PROPOSAL FOR PROFESSIONAL CONSULTING SERVICES

2022 NW Area Mill and Overlay Project

NORTHFIELD, MINNESOTA | MAY 21, 2021

SEH

Building a Better World for All of Us®

Engineers | Architects | Planners | Scientists

Building a Better World for All of Us®

May 21, 2021

Sean Simonson
Engineering Manager
City of Northfield
801 Washington Street
Northfield, MN 55057

RE: Proposal for 2022 NW Area Mill and Overlay Project – Northfield, Minnesota

Dear Sean:

As the City of Northfield plans its 2022 NW Area Mill and Overlay Project, it has demonstrated a commitment to enhancing local streets for pedestrians, bicyclists and drivers. With this series of proposed improvements, the City will need a qualified professional engineering partner to lead these efforts from start to finish. In this capacity, Short Elliott Hendrickson Inc. (SEH®) has assembled an experienced team able to tackle this project's challenges by delivering efficient, cost-effective service for the City and its stakeholders.

We have introduced our team and our approach in this proposal, and we look forward to the opportunity to discuss this project with you further. Please don't hesitate to contact me at 952.912.2629 or wbauer@sehinc.com if you have any questions or would like additional information.

Respectfully submitted,

We are excited about the opportunity to work on this project and continue to grow our working relationship.

WILLIAM BAUER, PE (MN)
PROJECT MANAGER

WAYNE HOULE, PE (MN)
CLIENT SERVICE MANAGER

CONTENTS

The specific licenses and credentials of the team members are described in the personnel and/or resume section of this document.

NFIEL 160682

Executive Summary

Having outlined the streets and improvements to be prioritized in the 2022 NW Area Mill and Overlay Project, the City of Northfield is now ready to select a consultant partner. We are committed to serving in this capacity by responding directly to the City and its stakeholders throughout the process.

As a project partner, the Short Elliott Hendrickson Inc. (SEH®) team will provide the following advantages:

PAST COLLABORATION WITH THE CITY

Over the last several years, we have had the opportunity to work with the City on various projects, particularly on neighborhood street construction and reconstruction efforts. Through these previous collaborations, we have developed a strong working relationship with your staff. On this project, we will continue to work as an extension of your team and build on the efficiencies we have established through our partnership.

DELIVERING EFFICIENT RESULTS

SEH is confident in our ability to meet your budget and schedule based on our understanding of the project sections and our extensive street design and construction experience. Our staff capacity and the availability of our team will enable us to meet this project's technical and documentation demands, and we are available to initiate the work tasks immediately upon execution of the contract.

WELL-ROUNDED AND EXPERIENCED TEAM

This is more than a mill and overlay project. It is also an opportunity to improve pedestrian and bicyclist connectivity and safety within the project area. Our multidisciplinary team has the resources to deliver a wide range of benefits, as we have included specialists in areas such as multimodal design, railroad coordination and traffic engineering, as well as a Resident Project Representative (RPR) to make sure each aspect of the project is completed efficiently and serves all users in the future.

Our team is ready to meet the goals and challenges for this effort. By focusing on accessibility, efficiency, cost-effectiveness and constructability, we will be able to successfully serve the City of Northfield on this project.

Sidewalk condition at St. Olaf Avenue railroad crossing facing west.

Project Understanding, Goals and Approach

GOALS

- **Extend the service life of all streets** within the project area by 15 years through a mill and overlay with spot repair of curb and gutter.
- **Improve pedestrian and bicycle connectivity** and safety through the addition of sidewalks, trails and on-street bikeways. These additional facilities will help meet the City's climate action plan goal of adding 10 additional miles of bicycle and pedestrian infrastructure by the end of 2022.
- **Upgrade in-place pedestrian facilities** to meet Americans with Disabilities Act (ADA) standards.
- **Complete storm sewer and drainage improvements** as recommended in the City's 2020 Neighborhood Flood Study.
- **Improve railroad crossing safety** at St. Olaf Avenue with implementation of safety measures in preparation for the future Quiet Zone.
- **Develop recommendations** to improve both pedestrian safety (at Greenvale Avenue) and motorist safety (at St. Olaf Avenue) on Trunk Highway (TH) 3.

EARLY ISSUES IDENTIFICATION

Our approach to the project starts with early issue identification. Our previous experience demonstrates that early identification is key to timely resolution of challenges and issues that can impact the successful completion of a project. We believe these challenges can be resolved through the course of the design process, coordination with private utility companies, neighborhood open houses and construction management. We will make early contact with the Canadian Pacific Railroad during preliminary design to develop a crossing plan of St. Olaf Avenue for the future Quiet Zone and for pedestrian crossing improvements at Greenvale Avenue. Securing early buy-in from the railroad will be critical in keeping the project on schedule.

Greenvale Avenue railroad crossing.

In addition, we will work closely with representatives from the various private utility companies within the project area. Our experience has shown that a proactive approach to utility coordination is key to project success. Identifying potential issues early and communicating with private utility companies accordingly mitigates impacts to the overall schedule. During the development of the 7th Street and Division Street Reconstruction, Spring Creek Road Improvements and TH 246 and Jefferson Parkway Roundabout projects, **William Bauer** worked with many of the same private utility companies expected to be present within the project area. He will leverage those relationships to ensure private utility relocations do not cause construction delays.

St. Olaf Avenue and Spring Street with non-ADA-compliant pedestrian ramp.

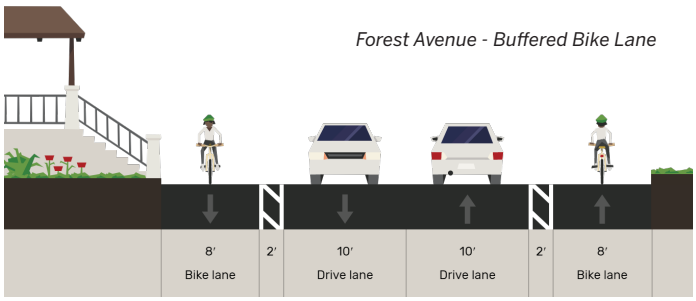
FEASIBILITY STUDY

During the feasibility report process, we will present the project at a neighborhood meeting with residents and business owners to communicate the project scope and anticipated impacts. Following feedback gained at the meeting, we will develop a report that proves the improvements are necessary, cost-effective and feasible. This will include the following information:

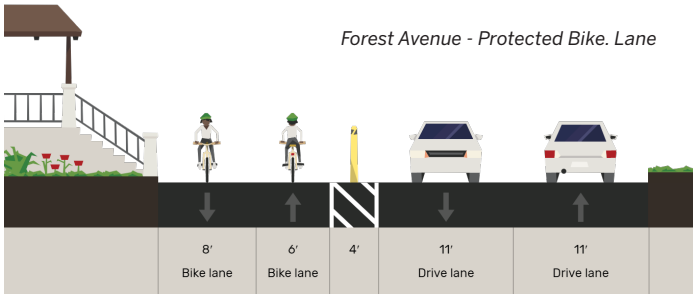
- Background of the project
- Discussion regarding the existing conditions and proposed improvements
- Analysis of alternatives and recommendations for the various on-street bikeway, sidewalk and trail improvements
- Discussion of the crash history at the St. Olaf Avenue and TH 3 intersection with recommendations to improve intersection safety
- Cost estimate
- Project financing

PEDESTRIAN AND BICYCLE IMPROVEMENTS

Improving the connectivity for both bicyclists and pedestrians will be an important component of the project. In addition to ADA upgrades of existing pedestrian facilities, we will also analyze the addition of on-street bikeways, sidewalks and trails at several locations within the project area.



Forest Avenue - Buffered Bike Lane



Forest Avenue - Protected Bike. Lane

KC Atkins will be a key team member in completing this task. With over 14 years of experience in the industry, she has delivered dozens of pedestrian, bicycle and transit projects throughout her career. Her experience will be crucial in:

- Reviewing potential pedestrian routes from the Greenvale Avenue and Spring Street area south to the City's recently completed improvements at the Transit Hub/Depot.
- Analyzing the need for a safe pedestrian crossing of Cannon Valley Drive to the Northfield Retirement Center Campus. This will be completed by utilizing Federal Highway Administrations (FHWA) Safe Transportation for Every Pedestrian (STEP) Guide.
- Developing on-street bikeway concepts for Thye Parkway, St. Olaf Avenue, Lockwood Drive and Forest Avenue. These concepts will be created with guidance from FHWA's Bikeway Selection guide and by meeting with City staff to understand potential usage and to discuss long-term maintenance needs.
- Analyzing the TH 3 and Greenvale Avenue intersection to prevent pedestrian access to the west side of TH 3 that lacks pedestrian amenities.

SEH will review the tradeoffs for each on-street bikeway design with Northfield staff and stakeholders, including, but not limited to existing parking removal/retention, lane dimensions, bikeway design user and type, intersection treatments and cost of treatments. Concept treatments for the Forest Avenue bikeway are shown on this page.

TOPOGRAPHIC SURVEY AND FIELD INVESTIGATION

Upon completion of the kickoff meeting with City staff, William will engage the design survey team and initiate the topographic field survey. SEH will conduct a full topographic field survey of the project intersections and locations of proposed sidewalk or trails.

Once all the field work and available mapping has been collected, processed electronically and vetted through our internal QA/QC process, we will perform a field review of the project site to ensure the base map is accurate and nothing was missed.

SEH has teamed with **Braun Intertec** (Braun) to provide geotechnical engineering services. The geotechnical investigation will consist of 30 hand auger soil borings, soil classification and laboratory testing. Soil samples and lab testing will be reviewed and determined by SEH geotechnical staff. A geotechnical memorandum will be provided as a deliverable for the geotechnical

portion and will provide final soil boring logs with soil types, groundwater elevations and laboratory testing, as well as pavement design recommendations if full depth replacement of some areas is determined to be required. Braun has provided an alternate fee to include up to five truck-mounted drill rig borings for deeper soil investigations as needed for retaining walls or full-depth pavement replacement.

Davey Resource Group (DRG) will collect tree and site data on all right of way trees within the project area. Additionally, an arborist's report will be developed that includes detailed information of overall tree condition and projection of fate following project completion. A tree inventory will be provided in the City's preferred GIS format. Trees that are recommended to be removed will be replaced at a 2:1 ratio from the City's Acceptable Boulevard Tree List with the project.

FINAL DESIGN

SEH will prepare final design plans and specifications in accordance with City standards. Our special provisions will be combined into the City's contract provisions to complete the entire bid proposal. As part of the final plans and specifications we will:

- Define the schedule and controls for contractors that give the City power to enforce the schedule
- Clearly identify traffic control and residential/business access requirements
- Identify private utility impacts

We propose design review meetings with the City at the 30%, 60% and 95% complete milestones to review the design documents and cost estimate and make any necessary changes before the bidding documents are finalized. All plan sets will be prepared and delivered in the format and order required by the City. The 30% cost estimate will be included in the feasibility study and will be based on major quantities and will include contingency. The 60%, 95% and final estimates will be based on a detailed quantity takeoff.

BIDDING ASSISTANCE

The project team will provide bidding services that include the following:

- Assist the City with advertising the project through award of the contract
- Provide answers to bidders' questions and prepare addenda (if required)
- Prepare and distribute bid documents
- Prepare a letter of award recommendation

CONSTRUCTION ADMINISTRATION AND OBSERVATION

Our team will act as an extension of City staff. We will lead, coordinate and support all project meetings, contractor submittals, utility relocations, schedule reviews, all project payments and/or documentation and project closeout. The City of Northfield can expect SEH to administer the construction contract consistent with contract documents with limited oversight.

SEH's RPR will provide full-time project observation during construction. We will coordinate all construction staking, coordinate material sampling and testing services with Braun Intertec, and document construction progress on a daily basis. Our RPR will attend and participate in all construction meetings, including the preconstruction conference, weekly coordination meetings and project closeout meetings. We will also engage with the contractor, subcontractors, utility companies and the adjacent businesses and property owners on a daily basis to maintain direct knowledge of the construction operations. This will ensure that the project is documented properly and that any issues that arise are quickly and fully resolved.

Greenvale Avenue and TH 3.

Background and Experience

This SEH team has experience with similar projects with comparable issues and scopes. The examples we provide show our experience effectively managing tasks and challenges similar to this in Northfield. We are eager to use our relevant experience to work collaboratively with the City to address existing issues within each project area.

DIVISION STREET AND 7TH STREET RECONSTRUCTION

NORTHFIELD, MN

The City of Northfield initiated a number of street improvement projects that supported their "Complete Streets" policy. The Division Street and 7th Street project included streetscape reconstruction, mill and overlay, and parking lot rehabilitation, as well as the replacement of water main, sanitary sewer and storm sewer. SEH provided services, including a feasibility study, topographic survey, design, utility coordination, bidding administration, construction staking, and public outreach and coordination.

A Gopher State One Call was completed to identify private utility facilities within the project area. After identifying conflicts, SEH facilitated a private utility coordination meeting in which solutions were discussed. In particular, the project included the design of public utilities around an in-place CenturyLink duct that could not be relocated and coordination with Xcel Energy to relocate power poles and some overhead facilities underground.

TH 246 AND JEFFERSON PARKWAY ROUNDABOUT

NORTHFIELD, MN

SEH was selected to provide design and construction administration services for a unique roundabout project in the City of Northfield at the intersection of TH 246 and Jefferson Parkway. The roundabout provided a safety improvement at a high-volume intersection that is adjacent to three schools. The project features four box culvert underpasses, one under each approach of the roundabout, to separate pedestrians and bicyclists from vehicular traffic. The project provides a future connection and crossing of the Mill Towns State Trail.

The project also included pedestrian improvements, such as a Rapid Rectangular Flashing Beacon system, for a key pedestrian crossing to Northfield High School's entrance on TH 246 from Marvin Lane.

SEH was responsible for coordinating with the City, School District and the Minnesota Department of Transportation (MnDOT). SEH's multidisciplinary team included civil, structural, geotechnical, water resources, natural resources, traffic, lighting and landscape architecture.

SPRING CREEK ROAD RECONSTRUCTION

NORTHFIELD, MN

SEH was selected to provide design and construction administration for the conversion of a rural gravel road to a semi-urban Municipal State Aid (MSA) Roadway. Spring Creek Road is located on the easterly border of the City of Northfield, which the City is expecting future expansion to the east. The project included the City annexing the easterly half of the roadway in order to use MSA funds. The project was designed to accommodate a quick modification to a full urban roadway. The project included sections of curb and gutter and sidewalks, as well as the extension of public utilities, including sanitary sewer, water main and storm sewer.

2020 UTILITY RECONSTRUCTION

CRYSTAL, MN

SEH provided design and construction administration services for the City of Crystal's 2020 utility reconstruction project. The project replaced aging public utilities (sanitary sewer, water main and storm sewer), curb and gutter, bituminous roadway and ADA pedestrian ramps on Kentucky Avenue and Jersey Avenue. Residents also received new water services, sanitary services and drain tile. The project was completed in the spring of 2021.

Proposed Staff

The team assembled for this mill and overlay project regularly partners with clients like the City of Northfield, and we work to understand your needs and preferences and offer informed solutions. By selecting SEH, you're choosing quality street construction engineering service and throrough local experience.

PROJECT ORGANIZATIONAL CHART

City of Northfield
David Bennett, PE
Public Works Director/City Engineer

William Bauer PE, ENV SP
Project Manager

Wayne Houle PE
Client Service Manager/Advisor

KC Atkins PE
Bicycle/Pedestrian Lead

Chad Jorgensen PE, PTOE
Traffic Engineer

Bryan Remer PE
Railroad Coordination

Kelsey Montebello
Lead Civil Designer

Spencer Szymonowicz
Technician

Brian McIntire
Resident Project Representative

Tom Runions
Survey Crew Chief

Braun Intertec
Geotechnical

Davey Resource Group
Arborist

The specific licenses and credentials of the team members are described in the personnel and/or resume section of this document.

WILLIAM BAUER PE, ENV SP
PROJECT MANAGER

William is a professional engineer who has worked as the lead designer and project manager on a variety of municipal engineering, recreational trail and site design projects. His experience includes the design of existing roadway reconstructions and rehabilitations, recreational trails, site design and grading, stormwater collection systems, sanitary sewer systems and water distribution systems. William's responsibilities include preparing preliminary and final design, cost estimation and project plans and specifications. He is skilled in software programs including Microsoft Office, AutoCAD Civil 3D and Autodesk Storm and Sanitary Analysis.

EXPERIENCE

TH 246 and Jefferson Parkway – City of Northfield, MN
Design engineer responsible for preliminary and final design, cost estimating and preparing plans and specifications. SEH was selected to provide design services for a unique roundabout project, responsible for managing the schedule, providing safety improvements and delivering a multimodal project. The project improved a critical intersection located at Trunk Highway 246 (TH 246) and Jefferson Parkway. It also provided improvements for a key pedestrian crossing to Northfield High School's entrance on TH 246 from Marvin Lane. SEH provided services that included preliminary design, public engagement, final design and construction administration services.

Division Street and 7th Street Reconstruction – City of Northfield, MN
The City of Northfield initiated a number of street improvements projects that supported their Complete Streets policy. The Division Street and 7th Street project included streetscape reconstruction, mill and overlay and parking lots rehabilitation. SEH provided services that included a feasibility study, topographic survey, design, bidding administration, construction services, and public outreach and coordination. The resulting improvements on this stretch in downtown Northfield included improved pedestrian facilities, ADA upgrades and public ADA on-street parking, improved bicycle infrastructure, updates to the downtown streetscape and updated stormwater systems.

Spring Creek Road Reconstruction – City of Northfield, MN
This project included design and construction administration for the conversion of a rural gravel road to a semi-urban Municipal State Aid (MSA) Roadway. Spring Creek Road is located on the easterly border of the City of Northfield, which the City is expecting future expansion to the east. The project included the City annexing the easterly half of the roadway in order to use MSA funds. The project was designed to accommodate a quick modification to a full urban roadway and included sections of curb and gutter and sidewalks, as well as the extension of public utilities.

5th Avenue Reconditioning – City of South Saint Paul, MN
This project included total street and utility construction of a Municipal State Aid street. Other components included public engagement, pedestrian improvements, traffic calming measures and sustainability in landscaping and stormwater management.

9
YEARS OF EXPERIENCE

EDUCATION
Bachelor of Science
Civil Engineering
Bradley University - Peoria, IL

REGISTRATIONS/CERTIFICATIONS
Professional Engineer in MN, IA, SD

ENVISION Sustainability Professional (ENV SP), Institute for Sustainable Infrastructure

PROFESSIONAL ASSOCIATIONS
American Society of Civil Engineers, Member

American Public Works Association, Member

WAYNE HOULE PE
CLIENT SERVICE MANAGER/ADVISOR

30
YEARS OF EXPERIENCE

Wayne will serve as the client service manager and advisor for the SEH team. His prior experience as a City staff person with managing the maintenance and creation of water quality ponds will give great insight to both the City and SEH team. Wayne brings experience in developing collaborative, complex public projects and programs. He is a senior professional engineer with a civil engineering background as a director of engineering, director of public works and city engineer. He worked for the City of Edina for 17 years, where he managed the annual operating and capital improvement budgets and provided leadership and staff support. He was involved in various governmental levels and committees. His work included being an owner's representative for two large pond dredging projects. He has directed and implemented public works projects including storm sewer, sanitary sewer, water system, and street and roadway improvements. Wayne continues to work on complex projects.

EDUCATION

Bachelor of Science
Civil Engineering
University of Minnesota-Minneapolis

Associate of Arts
Architectural Drafting
North Dakota State School of Science-Wahpeton

REGISTRATIONS/CERTIFICATIONS

Professional Engineer in MN

EXPERIENCE

- TH 246 and Jefferson Parkway – City of Northfield, MN
- Spring Creek Road Reconstruction – City of Northfield, MN
- Division Street and 7th Street Reconstruction – City of Northfield, MN
- Northfield Depot – City of Northfield, MN
- Streetscape and Pedestrian Safety Improvements at TH 3 and 3rd Street – City of Northfield, MN
- 2017 Mill and Overlay Project – City of Brooklyn Center, MN

KC ATKINS PE
BICYCLE/PEDESTRIAN LEAD

14
YEARS OF EXPERIENCE

KC will serve as task manager for the development of the pedestrian and bicycle improvements. KC is a project engineer with extensive nation-wide design experience for bicycle/pedestrian accommodations, urban/rural roadways, interchanges, expressways, freeways, local roads and roundabouts. She has federal and state highway design experience, including utility coordination, environmental documentation and coordination across multiple agencies. KC has proven to be an effective leader in engaging the public, policymakers and internal teams around technical ideas and designs. She is proficient in MicroStation, InRoads, AutoCAD, GIS applications, SYNCHRO, Highway Capacity Software, MnCMAT and Microsoft Office.

EDUCATION

Bachelor of Civil Engineering
Institute of Technology, University of Minnesota-Twin Cities

REGISTRATIONS/CERTIFICATIONS

Professional Engineer in MN, IA, KS, MO, ND, OH, SD, TX and WI

EXPERIENCE

- 2021 Overlay Improvements – City of Sauk Rapids, MN
- Nicollet Avenue Bridge Preliminary Design – City of Minneapolis, MN
- Hennepin Avenue Downtown Reconstruction – City of Minneapolis, MN*
- Winona Pedestrian and Bicycle Master Plan and Complete Streets – City of Winona, MN*
- Snelling Avenue –City of Saint Paul, MN*

**Completed prior to joining SEH*

BRYAN REMER PE
RAILROAD COORDINATION

16
YEARS OF EXPERIENCE

Bryan will be responsible for coordinating the railroad crossing improvements with the Canadian Pacific Railroad. He is a professional engineer with expansive civil engineering design and construction experience with SEH. Bryan's experience includes industrial railroad track and yard design, street and utility reconstruction, site grading, lake sewering, and subdivision and housing developments. His responsibilities include preparation of plan and specifications documents, permitting, feasibility reports, environmental reports, geotechnical testing, surveying and cost estimating.

EXPERIENCE

- City Technical Services – City of Rogers, MN
- Street and Utility Reconstruction – City of Richmond, MN
- Dale and Gopher Street Improvements – City of Becker, MN
- 5th Street South Improvements – City of Waite Park, MN
- Walnut Avenue and Hillcrest Street Improvements – City of Upsala, MN
- Street and Utility Improvements –City of Pierz, MN

EDUCATION
Bachelor of Science
Civil Engineering
University of North Dakota-Grand Forks

REGISTRATIONS/CERTIFICATIONS
Professional Engineer in MN, IA, MI, ND, NE, OK, AB, BC, NS, ON, PE, SK

CHAD JORGENSON PE, PTOE
TRAFFIC ENGINEER

8
YEARS OF EXPERIENCE

Chad will lead the review of the TH 3/St. Olaf Avenue crash history, as well as the development of recommended improvements. Chad is a professional traffic engineer specializing in transportation engineering. He is experienced in transportation planning, safety analysis, performance analysis, preliminary design and traffic operation analysis, traffic impact studies, and construction signing, striping and traffic control plans. Chad is knowledgeable in a variety of industry software applications including Synchro/SimTraffic, Highway Capacity Software (HCS), AutoCAD Civil 3D, MicroStation, SignCAD, VISSIM and Microsoft Office Suite.

EXPERIENCE

- Division Street and 7th Street Reconstruction – City of Northfield, MN
- TH 246 and Jefferson Parkway – City of Northfield, MN
- Streetscape and Pedestrian Safety Improvements at TH 3 and 3rd Street – City of Northfield, MN
- Plymouth Avenue at Mendelssohn Avenue Study – City of Golden Valley, MN
- 10th Avenue Bridge Rehabilitation – City of Minneapolis, MN
- 2017 Mill and Overlay Project – City of Brooklyn Center, MN
- Valley Creek Road Improvements at Cottage Grove Drive – City of Woodbury, MN

EDUCATION
Bachelor of Science
Civil Engineering
University of Minnesota-Duluth

REGISTRATIONS/CERTIFICATIONS
Professional Engineer in MN, IA, SD

Professional Traffic Operations Engineer (PTOE), Transportation Professional Certification Board

KELSEY MONTEBELLO

LEAD CIVIL DESIGNER

7
YEARS OF EXPERIENCE

Kelsey will lead the design and utility coordination tasks for the project. Kelsey is a graduate engineer with experience focused on transportation and site design. Her relevant coursework includes transportation engineering, geometric highway design, railroad planning and design, water resources and supply, water and wastewater engineering, soil mechanics, slope stability and retaining walls, foundation engineering, civil engineering materials, structural steel design and reinforced concrete design. Her computer experience includes Microsoft Word, Excel, PowerPoint, Publisher, Access, AutoCAD Civil 3D, Corel Draw X4 and Adobe Acrobat 9 Pro. Kelsey also has experience with operating Vissim, Synchro 7, Cube, Bentley MicroStation V8i and ArcGIS.

EXPERIENCE

- Division Street and 7th Street Reconstruction – City of Northfield, MN
- TH 246 and Jefferson Parkway – City of Northfield, MN
- Spring Creek Road Reconstruction – City of Northfield, MN
- Northfield Depot – City of Northfield, MN
- 2017 Mill and Overlay Project – City of Brooklyn Center, MN
- Plymouth Avenue N. Pavement Improvements – City of Golden Valley, MN

EDUCATION

Bachelor of Science
Civil Engineering
North Dakota State University-Fargo

SPENCER SZYMONOWICZ

TECHNICIAN

11
YEARS OF EXPERIENCE

Spencer will support the design and utility coordination tasks. Spencer is a civil engineering technician with experience in corrosion control, soils testing and ASTM concrete materials. He has hands-on experience with Trimble Robotic Total Station, Trimble R10 GPS, Digital and Automatic Levels. Spencer's computer experience includes AutoCAD Civil 3D, ESRI Arc Map and Microsoft Office.

EXPERIENCE

- Division Street and 7th Street Reconstruction – City of Northfield, MN
- Spring Creek Road Reconstruction – City of Northfield, MN
- Northfield Depot – City of Northfield, MN
- Streetscape and Pedestrian Safety Improvements at TH 3 and 3rd Street – City of Northfield, MN
- Plymouth Avenue N. Pavement Improvements – City of Golden Valley, MN
- 2017 Mill and Overlay Project – City of Brooklyn Center, MN

EDUCATION

Associate of Applied Science
Civil Engineering Technology
Southeast Technical Institute - Sioux Falls, SD

Associate of Applied Science
Land Surveying Technology
Southeast Technical Institute - Sioux Falls, SD

Associate
General Studies
University of Wisconsin-Superior

TOM RUNIONS
SURVEY CREW CHIEF

17
YEARS OF EXPERIENCE

Tom will serve as task manager for the design topographic survey and construction staking phases of the project. Tom is a survey crew chief with extensive survey experience, which includes design and construction surveys, land surveys, boundary surveys and right-of-way surveys. In addition, he has worked on multiple safety assessment program (SAP) projects.

EXPERIENCE

- TH 246 and Jefferson Parkway – City of Northfield, MN
- Local Road Improvement Program Project – City of Goodview, MN
- CSAH 23 and CSAH 25 White Topping (Shafer Contracting) – Nicollet County, MN
- Street Improvements – City of Cannon Falls, MN
- 2nd Street Southwest Reconstruction, Phase III – City of Rochester, MN
- TH 63/6th Street Signal and Intersection Widening – City of Stewartville, MN

EDUCATION
Associate of Science
Civil Engineering Technology
Rochester Community and Technical College - Rochester, MN

REGISTRATIONS/CERTIFICATIONS
Construction Survey Technician III, Minnesota Department of Transportation

BRIAN MCINTIRE
RESIDENT PROJECT REPRESENTATIVE

22
YEARS OF EXPERIENCE

Brian will serve as our resident project representative (RPR) during the construction of the project. He has extensive field experience including surveying and project management for various types of projects. Brian has been responsible for sampling and cataloging hazardous materials and post fire forensic investigations, testing soils, and inspecting and observing deep foundation systems.

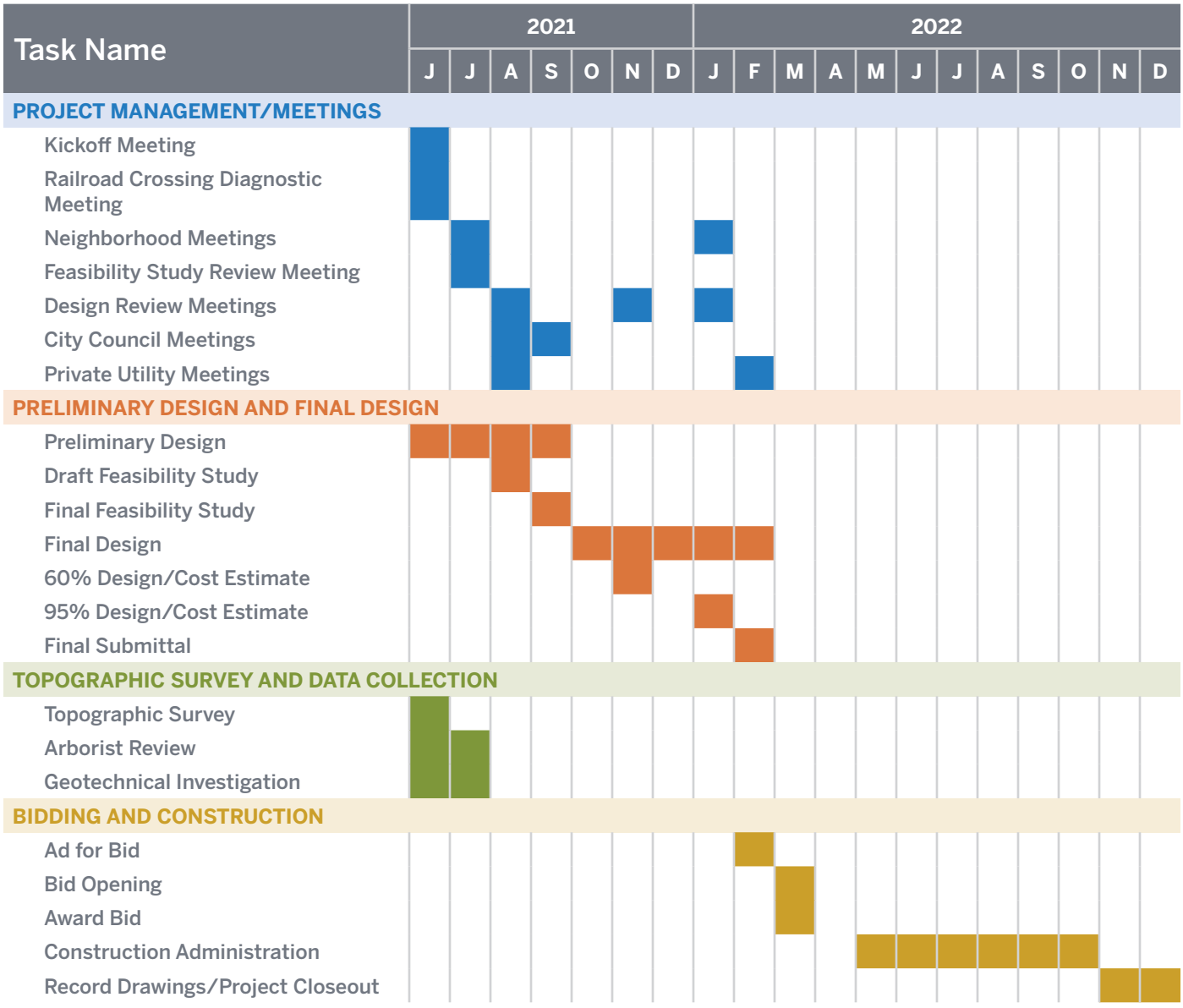
EXPERIENCE

- TH 246 and Jefferson Parkway – City of Northfield, MN
- City Engineer – City of Stewartville, MN
- 2020 and 2021 Capital Improvement Plan (CIP) – City of Stewartville, MN
- Hok-Si-La Bike Path – City of Lake City, MN
- Red Wing River Bridge - Minnesota Approach (MnDOT District 6) – Red Wing, MN

REGISTRATIONS/CERTIFICATIONS
Aggregate Production
Bituminous Street Level I and II
Concrete Field Level I and II
MnDOT

Project Schedule

SEH can begin work within two weeks of the notice-to-proceed from the City. We propose the following schedule for completion of the 2022 Mill and Overlay Project.



Proposed Cost

SEH will perform the work tasks as identified in the City's RFP and as outlined in our Project Approach and Scope for an estimated fee of $369,990; plus an additional fee for subconsultant services of $64,353. This fee represents approximately 16.1% of the overall potential construction cost of approximately $2,700,000.

Our fee includes reimbursable expenses. We will bill the City on a monthly basis for reimbursable expenses and on an hourly basis for labor.

Our fee is summarized in the table below and further detailed in the Task Hour Budget (THB) that follows.

PHASE		
NUMBER	DESCRIPTION	COST
1	Project Management/Meetings	$33,977
2	Preliminary Design/Feasibility Study	$45,970
3	Topographic Survey and Data Collection	$45,538
4	Final Design	$52,475
5	Construction Services	$192,030
Total SEH Fee		**$369,990**
Braun Intertec (Geotechnical Investigation)		$16,131
DRG (Arborist Review)		$4,550
Braun Intertec (Construction Materials Testing)		$43,672
Total Subconsultant Fee		**$64,353**
Total Fee		**$434,343**

SEH HOURLY BILLABLE RATES – 2021

CLASSIFICATION - OFFICE STAFF	BILLABLE RATE (1)
Principal	$170.00 - $270.00
Project Manager	$140.00 - $240.00
Senior Project Specialist	$135.00 - $220.00
Project Specialist	$100.00 - $175.00
Senior Professional Engineer I	$115.00 - $180.00
Senior Professional Engineer II	$140.00 - $225.00
Professional Engineer	$105.00 - $165.00
Graduate Engineer	$85.00 - $135.00
Senior Architect	$125.00 - $210.00
Architect	$110.00 - $150.00
Graduate Architect	$85.00 - $110.00
Senior Landscape Architect	$115.00 - $170.00
Landscape Architect	$95.00 - $125.00
Graduate Landscape Architect	$85.00 - $100.00
Senior Scientist	$130.00 - $170.00
Scientist	$90.00 - $135.00
Graduate Scientist	$80.00 - $105.00
Senior Planner	$130.00 - $210.00
Planner	$100.00 - $150.00
Graduate Planner	$90.00 - $120.00
Senior GIS Analyst	$110.00 - $175.00
GIS Analyst	$100.00 - $120.00
Project Design Leader	$120.00 - $185.00
Lead Technician	$105.00 - $170.00
Senior Technician	$90.00 - $135.00
Technician	$65.00 - $115.00
Graphic Designer	$90.00 - $145.00
Administrative Professional	$55.00 - $130.00

CLASSIFICATION - FIELD STAFF	BILLABLE RATE (1)
Professional Land Surveyor	$110.00 - $160.00
Lead Resident Project Representative	$95.00 - $155.00
Senior Project Representative	$90.00 - $135.00
Project Representative	$75.00 - $125.00
Survey Crew Chief	$85.00 - $135.00
Survey Instrument Operator	$60.00 - $95.00

(1) The actual rate charged is dependent upon the hourly rate of the employee assigned to the project. The rates shown are subject to change.

Effective: January 1, 2021
Expires: December 31, 2021

Project Name: 2022 NW Area Mill and Overlay Project

Client: City of Northfield, MN

SEH Project Approach and Task Hour Budget (THB)

Date: May 21, 2021 (Revised for ADA May 25, 2021)

	Billing Title	CSM	PM	PE	Grad Eng	Sr Tech	GIS Analyst	Admin Tech	Accounting Rep	Survey Crew Chief	Survey Tech	PE	PE	RPR	Reimbursable Expenses	Total
Task #1 - Project Management/Meetings																
1.1	**Contract and General**															
	Develop & execute City agreement		1						1							**2**
	Create project in accounting system		1						1							**2**
	Invoice management		12						12							**24**
	Deliverable: Executed contract															
1.2	**Meetings**															
	Kickoff meeting with Client	3	3	3												**9**
	Kickoff meeting with SEH Staff	1	3	1	1	1						1	1			**9**
	30%, 60%, and 95% design review meetings	10	10	3												**23**
	Neighborhood Meetings	8	20	8	12	12	8									**68**
	City Council Meetings	8														**8**
	Private utility meetings		8		4	4										**16**
	On-street bikeway design options review meeting		4	4									4			**12**
	Railroad crossings diagnostic meeting		4										4			**8**
	Assumptions: SEH will lead two in-person, neighborhood meetings. Includes preparation of power point and boards with attendance by up to three SEH staff. SEH will attend up to two City Council meetings. SEH will lead two in-person private utility coordination meetings (includes preparation of graphics, agenda, and minutes). Assumes railroad meeting will be on-site with MnDOT, railroad, and City staff to discuss crossing options for pedestrians at Greenvale Ave and the vehicular crossing at St Olaf Ave (includes meeting minutes/summary). Assumes design review meetings will be held in person at the 30%, 60%, and 95% milestones. The 30% design review meeting will also include discussion of crash analysis, Transit Hub pedestrian access review, Northfield Retirement Campus mid-block crossing, and TH 3 pedestrian access restrictions.															
	Deliverables: Meeting materials including graphics, agendas, and minutes as required.															
1.3	**Project Correspondence**															
	Client email updates & phone calls	4	12													**16**
Task #2 - Preliminary Design/Feasibility Study																
2.1	**Preliminary Design**															
	Sidewalk/Trail preliminary design		2		16											**18**
	Develop on-street bikeway design options		1	2	6											**9**
	Develop on-street bikeway recommendations		4	12	40											**56**
	Storm sewer design				2											**2**
	Railroad Crossing Design		1		6								8			**15**
	Review Cannon Valley Dr pedestrian crossing		1	6	8											**15**
	Review pedestrian access at TH 3/Greenvale Ave		1	4	4											**9**
	Review pedestrian routes to Transit Hub/Depot		1	12	4		4									**21**
	Review TH 3/St Olaf Ave crash history											2				**2**
	Develop recommended TH 3/St Olaf Ave improvements and draft memo		1									7				**8**
	Identify private utility impacts		2		4											**6**

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	Assumptions: Bikeway recommendations will include plan view layout of one option for each corridor. City will provide parking usage and pedestrian count data if required. Railroad crossing design includes development and submittal of crossing plans to railroad based on diagnostic meeting. Does not include submittals for quiet zone or coordination of railroad crossing gate design with the railroad. SEH will provide concept level graphics for pedestrian crossing and pedestrian routes. Crash analysis includes analysis of last 5 years of available crash data from MnDOT's Crash Mapping Analysis Tool. Includes preparation of memo describing crash patterns and developing improvement recommendations for the west leg of the intersection only. Detailed design of pedestrian crossing, pedestrian route, or crash improvements are not included.															
2.2	**Feasibility Study**															
	Prepare project area figures		2		12		12									**26**
	Develop recommended improvements		4	4												**8**
	Prepare project cost estimate		2		16											**18**
	Develop draft feasibility study	2	40	14	24			4								**84**
	Review draft study with City staff	3	4													**7**
	Prepare and submit final feasibility study		4					6								**10**
	Assumptions: Feasibility study will contain the following sections: Executive Summary, Introduction/Background, Existing Conditions, Alternatives Analysis for on-street bikeways, discussion of TH 3/St. Olaf Ave crashes, Northfield Retirement Center mid-block crossing, TH 3/Greenvale Ave pedestrian access restrictions, and summary of pedestrian routes from Greenvale Ave/Spring St to the Transit Hub/Depot, Proposed Improvements, Summary of Stakeholder Feedback, Cost Estimate, Project Schedule and 11x17 project overview graphics. Assumes addressing one (1) consolidated round of City/County comments. City staff will consolidate comments received and provide SEH one copy. Assumes comments will be provided via e-mail and a meeting is not required. Cost estimate will be calculated using an itemized list of major work items (removals, grading, bituminous pavement/trail, curb and gutter, catch basin replacements, signing/striping, restoration) with a 15% contingency including indirect costs for engineering, legal, and administrative. Costs will be listed in 2021 dollars. Assumes easements will not be required.															
	Deliverables: Feasibility study in PDF format.															
Task #3 - Topographic Survey and Data Collection																
3.1	**Topographic Survey**															
	Topographic Survey		16							170	30					**216**
	Assumptions: Topographic survey will consist of detailed survey at the project intersections and where trail or sidewalk are proposed only. The entire project area will not be surveyed. Spot curb and sidewalk replacement locations will not be surveyed. Includes setting control points for the entire project area. Assumes topographic survey will be completed after City's storm and sanitary structure review so inverts will be shot only on those structures to be replaced.															
3.2	**Data Collection & Base Files**															
	Conduct Gopher State One Utility One Call & Collect Utility Maps		1					1								**2**
	Collect Data (LIDAR, Aerial Imagery, Master Plans, Reports, GIS parcels, etc) & private utility mapping				2											**2**

	Billing Title	CSM	PM	PE	Grad Eng	Sr Tech	GIS Analyst	Admin Tech	Accounting Rep	Survey Crew Chief	Survey Tech	PE	PE	RPR	Reimbursable Expenses	Total
	Reduce data into basemap (Create CAD base file)				4											**4**
	Reduce topo data into EG surface				3											**3**
	Create RW file				2											**2**
	Review and document sidewalk, pavement, and curb/gutter condition		10		10											**20**
	Assumptions: Assumes RW files will be created from Rice County GIS parcel linework. Sidewalk, pavement, and curb and gutter condition will be reviewed by SEH staff. Approximate locations will be noted on the plans in relation to known features or off aerial photography. Assumes less than 10% of sidewalk/pavement area and curb and gutter length will need replacement. Assumes pavement replacement will consist of full depth patch while all other areas will have sufficient existing bituminous depth to accommodate a mill and overlay. Does not include development of condition report.															
3.3	**Arborist Report**															
	Conduct arborist review and develop report (20)															
	Assumptions: Only right-of-way trees within the project area will be reviewed. Data collection includes tree tag, species, diameter at breast height, condition rating, recommended fate, location (XY coordinates), and notes (existing hazards, defects to tree, etc)															
	Deliverables: Arborist report in PDF format. Tree inventory data in GIS, kmz, or excel format. Report will be completed by Davey Resource Group (DRG).															
3.4	**Geotechnical Investigation**															
	Stake soil borings									5						**5**
	Coordinate soil borings with subconsultant		2													**2**
	Review soil samples and assign testing		5													**5**
	Review logs and lab testing		5													**5**
	Develop soil parameters	1	5													**6**
	Prepare geotechnical report	4	15													**19**
	Assumptions: SEH Geotechnical staff will review results of hand auger and cores at selected locations through the corridor of planned improvements. We considered at least 20 hand augers will be performed near proposed improvements to a depth of 5-feet or greater. Soil samples obtained from borings will be reviewed and index tests will be assigned. We included a $1,000 allowance for geotechnical lab testing to be performed by Braun in accordance with their unit rates. The collected geotechnical informaiton will be used to provide geotechnical design recommendations for proposed subgrades supporting flatwork outside of the roadway. Assumes roadway improvements will consist of 2-inch bituminous mill/overlay with limited (<10%) full-depth patching. A pavement condition assessment and/or new pavement designs will not be completed. If site walkthroughs reveal areas of notable pavement distress, supplemental geotechnical site explorations will be considered.															
	Deliverables: Geotechnical investigation report in PDF format. Geotechnical investigation will be completed by Braun Intertec.															
Task #4 - Final Design																
4.1	**Final Street and Utility Design**															
	Storm sewer design		1			2										**3**
	Sanitary sewer design					1										**1**
	Water main design					1										**1**
	Intersection / ped ramp design		4		26	16										**46**

	Billing Title	CSM	PM	PE	Grad Eng	Sr Tech	GIS Analyst	Admin Tech	Accounting Rep	Survey Crew Chief	Survey Tech	PE	PE	RPR	Reimbursable Expenses	Total
	Develop construction phasing and traffic control plan	1	2		4											**7**
	Develop GM					24										**24**
	Develop RM					12										**12**
	Trail/sidewalk final design		2		12	12										**26**
	Private utility coordination		4		4											**8**
	60% Cost Estimate		2		12	12										**26**
	95% Cost Estimate		2		8	8										**18**
	100% Cost Estimate		2		6	6										**14**
	Assumptions: Assumes repair work will consist of catch basin, manhole, valve, or hydrant replacement only. Assumes no replacement of main (with the exception of the 250' segment on Woodland Trail). Assumes City will provide measuredown information with condition reports or that condition reports will be provided prior to completion of topographic survey so SEH staff may complete measuredowns. Does not include detailed storm sewer design and analysis. Assumes temporary or permanent easements will not be required for trail and sidewalk construction and that retaining walls will be modular block less than 4' in height without detailed geotechnical design. Intersection and pedestrian ramp designs will consist of geometric layouts only with no elevation information provided. Ramps will be designed in the field during construction based on the MnDOT Standard Pedestrian Ramp Details.														
	Deliverables: 60%, 95%, and 100% cost estimates in PDF and Excel formats.															
4.2	**Develop Construction Plans**															
	Title Sheet					1										**1**
	General Layout					3										**3**
	Estimated Quantities, Notes, Standard Plates					2										**2**
	General Notes					2										**2**
	Tabulations				4	4										**8**
	Construction details					2										**2**
	Typical sections		1			3										**4**
	Traffic control / construction phasing plan		2		8							1				**11**
	Removals					12										**12**
	Overlay plans					12										**12**
	Sidewalk / trail plan/profiles		1			12										**13**
	Pavement markings and signing					10						1				**11**
	Intersection / ped ramp details		4			32										**36**
	Restoration / tree planting plan					12										**12**
	Quality Control Review		8									2	6			**16**
	Site walkthrough plan review		6			6										**12**
	Assumptions: Assumes intersection and ped ramp designs will consist of geometric layouts only with no elevation information provided. Ramps will be designed in the field during construction based on the MnDOT Standard Ped Ramp Details.															
	Deliverables: Final bidding plans in PDF format.															
4.3	**Project Manual**															
	Front end documents		1													**1**
	Bidding requirements		1													**1**
	Geotechnical data		1													**1**
	Contract forms		1													**1**
	Conditions of the contract		1													**1**
	Supplementary conditions		8													**8**
	Special provisions		8					4								**12**
	Technical specifications		8													**8**
	Quality control review	1														**1**
	Deliverables: Final project manual in PDF format.															

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4.4	**Reviews and Permits**															
	60% Owner Review		1			8										**9**
	95% Owner Review		1			8										**9**
	Permits		2										4			**6**
	Assumptions: Includes submittal of railroad permit and MnDOT/County ROW permits as required. Assumes NPDES, MDH, MPCA, and other MnDOT/County permits will not be required.															
4.5	**Bidding**															
	Prepare ad for bid and electronic bid documents		2					8								**10**
	Respond to bidder questions and prepare addenda		6			6										**12**
	Review Tabulation of Bids							1								**1**
	Prepare Recommendation Letter		1					1								**2**
	Deliverables: Electronic ad for bid and bidding documents. Addenda as applicable. Recommendation of award letter.															
Task #5 - Construction Services																
5.1	**Preconstruction Activities**															
	Submit NPDES permit		1													**1**
	Preconstruction meeting agenda, attendance, minutes		4											3		**7**
	Review shop drawings/submittals		3													**3**
	Create field quantity book													3		**3**
	Set-up project in One Office													2		**2**
	Assumptions: Assumes City will provide laptop to SEH RPR to fill in project information in One Office															
5.2	**Construction Administration**															
	Prepare construction and contract documents		1					8								**9**
	Project management		4													**4**
	Engineering support		8													**8**
	Weekly construction meetings		20													**20**
	Pay applications													6		**6**
	Materials Testing Coordination													2		**2**
	Assumptions: Includes attendance, agenda, and minutes for weekly construction meetings. Assumes construction will last for 8 weeks.															
	Deliverables: Electronic construction and contract documents. Agendas and minutes for construction meetings. Pay applications for consideration by City Council.															
5.3	**Construction Staking**															
	Create stakeout/point files		5			6										**11**
	Retaining walls									2						**2**
	Storm sewer									2						**2**
	Sidewalk / trail / pedestrian ramps / curb and gutter									85	85					**170**
	Signing/striping									18						**18**
	Assumptions: Assumes a total of 25 storm structures will be replaced. Assumes signing will typically consist of reinstalling salvaged signs and installing new signage for on-street bikeways. Assumes striping will be marked on the streets receiving on-street bikeways as well as Greenvale Ave. Assumes two retaining walls on North Ave will be required (approximately 350' in total length).															
5.4	**Construction Observation**															
	Construction observation													1200		**1200**
	Materials Testing Subconsultant															

	Billing Title	CSM	PM	PE	Grad Eng	Sr Tech	GIS Analyst	Admin Tech	Accounting Rep	Survey Crew Chief	Survey Tech	PE	PE	RPR	Reimbursable Expenses	Total
	Assumptions: Assumes construction observation will be provided for an average of 30 hours/week for 8 weeks.															
	Deliverables: Materials testing results in electronic format. Testing will be completed by Braun Intertec.															
5.5	**Project Closeout**															
	Site closeout walkthrough and develop punchlist		6											6		12
	Punchlist coordination		4											6		10
	As built survey and structures															
	Complete as built drawings													8		8
	Final application for payment and contractor closeout letter	1	1											2		4
	1 year warranty walkthrough and follow up	3	3											3		9
	Deliverables: Punchlist, as-built drawings, and final pay application.															
Task #1 - Project Management/Meetings																
	Task Hours Summary	**34**	**78**	**19**	**17**	**17**	**8**		**14**			**1**	**9**			**197**
	Task Fee Summary	**$7,883.76**	**$12,007.26**	**$3,908.92**	**$1,843.41**	**$1,921.93**	**$1,190.11**		**$1,475.90**			**$152.04**	**$1,595.38**		**$1,998.00**	**$33,977**
Task #2 - Preliminary Design/Feasibility Study																
	Task Hours Summary	**5**	**70**	**54**	**142**		**16**	**10**				**9**	**8**			**314**
	Task Fee Summary	**$1,159.38**	**$10,775.75**	**$11,109.57**	**$15,397.86**		**$2,380.21**	**$1,135.79**				**$1,368.35**	**$1,418.11**		**$1,225.00**	**$45,970**
Task #3 - Topographic Survey and Data Collection																
	Task Hours Summary	**5**	**59**		**21**			**1**		**175**	**30**					**291**
	Task Fee Summary	**$1,159.38**	**$9,082.42**		**$2,277.15**			**$113.58**		**$20,180.16**	**$3,079.11**				**$30,327.10**	**$66,219**
Task #4 - Final Design																
	Task Hours Summary	**2**	**94**		**105**	**229**		**15**				**4**	**10**			**459**
	Task Fee Summary	**$463.75**	**$14,470.29**		**$11,385.74**	**$25,889.54**		**$1,703.68**				**$608.16**	**$1,772.64**		**$2,055.00**	**$58,349**
Task #5 - Construction Services																
	Task Hours Summary	**4**	**60**			**6**		**8**		**107**	**85**			**1,241**		**1,511**
	Task Fee Summary	**$927.50**	**$9,236.35**			**$678.33**		**$908.63**		**$12,338.73**	**$8,724.15**			**$138,784.99**	**$64,103.80**	**$235,702**
Project Summary																
	Project Hours Summary	**50**	**361**	**73**	**285**	**252**	**24**	**34**	**14**	**282**	**115**	**14**	**27**	**1,241**	**N/A**	**2,772**
	Project Fee Summary	**$11,594**	**$55,572**	**$15,018**	**$30,904**	**$28,490**	**$3,570**	**$3,862**	**$1,476**	**$32,519**	**$11,803**	**$2,129**	**$4,786**	**$138,785**	**$99,709**	**$440,217**

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