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SOUTHWEST MICHIGAN PLANNING COMMISSION IN MIRIVER VALLEY TRAIL EXTENSION



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June 15, 2020

Southwest Michigan Planning Commission 376 W. Main Street, Suite 130 Benton Harbor, MI 49022

Attention: Mr. Kris Martin, Associate Planner

RE: IN MI RIVER VALLEY TRAIL EXTENSION PHASE III

Dear Kris:

Wightman is a full-service consulting firm that exists to serve people and the communities we live in. Our dynamic team of over 140 professionals works to analyze, advise, design, and deliver successful projects in partnership with governments, businesses, and institutions in our communities. Becoming trusted advisors and true partners guides our actions.

We understand the Southwest Michigan Planning Commission (SWMPC) is seeking professional design and engineering services for the next phase of the Indiana and Michigan River Valley Trail (INRVT) which will consist of nine miles of shared use trail between Plym Park in Niles, MI and Range Line Park in Berrien Township, MI. We are so excited to see this next phase of trail moving forward and that is a testament to all the players involved and proof that the community's desire for trails has hit a critical mass. Be Healthy Berrien and SWMPC's efforts in the preliminary route planning for this extension had record public turnout and was very thorough.

We have worked throughout the region to assist communities with trail planning, design and construction. For all the trail projects, a state or federal funding source was utilized to leverage local dollars. We are very familiar with MDOT Local Agency Projects (LAP) and Michigan Natural Resources Trust Fund (MNRTF), both trail and roadway, We are typically involved in seven to 10 MDOT LAP and three to four Michigan Department of Natural Resources MNRTF projects each year.

Wightman is uniquely qualified for this project because of our involvement with the IMRVT through Niles Township; the coordination of the cross state grand opening of the trail; development of the Range Line Park trailhead in Berrien Township; pro-bono St. Joseph River crossing study for this trail; and involvement in all public input sessions for this phase of trail. Wightman has also worked with all of the current layout project landowners, including the City of Niles, Niles Township, Berrien Township, the Berrien County Road Department, American Electric Power, and MDOT.

Thank you again for the opportunity to submit this proposal to the Southwest Michigan Planning Commission. We look forward to the chance to continue our work with the with you on this project.

If you have any questions, please feel free to contact me.

Very truly yours,

CII

Steve C. Carlisle, PE scarlisle@gowightman.com

ALLEGAN

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o 269.673.8465

- BENTON HARBOR, MI 49022
- A 433 E. RANSOM ST.

o 269.327.3532

KALAMAZOO, MI 49007

KALAMAZOO

- A 306 S. WASHINGTON AVE., SUITE 200 ROYAL OAK, MI 48067
- o 248.791.1371

ROYAL OAK

GOWIGHTMAN.COM

BENTON HARBOR

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SCOPE OF WORK

We understand the Southwest Michigan Planning Commission (SWMPC) is seeking professional design and engineering services for the next phase of the Indiana and Michigan River Valley Trail (INRVT) which will consist of 9 miles of shared use trail between Plym Park in Niles, MI and Range Line Park in Berrien Township, MI. We are so excited to see this next phase of trail moving forward and that is a testament to all of the players involved, and proof that the community's desire for trails has hit a critical mass. Be Healthy Berrien and SWMPC's efforts in the preliminary route planning for this extension had record public turnout and was very thorough.

This RFP will cover the engineering services for this next phase of trail. A preliminary route has been developed and this route needs to be finalized. The trail will be developed to meet the AASHTO Guide for the Development of Bicycle Facilities, as well as ADA. It is anticipated that the project will seek funding through MDOT Transportation Alternatives Program (TAP) as well as Michigan Department of Natural Resources Trust Fund (MNRTF). The project will be designed to meet the criteria for both of these programs.

The scope of work will be broken into the following phases:

Preliminary Design Phase (Includes RFP Potential Project Deliverables A, B and E):

Based on our past experience on similar projects, we feel that the time spent on the preliminary phase is extremely important to prepare accurate cost estimates and stay within that budget for design. With that in mind we have put more tasks and time in the preliminary phase than the grant currently covers at \$13,000. We will include and invoice those fees in the Grade Inspection Phase but complete the tasks in the Preliminary Design Phase. We hope this shows our dedication to the project and the importance of these tasks to be completed early.

This phase will include refining the preliminary route map prepared by SWMPC; development of typical trail cross sections; review of environmental, historic, or physical constraints; preliminary right of way and property review; as well as preliminary cost estimates for construction. This design will take into account the different trail designs that will be needed for this route which will include at grade trail, bridges/culverts, and boardwalks as necessary.

We believe that this phase has three major goals for the stakeholders:

- 1) Preparation of the necessary supporting documents to seek state and federal grant funding,
- 2) Creation of visuals and proposed costs for local match fundraising, and
- 3) Establishment of major environmental, historic, or physical hurdles for the project early in the preliminary design phase allowing enough time to address them.

Included in this phase is an early onsite review meeting with regulatory and funding agencies including MDOT, EGLE, MDNR, USF&W for coordination and alliance regarding potential environmental conflicts. We propose to meet onsite following the first stakeholder group meeting.

This trail may need more local match and project fundraising than previous projects due to the substantial cost of this phase. During the public outreach meetings last year, the public greatly enjoyed reviewing the aerial and overall maps with stakeholders. Once the leaves have fallen, we propose to fly the proposed route with our flight crew and drone to stitch together an aerial with high-resolution photos taken from a height just above the trees and much closer to the ground. This aerial trail map can be utilized in multiple ways - stakeholders can use this aerial map to determine the locations for trail amenities and to provide an overall trail view during fundraising events. The map will also help further define the areas of concern and show the segments where environmental, physical or historic conflicts occur.

When the conceptual design and cost estimate are completed, Wightman will present our findings to SWMPC

SCOPE OF WORK

for review. There are two meetings during this phase: one with the stakeholder group and one for the public to present this information. We will incorporate approved feedback into the plan and estimate. Once the meetings have been complete, we will assist the SWMPC with applications to MDOT for TAP funding and MDNR for MNRTF funding. Wightman will assist SWMPC with the grant applications as needed.

The bridge over the Dowagiac River is a steel superstructure with concrete abutments and pier built in 1929. It would appear that the condition would be adequate to carry the required pedestrian loading, but we have included an inspection and load rating in this phase to verify that the condition is sufficient.

Construction Documents – MDOT GI Plans (Includes RFP Potential Project Deliverables C and D):

Once we complete the initial conceptual engineering phase, the route would be finalized and the environmental, historic or physical hurdles have been defined. This phase will include construction documents through the MDOT Grade Inspection (GI) phase; surveying; geotechnical investigation; and the continuation of permit submittals that are required for the proposed work. These plans will meet all of the MDOT requirements and the project will be designed to all applicable standards in accordance with the AASHTO Guide for the Development of Bicycle Facilities and Guide for the Development of Pedestrian Facilities, the FHWA Designing Sidewalks and Trails for Access, the MDOT Standard Specifications for Construction, and the Michigan Manual on Uniform Traffic Control Devices, including horizontal alignment and clearances, vertical alignment, and permanent signs. Trailhead, bike rack, and bench locations will be coordinated with the stakeholder group utilizing the original layouts on the the aerial trail map. Signage at the intersection(s) will include stop ahead, stop, intersection, no motor vehicles, and street signs on the trail; and include bike trail and bike crossing warning signs on the roadways similar to the designs we have completed for Phase I and Phase II.

Included in this phase, is verification of property ownership and property lines. Although it is expected that ownership will be finalized prior to this process, any easement paperwork would be considered an additional service. Also included in this phase is \$20,000 allowance for SHPO review. The SHPO process has changed significantly in the last few years. Knowing this will not be done until 2022, we will discuss the project with multiple consultants to find the best fit for the stakeholders.

Construction Documents - MDOT Final Submittal (Includes RFP Potential Project Deliverables C and D):

This phase of work will take any comments from the GI phase drawings and incorporate them into the project set to finalize the documents. We will also work to finalize any permit applications. The construction documents and specifications will be prepared assuming this will be bid through MDOT based on anticipated TAP funding.

Bid Phase:

Since it is assumed TAP funding will be utilized for this project bidding will be handled through the MDOT letting process. We will assist with the bid and answer questions as required.

Construction Phase services were not requested in the RFP but we are able to provide these services, if required, under separate contract.

6.1 FIRM INFORMATION

STRUCTURE:

Sub-S Corporation (Michigan). Firm is licensed to do business in the State of Michigan. Federal Tax ID#: 38-1962190. Duns & Bradstreet #: 05-603-5306.

BOARD OF DIRECTORS:

Steve C. Carlisle, P.E., Chairman (scarlisle@gowightman.com) Mickey E. Bittner, P.E., Treasurer (mbittner@gowightman.com) Brian Lieberg, P.S., Secretary (blieberg@gowightman.com) Greg Monberg, AIA, Trustee (gmonberg@gowightman.com) Mary Nykamp, P.E., Trustee (mnykamp@gowightman.com)



OFFICE LOCATIONS:

1670 Lincoln Road Allegan, MI 49010 (269) 673-8465 Fax: (269) 927-1300 2303 Pipestone Road Benton Harbor, MI 49022 (269) 927-0100 Fax: (269) 927-1300 433 E. Ransom Street Kalamazoo, MI 49007 (269) 327-3532 Fax: (269) 927-1300 306 S. Washington Avenue, Suite 200 Royal Oak, MI 48067 (248) 791-1371 Fax: (269) 927-1300

BACKGROUND:

Wightman has spent over 73 years providing the level of services that has earned the trust of our clients and helped us to become one of the most prominent engineering, surveying and architectural firms in the Midwest. Our employee-owned company provides practical solutions based on common sense for all levels of civil engineering, surveying, and architectural projects.

STAFF:

Wightman employs a continuously expanding team of professionals licensed to provide services in several states. Technical, surveying, inspection, and support staff are trained to provide varying levels of expertise from the smallest daily survey tasks to the design and inspection of the largest municipal or private projects. Continuing education, varied project exposure, and diverse professional backgrounds ensure that our clients will have a large pool of experts from which to draw.

HISTORY:

Our firm was established in 1946 by G. L. Wightman, civil engineer and surveyor. In 1971, our company became Wightman. We are an employee-owned company with more than 140 employees, including twenty-one licensed engineers, six licensed architects, six licensed surveyors, five licensed environmental specialists, and twenty other licensed professionals.

Wightman has served as a consultant to all forms of public and private entities, including county, city, township, village, tribal governments, private developers, and industrial and commercial clients. Wightman has gained a reputation for high quality, effective, and economical consulting services and has a proven track record for development and implementation of real and usable projects. This is evidenced by the many long-term relationships with municipalities that we value, many of which are in excess of 20, 30 or even 40 years. These relationships are perpetuated with a primary client liaison who maintains open communication regarding funding opportunities, status of projects, and proactive planning recommendations.







6.1 FIRM INFORMATION

ARCHITECTURE: CREATIVITY AND INSIGHT IN EVERY ASPECT

Sustainable Desian

Design

- Cultural ٠ ٠
- Urban Design Commercial
- Office ٠
- Banking & Financial ٠ ٠
- Civic Athletic & Recreation ٠
- Multi-Family
- ٠ ٠
- ٠
- ٠

- Landscape
- Streetscape Religious
- - Healthcare Entertainment
- Casino
- Mixed-Use
- Residential
- Site Master Plans
- Interior Design
- Industrial
- Hospitality Municipal Water
- and Wastewater **Treatment Facilities**

ENGINEERING: BROAD RANGE OF EXPERIENCE

Areas of Expertise

- Bridges and Dams
- Transportation Systems •
- Wastewater Systems ٠
- ٠ Water Systems
- Water & Sewage Treatment ٠
- GIS ٠
- Land Development ٠
- ٠ Stormwater Management
- ٠ Watershed and Lakes
- ٠ Hydrogeologic
- ٠ Parks and Recreation
- Sustainable Development

- Summary of Services
 - Civil Éngineering ٠
 - Structural Engineering ٠

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- Right-of-Way Acquisition
- Traffic Engineering Landscape Architecture ٠
- Feasibility Studies ٠
- Master & Land Use Planning
- **Rate Studies**
- **Capital Improvement Plans** ٠
- Grant & Funding Administration ٠
- Materials Testing ٠
- Construction Related Services
- **Environmental Services**

SURVEYING: EXTENSIVE TRAINING TO MEET ANY REQUIREMENT

Desian

- P.A. 132 Surveys
- Parcel Divisions
- ALTA/ACSM Land Title
- Boundary
- Topographic
- Site Design
- GPS

Construction

- Construction Staking Road Design
- Surveys Bridge Surveys
 - Right-of-Wav
 - Surveys
- Condominiums • Photogrammetric

Development

- Control Commercial
- Residential

Subdivisions

Planning & Management

Downtown Redevelopment

Sustainable Development

Contract Administration

Zoning Ordinances

Recreational Plans

Bid Management

MDEQ/Army Corps

of Engineers Joint

Permit Application

Cost Estimating

Town Planning

- Land Development
- & Planning

Additional Services High Definition Laser Scanning

- **Elevation Certificates**
- Mortgage Inspections
- Accident
- ٠ Forensic

Due Diligence

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- Land & Easement Descriptions
- Drone Photogrammetry

Baseline, Phase I, & Phase II

Environmental Site Assessments

Hydrogeological Investigations

Underground Storage Tank Sites

Spill Prevention, Control, and

Pollution Incident

Prevention Plans (PIPP)

Solid Waste Permitting

Countermeasure Plans (SPCC)

Stormwater Compliance Plans

and Leaking USTS Characterization

Facility Wide Compliance Inventory

Due Care Compliance & Analysis

ENVIRONMENTAL: EXTENSIVE EXPERTISE

Industrial Hygiene

- Asbestos Surveys and
- Third Party Oversight
- Lead Surveys & Risk Assessments ٠
- Mold Survey
- Radon Testing
- Indoor Air Quality (Testing/Permitting) Hazardous Waste Surveys

Soil Assessments

- Dredging Permitting & Sampling
- Geotechnical Investigations

Brownfield

6 | WIGHTMAN

- Due Diligence
- Project Facilitation & Management
- Grant & Funding Support

Natural Resources

Permitting

Soil Erosion and Sediment Control

Outdoor Air Quality (Testing

Environmental Management

- Wetland Delineation
- Species at Risk Surveys and Habitat Assessments

and Permitting)

ISO 14001 System

and Reporting

Development & Audits

Inspection, Permitting

General Consulting

ENGINEERING SERVICES

WH WIGHTMAN *it's all about people*



TRANSPORTATION

Includes planning and design, budget and funding assistance, right-of-way acquisition, construction engineering, traffic engineering, construction related services including inspection and testing, and construction staking.



SITE DEVELOPMENT

Includes the development of a set of plans showing the use and structures proposed for a property. Plans include existing site characteristics, demolition, grading, utilities, soil erosion control, lighting, and landscaping. Plans also include review of government ordinances and analysis of how they apply to the site—parking requirements, drainage, traffic flow, fences, signs, and more.



SPECIALTY DESIGN PROJECTS

Include streetscape design, roundabout design, drain projects, sustainable development, and more.



BRIDGE & DAMS

Includes structural engineering work, design, inspection, and more.



PARKS & RECREATION

Includes trail planning and design, park planning and design, playground design assistance, trailhead design, pavilion design, and more.



GRANT & FUNDING ADMINISTRATION

Includes review of available grant sources, identification of those for which you are eligible, and guidance in cutting through red tape to get projects funded.



STUDIES

Include feasibility studies, rate studies, capital improvement plans, master and land use planning, water reliability studies, drainage studies, funding applications, and preliminary engineering reports.

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ENGINEERING SERVICES

PERMITTING

From the simplest single permit to complex multi-permit projects, our team can help navigate the course of federal, state, and local regulatory agencies for utilities (water, sanitary sewer, storm sewer), drainage, erosion control, transportation, land uses and right-of-way encroachments.



COMMUNITY-WIDE ASSET MANAGEMENT PLANS

An asset management plan is a tactical plan for managing an organization's infrastructure and other assets to deliver an agreed upon standard of service. Typically, an asset management plan will cover more than a single asset, taking a systematic approach—especially where a number of assets are co-dependent and work together to deliver an agreed upon standard of service.



MATERIALS TESTING

Includes the testing of concrete and soils, bituminous asphalt content, as well as moisture and density of aggregate for construction projects.



WATER

Includes water supply and/or treatment design, water transmission design and analysis, water distribution design (pressure reducing, pressure sustaining and metering stations), and water storage design. Also includes watershed, lakes as well as shoreline services.



WASTEWATER

Includes the study, analysis, and design of wastewater treatment systems, wastewater collection systems (conventional gravity sewers, low pressure systems, septic tank effluent pump (STEP) systems, vacuum systems, and a combination of all), lift stations, and force mains. Also includes assistance with permitting and compliance issues.



STORMWATER MANAGEMENT

Generally focuses on channeling, conveying, controlling storing, and/or infiltrating rain water to protect developed properties. This is typically a large part of the approval process for any site development project. Can include catch basins, piping, ponds, storage basins, and pump stations where topography is an issue.



HYDROGEOLOGIC

A branch of engineering concerned with groundwater movement and the design of wells, pumps, and drains. The main concerns in groundwater engineering include groundwater contamination, conservation of supplies, and water quality.

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LANDSCAPE ARCHITECTURE SERVICES





LANDSCAPE PLANS

Design of landscape plans for commercial and municipal development including zoning/landscape ordinance compliant plantings.



PARKS & RECREATION

Includes the development of recreation plans used in DNR grant applications, park design, trail system master planning and development, trail design, grant applications (MNRTF), outdoor sports and athletic facilities, playgrounds and splash pads, water features, fountains, and more.



STREETSCAPE DESIGN

Includes planning and design of streetscapes and downtown beautification through the use of hardscapes and softscapes.



GREEN INFRASTRUCTURE

Includes the design and planning of rain gardens, water harvesting, and green roofs through implementation of stormwater management best practises.



SITE ANALYSIS

Site layout such as siting the building and other programming on the site based on topography, water, wind and sun exposure, circulation, and more.



HISTORICAL PRESERVATION PLANS

Includes landscapes, courtyards, hardscapes, connectivity, and more.



SPECIALTY AREAS

Include native plantings design plans, memorial design, and corporate campuses.

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6.1 PROJECT TEAM



STEVE C. CARLISLE, P.E. PRINCIPAL-IN-CHARGE

Mr. Carlisle serves as the Director of Engineering for Wightman with responsibility for analysis, design, and construction management for both municipal and private engineering projects. His experience includes municipal streets and utilities, bridges, private subdivisions, municipal planning and parks and recreation facilities. He has over 20 years' experience with transportation design and construction, many of which have included funding administered by MDOT Local Agency Programs.

Expertise

- Site Design
- Roads
- Bridges
- Streetscapes
- Municipal Utility Design and Coordination
- Stormwater Design and Management
- Private Development
- Construction Administration

Professional Registrations

- Professional Engineer Michigan #48036 Illinois # 062-056103
- Construction Site Certified Stormwater Operator Michigan #C-03681
- Soil Erosion & Sedimentation Control Certified #06-0567

Professional Training

- NHI Safety Inspection of In-Service Bridges
- ASCE HEC-RAS

Professional Affiliations

 American Society of Civil Engineers

Professional Positions

• Wightman and Associates, Inc. 1997 - Present

Education

• B.S. Civil Engineering Michigan State University 1997

Project Experience

Indiana Michigan River Valley Trail Project- Niles Charter Township Phase I and II – Principal in Charge

for Phase I and II of the Niles Charter Township portion of the project. Project called for trails to be constructed from the Indiana state line to Brandywine Creek Nature Park (just north of US12) and is continuing north to the intersection of Fort and 3rd Streets. This project includes up to 5.1 miles of trails from the state line to the existing City of Niles' trail with additional spurs and possible alternate routes.

Red Arrow Highway Streetscape Improvements, Berrien County Road Department,

New Buffalo, MI- Principal in Charge for a section of Red Arrow Highway in Chikaming and New Buffalo Townships. The project includes road and storm sewer improvements, pedestrian crossing signals, multi-use pathway, and streetscape elements including lighting, planting, outdoor seating, and patios. The project includes challenges with large existing driveway openings and limited parking. The design incorporates a road diet from four lanes to three lanes to enhance vehicular and pedestrian safety. Extensive collaboration and coordination with Galien River Sanitary District was required as the GRSD undertook a major sanitary sewer replacement project concurrent to the streetscape project.

Commercial/Division Street Project (Quality of Life Project), Dowagiac, MI- Principal in Charge of award-winning project which included narrowing Commercial Street and adjusting on street parking. The design reduced vehicle speeds by widening sidewalks, changing street paving materials with asphalt, brick, and concrete, and strategic onstreet parking, The project also included streetscape elements such as landscaping and lighting, and creating new pedestrian resources like benches, parks, and artwork.

City of Bridgman, Lake Street Enhancement Project, Red Arrow Highway

to Church Street; MDOT Job #106004A and 106905A- Project Manager for 0.6 miles of roadway and streetscape improvements including HMA milling and resurfacing, curb and gutter replacement, ADA sidewalk ramps, fire hydrant replacements, decorative stamped concrete sidewalks, LED street lighting, decorative benches, planters and trash receptacles, stamped concrete crosswalks, LED traffic signals with full span mast arm structure, plantings and elaborate block planters. The project required coordination between the MDOT Local Agency Program staff to administer the stimulus grant for the road implementation and the MDOT Enhancement staff to implement the streetscape grant.

Riverview Drive Improvements Project - G Avenue to Mt. Olivet Road, a total distance of approximately 1 mile - Road Commission of Kalamazoo County, MI

- Project included a complete reconstruction for the south 3,000' to accommodate a new storm sewer system, curb and gutter and developing proper shoulders. The storm sewer system required a baffle system to provide significant pipe storage to minimize impacts to the downstream outlet. The project required significant coordination with the Parchment elementary school to accommodate both pedestrian and bus traffic. The project also included design and construction administration of the Cooper Township sanitary sewer project, which ran along the center line of the road reconstruction limits. Additionally, significant private utility relocations, including telephone, gas main, fiber optic, and overhead electric, were completed.



Ben Baker, PLA, ASLA, LEED AP Project Manager

Mr. Baker is a talented registered Landscape Architect with 15 years' experience in the field. He is highly organized with the ability to manage multiple projects, meet deadlines and stay within budget. He has a strong reputation as a clear and effective communicator. Mr. Baker has an affinity for park and recreation projects including trail design, playgrounds, and parks.



Expertise

- Landscape Architecture
- Trails
- Planning
- Design

Certifications

 MDOT Training Wheels: On Road Bicycle Facility Training

Professional Affiliations

- LEED Accredited Professional
- President, Michigan Chapter of the American Society of Landscape Architects
- Moody on the Market 40 Under 40 for 2018

Professional Registrations

 Licensed Landscape Architect Michigan - 3901001536 Illinois - 157.001228 Indiana - LA21000135

Professional Positions

- Wightman
 2013 Present
- Planning Commissioner, St. Joseph Charter Township, Berrien County, MI 2012-Present
- Abonmarche Consultants, Inc. 2010-2013
- Wolff Landscape Architecture, Inc. 2004-2010

Education

• Bachelor of Landscape Architecture with High Honors, Michigan State University

Project Experience

Placemaking and Urban Design

Ben has worked on numerous projects relating to outdoor spaces. The relation of people to their outdoor environment is the key aspect of Landscape Architecture. Ben has extensive experience working in urban environments of all sizes, and knows how to design outdoor spaces that are functional and comfortable for the user. Ben is also very in tune with the Michigan Municipal League, and the Governor's Placemaking initiative – knowing that the quality of places, is important to a community's vitality.

Indiana-Michigan River Valley Trail, Niles Charter Township, MI

Project designer for the layout of the 3.3 mile phase of the design running from the Indiana state line to the Brandywine Creek Nature Park in Niles Charter Township. The overall trail, when completed, will connect Niles, MI to Mishawaka, IN and travel 34 miles. This trail is a paved, off-street multi-use trail, utilized by walkers, runners, rollerbladers and bicyclists.

Moso Village Streetscape, Sturgis, MI

Landscape Architect and designer for the streetscape of the redevelopment of a City Block, as well as an adjacent alleyway for the City of Sturgis. The city street has been re-imagined as a comfortable pedestrian space where the cars are secondary. The streets were designed to be shut down for festivals and events. The streetscape attracts people and kids of all ages to stop and play, with amenities such as a winding paver 'river', shimmering sidewalks, playful animal sculptures, bamboo-like bike racks, and an outdoor cabana with swings and a cellphone charging station. The street planting was inspired by the theme of the building and even includes hardy bamboo.

Quality of Life / Commercial Street, Dowagiac, MI

Project Designer / Landscape Architect for the master planning of 15 sites across the City of Dowagiac that would enhance the quality of life for residents, such as parks, trails, and other amenities. The first phase of construction for the project was completed in 2016 and entailed updating the streetscape for Commercial Street to tie in the downtown, removal of abandoned buildings to create park space, and re-aligning and updating small parking lots adjacent to the main traffic artery through town. The project also has identity markers where pubic art can be installed in the future.

Middle Crossing Pathway, City of Dowagiac, MI

Project designer for a nearly $\frac{1}{2}$ mile off-street multi-use trail in the City of Dowagiac. This trail connects the City sidewalk network to Russom Field sports complex on the outskirts of town, where safe pedestrian access previously did not exist.



Suzannah M. Deneau Designer Engineer

Ms. Deneau has more than 17 years' engineering experience. She provides structural engineering services for Wightman in both engineering and architectural capacities. Ms. Deneau is familiar with all aspects of grant funding opportunities as well as AASHTO Guide for the Design of Bicycle Facilities. Ms. Deneau's role as structural engineer taps into her strength as a problem solver. Her engineering abilities on trail designs along with her leadership of the planning process ensure a quality end product for Wightman's clients.



Expertise

- Trail Projects
- Structural Engineering
- Structural Evaluation
- Waterway & Bluff Restoration
- Concrete Design
- Steel Design
- Bridge Design
- Bridge Inspection

Professional Affiliations

- National Association of Women in Construction
- Precast/Prestressed Concrete Institute

Professional Training

- NHI Safety Inspection of
- In-Service Bridges
- ASCE HEC-RAS

Professional Registrations

- Construction Site Certified
 Stormwater Operator
 Michigan #C-13204
- Soil Erosion & Sedimentation Control Certification #06-0576

Professional Positions

- Wightman & Associates, Inc. 2006 Present
- Byce & Associates, Inc. 2004 2005
- Wightman & Associates, Inc. 1999 – 2001

Education

• B.S. Architectural Engineering Milwaukee School of Engineering, 2001

Project Experience

Indiana Michigan River Valley Trail Project- Niles Charter Township Phase I and II —Planning and Project Engineer for Phase I and II of the Niles Charter Township portion of the project. Project called for trails to be constructed from the Indiana state line to Brandywine Creek Nature Park (just north of US12) and is continuing north to the intersection of Fort and 3rd Streets. This project includes up to 5.1 miles of trails from the state line to the existing City of Niles' trail with additional spurs and possible alternate routes.

Antwerp Township Trail Project – Planning and Project Engineer for an east-west trail from the Village of Paw Paw to the Village of Mattawan through Antwerp Township. The project is in the planning stages, working with MDOT for access within I94 right-of-way and with MDOT and MDNR for funding of Phase I. The trail will be an off-road paved multi-use trail. Construction of Phase I is anticipated to begin in Spring, 2018.

Interurban Trail – Project engineer for the planning of the 42-mile trail connecting the Kalamazoo River Valley Trail in Kalamazoo County through Allegan County to the M-6 trail in Kent County. The planning includes the investigation of three routes: US-131, A45, and the old Interurban rail line now owned by Consumers Energy. Also included as part of the planning project are stakeholder meetings, public outreach, GIS mapping, and a master plan documents.

City of Wayland Interurban Trail Project – Planning and project Engineer for seeking MDOT Transportation Alternatives Program and MDNR Michigan Natural Resources Trust Fund grant for the 1.2 mile section of Interurban Trail through the City limits. Coordination with Consumers Power has been successful, a longterm lease was secured, and engineer cost estimates were prepared. The project proposed additional parking and a restroom facility for trail and park users.

Glassman Park, New Buffalo Township – Project Engineer for securing a MDNR Land and Water Conservation Grant from the MDNR for development of the Township's twenty year old park. The park is bordered by the Galien River and a new canoe launch was designed as part of the project along with nature trails and site amenities.

Oselka Park, New Buffalo Township – Project Engineer for securing a MDNR Michigan Natural Resources Trust Fund grant for the acquisition of a parcel of property downstream of Glassman Park along the Galien River for the Township. The project will provide additional access to the river for kayakers, canoeists, fishermen, and nature enthusiasts.



Paul Harvey, EIT Project Engineer

Mr. Harvey is an Engineer in Training for Wightman and has experience in multiple projects in both the Design and Construction phases. He has a vast knowledge for the construction process which aids in trouble shooting, problem solving, and minimizing potential issues that may arise.

Expertise

- Bridge Design
- Culvert Design
- Stormwater Management
- Hydraulic Analysis
- Construction Inspection
- Roadway Design

Professional Registrations

• Soil Erosion and Sedimentation Control, #19354

Professional Affiliations

Tau Beta Phi

Professional Positions

Wightman
 2016 - Present

Education

 B.S. Civil Engineering Western Michigan University, 2017

Project Experience

Preventative Maintenance on Four Bridges in Kalamazoo County, MI - Project Engineer for the preventative maintenance of four bridges within

Kalamazoo County. This project involves guardrail improvements, epoxy overlays, joint cleaning, concrete surface coating, and railing improvements.

Preventative Maintenance on Two Bridges in Berrien County, MI -

Project Engineer for the preventative maintenance of two bridges within Berrien County over the St. Joseph River. This project involves joint improvements, epoxy overlay, deck patching, steel cleaning and coating, concrete surface coating, and railing improvements.

Lake Pleasant Road Bridge Replacement over Beebe Creek, Hillsdale County, MI – Project Engineer on the bridge replacement project on Lake Pleasant Road over Beebe Creek in Hillsdale County. The project includes removing the existing timber structure and replacing it will a 40 foot span concrete spread box beam bridge. In addition, the project involves constructing a 34 foot wide roadway section at the bridge approaches, hydraulic analysis, guardrail design, slope restoration, and necessary permitting.

R Avenue Culvert Replacements, Kalamazoo County, MI – Project Engineer on the R Avenue Culvert Replacement projects in Kalamazoo County which included the removal of the existing culverts and two different waterway crossings on R Avenue and replacing them with sufficient structures. This project involves hydraulic analysis, the reconstruction of the existing roadway approaching the culverts, guardrail design, slope restoration, and necessary permitting.

32nd Street Culvert Replacement over Asher Drain, Kalamazoo County, MI - Project Engineer on the 32nd Street Culvert Replacement project in Kalamazoo County which included the removal and replacement of an existing culvert. This project involves hydraulic analysis, the reconstruction of the existing roadway approaching the culverts, guardrail design, slope restoration, and necessary permitting.

Vine Street Improvements, Kalamazoo, MI – On-site construction inspector for the Vine Street Improvements project in the summer of 2017. This project included 1.5 miles of HMA milling and resurfacing, curb and gutter replacement, ADA sidewalk ramps, water service replacement, and street signal improvements. The project required coordination between the City of Kalamazoo along with the MDOT.

Andrew Street Reconstruction, Kentwood, MI – Assisted with on-site construction inspection throughout the duration of the project. This project involved the complete reconstruct of multiple neighborhood roads including new curb and gutter, new concrete sidewalks, replacing existing driveway aprons, new HMA service, new water main and services, and a new storm sewer system.





JEFFREY V. BRADFORD, P.S. PROJECT SURVEYOR

Mr. Bradford has more than 30 years of surveying experience including field work such as construction layout for road design, bridge design and associated ramp and earthwork. He has worked on numerous projects involving layout of rightof-way, pavement, curb and gutter, sidewalks, storm sewer, culverts, guard rail and guard rail flair. Also, slope staking for open drainage, bridge substructure, pour elevations, bridge beam control, haunch, rail and bulkhead control, cross sections, superelevations and superelevation transitions, horizontal and vertical controls, PLSS corner locations, data collection of planimetric features and points to create DTM.



- Road Design Surveys
- Subdivision Plats
- Boundary Surveys
- ALTA Surveys
- P.A. 132 Surveys
- Topographic Surveys
- Construction Staking

Professional Registrations

 Professional Surveyor Michigan #44290

Professional Registrations

 Michigan Society of Professional Surveyors

Professional Positions

• Wightman & Associates, Inc 1986 - Present

Education

• B.S. Surveying Engineering Ferris State University 1993

Project Experience

Interstate Highway 94 - MDOT Project 11015-202013

Survey Manager in charge of 6.98 miles of hot mix asphalt cold milling and resurfacing and pavement markings on I-94 from south of Three Oaks Road to Red Arrow Highway, Berrien County. Staking included yield stakes for paving operations, detour routes, temporary and permanent signage and quantity calculations.

US-12/Old M-205/Five Points Road Intersection, Cass County, MI MDOT Project 14041-125133

Survey Manager in charge of 0.38 of a mile of concrete intersection improvements and construction of roundabout, drainage improvements, traffic signal removal, signing, lighting and landscaping. Staking items included drainage structures, slope staking for ditching activities, roadway curb and gutter and asphalt locations, detour route, permanent and temporary signage and quantity calculations.

M-86 over Prairie River and Crystal Springs Street over Dowagiac

River, Van Buren and Cass Counties, MDOT Project 78061-113259 Survey Project Manager in charge of two separate bridge reconstruction project calculations and coordination of layout of curb and gutter, asphalt widening, piles, abutments, beams, wing walls, dowel pins, slope staking, approach slabs, bridge fascia and guardrail.

Sidewalk ADA Ramp Upgrades, US-12 from Chicago St to Bronson St, New Buffalo, MI, MDOT Job#11011-113015

Survey Project Manager in charge of calculations and coordination of layout of proposed approach and ADA ramp upgrades for 10 intersections on US-12.

Commercial/Division Street Project, Dowagiac, MI- Survey Project Manager of award-winning project which included a road diet that reduced the design speed by widening sidewalks, changing street paving materials with asphalt, brick, and concrete, incorporating on-street parking, providing streetscape elements such as landscaping and lighting, and creating new pedestrian resources like benches, parks, and artwork.

Main Street (BL-194) Reconstruction, Benton Harbor, MI, MDOT Project 11013-86206

Survey Project Manager in charge of calculations and coordination of layout of hot mix asphalt, roundabouts, concrete curb and gutter, storm, sanitary, watermain, electric, traffic signal polls, hand holes, sidewalk ADA ramps and retention walls for 1.78 miles of roadway on I-94 BL (Main Street) from River Street to M-139 (North Fair Avenue) in Benton Harbor.





Sarah Proceviat, Msc. Director of Environmental

Ms. Proceviat has over 15 years of managerial experience involving natural resources and environmental sciences. She has worked with regulatory groups as well as industrial organizations and has guest lectured at several academic institutions as well as at numerous conferences and workshops. Through her academic and work experiences, Ms. Proceviat has developed the ability to merge environmental sustainability with industry and infrastructure development and operations to ensure requirements and intent of both are understood and respected. Her experiences have taught her that success is proven when partnerships between sectors and teams have been fostered.



Expertise

- Natural Resource Assessments
- Phase I & II ESAs
- Air Quality & Noise Assessments
- Planning & Permitting
- Environmental Protection Plans
- Compliance
- Construction Land Access
- ISO:14001
- Training & Development

Professional Affiliations

- Canadian Kennel Club Foundation – Board of Directors/Treasurer
- Lakeshore Networking Group

Professional Registrations

- Safety Leadership Training
- Crew Leader, Electroshocking, Malaspina College
- Erosion and Sediment Control, Malaspina College
- Environmental Regulations and Compliance Certificate, Envirogate Event Management
- Troubleshooting Air Emissions Certificate, Williams and Shier, Environmental Lawyers LLP.
- Wildlife Chemical Immobilization, Toronto Zoo
- Radio Telemetry for Fish and Wildlife, Ministry of Natural Resources
- Species at Risk, Field Specialist Research Training

Education

- Ph.D. Wildlife Management and Epidemiology (Field)
- M.S. Zoology and Wildlife Management -Laurentian University
- B.S. Zoology and Biology Laurentian University

Project Experience

Environmental Site Assessments. Completed Phase I, II and III (Remediation) Environmental Assessments for utilities (transmission/distribution lines, substations), up- and downstream oil and gas facilities, Lake Superior Quarry Site, Mid-Canada Radar Line Sites. Work sites located in Ontario, Saskatchewan, Alberta and British Columbia, Canada. Technical and peer review for reporting on projects located in various States within the U.S.A.

Natural Resource Assessments. Completed wetland, aquatic, vegetation, invasive species, wildlife and species at risk assessments and monitoring for utilities, upand downstream oil and gas facilities, highway development, mining and forestry. Traditional Ecological Knowledge gathering for Indigenous groups. Technical and peer review for reporting on projects located in various States within the U.S.A.

Air Quality and Noise Assessments. Completed lead and mold testing for private and commercial properties. Air quality and noise assessments have been completed for commercial, industrial, and educational sites. Have completed these for federal environmental assessments, manufacturing plants, mechanical shows, quarry developments, and sites subject to low-flying aircraft. Has also conducted these assessments and subsequent permitting/reporting for siting, health and safety purposes, and to address ISO:14001 requirements.

Environmental Protection Plans and Compliance. Developed environmental protection and management plans for use by utilities (transmission/distribution lines, substations) as well as up- and downstream oil and gas facilities. Implementation of management plans on over 3000 linear miles of ROW (approx. 100 projects) throughout Newfoundland, Ontario, Manitoba, Saskatchewan, Alberta and British Columbia, Canada; as well as within Texas, Kentucky, North and South Dakota, North Carolina and Nebraska. Environmental protection plans developed and implemented included: access management, air quality and dust control, erosion and sediment control, fire suppression, fish and habitat protection, hazardous and waste management, post-reclamation, soil and groundwater management, spill prevention and emergency response, timber management, vegetation management, water quality management, weed management, wet weather protocol, equipment salvage and contaminant management and wildlife and habitat protection.

ISO-14001. Developed environmental management system for largest privately owned utility contractor (powerline, telecom, HVAC, boring, substation, communications) in North American. Gap analysis for various entities. ISO Environmental Management Systems have also been completed for large-scale transportation development programs and owner-operator clientele.

Planning and Permitting. Completed construction access and environmental planning for over 1500 linear miles of ROW. Construction access activities involved obtaining permits and ensuring compliance with road-use agreements, landowner agreements (private, Indigenous), utility crossings (underground and overhead) and navigable waters; as well as planning access routes, constructing roads (permanent and temporary) and installing crossings (culverts, bridges) in prairie, forested and mountainous terrain. Environmental permitting occurred at a local, regional and federal level.



6.2 PROJECT EXPERIENCE

Wightman is uniquely qualified for this project because of our involvement with the IMRVT through Niles Township; the coordination of the cross state grand opening of the trail; development of the Range Line Park trailhead in Berrien Township; pro-bono St. Joseph River crossing study for this trail; and involvement in all public input sessions for this phase of trail. Wightman has also worked with all of the current layout project landowners, including the City of Niles, Niles Township, Berrien Township, the Berrien County Road Department, American Electric Power, and MDOT.

WIGHTMAN TRAIL COMMUNITIES

Niles Charter Township Village of Edwardsburg **Ontwa Township** Oronoko Township Village of Berrien Springs Cass County Road Commission City of Dowagiac **Berrien County Road Department** Chikaming Township New Buffalo Township Village of Eau Claire City of Portage **Royalton Township** Village of Cassopolis Antwerp Township City of Albion Village of Paw Paw **Cooper Township** City of Plainwell Gun Plain Township Village of Martin **Dorr Township** Leighton Township Martin Township Wayland Township City of Wayland **Byron Township** Village of Vicksburg Village of Homer **Berrien Township** St. Joseph Charter Township



REFERENCES

Niles Charter Township Ms. Jill Delucia, Dir. of Parks Comm. (574) 850-4785 jdelucia@nilestwpmi.gov Berrien County Road Dept. Kevin Stack, Eng. Supervisor (269) 925-1196 x 4421 kstack@bcroad.org City of Dowagiac Kevin Anderson, City Manager (269) 782-2195 citymanager@dowagiac.org

INDIANA-MICHIGAN RIVER VALLEY TRAIL - PHASE 1



NILES CHARTER TOWNSHIP, MI





Client Reference: Niles Charter Township Ms. Jill Delucia Director of the Parks Commission (574) 850-4785

Project Date: 2012-2014

Project Cost: \$842,000

Services Provided:

- Trail Planning
- Construction Engineering
- Preliminary Engineering
- Surveying
- Design Engineering
- Construction Staking
- Grant Assistance
- Wetland/Floodplain Delineation

Staff Involved:

- Steve Carlisle, PE
- Ben Baker, PLA, LEED AP
- Suzannah Deneau



The Indiana-Michigan River Valley Trail is a 34-mile trail connecting Niles, MI to Mishawaka, IN. Wightman provided design engineering, construction administration, and staking to assist Niles Charter Township with Phase I of their portion of the project from the Indiana state line to the Brandywine Creek Nature Park (just north of US12).

This 3.3 mile section of non-motorized trail is parallel to a commercial, retail corridor in Niles Charter Township. This phase completes nearly 10% of the 34 mile IN-MI River Valley Trail and travels from the Indiana-Michigan state line to the Brandywine Creek Nature Park. The trail is 10' wide with 2' shoulders through a wooded passageway that can now be utilized by pedestrian travelers and recreational enthusiasts. Wightman provided design engineering, construction administration, and staking to assist Niles Charter Township with Phase I of their portion of the project from

the Indiana state line to the Brandywine Creek Nature Park (just north of US12).

Wightman worked with the project partners including Niles Township, Southwest Michigan Planning Commission, Michigan Department of Transportation, Michigan Department of Natural Resources, Berrien County Road Department, and American Electric Power.



6.2 PROJECT EXPERIENCE

INDIANA-MICHIGAN RIVER VALLEY TRAIL - PHASE 2



NILES CHARTER TOWNSHIP, MI



Client Reference: Niles Charter Township Ms. Jill Delucia Director of the Parks Commission (574) 850-4785

Project Date: 2012-Present

Project Cost: \$1,215,000

Services Provided:

- Trail Planning
- Construction Engineering
- Preliminary Engineering
- Surveying
- Design Engineering
- Construction Staking
- Grant Assistance
- Wetland/Floodplain
 Delineation

Staff Involved:

- Steve Carlisle, PE
- Ben Baker, PLA, LEED AP
- Suzannah Deneau
- Sarah Proceviat, MSC

This 1.1 mile section of non-motorized trail takes advantage of beautifully wooded properties owned by Michigan Department of Natural Resources and Niles Charter Township located just off of two major roads. This phase links the finished Michigan trail sections with the many miles of trail in Indiana. The trail is 10' wide with 2' shoulders through over Brandywine Creek to be utilized by pedestrian travelers and recreational enthusiasts. The pathway connects another Township park – Community Park with walkers and bikers.

Wightman provided assistance for grant funding, design engineering, permitting, construction administration, and topographic survey and construction staking to Niles Charter Township for Phase II of their portion of the project to connect to the City of Niles trail.



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RIVER TO RIVER TRAIL PLANNING

KALAMAZOO, ALLEGAN, & KENT COUNTIES, MI



Client Reference: West Michigan Transit Greenways Mr. John Morrison Executive Director (616) 485-7805

Project Date: 2016-Present

Project Cost: \$56,000

Services Provided:

- Trail Planning
- Stakeholder Engagement
- Grant Assistance
- Preliminary Engineering

Staff Involved:

- Mickey Bittner, PE
- Steve Carlisle, PE
- Ben Baker, PLA, LEED AP
- Laura Fredrickson, PLA
- Suzannah Deneau
- Ryan Miller, GISP
- April Kibby

The River to River Trail is a 40-mile trail that will connect the Kalamazoo River Valley Trail with the Kent County Trail system and eventually to the Grand River Greenway Trail following the previously known Interurban Railroad line mostly owned by Consumers Energy. Thirteen communities have a stake in the Interurban Trail: Kalamazoo, Allegan, and Kent Counties; Cooper, Gun Plain, Martin, Wayland, Leighton, Dorr, and Byron Townships; the Cities of Plainwell and Wayland; and the Village of Martin. This is the fourth trail in the state to propose an alignment within MDOT interstate highway right of way.

This project is currently in the planning stages and we will be engaging stakeholders and partners to gather information regarding the proposed trails and routes. As a result of the planning process, an Interurban Trail Master Plan document will be developed for trail stakeholders and public outreach. This document will include maps, goals, stakeholders and partners, funding guidance, meeting minutes, and implementation. The second deliverable will be an online accessible database with the proposed trail route and amenities located near the trail including downtowns, parks, schools, etc.

6.2 PROJECT EXPERIENCE

RANGE LINE PARK



Berrien Township, MI



Client Reference: Berrien Township Mr. Brian Bixby Township Supervisor (269) 461-6925

Project Date: 2017-Ongoing

Project Cost: \$300,000

Services Provided:

- Landscape Architecture
- Grant Assistance
- Civil Engineering

Staff Involved:

- Ben Baker, PLA, LEED AP
- Suzannah Deneau
- Laura Fredrickson, PLA

Wightman was contacted by Berrien Township to assist in preliminary park planning and cost estimating for Range Line Park. Wightman worked with the Southwest Michigan Planning Commission and the Township to submit a Michigan Natural Resources Trust Fund through the Michigan Department of Natural Resources for improvements at the park.

The proposed improvements include updated accessible playground, updated picnic shelters with restrooms, accessible trails through the woods with overlooks over the Lake Champlain/ St. Joseph River. This park will also serve as regional trailhead for the extension of the Indiana Michigan River Valley Trail.

The project recently received a Michigan Natural Resources Trust Fund Grant and design documents are underway with an anticipated completion in 2021.

EDWARDSBURG SPORTS COMPLEX

Edwardsburg, MI

Client: Ed Patzer (866) 223-0082

Project Date: 2018 - 2019

Services Provided:

- Design Engineering
- Surveying

Staff Involved:

- Steve Carlisle, PE
- Suzannah Deneau
- Ben Baker, PLA, LEED AP

Wightman provided design engineering services for the 0.48 miles of concrete shared-use path, curb, gutter, sidewalk and ramps, hot mix asphalt approach, trail guardrail and signing. The project is located on the north side of US-12 from the Edwardsburg Sports Complex east to Claire Street, Cass County. The 10 ft wide non-motorized pathway was constructed to connect the new Edwardsburg Sports Complex to the existing school compound and the Village sidewalk system.

Easement descriptions were prepared to acquire additional property outside of the existing right-of-way so that the non-motorized pathway could be located further away from the roadway for safety and comfort. This project was funded with Michigan Department of Transportation CMAQ funding of \$161,440 and Michigan Department of Natural Resources MNRTF grant of \$40,000. The project was bid through the MDOT Local Agency Programs and the pathway was designed in accordance with AASHTO design standards.





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UNION PIER STREETSCAPE



UNION PIER, MI



Client Reference:

Berrien County Road Department Kevin Stack, PE Engineering Supervisor 269-925-1196 x 4421

Design Start Date: 2019 Construction Start Date: 2020

Project Cost: \$3,800,000

Services Provided:

- ◊ Conceptual design
- ◊ Placemaking
- ◊ Civil Engineering
- ◊ Landscape Architecture
- ♦ Survey
- ◊ Architecture
- ◊ Environmental

Staff Involved:

- ◊ Steve Carlisle, PE
- ♦ Melanie Stanage, PE
- ♦ Chris Cowgill, PE
- ◊ Ben Baker, PLA, LEED AP
- ◊ Jeff Bradford, PS

The Berrien County Road Department, in conjunction with Chikaming Township and New Buffalo Township, desired to increase safety, provide multi mobile transportation routes, and beautify the Red Arrow Highway corridor through Union Pier. This includes a road diet to reduce Red Arrow Highway from four lanes to three, a separated non-motorized path, and streetscape elements, which will include landscaping, rain gardens, decorative lighting, site furnishings, and decorative paving.

This road diet is the first phase of reducing Red Arrow Highway to three lanes and will reduce speed and increase safety by providing a dedicated center turn lane.

The project involves multiple funding sources, including federal aid, and is being delivered through the MDOT Local Agency Program. Additional funding sources include grants from the Pokagon Fund, township dollars, and the County local match.

A critical piece of this project is public outreach and communication, as there are various businesses located along the route that will be impacted during peak tourist season. Meetings and open houses were held to help provide information and answer questions. As peak season for businesses and the construction time frame inevitably overlap, a full detour was not feasible, and a phased maintenance of traffic plan was required to allow access to commercial businesses during the project.

MIDDLE CROSSING ROAD PATHWAY W+

Dowagiac, MI



Client Reference: City of Dowagiac Mr. Kevin Anderson (269) 782-2195

Project Date: 2014

Project Cost: \$100,159

Services Provided:

- Design Engineering
- Full LAP Construction
 Engineering
- Surveying
- Construction Staking
- CMAQ Grant Assistance
- Right-of-way Acquisition

Staff Involved:

- Steve Carlisle, PE
- Ben Baker, PLA, LEED AP
- Suzannah Deneau
- Jimmy Kahl

Wightman was contacted by the City of Dowagiac to assist with applying and administering the CMAQ funding for a pathway along Middle Crossing Road in the City of Dowagiac. The path was developed to link the residential area of the downtown to Russom Park, which consists of several baseball, softball, and future soccer fields. The pathway starts at Prairie Ronde Avenue, and continues north to Russom Park a distance of approximately 0.5 miles. The pathway was constructed using aggregate base and a 3" HMA surface, with a width of 10', plus 2' shoulders on either side to satisfy the FHWA trail standards for this type of use. The project was funded through CMAQ and City match monies, and was administered following the MDOT Local Agency Programs requirements.





ANTWERP TOWNSHIP TRAIL PROJECT



Antwerp Township, MI



Client Reference: Antwerp Township Mr. Dan Ruzick Supervisor (269) 668-2615

Project Date: 2015- Present

Project Cost: \$2,600,000 (est.)

Services Provided:

- Trail Planning
- Stakeholder Engagement
- Grant Assistance
- Preliminary Engineering

Staff Involved:

- Suzannah Deneau
- Sam Leach, PE

The Antwerp Township Trail Project is intended to connect the Villages of Mattawan and Paw Paw, then connect the Fruitbelt Trail with the Texas Township trail system and is approximately six miles long. The project is currently in the planning stages and we are engaging stakeholders including Antwerp Township; the Village of Mattawan, the Village of Paw Paw, MDOT, MDNR, Paw Paw Conservation Group, local Boy Scout troops, and many others.

This project is the third trail in the state to propose an alignment within an MDOT Interstate Highway right of way. We have had numerous discussions with MDOT about this and they have been on-board with this concept to date.

We continue to work with the stakeholders on this project for submission for grants for design and construction as we prepare for construction of Phase I.

6.2 PROJECT EXPERIENCE

• WIGHTMAN COMMUNITY ENGAGEMENT

It's all about engaging our community, clients, and stakeholders..... The success of our public engagement strategy is teamwork: from you as the client, to our consultants, and within our internal team, we rely on clear communication and poignant questions to bring us together to discover the right decisions. Our approach can be scaled to match the goals of the group we are engaging, but our preferred strategy is three-tiered.

We start with a Steering Committee that acts as our client group. These are the individuals that will ultimately make final decisions about design and implementation. We also task this group with identifying key individuals to be involved with the next tier of engagement: stakeholders.





Stakeholders are individuals or organizations either directly impacted by decisions that will be made or are influential members of the community that can help us implement parts of the project. This not only gives us the establishes community buy-in, but it gives us insight to opportunities that could be missed before we even begin design.

Our third tier of engagement is the Public; we typically engage the public through workshops or surveys, enabling us to ask broad questions that will provide insight to the greater context projects will impact.

To our team at Wightman, the engagement process is integral to the success of a project. Parks and buildings and infrastructure serve our citizens and region and if we neglect to understand their needs and dreams we will miss out on great opportunities.





IT'S ALL ABOUT CELEBRATING SUCCESS!

Wightman recognizes that achieving major milestones - from the start of construction to the grand opening - of any project is a cause for excitement and celebration for our clients, the community, and even our own staff.

Celebrating the successful completion of a project is a simple way to recognize the hard work accomplished by stakeholders, respectfully honor project donors' gifts, and show appreciation to community members who anxiously awaited the unveiling.





Wightman truly appreciates the time, energy, and efforts of each and every person involved in a project. By partnering, the satisfaction of a job well done and a journey successfully completed can be shared by everyone. Please don't hesitate to ask how we can help you with a groundbreaking, project milestone, media, or ribbon-cutting event.

6.3 CONSTRUCTION COST CONTROL & SCHEDULING

Based on our past experience on similar projects, we feel that the time spent on the preliminary phase is extremely important to controlling design costs in future phases. With that in mind we have put more tasks and time in the preliminary phase than the grant currently covers. We hope this shows our dedication to the project and the importance of these tasks to be completed early. We will not invoice SWMPC/BCHD beyond the grant amount until the project is underway. (We have accounted for these fees in the later portions of the project.) Finding the pitfalls early in the project will allow us to estimate the construction costs more accurately and keep the project within budget.

This project is a massive undertaking for one phase with a large construction cost. The project may need to be built in shorter sections of trail. To keep costs low for the stakeholders, we would recommend designing the trail in its entirety with thoughtful stop/start points. With the full trail design complete, the stakeholder would have shelf ready projects that may be able to take advantage of atypical funding opportunities.

The two southern stretches of trail in Niles Charter Township were designed with 3 inches HMA on 8 inches of aggregate base. The intent was to design a heavy-duty pedestrian path that AEP would use as a driveway to access their poles where needed. We recommend the same cross section to be used on the next section of trail. Although there will be some annual and regular maintenance on the trail such trash pickup, crack sealing, and seal coating; the trail should not need to be milled and resurfaced for 30+ years.

Another item that we feel can have a big impact on maintenance of the trail is tree removals. Where possible, we recommend removing trees whose roots may interfere with the trail. Within the section of trail through Brandywine Creek Nature Preserve and the Township's property to the north, we removed trees within of 10-feet of the trail shoulder for a total 30-feet wide swath. This method should be considered within the heavier wooded areas.

Knowing that fundraising for a trail is a challenging endeavor, finding money to maintain the trail is even more difficult. Kalamazoo County Parks has followed a trend of fundraising for twice the construction costs to create an endowment fund to maintain the trail in the future. It seems like a daunting task but having that money at the time of trail construction allows them to move forward on more sections of trails sooner. It also ensures that trails will be maintained and stay in good shape for future users. This model has worked well for the Kalamazoo County Parks and could be considered for this project as well. We look forward to working with the stakeholders to determine what funding mechanism works best for this project.

6.4 EXPERIENCE WITH STATE/ FEDERAL FUNDING

We understand that once TAP money is obligated through MDOT Local Agency Projects how important it is to keep on schedule. We have extensive experience with Local Agency Projects with various funding sources including TAP, CMAQ, road and bridge funding. We are very familiar with this process and the requirements. We are also very familiar with the MNRTF and other grants from the Michigan DNR and how important it is to coordinate the schedule and funding between these two grant sources.

6.5 LINE ITEM COSTS FOR EACH ACTIVITY/TASK/DELIVERABLE

Preliminary	/ Engineering (7/1/2020 - 9/30/2020)	\$ 12,935
	Kickoff meeting with MDOT, EGLE, Drain Office and USFWS/Site Visit	2,150
	Bridge Inspection & Load Rating	1,760
	MNRTF Grant Application (Assistance)	1,400
	TAP Grant Application (Assistance)	1,400
	Preliminary Engineer's Estimate	2,820
	Drone Flight	-
	Environmental Impacts	-
	Miss Dig Design Ticket	500
	Misc Calls and Scope	565
	Public Input/Planning Commission Meeting	2,340
GI Plans (2	/2022 9/2022)	\$ 259,360
	Drone Flight (to be completed as part of Prelim Eng)	7,800
	Environmental Impacts (to be completed as part of Prelim Eng)	6,800
	Kickoff Meeting to Review Project Management Plan	1,960
Surve	eys/ROW Acquisition:	-
	Topographic Survey	59,180
	Soil Borings - 5' Hand Augers at 2000 ft	19,000
	Coordinate with Property Owners	8,800
	Review right-of-way/Determine Required Easements	7,950
	Prepare Documents and Files (Attorney)	-
	Easement Drawings	-
Perm	itting:	
	MDOT Program Application	2,020
	Soil Erosion Control Permit	760
	NPDES Permit by Rule	380
	County Drain Permit	1,760
	EGLE/USACOE Joint Permit	6,900
	NEPA	11,500
	SHPO Consultant Allowance	22,380
GI Pla	an Set	
	Existing Utilities to Plans	1,010
	Field Verifications	1,070
	Preliminary Plans (50% Plans, Alignment V & H, Topo)	52,750
	Meeting to Review Plans and Estimates	660
	Prepare GI Plans (80% Plans)	33,920
	Peer Review (50% and 80%)	6,250
	GI Meeting	2,150
	Misc Calls and Scope	4,360

6.5 LINE ITEM COSTS FOR EACH ACTIVITY/TASK/DELIVERABLE

MDOT Final Submittal (9/2022 - 1/2023)	\$ 46,180
Finalize Plans	30,260
Finalize MERL Estimate	3,795
Prepare Special Provisions	5,145
Bidding (MDOT LAP Support)	2,620
Misc Calls and Scope	4,360
Total Amount	\$ 318,475
Total Hours	2,586

Fees outlined above are in 2020 dollars. Apply 3% increase per year after 2020.

6.6 TIMELINE

We are making some bid assumptions below that funding will be approved the first year applied for by the stakeholders. If the grant funding is not approved the first year, the dates below would be adjusted based on actual funding timeline.

Preliminary Design Phase will begin July 1, 2020 and be completed in 2020. Invoices associated with grant funding will be submitted to the SWMPC prior to the grant deadline for work completed prior to September 30, 2020. The drone flight would likely be performed after that day to allow the leaves to fall.

Construction Documents (MDOT GI Plans): it is assumed that this phase will begin once funding is acquired. With the understanding that the project will be seeking TAP funding and MNRTF funding it is anticipated that the earliest this phase might begin is February, 2022. However, we are able to begin work earlier if other funding is secured. We anticipate this phase of work will take seven months with a GI scheduled in September, 2022 at the earliest.

Construction Documents (MDOT Final Submittal): After the comments are received from the GI it is anticipated that the final construction documents will be submitted back to MDOT within 2 months for a letting scheduled for January 2023.

Construction: With tree removals, we anticipate construction starting February 2023 and continuing through December 2023 for Substantial Completion and Spring, 2024 for Final Completion.

HOURLY RATES

STANDARD RATES

STANDARD HOURLY RATES AND UNIT RATES Revised 4/1/2019

Principal	\$ 210.00 /hour
Senior Licensed Staff	\$ 175.00 /hour
Licensed Staff I	\$ 115.00 /hour
Licensed Staff II	\$ 130.00 /hour
Licensed Staff III	\$ 140.00 /hour
Professional Staff I	\$ 85.00 /hour
Professional Staff II	\$ 95.00 /hour
Professional Staff III	\$ 105.00 /hour
Professional Staff IV	\$ 125.00 /hour
Professional Staff V	\$ 140.00 /hour
Technician I	\$ 70.00 /hour
Technician II	\$ 75.00 /hour
Technician III	\$ 85.00 /hour
Technician IV	\$ 90.00 /hour
Administrative	\$ 70.00 /hour
3 Person Survey Crew	\$ 185.00 /hour
2 Person Survey Crew	\$ 150.00 /hour
1 Person Survey Crew	\$ 100.00 /hour
3 Person Survey Crew (Construction Staking)	\$ 210.00 /hour
2 Person Survey Crew (Construction Staking)	\$ 175.00 /hour
1 Person Survey Crew (Construction Staking)	\$ 130.00 /hour
High Definition Laser Scanning Technician	\$ 150.00 /hour
Drone Pilot/Technician	\$ 150.00 /hour
Expert Witness/Testimony	\$ 400.00 /hour
High Definition Laser Scanner	\$ 150.00 /hour
Aerial Drone Equipment	\$ 150.00 /hour



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HOURLY RATES

STANDARD RATES

REIMBURSABLE RATES Revised 10/21/2013

Reimbursable

Compensation for reimbursable expenses shall be computed as a multiplier of 1.1 times the expense incurred and as follows:

Outside Consultants	1.1 x cost
Mileage	1.1 x Federal Rate
Travel, Lodging and Misc	1.1 x cost
Postage, UPS, FedEx, Messenger	1.1 x cost
Outside Reproduction	1.1 x cost

In-House Prints / Copies / Plots:

Black & White Prints / Copies

8½ x 11	\$ 0.19/sheet
8½ x 14	\$ 0.19/sheet
11 x 17	\$ 0.19/sheet

Color Prints / Copies

8½ x 11	\$ 0.85/sheet
8½ x 14	\$ 0.85/sheet
11 x 17	\$ 1.25/sheet

B/W Plots

12 x 18	\$ 1.50/sheet
18 x 24	\$ 2.75/sheet
24 x 36	\$ 5.00/sheet
30 x 42+	\$ 7.50/sheet

Color Plots

\$ 9.00/sheet
\$ 18.00/sheet
\$ 30.00/sheet
\$ 42.00/sheet



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HANK 110

GHTMA

IT'S ALL ABOUT PEOPLE.

SOUTH FIREMAN'S PARK

TRAIL RULES

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TRAIL HISTORY

ALLEGAN

MI RIVER VALLEY TRAIL

1670 LINCOLN ROAD ALLEGAN, MI 49010 **P** 269.673.8465

BENTON HARBOR

2303 PIPESTONE ROAD **BENTON HARBOR, MI 49022 P** 269.927.0100

KALAMAZOO

433 EAST RANSOM STREET KALAMAZOO, MI 49007 **P** 269.327.3532

ROYAL OAK

306 S. WASHINGTON, SUITE 200 ROYAL OAK, MI 48067 **P** 248.791.1371

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