



October 15, 2021
Marcus Jones, PE
Henderson County
1 Historic Courthouse Square, Hendersonville, NC 28792
majones@hendersoncountync.gov

REGISTER STATUS
NCBELS: #C-0293
NCBOLA: #C-187

RE: Ecusta Rail-Trail, TIP BL-0007

Dear Mr. Jones,

EXPRESSION OF FIRM'S INTEREST + SUMMATION OF INFORMATION

McAdams is pleased to submit our qualifications for the design of phases A, B and C of the Ecusta Rail-Trail. The trail is an important part of the region's future and is the result of countless hours of effort from many community members over many years. McAdams understands that bringing that vision into reality is a significant responsibility. We would be honored to be selected to apply our extensive greenway expertise for the Ecusta Rail-Trail. As you review our qualifications, please consider the following benefits of selecting the McAdams team:

Dedicated Greenway / Trails Design Team: McAdams is one of the few firms in North Carolina with a dedicated greenway / trails planning and design team. These professional engineers, planners and landscape architects match their passion for trails with years of trail-specific experience and work exclusively on greenway projects.

Experienced Principal-in-Charge (PIC) + Project Manager (PM): Iona Thomas, AICP (PIC) has delivered both large and small greenway projects throughout North Carolina, including the entirety of Raleigh's Neuse River Trail and Asheville's French Broad River Greenway, as well as over 100 miles more. Her experience solving complicated design, property and construction issues is a critical asset for any project she leads. Andrew Hickling, PE (PM) has dedicated his career to working on planning, design and the construction of greenways and bicycle and pedestrian infrastructure to create safe and engaging experiences for trail users of all ages and abilities.

The Right Partners: McAdams has crafted a team specifically around the challenges of this project:

- > **Transportation Planning and Design (TPD):** TPD brings both local community knowledge and specialized trestle repurposing expertise to the project. McAdams values TPD staff's dedication to quality and community.
- > **Studio Main:** Blake Sanders, RLA brings a wealth of knowledge and community connections to the project built over a decade working in the region. His work includes natural surface trails in Pisgah National Forest, to feasibility studies for Mills River (NC 280 Corridor Study), to the Ecusta Trail Feasibility Study (2011). Blake has

also presented on Ecusta Trail implementation multiple times at the Blue Ridge Bicycle Club and the Friends of the Ecusta Trail.

- ▶ **Jennings Environmental PLLC (Jennings):** McAdams works with Greg Jennings, PhD, PE on stream projects throughout the State. His expertise and dedication to helping communities improve their streams will be an asset to this project.
- ▶ **HDR:** HDR is also a trusted partner for our team who will bring specialized inspection services, traffic engineering and structural engineering to the project. This partnership will provide Henderson County with the best of both worlds: high quality, responsive service from a small firm like McAdams, and access to a wide variety of specialized service from a mega firm like HDR.

In-house Services: While our team does include outside members, McAdams has key services in-house that will help us control schedule, cost and quality including: surveying, SUE, stormwater, stream restoration, floodplain modeling, landscape architecture, visualizations and construction administration.

More Than a Technical Challenge: While the Ecusta Trail presents technical challenges that our engineers are eager to tackle, the project will ultimately connect trail users with nature, sweeping views of the mountains and floodplains, local businesses and cultural destinations. Our goal will be to promote an elegant expression of artful design and create a community character that promotes livability and sense of ownership. Our focus will be creating a destination that will attract both local and regional visitors. We view this project as an opportunity to connect with countless other amenities, while also facilitating comparable local economic investment as seen in the revitalization of similar communities across the Southeast.

Communication: Andrew will serve as a single point of contact for the County and will keep the lines of communication open with bi-weekly calls or online Zoom / Teams meetings and email updates to keep the County's project manager well informed throughout the life of the project. During construction, we will attend monthly construction meetings with the contractor and the County to review any submittals or RFIs and discuss issues that may arise during construction. We use a variety of software programs for scheduling and coordination as well as a central location to host documents for review and to track and maintain records of any comments or changes.

PRIVATE ENGINEERING FIRM QUALIFICATION

McAdams most recent private engineering firm qualification was approved by NCDOT and is valid until April 22, 2022.

CONFLICT OF INTEREST

To the best of our knowledge and belief, neither McAdams nor any of its employees has any potential conflicts of interest due to any other clients, contract or property interests arising from this contract. As is our standard procedure, we will evaluate the project during scoping negotiations for any potential conflicts of interest and immediately notify you in the event such conflicts exist or may appear to exist.

Please do not hesitate to reach out if I can provide any further information at thomas@mcadamsco.com or 919. 632. 2600. McAdams thanks you for your consideration of our credentials and is hopeful for the opportunity to work with Henderson County on this exciting project.

Sincerely,

MCADAMS



Iona Thomas, AICP / Vice President, Strategy + Public Client Development



EB-5904, Durham Rail Trail

Bicycle + Pedestrian Trail
> Durham, NC



Locally Administered Project

The McAdams team is working closely with City of Durham staff to design this 1.75-mile trail that will connect pedestrians and cyclists from North Durham to the Ellerbee Creek Trail network and to downtown. The trail will have proximity to the American Tobacco Trail and to major transportation nodes, such as the Amtrak Station and Durham Station. The trail will have a paved, multi-use, Americans with Disabilities Act (ADA) accessible route. The trail will pass through the South Ellerbee Creek Stormwater project. At least two stream crossings as well as a restored rail bridge section are all features of the project and will include accommodations for potential access spurs to adjacent neighborhoods.

> PROJECT OWNER:
City of Durham

> PROJECT DATES:
Start: 05/2021
End: 10/2022 (est.)

> REFERENCE:
Nia Rodgers
City of Durham
984. 209. 2671
nia.rodgers@durhamnc.gov

> PROJECT COSTS:
Construction: \$6.7 M
Design Fee: \$966,953

> PROJECT SIZE:
1.75 miles

> SERVICES:
Surveying
SUE
Trail Design
Stormwater
Public Engagement
Planning
Landscape Arch.



Junction 1504 + Charlotte Rail Trail Connection

> Charlotte, NC

Located near Uptown and South End neighborhoods, Junction 1504 is an 11-acre site with 250 units positioned within steps of the City's abundant green spaces, light rail lines and major employment centers. The design included 1,500 linear feet of the Charlotte Rail Trail, which forms its eastern boundary. McAdams executed design to include the greenway and worked closely with the City of Charlotte to achieve a seamless addition to the Charlotte Rail Trail. This section of trail includes decorative lighting, landscaped borders and ornamental fencing to create a buffer with the rail line for greenway users and residents.

> PROJECT OWNER:
JLB Partners
Southeast

> PROJECT DATES:
Start: 01/2011
End: 12/2016

> REFERENCE:
Scott Schlosser
JLB Partners
Southeast
678. 855. 7902
sschlosser@jlbpartners.com

> PROJECT COSTS:
Construction: \$30 M
Design Fee: \$135,000

> PROJECT SIZE:
11.1 acres, 250 units
1,500 LF of trail

> SERVICES:
Civil Engineering
Due Diligence
Surveying
Site Planning



Mendota Trail

Master Plan
> Bristol, VA

TPD's work included economic forecasting, tourism development, trail roadway crossings and Timber Trestle maintenance and repair plans. TPD also assisted in developing trail alignments, stakeholder coordination and project materials and documentation. TPD led coordination with the Virginia Department of Transportation and Bristol Engineering staff regarding trail crossings and related roadway and intersection modifications. A number of TPD's timber trestle and roadway crossing recommendations have since been implemented / integrated into future projects that are in design and construction. With respect to economic forecasting and tourism development, TPD developed a resource list of strategies that the Friends of Southwest Virginia can deploy as the trail develops and the number of trail users increases.

> PROJECT OWNER:
Friends of Southwest Virginia

> PROJECT DATES:
Start: 2020
End: 2021

> REFERENCE:
Emily Mayo
Friends of Southwest Virginia
276. 492. 2400
emayo@friendsofswva.org

> PROJECT COSTS:
Planning Fee: \$19,095

> PROJECT SIZE:
12.5-mile trail plan

> SERVICES:
Strategic Planning
Feasibility Studies
Data Collection
Economic Forecasting
Public Outreach
Base Mapping



> PROJECT OWNER:
Henderson County

> REFERENCE:
Autumn Radcliff
Henderson County
828. 694. 6558
aradcliff@hendersoncountync.gov

> PROJECT COSTS:
Design Fee: \$11,700

> PROJECT SIZE:
8 miles

> SERVICES:
Traffic
Public Engagement
Cost Estimating
Alignment Evaluation
Support
NCDOT Coordination
Road Crossing Recom.

Oklawaha Greenway
North + South Extension Feasibility Studies
> Henderson County, NC

Henderson County sought to study the feasibility of a northern and southern extension of Oklawaha Greenway. The goal of the northern extension is to connect to a County-owned park and other destinations, and the goal of the southern extension is to provide connectivity to the Blue Ridge Community College and nearby educational institutions. TPD provided support services, including identifying barriers and opportunities to trail alignments; recommending and evaluating alternatives; and development of an action plan. TPD led the traffic-related components of the project where proposed trail alignments interact with the road and bridge network. TPD provided cost estimates for these on-street bicycle / pedestrian accommodations. TPD also furnished existing conditions data, including walking and bicycle rates, traffic volumes, crash data and demographic data.



John Rock Trail / Cat Gap Loop
Wayfinding Signage
> Brevard, NC

Studio Main led The Pisgah Conservancy through a comprehensive process to develop conceptual wayfinding signage; identify ideal placement to ensure safety; design gateway, directional, wayfinding, educational and kiosk signage; and provide construction documents for phased implementation. With multiple crossings with Butter Gap Trail and the Art Loeb Trail, the John Rock Trail and Cat Gap Loop were in need of directional signage to alert trail users of their location and distance to their destination. With over 400 miles of trails in Pisgah National Forest and over 500,000 acres, Studio Main, in conjunction with The Pisgah Conservancy, provided natural trail surface signage standards that can be implemented in phases throughout all trails.

> PROJECT OWNER:
The Pisgah Conservancy; Cradle of Forestry

> REFERENCE:
John Cottingham
The Pisgah Conservancy
828. 782. 1418
johnc@pisgahconservancy.org

> PROJECT COSTS:
Design Fee: \$16,000

> PROJECT SIZE:
5.7 miles

> SERVICES:
Master Planning
Trail Design
Wayfinding Signage
Placement Plan

> PROJECT DATES:
Start: 04/2020
End: On-going



EB-5782, McAlpine Creek
Greenway Design
> Mecklenburg County, NC



Locally Administered Project

McAdams worked with Mecklenburg County to deliver a critical piece of the McAlpine Creek Greenway. As part of the Carolina Thread Trail system, they will connect across southern Charlotte, creating key east-west connections. This section of trail connects several neighborhoods on both sides of the creek, as well as provides safe access to sidewalk networks to both Charlotte Country Day School and McAlpine Elementary School. McAdams provided full construction documents to the County for two-and-a-half miles of trail that include two bridge crossings, several sections of boardwalk with concrete decking and additional parking at a new trailhead.

> PROJECT OWNER:
Mecklenburg County

> REFERENCE:
Karen Weston-Chien
Mecklenburg County
980. 314. 2516
karen.weston-chien@mecklenburgcountync.gov

> PROJECT COSTS:
Construction: \$6.3 M
Design Fee: \$616,000

> PROJECT SIZE:
2.57 miles

> SERVICES:
Planning
Surveying
Natural Systems
Landscape Arch.
Greenway Design
Civil Engineering
Flood Modeling
Construction Admin.



> PROJECT OWNER: Mecklenburg County

> REFERENCE: Jennifer Brooks
Mecklenburg County
980. 314. 2428
jennifer.brooks@mecklenburgcountync.gov

> PROJECT COSTS: Construction: TBD
Design Fee: \$673,000

> SERVICES: Civil Engineering
Surveying
SUE
Flood Modeling
Drainage Design
Natural Resources

> PROJECT DATES: Start: 07/2020
End: 08/2022 (est.)

> PROJECT SIZE: 3 miles

Sugar Creek Greenway

Mecklenburg County, Greenway On-call
> Charlotte, NC

This project will create a new greenway corridor down Sugar Creek, from Billy Graham Parkway, down past South Tryon Road in southeast Charlotte. The project will connect several neighborhoods with parks, sidewalks and businesses in the Eagle Lake and old Coliseum Centre area, as well as the farmers market and new affordable housing developments. The trail will eventually connect with the Irwin Creek Greenway, allowing the public to ride or walk to Uptown. The project will include a new trailhead off of South Tryon Road and multiple bridges across the creek.



> PROJECT OWNER: Town of Cary

> REFERENCE: David Mason
Town of Cary
919. 462. 3863
david.mason@townofcary.org

> PROJECT COSTS: Construction: \$1.25 M
Design Fee: \$175,000

> SERVICES: Pedestrian Boardwalk
Greenway Alignment
Earthen Dam Impacts
Civil Engineering

> PROJECT DATES: Start: 09/2009
End: 05/2014

> PROJECT SIZE: 2,500 LF (trail)
200 LF (boardwalk)

Tryon Road Greenway

Scenic Greenway Extension
> Cary, NC

McAdams worked with the Town of Cary to design approximately 2,500 linear feet of greenway trail around Macedonia Lake with a 200-linear foot boardwalk. The project required the mitigation of impacts to an earthen dam, allowing for a trail connection to an existing pedestrian tunnel under Tryon Road. McAdams provided alternative trail alignment scenarios that outlined opportunities and constraints in order to arrive at a cost-effective solution that provided for experiential enjoyment. The project team facilitated a number of stakeholder and public input meetings to better understand the concerns and desires of the community, and to achieve consensus. Input from these meetings was incorporated into the ultimate trail alignment. The project required a complex permitting process which McAdams successfully navigated.



> PROJECT OWNER: Henderson County

> REFERENCE: Betsy Gerwig
USDA
828. 697. 4949
betsy.gerwig@usda.gov

> PROJECT COSTS: Fee: \$400,000

> SERVICES: Creek Restoration
Permitting

> PROJECT DATES: Start: 2021
End: 2022 (est.)

> PROJECT SIZE: 2,000 LF

Lewis Creek Restoration

Edneyville Community Center
> Henderson County, NC

Lewis Creek will be restored to improve water quality, aquatic habitats and community education and access to a healthy riparian ecosystem. The existing stream is severely eroding with poor habitats and lack of floodplain functions. This project requires coordination with the Henderson County Parks and Recreation staff and private property owners adjacent to the stream. Outcomes of this project will include enhanced water quality and aquatic habitats, in addition to improved natural recreation and education opportunities for the park users and local elementary school students.



U-4712, US 23 Business Improvements
> Haywood County, NC

This project will improve the existing US 23 Business (South Main Street) corridor from SR 1164 (Hyatt Creek Road) to US 276 (Pigeon Street). HDR prepared a capacity analysis, crash study and functional preliminary design for the proposed roadway improvements, which included widening, adding medians and improving pedestrian and bicycle facilities along the corridor. HDR made recommendations for intersection improvements where traffic analysis indicated improvements were deemed necessary.

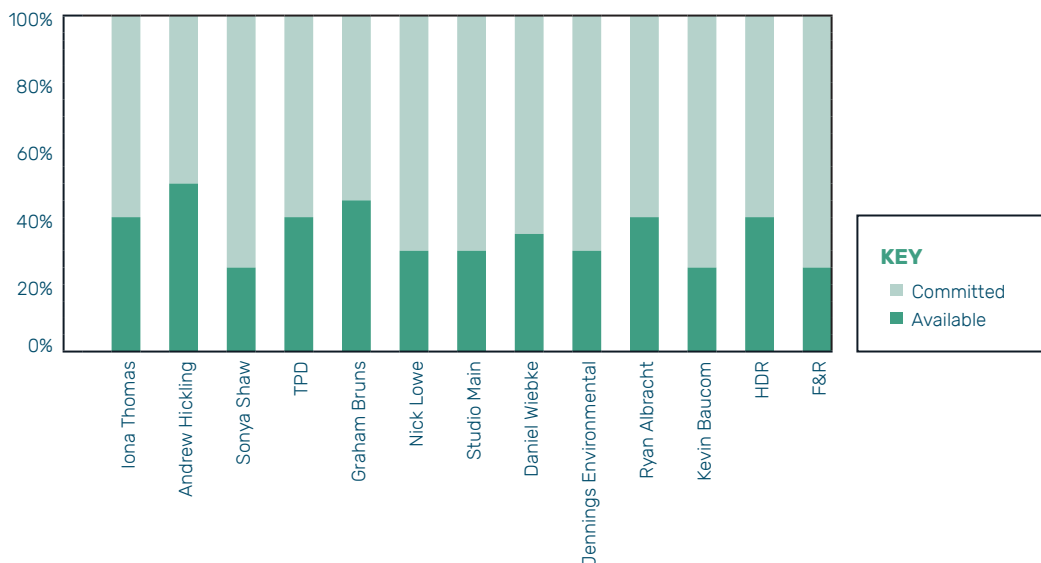
> PROJECT OWNER: NCDOT	> REFERENCE: Barry Mosteller NCDOT 828. 586. 2141 bdmosteller@ncdot.gov	> PROJECT COSTS: Construction: \$45 M	> SERVICES: Capacity Analysis Crash Study Functional Preliminary Design
> PROJECT DATES: Start: 07/2017 End: 09/2023 (est.)		> PROJECT SIZE: 2.1 miles	

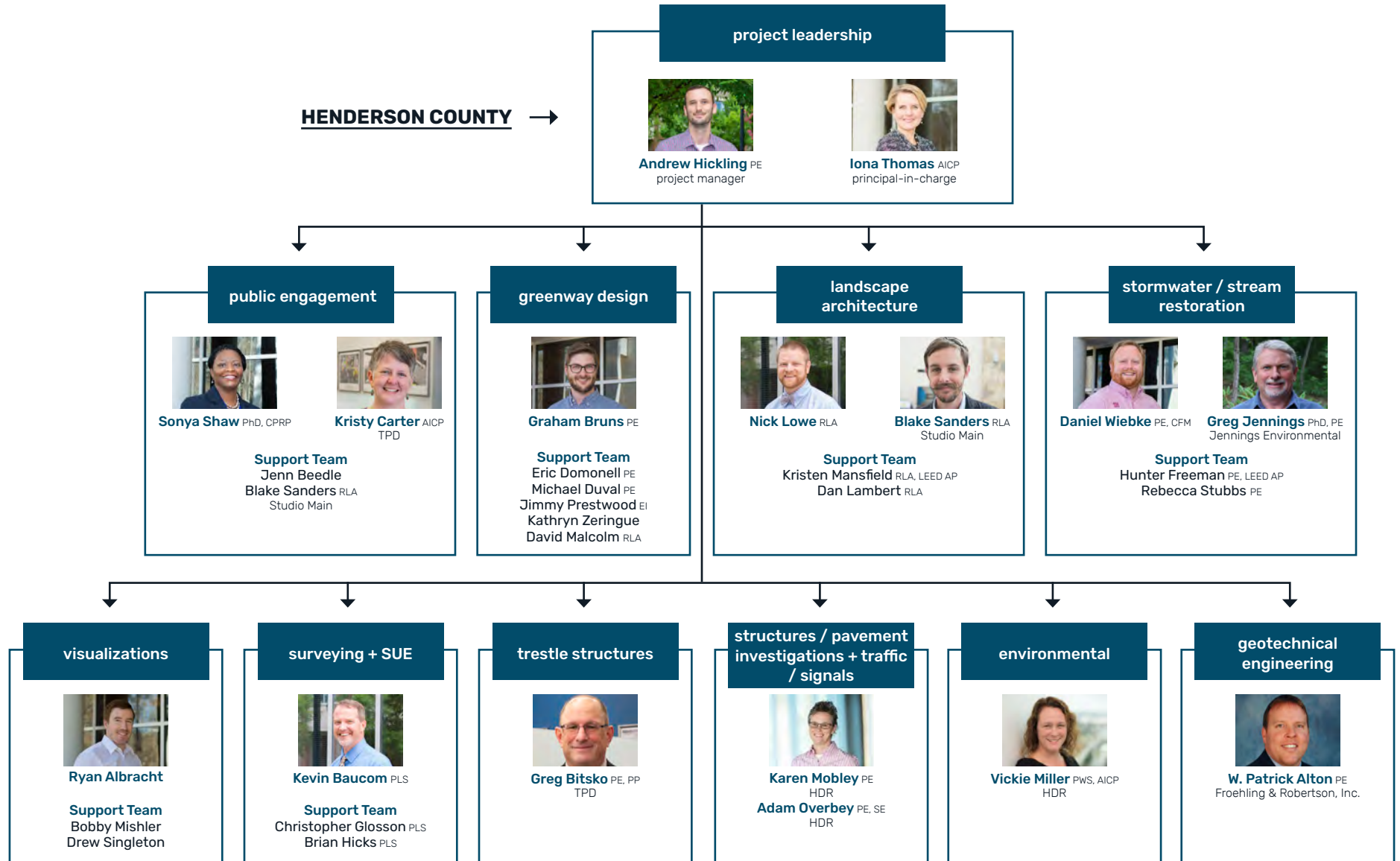
TEAM EXPERIENCE > **CHAPTER 3**

AVAILABLE WORK FORCE
CAPACITY CHART

The proposed project team members are available to begin work immediately upon notice-to-proceed. With a firm comprised of over 350 professionals and the latest equipment and technology, the McAdams team has the capacity to perform services on the required schedule.

McAdams is committed to having the staff, equipment and resources available for the duration of Henderson County’s Ecusta Rail-Trail project schedule. When McAdams undertakes a project, our goal is to meet project milestones and deadlines within the defined budgets. When we develop and prepare detailed project schedules, we commit to staff availability that will ensure project work efforts will meet project schedules. McAdams has the resource capacity to handle both short- and long-term work. We can also easily mobilize our resources to assist in expediting schedules or support any unusual or unforeseen challenges that may arise during the course of the project.







Iona Thomas AICP
 McAdams > Principal-in-Charge
 Durham, NC

Iona is a certified planner who combines her passion for greenways with extensive technical expertise and management skills to design trails throughout the Southeast. She is a passionate supporter of greenways and believes they play an important role in economic development, creating healthy communities, providing alternate modes of transportation and connecting people with nature. Iona is a national leader in greenways, serving on the East Coast Greenway Board of Trustees, co-chair of the biennial Southeast Greenway Summit and an active member of NCDOT's Bicycle and Pedestrian Policy Committee. **Relevant Experience:** EB-5894, Durham Rail Trail / Durham, NC; EB-5904, Black Creek Greenway / Cary, NC; EB-4702, Snyder Rail Trail Greenway, Phases I + II / Albemarle, NC*; EB-5121A Cross City Trail, Phase I / Wilmington, NC*

> EDUCATION:
 B.A. in Government,
 University of South Carolina

Warwick Fellow, Warwick
 University, United Kingdom

> REGISTRATIONS:
 AICP: #018503

*Experience under prior
 association



Andrew Hickling PE
 McAdams > Project Manager
 Charlotte, NC

Andrew brings over 14 years of combined civil engineering experience on transportation and public infrastructure projects for state and local government clients across the Mid Atlantic and Southeastern US. Prior to joining McAdams, Andrew most recently worked as a project manager and engineer in a practice dedicated to the planning and design of greenways and other bicycle and pedestrian facilities. Andrew's relevant experience consists of planning, feasibility studies, public engagement, design, cost estimation and construction administration services for on- and off-street active transportation facilities. **Relevant Experience:** Sugar Creek Greenway / Charlotte, NC; Mallard Creek Greenway / Charlotte, NC; EB-5894, Durham Rail Trail / Durham, NC; EB-5937, Book Walk + EB-5938 Book Walk South / Hickory, NC*; EB-5542 Peavine Rail Trail Feasibility Study / Marion, NC*; EB-5827 Fonta Flora State Trail / Burke County, NC*

> EDUCATION:
 B.S. in Civil Engineering,
 Virginia Polytechnic Institute
 + State University

> REGISTRATIONS:
 PE: NC #042301;
 VA #0402050098

*Experience under prior
 association



Sonya Shaw PhD, CPRP
 McAdams > Public Engagement Lead
 Durham, NC

Sonya has over 30 years of experience in parks, recreation and cultural resources, serving as parks and recreation director in the municipalities of Goldsboro and Garner and division manager in Chapel Hill. Sonya is recognized for her work in leading diverse communities, with research focusing on meeting the needs of underserved populations. Sonya is experienced in community engagement strategies; consensus building; and collaborative approaches. She has worked with communities on comprehensive parks and recreation planning; park master planning; organizational and staff planning; recreation facilities; operational planning; and greenway planning. Sonya is known for her leadership and service at the local, State and national levels. **Relevant Experience:** EB-5894, Durham Rail Trail / Durham, NC; Yeorgan Park / Garner, NC; West Pinehurst Park, Master Plan / Pinehurst, NC

> EDUCATION:
 B.A. in Leisure Studies +
 Recreation Administration,
 UNC Chapel Hill

M.P.A., NC Central University

Ph.D. in Parks, Recreation +
 Tourism Management, NC
 State University

> REGISTRATIONS:
 CPRP



Kristy Carter AICP
 TPD > Public Engagement
 Asheville, NC

Kristy serves as a senior project manager for TPD's Traffic Engineering Services department. Kristy has more than two decades of experience in community and transportation planning. She is a skilled community planner, having designed and executed transportation and community impact projects in more than dozens of communities. Her expertise includes project planning, analysis and public engagement. Kristy also leads TPD's greenway / trail economic impact effort through market analysis, trial intercept surveys and helping communities plan to measure a greenway's impact over time. **Relevant Experience:** Swannanoa River Greenway / Asheville, NC; Rhea County, Trails / Rhea County, TN; Village of Flat Rock, Bicycle + Pedestrian Connections Study / Flat Rock, NC; Town of Fletcher, Comprehensive Bicycle + Pedestrian Plan / Fletcher, NC; Jackson County, Comprehensive Pedestrian Plan / Jackson County, NC

> EDUCATION:
 B.S. in Recreational Therapy,
 Western Carolina University

M.P.A., Public Affairs, Western
 Carolina University

> REGISTRATIONS:
 AICP: #274446



Graham Bruns PE
 McAdams > Greenway Design Lead
 Raleigh, NC

Graham is a greenway manager within the Civic Spaces group at McAdams. He is passionate about creating transportation options for people of all ages and abilities and strives to create balanced and equitable thoroughfares that are safe, cost-effective and enjoyable to use. His skills related to designing bicycle and pedestrian infrastructure include developing cost estimates from planning stages to final design; bridge siting analysis; greenway plan and profile design; signing / striping; recognizing dangerous bicycle / pedestrian / automobile interactions; and application of American Association of State Highway Transportation Officials and National Association of City Transportation Officials design guidelines. **Relevant Experience:** EB-5782, McAlpine Creek Greenway Design / Mecklenburg County, NC; EB-5894, Durham Rail Trail / Durham, NC; EB-5904, Black Creek Greenway / Cary, NC; Cross Charlotte Trail, Mallard Creek Greenway / Charlotte, NC; Sugar Creek Greenway / Charlotte, NC

> EDUCATION:

B.S. in Civil Engineering,
 Transportation Concentration,
 NC State University

> REGISTRATIONS:

PE: NC #042574



Nick Lowe RLA
 McAdams > Landscape Architecture Lead
 Charlotte, NC

Nick is a senior landscape architect and park planner with McAdams with over 16 years of experience in the planning and design industry. Nick has managed complex parks and recreation master plan projects for public agencies throughout the Carolinas and has extensive experience in planning outdoor environments and public open spaces. His recent endeavors have led to working with local governments to create high-performance public spaces that include phased master plans. His focus on creating parks that reflect place through sustainable design and space making helps clients deliver truly authentic designs. **Relevant Experience:** Fites Creek, Pedestrian Crossing / Mount Holly, NC; Dutchmans Creek, Pedestrian Crossing / Mount Holly, NC; Liberty Park, Phase II Improvements / Mooresville, NC; Pearl Street Park, Renovations / Charlotte, NC

> EDUCATION:

B.S. in Horticulture, NC State
 University

M.L.A., Virginia Tech

> REGISTRATIONS:

RLA: NC #1959; SC #1371



Blake Sanders RLA
 Studio Main > Landscape Architecture + Public Engagement
 Pelzer, SC

Blake has over 15 years of experience as a project manager / senior landscape architect for regional and international design firms. Blake has taken streetscapes, trails and parks from concept to construction and is known for his innovative design and construction strategies. His experience includes community-oriented planning and design through charrettes; streetscape improvement planning; corridor studies; bicycle and greenway planning; and municipal, campus, park and recreation design. **Relevant Experience:** Ecusta Trail / Hendersonville, NC; Pisgah National Forest / Brevard, NC; Myrtle Beach Rail-Trail / Myrtle Beach, SC; Sawmill Branch Rail-Trail / Summerville, SC; Euclhee Creek Greenway / Columbia County, GA

> EDUCATION:

B.L.A., Clemson University

> REGISTRATIONS:

RLA: SC #1244



Daniel Wiebke PE, CFM
 McAdams > Stormwater / Stream Restoration Lead
 Durham, NC

Daniel has provided stormwater design and oversight all across North Carolina. Having a decade of experience, he has worked on many aspects of the stormwater industry, including drainage system design and analysis; green stormwater infrastructure; dam management and rehabilitation; permitting tool development; and very deep roots in stormwater control measure design and floodplain management. His additional experience includes greenway design and basic water and sewer layout in rural areas when accompanying stormwater. **Relevant Experience:** EB-5894, Durham Rail Trail / Durham, NC; EB-5904, Black Creek Greenway / Cary, NC; Sugar Creek Greenway / Charlotte, NC

> EDUCATION:

B.S. in Civil Engineering, NC
 State University

Master of Biological +
 Agricultural Engineering, NC
 State University

> REGISTRATIONS:

PE: NC #043300

CFM: #14-0542



Greg Jennings PhD, PE
 Jennings Environmental > Stormwater / Stream Restoration
 Asheville, NC

Greg is a professional engineer with 30 years of experience in ecosystem restoration and water resources management. As founding principal of Jennings Environmental PLLC, he provides consulting services on ecosystem restoration planning, design, implementation and evaluation. Through partnerships with businesses, agencies, non-profit groups and universities, he provides leadership and technical support for ecosystem restoration implementation and evaluation throughout North Carolina and surrounding states. Consulting services include feasibility studies; hydrologic and hydraulic analyses; watershed master planning; grant-writing; stakeholder engagement and education; design optimization; environmental permitting; construction administration; vegetation establishment; adaptive management; and post-implementation monitoring. **Relevant Experience:** Lewis Creek Restoration, Edneyville Community Center / Henderson County, NC; East Fork French Broad River Bank Stabilization / Brevard, NC; Davidson River Enhancement / Brevard, NC; Robinson Creek Restoration / Asheville, NC

> EDUCATION:
 B.S. in Engineering,
 Pennsylvania State University

M.S. in Engineering,
 Pennsylvania State University

PhD, Engineering, University
 of Nebraska

> REGISTRATIONS:
 PE: NC #25454; SC #32505;
 VA #0402061692



Ryan Albracht
 McAdams > Visualizations Lead
 Raleigh, NC

Ryan is a landscape architect in training who specializes in three-dimensional visualization. He joined McAdams shortly after receiving his Master of Landscape Architecture from Kansas State University in 2016, and his specialties include interactive graphics, procedural modeling, animations and virtual reality experiences. Furthermore, he has past work experience in horticulture, construction and urban design. He has worked on a wide variety of projects and enjoys finding innovative methods to improve our design process. **Relevant Experience:** CAMPO, Triangle Bikeway Study / Raleigh, NC; Yeargan Park / Garner, NC; City Lake Park / High Point, NC; Davie County Community Park / Mocksville, NC

> EDUCATION:
 M.L.A., Kansas State
 University



Kevin Baucom PLS
 McAdams > Surveying + SUE Lead
 Charlotte, NC

Kevin has 23 years of surveying experience and joined McAdams in 1998. He currently serves as the director of Geomatics for the Charlotte market. During his career in surveying, Kevin has managed a wide variety of projects in various market sectors, including municipal, energy, higher education and private land development. He leads his team by consistently meeting project deadlines, delivering high quality work and focusing on client service through responsiveness and the flexibility to meet the specific needs of each client. **Relevant Experience:** EB-5782, McAlpine Creek Greenway Design / Mecklenburg County, NC; Sugar Creek Greenway / Charlotte, NC; Pearl Street Park, Renovations / Charlotte, NC; New Centre Park, Phase II / Clover, SC; Carter-Ann Street, Stormwater Improvements / Asheville, NC

> EDUCATION:
 A.A.S. in Land Surveying +
 Civil Engineering Technology,
 Central Piedmont Community
 College

B.S. in Mathematical
 Sciences, UNC Chapel Hill

M.B.A., Queens University

> REGISTRATIONS:
 PLS: NC #L-4275;
 SC #L-22748; VA #L-2808



Greg Bitsko PE, PP
 TPD > Trestle Structures
 Asheville, NC

Greg's expertise in timber bridges and trestles was developed during his 18 years working in the Monmouth County Engineering department in New Jersey. Monmouth County maintained 196 bridges over 20 feet in length, 400 structures between five feet and 20 feet in length and 300 other smaller drainage structures. Of the nearly 600 structures over five feet in length, more than 70% were of timber construction to varying degrees. Up through the mid-1990s, Monmouth County was designing new bridges using timber bulkhead abutments (trestle style) and timber piles with more modern concrete superstructures and decks. Therefore, Greg dealt with the new timber construction as well as the repair and rehabilitation of timber structures on a daily basis at the County. **Relevant Experience:** Mendota Trail Master Plan, Timber Trestle + Road Crossing Preliminary Assessments / Mendota, VA to Bristol, VA; On-call Professional Engineering Services + Construction Inspection for Various Improvement Projects / Monmouth County, NJ; Professional Engineering + Planning On-call Services / Mercer County, NJ

> EDUCATION:
 B.S. in Civil Engineering,
 Lehigh University

Juris Doctor, Rutgers
 University

> REGISTRATIONS:
 PE: NJ #24GE03523800;
 PA #PE74136; FL #67905;
 AZ #47026; MD #45031

PP: NJ #33LI00498600



Karen Mobley PE
 HDR > Structures / Pavement Investigations + Traffic / Signals
 Raleigh, NC

Karen joined HDR in 2009 with experience in surface transportation and construction projects. Prior to joining the firm, she was employed with other private consultants and worked as a civilian contractor in Kabul, Afghanistan for a year. Her responsibilities include bridge design, bridge load testing, field inspections, photo documentation, construction plan production, repair recommendations, condition grading of all deteriorated items and bridge ratings and analyses. **Relevant Experience:** Bridge on Goodman Road over Coddle Creek / Cabarrus County, NC; Bridge on SR1189 over Cane Creek / Mitchell County, NC; Dan Cameron Bridge / New Hanover County, NC

> EDUCATION:
 B.S. in Civil / Structural Engineering, NC State University

B.S. in Mathematics + Computer Science, Methodist College

> REGISTRATIONS:
 PE: NC #036214; KY #27593; VA #0402048725; FL #76647; SC #342777; GA #PE043489



Vickie Miller PWS, AICP
 HDR > Environmental
 Raleigh, NC

Vickie is a senior environmental scientist / planner with HDR in Raleigh, North Carolina. Vickie has over 22 years of experience leading and preparing NEPA / SEPA documentation for complex transportation, water /wastewater and other utility projects. She has prepared environmental assessments, environmental impact statements, categorical exclusions, natural resources technical reports, CWA permits and riparian / wetland restoration plans for several State Departments of Transportation (NCDOT, VDOT, TDOT); North Carolina Ecosystem Enhancement Program; and numerous federal, municipal and private clients. **Relevant Experience:** R-2609, US 401 Corridor Studies / Wake County, NC; R-2250, Greenville Bypass Design-build / Greenville, NC; East Lexington Avenue - Greensboro Road Feasibility Study / High Point, NC

> EDUCATION:
 B.S. in Environmental Sciences / Studies, UNC Chapel Hill

M.S. in Natural Resources, NC State University

> REGISTRATIONS:
 PWS: NC #1962
 AICP: NC #022709



W. Patrick Alton PE
 Froehling & Robertson, Inc. > Geotechnical Engineering
 Raleigh, NC

Patrick has 18 years of experience in a diverse selection of geotechnical engineering projects. As transportation services manager, his duties include overall management of F&R's on-call geotechnical contract with NCDOT; management of administrative, field and engineering staff; planning subsurface investigations and laboratory testing programs; evaluation and design of geotechnical field and laboratory studies; geotechnical engineering analyses for shallow and deep foundations, including axial and lateral deep foundation analysis, embankment design and stability analysis, pavement design and foundation settlement evaluation; preparation of geotechnical reports; and overall project management. Patrick has performed these services in support of dozens of NCDOT-owned roadway and bridge projects. **Relevant Experience:** NCDOT, I-26 Improvements / Buncombe + Henderson Counties, NC; R-5797, Upgrade US 70 to Interstate Standards / Columbus County, NC; NCDOT, Express Design-build Bridge Replacements / Statewide, NC

> EDUCATION:
 B.S. in Civil Engineering, NC State University

> REGISTRATIONS:
 PE: NC #33758;
 VA #0402062566



PROJECT APPROACH**LISTEN + ENGAGE**

The McAdams approach begins with carefully listening to the County to understand the vision for the project. A scoping session will include County staff from all relevant departments (engineering; planning; parks and recreation; and public works / facility maintenance) to set expectations for each element of the project. Our team will also include a site walk with staff to ground the whole project team with a detailed look at challenges and opportunities.

ANALYZE + DESIGN

Through the lens of our design experience, the McAdams team will evaluate the trail corridor for design criteria factors, calculate the impact of decision alternatives and re-balance the design. Every project has key elements that influence the final design more than others. For this project, the following will likely be significant drivers: creek crossings and wetland impacts; interaction with roadway traffic and adjacent properties; stormwater; and rehabilitation of existing trestle structures. Our team will analyze the design alternatives for constructability; impacts to schedules; property and permitting; and the overall user experience. We will develop a decision matrix to support County decision making that includes conceptual level costs for each alternative. The foundation of our design will be accurate documentation of field conditions, including:

Topographic + Boundary Surveys: Accurate surveys are the foundation of all well-designed projects. McAdams has one of the largest and most skilled surveying teams in the State. This team of professionals will prepare all easement exhibits and plats for any additional right-of-way, if needed.

SUE: We will identify all utilities within the project corridor and coordinate with utility providers to confirm locations, discuss conflicts and negotiate any necessary utility relocation. Our design will attempt to minimize all utility conflicts.

Wetlands Delineation: We will delineate any existing streams and wetlands within the project corridor and determine if there are any jurisdictional features that will require avoidance and/or mitigation. Our team of environmental scientists and field personnel will flag wetlands and work with both the State and US Army Corp of Engineers to make jurisdictional determinations.

Threatened + Endangered Species Survey: We will conduct a thorough review of the corridor for threatened and endangered species, including the US Fish and Wildlife Service (USFWS) list of endangered species; threatened species; Federal species of concern; candidate species for Henderson County; and the North Carolina Natural Heritage Program (NCNHP) list of State and Federal protected species for Henderson County.

Trestles: Greg Bitsko, PE with TPD, will lead the timber trestle work. He has over 37 years of experience and is an expert in timber bridges and trestles. He worked in New Jersey for 25 years on the structural design and maintenance of nearly 600 structures, of which, more than 70% involved timber construction. He dealt with new timber construction as well as the repair and rehabilitation of timber structures on a daily basis, including rail trail structures. He recently completed a timber trestle rehabilitation plan for the Mendota Trail (rail trail) near Bristol, Virginia, and several of his recommendations have been implemented in the short six-month span since project completion in early 2021.

We will work with the County early to identify the potential for significant cost savings for design and construction on the timber trestle approach. We start with a hands-on field inspection and findings report to identify a trestle action plan with repair of defects prioritized into three categories:

- **Immediate:** Those repairs that are essential to safely open the structure for trail use.

- › **Short-term:** Those repairs that should be performed within the next five years to address on-going deterioration, which may eventually affect trail usage or could later lead to more expense to repair.
- › **Long-term:** System preservation including minor repairs (not mission critical, but necessary to prevent long-term degradation) and repairs that are more extensive / expensive (but not essential within the first five years of use.)

Previous study recommendations included additional nondestructive testing, such as dye penetrate and magnetic particle tests along with coring, ultrasonic scanning and acoustic emission monitoring. **We believe that this additional testing is unnecessary for the intended purpose of the trestles for trail traffic and potentially light vehicle use. The following approach has the potential for significant cost and time savings:**

- › Defects to be addressed can be adequately identified through visual means, combined with hammer sounding and awl probing. Limiting the more expensive testing will reduce overall design costs significantly. We believe this is a reasonable approach as these structures were originally designed to carry heavy railroad locomotives. Loads associated with typical trail traffic (including light vehicles) are only a fraction of the design loads. While one or more stringers could exhibit extensive decay, the remaining stringers may be more than adequate to carry trail loads. For the Mendota Rail-Trail project, entire bents were removed and the trestles were still capable of carrying construction vehicles.
- › Given nearly all the trestles share common details, we would develop typical repair details for common work items such as abutment rehabilitation; new decking and rails; and structural work such as concrete patching, timber sistering and splicing. **This reduces cost and eliminates the need to develop 16 site-specific repairs in detail.**
- › We recommend modifying the deck design that was proposed and installing new flashing and deck ties. This will provide a more secure attachment for the railings, allow for simplified shimming to address superelevation and results in fewer holes in the stringers (reducing the opportunity for decay).

REFINE + COORDINATE

While it is easy to follow an existing rail line on a map for a rail trail, it takes experience, specialized expertise and fieldwork to create a project that can be designed, permitted and constructed within a municipality's established budget. Effective design is an exercise in balancing competing forces. The following factors contribute to developing a deep understanding of the factors that shape each trail alternative:

Trail Design: We look at trail design not as a small road as a transportation engineer might, but as an experience for end-users to be active and enjoy the outdoors. Our team strives to provide a safe, comfortable and accessible trail for local residents and visitors alike.

Stormwater / Hydraulics: McAdams has a strong reputation as Statewide leaders in hydraulic modeling and stormwater design. We are problem solvers with over 42 years of experience working with municipalities to design stormwater solutions that comply with regulations, address nuisance flooding and do not place an undue maintenance burden on our clients. We understand that the project corridor may be threatened by erosion caused by numerous FEMA-studied streams, including Shaw Creek, Wash Creek and the French Broad River where these channels flow under and alongside the trail. We are aware of many areas of stream scour and poorly functioning culverts where improvements to streambanks and crossings will greatly enhance the sustainability of the trail and stream ecosystems. The project team will calculate shear stresses and velocities at the problem areas to determine appropriate stabilization solutions to ensure long-term success. We will prioritize natural solutions for stream stabilization, including streambank bioengineering techniques and natural channel design morphology adjustments. We understand that there may be situations where structural stabilization (e.g. articulated concrete block mattresses) will be necessary to protect critical infrastructure in a constrained location. Our solutions will be

prioritized to be most protective of the trail and stream while considering life-cycle costs. We are experienced at working within previously acquired rights-of-way or easements and understand the impact additional easement acquisition can have on project schedules and budget. We will work with the client to determine the best stabilization approaches that fit the project constraints and objective.

Safety: This project will be designed for users of all abilities and ages and meet ADA compliance by using comfortable grades and cross slopes. This project will require at-grade roadway crossings, and our design will include high-visibility crossings, adequate sight distance, proper signage and other advance warning measures to ensure user safety at these conflict points with traffic.

STAKEHOLDER / COMMUNITY ENGAGEMENT

The COVID-19 pandemic has changed the way people work, move and interact with each other. McAdams has invested in resources that help gather people for collaboration and input without in-person meetings. We have also created on-demand resources that provide information and input tools at the convenience of the public. As a result, we have seen higher participation across small, local projects and multi-county regional projects during the pandemic. Virtual techniques do miss some voices and we supplement that type of outreach with small focus groups of underrepresented community members. We also increase the number of one-on-one phone conversations with community leaders to create more inclusive programs and connect with hard-to-reach social groups. These tools will continue to serve our clients and communities well until the pandemic resolves. We will take lessons learned and use a hybrid approach that mixes virtual and on-demand outreach with in-person events to capitalize on what we have learned during the pandemic to reach more people.

GRAPHIC COMMUNICATION ([check out an example here: https://vimeo.com/553048796](https://vimeo.com/553048796))

While those of us in the design profession interact with maps and plans every day, many people in the communities we work with rarely need to do so. We strive to make our materials easy to understand, with clear landmarks and road networks identified so citizens can find their homes, desired destinations and their favorite greenway. Additionally, McAdams has a specialized team of graphic communicators who develop presentations, 3D models, photomontages and video fly-throughs to help various audiences understand proposed alignments. Because the public and elected officials can see a potential project with these tools, they are able to provide meaningful feedback.

PERMIT + ACQUIRE

As the project moves through design, our team will prepare applications and coordinate with permitting agencies to advance towards project construction. This work includes, but is not limited to, the following:

- › State Historical Preservation Office (SHPO) Coordination;
- › NEPA Documentation / Categorical Exclusion;
- › 401 / 404 Nationwide Permit;
- › Floodplain Development Permit;
- › NCDOT Permitting (encroachment agreements and driveway permits on state-maintained roads); and
- › County Permitting (building permits for structures and driveway permits on locally maintained roads).

BID + CONSTRUCT

Our team has many years of experience bidding local, State and Federally funded projects and obtaining NCDOT approval of final design plans, specifications and estimates (PS+E) package. Our team will support the County's bid process from advertising through bid certification. This includes any technical addenda to the bid, running pre-bid and bid-opening meetings, bid certification and preparation of final bid tab. We can also provide construction administration services including attending monthly construction meetings, reviewing submittals and responding to requests for information (RFIs) from the contractor.

	LISTEN + ENGAGE	ANALYZE + DESIGN	REFINE + COORDINATE	PERMIT + ACQUIRE	BID + CONSTRUCT
SCOPE / MILESTONES	<ul style="list-style-type: none"> > Client Expectations <ul style="list-style-type: none"> - Schedule - Budget - Maintenance - Work Plan / Schedule > Project Vision <ul style="list-style-type: none"> - Field Walk with Staff - Community Input Plan - Technical Assessment 	<ul style="list-style-type: none"> > Document Field Conditions <ul style="list-style-type: none"> - Surveying / SUE - Environmental Assessment > Trestle Inspections > Alternatives Analysis > Amenity Location / Type > Horizontal Alignment > Stormwater > Property Impacts > Visualizations > 30% Plans + Cost Estimate <ul style="list-style-type: none"> - NCDOT Review > Quality Assurance / Quality Control 	<ul style="list-style-type: none"> > Horizontal / Vertical Alignments > At-grade Crossings > Amenity Design > Hydraulic Modeling > Stormwater Design > Utility Coordination > Constructability Review > 60% Plans <ul style="list-style-type: none"> - NCDOT Review / Approval > Specifications > Quality Assurance / Quality Control 	<ul style="list-style-type: none"> > County Permitting <ul style="list-style-type: none"> - Site Plan - Stormwater - Building / Structures - Engineering - Public Works / Facility Maintenance > NEPA Environ. Document > SHPO > FEMA / Local Floodplain Administrator Permit > 401/404 Nationwide > ROW + Easements (if necessary) <ul style="list-style-type: none"> - NCDOT Authorization - Acquisition - NCDOT Certification > Utility Relocation 	<ul style="list-style-type: none"> > 90% + Final Construction Documents <ul style="list-style-type: none"> - Plans - Specifications - Estimates - Quality Assurance / Quality Control - NCDOT PS+E Approval > Bidding Assistance <ul style="list-style-type: none"> - Pre-bid Meeting - Bid Opening - Bid Certification > NCDOT Contract Concurrence > Construction NTP > CA Services (future) <ul style="list-style-type: none"> - Submittal / RFI Review - Construction Meetings
MTGS/ COORD.	<ul style="list-style-type: none"> > Staff Workshop + Walk > Community Listening Meetings 	<ul style="list-style-type: none"> > Bi-Weekly PM Update > Design Team Meetings > Presentation to Oversight Committee > Community Workshop 	<ul style="list-style-type: none"> > Bi-weekly PM Update > Design Team Meetings > Presentation to Oversight Committee > Public Design Presentation 	<ul style="list-style-type: none"> > County Coordination > Property Owners (as necessary) > Utility Coordination 	<ul style="list-style-type: none"> > Bi-weekly Project Manager Update > Presentation to Oversight Committee

PROJECT TASK	2022												2023			
	J	F	M	A	M	J	J	A	S	O	N	D	J	F		
Bi-weekly Meetings with Project Manager	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Notice-to-Proceed + Surveying + Field Investigation	█	█	█	█	█											
30% Design + County / NCDOT Review		█	█	█	█	█	█									
Public Meetings						█	█	█	█	█	█	█				
60% Design + County / NCDOT Review						█	█	█	█	█	█	█				
State / Local Permitting								█	█	█	█	█	█	█	█	█
90% Design (PS+E) + County / NCDOT Review										█	█	█	█			
Final Design (PS+E) + County / NCDOT Review												█	█	█	█	█
Bid for Construction + NCDOT Concurrence														█	█	█
Award Construction + Issue Notice-to-Proceed																█

*Schedule shown for illustrative purpose, actual schedule may be reduced / extended based on final scope of work, agency review times, etc. If selected, McAdams will work with the County to develop a mutually agreed upon schedule and prosecute the work accordingly.

PRIME Form RS-2

FOR USE ON CONTRACT SOLICITATIONS ONLY
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

REV 07/15/2020.RJS

PRIME CONSULTANT

TO BE USED WITH PROFESSIONAL SERVICES CONTRACT ONLY
 RACE AND GENDER NEUTRAL

Ecusta Rail-Trail, TIP BL-0007 Letter of Interest

TIP No. and/or Type of Work (Limited Services)

McAdams / Federal Tax ID: 56-1234550
 (Consultant/Firm Name and Federal Tax Id)

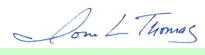
SERVICE / ITEM DESCRIPTION		
Discipline Code**	Description**	Anticipated Utilization (%)
32	Categorical Exclusion	5%
70	Erosion Control	5%
132	Landscape and Streetscape Design	5%
171	Public Involvement	5%
199	Route Location Survey	15%
316	Multi-use Trail Design, Survey + Layout	15%
433	Basic Hydrologic and Hydraulic Design	5%
434	Tier II Complete Hydrologic and Hydraulic Design	5%
TOTAL UTILIZATION:		60.00%

**One (1) per line -- please use additional Prime RS-2 Forms if necessary.

"PRIME CONSULTANT" (FORM RS-2) RACE AND GENDER NEUTRAL
Instructions for completing the Form RS-2:

- Complete a Prime Consultant Form RS-2 for the prime consultant firm.
- Insert TIP Number and /or Type of Work (Limited Services)
- Complete the Consultant/Firm name and Federal Tax ID Number for the primary firm information.
- Enter Service/Item Description – describe work to be performed by the Prime Firm
- Enter Anticipated Utilization – Insert dollar value or percent of work to the Prime Firm
- *Signature of the Prime Consultant **is required** on each RS-2 Form to be submitted with the Letter of Interest (LOI) to be considered for selection
- Complete "SPSF Status" section - Check the appropriate box regarding

RECOMMENDED BY:
 CONSULTANT: McAdams

*BY: Iona Thomas 

TITLE: VP, Strategy + Public Client Development

SPSF Status: YES NO

SUBCONSULTANT Form RS-2

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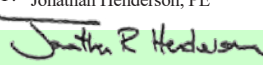
SUBCONSULTANT

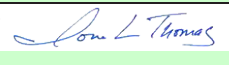
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 RACE AND GENDER NEUTRAL

Ecusta Rail-Trail, TIP BL-0007 Letter of Interest
TIP No. and/or Type of Work (Limited Services) McAdams / Federal Tax ID: 56-1234550
(Consultant/Firm Name and Federal Tax Id) HDR Engineering, Inc. of the Carolinas 56-0511218
(Subconsultant/Firm Name and Federal Tax Id)

SERVICE / ITEM DESCRIPTION		
Discipline Code**	Description**	Anticipated Utilization (%)
143	NBIS Bridge Inspection	2%
243	Threatened + Endangered Species Survey	2%
106	Historic Architectural Surveys of Standing Structures	1%
270	Utility Coordination	2%
280	Wetlands and Stream Delineation	2%
289	Signal Systems Inspection	1%
294	Roadway Foundation Investigation + Design	1%
295	Structure Foundation Investigation + Design	1%
296	Retaining Wall Investigation + Design	1%
332	Building Design	1%
338	Building Site Design	1%
TOTAL UTILIZATION:		15.00%

**One (1) per line -- please use additional Subconsultant RS-2 Forms if necessary.

SUBMITTED BY: SUBCONSULTANT: HDR Engineering, Inc. of the Carolinas
*BY: Jonathan Henderson, PE 
TITLE: SVP, South Atlantic Area Manager

RECOMMENDED BY: CONSULTANT: McAdams
*BY: Iona Thomas 
TITLE: VP, Strategy + Public Client Development

SPSF Status: YES NO

"SUBCONSULTANT" (FORM RS-2) RACE AND GENDER NEUTRAL

<p>Instructions for completing the Form RS-2:</p> <ol style="list-style-type: none"> 1. Complete a Subconsultant Form RS-2 for each Subconsultant firm to be utilized by your firm. 2. Insert TIP Number and /or Type of Work (Limited Services) 3. Complete the Consultant/Firm name and Federal Tax ID Number for the primary firm information. 4. Complete the Subconsultant/Sub Firm name and Federal Tax ID Number for the sub firm information. 5. Enter Service/Item Description – describe work to be performed by the Sub Firm 6. Enter Anticipated Utilization – Insert dollar value or percent of work to the Subconsultant/Sub Firm 7. *Signatures of both Subconsultant and Prime Consultant are required on each RS-2 Form to be submitted with the Letter of Interest (LOI) to be considered for selection 8. Complete "SPSF Status" section - Subconsultant shall check the appropriate box regarding SPSF Status, check Yes if SPSF or No if not SPSF <p>In the event the firm has no subconsultant, it is required that this be indicated on the Subconsultant Form RS-2 form by entering the word "None" or the number "ZERO" and signing the form.</p>
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SUBCONSULTANT Form RS-2

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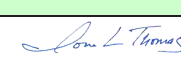
SUBCONSULTANT
 TO BE USED WITH PROFESSIONAL SERVICES CONTRACT ONLY
 RACE AND GENDER NEUTRAL

Ecusta Rail-Trail, TIP BL-0007 Letter of Interest
TIP No. and/or Type of Work (Limited Services)
McAdams / Federal Tax ID: 56-1234550
(Consultant/Firm Name and Federal Tax Id)
Traffic Planning and Design, Inc. / Federal Tax ID #23-2557966
(Subconsultant/Firm Name and Federal Tax Id)

SERVICE / ITEM DESCRIPTION		
Discipline Code**	Description**	Anticipated Utilization (%)
63	Environmental Assessment / Finding of No Significant Impacts	3%
171	Public Involvement	5%
155	Pavement Marking Plans	3%
207	Signal Design	3%
247	Traffic Control Plans	3%
269	Urban Roadway Design	3%

One (1) per line -- please use additional Subconsultant RS-2 Forms if necessary. **TOTAL UTILIZATION: 20.00%

SUBMITTED BY:
 SUBCONSULTANT:
 Traffic Planning and Design, Inc.
***BY:**
 Christina Staudt, PE, Regional Manager
 TITLE:

RECOMMENDED BY:
 CONSULTANT: McAdams
***BY:** Iona Thomas 
 TITLE: VP, Strategy + Public Client Development

SPSF Status: YES NO

“SUBCONSULTANT” (FORM RS-2) RACE AND GENDER NEUTRAL

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- Complete a Subconsultant Form RS-2 for each Subconsultant firm to be utilized by your firm.
- Insert TIP Number and /or Type of Work (Limited Services)
- Complete the Consultant/Firm name and Federal Tax ID Number for the primary firm information.
- Complete the Subconsultant/Sub Firm name and Federal Tax ID Number for the sub firm information.
- Enter Service/Item Description – describe work to be performed by the Sub Firm
- Enter Anticipated Utilization – Insert dollar value or percent of work to the Subconsultant/Sub Firm
- *Signatures of both Subconsultant and Prime Consultant **are required** on each RS-2 Form to be submitted with the Letter of Interest (LOI) to be considered for selection
- Complete “SPSF Status” section - Subconsultant shall check the appropriate box regarding SPSF Status, check Yes if SPSF or No if not SPSF

In the event the firm has **no** subconsultant, it is **required** that this be indicated on the Subconsultant Form RS-2 form by entering the word **“None”** or the number **“ZERO”** and signing the form.

SUBCONSULTANT

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Ecusta Rail-Trail, TIP BL-0007 Letter of Interest

TIP No. and/or Type of Work (Limited Services)
 McAdams / Federal Tax ID: 56-1234550

(Consultant/Firm Name and Federal Tax Id)
 Studio Main LLC / Federal Tax ID: 81-5170368

(Subconsultant/Firm Name and Federal Tax Id)

SERVICE / ITEM DESCRIPTION		
Discipline Code**	Description**	Anticipated Utilization (%)
132	Landscape and Streetscape Design	1.25%
171	Public Involvement	1.25%
TOTAL UTILIZATION:		2.5%

**One (1) per line -- please use additional Subconsultant RS-2 Forms if necessary.

SUBMITTED BY:
 SUBCONSULTANT: Studio Main LLC

*BY: Blake Sanders, PLA

TITLE: President

RECOMMENDED BY:
 CONSULTANT: McAdams

*BY: Iona Thomas

TITLE: VP, Strategy + Public Client Development

SPSF Status: YES NO

“SUBCONSULTANT” (FORM RS-2) RACE AND GENDER NEUTRAL

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- Enter Service/Item Description – describe work to be performed by the Sub Firm
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SUBCONSULTANT Form RS-2

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Ecusta Rail-Trail, TIP BL-0007 Letter of Interest


TIP No. and/or Type of Work (Limited Services)
McAdams / Federal Tax ID: 56-1234550

(Consultant/Firm Name and Federal Tax Id)
Froehling & Robertson, Inc. / Federal Tax ID: 54-0217380
(Subconsultant/Firm Name and Federal Tax Id)

<i>SERVICE / ITEM DESCRIPTION</i>		
Discipline Code**	Description**	Anticipated Utilization (%)
297	Pavement Design Investigation	2.5%
TOTAL UTILIZATION:		2.5%

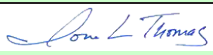
**One (1) per line -- please use additional Subconsultant RS-2 Forms if necessary.

SUBMITTED BY:
SUBCONSULTANT: Froehling & Robertson, Inc.

*BY: W. Patrick Alton, PE  William Patrick Alton - PE# 2023-10-13 13:04:24 0409

TITLE: Transportation Services Manager

RECOMMENDED BY:
CONSULTANT: McAdams

*BY: Iona Thomas 

TITLE: VP, Strategy + Public Client Development

SPSF Status: YES NO

“SUBCONCONSULTANT” (FORM RS-2) RACE AND GENDER NEUTRAL

Instructions for completing the Form RS-2:

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- Insert TIP Number and /or Type of Work (Limited Services)
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- Enter Service/Item Description – describe work to be performed by the Sub Firm
- Enter Anticipated Utilization – Insert dollar value or percent of work to the Subconsultant/Sub Firm
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