



August 18, 2023

Mr. Marcus Jones, PE, County Engineer
Henderson County
1 Historic Courthouse Square
Hendersonville, NC 28792

Re: Henderson County Ecusta Rail-Trail Letter of Interest
JMT Job Number: 23-02318

Dear Mr. Jones and Members of the Selection Committee:

The Johnson, Mirmiran and Thompson, Inc. (JMT) and our partners are pleased to present this Letter of Interest (LOI) for your project. Our team has enjoyed the challenges and partnerships of delivering the first six miles of the Ecusta Trail. We want to continue to offer you a **proven team that can deliver** the design of the remaining five miles in Henderson County. To accomplish the design work and award a construction contract in July of 2024, we have assembled a seasoned and extensive team that includes:

- ✓ **JMT** has offices in 16 states and Washington, DC, with a strong presence in Western North Carolina, and possesses a vast knowledge of managing Federal Highway Administration (FHWA) funding administered by NCDOT including Rails to Trails Projects and Greenway projects. **JMT has developed over 100 NCDOT comprehensive plan sets to include special provisions and developed eight construction contract proposals per NCDOT protocols.**
- ✓ **Equinox** is headquartered in Asheville, and has delivered multiple successful Greenway and Rails to Trails Projects, many in our region. Their Landscape Architectural staff and Natural Environmental Scientists have been instrumental in the design and permitting of the Hendersonville to Horse Shoe section of the trail.
- ✓ **Traffic Planning & Design (TPD)** is a planning traffic-focused firm with a strong Asheville office. They focus on innovative solutions for bike and pedestrian traffic conflicts with vehicular traffic, planning projects, traffic safety, Greenway projects, and Rails to Trails projects. TPD is leading the design efforts for the Transylvania County portion of the trail.
- ✓ **Watermark Landscape Architecture (WLA)** is a Hendersonville SPSF firm practicing in the Henderson County region for over 20 years. Hunter Marks is the owner and principal and worked hard to see the Ecusta Trail come into existence. WLA was instrumental in developing landscape architectural designs for the Hendersonville to Horse Shoe section that honors the history of the Ecusta Trail which will make it a unique experience for future trail users.
- ✓ **ECS Southeast (ECS)** is focused on Geotechnical Engineering Services and Geoenvironmental Services with many offices throughout the southeast and in Asheville and Charlotte. ECS is highly familiar with NCDOT and FHWA processes and material certifications. ECS performed all geotechnical investigations and retaining walls designed on the Hendersonville to Horse Shoe section for the trail and **completed a retaining wall design in weeks to react to a last-minute change** in the plans caused by a reluctant property owner.
- ✓ **Wetherill Engineering (WE)** is a new member to our team offices with extensive experience partnering with JMT on NCDOT project delivery. WE is a HUB/SPSF firm with Raleigh and Charlotte offices and has also delivered many greenway projects utilizing FHWA funding sources. WE's strong hydraulics and erosion control design staff will mean the short duration planned for delivery of this project's design is successful.

Additional information concerning these firms, key project personnel, and services provided by each are found in Chapters 2 and 3 of this letter of interest.

Joel Setzer, PE, will serve as your project manager and primary contact for this project. We hope to continue our service to you and help you achieve the vision of this project. Joel's phone numbers are 828.477.4993 [O] and 828.226.9158 [C]. His email address is jbsetzer@jmt.com. Please contact him anytime he can assist you.

Sincerely,
JOHNSON, MIRMIRAN & THOMPSON, INC.

Reece Schuler, PE, PLS
Vice President/Principal-in-Charge
(M) 828.779.1788 | rmschuler@jmt.com

Joel Setzer, PE
Project Manager/Primary Contact
(M) 828.226.9158 | jbsetzer@jmt.com

Chapter 1 - Introduction

The JMT Team

Our team has no conflict of interest or perceived conflict in performing the services. Should a conflict or perceived conflict become known, we will replace the appropriate team member to remove the conflict.

The JMT team can fully deliver the design phase to begin the construction phase by July 2024. The total allotted time is 10 months. The required NCDOT reviews and environmental permitting will consume 16 weeks of the available time **leaving the time allotted for performing all survey, design, and contract document preparation to be just over six months.** We have addressed this challenge by:

- ✓ Dedicating a large survey staff and new technologies for topographic surveys.
- ✓ Utilizing Lidar and prior property surveys for preliminary designs until topographic surveys are available.
- ✓ Utilizing design and contract document templates established for the Hendersonville to Horse Shoe section this team has delivered.
- ✓ Increased hydraulic and drainage design capacity with the addition of Wetherill Engineering to our team.

This is in addition to the strengths we have demonstrated on the Hendersonville to Horse Shoe section:

- ✓ The ability to adjust to client changes in scope and minimize schedule impacts.
- ✓ Proactively engaging permitting agencies for quicker permit processing.
- ✓ Application of knowledge of NCDOT plan and contract document development.

Summation of Information

- ✓ Chapter 2 - Team Qualifications showcasing recent similar projects.
- ✓ Chapter 3 - Team Experience containing professional credentials, key staff experience and unique qualifications, organization chart, available workforce, and names, classifications, and location of employees assigned.
- ✓ Chapter 4 - Technical Approach including our project understanding and approach, innovative ideas, and our ability to meet the deadlines for this project.

Chapter 2 - Team Qualifications

LEGEND

JMT = Johnson, Mirmiran and Thompson

TPD = Traffic Planning & Design

ECS = ECS Southeast

WE = Wetherill Engineering

WLA = Watermark Landscape Architecture

Prequalifications

Firm:

JMT	TPD	ECS	WE	EQUINOX	WLA
			HUB, SPSF		SPSF

NCDOT Discipline Codes Requested

00023	Bridges - Spans over 200'	•	•		•		
00024	Bridges - Spans under 200'	•	•		•		
00032	Categorical Exclusion	•	•	•	•	•	
00063	Environmental Assessment / Finding of No Significant Impacts	•	•	•	•		
00070	Erosion Control	•	•		•	•	
00106	Historic Architectural Surveys of Standing Structures	•					
00132	Landscape and Streetscape Design	•	•			•	•
00143	NBIS Bridge Inspection	•			•		
00155	Pavement Marking Plans	•	•		•		
00171	Public Involvement	•	•		•	•	
00199	Route Location Survey	•			•		
00207	Signal Design		•		•		
00243	Threatened & Endangered Species Survey	•		•	•	•	
00247	Traffic Control Plans	•	•		•		
00269	Urban Roadway Design	•	•		•		
00270	Utility Coordination	•			•		
00280	Wetlands and Stream Delineation	•	•	•	•	•	
00294	Roadway Foundation Investigation & Design			•			
00295	Structure Foundation Investigation & Design			•			
00296	Retaining Wall Investigation & Design			•			
00297	Pavement Design Investigation			•			
00316	Multi-Use Trail Design, Survey & Layout	•	•		•	•	•
00433	Basic Hydrologic and Hydraulic Design	•	•		•		
00434	Tier II Complete Hydrologic and Hydraulic Design	•	•		•		

	= Lead Role
	= Supporting Role
	= Backup support if needed
•	= Prequalified

Our team possesses additional NCDOT Work Code Certifications should they become necessary for this project. Below is a listing of the number of additional NCDOT Work Codes possessed.

FIRM	NUMBER OF ADDITIONAL CODES
JOHNSON, MIRMIRAN AND THOMPSON (JMT)	102
EQUINOX	4
WETHERILL (WE)	87
TRAFFIC PLANNING & DESIGN (TPD)	29
WATERMARK LANDSCAPE ARCHITECTURE (WLA)	2
ECS SOUTHEAST (ECS)	80

Chapter 2 - Team Qualifications

Similar Projects - JMT

JMT		
Project Name, Location, & Year Completed	Client Contact	Project Synopsis
Ecusta Trail - Hendersonville to Horse Shoe Section 2023	Henderson County Marcus Jones, PE 828.962.9855	JMT is finalizing the design plans, construction documents, and bidding process for the first six miles of the Ecusta Trail. The project features 12 and 14 feet wide greenway widths, six bridges, two retaining walls, improved drainage designs, two signalized highway crossings, and two RRFB crossings. JMT led a multi-disciplinary survey and design team to accomplish designs and project letting rapidly and met challenges of many scope changes.
Ecusta Trail – Transylvania County Section Transylvania County Ongoing project	NCDOT -Josh Gillett, PLS - 828.586.0925 TPD - Christy Staudt, PE - 828.575.0133	JMT is selected to perform surveys for NCDOT for the design of this section of the Ecusta Trail. JMT is serving as a subconsultant to TPD for the design services and leading the NEPA documentation services and utility coordination services. JMT is also the prime for survey services.
Pickett Trail Connector Fairfax, VA Ongoing project	City of Fairfax, VA Christina Alexander 703.273.3067	New off-road shared use path (SUP) providing a new north-south connection between the Cross County Trail on the south with the City of Fairfax Connector Trail on the north. JMT is providing pedestrian facilities, stormwater, environmental, utilities, geotechnical, structural, cost estimating, SUE, landscape architecture, parks, survey, public outreach, project and program management, CAD, GIS, archaeological, and arborist.
Traffic Engineering Design Services Tier 2 Baltimore County, MD Ongoing project	Baltimore County Linda Abel 410.887.8157	JMT conducted feasibility studies for new bicycle and pedestrian trails. Services include demand projections, environmental screening, trail/greenway design, and developing planning cost estimates.
Bowie Mill Road Bikeway Final Design Montgomery County, MD Ongoing project	Montgomery County Rebecca Park 240.777.7263	JMT is developing full construction documents to include special provisions and specifications for a separated 8-foot-wide shared-use path along Bowie Mill Road for 3.3 miles.
Good Hope Road Shared-Use Path Montgomery County, MD Ongoing project	Montgomery County Rebecca Park 240.777.7263	JMT provided surveys, SUE, environmental planning and permitting, landscape architecture, geotechnical services, and structural analysis and engineering for an eight-foot multiuse path.
Urban Wilderness Gateway Knoxville, TN Ongoing project	City of Knoxville Tom Clabo, PE 865.215.6100	JMT (formerly V&M) is providing design services for a new entrance into the Urban Wilderness along the James White Parkway corridor to parking, restrooms and comfort stations, road improvements, amenities for bicyclists, pedestrians, and placemaking.
Old Lenoir Multi-Use Trail Hickory, NC Ongoing project	City of Hickory John Marshall 828.323.7422	JMT (formerly V&M) provided environmental documentation, preliminary engineering, and design services.. The project is about 2.3-miles long and is critical to completing a full east-west, north-south corridor improvement project. Improvements include adding a multi-use path along the project corridor while reducing an existing four-lane section to a three-lane road with a two-way left turn lane.
Pacolet Trail – RAB Pacolet, SC Completed 2023	Spartanburg County Ron Kirby rkirby@spartanburgcounty.org	JMT (formerly V&M) provided design services for roadway improvements and Pacolet riverwalk facilities. This project will provide parking, walkways, scenic overlooks, and kayak friendly travel. Upgrading the thoroughfare will provide safer vehicular traffic. This is a turnkey SCDOT funded LPA project that included a roundabout, several upgraded and new parking areas, access roads, drainage improvements, landscaping, and safety improvements. JMT provided highly experienced personnel for project management and administration, survey, utility coordination, engineering design, plan development and construction administration.
Lake James State Park Trail & Pedestrian Bridge Lake James, NC Completed 2022	NC Parks & Recreation Erin Lawrence, PE 919.707.9322	JMT's (formerly V&M) trail design follows a grade along the 1,100-1,500' long trail section to the proposed bridge location. JMT proposed a trail extension to a natural overlook as another lake view opportunity. The proposed bridge is strategically located to cross at one of the narrowest necks of the lake, yet be visible to park boaters from two miles away. JMT's structural design team's goals for this bridge design were to: aesthetically mesh with the local rustic feel of other structures in the park; functionally convey park visitors across the structure while providing open views for hikers and navigational clearances for boaters; and meet the Park's budget for this project.

Chapter 2 - Team Qualifications

Similar Projects - JMT

JMT		
Project Name, Location, & Year Completed	Client Contact	Project Synopsis
Prestonsburg Rails to Trails Prestonsburg, KY 2020	City of Prestonsburg Les Stapleton 859.886.2336	Preliminary scoping study to identify problem areas or existing issues to determine the feasibility of converting the old railroad to a recreational trail. The study included design analysis, cost estimates, and bridge inspection. JMT (formerly V&M) provided construction plans, bid document preparation, signing plans, construction plan sheets, tie-ins for trailheads, and detail sheets for signs and gates. We provided bridge plans for repair and retrofit of bridges and prepared all required permit applications. The City requested breaking the bid packages into four separate packages so smaller local contractors could competitively bid on different phases of construction.
Dale Drive Pedestrian Facility Improvements Final Design Montgomery County, MD Completed 2020	Montgomery County Angel Cheng, Client Project Manager 240.777.7274	JMT analyzed and proposed pedestrian facilities along the project corridor to address community-driven concerns regarding this road being used as a cut-through street, speeding, near crashes, and overall safety of the roadway, especially as it relates to pedestrians. JMT developed typical sections and evaluated options for the sidewalk on either or both sides, as well as reviewed both open section and closed section roadway. The proposed pedestrian facilities will connect to the existing facilities located at either end of the project.
Aspen Hill Neighborhood Greenway Feasibility Study Completed 2020	Montgomery County Angel Cheng, Client Project Manager 240.777.7274	JMT conducted a feasibility study for a greenway connecting the Aspen Hill neighborhood to nearby commercial and retail areas, a metro station, and the regional bicycle and pedestrian network. The greenway route concept includes traffic calming, wayfinding, and low-cost intersection improvements.
Appomattox River Greenway Trail Colonial Heights, VA Completed 2020	City of Colonial Heights Todd Flippen 804.520.9334	JMT performed design, environmental permitting, construction bidding, and construction management services under Virginia DOT administration standards for federal funds. Provided construction management, inspection, and QA testing services throughout construction. Services included holding pre-construction and monthly progress meetings, on-site inspections, keeping records, reviewing contractor submittals, calculating monthly pay estimates, and conducting material testing, environmental permit compliance, work zone safety, final inspection, punch list, and project acceptance.
Village of Flat Rock Greenway Connection Feasibility Study Flat Rock, NC 2019	Land of Sky Regional Council Tristan Winkler, French Broad River MPO Director 828.251.7454	JMT (formerly V&M) performed a feasibility study for a trail to link the Park at Flat Rock to the Historic Carl Sandburg Home. The following factors were highlighted for consideration during the feasibility process: <ul style="list-style-type: none"> • Connections to Flat Rock's more extensive trail network and possibly the Oklawaha Greenway. • Use of NCDOT's North Highland Lake Road improvement project. • Linking area hubs of activity - the Park at Flat Rock and the Carl Sandburg Home National Historic Site. • Opportunities to connect to downtown Flat Rock, the Village Center, the Flat Rock Playhouse. Key milestones identified included opportunities and constraints identification, developing trail alignment corridor possibilities, and determining a preferred corridor.
Looney Creek Rails-to-Trails Completed 2017	Harlan County, KY Ryan Creech 606.573.4771	JMT (formerly V&M) designed and provided construction administration and right-of-way services for a five-mile rails-to-trails project for Harlan County Fiscal Court. The project used federal transportation funds administered by the Kentucky Transportation Cabinet.
Berea College Trails and Trailheads Kentucky Completed 2017	Berea College Shane Wilkerson 859.985.4176	JMT (formerly V&M) developed an environmentally sustainable and cost-efficient design for the site. This design included paved lanes with stone parking locations, which greatly reduced the amount of impervious asphalt needed. This approach significantly lowered project cost and allowed the storm water to infiltrate into the surrounding soil, reducing runoff. Two entrances were combined into one location creating safer ingress and egress. A safe trail crossing was developed using a speed table near the entrance to the trailhead. A bike repair station was also included with the project.
Middlesboro Canal Walk Middlesboro, KY Completed 2017	City of Middlesboro Former Mayor, Bill Kelley 606.248.5670	Upgrade and rehabilitation of the Middlesboro Canal Walk. This project expanded the walk to a width of eight feet to meet the needs of a variety of users. As part of this project, the existing concrete walk was removed and replaced with an asphalt surface. In place of the grass portion of the walk, a new asphalt surface was placed. The Canal Walk was re-routed to a new location. This project included removal of existing sidewalk, new pavement, striping of bicycle lanes, rehabilitation and widening of existing boardwalk, lighting, and landscaping. We worked hand-in-hand with the City to ensure all requirements were met, and that the grant was administered in accordance with regulations.

Chapter 2 - Team Qualifications

Similar Projects - JMT, Equinox, and Wetherill

JMT

Project Name, Location, & Year Completed	Client Contact	Project Synopsis
Dawkins Line Rails-to-Trails Magoffin, Johnson, & Breathitt Counties, KY Completed 2011	Kentucky Finance Cabinet Frank Phillips 502.564.3156	Boundary Survey - JMT (formerly V&M) was initially selected to provide boundary surveying services for this 36.11 mile "Rails to Trails" project. JMT provided a complete boundary survey for the entire 36.11-mile abandoned railroad right-of-way. Construction Cost Study/GIS – Following the boundary survey completion, JMT prepared a probable construction cost estimate for the 36.11-mile project. Utilizing data collected during the boundary survey along with the construction cost estimate developed during an earlier feasibility study, JMT developed a GIS database for the project. Trail Design/Construction Documents - JMT provided preparation of construction documents, field surveys, structural inspection of 24 bridges, evaluation/recommendation for trail surface and bridge decking/railing.

EQUINOX

Beaverdam Greenway Buncombe County, NC Ongoing project	Buncombe County Thomas Gull 828.250.6705	Full construction documents and permitting for a 1.5-mile section of greenway that connects to the Woodfin Greenway & Blueway
Swannanoa Greenway Asheville, NC Ongoing project	City of Asheville Dustin Clemens (828) 575-3851	Full construction documents and permitting for a 1.4-mile section of greenway including a retrofit of an existing bridge to accommodate the greenway
Fonta Flora Trail Feasibility Study Morganton, Asheville, NC Completed 2023	Friends of Fonta Flora State Trail Amanda E. Finn 828.442.5402	A feasibility study for a 33-mile section of the Fonta Flora Trail that will run from Morganton to Asheville NC. The project included an assessment of trail alignment alternatives, working with key agencies and stakeholders, and a comprehensive strategy for landowner outreach.
Virginia Creeper Trail Master Plan Virginia Completed 2022	Friends of Southwest Virginia Idalina Walker (276) 492-2400	Master Plan for the Virginia Creeper Trail Master Plan and Economic Impact Assessment. The study area includes the entirety of the existing Virginia Creeper Trail and includes in-depth assessment to assist the Virginia Creeper Trail Conservancy (VCTC). Equinox provided: analysis, stakeholder and public engagement, land conservation assessment, trail economic impact assessment, organizational structure, partnership & capacity building, marketing plan, strategic plan, and master plan
Mendota Trail Completed 2021	Friends of Southwest Virginia Idalina Walker (276) 492-2400	Master plan for 12.5 miles of the Mendota Rail-to-Trail corridor running between the City of Bristol and the rural community of Mendota in Washington County, Virginia. Equinox provided: site analysis, corridor design, trailhead design, environmental assessment, opportunities and challenges mapping, place making & wayfinding, trail feasibility, phasing & funding plan, economic impact study, and master plan.
Waynesville Greenway Waynesville, NC Completed 2021	Town of Waynesville Elizabeth Teague 828.456.2004	The study area included the section between Recreation Park and the south-eastern trailhead of the Lake Junaluska trail located in Waynesville Industrial Park. Equinox provided: site analysis, opportunities and challenges mapping, alternative alignments, public process and landowner outreach, feasibility study, and corridor design.

WETHERILL (WE)

Apex West Greenway Apex, NC Completed 2023	Town of Apex Angela Reincke 919.372.7468	Provided design and construction documents for approximately 700 feet of trail, including 180 feet of timber boardwalk over wetlands. The project includes coordination with Wake County and the NCDOT Rail Division. Wake County intends to construct a trailhead at this location and will ultimately maintain this section of trail.
Utle Creek Greenway Phase 1 Holly Springs, NC Completed 2022	Town of Holly Springs Dirk Siebenbrodt, PE 919.557.3931	The federally-funded project will connect the east side of town with the west side of town using an existing pedestrian culvert under the NC 55 Bypass. Project includes several creek crossings, challenging terrain, and sidewalk/crosswalks at both ends of trail. The proposed greenway, just upstream of a FEMA limited detail flood study, crossed Utle Creek at two bridge crossings. A flood study was completed.
Jones Creek Greenway Carrboro, NC Completed 2022	Town of Carrboro Christina Moon 919.918.7325	Provided design and construction documents for a greenway trail. The project area is bounded by Jones Creek to the east. A flood study was required for the crossing of Buckhorn Branch and a No Rise Certification was obtained.

Chapter 2 - Team Qualifications

Similar Projects - Traffic Planning & Design, ECS, and Watermark Landscape Architecture

TRAFFIC PLANNING & DESIGN (TPD)

Project Name, Location, & Year Completed	Client Contact	Project Synopsis
Saluda Grade Rail Trail Hendersonville, NC Ongoing Project	Conserving Carolina Kristin Cossa 828.697.5777	TPD is serving as the prime consultant for this project. The project includes the preliminary planning and a feasibility study for the proposed Saluda Grade Rail Trail, and a thorough economic impact assessment. The project also includes a feasibility study of the opportunities to connect the proposed Saluda Grade Rail Trail with the Ecusta Trail currently under development in Henderson and Transylvania Counties, NC.
Ecusta Rail Trail: Kanuga Rd at Willow Rd Trail Crossing ADA Ramp Design Hendersonville, NC Completed 2023	Henderson County Marcus Jones, PE 828.962.9855	TPD served as a subconsultant to JMT in developing the design and construction documents for a 6-mile stretch of the Ecusta Trail connecting downtown Hendersonville to Horseshoe, NC. TPD completed planning, engineering, and conceptual plan development for trail roadway crossings (at-grade), as well as support for NCDOT coordination and community engagement.
Swannanoa River Greenway Asheville, NC Completed 2022	City of Asheville, NC Lucy Crown, AICP 828.259.5805	TPD led preliminary engineering feasibility analysis for crossing designs, safety analysis, and provided modifications for the signalized Biltmore Avenue corridor. TPD designed a section of the greenway that reused the sidewalk and one travel lane of the bridge that connects the project to Swannanoa River Road. TPD also designed key connections with sidewalk extensions, bus stop connections, ADA upgrades to signals, and a bicycle lane to the greenway that transitions at the nearby roundabout.
Mendota Trail Master Plan Virginia Completed 2021	Friends of Southwest VA Emily Mayo 276.492.2400	TPD assisted a team of consultants to prepare the Mendota Trail Master Plan. TPD's lead tasks included economic forecasting and tourism development, trail roadway crossing design, and coordination with VDOT and Bristol Engineering staff regarding trail crossings and related roadway and intersection modifications. TPD developed the Timber Trail Work Plan that will guide timber trestle maintenance and repair for the old railroad timber trestles. TPD also assisted the team with trail alignments, stakeholder coordination and project materials and documentation.
Rhea County Greenway Connector Plan Rhea County, TN Completed 2020	Rhea County, TN John Bamber 423.775.6171	TPD assisted the team in developing a trail plan that connects the small towns of Spring City and Dayton and the many outdoor and cultural recreation opportunities in between. The trails will also connect Rhea County to the 200+ mile, cross-state Cumberland Trail. TPD provided planning, community engagement, crossing analysis and technical feasibility services.
Oklawaha Greenway Feasibility Study Henderson County, NC Completed 2019	Henderson County Autumn Radcliffe 828.694.6558	Henderson County sought to study the feasibility of a northern and southern extension of the existing Oklawaha Greenway. TPD provided support services for a number of tasks, including identifying barriers and opportunities to trail alignments, recommending and evaluating alternatives, and Action Plan development. TPD also assisted with public and stakeholder engagement.

ECS

Swannanoa Greenway Asheville, NC Completed 2020	Equinox Environmental David Tuch 828.253.6856	ECS provided a subsurface exploration, geotechnical engineering, and design recommendations during the preliminary corridor design phase (Phase I) of the Swannanoa River Greenway project. When completed, the greenway will extend approximately four miles along the Swannanoa River from Biltmore Village to Azalea Park. Phase I includes an approximately 4,600-foot long section which will include the construction of an asphalt path, and several retaining walls and culverts.
Enka Heritage Trail Asheville, NC Ongoing project	JMT (formerly V&M) Joel Setzer 828-226-9158	ECS is currently providing geotechnical and environmental services for the design and construction of a proposed greenway trail. The trail is approximately 2.0 miles in length and will consist of several pedestrian bridges and retaining walls. Environmental services consisting of a Phase I Environmental Screening will be performed within the project limits.

WATERMARK LANDSCAPE ARCHITECTURE (WLA)

Seventh Avenue Streetscape- Hendersonville, NC Ongoing project	City of Hendersonville Brendan Shanahan 828.674.0697	Public involvement, stakeholder meetings, streetscape design, landscape design, construction details, bid assistance, graphics and visualization.
Laurel Green Park Laurel Park, NC Completed 2020	Robinson Design Engineers Phillip Ellis, PE 864.901.1611	Public engagement, stakeholder meetings, conceptual stream and landscape design, graphics and visualization, assistance with grant procurement.
Flat Rock Park Flat Rock, NC Completed 2019	The Park at Flat Rock Michael Dages 828.435.0397	Meadow planting design, creation of long-term management plan, project management, and installation oversight.

Chapter 3 - Team Experience

Organizational & Capacity Charts



LEGEND

* = Resume Included

JMT = Johnson, Mirmiran and Thompson

TPD = Traffic Planning & Design

ECS = ECS Southeast

WLA = Watermark Landscape Architect

WE = Wetherill Engineering

Principal-in-Charge

Reece Schuler, PE, PLS (JMT)*

Project Accountant

Jessica Toye (JMT)*

Project Manager

Joel Setzer, PE (JMT)*

Project Development & Environmental Analysis Phase | Pre-design Phase

Updating NEPA Document

Lisa Feller, PE (JMT)*
Tina Sekula, AICP, CEP, PWS (JMT)
Preston Butler (JMT)*

Natural Resource Evaluation | Stream & Wetland Delineation

Owen Carson (Equinox)*
Charles Lawson (Equinox)*
Preston Butler (JMT)*

Cultural Resource Evaluation | Bridge 10

Mary Alfson-Tinsmon (JMT)*

Topographic Surveys

Mark Parris, PLS (JMT)*
Karsten Sluder, PLS (JMT)
David Burrell, PLS (JMT)
Jack Thomas (JMT)
Jason Cooper (JMT)
Reuben Vinas (JMT)
Hunter Debruhl (JMT)
Phillip Shipman (Technician, JMT)
Barbara Surret (Technician, JMT)
Brenda Guerrero (Technician, JMT)

Surveys - Reality Capture & Remote Sensing

Dan Schilling, PLS (JMT)*
Eric Cooper, PLS (JMT)
James Shaw, PLS (JMT)

Subsurface Utility Engineering (SUE)

Tim Buckner (JMT)*
Christopher Whitlow (JMT)

Geotechnical Investigations

Michael Walko, PE (ECS)*
Kelly de Montbrun, PE (ECS)

Stakeholder | Community Engagement Support

Joel Setzer, PE (JMT)*
Kristy Carter, AICP (TPD)*
Hunter Marks, RLA, LEED AP (WLA)*

Design & Permitting Phase

Greenway Design

Joel Setzer, PE (JMT)*
Reece Schuler, PE, PLS (JMT)*
Emma Pindur (JMT)
Alex Fitzpatrick (JMT)
Christy Staudt, PE (TPD)*
Hunter Marks, RLA, LEED AP (WLA)*
David Tuch, RLA (Equinox)*

Drainage Design | Streambank Stabilizations | Floodplain Development Permitting | Stormwater & Watershed Permitting

Jon Ford, PE (JMT)*
Bradley Ridnour, PE (JMT)*
Hilafu Hilafu, PE (JMT)
James Monohan (JMT)
Kabin Luitel, PE, CFM (JMT)
Kevin Alford, PE (WE)*
Jerry Lindsey, PE (WE)*
Matthew Harvey, PE (WE)*
Harinder Singh, PE (WE)
Jerry Lindsey, PE (WE)*

Traffic Sign & Pavement Marking Designs

Christy Staudt, PE (TPD)*
Chris Wachter, PE (TPD)

Traffic Signals Design

Colin Kinton, PE (TPD)*
Robert Woutersz (TPD)

Trail Amenity | Landscape Architectural Design

David Tuch, RLA (Equinox)*
Megan Foy, RLA, LEED AP (Equinox)*
Hunter Marks, RLA, LEED AP (WLA)*
Brooke Alexander (WLA)*

Bridge | Large Culvert | Headwall | Structural Retaining Wall Design

Hardy Willis, PE (JMT)*
Kyle Compton, PE (JMT)
Gwen Pritchard, PE (JMT)*
Jason Bartley, EIT (JMT)

Geotechnical Retaining Wall Design

Doug Chappell, PE (ECS)
Mohammed Mulla, PE, PhD (ECS)*

Wayfinding Sign | Placemaking Sign Design

David Tuch, RLA (Equinox)*
Megan Foy, RLA, LEED AP (Equinox)*
Hunter Marks, RLA, LEED AP (WLA)*

Brooke Alexander (WLA)*

401/404 Permitting

Owen Carson (Equinox)*
Charles Lawson (Equinox)*
Preston Butler (JMT)*
Emma Pindur (JMT)

Utility Coordination

Nick Asaro, PLS (JMT)*
Joe Montgomery, CEPSCI (JMT)

Erosion Control Design & Permitting

Kevin Alford, PE (WE)*
Matthew Harvey, PE (WE)*
Jerry Lindsey, PE (WE)*

NCDOT Encroachment Permitting

Joel Setzer, PE (JMT)*
Shep Cordray (JMT)

Construction Contract Development & Bidding Phase

Construction Contract Development & Bidding

Tara Best Crawford, PE (JMT)*
Joel Setzer, PE (JMT)*
Shep Cordray (JMT)

Chapter 3 - Team Experience

Name, Classification, and Location + Capacity Table

FIRM	NAME	CLASSIFICATION	LOCATION	AVAILABILITY
JMT	Reece Schuler, PE, PLS	Principal-in-Charge/QA-QC	Asheville, NC	25%
JMT	Joel Setzer, PE	Project Manager	Asheville, NC	50%
JMT	Lisa Feller, PE	NEPA Document	New Bern, NC	30%
JMT	Tina Sekula, AICP, CEP, PWS	NEPA Document	Raleigh, NC	30%
JMT	Preston Butler	NEPA Document, Natl Resource Eval, Stream & Wetland Delineation, 401/404 Permtg	Raleigh, NC	40%
JMT	Mary Alfson-Tinsman	Cultural Resources	Philadelphia, PA	25%
JMT	Mark Parris, PLS	Survey Manager	Asheville, NC	40%
JMT	Karsten Sluder, PLS	Survey Crew Chief	Asheville, NC	40%
JMT	David Burrell, PLS	Survey	Asheville, NC	50%
JMT	Jack Thomas	Survey	Asheville, NC	50%
JMT	Jason Cooper	Survey	Asheville, NC	50%
JMT	Reuben Vinas	Survey	Asheville, NC	50%
JMT	Hunter Debruhl	Survey	Asheville, NC	50%
JMT	Phillip Shipman	Survey Technician	Asheville, NC	60%
JMT	Barbara Surrent	Survey Technician	Asheville, NC	60%
JMT	Brenda Guerrero	Survey Technician	Asheville, NC	60%
JMT	Dan Schilling, PLS	Surveys-Reality Capture & Remote Sensing	Raleigh, NC	50%
JMT	Eric Cooper, PLS	Surveys-Reality Capture & Remote Sensing	Hunt Valley, MD	40%
JMT	James Shaw, PLS	Surveys-Reality Capture & Remote Sensing	Hunt Valley, MD	40%
JMT	Tim Buckner	SUE Crew Chief	Asheville, NC	40%
JMT	Christopher Whitlow	SUE	Asheville, NC	40%
JMT	Emma Pindur	Greenway Design, 401/404 Permitting	Charlotte, NC	40%
JMT	Alex Fitzpatrick	Greenway Design	Charlotte, NC	50%
JMT	Jon Ford, PE	Drainage Dsgn, Strembank Stabilizatns, Floodplain Dev Permtg, Strmwtr & Wtrshd Permtg	Charlotte, NC	40%
JMT	Bradley Ridnour, PE	Drainage Dsgn, Strembank Stabilizatns, Floodplain Dev Permtg, Strmwtr & Wtrshd Permtg	Middlesboro, KY	30%
JMT	Hilafu Hilafu, PE	Drainage Dsgn, Strembank Stabilizatns, Floodplain Dev Permtg, Strmwtr & Wtrshd Permtg	Knoxville, TN	50%
JMT	James Monohan	Drainage Dsgn, Strembank Stabilizatns, Floodplain Dev Permtg, Strmwtr & Wtrshd Permtg	Richmond, VA	50%
JMT	Kabin Luitel, PE, CFM	Drainage Dsgn, Strembank Stabilizatns, Floodplain Dev Permtg, Strmwtr & Wtrshd Permtg	Richmond, VA	40%
JMT	Hardy Willis, PE	Bridge, Large Culvert, Headwall, Structural Retaining Wall Design	Asheville, NC	50%
JMT	Kyle Compton, PE	Bridge, Large Culvert, Headwall, Structural Retaining Wall Design	New Bern, NC	40%
JMT	Gwen Pritchard, PE	Bridge, Large Culvert, Headwall, Structural Retaining Wall Design	Raleigh, NC	40%
JMT	Jason Bartley, EIT	Bridge, Large Culvert, Headwall, Structural Retaining Wall Design	Asheville, NC	60%
JMT	Nick Asaro, PLS	Utility Coordination	Charlotte, NC	50%
JMT	Joe Montgomery, CEPSCI	Utility Coordination	Columbia, SC	50%
JMT	Shep Cordray	NCDOT Encroachment Permitting	Asheville, NC	40%
JMT	Tara Best Crawford, PE	Construction Contract Development and Bidding	Asheville, NC	45%
Equinox	Owen Carson	Natural Resource Evaluation, Stream and Wetland Delineation, 401/404 Permitting	Asheville, NC	30%
Equinox	Charles Lawson	Natural Resource Evaluation, Stream and Wetland Delineation, 401/404 Permitting	Asheville, NC	30%
Equinox	David Tuch, RLA	Greenway Design	Asheville, NC	15%
Equinox	Megan Foy, RLA, LEED AP	Trail Amenity Landscape Architechtural Design	Asheville, NC	20%
ECS	Michael Walko, PE	Geotechnical Investigations	Charlotte, NC	25%
ECS	Kelly de Montbrun, PE	Geotechnical Investigations	Charlotte, NC	25%
ECS	Doug Chappell, PE	Geotechnical Retaining Wall Design	Charlotte, NC	25%
ECS	Mohammed Mulla, PE, PhD	Geotechnical Retaining Wall Design	Charlotte, NC	15%

Chapter 3 - Team Experience

FIRM	NAME	CLASSIFICATION	LOCATION	AVAILABILITY
TPD	Kristy Carter, AICP	Stakeholder Community Engagement Support	Asheville, NC	50%
TPD	Christy Staudt, PE	Greenway Design, Traffic Sign & Pavement Marking Designs	Asheville, NC	50%
TPD	Chris Wachter, PE	Traffic Sign & Pavement Marking Designs	Remote	75%
TPD	Colin Kinton, PE	Traffic Signals Design	Asheville, NC	50%
TPD	Robert Woutersz	Traffic Signals Design	Asheville, NC	75%
WLA	Hunter Marks, RLA, LEED AP	Stakeholder-Community Eng Support, GW Design, Trail Amenity, Landscape Archl Design	Hendersonville	30%
WLA	Brooke Alexander	Trail Amenity Landscape Architectural Design, Wayfinding Sign, Placemakg Sign Design	Hendersonville	30%
WE	Kevin Alford, PE	Drainage Dsgn, Strembank Stabilizatns, Floodplain Dev Permtg, Strmwtr & Wtrshd Permtg	Raleigh, NC	30%
WE	Jerry Lindsey, PE	Drainage Dsgn, Strembank Stabilizatns, Floodplain Dev Permtg, Strmwtr & Wtrshd Permtg	Raleigh, NC	30%
WE	Matthew Harvey, PE	Drainage Dsgn, Strembank Stabilizatns, Floodplain Dev Permtg, Strmwtr & Wtrshd Permtg	Raleigh, NC	40%
WE	Harminder Singh, PE	Drainage Dsgn, Strembank Stabilizatns, Floodplain Dev Permtg, Strmwtr & Wtrshd Permtg	Raleigh, NC	30%
WE	Katie Estep, EI	Erosion Control Design and Permitting	Raleigh, NC	50%

Key Personnel Resumes



REECE SCHULER, PE, PLS JMT PRINCIPAL-IN-CHARGE

Reece is not only the Principal on this project, he will also be overseeing/assisting with project design and contract development, as well as community engagement. He brings over 26 years of industry experience to your project. He has managed and provided roadway, street, sidewalk, and trail design services for accelerated projects, design-build highway improvements, and various intersection designs on local roads to large interstates. He will help to ensure coordination with NCDOT and other project stakeholders is seamless, and that project challenges are identified and solved efficiently. Reece lives in Henderson County.



JOEL SETZER, PE JMT - PROJECT MANAGER

Joel brings more than 37 years experience on multiple greenway projects like Henderson County's Ecusta Rails to Trails project. He worked for NCDOT for more than 30 years, starting as an entry-level engineer and advancing to advanced leadership roles for the 10-county division in far western North Carolina. His experience includes transportation and municipal improvement projects. He specializes in long-range planning, needs prioritization, feasibility studies, project development and financing, natural environmental analysis, human environmental analysis, environmental permitting, bidding processes management, and construction management.



JESSICA TOYE JMT - PROJECT ACCOUNTANT

Jessica has 12 years of experience that includes performing a wide variety of managerial, accounting, and administrative duties. She is experienced in managing several employees and delegating responsibilities appropriately to ensure all group and individual goals are met. She coordinates payments of accounts using different payment methods including credit card, check, and electric fund transfer. Jessica will maintain constant communication and translation to guarantee quality service.



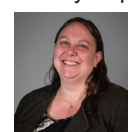
LISA FELLER, PE JMT - NEPA DOCUMENTATION

Lisa's project management expertise includes NEPA/SEPA planning and environmental document preparation; roadway design project plans and documentation; coordination with federal, state, and local agencies and the public; team supervision; schedule oversight; and quality control. These skills will be critical in her role for this project. She has 16 years of NEPA/SEPA environmental planning experience that encompasses all phases of the project development process from scoping through construction. Her expertise includes NEPA/SEPA compliance, the NEPA-404 merger process, environmental agency coordination, public outreach, and experience with Section 4(f), Section 6(f), Section 7, and Section 106 compliance.



PRESTON BUTLER JMT - NEPA DOCUMENTATION

Preston is an experienced scientist and consultant who can lead environmental regulatory and natural resource investigation tasks and projects from initial planning through permitting. He has provided regulatory planning and permitting, wetland and stream delineation, GIS mapping and analysis, as well as environmental documentation to both private and public clients on over 250 projects. He has acquired Clean Water Act jurisdictional determinations and permits, State buffer determination and authorizations, and other approvals from the US Army Corps of Engineers (USACE) and NC Division of Water Resources (NCDWR) for a variety of public and private projects.



MARY ALFSON-TINSMAN JMT - CULTURAL RESOURCE EVALUATION-BRIDGE 10

Mary has more than 25 years of experience completing a variety of environmental review documents including Historic Resource Surveys/Determination of Eligibility Reports, Determination of Effect Reports, and 4(f) Evaluations, including public involvement and preservation planning. She has prepared/participated in state-level and HABS/HAER documentation of residences, industrial buildings, bridges, and districts. She has served as a Cultural Resources Professional for several Pennsylvania Department of Transportation (PennDOT) past projects.

Chapter 3 - Team Experience



MARK PARRIS, PLS
JMT - SURVEY MANAGER

Mark is JMT's North Carolina Survey Manager and will be the survey lead on this project. He started his professional surveying career in 1999. He began his career at JMT (formerly V&M) in 2011 as a survey field crew leader. In 2015 he became the survey manager in charge of QA/QC, technical review, staffing, scheduling, and project budgets for the Carolinas. He has extensive experience in boundary surveys, topographical surveys and construction staking surveying. Mark is a Henderson County native.



DAN SCHILLING, PLS
JMT - SURVEY-REALITY CAPTURE & REMOTE SENSING

Dan has a diverse background that began in Wildlife and Fisheries and transitioned into surveying. His work in Wildlife and Fisheries allowed him to analyze geospatial relationships and process permits as they related to threatened and endangered species. Since switching to surveying, he has over five years of experience surveying and overseeing projects. He has extensive experience utilizing remote sensing techniques, such as LiDAR, to capture data resulting in higher accuracy, quicker data collection, and safer operations. He served as an advanced survey coordinator for clients including NCDOT and private clients working on jobs varying in scope from in-house to municipalities to state and even federal. He has done various combinations of collecting, processing, registering, drawing, and/or reviewing data and deliverables for jobs including buildings, hydrography, roadways, and railroads.



TIM BUCKNER
JMT - SUE CREW CHIEF

Tim has served as a Survey Party Chief and Subsurface Utility Engineering (SUE) Party Chief and SUE Project Analyst. He has been extensively involved in the surveying phase of all underground utilities, NCDOT projects involving utilities, and the private sector, and has gained valuable experience in the specialized field of SUE. He also serves as Crew Chief of the vacuum excavator performing hundreds of test holes on all types of utilities.



JON FORD, PE
JMT - HYDRAULICS DESIGN

Jon will head up the Steambank and Railroad Stabilization efforts. On both DOT and local roadway projects, he has conducted technical investigations and analysis of hydraulic studies, prepared stormwater management, drainage system infrastructure, and hydraulic and hydrologic analysis reports, outfall analyses, and roadway drainage design including stable channel analysis, inlet spacing studies, crossline and culvert analysis. Jon has eight years of experience in the transportation sector with a focus on stormwater management throughout North and South Carolina.



BRADLEY RIDNOUR, PE
JMT - HYDRAULICS DESIGN

Bradley is experienced in the design and analysis of hydrology and hydraulics. His primary roles have been the geometric design of roadways, hydraulic design of bridges, culverts, and storm sewers. Bradley is experienced in using HEC-RAS, as well as MicroStation CADD based highway and hydraulic design and drafting techniques, complex hydrologic and hydraulic analysis techniques, and bridge scour analysis. He has produced nearly 100 bridge or culvert survey reports, dozens of MOA (now SFC) documents, and around ten CLOMR/LOMR documents.



HARDY WILLIS, PE
JMT - STRUCTURE DESIGN

Hardy joined JMT in 1998 after 33 years with the NCDOT Structure Design Unit. He has been JMT's structural team leader in NC until a recent promotion. He has designed or managed over a hundred bridge projects for clients such as NCDOT, Kentucky Transportation Cabinet, SCDOT, GDOT, TDOT, Duke Energy, Cherokee DOT, and a host of private clients. His design experience ranges from highway and railroad to pedestrian bridges. He has managed multi-faceted projects with multiple structures, interstates, and intense schedule constraints.



GWEN PRITCHARD WILSON, PE
STRUCTURE DESIGN

Gwen is a project engineer with experience in providing high-level structural engineering design, quality control checks on plan production, and monitoring project adherence to the appropriate specifications and standards. Gwen is an analytical thinker with strong people skills and excellent organizational abilities. Responsibilities have included coordination and design of multiple retaining walls; overseeing the preparation and checking of structure design calculations, reports and plans; and development of analysis and rating of bridges.



NICK ASARO, PLS
JMT - UTILITY COORDINATION

Nick has extensive utility coordination and property acquisition work with local municipalities and DOT projects throughout North Carolina. He has worked with many utility companies, including Duke Energy, Dominion Gas, AT&T Communications, Charter Communications, Piedmont Natural Gas, and multiple municipalities to coordinate the relocation and organization of any utility in conflict (power lines, gas lines, water and sewer lines, etc.) found within project limits. He is adept at identifying major utilities to avoid and early minor relocations to maintain project schedules.



TARA BEST CRAWFORD, PE
JMT - CONSTRUCTION CONTRACT DEVELOPMENT & BIDDING

Tara is knowledgeable in commercial subdivisions, public and private road design, wetland mitigation, and disaster response. She has experience with project and construction management, facility management, stormwater management, and geotechnical analysis. As an Assistant Resident Maintenance Engineer, she oversaw routine maintenance and emergency repairs of more than 7,000 lane miles, including 50+ miles of interstate, three weigh stations, and two rest areas.

Chapter 3 - Team Experience



DAVID TUCH
EQUINOX - REGISTERED
LANDSCAPE ARCHITECT

David is the owner and President of Equinox. He worked in Portland, Oregon for a multidisciplinary firm on greenway and trail, recreation planning, and ecological design in the state of Oregon and Washington. His past work experience also includes recreational planning and design for the National Park Service. David brought his national experience to the region and has been involved in a variety of trail and greenway projects in the southeast. He served as the project manager for the award winning French Broad River Greenway at New Belgium Brewing and led the preliminary design for the HWY 251/Woodfin Greenway/Blueway (includes rails with trails).



MEGAN FOY
EQUINOX - LANDSCAPE
ARCHITECT & LEED AP

Megan is a licensed Landscape Architect and Leadership in Energy and Environmental Design accredited professional. She is skilled at working with communities to integrate needs and desires into context sensitive design. She has worked on a variety of site specific designs for greenway trailheads, recreation master plans and park projects. Megan's experience includes working on several greenway and trailhead projects, including the Bearwallow Mountain Trailhead where she has worked with NCDOT to develop designs that integrate environmental site constraints with improvements to pedestrian safety. She also played a key role in the Mendota Rail to Trail project and served as the project manager for the Waynesville Greenway project.



OWEN CARSON
EQUINOX - ECOLOGIST

Owen specializes in Environmental Assessments, Stream and Wetland Delineations, Regulatory Permitting, Natural Resource Inventory, Ecological Monitoring, and Biological Surveys. He has worked on providing environmental documentation for greenways in accordance with NCDOT guidelines and requirements including Type II Ground-Disturbing Categorical Exclusion (CE) and Natural Resources Technical Reports. He also provides stream and wetland delineations and jurisdictional determinations. He provided environmental services for the Enka Heritage Trail in Buncombe County, the Hwy 251 Greenway in Woodfin, and the Swannanoa River Greenway in Asheville.



CHARLES LAWSON
EQUINOX - WILDLIFE
BIOLOGIST

Charles has 22 years of experience in wildlife biology. As a Technician with the NCWRC wildlife diversity program, he conducted surveys for state and federally listed terrestrial species. Charles' work experience includes conducting surveys for special concern, threatened and endangered species, fisheries surveys, benthic invertebrate collection, wetland identification/delineation, stream restoration monitoring, natural resource identification, water quality, and monitoring associated with construction activities, NEPA documentation, 404/401 permits, USFS special use permits, and ecological, and biological assessments.



MICHAEL WALKO, PE
ECS - GEOTECHNICAL

Mike is a Principal Engineer for ECS. He has more than 28 years experience in a broad range of geotechnical engineering projects and is responsible for providing project management and engineering services to ECS's transportation clients. He has experience managing and executing a wide variety of subsurface exploration programs pertaining to transportation projects. His experience includes oversight for field evaluations; adapting fieldwork to adverse conditions, evaluating subsurface conditions, review of field and laboratory data and preparation of bridge foundation and roadway reports.



MOHAMMED MULLA, Ph.D, PE,
CPM
ECS - GEOTECHNICAL
RETAINING WALL DESIGN

Dr. Mulla has experience in the transportation industry, project management, and contract management. He served at the NCDOT over 30 years, the last 18 as the State Soils and Foundation Engineer and the Assistant State Geotechnical Engineer. He has managed and supported the geotechnical investigation, testing, and designing of hundreds of bridges, roadway miles, retaining walls, pavements, subgrade investigation and ground improvement. Dr. Mulla's experience includes providing design recommendations for roadway slopes, retaining walls, geosynthetic reinforced slopes, design and evaluation of shallow and deep foundations, pavement subgrades investigation and recommendation and chemically stabilized roadway subgrades across North Carolina.



KRISTY CARTER, AICP
TPD - STAKEHOLDER |
COMMUNITY ENGAGEMENT
SUPPORT

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 and is a skilled community planner having designed and executed transportation and community impact projects in more than 30 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.



CHRISTINA STAUDT, PE
TPD - GREENWAY DESIGN

Christy is TPD's regional manager overseeing work in the Southeast for public sector design and planning projects. Christy approaches projects with an eye on context sensitivity and awareness of mobility needs for all road users. Her experience ranges from project planning through conceptual, preliminary and final design. Christy has also provided project oversight through bidding and construction inspection and has reviewed hundreds of land development and transportation improvement plans including corridor studies, access plans, traffic impact studies, internal circulation, roadway safety reviews, traffic calming, municipal consulting, MUTCD compliance and ADA compliance reviews. Christy's experience also includes extensive public involvement outreach as part of planning and design contracts. Christy is a resident of Henderson County and has led or worked on 20 active transportation projects in Buncombe and Henderson Counties.



COLIN KINTON, PE
TPD - TRAFFIC SIGNALS
DESIGN

Colin has more than 30 years of experience in traffic and transportation engineering roles in North Carolina, South Carolina and Tennessee. Throughout his career he has been responsible for local traffic engineering studies, transportation planning, local capital project planning, construction management and transportation facility maintenance. He is well-versed in traffic signal design and coordination, traffic calming, corridor access management and complete streets.

Chapter 3 - Team Experience

Additionally, his local programming, management and maintenance experience has provided him with the background knowledge to see the connection between project planning and the potential savings on constructability with long-term maintenance benefits. Colin's traffic signal design experience includes implementing multiple pedestrian crossings with pedestrian hybrid beacons (HAWK signals), rectangular rapid flash beacons (RRFB) and other high visibility accessible crossings to improve safety and access for all.



CHRIS WACHTER, PE
TPD - GREENWAY ROAD CROSSING DESIGN

Chris currently serves as a Project Manager and is responsible for the analysis and design of various roadway, trail, and ADA ramp projects for NCDOT, NJDOT, DELDOT, PENNDOT, the Pennsylvania Turnpike Commission and other local government clients. He also has extensive experience in construction services as a construction inspection supervisor, where he has worked on hundreds of work orders providing daily oversight and documentation, and preparing estimates.



ROBERT WOUTERSZ, EIT
TPD - GREENWAY ROAD CROSSING DESIGN

Robert Woutersz serves as a Highway Design Specialist for TPD where he has been focused on the design of pedestrian facilities, pavement marking and signing plans, traffic signals, and ADA curb ramps. He has provided these services for NCDOT, SCDOT, PennDOT, and various private developers.



HUNTER MARKS, RLA, LEED AP
WLA - COMMUNITY ENGAGEMENT & LANDSCAPE DESIGN

Hunter is a local landscape architect and the President of the Friends of the Ecusta Trail. As a landscape architect and land planner, Hunter has been involved in many trail, greenway, and park projects. He previously worked in the rail industry as a Trainmaster on the Norfolk & Western Railway. His background gives him a unique perspective on issues involving the development of the Ecusta Trail.

Hunter received his Masters in Landscape Architecture from Louisiana State University, and received his Bachelors Degree in Agriculture from the University of Tennessee. He is a member of the American Society of Landscape Architects, is a LEED AP designer, and is licensed as a landscape architect in North Carolina, Georgia, Tennessee, and South Carolina.



BROOKE ALEXANDER, BLA
WLA - COMMUNITY ENGAGEMENT & LANDSCAPE DESIGN

Brooke holds a degree in Landscape Architecture from the University of Georgia. She has in-depth knowledge and background with plant material, graphics, and design. Brooke's extensive international travel and work experience brings an added dimension to each project, which is highly valued by our clients.



KEVIN ALFORD, PE
WE - DRAINAGE DESIGN, EROSION CONTROL

Kevin has over 22 years of experience in the field of Hydraulic/ Hydrologic Design, working on projects across the entire state of North Carolina. He is experienced in stormwater design, erosion control design, scour analysis, Bridge/Culvert design and SCM (Stormwater Control Measure) design. He also has extensive experience with the modeling of streams, culverts and bridges using HY-8, HEC-2 and HEC-RAS.

Kevin also has completed numerous FEMA Flood studies that involve CLOMRs, LOMRs, no-rise/no-impact studies and floodway modifications. His experience as a lead hydraulic engineer includes private, municipal, university and state government clients for projects ranging from municipal sidewalk and greenways to major interstate improvements.



JERRY LINDSEY, PE
WE - DRAINAGE DESIGN, EROSION CONTROL

Jerry joined Wetherill Engineering in 2017 after 32 years with the NCDOT Hydraulics Unit. Much of his time with the Hydraulics Unit was with the Maintenance Section where he was responsible for all aspects of highway maintenance issues with regard to drainage statewide. He is experienced in investigating, analyzing, and resolving drainage complaints. His experience includes design/analysis of storm drain systems, curb and gutter, and open channels. He has experience in flood modeling on numerous bridge, culvert, and pipe replacement projects. He has experience in designing remedial solutions for failing drainage systems which include rehabilitating in place, supplemental pipes, or replacing/rerouting the systems.



MATT HARVEY, PE
WE - DRAINAGE DESIGN, EROSION CONTROL

Matt is a Hydraulic Engineer with 21 years of experience and a background in hydraulic and roadway design. Matt specializes in hydraulic design, erosion control design, permitting, and CAD, and is a certified NCDOT Level III Erosion Control Designer.

Matt's experience includes design/analysis of storm drain systems, curb and gutter, and open channels on projects from large interstates to sidewalk projects. Matt just recently completed the drainage design on a portion of I-40 in Asheville from Monte Vista Road to west of Sand Hill Rd. and I-26 from Pond Road Bridge to I-26/I-40/I-240 interchange.

Chapter 4 - Technical Approach

The JMT Team's project approach and methodology will be driven by applying our **knowledge gained on the first six miles** of this project, the **knowledge we have of the required NCDOT processes** for the use of secured grants for the construction phase, and **achieving the deadline** of having a construction contract in place by July of 2024.

Much of the project requires routine design approaches and methodologies since we are utilizing an existing railroad bed within mostly rural and undeveloped areas. This means the alignment is mostly established, much of the alignment is free of larger vegetative growth, and there is a secured 100-foot right of way for this entire section and we will not be as constrained with necessary drainage improvements needed and avoidance of impacts to natural resources.

There are several unique conditions and design considerations throughout the project. They include:

Prior environmental commitments – the current Categorical Exclusion for the project included commitments to staying within the existing railroad bed, the existing right of way, and retaining all bridges. However, the safer alignment, the alignment required to avoid harsh and undue impacts on the natural environment, and the condition of the bridges mean we must revisit those commitments to achieve a functional greenway that fits our environmental context. Bridge 10 over the French Broad River will likely have the middle portion be deemed significant and need to be retained along with its stone masonry abutments. Designing new sections of the bridge to replace the decayed wood that fits the character of the retained portion and avoids flood zone impacts will be an exciting opportunity to showcase our structural engineers, hydraulics engineers, and landscape architects' ability to coalesce around a solution. Our team will engage the State Historic Preservation Office on day one to gain clarity on the historic significance of Bridge 10 and utilize designs that preserve and enhance its significant attributes.

Significant presence of wetlands and streams in the ditches – this five-mile section is very similar to the western portion of the six-mile section we just completed our design services for. It has very poor drainage infrastructure, which over time has created wetlands or streams in the ditches. These features are not included in current wetland and stream on-line mapping but will become jurisdictional during natural resource evaluations needed to satisfy the National Environmental Policy Act (NEPA) and obtain permits for construction. Our team will conduct jurisdictional feature delineation early in our schedule and map streams and wetlands before design efforts begin to avoid resource impacts and delays in implementing the project. The first six miles of the total 18-mile project were permitted under Nationwide Permits with lower thresholds. As the impacts begin to become cumulative for this project and the Transylvania County section, care must be taken to avoid and minimize impacts on these resources to save time and money during permit acquisitions.

Potential for Flood Zone Impacts – Approximately 2.5 miles (about ½) of the current alignment lies within the flood zones of regulated streams of Battle Creek and Gash Creek and the French Broad River. The design of the greenway will not only need to achieve the objectives of supplying a paved width for the anticipated greenway use demand but will need to also be designed **to achieve no increase in the base flood elevations to avoid long and expensive permitting processes to modify the flood zones**. Our team demonstrated the ability to achieve this balance through our services on the Horse Shoe to Hendersonville section of the Ecusta Trail. We

intend to achieve this balance again by lowering grades and retaining bridge elevations to design a greenway that will not impact the flood zones and avoid adverse impacts to neighboring properties. Doing so is a trial-and-error process that must be tackled early in our design process to achieve a construction start in July 2024.

Existing Makeshift Retaining Walls and Stream/River

Scour Protection – our team has identified at least two areas where the railroad company constructed retaining walls using railroad rails as piles and railroad crossties as panels for makeshift walls to shore up the railroad and prevent future stream or river scouring of the alignment. One area is along the French Broad River north of Old Brevard Highway near Horse Shoe. The other is near the intersection of Armstrong Road east of Etowah.

These walls likely have creosote timber lagging components that will decay soon and undermine the new greenway pavement structure.

On the first day of our work, we will have a full on-site assessment of geotechnical engineers, structural engineers, greenway design staff, and environmental scientists and quickly determine how to repair or replace these walls to render them suitable for the greenway. Like many of the areas we faced on the Hendersonville to Horse Shoe design work, our team has faced similar challenges and has a menu of solutions available.

Other walls and rock embankment armoring are highly likely to be needed to avoid impacts to flood zones and jurisdictional waters. ECS and JMT have a strong historic working relationship and successfully delivered many retaining walls across the state.

Requirements of Funding Agencies for Design Reviews and the Ability to Adapt – JMT has **successfully delivered hundreds of NCDOT plan sets** that have been through various degrees of NCDOT plan reviews. We understand the process and the time to allow in the schedule to achieve NCDOT concurrences. We also understand these are new processes for the County and can adapt to changing NCDOT guidance just as we did on the Hendersonville to Horse Shoe section. Our team pushed to achieve multiple NCDOT reviews that were initially eliminated from the scope and fee to save money and time on design work. When this work was added back to the scope, **our team moved rapidly to adjust and get the reviews performed as quickly as possible to minimize the damage to the delivery schedule**. In most cases, our team worked at a financial loss to achieve this rather than slow down the delivery process with claims for additional compensation. We have demonstrated an ability to assist you with the requirements of funding agencies, even when they change, to achieve the objective of implementing the construction phase.



Makeshift Wall Along River



Makeshift Wall Near Armstrong Road

Chapter 4 - Technical Approach

In addition to **successfully delivering plan sets, special provisions, and environmental permits that have been subject to NCDOT reviews**, we have also **delivered NCDOT-style construction contract proposals on at least eight projects in the past five years**. These utilized NCDOT contract language templates and were subject to NCDOT reviews.

Greenway crossings of minor arterial and heavy traffic carrying local routes – the greenway will cross US 64 (minor arterial) in Etowah that carries an estimated 11,500 vehicles per day (VPD) and heavy traffic carrying local roads of Banner Farm Road (estimated Annual Average Daily Traffic (AADT) of 3400 VPD), and Etowah School Road (estimated AADT of 1600 VPD). As we demonstrated in the Hendersonville to Horse Shoe section, our team knows how to treat these unique conditions by applying the latest technologies available and trending concepts where applicable. Our team demonstrated the ability to work with NCDOT on recommended traffic control devices to gain early concurrence on various design concepts for each crossing. We will apply this same approach to this new project.

No other firm and team could have pulled off the change of requirements that this team demonstrated in the first six-mile section. Our team focused on the delivery of the project rather than our profit margins.

JMT's capability to meet your project needs is supported by a team with decades of unparalleled experience and expertise.

Aggressive delivery – JMT can accomplish getting the project to construction in the October to July timeframe specified. The team we present was assembled and developed with this goal in mind. The reasons this team can be successful with the proposed schedule include:

A team with design templates, special provisions, and contract language in place from the Hendersonville to Horse Shoe section – during the design, we developed templates for safety signage, pavement markings, road crossing signalization, safety railing, guardrail placement, detectable warning surfaces, rock embankments, uniquely sized drainage structures, placemaking signage, and prefabricated bridges that have undergone NCDOT reviews, and we are ready to apply to this section of the Ecusta Trail. Having these templates ready to implement means less review time in debating NCDOT approvals and less design time to present plans for approval. This will not only deliver the project on time but will save money on design costs. This is one of the driving factors for retaining the existing team.

A large contingent of survey staff and innovative survey solutions – to achieve full topographic surveys for design work, **we have identified and tentatively dedicated four conventional survey crews, one drone survey crew, one subsurface utility (SUE) crew, three staff specializing in processing drone survey and scan survey data, four survey CAD technicians to achieve having full mapping for designs within five weeks**. Field crews will be supplied from our Asheville and Spartanburg offices, where we have additional crews on reserve should they be required and **save you significant costs compared to utilizing crews from outside of the region**.

Our survey effort will be coordinated in the field with stream and wetland delineations meaning a consistency in the survey points for these features that will achieve faster and cheaper results in designing the project that avoids and minimizes environmental impacts.

Our field crews will focus on mapping existing drainage features to get a drainage design started earlier in the design process and avoid delays in achieving the overall schedule objectives.

Advanced design work utilizing existing survey work and available online Lidar – rather than awaiting a full topographic survey for preliminary design work, there are many preliminary design functions that can utilize the existing survey performed for the rail corridor acquisition coupled with online Lidar that include road crossing designs, preliminary pipe sizing placement, drainage ditch designs, preliminary line and grade, placement opportunities for landscape architectural features and amenities, and need for retaining walls. Our team will produce preliminary base mapping for designs within two weeks so that preliminary designs may proceed while full topographic surveys for final designs are developed.

An expanded team for drainage design, land disturbing activities permitting, and stormwater permitting – we have added an additional subconsultant, Wetherill Engineering (WE), to augment the JMT staff for these aspects of the design services. We have partnered with JMT on multiple NCDOT projects, fully know NCDOT drainage design requirements, and have a robust staff to add to the land disturbance permitting and stormwater permitting processes. **Between JMT and WE, we plan to utilize over 10 design professionals to make the project schedule.**

Aggressive and Focused Project Delivery – Upon notification of selection, a granular project schedule will be developed outlining each team member's expectations for success. We will have a weekly project huddle with the survey and design staff and hope to have the County and NCDOT representatives present to maintain focus on the project schedule.

Application of team knowledge in the process for project delivery required by funding and regulatory organizations – this team, through its experiences on prior but very similar projects, understands what is expected for project success. These organizations include the United States Department of Transportation (USDOT); Federal Highway Administration (FHWA); North Carolina Department of Transportation (NCDOT); Henderson County; Friends of Ecusta Trail; Conserving Carolina; United States Army Corps of Engineers (USACE); NC Department of Environmental Quality (NCDEQ); and the NC Wildlife Resources Commission. We have professional relationships with many staff in these organizations, and many of our staff have worked within them.

Our project timeline meets the deadlines of beginning construction and allows for time for NCDOT and the RTAC reviews needed. NCDOT review processes and environmental permitting will consume 3.7 months of the available 10 months for the planned work. Our aggressive and deliverable timeline can be found on the following page.

Chapter 4 - Technical Approach

Project Timeline**			
Phase	Activity	Start	End
Preliminary	Scope, Fee Contract Execution	9/20/2023	10/2/2023
	Subconsultant Contracts	10/2/2023	10/6/2023
	Topographic Surveys/Base Mapping for Design	10/3/2023	11/3/2023
	Stream & Wetland Delineation	10/9/2023	10/20/2023
	Cultural Resource Screening	10/2/2023	11/3/2023
	Bridge 10 Potential Historic Significance Evaluation	10/2/2023	11/30/2023
	Geotechnical Pavement Recommendations	10/9/2023	11/3/2023
30%	Greenway Design	11/6/2023	12/1/2023
	US 64 & Banner Farm Road Crossing Design	10/9/2023	11/3/2023
	Wall and Slope Stabilization Determinations	12/4/2024	12/15/2023
	Utility Coordination	11/6/2023	12/15/2023
	Updating the NEPA Document	12/16/23	2/29/2024
60%	Wall/Bridge Foundation Recommendations	12/18/2023	1/26/2024
	Drainage Design	12/18/2023	2/2/2024
	Greenway Design	1/8/2024	2/9/2024
	Bridge and Wall Design	1/29/2024	2/23/2024
90%	Greenway Design	2/12/2024	3/22/2024
	Trail Amenity Design	2/12/2024	3/15/2024
	Traffic Management Design	2/12/2024	3/1/2024
	Traffic Signal Design	2/12/2024	3/8/2024
	Traffic Sign & Pavement Marking Design	2/12/2024	3/1/2024
	Wayfinding/Placemaking Sign Design	2/12/2024	3/8/2024
	Bridge & Wall Design	2/12/2024	3/22/2024
	Erosion Control Design	3/11/2024	3/22/2024
	NCDOT Plans Review, Comment Responses, Plan Changes	3/25/2024	4/19/2024
Permitting	Permit Drawings, 401/404 Permits	3/25/2024	5/17/2024
	Floodplain Development	3/25/2024	4/19/2024
	Erosion and Sedimentation Control	3/25/2024	4/19/2024
	Stormwater Management and Watershed	4/22/2024	5/3/2024
	NCDOT Encroachment Permit	5/6/2024	6/7/2024
Let Preparation	Construction Contract Development & Special Provisions	4/22/2024	5/10/2024
	NCDOT Construction Proposal Review, Responses, Authorizations	5/13/2024	5/31/2024
	NCDOT Authorization to Advertise and Let	6/1/2024	6/7/2024
	Advertisement, Bidding	6/10/2024	7/9/2024
	Contract Award, NCDOT Concurrence	7/10/2024	7/26/2024

****The above timeline is aggressive and ambitious. The overall time start to finish is ten months. The permitting processes and required NCDOT reviews will consume almost four months of the total ten months. This team is uniquely poised to deliver this project on this timeline because of our prior accomplishments on the project and the staff resources available in our area. We have already tentatively scheduled the surveying and design activities to ensure success. Our team has demonstrated the ability to continue with the project delivery process when change orders in design services are necessary without causing delays to the schedule.**


**NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
PRIME CONSULTANT
TO BE USED WITH PROFESSIONAL SERVICES CONTRACT ONLY
RACE AND GENDER NEUTRAL**

Henderson County Ecusta Rail-Trail West

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

Johnson, Mirmiran and Thompson, Inc.

*(Consultant/Firm Name **ONLY** -- Include NO PII (Personally Identifiable Information))*

SERVICE / ITEM DESCRIPTION		Anticipated Utilization
023 Bridges-Spans over 200' 024 Bridges under 200' 032 Categorical Exclusion 063 Environmental Assessment/		
Finding of No Significant Impacts 070 Erosion Control 106 Historic Architectural Surveys of Standing Structures		
132 Landscape & Streetscape Design 143 NBIS Bridge Inspection 155 Pavement Marking Plans 171 Public		
Involvement 199 Route Location Survey 243 Threatened & Endangered Species Survey 247 Traffic Control		
Surveys 269 Urban Roadway Design 270 Utility Coordination 280 Wetlands & Stream Delineation 316 Multiuse		57%
Trail Design, Survey & Layout 433 Basic Hydrologic & Hydraulic Design 434 Tier II Complete Hydrologic &		
Hydraulic Design		
TOTAL UTILIZATION:		57%
RECOMMENDED BY:		
CONSULTANT:		
Johnson, Mirmiran and Thompson, Inc.		
		
*BY: Reece Schuler, PE, PLS		
TITLE: Vice President		<input type="text"/>
SPSF Status:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

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

Instructions for completing the Form RS-2:

1. Complete a Prime Consultant Form RS-2 for the prime consultant firm.
2. Insert TIP Number and /or Type of Work (Limited Services)
3. Complete the Consultant/Firm name for the primary firm information.
4. Enter Service/Item Description – describe work to be performed by the Prime Firm
5. Enter Anticipated Utilization – Insert dollar value or percent of work to the Prime Firm
6. *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
7. Complete “SPSF Status” section - Check the appropriate box regarding SPSP Status, check Yes if SPSP or No if not SPSP

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Henderson County Ecusta Rail-Trail West

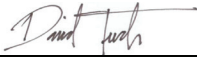

TIP No. and/or Type of Work (Limited Services)

Johnson, Mirmiran and Thompson, Inc.

*(Consultant/Firm Name **ONLY** -- Include NO PII (Personally Identifiable Information))*

Equinox Environmental Consultation and Design, Inc.

*(Subconsultant/Firm Name **ONLY** -- Include NO PII (Personally Identifiable Information))*

SERVICE / ITEM DESCRIPTION		Anticipated Utilization
132 Landscape & Streetscape Design 243 Threatened & Endangered Species Survey		
280 Wetlands & Stream Delineations 316 Multi-Use Trail Design, Survey & Layout		8%
TOTAL UTILIZATION:		8%
SUBMITTED BY: SUBCONSULTANT: Equinox Environmental Consultation and Design, Inc.	RECOMMENDED BY: CONSULTANT: Johnson, Mirmiran and Thompson, Inc.	
		
*BY: David Tuch	*BY: Reece Schuler, PE, PLS	
TITLE: President	TITLE: Vice President	<input type="text"/>
SPSF Status: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

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

Instructions for completing the Form RS-2:

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 for the primary firm information.
4. Complete the Subconsultant/Sub Firm name 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

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.

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Henderson County Ecusta Rail-Trail West



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

Johnson, Mirmiran and Thompson, Inc.

*(Consultant/Firm Name **ONLY** -- Include NO PII (Personally Identifiable Information))*

ECS Southeast

*(Subconsultant/Firm Name **ONLY** -- Include NO PII (Personally Identifiable Information))*

SERVICE / ITEM DESCRIPTION		Anticipated Utilization
032 Categorical Exclusion 063 Environmental Assessment/Finding of No Significant Impacts		
294 Roadway Foundation Investigation & Design 295 Structure Foundation Investigation & Design 296 Retaining Wall Investigation & Design 297 Pavement Design Investigation		9%
TOTAL UTILIZATION:		9%
SUBMITTED BY: SUBCONSULTANT: ECS Southeast	RECOMMENDED BY: CONSULTANT: Johnson, Mirmiran and Thompson, Inc.	
		
*BY: Mohammed, Mulla, PE, PhD, CPM	*BY: Reece Schuler, PE, PLS	
TITLE: Vice President	TITLE: Vice President	<input type="text"/>
SPSF Status: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

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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
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Henderson County Ecusta Rail-Trail West



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

Johnson, Mirmiran & Thompson, Inc.

*(Consultant/Firm Name **ONLY** -- Include NO PII (Personally Identifiable Information))*

Traffic Planning and Design, Inc.

*(Subconsultant/Firm Name **ONLY** -- Include NO PII (Personally Identifiable Information))*

SERVICE / ITEM DESCRIPTION		Anticipated Utilization
155 Pavement Marking Plans - 100%, 171 Public Involvement - 80%, 207 Signal Design -100%		
247 Traffic Control Plans - 100%, 269 Urban Roadway Design - 100%, 316 Multi-Use Trail Design, Survey, and Layout - 5%		12%
TOTAL UTILIZATION:		12%
SUBMITTED BY: SUBCONSULTANT: 	RECOMMENDED BY: CONSULTANT: Johnson, Mirmiran and Thompson, Inc.	
Traffic Planning and Design, Inc.		
*BY: Christina Staudt, PE	*BY: Reece Schuler, PE, PLS	
TITLE: Regional Manager	TITLE: Vice President 	
SPSF Status: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

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

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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
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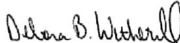

TIP No. and/or Type of Work (Limited Services)

Johnson, Mirmiran and Thompson, Inc.

*(Consultant/Firm Name **ONLY** -- Include NO PII (Personally Identifiable Information))*

Wetherill Engineering

*(Subconsultant/Firm Name **ONLY** -- Include NO PII (Personally Identifiable Information))*

SERVICE / ITEM DESCRIPTION		Anticipated Utilization
023 Bridges-Spans over 200' 024 Bridges-Spans under 200' 032 Categorical Exclusion 063 Environmental Assessment/Finding of No Significant Impacts 070 Erosion Control		
143 NBIS Bridge Inspection 199 Route Location Survey 207 Signal Design 433 Basic Hydrologic & Hydraulic Design 434 Tier II Complete Hydrologic & Hydraulic Design		12%
TOTAL UTILIZATION:		12%
SUBMITTED BY: SUBCONSULTANT: Wetherill Engineering	RECOMMENDED BY: CONSULTANT: Johnson, Mirmiran and Thompson, Inc.	
		
*BY: President	*BY: Reece Schuler, PE, PLS	
TITLE:	TITLE: Vice President 	
SPSF Status: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

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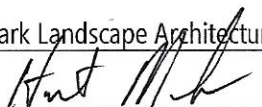

TIP No. and/or Type of Work (Limited Services)

Johnson, Mirmiran and Thompson, Inc.

*(Consultant/Firm Name **ONLY** -- Include NO PII (Personally Identifiable Information))*

Watermark Landscape Architecture

*(Subconsultant/Firm Name **ONLY** -- Include NO PII (Personally Identifiable Information))*

SERVICE / ITEM DESCRIPTION		Anticipated Utilization
132 Landscape and Streetscape Design 316 Multi-Use Trail Design, Survey & Layout		2%
TOTAL UTILIZATION:		2%
SUBMITTED BY: SUBCONSULTANT: Watermark Landscape Architecture	RECOMMENDED BY: CONSULTANT: Johnson, Mirmiran and Thompson, Inc.	
		
*BY: HUNTER MARKS, RLA	*BY: Reece Schuler, PE, PLS	
TITLE: PRINCIPAL	TITLE: Vice President 	
SPSF Status: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

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