collaborative and supportive mindset for open discussion of MEP/FP systems and expertise in sustainable design. In addition to these sustainable design strategies, our team brings unique expertise with facility controls and building automation system optimization.

WATER AND ENERGY EFFICIENCY

Our specialized analyses are frequently used in new construction to compare design alternatives and quantify water and hot water energy benefits, such as those derived from low-flow fixtures or efficient hot water generation. For renovations, such as the Moore Strong Plumbing project, we use these analyses to estimate potential savings from different design solutions, including fixture upgrades, hot water system optimizations, solar hot water systems, and improved distribution networks. These projections can be used for sustainability reporting or as a critical decision-making tool for long-term operational cost reductions.

McKim & Creed employs a variety of software and methodologies for these assessments, including hot water system sizing and comprehensive life cycle cost analysis. Our analyses are updated at each phase of the project, gaining accuracy and validity the further into design we go. If applicable, we follow relevant industry standards for water efficiency and energy performance in hot water systems, such

as those referenced in LEED and Green Globes certifications, ensuring compliance and optimal performance. In addition to these analytical approaches and standards, our team applies many years of professional experience in water and energy efficiency, ensuring the solution meets our client's specific needs for modern, efficient plumbing infrastructure.

WATER ENERGY USE

Our team recognizes that a significant portion of a building's operational costs stems from water consumption and the energy required for heating water, particularly in facilities like residence halls. Therefore, prioritizing conservation efforts within plumbing systems presents a prime opportunity for substantial savings. Some plumbing-focused conservation measures, such as upgrading to low-flow fixtures or optimizing hot water systems, can be implemented with low to no upfront cost.



McKim & Creed was instrumental in the development of Wake Tech Community College's new Eastern Campus—providing MEP/FP engineering services for several new buildings. Our design prioritized sustainable design features to achieve Green Globes certification, including Solar PV systems, manifolded air handling units with fan wall technology, LED lighting and lighting controls, and optimized HVAC controls sequences. McKim & Creed also provided commissioning services for the 15,000 SF CEP, which provides chilled water and hot water to all campus buildings on the WTCC Eastern Campus.

LEED AND GREEN GLOBES EXPERIENCE

McKim & Creed leverages our team's talent and certification to push past the conventional and offer innovative solutions. Our team has experience with the process of obtaining LEED & Green Globes ratings on both new and existing buildings. Many of our design decisions are based on these principles even if the project does not have LEED or Green Globes certification requirements. We've provided an overview of our expertise.

LEED

Our firm is one of the most accomplished in the local arena with energy efficiency, renewable energy and LEED / Sustainability. McKim & Creed has 17 LEED Accredited Professionals. We have experience with the process of obtaining LEED ratings on both new and existing buildings. Design choices are often based on LEED principles even if the project does not require LEED certification. McKim & Creed also has experience in achieving the necessary energy performance to obtain Energy Star-rated buildings, which is a requirement for LEED Existing Building (EB) certification.

GREEN GLOBES

Similar to the hierarchical levels of LEED certification (bronze, silver, gold, platinum) Green Globes certifies a building's design and actual performance according to four levels of achievement (one, two, three, and four Green Globes).

The flexible and interactive nature of the Green Globes rating scale enables our engineering team to consider the ability and impact of pursuing these during capital infrastructure renovations and renewal. Our team will select the most cost-effective design solutions early on and throughout the design phase; however, when design is already underway or almost complete, pursuit of Green Globes points can have a significant cost impact.

McKim & Creed's Green Globes experts are able to review the design and construction documents for opportunities to maximize Green Globes points via design optimization and provide clients with the important and necessary information to make informed decisions that will minimize cost and schedule impact and optimize the opportunity for qualifying Green Globes points.

McKim & Creed's LEED Experience includes...
Ft Bragg Blood Donor Center, LEED Silver
FSU New Science & Technology Building, LEED Silver
UNCC (PORTAL) Building, LEED Certified
UNC Charlotte Rose Football Center, LEED Certified
Camp Lejeune Consolidated Academic Instructional Facility - Phase II, LEED self-certified
CMS, Pineville Elementary New Construction, LEED certified
The US Forest Service lab, LEED Silver (prepared the energy models and all LEED forms and documentation)
NC State Indoor Practice Facility, LEED certified
High Point Baseball Stadium, LEED certified
East Asheville Library, LEED certified

McKim & Creed's Green Globes Experience includes...
UNC Charlotte University Recreation Center, Two Green Globes
UNC Charlotte South Village Dining Facility, Three Green Globes
UNC Charlotte Martin Residence Hall, Two Green Globes
WTCC Education & Innovation Building, Green Globes certified
WTCC Public Safety Complex, Green Globes certified

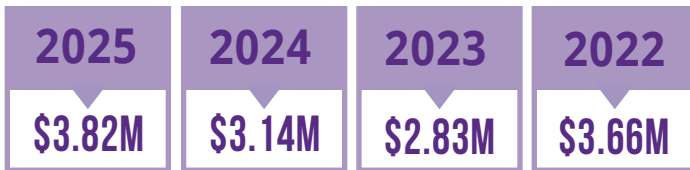


5 MINORITY BUSINESS PARTICIPATION PLAN

OUR COMMITMENT TO HUB UTILIZATION

McKim & Creed appreciates UNC Greensboro's commitment to supplier diversity. While McKim & Creed is not a minority-owned business, a significant portion of our services are performed for clients who routinely require M/WBE/VBE/LDB/SBE participation. We routinely work with and pursue M/WBE/VBE/LDB/SBE subconsultants and use our ever-expanding database of qualified partners to procure additional work depending on the needs of our clients. In fact, we have never failed to meet a client's contractual requirement in regard to the use of MBE's, LDB's, SBE's, and VBE's and work diligently to exceed clients' goals.

McKim & Creed is committed to partnering with historically underutilized businesses, small businesses, small disadvantaged businesses, women-owned businesses, and minority businesses when the need arises. The numbers below demonstrate McKim & Creed's commitment over the years.



DESIGN & CONSTRUCTION EFFORTS TO REACH UNCG HUB GOALS

McKim & Creed is committed to supporting UNCG's HUB goals through the use of certified HUB partners in our design and construction team and implementing strategies that promote equal access and participation. Our approach includes proactive outreach, transparent communication, and compliance monitoring throughout the project lifecycle. We prioritize collaboration and good faith efforts, ensuring project plans are accessible and opportunities are clearly communicated to our HUB team members.

To achieve the state of North Carolina (10%) and UNCG (15%) participation benchmarks, we have F&R and 35 North joining our team. F&R, **an NC HUB and SWaM-certified firm** with over 70 years of experience, brings expertise in environmental consulting, engineering, and testing services. F&R will help us identify and mitigate risks with minimal campus disruption. 35 North, **an NC HUB and certified Service-Disabled, Veteran-Owned Small Business (SDVOSB)**, offers extensive experience in cost estimating, construction management and compliance, ensuring technical excellence and local market insight. These partnerships strengthen our ability to deliver a collaborative, efficient, and inclusive project. If needed, we will also leverage the use of HUB directories if any additional efforts are needed in reaching targeted HUB goals.





6 **CURRENT SF-330**



ARCHITECT - ENGINEER QUALIFICATIONS
PART I - CONTRACT-SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

PROJECT LOCATION (CITY, STATE) Greensboro, NC	PROJECT TITLE Moore Strong Plumbing Renovation
PUBLIC NOTICE DATE 1/8/2026	SOLICITATION OR PROJECT NUMBER 287-30705-DS

B. ARCHITECT - ENGINEER POINT OF CONTACT

NAME AND TITLE
Josh Berard / Project Manager

NAME OF FIRM
McKim & Creed, Inc.



PHONE 607.743.1437	FAX 919.233.8031	E-MAIL jberard@mckimcreed.com
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C. PROPOSED TEAM

A.	PRIME	J-V	SUB	FIRM NAME	ADDRESS	ROLE IN THIS CONTRACT
	✓			McKim & Creed, Inc. <input type="checkbox"/> BRANCH OFFICE	4300 Edwards Mill Rd Suite 200 Raleigh, NC 27612	Electrical & Plumbing Engineering; Project Management; QA/QC
			✓	35 North <input type="checkbox"/> BRANCH OFFICE	4601 Creekstone Drive Suite 130 Durham, NC 27703	Cost Estimating
			✓	F&R <input checked="" type="checkbox"/> BRANCH OFFICE	310 Hubert Street Raleigh, NC 27603	Environmental Consulting
				KEI <input checked="" type="checkbox"/> BRANCH OFFICE	210 East Trade St, C 440 Charlotte, NC 28202	Architectural Services
				<input type="checkbox"/> BRANCH OFFICE		
				<input type="checkbox"/> BRANCH OFFICE		
				<input type="checkbox"/> BRANCH OFFICE		
				<input type="checkbox"/> BRANCH OFFICE		

D. ORGANIZATIONAL CHART OF PROPOSED TEAM

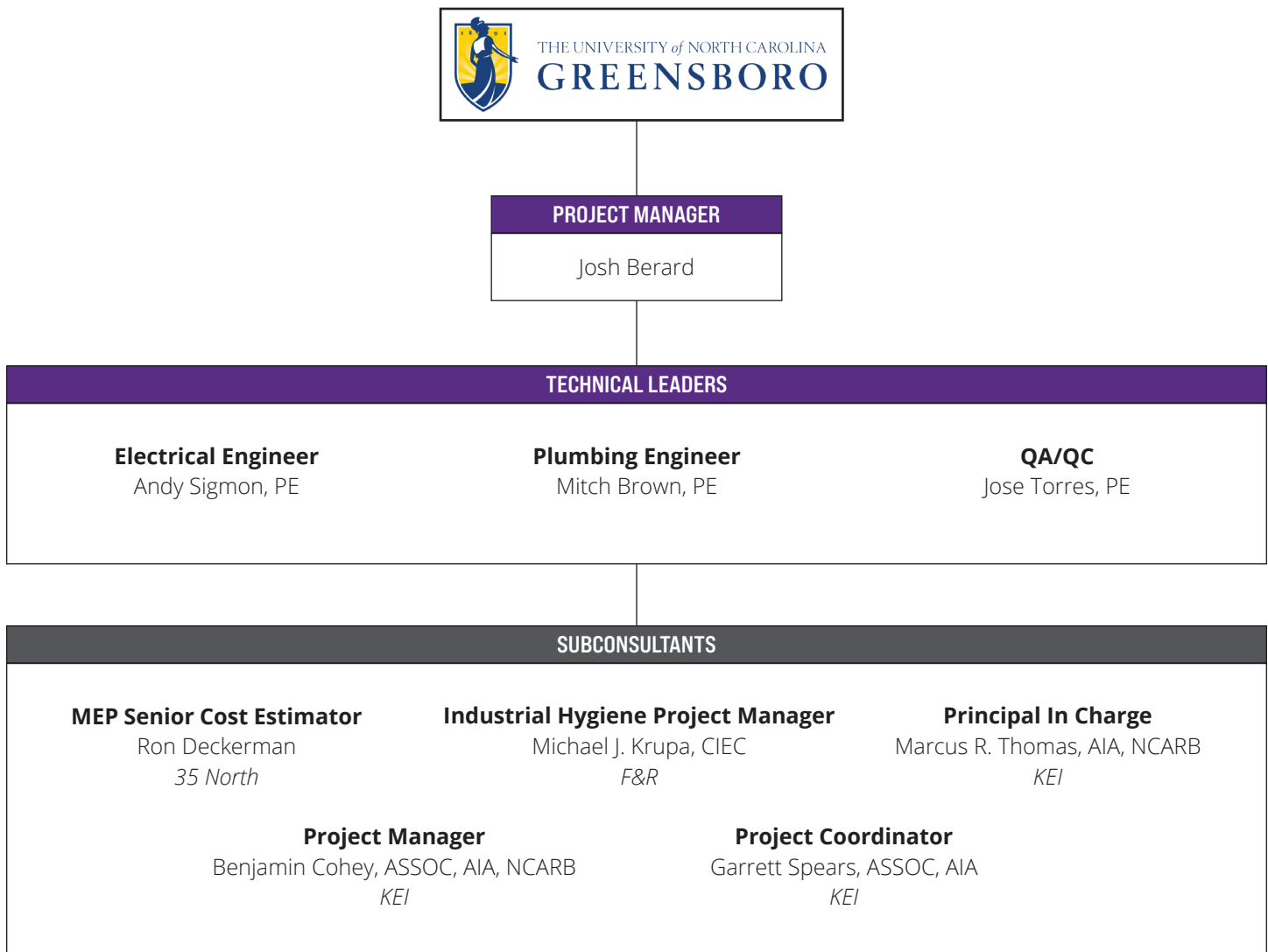
Attached

D. Organizational Chart



Our commitment and focus as a firm is to maintain the highest standards of service and quality while meeting our clients' technical, schedule and budget constraints. Our project team will function as an extension of the UNC Greensboro staff, making themselves readily available for hands-on support for this project. This will facilitate the quick identification of challenges resulting in unique, customizable solutions that are best suited for projects of this exact type. Our team brings over 100 years of combined MEP/FP experience to the project with consulting engineering and owner-side experience in design, operations, energy management, and maintenance.

Josh Berard will serve as our project manager for the duration of this project. He will act as the primary point of contact and will focus on project delivery, schedule, budget and resources. Supporting Mr. Berard is electrical engineer Andy Sigmon, PE; Plumbing Engineer Mitch Brown, PE; and QA/QC Jose Torres, PE. We also have Ron Deckerman from 35 North joining our team to provide cost estimating services to accurately assess the intention of the design, suggest improvements as needed, and predict other needs that might not yet be reflected on paper. Michael J. Krupa, CIEC, with Froehling & Robertson, Inc. (F&R), a SWaM and HUB minority-owned business, will provide environmental/hazardous materials abatement services to address any environmental risks and liabilities. Principal-In-Charge Marcus R. Thomas, AIA, NCARB; Project Manager Benjamin Cohey, ASSOC, AIA, NCARB and Project Coordinator Garrett Spears, ASSOC, AIA from KEI will be joining our team to provide architectural services, ensuring SCO and UNCG standards for safety, student experience, and long-term maintainability through coordinated design, room layout refinement, and compliance documentation.

Each team member has experience working with Plumbing infrastructure and serving higher education facilities, particularly related to residence halls, and understands the needs of colleges and universities for these types of projects. Additionally, the McKim & Creed team has more than 130 MEP/FP professionals across our footprint who can serve this project should the need arise.



E. RESUME

	NAME	ROLE	YEARS EXPERIENCE	
	Josh Berard	Project Manager	TOTAL 15	CURRENT FIRM 8
FIRM MCKIM & CREED Raleigh, NC				

EDUCATION
B.S., Mechanical Engineering, State University of New York at Buffalo

CURRENT PROFESSIONAL REGISTRATION

Mr. Berard has 15+ years' experience in HVAC and plumbing consulting working as a designer and project manager. Management of his projects includes successfully driving on time completion while balancing both the construction budget and the owner's needs/requirements. On the design side, he has a demonstrated history involving domestic water, sanitary and fire protection systems. Additionally, Mr. Berard is knowledgeable with regard to state building codes, NFPA requirements and ASHRAE guidelines.

RELEVANT PROJECTS

A.	NCSSM DORM RENOVATIONS <i>Durham, NC</i>	PRO. SERVICES COMPLETED	2025	CONSTRUCTION COMPLETED	Est 2026
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			

Mr. Berard is serving as mechanical and plumbing designer. McKim & Creed is providing MEP services for this project to renovate and upgrade six student residence halls at NCSSM. The project scope included an initial advanced planning phase to assess all residence halls and associated MEP upgrades. The renovations include upgrading MEP central systems, individual and community restrooms, furnishings in the rooms and lounges, and all adult apartments used by live-in staff members. Our scope included replacing the existing plumbing piping systems providing new exhaust fans and ductwork, replacing select air handling units, and providing MEP modifications to support architectural renovations (new lighting, receptacle layout modifications, and new diffusers). Size: 200,000 SF | Cost: \$10 million

B.	UNC CHAPEL HILL GRANVILLE TOWERS HVAC REPLACEMENT <i>Chapel Hill, NC</i>	PRO. SERVICES COMPLETED	2020	CONSTRUCTION COMPLETED	2021
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			

Mr. Berard served as mechanical designer. McKim & Creed responded to an urgent need from UNC Chapel Hill to replace the existing mechanical systems in three high rise residence halls, Granville Towers. The original systems were installed over 60 years ago when designers didn't have the understanding of controlling humidity as well as we do now. This resulted in mold growth in and around the restrooms and system replacement was a must, and schedule was the biggest driver. McKim & Creed explored different HVAC system solutions including considerations for budget, space, phasing, and performance. Size: 300,000 SF | Cost: \$23 million

C.	FSU HOOD, HARRIS & JOYNER RESIDENCE HALL HVAC REPLACEMENTS <i>Fayetteville, NC</i>	PRO. SERVICES COMPLETED	2022	CONSTRUCTION COMPLETED	2023
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			

Mr. Berard served as mechanical designer. McKim and Creed provided MEP/FP design services for these HVAC replacement projects for Harris, Joyner and Hood Residence Halls to replace the existing fan coil units. The units in Harris and Joyner are ceiling mounted and were changed to vertical floor mounted units. The units in Hood were replaced with similar units. The project included replacing the dielectric union gaskets and insulation on the existing piping to prevent condensation during cooling mode. Size: Hood (17,562 SF) / Harris (24,735 SF) / Joyner (22,031 SF) | Cost: \$1.5 million



D.	UNC CH EVERETT, LEWIS & STACY RESIDENCE HALL HVAC REPLACEMENT <i>Chapel Hill, NC</i>	PRO. SERVICES COMPLETED	2017	CONSTRUCTION COMPLETED	2018
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			

Mr. Berard served as mechanical designer. McKim & Creed responded to an urgent need from UNC Chapel Hill to replace the existing mechanical systems in three high rise residence halls —Granville Towers. The original systems were installed over 60 years ago when designers didn't have the understanding of controlling humidity as well as we do now. This resulted in mold growth in and around the restrooms and system replacement was a must, and schedule was the biggest driver. McKim & Creed explored different HVAC system solutions including considerations for budget, space, phasing, and performance. The best system type was determined to be dedicated outside air handlers coupled with variable refrigerant flow (VRF) room controls. Size: Everett (24,056 SF) / Lewis (24,084 SF) / Stacy (23,745) | Cost: \$7.5 million

E.	WTCC PERRY NEW SCIENCE & HEALTH EDUCATION BUILDING <i>Raleigh, NC</i>	PRO. SERVICES COMPLETED	2024	CONSTRUCTION COMPLETED	Est 2026
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			

Mr. Berard served as project manager. McKim & Creed is providing mechanical, electrical, plumbing, and fire protection system design for the 106,000 SF Wake Technical Community College (WTCC) Perry Health Science Campus new Health Sciences building. This building will serve as the campus's state of the art hub for healthcare staff training with a direct adjacency to Wake Med for collaboration. Included in this building are simulation patient rooms, an ED, an OR, ultrasound training bays as well as functioning X-ray, MRI, and CT scanning spaces. This project consists of a unique balance of energy efficiency for Green Globes certification while maintaining robust systems that will meet the school's needs. Overall mechanical systems include penthouse air handlers, boilers and utility yard residing air cooled chillers. Size: 106,000 SF | Cost: \$95 million

E. RESUME

	NAME	ROLE	YEARS EXPERIENCE	
	Andy Sigmon, PE	Electrical Engineer	TOTAL 30	CURRENT FIRM 10
FIRM MCKIM & CREED Raleigh, NC				

EDUCATION
B.S., Electrical Engineering, North Carolina State University



CURRENT PROFESSIONAL REGISTRATION
Professional Engineer: NC (#027325)

Mr. Sigmon has 30+ years of experience in electrical design and application. He has been involved with consultation, electrical design, electrical specification writing and construction administration for institutional, educational, commercial and industrial facilities. His design responsibilities have included lighting, power, emergency generator, fire alarm, security, and communications systems.

RELEVANT PROJECTS

A.	UNCG BRYAN BUILDING AIR HANDLING UNIT REPLACEMENT Greensboro, NC	PRO. SERVICES COMPLETED	2020	CONSTRUCTION COMPLETED	2020
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			
<p>Mr. Sigmon provided electrical engineering services. McKim & Creed was selected to perform design, bidding, and construction administration services to replace Air Handling Unit #3 for the Bryan Building at UNC Greensboro. This is an informal project, with McKim & Creed being selected under our campus annual service agreement for engineering services. The scope of this project includes the complete replacement of Air Handling Unit #3 that serves the existing auditorium in the building. McKim & Creed provided load calculations to verify unit sizing, conducted meetings with UNC Greensboro staff to review and address controls strategies (in particular humidity control), and provided detailed air handling unit selections to ensure the dimensions of the air handling unit fit the space available while providing space needed for future maintenance and access. Electrical work included a new power feed for the fan motor and associated variable frequency drive, and also integration of new duct smoke detectors into the fire alarm system. A new floor drain was also designed for the mechanical room. Size: SF Cost: \$180,000</p>					
B.	UNCG COLEMAN BUILDING FIRE ALARM SYSTEM REPLACEMENT Greensboro, NC	PRO. SERVICES COMPLETED	2022	CONSTRUCTION COMPLETED	N/A
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			
<p>Mr. Sigmon served as project manager. The Coleman Building at UNC Greensboro needed upgrades to its fire alarm system to ensure a safe environment for all its occupants. McKim & Creed's scope included a complete fire alarm system replacement throughout the building and upgrading the system to an addressable fire alarm system that includes mass notification and voice evacuation per UNC Greensboro Design & Construction and SCO guidelines. Our team also modified the detection system, which included upgrades to the smoke detectors, duct detectors and beam detectors. The building will remain occupied during construction. Size: 200,000 SF Cost: \$2 million</p>					
C.	UNCG PHILLIPS HAWKINS FIRE ALARM UPGRADES Greensboro, NC	PRO. SERVICES COMPLETED	2017	CONSTRUCTION COMPLETED	2018
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			
<p>Mr. Sigmon served as project manager. McKim & Creed's scope included replacing the existing addressable fire alarm system, adding mass notification and addressing ADA deficiencies along with additional work to install security cameras for improved safety. The project also included the addition of a 100kW/125kVA standby generator to serve life safety loads including emergency lighting, and optional standby loads including an elevator. Size: 20,000 SF Cost: \$1.2million</p>					
D.	WTCC PERRY NEW SCIENCE & HEALTH EDUCATION BUILDING Raleigh, NC	PRO. SERVICES COMPLETED	2024	CONSTRUCTION COMPLETED	Est 2026
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			
<p>Mr. Sigmon served as electrical EOR. McKim & Creed is providing mechanical, electrical, plumbing, and fire protection system design for the 106,000 SF Wake Technical Community College (WTCC) Perry Health Science Campus new Health Sciences building. This building will serve as the campus's state of the art hub for healthcare staff training with a direct adjacency to Wake Med for collaboration. Included in this building are simulation patient rooms, an ED, an OR, ultrasound training bays as well as functioning X-ray, MRI, and CT scanning spaces. This project consists of a unique balance of energy efficiency for Green Globes certification while maintaining robust systems that will meet the school's needs. Overall mechanical systems include penthouse air handlers, boilers and utility yard residing air cooled chillers. Size: 106,000 SF Cost: \$95 million</p>					
E.	NCSSM DORM RENOVATIONS Durham, NC	PRO. SERVICES COMPLETED	2025	CONSTRUCTION COMPLETED	Est 2026
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			
<p>Mr. Sigmon is serving as electrical engineer. McKim & Creed is providing MEP services for this project to renovate and upgrade six student residence halls at NCSSM. The project scope included an initial advanced planning phase to scope all residence halls and associated MEP upgrades. The renovations include upgrading MEP central systems, individual and community restrooms, furnishings in the rooms and lounges, and all adult apartments that are used by live-in staff members. Our scope included replacing the existing plumbing piping systems providing new exhaust fans and ductwork, replacing select air handling units, and providing MEP modifications to support architectural renovations (new lighting, receptacle layout modifications, and new diffusers). Size: 200,000 SF Cost: \$10 million</p>					

E. RESUME

	NAME	ROLE	YEARS EXPERIENCE	
	Mitch Brown, PE	Plumbing Engineer	TOTAL 37	CURRENT FIRM 13
FIRM				
MCKIM & CREED Raleigh, NC				

EDUCATION
B.S., Mechanical Engineering, NC State University

CURRENT PROFESSIONAL REGISTRATION
Professional Engineer: NC (#019692)

Mr. Brown is a professional engineer with 37+ years of experience. His principal areas of experience include the design of HVAC systems, plumbing systems, medical gas systems, steam and condensate systems, boiler and chiller plants and facility condition assessments.

RELEVANT PROJECTS

A.	NCSU KILGORE, THOMAS, SCOTT RENOVATION <i>Raleigh, NC</i>	PRO. SERVICES COMPLETED	Ongoing	CONSTRUCTION COMPLETED	TBD
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			

Mr. Brown is serving as plumbing and fire protection engineer. The Kilgore (built in 1952), Scott (opened in 1952) and Thomas (built in 1964) Halls project is a combined and phased HVAC and laboratory renovations project addressing multiple needs across NC State's North Campus. The project addresses deficient mechanical, electrical, plumbing, and fire protection systems and brings the buildings into compliance with the NC State Building codes and regulatory laboratory requirements. Size: 237,000 SF total | Cost: \$24.3 million

B.	UNC CHAPEL HILL GRANVILLE TOWERS HVAC REPLACEMENT <i>Chapel Hill, NC</i>	PRO. SERVICES COMPLETED	2020	CONSTRUCTION COMPLETED	2021
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			

Mr. Brown served as plumbing and fire protection engineer. McKim & Creed responded to an urgent need from UNC Chapel Hill to replace the existing mechanical systems in three high rise residence halls, Granville Towers. The original systems were installed over 60 years ago when designers didn't have an understanding of controlling humidity as well as we do now. This resulted in mold growth in and around the restrooms and system replacement was a must, and schedule was the biggest driver. McKim & Creed explored different HVAC system solutions including considerations for budget, space, phasing, and performance. Size: 300,000 SF | Cost: \$23 million

C.	UNCSA SANFORD & MOORE RESIDENCE HALLS HVAC REPLACEMENT <i>Winston-Salem, NC</i>	PRO. SERVICES COMPLETED	2019	CONSTRUCTION COMPLETED	2020
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			

Mr. Brown served as mechanical engineer. McKim & Creed completed a project study and subsequently completed the HVAC Upgrades project for the NC School of the Arts Sanford and Moore Residence Halls. The HVAC Upgrades project included new central HVAC systems and associated electrical power renovations for 2 new air-cooled chillers, 4 new boilers, 2 new domestic water heaters, and associated piping, pumps, and controls system upgrades. The existing chillers served each building separately, but the new chillers were tied together to provide partial redundancy to both buildings. Additionally, multiple boilers and pumps were provided to improve redundancy if a single piece of equipment were to fail. This project was completed on time and under budget for UNCSA with the project substantial completion in the summer of 2020 prior to students returning to campus. Size: 24,000 SF | Cost: \$1.1 million

D.	FAYETTEVILLE STATE UNIVERSITY NEW SCIENCE AND TECHNOLOGY BUILDING <i>Fayetteville, NC</i>	PRO. SERVICES COMPLETED	2014	CONSTRUCTION COMPLETED	2016
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			

Mr. Brown served as a plumbing and fire protection engineer for the new 55,000 SF Science and Technology Building. An award-winning, LEED Silver-certified project, the building complies with State Construction Office guidelines regarding sustainability to reduce energy and water consumption. A life cycle cost analysis was provided, and energy conservation strategies were put into place that included high-efficiency water-cooled chillers with a variable secondary flow system, high-efficiency condensing type boilers and water heaters, energy recovery for exhaust/outside air streams, high-efficiency T-5 HO lighting and lighting controls, and high-performance glazing and increased insulation values for the building envelope. Low-flow plumbing fixtures were utilized as part of a water reduction strategy. Size: 55,000 SF | Cost: \$19 million

E.	WTCC PERRY NEW SCIENCE & HEALTH EDUCATION BUILDING <i>Raleigh, NC</i>	PRO. SERVICES COMPLETED	2024	CONSTRUCTION COMPLETED	Est 2026
		<input checked="" type="checkbox"/> PERFORMED WITH CURRENT FIRM			

Mr. Brown served as plumbing and fire protection engineer. McKim & Creed is providing mechanical, electrical, plumbing, and fire protection system design for the 106,000 SF Wake Technical Community College (WTCC) Perry Health Science Campus new Health Sciences building. This building will serve as the campus's state of the art hub for healthcare staff training with a direct adjacency to Wake Med for collaboration. Included in this building are simulation patient rooms, an ED, an OR, ultrasound training bays as well as functioning X-ray, MRI, and CT scanning spaces. This project consists of a unique balance of energy efficiency for Green Globes certification while maintaining robust systems that will meet the school's needs. Overall mechanical systems include penthouse air handlers, boilers and utility yard residing air cooled chillers. Size: 106,000 SF | Cost: \$95 million

E. RESUME			
NAME	ROLE	YEARS EXPERIENCE	
		TOTAL	CURRENT FIRM
Jose Torres, PE	QA/QC	24	1
FIRM			
MCKIM & CREED Raleigh, NC			

EDUCATION	CURRENT PROFESSIONAL REGISTRATION
M.B.A., Business Administration, Wake Forest University B.S., Mechanical Engineering, North Carolina State University	Professional Engineer: NC (# 031493)

Mr. Torres brings 24+ years of experience, with a proven track record of designing and implementing efficient and effective mechanical systems. Mr. Torres possesses extensive knowledge of HVAC, plumbing, and fire protection systems, and has a strong understanding of industry codes and regulations

RELEVANT PROJECTS

A. FSU BUTLER & TELECOM BUILDINGS RENOVATIONS <i>Fayetteville, NC</i>	PRO. SERVICES COMPLETED	Ongoing	CONSTRUCTION COMPLETED	TBD
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Mr. Torres is serving as mechanical engineer. Fayetteville State University selected McKim & Creed as the prime consultant to address outdated mechanical and electrical infrastructure in the G.L. Butler and Telecommunications buildings. For the G.L. Butler Building, the project includes fire alarm system replacement for code compliance, inspection and repair of air handlers on upper floors, and the installation of VAV boxes and new ductwork for better temperature control. The Telecommunications Building project involves the removal of DX units, installation of air handlers and VAV boxes, connection to the campus chilled water loop, and system upgrades including an emergency generator and fire alarm replacement. Size: 87,000 SF | Cost: \$3.8 million

B. WTCC PERRY NEW SCIENCE & HEALTH EDUCATION BUILDING <i>Raleigh, NC</i>	PRO. SERVICES COMPLETED	2024	CONSTRUCTION COMPLETED	Est 2026
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Mr. Torres is serving as mechanical engineer. McKim & Creed is providing mechanical, electrical, plumbing, and fire protection system design for the 106,000 SF Wake Technical Community College (WTCC) Perry Health Science Campus new Health Sciences building. This building will serve as the campus's state of the art hub for healthcare staff training with a direct adjacency to Wake Med for collaboration. Included in this building are simulation patient rooms, an ED, an OR, ultrasound training bays as well as functioning X-ray, MRI, and CT scanning spaces. This project consists of a unique balance of energy efficiency for Green Globes certification while maintaining robust systems that will meet the school's needs. Overall mechanical systems include penthouse air handlers, boilers and utility yard residing air cooled chillers. Size: 106,000 SF | Cost: \$95 million

C. NC EDUCATION CAMPUS <i>Raleigh, NC</i>	PRO. SERVICES COMPLETED	Ongoing	CONSTRUCTION COMPLETED	Est 2027
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Mr. Torres is serving as mechanical engineer. McKim & Creed is providing mechanical, electrical, plumbing, and fire protection engineering services for the North Carolina Education Campus project. This new campus will support multiple executive-level agencies, including the Department of Commerce, Department of Public Instruction, Community Colleges System, and the UNC System. The building includes 300,000 SF of office space, high-technology board rooms and conference rooms, support space, and a below-grade parking deck. McKim & Creed's scope includes completing an advanced planning phase with an emphasis on energy savings and review of options including a new hybrid chilled water-cooled chiller plant coupled with NC SCO utilities and usage of existing central steam system, heat recovery chiller, LED lighting and lighting controls and optimized HVAC system controls. Size: 300,000 SF | Cost: \$320 million

D. NCSU POLK HALL RENOVATION <i>Raleigh, NC</i>	PRO. SERVICES COMPLETED	Ongoing	CONSTRUCTION COMPLETED	TBD
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Mr. Torres is providing QA/QC services. McKim & Creed is providing MEP services for the \$73 million renovation of Polk Hall (completed in 1926), which houses the Structural & Molecular Biochemistry and Animal Science departments. The project aims to enhance labs and student spaces and includes modernizing mechanical, electrical, and plumbing systems. Specific upgrades involve the fire alarm system, electrical switchgear, building power panels, air handling units, medium pressure ductwork, lab exhaust systems, lighting controls, and plumbing infrastructure. McKim & Creed led discussions in the planning phase for high-efficiency lab HVAC systems. The goal is to modernize the facility to support program growth and expansion. Size: 128,000 SF | Cost: \$73 million

E. METHODIST UNIVERSITY BERNS STUDENT CENTER MEP STUDY <i>Fayetteville, NC</i>	PRO. SERVICES COMPLETED	2024	CONSTRUCTION COMPLETED	NA
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Mr. Torres provided cost estimating services. McKim & Creed conducted a study of the Berns Student Center's existing MEP systems to address inefficiencies and identify future needs. The assessment examined outdated systems, proposed a fire protection design, and considered a digital building automation system for improved HVAC controls and temperature distribution. Plumbing recommendations included a new domestic water service, replacing tankless water heaters with a recirculating system, and upgrading the kitchen's grease trap and sanitary system. The electrical analysis advised consolidating systems, replacing switchboards and panelboards, installing new LED lighting and controls, a 250kW generator for backup power, and updating the fire alarm system to align with vendor preferences. Size: 40,000 SF | Cost: \$20 million

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each Key Person)



12. NAME RON DECKMAN	13. ROLE IN THIS CONTRACT MEP Senior Cost Estimator	14. YEARS OF EXPERIENCE	
		a. TOTAL 32+	b. CURRENT FIRM 8
15. FIRM NAME AND LOCATION 35°NORTH PEG Contracting Inc., dba 35 North, Durham, NC			
16. EDUCATION (DEGREE AND SPECIALIZATION) B.A. in Humanities/Classical Studies, Biola University (Magna Cum Laude)		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)	

18. OTHER PROFESSIONAL QUALIFICATIONS (PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.)

Ron brings over 32 years of experience in preconstruction services managing high-intensity projects at facilities across the country. He has provided cost estimating support for design projects ranging from \$25,000 to over \$900 million for education, healthcare, municipal, and federal sectors, among others. Ron successfully provides advance planning, construction cost milestone estimating, and value engineering for all design phases for new facilities and renovations. He specializes in complex MEP estimating. Ron has a deep knowledge of plumbing, mechanical, and electrical utilities, coupled with a strong understanding of project requirements.

19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (CITY AND STATE)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
a	University of North Carolina Charlotte, Cone Center - Restroom Addition, Charlotte, NC	2024	NA
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE MEP Senior Cost Estimator for a feasibility study involving the renovation of existing areas to include ablation stations. Scope includes a new gender-neutral ADA-compliant restroom with floor sink drain, wash basin, and shower attachment at water closet, along with new walls to deck with sound batt insulation. In the existing men's restroom, one lavatory will be replaced with a Kohler Rivlet (wudu). In the existing women's restroom, three lavatories will be removed and replaced with one wall-mounted lavatory and one Kohler Rivlet (wudu). Size: 1,480 SF; Cost: \$606,281		
b	North Carolina State University, Tri Towers Residence Hall, Mechanical System Upgrade, Raleigh, NC	2024	2025-2027
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE MEP Cost Estimator for the phased mechanical system renovations for three residence halls - Bown Hall, Carroll Hall, and Metcalf Hall (Tri-Towers). Building scopes will include upgrades to the restroom and corridor ventilation, new exhaust ventilators, new restroom exhausts, as well as new ducts and ceilings where required. A new 125-amp 480-volt panel is provided on the first floor of each building to provide power to the DOAS units. Size: 31 Levels; Cost: \$10.2 M		
c	University of North Carolina Charlotte, Friday HVAC & Electrical Repairs, Charlotte, NC	2024	2026 (est)
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE MEP Senior Cost Estimator for this project, which prioritizes HVAC renovations, including the replacement of three rooftop units with new DX units featuring VFDs. Additionally, a new four-pipe AHU is installed, along with new medium-pressure ductwork and VAV units. The fire alarm system undergoes extensive upgrades, with devices and conduit to be replaced on multiple floors and wiring meeting Class A standards throughout. Size: 90,050 SF; Cost: \$6.5 M		
d	University of North Carolina Chapel Hill, Morehead Chemistry Teaching Lab Renovations, Chapel Hill, NC	2024	Ongoing
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE MEP Senior Cost Estimator for the renovation and conversion of six existing laboratories into teaching laboratories within an occupied facility. Scope includes architectural upgrades including casework, specialty equipment, mechanical, electrical, plumbing, fire protection, low-voltage systems, and abatement. Size: 5,698 SF; Cost: \$3.2 M		
e	East Carolina University, Todd Dining Hall Renovation, Greenville, NC	2025	TBD
	(3) BRIEF DESCRIPTION (BRIEF SCOPE, SIZE, COST, ETC.) AND SPECIFIC ROLE MEP Senior Cost Estimator for the the project, which involves demolition and structural upgrades to the existing crawl space beneath the active main kitchen at East Carolina University. Scope includes installation of a drainage system, grease separator, and floor drains, as well as updating existing plumbing and natural gas lines. Size: 14,365 SF; Cost: \$3.5 M		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete on Section E for each key person.)

12. NAME		13. ROLE IN THIS CONTRACT		14. YEARS EXPERIENCE	
Michael J. Krupa, MS OSH, GSP®, CIEC		Industrial Hygiene Project Manager		a. TOTAL 30	b. WITH CURRENT FIRM 7
15. FIRM NAME AND LOCATION <i>(City and State)</i> Froehling & Robertson, Inc. (Raleigh, NC)					
16. EDUCATION <i>(Degree and Specialization)</i> Master of Science / Occupational Safety and Health, Environmental Management Bachelor of Arts / Geology			17. CURRENT PROFESSIONAL REGISTRATION <i>(State and Discipline)</i> NC: Asbestos Inspector, Asbestos Air Monitor, Asbestos Project Designer, Asbestos Management Planner, Lead Based Paint Inspector/Risk Assessor; SC: Asbestos Inspector, Asbestos Air Sampler, Asbestos Project Designer		
18. OTHER PROFESSIONAL QUALIFICATIONS <i>(Publications, Organizations, Training, Awards, etc.)</i> Mr. Krupa manages and conducts Indoor Air Quality Studies and Mold/Moisture Assessments, Hazardous Materials Inspections (asbestos, lead-based paint, PCBs, mercury, universal waste), Industrial Hygiene Studies (airborne chemical contaminants, noise), and Asbestos Air Monitoring. Mr. Krupa also develops and maintains Respiratory Protection Programs and Personal Protective Equipment (PPE) Programs.					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION <i>(City and State)</i> NC A&T University, Carver Hall Hazardous Materials Survey Greensboro, NC		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2022	CONSTRUCTION <i>(If Applicable)</i> N/A	
(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Mr. Krupa provided project management of the Limited Regulated Materials Survey for the planned renovations to the 56,800-square-foot two-story educational and research facility. The limited Regulated Materials Survey was to identify ACM, LBP coatings, Polychlorinated Biphenyls, select Universal waste, and other Regulated Materials (ozone-depleting substances, electronic waste, etc.) that would require appropriate removal, handling, and disposal prior to renovation and select demolition activities.					
b.	(1) TITLE AND LOCATION <i>(City and State)</i> UNC Greensboro - Coleman Athletic Center Building Fire Alarm Upgrade Greensboro, NC		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2019	CONSTRUCTION <i>(If Applicable)</i> N/A	
(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Mr. Krupa provided project management during hazardous materials design services for a 3,412-square-foot area in the UNCG Coleman Athletic Center. As required, NC Accredited Asbestos Inspector(s) conducted sampling activities of the subject building components within the stated scope of work for ACMs. A visual survey for Lead-Based Paint, PCBs, and other regulated materials was also completed to characterize materials for disposal in accordance with the applicable sections of the Federal Toxic Substance Control Act.					
c.	(1) TITLE AND LOCATION <i>(City and State)</i> UNC Chapel Hill - Berryhill Hall Chapel Hill, NC		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2020	CONSTRUCTION <i>(If Applicable)</i> N/A	
(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Mr. Krupa provided asbestos project monitoring and management services during the abatement activities at Berryhill Hall in 2020. The asbestos abatement project consisted of removal, disposal, and installation of engineering controls with regard to identified ACM that required removal prior to the demolition of this 128,684-square-foot structure. The project also included hazardous materials surveys completed in 2019.					
d.	(1) TITLE AND LOCATION <i>(City and State)</i> UNC Chapel Hill - Everett, Lewis & Stacy Residence Halls Chapel Hill, NC		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2020	CONSTRUCTION <i>(If Applicable)</i> N/A	
(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Mr. Krupa provided asbestos survey and monitoring services at the three-story 19,436-square-foot Everett Residence Hall, the three-story 19,502-square-foot Lewis Residence Hall, and the three-story 20,110-square-foot Stacy Residence Halls. The limited Regulated Materials Survey was to identify ACM, LBP coatings, Polychlorinated Biphenyls (PCBs), select Universal waste, and other select Regulated Materials (ozone-depleting substances, electronic waste, etc.) that required appropriate removal, handling and disposal procedures prior to renovation and/selective demolition activities.					
e.	(1) TITLE AND LOCATION <i>(City and State)</i> UNC Chapel Hill - Sitterson Hall Classroom Renewal Chapel Hill, NC		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2019	CONSTRUCTION <i>(If Applicable)</i> N/A	
(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Mr. Krupa provided limited regulated materials consulting services at Sitterson Hall at UNC CH. The purpose of the limited regulated materials survey is to identify asbestos-containing materials (ACMs), Lead-Based Paint (LBP) coatings, and other select regulated materials that may require appropriate removal, handling, and disposal procedures before scheduled renovation and selective demolition activities at the subject property. The renovation area comprised 5,000-square-feet and provided a large, active learning classroom. It encompassed selective demolition, new floor construction, finishes, lighting, A/V, electrical, and data distribution.					

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

[Complete one Section E for each key person]

12. Name Marcus R. Thomas AIA, NCARB	13. Role in this Contract Principal-In-Charge	14. Years Experience	
		A. TOTAL 10	B. WITH CURRENT FIRM 4

15. Firm Name and Location [CITY AND STATE]
KEi Architects, Charlotte, North Carolina

16. Education [DEGREE AND SPECIALIZATION] Master of Architecture, Hampton University	17. Current Professional Registration [STATE AND DISCIPLINE] Registered Architect NC, VA, SC, TN
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18. Other Professional Qualifications [PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.]
2021 Autodesk 40 Under 40 Champions of Construction; AIA Charlotte, Board of Directors; NCARB Professional Conduct Committee, NAAB Accreditation Review Committee, Dukes Mayo Bowl Selection Committee

19. Relevant Projects

A.	1. Title and Location [CITY AND STATE] Hampton University Admin. Building Renovation Hampton, Virginia	2. Year Completed	
		Professional Services 2024	Construction [IF APPLICABLE] Est. 2026
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role 18,000 SF. Renovation of Hampton University's Administration Building focused on modernizing office spaces, enhancing accessibility, and preserving the building's historic architectural character while integrating updated systems to support operational efficiency.	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
B.	1. Title and Location [CITY AND STATE] VSU HVAC Replacements Petersburg, Virginia	2. Year Completed	
		Professional Services 2023	Construction [IF APPLICABLE] Ongoing
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role KEi was contracted to provide Architectural services in support of VSU's efforts to assess and replace HVAC units campuswide.	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
C.	1. Title and Location [CITY AND STATE] NCCU Art Museum Durham, North Carolina	2. Year Completed	
		Professional Services 2022	Construction [IF APPLICABLE] 2023
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role KEi is engaged with North Carolina Central University to renovate the campus Art Gallery. Referred to as the "heart" of campus, the Art Gallery hosts a number of events and functions from classes to cocktail receptions. The project will include rethinking the look at function of the interior space, in addition to electrical, mechanical, plumbing and fire protection.	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
D.	1. Title and Location [CITY AND STATE] WTCC Therapeutic Massage Renovation Raleigh, North Carolina	2. Year Completed	
		Professional Services 2023	Construction [IF APPLICABLE] Ongoing
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role Wake Technical Community College engaged KEi to reimagine a multifunction space for their therapeutic massage program. The program also serves outside clients, so they new space had to meet both academic and public requirements. The renovated space will include space for 8 massage tables, storage, restroom, handwashing station and public waiting area.	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
E.	1. Title and Location [CITY AND STATE] Lakeview Hall Renovation Richmond, Virginia	2. Year Completed	
		Professional Services 2024	Construction [IF APPLICABLE] 2024
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role A 4,000 SF adaptive reuse project transforming former residential units into modern, functional administrative offices for the Residence Life department. The renovation included flexible office layouts, upgraded infrastructure, and sustainable design elements, all delivered on time and within budget.	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

[Complete one Section E for each key person.]

12. Name Benjamin Cohey ASSOC. AIA, NCARB	13. Role in this Contract Project Manager	14. Years Experience	
		A. TOTAL 23	B. WITH CURRENT FIRM 1.5 Year

15. Firm Name and Location [CITY AND STATE]
KEi Architects, Charlotte, North Carolina

16. Education [DEGREE AND SPECIALIZATION] University of North Carolina Charlotte / Bachelor of Architecture (UF) Anne Arundel Community College / Associate in Arts / Architecture	17. Current Professional Registration [STATE AND DISCIPLINE] N/A
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18. Other Professional Qualifications [PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.]

19. Relevant Projects

A.	1. Title and Location [CITY AND STATE] Hampton University Admin. Building Renovation Hampton, Virginia	2. Year Completed	
		Professional Services 2024	Construction [IF APPLICABLE] Est. 2026
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role 18,000 SF. Renovation of Hampton University's Administration Building focused on modernizing office spaces, enhancing accessibility, and preserving the building's historic architectural character while integrating updated systems to support operational efficiency.	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
B.	1. Title and Location [CITY AND STATE] Lakeview Hall Renovation Richmond, Virginia	2. Year Completed	
		Professional Services 2024	Construction [IF APPLICABLE] 2024
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role A 4,000 SF adaptive reuse project transforming former residential units into modern, functional administrative offices for the Residence Life department. The renovation included flexible office layouts, upgraded infrastructure, and sustainable design elements, all delivered on time and within budget.	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
C.	1. Title and Location [CITY AND STATE] North Elm Medical Office Building Greensboro, North Carolina	2. Year Completed	
		Professional Services 2022	Construction [IF APPLICABLE] 2023
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role North Elm Medical Office Building is a 8,000 SF first time upfit. The project includes 15 exam rooms, lab, teamwork areas, and office space. This Urgent Care facility welcomes both adult and pediatric patients. Focus was given to building circulation and efficiency of staff.	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
D.	1. Title and Location [CITY AND STATE] Cary Academy Classroom Addition Cary, North Carolina	2. Year Completed	
		Professional Services 2024	Construction [IF APPLICABLE] Ongoing
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role Construction Administrator. The Cary Academy Classroom Addition project expands the campus's learning spaces with state-of-the-art classrooms designed to foster collaboration and innovation. Featuring flexible layouts, advanced technology, and sustainable design elements, this addition enhances the academic experience for students and faculty alike.	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
E.	1. Title and Location [CITY AND STATE] WTCC Therapeutic Massage Renovation Raleigh, North Carolina	2. Year Completed	
		Professional Services 2023	Construction [IF APPLICABLE] 2024
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role Wake Technical Community College engaged KEi to reimagine a multifunction space for their therapeutic massage program. The program also serves outside clients, so they new space had to meet both academic and public requirements. The renovated space will include space for 8 massage tables, storage, restroom, handwashing station and public waiting area.	<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

[Complete one Section E for each key person]

12. Name Garrett Spears ASSOC. AIA	13. Role in this Contract Project Coordinator	14. Years Experience	
		A. TOTAL 9	B. WITH CURRENT FIRM 3

15. Firm Name and Location [CITY AND STATE]
KEi Architects, Charlotte, North Carolina

16. Education [DEGREE AND SPECIALIZATION] Bachelor of Architecture, Tuskegee University	17. Current Professional Registration [STATE AND DISCIPLINE] N/A
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18. Other Professional Qualifications [PUBLICATIONS, ORGANIZATIONS, TRAINING, AWARDS, ETC.]

19. Relevant Projects

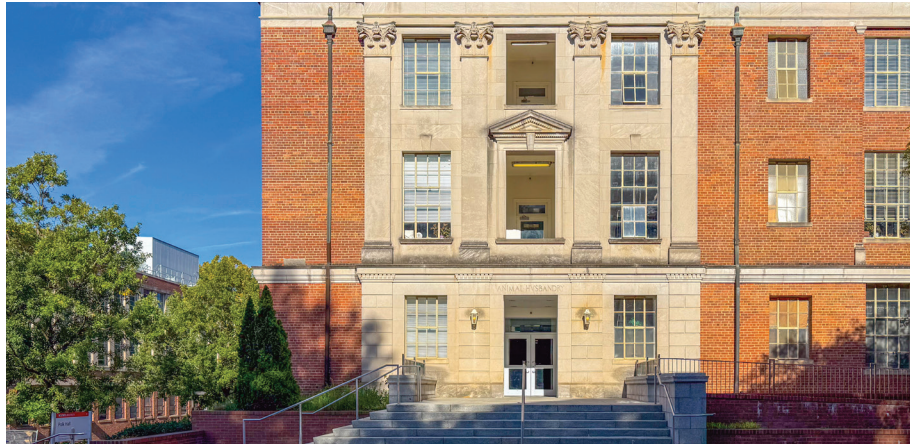
A.	1. Title and Location [CITY AND STATE] Cary Academy Classroom Addition Cary, North Carolina	2. Year Completed	
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role The Cary Academy Classroom Addition project expands the campus's learning spaces with state-of-the-art classrooms designed to foster collaboration and innovation. Featuring flexible layouts, advanced technology, and sustainable design elements, this addition enhances the academic experience for students and faculty alike.	Professional Services 2024	Construction [IF APPLICABLE] Ongoing
		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
B.	1. Title and Location [CITY AND STATE] Karl Strass Track Replacement Asheville, North Carolina	2. Year Completed	
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role KEi was contracted to coordinate and implement the design for the replacement of Karl Strauss Track and natural grass infield at the University of North Carolina Asheville. The project required the removal of all existing surfaces and will be replaced with a new Mondo track surface, natural grass infield and fencing.	Professional Services 2022	Construction [IF APPLICABLE] 2023
		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
C.	1. Title and Location [CITY AND STATE] Clafin University, Health and Wellness Complex Orangeburg, SC	2. Year Completed	
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role The project consisted of the expansion of the historic Jonas T. Kennedy Health and Physical Education Center into a 30,000 SF, full-service Health and Wellness Center that features a gymnastics and aerobics room, a weight room, an indoor track, staff offices, and multi-purpose meeting and seminar rooms. The new facility opened in February 2019 and is open to both Clafin students and members of the nearby Orangeburg community.	Professional Services 2017	Construction [IF APPLICABLE] 2019
		<input type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
D.	1. Title and Location [CITY AND STATE] NCCU Art Museum Durham, North Carolina	2. Year Completed	
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role KEi is engaged with North Carolina Central University to renovate the campus Art Gallery. Referred to as the "heart" of campus, the Art Gallery hosts a number of events and functions from classes to cocktail receptions. The project will include rethinking the look at function of the interior space, in addition to electrical, mechanical, plumbing and fire protection.	Professional Services 2022	Construction [IF APPLICABLE] 2023
		<input checked="" type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	
E.	1. Title and Location [CITY AND STATE] Charleston Southern University Residence Hall Charleston, South Carolina	2. Year Completed	
	3. Brief Description [BRIEF SCOPE, SIZE, COST, ETC.] and Specific Role The new residence hall at Charleston Southern is the first new student housing project for the university in decades. This buildings meets a need for suite-style housing for the schools upperclassmen enrollment numbers consistently increase year after year. This 213 bed residence features two-bedroom (doubles) units, Resident Life Coordinator and laundry on the first floor, student meeting and study space on the second floor and student lounge and kitchen on the third.	Professional Services 2017	Construction [IF APPLICABLE] 2019
		<input type="checkbox"/> CHECK IF PROJECT PERFORMED WITH CURRENT FIRM	

F. EXAMPLE PROJECT		EXAMPLE PROJECT #	1
POLK HALL RENOVATION <i>Raleigh, NC</i>		YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION
		Ongoing	NA

PROJECT OWNER'S INFORMATION

PROJECT OWNER NC State University	POINT OF CONTACT NAME Bill Davis <i>Associate Director</i>	POINT OF CONTACT PHONE NUMBER, & EMAIL 919.513.7492 wrdavis3@ncsu.edu
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BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



McKim & Creed is providing MEP services for the \$73 Million Polk Hall Renovation project at NCSU. This multi-phased project will renovate portions of Polk Hall, which houses the Structural & Molecular Biochemistry and Animal Science departments, to improve labs as well as student spaces. The scope of services also includes significant modernization of the mechanical, electrical, and plumbing (MEP) systems within the building.

Specifics of this scope include upgrades to the fire alarm system, new electrical switchgear and building power panels, replacement of the air handling units, replacement of the majority of the medium pressure ductwork systems, upgrades to lab exhaust systems, lighting and lighting controls, and replacement of the majority of the plumbing infrastructure systems. McKim & Creed led systems discussions in the advanced planning phase, including the planning for variable volume, high-efficiency lab HVAC systems, and associated controls.

The goal of this infrastructure work is to modernize this lab building to allow for continued program growth and expansion.

PROJECT DETAILS:

SIZE
128,000 SF

COST
\$73 million

ROLE
Engineering Prime

PROJECT HIGHLIGHTS:

- ✔ Multi-phased renovation
- ✔ MEP system modernization
- ✔ Plumbing infrastructure replacement
- ✔ Advanced planning leadership
- ✔ New electrical switchgear

FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
#	FIRM NAME	FIRM LOCATION	ROLE
A.	McKim & Creed, Inc.	Raleigh, NC	MEP/FP Engineering

F. EXAMPLE PROJECT

EXAMPLE PROJECT #

2

FSU RJSC SANITARY PIPING EMERGENCY REPLACEMENT

Fayetteville, NC

YEAR COMPLETED

PROFESSIONAL SERVICES

2022

CONSTRUCTION

2022

PROJECT OWNER'S INFORMATION

PROJECT OWNER

Fayetteville State University

POINT OF CONTACT NAME

Harold Miller

POINT OF CONTACT PHONE NUMBER, & EMAIL

910.703.7669

hmiller1@uncfsu.edu

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



This project was an emergency project to replace sanitary piping in the building that served as the main line from the upper level restrooms and the discharge from the grease separator. The Jones Center is the main dining hall on campus so the piping had to be fixed immediately.

The project was challenging in that the line that needed to be replaced ran down the center of the building and had an eighteen foot drop to a lower level that was inaccessible to replace in kind.

McKim & Creed rerouted the sanitary main from inside the building where it was accessible in the kitchen prep area to outside the building. Once outside it was routed past the grease separator to a retaining wall. The discharge line of the grease separator was connected to the line. At the retaining wall, the line passed through the wall and routed down with a drop and rerouted to the inside of the building in a mechanical room on the lower level to return to the existing main trunk in the building.

PROJECT DETAILS:

SIZE

N/A

COST

\$360,000

ROLE

Engineering Prime

PROJECT HIGHLIGHTS:

- ✔ FSU experience
- ✔ Response to emergency/urgent need
- ✔ Sanitary piping replacement and reroute
- ✔ Rapid design
- ✔ Infrastructure upgrade



FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

#	FIRM NAME	FIRM LOCATION	ROLE
A.	McKim & Creed, Inc.	Raleigh, NC	MEP/FP Engineering

F. EXAMPLE PROJECT		EXAMPLE PROJECT #	3
NCSU AVENT FERRY COMPLEX <i>Raleigh, NC</i>		YEAR COMPLETED	
		PROFESSIONAL SERVICES 2018	CONSTRUCTION 2019

PROJECT OWNER'S INFORMATION		
PROJECT OWNER NC State University	POINT OF CONTACT NAME Lynn Swank, PLA, LEED AP	POINT OF CONTACT PHONE NUMBER, & EMAIL (919) 513.4637

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



This project provided the replacement of existing domestic cold water, hot water and hot water recirculation piping for two residence halls and also modified the hot water generation system(s). The piping was failing due to galvanic corrosion. The design provided for a new domestic cold water, hot water and hot water return risers where removed in the existing chases and replaces abandoned piping buried in concrete slabs between floors.

Additionally, insulation was installed on all domestic water piping along with any valves necessary for a complete and operational system. Zone isolation valves are required at each floor and circuit setters were specified to balance the return system where applicable. Additional capacity was provided for the instantaneous gas water heaters as well as thermal storage tanks for both buildings (E&F).

PROJECT DETAILS:

SIZE
70,000 SF
605 residents

COST
\$500,000

ROLE
Engineering Prime

PROJECT HIGHLIGHTS:

- ✔ Piping replacement
- ✔ System balancing
- ✔ Gas water heaters
- ✔ Thermal storage

FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
#	FIRM NAME	FIRM LOCATION	ROLE
A.	McKim & Creed, Inc.	Raleigh, NC	MEP/FP Engineering

F. EXAMPLE PROJECT

EXAMPLE PROJECT #

4

NCSSM DORM RENOVATIONS
Durham, NC

YEAR COMPLETED

PROFESSIONAL SERVICES
2025

CONSTRUCTION
2026 EST

PROJECT OWNER'S INFORMATION

PROJECT OWNER NC School of Science and Math	POINT OF CONTACT NAME Robert Allen	POINT OF CONTACT PHONE NUMBER, & EMAIL 919.416.2659 allenr@ncssm.edu
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BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



McKim & Creed is providing MEP services for this project to renovate and upgrade six student residence halls at NCSSM. The project scope included an initial advanced planning phase to scope all residence halls and associated MEP upgrades. The renovations include upgrading MEP central systems, individual and community restrooms, furnishings in the rooms and lounges, and all adult apartments that are used by live-in staff members.

Our scope included replacing the existing plumbing piping systems providing new exhaust fans and ductwork, replacing select air handling units, and providing MEP modifications to support architectural renovations (new lighting, HVAC and plumbing fixtures). These existing buildings were built in the 1960s and renovations of them took careful coordination to ensure all new piping was able to fit in the tight ceiling spaces available.

PROJECT DETAILS:

SIZE

200,000 SF

COST

\$10 million

ROLE

Engineering Consultant

PROJECT HIGHLIGHTS:

- ✔ Higher education/SCO experience
- ✔ Multiple residence hall building renovations
- ✔ Bathroom renovations and domestic hot water system replacement
- ✔ Complete new building HVAC
- ✔ Phasing that minimized impacts to student residents

FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

#	FIRM NAME	FIRM LOCATION	ROLE
A.	McKim & Creed, Inc.	Raleigh, NC	MEP/FP Engineering

F. EXAMPLE PROJECT

EXAMPLE PROJECT #

5

UNC CHAPEL HILL KENAN LABORATORY INFRASTRUCTURE UPGRADES

Chapel Hill, NC

YEAR COMPLETED

PROFESSIONAL SERVICES

2018

CONSTRUCTION

2020

PROJECT OWNER'S INFORMATION

PROJECT OWNER

UNC Chapel Hill

POINT OF CONTACT NAME

Chris Glenn

POINT OF CONTACT PHONE NUMBER, & EMAIL

(919) 201-6649

Chris.Glenn@facilities.unc.edu

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



McKim & Creed provided mechanical and electrical engineering services as part of UNC Chapel Hill's initiative to implement energy conservation measures at the 45-year-old Kenan Lab. This \$21 million project included providing a new chilled water heat exchanger with associated pumps and controls to decouple the building from the central campus chiller plant as well as new supply valves, exhaust valves and laboratory controls. We also replaced the building's air handling units. The project scope also included modification and extension of steam piping as part of the building's steam to hot water system. McKim & Creed also provided steam to the 3 new lab air handling unit humidifiers.

Additionally, McKim & Creed provided a new sprinkler system for floors 3-9 of this building. In addition to the new sprinkler system, a new fire pump was provided as well as a new room for the fire command center and new front end fire alarm panel. Emergency power for the new fire pump was extended from the Murray/Venable generator. During these infrastructure upgrades the client decided to expand the project again to include a comprehensive renovation of the top four floors of lab space.

This involved the total renovation of 6 lab spaces and graduate student office support spaces to support chemistry, optics, and advanced sciences, which included 16 new fume hoods and associated exhaust systems, new lab casework, specialty gases and 208-Volt power for specialty lab equipment.

PROJECT DETAILS:

SIZE

115,000 SF

COST

\$21 million

ROLE

Engineering Prime

PROJECT HIGHLIGHTS:

- ✔ Electrical distribution system modifications
- ✔ Energy conservation and savings
- ✔ HVAC & controls infrastructure upgrades
- ✔ New fire pump protection system design
- ✔ Voice communication



FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

#	FIRM NAME	FIRM LOCATION	ROLE
A.	McKim & Creed, Inc.	Raleigh, NC	MEP/FP Engineering
B.	F&R	Raleigh, NC	Environmental Services

F. EXAMPLE PROJECT		EXAMPLE PROJECT #	6
UNC HOSPITALS 7TH FLOOR BED TOWER CONVERSION <i>Chapel Hill, NC</i>		YEAR COMPLETED	
		PROFESSIONAL SERVICES 2023	CONSTRUCTION TBD

PROJECT OWNER'S INFORMATION

PROJECT OWNER UNC Hospitals	POINT OF CONTACT NAME Cleopatrice Robinson <i>Project Manager</i>	POINT OF CONTACT PHONE NUMBER, & EMAIL 919.966.5211 Cleopatrice.Robinson@unchealth.unc.edu
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BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



UNC Hospitals is a network of public hospitals and community clinics serving more than 800,000 patients each year. For patients to receive the highest quality of care, these medical facilities need top-performing mechanical, electrical and plumbing systems for operating equipment, managing comfort conditions, and maintaining sanitary standards. McKim & Creed is currently providing professional MEP services to the main campus, renovating the existing 7th floor into a new 45 bed surgical inpatient unit.

Once complete, our engineering solutions will help provide a comfortable space for patients to recover post-surgery and equip medical staff with the underlying features and tools they need to offer exceptional patient care.

PROJECT DETAILS:

SIZE
34,000 SF

COST
\$30 million

ROLE
Engineering Prime

PROJECT HIGHLIGHTS:

- ✔ New Surgical Inpatient Bed Tower
- ✔ Modernized Healthcare Facility
- ✔ Improved Efficiency and Functionality
- ✔ New MEP Systems

FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
#	FIRM NAME	FIRM LOCATION	ROLE
A.	McKim & Creed, Inc.	Raleigh, NC	MEP/FP Engineering

F. EXAMPLE PROJECT

EXAMPLE PROJECT #

7

DUKE HOSPITAL DIETARY EXPANSION

Durham, NC

YEAR COMPLETED

PROFESSIONAL SERVICES

2012

CONSTRUCTION

2014

PROJECT OWNER'S INFORMATION

PROJECT OWNER

Duke University Medical Center

POINT OF CONTACT NAME

Chris Boudreaux

POINT OF CONTACT PHONE NUMBER, & EMAIL

919.730.0866
christopher.boudreaux@duke.edu

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



McKim & Creed has provided comprehensive mechanical, electrical, plumbing, and fire protection engineering services for multiple renovation and expansion projects at the Duke University Hospital main kitchen. Most recently, the firm supported a 1,500 SF partial renovation of the main kitchen, focused on enlarging the pot washing area to improve workflow for kitchen and dishwashing operations. This project builds on McKim & Creed's longstanding relationship with Duke University Hospital, which include a full renovation of the 13,000 SF main kitchen completed in 2014.

Previously, McKim & Creed partnered with Duke Medical Center to expand the capacity of the existing 17,000 SF main kitchen. This effort included a new 7,500 SF addition to house coolers, freezers, dry storage, and chemical storage areas, replacing the original adjacent spaces. The kitchen itself was renovated to add ranges, smokers, ovens, and auxiliary equipment, increasing capacity to serve the growing patient population associated with the new Cancer Wing. The Dietary Expansion Project was carefully phased to keep the kitchen operational throughout construction.

After the addition was completed, the kitchen renovation began, with outdated areas demolished to allow for expanded cooking and meal preparation spaces. The project was designed in 3D using the Revit Building Information Modeling System, which improved building systems coordination, reduced construction issues, and decreased construction time.

PROJECT DETAILS:

SIZE

17,000 SF

COST

\$8 million

ROLE

Engineering Prime

PROJECT HIGHLIGHTS:

- ✔ Kitchen capacity expansion
- ✔ Phased construction
- ✔ Operational Continuity
- ✔ Equipment Upgrades
- ✔ Storage Area Relocation
- ✔ 3D Revit Design
- ✔ Improved System Coordination



FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

#	FIRM NAME	FIRM LOCATION	ROLE
A.	McKim & Creed, Inc.	Raleigh, NC	MEP/FP Engineering

F. EXAMPLE PROJECT

UNC SCHOOL OF THE ARTS SANFORD & MOORE RESIDENCE HALLS HVAC REPLACEMENT
Winston-Salem, NC

EXAMPLE PROJECT #

8

YEAR COMPLETED

PROFESSIONAL SERVICES

2019

CONSTRUCTION

2020

PROJECT OWNER'S INFORMATION

PROJECT OWNER

UNC School of the Arts

POINT OF CONTACT NAME

Chris Placco

POINT OF CONTACT PHONE NUMBER, & EMAIL

336.631.1236

placcoc@uncsa.edu

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



McKim & Creed completed a project study and subsequently completed the HVAC Upgrades project for the UNC School of the Arts Sanford and Moore Residence Halls. The HVAC Upgrades project included new central HVAC systems and associated electrical power renovations for 2 new air-cooled chillers, 4 new boilers, 2 new domestic water heaters, and associated piping, pumps, and controls system upgrades. The existing chillers served each building separately, but the new chillers were tied together to provide partial redundancy to both buildings. Additionally, multiple boilers and pumps were provided to improve redundancy if a single piece of equipment was to fail.

This project was completed on time and under budget for UNCSA with the project's substantial completion in the summer of 2020 prior to students returning to campus.

The HVAC systems study included meetings with UNCSA staff and reviewing first costs as well as life cycle costs for HVAC systems for the building. Based on available funding and overall maintenance considerations, the first phase of this project was to complete the central system renovations outlined above which were completed on time and under budget.

PROJECT DETAILS:

SIZE

24,000 SF each

COST

\$1.1 million

ROLE

Engineering Prime

PROJECT HIGHLIGHTS:

- ✔ HVAC systems upgrade
- ✔ Piping and controls upgrade
- ✔ Completed on time and under budget
- ✔ Multi-residence hall renovation project
- ✔ Life cycle cost analysis
- ✔ Phased design

FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

#	FIRM NAME	FIRM LOCATION	ROLE
A.	McKim & Creed, Inc.	Raleigh, NC	MEP/FP Engineering

F. EXAMPLE PROJECT

EXAMPLE PROJECT #

9

UNCG PHILLIPS & HAWKINS FIRE ALARM UPGRADES

Greensboro, NC

YEAR COMPLETED

PROFESSIONAL SERVICES

2017

CONSTRUCTION

2018

PROJECT OWNER'S INFORMATION

PROJECT OWNER

UNC Greensboro

POINT OF CONTACT NAME

Tim Rouse
Project Manager

POINT OF CONTACT PHONE NUMBER, & EMAIL

336.334.4317
tsrouse2@uncg.edu

BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



The Phillips Hawkins 102,000 SF residence hall at UNC Greensboro needed upgrades to its fire alarm system to meet ADA compliance and improve building safety measures for all its occupants. Mckim & Creed's scope included replacing the existing addressable fire alarm system, adding mass notification and addressing ADA deficiencies along with additional work to install security cameras for improved safety.

The project also included the addition of a 125kW generator to support emergency lighting, communications, and an elevator as well as new distribution equipment, feeders and branch circuits to support circuiting of the new emergency systems. The design included lighting calculations to ensure adequate lighting is provided for emergency egress throughout the building.

Important for SCO-related fire alarm projects, we also worked in close collaboration with UNCG, contractors and design team members to review shop drawings, verify installation specifications, coordinate mechanical aspects and follow detailed testing criteria to efficiently get the system online and ensure it met all design elements.

PROJECT DETAILS:

SIZE

102,406 SF

COST

\$1.2 million

ROLE

Engineering Prime

PROJECT HIGHLIGHTS:

- ✔ UNC System / Higher Education Experience
- ✔ SCO Experience
- ✔ New 125kW Generator
- ✔ New Emergency Systems
- ✔ ADA Compliance and Life Safety Upgrades
- ✔ Emergency Lighting



FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

#	FIRM NAME	FIRM LOCATION	ROLE
A.	McKim & Creed, Inc.	Raleigh, NC	MEP/FP & Civil Engineering

F. EXAMPLE PROJECT		EXAMPLE PROJECT #	10
UNC CHAPEL HILL EVERETT, LEWIS & STACY RESIDENCE HALL HVAC REPLACEMENT <i>Chapel Hill, NC</i>		YEAR COMPLETED	
		PROFESSIONAL SERVICES 2017	CONSTRUCTION 2018

PROJECT OWNER'S INFORMATION

PROJECT OWNER UNC Chapel Hill	POINT OF CONTACT NAME Chris Glenn	POINT OF CONTACT PHONE NUMBER, & EMAIL 919.201.6649 Chris.Glenn@facilities.unc.edu
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BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



With buildings nearing 100-years-old on its historic campus, UNC Chapel Hill needed heating, cooling and fire protection system upgrades in several of its dorms. McKim & Creed was the prime consultant for the renovation of Everett, Lewis, and Stacy Residence Halls and provided efficient solutions to improve comfort levels and safety features for the students living there.

This included replacing all the HVAC piping as well as providing new fan coil units, a dedicated outside conditioning unit, HVAC controls, fire alarm system upgrades, and replacement of the building windows. The project also included new chilled water piping and pumping bridge in the basement of each building. Additionally, hazardous material abatement was part of the project design. As prime consultant, McKim & Creed provided detailed project documents including a project staging plan and project schedule requirements.

PROJECT DETAILS:

SIZE
24,056 SF (Everett) / 24,084 SF (Lewis) / 23,745 SF (Stacy)

COST
\$4.5 million

ROLE
Engineering Consultant

PROJECT HIGHLIGHTS:

- ✔ UNC Chapel Hill experience
- ✔ Residence hall experience
- ✔ Heating & cooling upgrades
- ✔ HVAC renovation
- ✔ Piping and controls replacement
- ✔ Energy efficient solutions
- ✔ Multi-residence hall renovation project
- ✔ Expedited, aggressive design schedule
- ✔ Higher education/SCO experience

FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
#	FIRM NAME	FIRM LOCATION	ROLE
A.	McKim & Creed, Inc.	Raleigh, NC	MEP/FP Engineering
B.	F&R	Raleigh, NC	Hazardous Material Abatement

Architecture-Engineer Qualifications

SOLICITATION NUMBER
287-30705-DS

PART II - GENERAL QUALIFICATIONS

FIRM NAME MCKIM & CREED, INC.					YEAR ESTABLISHED 1990	DUNS NUMBER 04-693-9948
STREET 4300 Edwards Mill Rd, Suite 200					OWNERSHIP	
CITY Raleigh	STATE NC	ZIP CODE 27612	TYPE Professional Corporation			
POINT OF CONTACT Street Lee, PE, ENV SP CEO					SMALL BUSINESS STATUS No	
PHONE NUMBER 727.491.7567			EMAIL ADDRESS slee@mckimcreed.com		NAME OF FIRM McKim & Creed, Inc.	
FORMER FIRM NAME(S) McKim & Creed, P.A. McKim & Creed Engineers, P.A.					YEAR ESTABLISHED 1978	DUNS NUMBER 04-693-9948

EMPLOYEES BY DISCIPLINE				PROFILE OF FIRM'S EXPERIENCE AND ANNUAL REVENUE FOR LAST 5 YEARS			
FUNCTION CODE	DISCIPLINE	NO. OF EMPLOYEES		PROFILE CODE	EXPERIENCE	REVENUE INDEX #	
		FIRM	BRANCH				
02	Administrative	109	25	E03	Electrical Studies and Design	9	
08	CADD Technicians	32	4	F03	Fire Protection	1	
12	Civil Engineers	90	16	H04	Heating; Ventilating; Air Conditioning	9	
15	Construction Inspectors	16	2	A12	Automation; Controls; Instrumentation	8	
21	Electrical Engineers	22	3	P06	Planning (Site, Installation, Project)	8	
33	Hydrographic Surveyors	13	0	P07	Plumbing & Piping Design	7	
38	Land Surveyors	40	5	S09	Structural Design; Special Structures	7	
42	Mechanical Engineers	25	7	P12	Power Generation; Transmission; Distribution	1	
48	Project Managers	82	14	G04	Geographic Information System Services: Development, Analysis, and Data Collection	4	
49	Remote Sensing Specialists	16	2				
57	Structural Engineers	5	2	H13	Hydrographic Surveying	6	
58	Technician/Analyst	34	0	S13	Storm Water Handling and Facilities	8	
	Fire Protection Designers	2	0	U03	Utilities	7	
	Electrical Designers	17	3	S10	Surveying; Platting; Mapping; Flood Plain Studies	9	
	Mechanical Designers	13	3	R07	Remote Sensing	6	
	Survey Crew Members	105	17	L02	Land Surveying	10	
	SUE Crew Members	117	11	I03	Industrial Waste Treatment	10	
	Crew Chiefs	55	7	W03	Water Supply; Treatment; Distribution	10	
	Instrumentation & Controls Specialists	14	1				
	Engineer Intern	68	13				
	Other Employees	120	16				
Total		995	151				

Annual Average Professional Services Revenues of Firm for Last 3 Years	Professional Services Revenue Index Number	
	a. Federal Work	4
b. Non-Federal Work	10	2. \$100,000 to less than \$250,000
c. Total Work	10	3. \$250,000 to less than \$500,000
		4. \$500,000 to less than \$1 million
		5. \$1 million to less than \$2 million
		6. \$2 million to less than \$5 million
		7. \$5 million to less than \$10 million
		8. \$10 million to less than \$25 million
		9. \$25 million to less than \$50 million
		10. \$50 million or greater

AUTHORIZED REPRESENTATION

The Forgoing is a statement of facts.

SIGNATURE 	DATE 1/28/2026
NAME & TITLE Street Lee, PE, ENV SP CEO	

ARCHITECT-ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (If any)

PART II - GENERAL QUALIFICATIONS
(If a firm has branch offices, complete for each specific branch office seeking work.)

2A. FIRM (Or Branch Office) NAME			3. YR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
PEG Contracting Inc., dba 35 North			2010	L7SHLVUSN4A4
2B. STREET			5. OWNERSHIP	
4601 Creekstone Drive, Suite 130			A. TYPE	
2C. CITY	2D. STATE	2E. ZIP CODE	S Corporation	
Durham	NC	27703	B. SMALL BUSINESS STATUS	
6A. POINT OF CONTACT NAME AND TITLE			SDVOSB, NC HUB, and SWaM Certified	
Scott McEntee, President and CEO			7. NAME OF FIRM (If block 2a is a branch office)	
6B. TELEPHONE NUMBER	6C. E-MAIL ADDRESS			
(919) 747-4544	smcentee@35n.com			
8A. FORMER FIRM NAME(S) (If any)			8B. YR. ESTABLISHED	8C. UNIQUE ENTITY IDENTIFIER

9. EMPLOYEES BY DISCIPLINE

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number (see below)
		(1) FIRM	(2) BRANCH			
02	Administrative	7	0	A03	Agricultural Development; Grain Storage; Farm	2
48	Project Manager	13	0	A08	Animal Facilities	1
16	Construction Manager	15	0	A12	Automation; Controls; Instrumentation	3
18	Cost Engineer/Estimator	7	0	C15	Construction Management	2
22	Electronics Engineer	1	0	C18	Cost Estimating; Cost Engineering & Analysis; Parametric Costing; Forecasting	4
				E02	Educational Facilities, Classrooms	2
				H09	Hospital & Medical Facilities	1
				I01	Industrial Buildings; Manufacturing Plants	4
				I02	Industrial Processes; Quality Control	2
				L01	Laboratories; Medical Research Facilities	2
				O01	Office Buildings; Industrial Parks	2
				R05	Refrigeration Plants/Systems	1
				R08	Research Facilities	5
				S08	Special Environments; Clean Rooms, etc.	1
	OTHER EMPLOYEES			S11	Sustainable Design	2
Total		43	0	V01	Value Analysis; Life-Cycle Costing	1

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS


PROFESSIONAL SERVICES REVENUE INDEX NUMBER


(Insert revenue index number shown at right)

a. Federal Work	1	1. Less Than \$100,000	6. \$2 million to less than \$5 million
b. Non-Federal Work	8	2. \$100,000 to less than \$250,000	7. \$5 million to less than \$10 million
c. Total Work	8	3. \$250,000 to less than \$500,000	8. \$10 million to less than \$25 million
		4. \$500,000 to less than \$1 million	9. \$25 million to less than \$50 million
		5. \$1 million to less than \$2 million	10. \$50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

A. SIGNATURE	B. DATE
	01/20/2026
C. NAME AND TITLE	
Scott McEntee, President and CEO	

ARCHITECT - ENGINEER QUALIFICATIONS				1. SOLICITATION NUMBER (If any) N/A		
PART II - GENERAL QUALIFICATIONS <i>(If a firm has branch offices, complete for each specific branch office seeking work.)</i>						
2a. FIRM (OR BRANCH OFFICE) NAME Froehling & Robertson, Inc.				3. YEAR ESTABLISHED 1881		4. UNIQUE ENTITY IDENTIFIER RL9UP3E4BV68
2b. STREET 310 Hubert Street				5. OWNERSHIP 5a. TYPE Corporation		
2c. CITY Raleigh		2d. STATE NC	2e. ZIP CODE 27603	5b. SMALL BUSINESS STATUS N/A		
6a. POINT OF CONTACT NAME AND TITLE Elias N. Ruhl, Branch Manager				7. NAME OF FIRM (If block 2a is a branch office) Same as in Block 2a.		
6b. TELEPHONE NUMBER 919.719.1973		6c. E-MAIL ADDRESS eruhl@fandr.com				
8a. FORMER FIRM NAME(S) (If any) N/A				8b. YEAR ESTABLISHED		8c. UNIQUE ENTITY IDENTIFIER
9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. Number of Employees		a. Profile Code	b. Experience	c. Revenue Index Number (see below)
		(1) FIRM	(2) BRANCH			
02	Administrative	44	3	A10	Asbestos Abatement	3
08	CADD Technician	3	1	C15	Construction Management	3
12	Civil Engineer	43	8	E09	Environmental Impact Studies, Assessments	5
15	Construction Inspector	138	24	E13	Environmental Testing and Analysis	6
16	Construction Manager	14	2	H03	Hazardous, Toxic, Radioactive Waste Remediation	3
23	Environmental Engineer	0	0	L01	Laboratories	5
24	Environmental Scientist	12	3	M03	Metallurgy	5
26	Forensic Engineer	1	0	S05	Soils and Geologic Studies	8
27	Foundation/Geotechnical Eng.	30	5	T02	Testing and Inspection Services	8
30	Geologist	7	4			
36	Industrial Hygienist	9	4			
	Drillers/Driller Helpers	26	7			
	Total	327	58			
11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS <i>(Insert revenue index numbers shown at right)</i>		PROFESSIONAL SERVICES REVENUE INDEX NUMBER				
a. Federal Work	6	1. Less than \$100,000		6. \$2 million to less than \$5 million		
b. Non-Federal Work	8	2. \$100,000 to less than \$250,000		7. \$5 million to less than \$10 million		
c. Total Work	9	3. \$250,000 to less than \$500,000		8. \$10 million to less than \$25 million		
		4. \$500,000 to less than \$1 million		9. \$25 million to less than \$50 million		
		5. \$1 million to less than \$2 million		10. \$50 million or greater		
12. AUTHORIZED REPRESENTATIVE The foregoing is a statement of facts.						
a. SIGNATURE 				b. DATE January 22, 2026		
c. NAME AND TITLE Gary A. Bruce, P.E., President & COO						



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