

December 15, 2022

Ashley Buechter, PE Missouri's Local Program LPAoncall@modot.mo.gov

RE: ON-CALL PROFESSIONAL SERVICES: ENVIRONMENTAL CATEGORY

Dear Ms. Buechter:

Shannon & Wilson, Inc. (S&W) is pleased to have the opportunity to provide our qualifications for professional environmental services for LPA On-Call.

WORKKFORCE DIVERSITY:

Shannon & Wilson is committed to reaching as diverse an applicant pool as possible. In addition to posting jobs to our corporate website, we specifically post position descriptions and instructions for applicants with professional societies composed of and dedicated to women and minorities. Furthermore, we work similarly with regional organizations including the Mid-States Minority Supplier Development Council and the St. Louis Business Diversity Board to promote open positions through their websites. As part of our recruiting strategy in universities, we reach out to student engagement clubs and societies for women and minority engineers. Shannon & Wilson also has a Diversity and Inclusion Committee that is companywide and meets monthly in order to discuss how to further diversify our firm.

- Total employees in the St. Louis Office: 24 (Firm Wide Data Available Upon Request)
- Employees Who Identify as Non-White: 3
- Employees Who Identify as Female or Not-Male: 6
- Employees Who Identify as Both: 2

GENERAL OVERVIEW OF FIRM:

Shannon & Wilson is a 100% employee-owned consulting firm of over 300 professionals established over 68 years ago. We are recognized by our clients and peers to be among the leaders in Missouri and the nation in geotechnical and environmental consulting. In-house capabilities include geotechnical engineering and instrumentation, geology and geophysics, rock mechanics and underground engineering, earthquake engineering, and environmental science. These services typically support the design and construction of highways, bridges, and other transportation facilities; tunnels and underground operations; structural foundations, excavations, and retention systems; landslide/slope stabilizations and; groundwater management systems. In addition, we work with many subcontractors across the state to provide services such as drilling and Noise and Vibration studies.

In addition to design, S&W routinely provides technical plans, specifications, cost estimating, and construction-phase engineering services. We provide field support equipment, explorations, and exploration management; professional staffed soil and rock testing laboratories; and one of the most complete geotechnical research libraries in the country.

GENERAL EXPERIENCE OF FIRM:

In the past 10 years, more than half of Shannon & Wilson's work has been on environmental projects. Recent experience with environmental projects includes:

TRRA NEPA, Connection Study, Design Nine, Inc. | Suaget, IL

Shannon & Wilson, Inc. performed a NEPA desktop study for the reestablishment of a 3200 linear foot connection track for Terminal Railroad Association in St. Clair County, Illinois. The purpose of this project was to assist in environmental due diligence for a grant application and then NEPA support after the funding was awarded under FHWA and Illinois DOT guidelines. Work included evaluation of alternatives and affected environment including Location and Lane Use, Cultural Resources, Parks and Recreational Facilities, Transportation, Noise and Vibration, Air Quality, Hazardous Materials, Hazardous Waste, Property Acquisition, Community Impacts and Environmental Justice, Impacts on Wetlands, Floodplain Impacts, Water Quality, Navigable Waterways, Coastal Zones, Prime and Unique Farmlands, Critical Habitat and Threatened/Endangered Species, Public Safety, Cumulative Impacts, Indirect Impacts, and Mitigation. (Federally funded).

TRRA Madison Yard Expansion | Madison, IL

Shannon & Wilson, Inc. performed a National Environmental Policy Act (NEPA) Study for the proposed expansion of Terminal Railroad Association of St. Louis (TRAA) Madison, IL Yard. We coordinated the archaeological review, Environmental Justice review, Air Quality, and Noise and Vibration with subcontractors and Floodplain Review within Shannon & Wilson. We performed the preliminary Threatened and Endangered Species assessment for aquatic and terrestrial species, evaluated impacts to Waters of the U.S. including wetlands and assisted with the potential impacts to Prime and Unique farmland. These studies were part of environmental due diligence to assist TRRA in Federal grant applications to fund the project for use in the required Environmental Assessment that is required by the Federal Railroad Administration. (Federally funded).

Merchants Bridge Main Span Replacement, Modjeski and Masters, Inc. | St. Louis, MO

Shannon & Wilson, Inc. performed a National Environmental Policy Act (NEPA) study for the replacement of the main span over the Mississippi River. We evaluated the U.S. Coast Guard's NEPA checklist for applicability and coordinated architectural review, performed the preliminary Threatened and Endangered Species assessment for aquatic and terrestrial species, evaluated impacts to Waters of the U.S., and coordinated the NEPA review with the U.S. Coast Guard. The review concluded the U.S. Coast Guard NEPA documentation could be satisfied with a Categorical Exclusion and identified additional natural resource coordination and permitting requirements including National Historic Preservation Act Section 106 Consultation with the Missouri State Historic Preservation Office. This consultation was formally initiated and the Illinois Historic Preservation Agency ceded lead agency status to the MO SHPO. Requirements for Threatened and Endangered Species Section 7 consultation with the U.S. Fish and Wildlife Service were identified along with consultation requirements with the Missouri Department of Conservation. We also assisted with permitting through the U.S. Army Corps of Engineers, including either a Section 10 permit under the Rivers and Harbors Act or Section 404 and 401 permitting under the Clean Waters Act. (Federally funded).

INRD - Bridges H&H and Permitting, Design Nine, Inc. | IL, IN

Shannon & Wilson, Inc. was retained by Design Nine, Inc. to perform multiple tasks including Environmental Permitting, Geotechnical Engineering, and Hydrology and Hydraulics analysis for a total of 37 bridge replacement projects along the Indiana Rail Road (INRD) stretching from central Illinois to Indianapolis, Indiana. We performed the Clean Water Act Section 404/401 permitting at all of the locations. We also performed NEPA Categorical Exclusion documentation support in coordination with the Federal Railroad Administration for 9 of these bridges in Crawford County, Illinois. Work included evaluation of alternatives and affected environment including Location and Land Use, Cultural Resources, Parks and Recreational Facilities, Transportation, Noise and Vibration, Air Quality, Hazardous Materials, Hazardous Waste, Property Acquisition, Community Impacts and Environmental Justice, Impacts on Wetlands, Floodplain Impacts, Water Quality, Navigable Waterways, Coastal Zones, Prime and Unique Farmlands, Critical Habitat and Threatened/Endangered Species, Public Safety, Cumulative Impacts, Indirect Impacts, and Mitigation. (Federally funded).

NEPA - TRRA Arch Tunnel, Terminal Railroad Association of St. Louis | St. Louis, MO

Shannon & Wilson, Inc. performed a NEPA desktop study for a dewatering project for Terminal Railroad Association Arch Tunnel in St. Louis, MO. The purpose of the project was to assist in environmental due diligence for a grant application and then NEPA support after the funding was awarded. Work included evaluation of alternatives and affected environment including Location and Land Use, Cultural Resources, Parks and Recreational Facilities, Transportation, Noise and Vibration, Air Quality, Hazardous Materials, Hazardous Waste, Property Acquisition, Community Impacts and Environmental Justice, Impacts on Wetlands, Floodplain Impacts, Water Quality, Navigable Waterways, Coastal Zones, Prime and Unique Farmlands, Critical Habitat and Threatened/Endangered Species, Public Safety, Cumulative Impacts, Indirect Impacts, and Mitigation. (Federally funded).

QUALIFICATION OF PERSONNEL: We assemble teams of highly qualified personnel to deliver client-focused service and solutions. Our teams have the experience and technical resources to focus on the critical elements of your projects to accomplish tasks on schedule and within budget.

| Office Manager | Personnel/Years Exp. | Registration | Education |
|-------------------------------------|----------------------|-----------------------------------|---|
| | Tom Abkemeier (32) | PE: MO, AR, IA, IL, KS, KY, TN | MS, Civil Engineering BS, Civil Engineering |
| Project Managers | James Dutt (23) | PG: IL RG: MO | MS, Environmental Science BA, Geology BS, Environmental Science |
| | Russell Schwab (34) | RG: MO | MS, Environmental Management BS, Geology |
| Geologists/Environmental Scientists | James Zschau (37) | RG: MO | BS, Geology |
| | Mark Wieners (19) | RG: MO | BA, Environmental Science BS, Geology |
| | Matthew Reed (4) | GIT | BS, Geology AA, General Studies |
| | Marissa McMullen (1) | | BS, Petroleum Engineering Minor, Geology |
| | Emily Persinger (>1) | | MS, Geosceince BS, Geology Minor, Environmental Science |

FAMILIARITY/CAPABILITY: Shannon & Wilson is familiar with the requirements for completing environmental projects that include federal and state funding through our work with the U.S. Army Corps of Engineers, National Park Service, and a multitude of Departments of Transportations including MoDOT, IDOT, IaDOT, CDOT, and WisDOT. We're also well-versed in work with public agencies such as St. Louis County, Class I Railroads, St. Louis Metropolitan Sewer District, etc. Shannon & Wilson has successfully delivered work for these agencies and more with the knowledge and familiarity of federal requirements and laws.

ACCESSIBILITY: Shannon & Wilson has the ability to work state-wide for our clients, with subcontractors and co-prime partners across Missouri and more. We are also accustom to providing emergency response to projects as well. S&W is always readily available to complete jobs successfully for their clients.

Sincerely,

SHANNON & WILSON

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Russell Schwab, RG Vice President