



March 22, 2018

Sent via email

Duncan Schwensohn
City of Duluth
411 West First Street, Room 211
Duluth, MN 55802

**Re: Proposal for Environmental Support Services - Construction
Superior Street Reconstruction - Duluth, MN**

Dear Mr. Schwensohn:

Barr Engineering Co. (Barr) is pleased to provide this proposal for environmental support services during the Superior Street Reconstruction Project (Project). The scope of work covered in this proposal will be for Barr to act as the Environmental Representative on behalf of the City of Duluth. Our primary task will be to provide construction observation and documentation of the response action implementation as outlined in the Minnesota Pollution Control Agency (MPCA) approved Response Action Plan / Construction Contingency Plan (RAP/CCP) and as incorporated into the Project specifications.

Project Understanding

The Project was designed and bid by LHB Consultants with environmental support by Barr under a separate contract. It is our understanding that the construction portion of this work has been awarded to Northland Constructors and the scope of the reconstruction project will be completed in three separate phases from 2018 to 2020.

- Phase 1: 2018 7th Avenue West to west side of 3rd Avenue West
- Phase 2: 2019 4th Avenue East to east side of Lake Avenue
- Phase 3: 2020 3rd Avenue West to east side of Lake Avenue

The City will provide overall construction management and Barr will provide limited construction observation and environmental management services on behalf of the City acting as the *Environmental Representative*, as needed throughout the three year duration of the project. The *RAP/CCP and Amendment* was prepared by Barr and approved by the MPCA in 2017 to address contaminated soil identified along the Project corridor. Barr's primary task as *Environmental Representative* will be to document that the MPCA approved soil response action was properly implemented during construction. We will also be available to assist with unknown environmental concerns discovered during construction and to support the contingency plan implementation as needed.

Scope of Work

The primary work scope objectives for our environmental support services for this Project are outlined below:

- Attend pre-construction meeting organized by the City.
- Provide a qualified inspector (Environmental Representative) for construction observation support to the City for significant and/or environmental activities, as needed. City personnel will provide primary construction oversight.
- Collect soil samples in target soil screening area and contaminated soil excavation areas for screening and/or verification analysis to ensure proper soil classification and management.
- Assumes Barr construction observation records are maintained.
- Assumes Barr will attend 3 weekly construction meetings per year.
- Barr will manage soil disposal documentation and track quantities on an annual basis with a year-end technical memorandum.
- At the end of the three year Project, Barr will prepare a response action implementation report for MPCA review and approval.

Our support services will be completed while maintaining communication with the City, their contractor Northland Construction and will seek appropriate approvals by the MPCA Voluntary Investigation and Cleanup (VIC) program, as needed. The tasks associated with each of the three phases are further detailed below.

Environmental Construction Observation Services

Barr will be responsible for overseeing the implementation of the approved RAP for this Project according to the technical specifications and project plans provided in the Project Manual. These services will include:

Project Coordination and Planning

- Attend Pre-construction meeting;
- Review contractor submittals (Contractor OSHA training Certification and Project Health and Safety Plan);
- Prepare Barr site specific Health and Safety Plan, consistent with OSHA requirements;
- Respond to contractor requests for information, scheduling and contingencies; and
- Communications with City and the MPCA VIC Program during construction, as needed.

Phase 1: 2018 - Field Support

- Provide construction observation assistance and soil screening at eight Targeted Soil Screening Areas as defined in the project plans and specifications (SB-01, SB-03, SB-05, SB-15, SB-16, SB-17, SB-18, and SB-19). Our cost assumes up to **80 hours** (or 8 days) of field inspection time to work with the Contractor for soil screening and classification.

- Attend weekly construction meetings when soil classification tasks or topics are included (assumes 3 weekly meetings / year);
- For costing and planning purposes, we have assumed two of the eight screening locations will require reclassification as Contaminated Soil. For estimating purposes we will assume an additional **40 hours** (4 days) of field oversight time and verification sample collection and analysis (assumes up to **10 diesel range organic (DRO) compound and 10 volatile organic compounds (VOC)** soil samples will be analyzed with a 72-hour rush turnaround time). We will also assist the Contractor with Contaminated Soil disposal coordination and documentation, as needed.
- We will be available for environmental construction contingency evaluations (assumes up to **30 hours** of field time (3 field visits – 10 hours each).
- Prepare a memorandum at the end of the construction season summarizing and documenting the environmental tasks completed, including Contaminated Soil disposal documentation.

Phase 2: 2019 - Field Support

- Provide construction observation assistance and remedial excavation oversight (assumes field support of up to **40 hours** (4 days) for the two Contaminated Soil Excavation Areas (SB-65 and SB-66) and to coordinate with the laboratory and Contractor for excavation verification sample collection and analysis (assumes up to **10 DRO and 10 VOC** soil samples will be analyzed with a 72-hour rush turnaround time).
- Provide construction observation assistance and soil screening at two Targeted Soil Screening Areas (SB-40, SB-59) and the larger Targeted Soil Screening areas surrounding the two Contaminated Soil Areas located at 4th Avenue East (SB-65, SB-66) as defined in the project plans and specifications. Our cost assumes field support of up to **20 hours** (or 2 days) for the SB-40 and SB-59 areas and **40 hours** (4 days) of field inspection time for the SB-65 and SB-66 areas to work with the Contractor for soil screening and classification.
- Attend weekly construction meetings when remedial action tasks are included (assumes 3 / year);
- Assist Contractor with Contaminated Soil disposal coordination and documentation for the two Contaminated Soil Excavation Areas (SB-65 and SB-66), as requested.
- For costing and planning purposes, we have assumed one of the three soil screening locations will require reclassification as Contaminated Soil. For estimating purposes we will assume an additional **20 hours** (1 day) of field support time for verification sample collection and analysis (assumes up to **5 DRO and 5 VOC** soil samples will be analyzed with a 72-hour rush turnaround time). We will also assist the Contractor with Contaminated Soil disposal coordination and documentation, as needed.
- Be available for environmental construction contingency evaluations (assumes up to **30 hours** of field time (3 field visits – 10 hours each).

- Prepare a memorandum at the end of the construction season summarizing and documenting the environmental tasks completed, including Contaminated Soil disposal documentation.

Phase 3: 2020 - Field Support

- Provide construction observation assistance and remedial excavation oversight (assumes field support of up to **20 hours** (2 days) for the one Contaminated Soil Excavation Area (SB-31) and coordinate with the laboratory and Contractor for excavation verification sample collection and analysis (assumes up to **5 DRO and 5 VOC** soil samples will be analyzed with a 72-hour rush turnaround time).
- Provide construction observation assistance and soil screening at one Targeted Soil Screening Area (SB-21) and the larger Targeted Soil Screening areas surrounding the Contaminated Soil Areas in front of US Bank (SB-31) as defined in the project plans and specifications. Our cost assumes field support of up to **10 hours** (or 1 day) for the SB-21 area and **20 hours** (2 days) for the SB-31 area to work with the Contractor for soil screening and classification.
- Attend weekly construction meetings when remedial action tasks are included (assumes 3 / year);
- Assist Contractor with Contaminated Soil disposal coordination and documentation for the remedial excavation area (SB-31), as requested.
- Be available for environmental construction contingency evaluations (assumes field support of up to **30 hours** (3 field visits – 10 hours each).
- Prepare a memorandum at the end of the construction season summarizing and documenting the environmental tasks completed, including Contaminated Soil disposal documentation.

Environmental Reporting

- Prepare a response action implementation report documenting the completed response actions for approval by the MPCA VIC program.

Project Assumptions

This scope of work includes the following assumptions:

- Contractor will be responsible for all construction staking and will mark excavation and screening area limits.
- Contractor Staked screening excavation areas will be documented by Barr using a hand held GPS and illustrated on site diagrams following the field activities.
- Our field support services assume the following number of field hours per phase / year:
 - Phase 1: 2018 - Field Support Hours = 90
 - Phase 1: 2018 - Field Support Hours = 150
 - Phase 1: 2018 - Field Support Hours = 80

- Barr assumes the following number of analytical samples will be collected and analyzed for soil documentation:
 - Phase 1: 2018 – 10 DRO / VOC
 - Phase 1: 2018 - 15 DRO / VOC
 - Phase 1: 2018 - 5 DRO / VOC
- Our estimate assumes construction dewatering sampling and management will not need be required.
- Our work scope does not include asbestos sampling or management associated with the wrap around the steam utility pipes. We assume this work will be coordinated by others. If assistance is requested from Barr for asbestos related tasks, a separate cost estimate will be provided.

Project Team

Project Resources. We understand that accommodating the construction schedule often requires a very quick response by the consultant. Barr has the bench strength to be responsive to the needs of the City and their Contractor(s).

Barr has identified the team members outlined below to be key to this project. Barr's local **Duluth** office staff (**Carney, Beaster and Bevis**) will provide the project management, response action and environmental construction observation support during construction. Our staff will work closely with the City of Duluth and the MPCA to assure project goals are met. Additional project management and design support will be provided by these additional team members (**Dott and Lund**).

Team Members	Role
Eric Dott	Principal in Charge
Lynette Carney	Senior Project Manager
Eric Lund (PE)	Professional Engineer
Tristan Beaster	Environmental Engineer / Field Support
Martin Bevis	Geologist / Field Support
John Kubiak	GIS/CAD Specialist
Various	Project Support Staff

Barr has selected **Pace Analytical Services Inc.** as our subconsultant laboratory. These costs have been included in our estimate.

Schedule

Barr is prepared to begin work on this project immediately. We understand that this work is targeted to begin construction in April 2018. The following project schedule shows the major elements of the project and estimated completion date. Actual completion dates will ultimately be determined by Contractor and Project schedules. Email updates will be provided to the City regarding field tasks and scheduled

deliverables, relevant findings, and final deliverables. The City will be notified of any relevant schedule, scope or activity changes.

Work Assignment	Format	Target Completion Date
Pre-Construction Meeting	Meeting	March 19, 2018
Phase 1: 2018 Construction Observation and Documentation	Field Inspection / Annual Memo / Contaminated Soil Disposal Documentation	April – November 2018
Phase 2: 2019 Construction Observation and Documentation	Field Inspection / Annual Memo / Contaminated Soil Disposal Documentation	April – November 2019
Phase 3: 2020 Construction Observation and Documentation	Field Inspection / Annual Memo / Contaminated Soil Disposal Documentation	April – November 2020
Response Action Implementation Report	Report	March 31, 2021

Cost Estimate

Based on our experiences on similar projects, Barr has prepared the following preliminary cost estimates for consulting tasks required to complete the proposed scope of work. Barr proposes to provide our professional services on a time and materials basis in accordance with our current fee schedule. Since this is a multiple year project, our labor costs include an approximate annual increase of 5%.

Task	3 Year Project Cost Estimate
Project Coordination and Planning	\$12,800
Phase 1: 2018 - Field Support	\$36,600
Phase 2: 2019 – Field Support	\$39,600
Phase 3: 2021 – Field Support	\$26,300
Reporting	\$9,700
Total	\$125,000

The City of Duluth should also include budget to fund the MPCA VIC staff review and oversight time (at \$125 per hour). Based on similar projects you should assume up to 5-10 hours of VIC staff time per year may be needed. Our estimated cost range reflects a wide range of site conditions and construction assumptions made by Barr and assumptions made regarding anticipated environmental conditions to be encountered during construction. It is possible that additional environmental conditions will be encountered that were not anticipated as part of this estimate. If additional contingency support services are identified that require support services beyond the scope of this proposal, this work will be completed at an additional cost, only upon City authorization of the change.

If the scope and costs are satisfactory, we will await a purchase order and subcontractor agreement for signature from the City of Duluth. We will execute the agreement by signing and returning one copy to you for your records. We appreciate the opportunity to submit this proposal to you. If you have any questions, please call me at (218) 529-7141 or by email at lcarney@barr.com or Eric Dott at (218) 529-8234 or by email at edott@barr.com.

Sincerely,
Barr Engineering, Inc.



Lynette Carney, PG
Project Manager



Eric Dott, PG
Principal in Charge

Enclosure: 2018 Fee Schedule



Fee Schedule—2018

Rev. 12/30/17

Description	Rate* (U.S. dollars)
Principal	\$145-295
Consultant/Advisor.....	\$155-250
Engineer/Scientist/Specialist III.....	\$125-150
Engineer/Scientist/Specialist II.....	\$95-120
Engineer/Scientist/Specialist I.....	\$65-90
Technician III.....	\$125-150
Technician II.....	\$95-120
Technician I	\$50-90
Support Personnel II	\$95-150
Support Personnel I	\$50-90

Rates for litigation support services will include a 30% surcharge.

A ten percent (10%) markup will be added to subcontracts for professional support and construction services to cover overhead and insurance surcharge expenses.

Invoices are payable within 30 days of the date of the invoice. Any amount not paid within 30 days shall bear interest from the date 10 days after the date of the invoice at a rate equal to the lesser of 18 percent per annum or the highest rate allowed by applicable law.

Reimbursable expenses including, but not limited to, the actual and reasonable costs of transportation, meals, lodging, parking costs, postage, and shipping charges will be billed at actual cost. Materials and supplies charges, printing charges, and equipment rental charges will be billed in accordance with Barr's standard rate schedules. Mileage will be billed at the IRS-allowable rate.

Principal category includes consultants, advisors, engineers, scientists, and specialists who are officers of the company.

Consultant/Advisor category includes experienced personnel in a variety of fields. These professionals typically have advanced background in their areas of practice and include engineers, engineering specialists, scientists, related technical professionals, and professionals in complementary service areas such as communications and public affairs.

Engineer/Scientist/Specialist categories include registered professionals and professionals in training (e.g. engineers, geologists, and landscape architects), and graduates of engineering and science degree programs.

Technician category includes CADD operators, construction observers, cost estimators, data management technicians, designers, drafters, engineering technicians, interns, safety technicians, surveyors, and water, air, and waste samplers.

Support Personnel category includes information management, project accounting, report production, word processing, and other project support personnel.

*Rates do not include sales tax on services that may be required in some jurisdictions.