

PROFESSIONAL SERVICES AGREEMENT

This Agreement is made and entered into on the 9th day of September 2023, between the **CITY OF SHAKOPEE**, 485 Gorman Street, Shakopee, MN 55379 ("City") and **WSB & ASSOCIATES, INC.**, 701 Xenia Ave. S., Ste. 300, Minneapolis, MN 55416 ("Consultant").

Preliminary Statement

The purpose of this Agreement is to set forth terms and conditions for the provision of professional services by the Consultant for the City for the following described Project:

CR 78 Pedestrian Underpass at Zumbro Avenue

The City and Consultant agree as follows:

1. **Consultant's Services.** The Consultant agrees to provide professional services as described in Exhibit A, Scope of Work and any addenda thereto. The Consultant shall serve as the City's professional consultant in the specified work and shall provide consultation and advice to the City during the performance of its services. The Consultant agrees to use the City's standard specifications in any bidding documents prepared under this Agreement. The requirements of this section may be waived by the City if the City Engineer determines that they are not necessary for the successful completion of the project. A Consultant requesting a requirement to be waived must have written authorization from the City Engineer and must be incorporated into this agreement.
2. **Time for Performance of Services.** The Consultant will endeavor to perform the services outlined in the work program within the prescribed days from the date of the contract award. Any changes in this schedule must be approved in writing by the City.
3. **Term.** The term of this Agreement will be from September 9, 2023 through December 31, 2024, the date of signature by the parties notwithstanding. This Agreement may be extended upon the written mutual consent of the parties for such additional period as they deem appropriate, and upon the terms and conditions as herein stated.
4. **Compensation for Services.** City agrees to pay the Consultant for services as described in Exhibit A, attached and made a part of this Agreement, which may be amended from time to time by mutual agreement by City and Consultant. The Consultant's hourly rates must be based on the hourly rates approved by the City.

The Agreement amount shall include all services to be rendered by the Consultant as part of this Agreement (including all travel, living and overhead expenses incurred by the Consultant in connection with performing the services herein) except for special services authorized in writing by the City. The amount stipulated shall be considered a "Not to Exceed" cost to the City.

The Consultant must keep track of the costs billable under this contract at all times; any work in excess of the negotiated amount shall not be eligible for payment unless preapproved. The Consultant must notify the City if the Consultant anticipates that the negotiated amount might be exceeded, in order to determine whether or not the City is prepared to increase the compensation. This notification and approval must occur in advance of the work occurring to be considered for compensation.

5. **Payment of Fees.** The Consultant must submit itemized bills for services provided to the City on a monthly basis. The monthly billing must summarize the progress of the project as certified by the Consultant. For work reimbursed on an hourly basis, the Consultant must indicate for each employee, his or her classification, the number of hours worked, rate of pay for each employee, a computation of amounts due for each employee, the total amount due, the original contracted amount, the current requested amount, and the total amount. Consultant must verify all statements submitted for payment in compliance with Minnesota Statutes Sections 471.38 and 471.931. For reimbursable expenses, the Consultant must provide such documentation as reasonably required by the City. Consultant bills submitted will be paid in the same manner as other claims made to the City.
6. **Audit Disclosure.** The Consultant must allow the City or its duly authorized agents reasonable access to such of the Consultant's books and records as are pertinent to all services provided under this Agreement.

Any reports, information, data, etc. given to, or prepared or assembled by the Consultant under this Agreement which the City requests to be kept confidential must not be made available to any individual or organization without the City's prior written approval. All finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs, and reports prepared by the Consultant will become the property of the City upon termination of this Agreement, but Consultant may retain copies of such documents as records of the services provided and may reuse standard portions of such documents in the normal course of its business.

7. **Termination.** Termination for Cause. This Agreement may be terminated by City by seven day's written notice to Consultant delivered to the address written above. Upon termination under this provision, the Consultant will be paid for services rendered and reimbursable expenses until the effective date of termination.

If, through any cause (except those reasonably beyond Consultant's control), the Consultant shall fail to fulfill in timely and proper manner its obligations under this Contract, or if the Consultant shall violate any of the covenants, agreements, or stipulation of this Contract, the City shall thereupon have the right to terminate this Contract by giving written notice to the Consultant of such termination and specifying the effective date thereof, at least five (5) days before the effective date of termination. In that event the Consultant shall have sixty (60) days to furnish all finished or unfinished documents, computer programs, data, studies, surveys, drawings, maps, models, photographs, and reports or other material prepared by the Consultant under this Contract, which shall, at the option of the City, become its property, and the Consultant shall be entitled to receive just, equitable compensation for any satisfactory work completed on such documents and other materials prior to the effective date of termination.

Notwithstanding the above, the Consultant shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of the Contract by the Consultant, and the City may withhold any payments to the Consultant for the purpose of setoff until such time as the exact amount of damages due the City from the Consultant is determined.

In the event this Contract is terminated for cause, then the City may take over and complete the work, by contract or otherwise, and the Consultant and its sureties shall be liable to the City for any costs over the amount of this contract thereby occasioned by the City. In any such case the City may take possession of, and utilize in completing the work, such materials, appliances and structures as may be on the work site and are necessary for completion of the work. The foregoing provisions are in addition to, and not in limitation of, any other rights which the City may have.

Termination Not For Cause. The City may terminate this Contract at any time, with or without cause, by giving written notice to the Consultant of such termination and specifying the effective date thereof, at least fifteen (15) days before the effective date of such termination. In that event, the Consultant shall have sixty (60) days to furnish all finished or unfinished documents, computer programs, data, studies, surveys, drawings, maps, models, photographs, and reports or other material prepared by the Consultant under this Contract, which shall, at the option of the City, become its property. If the Contract is terminated by the City as provided in this paragraph, the Consultant will be paid an amount which bears the same ratio to the total compensation as the services actually performed bear to the total services of the Consultant covered by this Contract, less payments or compensation previously made.

8. **Subcontractor.** The Consultant must not enter into subcontracts for any of the services provided for in this Agreement without the express written consent of the City.
9. **Independent Contractor.** At all times and for all purposes hereunder, the Consultant is an independent contractor and not an employee of the City. No statement herein shall be construed so as to find the Consultant an employee of the City.
10. **Assignment.** Neither party will assign this Agreement, nor any interest arising herein, without the written consent of the other party.
11. **Services not Provided for.** No claim for services furnished by the Consultant not specifically provided for herein will be honored by the City.
12. **Severability.** The provisions of this Agreement are severable. If any portion hereof is, for any reason, held by a court of competent jurisdiction to be contrary to law, such decision will not affect the remaining provisions of the Agreement.
13. **Entire Agreement.** The entire agreement of the parties is contained herein. This Agreement supersedes all oral agreements and negotiations between the parties relating to the subject matter hereof as well as any previous agreements presently in effect between the parties relating to the subject matter hereof. Any alterations, amendments, deletions, or waivers of the provisions of this Agreement will be valid only when expressed in writing and duly signed by the parties unless otherwise provided herein.
14. **Compliance with Laws and Regulations.** In providing services hereunder, the Consultant must abide by all statutes, ordinances, rules and regulations pertaining to the provision of services to be provided. Any violation will constitute a material breach of this Agreement and entitle the City to immediately terminate this Agreement.
15. **Equal Opportunity.** During the performance of this contract, the Consultant must not discriminate against any employee or applicant for employment because of race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, disability, or age. The Consultant must post in places available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause and stating that all qualified applicants will receive consideration for employment. The Consultant must incorporate the foregoing requirements of this paragraph in all of its subcontracts for program

work, and will require all of its subcontractors for such work to incorporate such requirements in all subcontracts for program work.

16. **Waiver.** Any waiver by either party of a breach of any provisions of this Agreement will not affect, in any respect, the validity of the remainder of this Agreement.
17. **Liability and Indemnity.** The Consultant must indemnify and hold harmless the City, its employees and agents, for all claims, damages, losses, and expenses, including, but not limited to, attorney's fees, which they may suffer or for which they may be held liable, as a result of, and to the extent of, the negligent or wrongful acts of the Consultant, his employees, or anyone else for whom he is legally responsible in the performance of this Agreement.

The Consultant assumes full responsibility for relations with its subcontractors, and must hold the City harmless and must defend and indemnify the City, its employees and agents, for any claims, damages, losses, and expenses in any manner caused by such subcontractors, arising out of or connected with this contract.

18. **Insurance.** During the term of this Agreement, Consultant must procure and maintain during the life of this Contract, and provide the City with a certificate of insurance showing, the following coverage for each occurrence and in aggregate:
 - A. Comprehensive General Liability Insurance, including Broad Form Property Damage, Completed Operations and Contractual Liability for limits not less than \$1,500,000 each occurrence for damages of bodily injury or death to one or more persons and \$1,500,000 each occurrence for damage to or destruction of property.
 - B. Insurance coverage for Special Hazards, including but not limited to explosion hazard, collapse hazard, underground property damage hazard, (commonly known as XCU).
 - C. Comprehensive Automobile Liability Insurance, in an amount not less than \$1,500,000 for each occurrence. Coverage shall include all owned autos, non-owned autos, and hired autos.
 - D. Errors and Omissions Insurance against errors and omissions resulting from the performance of Consultant's work under this Agreement. Said coverage shall be in an amount not less than \$2,000,000.
 - E. Workmen's Compensation insurance for all its employees as required by the Minnesota Worker's Compensation Act.

F. The City of Shakopee must be named as "ADDITIONALLY INSURED" on the insurance described in paragraphs A, B, and C, and must receive notice ten (10) days prior to the cancellation or expiration any of the specified insurance. If the deductible provisions of the Consultant's coverage or any subcontractor's coverage is questioned by the City, the Consultant shall provide the City, upon request, "Proof of Assets".

This policy must provide, as between the City and the Consultant, that the Consultant's coverage shall be the primary coverage in the event of a loss. If the Consultant is providing either architectural or engineering services, the Consultant must also maintain during the term of this Agreement a professional liability insurance policy with the same limits as for general liability. A certificate of insurance on the City's approved form which verifies the existence of these insurance coverages must be provided to the City before work under this Agreement is begun.

19. **Governing Law.** This Agreement will be controlled by the laws of the State of Minnesota.
20. **Whole Agreement.** This Agreement embodies the entire agreement between the parties including all prior understanding and agreements, and may not be modified except in writing signed by all parties.

Executed as of the day and year first written above.

CITY OF SHAKOPEE

WSB & ASSOCIATES, INC.

By: _____
Matt Lehman, Mayor

Date: _____

By:  _____

Its: Vice President - Transportation

Date: 8/30/2023

By: _____
William H. Reynolds, City Administrator

Date: _____



August 29, 2023

Mr. Alex Jordan, PE
City Engineer
City of Shakopee
485 Gorman Street
Shakopee, MN 55379

Re: Scope for Final Design and Construction Services for the
Pedestrian Underpass Across 130th Street (CSAH 78) Near Zumbro Avenue

Dear Mr. Jordan:

WSB & Associates, Inc. (WSB) is pleased to submit this scope of services for the final design and construction services for the Pedestrian Underpass across 130th Street (CSAH 78) near Zumbro Avenue.

Below is a summary of our proposed scope. Please review this information and contact me with any questions or comments.

PROJECT APPROACH / SCOPE OF SERVICES

WSB's project scope and proposed work plan are based on our understanding of the project as documented above. To complete the project, we propose the following scope of services:

Task 1 – Project Management

Nic Hentges will be the Project Manager and is a firm believer in continuous, effective, and timely communication. He will work closely with the Shakopee team to ensure the project continues forward on or ahead of schedule. In addition to the monthly invoices and progress reports, Nic will conduct bi-weekly phone calls, virtual meetings, or email correspondence with the city as appropriate.

Nic will be utilizing a Project Management Plan (PMP) throughout the project. This document will ensure that WSB and the city are always on the same page and will keep the Project Management Team (PMT) on track as it will include an issues log, decision list, and schedule and budget summary. Nic will share the PMP at each PMT meeting. The PMP will be included in each agenda and all meeting minutes. PMT meetings are expected to take place monthly. PMT meetings will be held virtually. Upon request WSB will meet with the city in person at the city offices to hold PMT meetings.

- PMT Meetings: 8 (Monthly, September 2023 to April 2024 - virtual)

Task 2 – Agency Involvement

Agency coordination will be completed through PMT meetings and meetings with approval agencies including the MPCA, Scott Watershed Management Organization (Scott WMO) and MnDOT State Aid. WSB will engage with these agencies early in the process in a collaborative manner to ensure their concerns are understood and addressed prior to the design moving too far ahead. WSB will continue communication throughout the project to ensure the project remains on an efficient track. WSB will prepare agendas and meeting minutes for each meeting. It is assumed WSB will attend and lead the following number of meetings:

- Agency Coordination Meetings: 2

Task 3 – Private Utility Coordination

WSB will perform the private utility coordination and relocation coordination efforts for the project. WSB will begin the process by conducting a Gopher State One Call for design and use this information to update mapping of existing utilities. WSB will be responsible for collecting a survey of the marked utilities and will incorporate them into the project mapping and construction documents. WSB will also conduct the utility coordination and relocation meetings with the affected utilities. When final relocation plans have been received from the utility companies, WSB will assist the city in coordinating their relocations. Up to two utility meetings will be held with utility companies. The initial meeting will be a large group meeting and the second meeting will be individual meetings.

Task 4 – Surveying

WSB will complete all the survey and mapping required for the project. The surveying and mapping will be completed in Scott County coordinates. The WSB survey team will survey the corridor with a robotic total station, the horizontal control will be Scott County NAD83-2011 Adjustment and the vertical adjustment will be NAVD 88 unless otherwise specified by the County. There will be enough control points throughout the project site to be used for the topographic and construction survey. The survey information (point data) will be collected at a minimum, every 50 feet along the corridor and survey grade breaks, above ground features, marked utilities, and any other features that will be important during the design. This survey will conform with the minimum standard detail requirements for ALTA/NSPS land survey title surveys, Table A, Options 2, 4, 5, 8, and 11. The survey team will process this data and create the existing conditions base map. The basis of this map will be the data collected in the field, all line work, features, utilities, contour, and tin data will be shown.

Task 5 – Geotechnical Investigation

American Engineering Testing (AET) will perform subsurface soil borings, classify, and analyze the soil samples, obtain groundwater depth measurements if applicable, and prepare a geotechnical report. This information will be used to aid the design of trail, roadway, and foundation for the precast concrete box culvert.

See the attached AET proposal for detailed information regarding the scope of the geotechnical investigation.

Task 6 – Final Design

WSB will advance the preliminary layout that was created in the feasibility phase of the project to a final project layout. Advancement of the layout to finalization will include finalizing the roadway, north trail, south trail, and precast concrete box culvert alignments, profiles, cross sections, and construction limits. Following finalization of the layout WSB will begin work on the final plans, specifications, and estimates, herein referred to as the construction documents. WSB will utilize MicroStation and Geopak software to complete the detailed final design and prepare the construction documents. WSB will formally submit to the city the 60%, 95%, and 100% construction documents. In addition to formal submittals to the city, the 95% and 100% and construction documents will be submitted to MnDOT State Aid for review and approval as the precast concrete box culvert will cross a County State Aid Highway (CSAH 78).

Final design will be in accordance with MnDOT State Aid, Scott County, and City of Shakopee standards, guidelines, and requirements. As final plans are developed, WSB will submit construction plans for agency review at the intervals stated above. After each review, comments will be incorporated into the subsequent plan sets and listed in a comment resolution table. The comment resolution table will include the commenting agency, the agency comment, how the comment was addressed and who addressed the comment. Final design milestones will include the following:

- *30% Final Layout:* Project layout is finalized. Basic design elements included in the final layout are the alignments, geometrics, profiles, cross sections, and construction limits. The pavement design will also be completed at the 30% design stage.
- *60% Plan Set:* Major plan elements are provided including those listed in the 30% stage above, typical sections, drainage elements, utilities, miscellaneous details, construction staging/traffic control, preliminary major quantities, signing, striping, and draft special provisions. The 60% stage will not be a formal submittal of a full plan set and project manual. The pertinent components of each document will be shared with the city and county as determined by the PMT.
- *95% Plan Set:* Included at this stage is the plan set showing all final elements of the project including quantities for all items, special provisions, State Aid checklists, drainage design report, pavement design report, laboratory services request form, quality management process form, utility relocation certificate, and any other elements that allow for a thorough review and approval by all agencies.
- *100% Plan Set:* All plan elements are complete. 100% plans will only include revisions based on agency review comments from the 95% design stage.

Prior to the milestone submittals mentioned above, the submittal package will go through WSB's formal QA/QC process to ensure accuracy and consistency. The WSB quality process uses the MnDOT plan review checklists as the basis for review.

Cost estimates will be prepared using the City of Shakopee's cost participation policy. Costs will be separated by State Aid eligible and non-eligible items, if applicable. As the design progresses the estimates will become more detailed.

WSB will provide preliminary and final drainage design for the new storm sewer system that will accommodate the revised drainage patterns resulting from the addition of the box culvert under 130th Street. The preliminary items will include the basic storm sewer system layout and will be included in the final project layout. The subsequent designs will be included in the plan sets and will include full horizontal and vertical designs of the storm sewer system. Our drainage team will coordinate with our roadway designers to determine special ditch grades where applicable. WSB will determine the appropriate measures to be taken that are necessary to accommodate the added impervious surfaces in accordance with the permitting agency requirements. The added impervious surface area is not anticipated to trigger requirements leading to new BMPs.

The final construction documents submittal will include the final plan, final special provisions and proposal, final cost estimate with applicable cost share breakdowns, staking files and an advertisement for bid. A 100% signed plan set and proposal concludes the development of final design. The construction plans will include the following, at a minimum:

- Title Sheet
- General Layout
- Statement of Estimated Quantities
- Quantity and Earthwork Tabulations
- Construction Notes and Standard Plates
- Typical Sections
- Miscellaneous Details
- Standard Plans
- Existing Topography, Utility, and Removal Plan
- Construction Staging and Traffic Control
- Alignment Plans and Tabulations

- Bridge Plan
- Construction Plans and Profiles (include signing, striping, and drainage)
- Drainage Profiles and Tabulations
- SWPPP
- Turf Establishment Plans and Erosion Control
- Cross Sections every 50 feet

Task 7 – Specifications / Bidding Documents

WSB will prepare a project specifications package (Project Manual) that will include all materials that the city will use in bidding including the city's bid proposal form and special provisions. The Project Manual will include the full set of project specifications and applicable city standard contract and bidding information. WSB will prepare the advertisement for bid using the city's template.

WSB will coordinate the placement of the advertisement in the appropriate legal paper. The City of Shakopee will serve as the bidding agent. WSB will assist with Contractor questions throughout the bidding process.

Task 8 – Permits

WSB will prepare and submit all applicable permits for this project. WSB will coordinate with the permitting agencies as early as practical during the design process to keep the agencies informed of the project details and to make the approval process as efficient as possible. Wetlands were previously delineated within this project area for adjacent developments. Impacts, if any, to existing stormwater BMPs will require a Wetland Conservation Act No Loss approval through the City of Shakopee.

Task 9 – Box Culvert Design

WSB will perform the final design of the box culvert and culvert end sections. This task will include preliminary calculations and design of the pedestrian box culvert and end sections. Alternatives will be analyzed regarding configuration, footing concepts, lighting, drainage, guardrail attachment and other treatment conditions. We have assumed that no retaining walls will be part of our design, only standard precast end sections.

WSB will complete preliminary and final bridge plans for submittal to Minnesota Department of Transportation (MnDOT). The deliverables will include all information necessary to construct the bridges and end sections according to code. WSB will also provide special provisions and cost estimates to be included in the project manual for use in construction.

The fee provided for the box culvert design assumes the box culvert and end sections will be precast concrete units. If it is determined that precast units will not be able to be used, WSB will coordinate with the city regarding additional scope and fee to design cast in place components.

Task 10 – Construction Services

Paul Kyle, PE will be the Construction Project Manager and oversee all Contract Administration throughout the duration of this project. During construction, our team will maintain our commitment to communication, community involvement, quality, and safety. Paul will assume overall responsibility for this construction contract and maintain close communication with Nic Hentges (Design PM) and the City Project Manager. Paul will regularly review the construction schedule to ensure construction stays on track, make decisions regarding design issues, and oversee all consultant personnel. Paul will also remain active in the project throughout construction to provide oversight of field staff and manage the administrative tasks on the project.

WSB will provide a certified bridge construction inspector for the construction of the box culvert

that has experience relating to pedestrian underpass construction. It is anticipated that the certified bridge inspector will be on site for 5 days at 10 hours per day. WSB will also provide an experienced construction observer for the trail and roadway portions of the project. That observer will be on site for approximately 3 hours per day, 5 days a week, for 5 weeks. Throughout construction, our inspectors will proactively complete the responsibilities of their role to verify compliance without sacrificing time and budget. Our inspectors will continue to communicate and coordinate with the contractor daily to anticipate upcoming activities and prepare accordingly, including the scheduling of material testing and surveying.

WSB construction materials testing staff will perform all required materials testing for this project per the State Aid for Local Transportation Schedule of Material Control. Our staff will provide the results of each test to the city upon request.

Nearing the completion of Construction WSB survey staff will gather as-builts data for all the storm sewer components of the project. WSB will use the as-built data to create record drawings for the project. Record drawings will be delivered to the city in pdf and AutoCAD formats.

Deliverables

Contract Administration

- Prepare for and facilitate all applicable utility coordination meetings between the city, contractor, and WSB.
- Prepare for a facilitate the preconstruction meeting.
- Respond to all contractor requests for information (RFI).

Construction Observation and inspection

- Record all construction activities daily, making a complete and accurate record of all events.
- Ensure construction practices and materials used on site are compliant with project specifications.
- Accurately measure and record contract pay items daily.
- Perform daily reviews of construction signing, detour signing, and construction traffic control maintenance.
- Perform monthly labor compliance interviews.
- Communicate regularly with the project manager, contractor, city, and involved stakeholders.
- Provide services required under this contract as necessary to accommodate the contractor's schedule and needs.
- Exercise the "Authority and Duties of the Inspector" as necessary.

Construction Staking

- Verifying datum points are accurate and correct.
- Provide all required construction staking including setting benchmark elevation locations.
- Providing and maintaining records for as-builts.
- Coordinate with contractor on private utility relocations.
- Surveying to locate and identify as-built elevations for all repaired or modified City utilities.
- Structure measure downs on all structures within the project limits.
- Record Drawing preparation.
- Any necessary tie cards for repaired utilities.

SCHEDULE

The following schedule is proposed for final design services. WSB will begin work in September 2023. Final (100%) trail and bridge plans and specifications will be completed by April 2024 for

submittal to MnDOT State Aid and the city for final review and approval in May 2024. Bidding will take place in May and June 2024 in preparation for construction in July 2024. The intent of this schedule is to have the closure of 130th Street for construction of the box culvert align with the adjacent Scott County roadway closure.

GSOC and Utility Markings	September 2023
Topographic Survey	September 2023
Permitting	September 2023 – April 2024
Geotechnical Investigation and Report	September – November 2023
Final Layout / 30% Design	September 2023
Utility Relocation Coordination	October 2023 – May 2024
60% Trail Plans and Preliminary Specifications	November 2023
Agency Review of 60% Trail Plans and Specifications.....	December 2023
Preliminary Bridge Plans.....	December 2023
Agency Review of Preliminary Bridge Plan.....	December 2023 – January 2024
95% Trail Plans and Specifications.....	February 2024
90% Bridge Plans and Specifications	March 2024
Agency Review of 95% Trail Plans and Specifications.....	March 2024
100% Trail Plans and Specifications.....	April 2024
Agency Review of 100% Trail Plans and Specifications.....	April 2024
Trail and Bridge Plans and Specifications Approval	May 2024
Advertising	May – June 2024
Bid Opening	June 20, 2024
Begin Construction.....	July 2024
End Construction.....	August – September 2024

FEE SCHEDULE

The fees for the scope of services defined in this proposal will be billed hourly with an anticipated total not-to-exceed cost of **\$133,946 for final design services and \$68,078 for construction services**. See the attached Exhibit A for the fee schedules.

If you have any questions on the above scope and attached fee schedule, please feel free to contact me. Thank you for providing WSB the opportunity to successfully deliver this project for the city of Shakopee.

Sincerely,
WSB

A handwritten signature in black ink, appearing to read 'Ni Hentges', with a long horizontal flourish extending to the right.

Nicholas Hentges, PE
Project Manager

Attachments



Estimate of Cost
130th St (CSAH 78) at Zumbro Ave Pedestrian Underpass
CITY OF SHAKOPEE
EXHIBIT A
FINAL DESIGN SERVICES



FINAL DESIGN SERVICES										
	Project Manager	Project Engineer	Structural Engineer	Sr. Technician	Survey Manager	Survey Support	Survey Crew 2-Person	Clerical	Total Hours	
Task No Description										
1 PROJECT MANAGEMENT										\$16,072.00
A. Project Management	30								30	\$7,110.00
B. PMT Meetings (8 total)	16							4	20	\$4,244.00
C. QA/QC	18							4	22	\$4,718.00
2 AGENCY INVOLVEMENT										\$2,434.00
A. Agency Coordination (2 Meetings)	6	4		2					12	\$2,434.00
3 PRIVATE UTILITY COORDINATION										\$6,367.00
A. Utility Identification (GSOC)		4						2	6	\$786.00
B. Utility Meetings (1 Large Group and 7 Individual Meetings)	5	10							15	\$2,585.00
C. Coorination/ Plans	4	12		2					18	\$2,996.00
4 SURVEYING										\$4,046.00
A. Office Survey					2				2	\$810.00
B. Field Survey							10		10	\$2,500.00
C. Base File / Surface Model						4			4	\$736.00
5 GEOTECHNICAL INVESTIGATION										\$13,000.00
Geotechnical Investigation	SEE ATTACHED AET GEOTECHNICAL INVESTIGATION FEE									\$13,000.00
6 FINAL DESIGN & PLAN PREPARATION										\$46,553.00
6.1 Final Layout / 30% Design										
Trail and Roadway	2	8		10					20	\$3,434.00
Drainage	2	8							10	\$1,720.00
Cross Sections	2	4		12					18	\$3,242.00
6.2 60 Percent and 95 Percent Design and Plans										
Trail and Roadway	6	84		40					130	\$20,542.00
Drainage	4	42		4					50	\$8,404.00
Cross Sections	2	6		10					18	\$3,154.00
6.3 Final Plans	4	10		4					18	\$3,126.00
6.4 Cost Estimates	3	10		4					17	\$2,931.00
7 SPECIFICATIONS / BIDDING DOCUMENTS										\$2,692.00
A. Specifications / Bidding Documents	10	2							12	\$2,692.00
8 PERMITS										\$2,862.00
A. Permitting	8	6							14	\$2,862.00
9 BOX CULVERT DESIGN										\$34,920.00
A. Preliminary Structural Design and Plans	20		72						92	\$17,460.00
B. Final Structural Design and Plans	20		72						92	\$17,460.00
Total Hours	162	210	144	88	2	4	10	10	630	
Hourly Costs	237.00	146.22	176.67	184.00	168.00	184.00	250.00	113.00		
Labor Costs	\$38,394.00	\$30,706.20	\$25,440.48	\$16,192.00	\$336.00	\$736.00	\$2,500.00	\$1,130.00		\$128,946.00
Expenses										
Mileage and Permits										\$5,000.00
Total Expenses										\$5,000.00
Total Labor and Expenses Final Design Services										\$133,946.00



Scott County - Shakopee

130th Street and Zumbro Ave Underpass

R-022744-000

Construction Materials Testing Estimate of Costs (2023 SMC)

WSB Unit	Test Type/Material	Minimum Required Testing Rate	Quantity of Material	Minimum Tests	Probable Tests	Cost Per Test	Minimum Cost	Probable Cost
Gradation Testing								
3025	Aggregate Base	Random Sampling: ≥ 250 CY (CV) to <2,000 CY (CV) OR ≥ 500 Tons to <4,000 Tons. Material is a minimum of one lot. Test 2 random samples from each lot and average.	CL 5: 948.2 CY	2	3	\$150.00	\$300.00	\$450.00
3025	Select granular Embankment	1 / 40,000 CY (CV) or 1 / 80,000 Tons	2044 CY	1	2	\$150.00	\$150.00	\$300.00
3025	Structural Backfill	1 per source	343.2 CY	1	2	\$150.00	\$150.00	\$300.00
3025	Granular Backfill	1 per source	1058.46 CY	1	2	\$150.00	\$150.00	\$300.00
3025	Granular Bedding	1 per source	86.58 CY	1	2	\$150.00	\$150.00	\$300.00
3025	Coarse Filter Aggregate	1 per source	378.3 CY	1	2	\$150.00	\$150.00	\$300.00
Total Minimum Cost for Section							\$1,050.00	
Total Probable Cost for Section							\$1,950.00	

WSB Unit	Test Type/Material	Minimum Required Testing Rate	Major Soil Types	Minimum Tests	Probable Tests	Cost Per Test	Minimum Cost	Probable Cost
Proctor Test								
3260	Proctor Test	1 / Major soil type. Additionally, one for each granular material, if using specified density.	Embankment Subgrade Backfill	5	7	\$150.00	\$750.00	\$1,050.00
Total Minimum Cost for Section							\$750.00	
Total Probable Cost for Section							\$1,050.00	

WSB Unit	Test Type/Material	Minimum Required Testing Rate	Quantity of Material	Minimum Tests	Probable Tests	Cost Per Test	Minimum Cost	Probable Cost
Compaction Testing - Nuclear Density Gauge and Dynamic Cone Penetrometer								
3500	Aggregate Base	1 test / 2,000 CY (CV) or 4,000 Tons.	CL 5: 948.2 CY	1	2	\$50.00	\$50.00	\$100.00
3510	Granular Materials	Roadway Embankment: 1 test per 5,000 CY (CV),	SGE: 2044 CY	1	2	\$20.00	\$20.00	\$40.00
3510		Transverse culverts & Abutments (except spread footings): 1 test per every 2 feet of fill height per structure.	Box Culvert 14x10 82 LF (Gran BF / Structural BF)	8	10	\$20.00	\$160.00	\$200.00
3510	Non-Granular Materials	Roadway Embankment: 1 test per 10,000 CY (CV). Outside roadcore: Test at the Engineer's discretion.	Common: 317 CY	1	2	\$20.00	\$20.00	\$40.00
3510		Structures Trenches: 1 test per 500 feet of each structure length at various depths.	Storm: 1409 LF	6	8	\$20.00	\$120.00	\$160.00
3510		Subgrade Preparation: 1 test per 25 road stations.	1926 SY	1	2	\$20.00	\$20.00	\$40.00
				Total Minimum Cost for Section			\$390.00	
				Total Probable Cost for Section			\$580.00	

WSB Unit	Test Type/Material	Minimum Required Testing Rate	Quantity of Material	Minimum Tests	Probable Tests	Cost Per Test	Minimum Cost	Probable Cost
Moisture Content Test								
3250	Aggregate Base	1 / 1,000 CY up to 10 maximum. For quality compaction test at Engineer's discretion.	CL 5: 948.2 CY	1	1	\$15.00	\$15.00	\$15.00
3250	Structure Excavations and Backfills	1 / structure for 2451 materials Adjacent structures may use one sample.	Gran BF: 1058.46 CY Gran Bdg: 86.58 CY Coarse Filter: 378.3 CY Structural BF: 343.2 CY	4	4	\$15.00	\$60.00	\$60.00
3250	All Embankment Materials	1 / 10,000 CY up to 10 maximum. For quality compaction, test at Engineer's discretion	SGE: 2044 CY Common: 317 CY	2	2	\$15.00	\$30.00	\$30.00
3250	Subgrade Preparation	1 per 25 Road Stations. For quality compaction test at Engineer's discretion	1926 SY	1	1	\$15.00	\$15.00	\$15.00
Total Minimum Cost for Section							\$120.00	
Total Probable Cost for Section							\$120.00	

WSB Unit	Test Type/Material	Minimum Required Testing Rate	Number of Sources	Minimum Tests	Probable Tests	Cost Per Test	Minimum Cost	Probable Cost
Aggregate Quality								
4030	Aggregate Base and Surface Courses Recycled/Salvaged/Reclaimed Bitumen content - At Engr's Discretion	2 per source (unless directed by Engineer)	CL 5	2	2	\$165.00	\$330.00	\$330.00
3110 3060	Granular Materials Carbonate Quarry (Fine Aggregate Bedding/Coarse Filter) LAR, Insoluble Residue	2 per source (unless directed by Engineer)	Coarse Filter Aggregate	2	2	\$415.00	\$830.00	\$830.00
Total Minimum Cost for Section							\$1,160.00	
Total Probable Cost for Section							\$1,160.00	

Test Type/Material	Minimum Required Testing Rate
Test Rolling	
Test Rolling	Contractor to perform test rolling at top of: • Non-granular subgrade (2106) • Granular subgrade that does not meet 3149.2.B.2 (2106) • Base (2211) and shoulder base (2221) • Unstabilized Full Depth Reclamation (2215) Minimum 12' width and 300' length. *Assuming onsite Agency representative will observe test rolling.

WSB Unit	Test Type/Material	Minimum Required Testing Rate	Quantity of Material	Minimum Tests	Probable Tests	Cost Per Test	Minimum Cost	Probable Cost
Concrete Testing								
2040	Concrete Testing	1 / 100 CY / mix type / day (1 set of 4 cylinders) *Field Cure Cylinder = Additional. Casted upon request.*	Curb and Gutter: 90 CY Equipment Pad (#): 1	2	4	\$120.00	\$240.00	\$480.00
Total Minimum Cost for Section							\$240.00	
Total Probable Cost for Section							\$480.00	

WSB Unit	Test Type/Material	Minimum Required Testing Rate	Quantity of Material	Minimum Tests	Probable Tests	Cost Per Test	Minimum Cost	Probable Cost
Bituminous Testing								
4090	Verification Testing - MnDOT Gyratory Mix Properties	1 / mix type / day	12.5W(3,F): 355 T 12.5NW(3,B): 185 T	1	2	\$600.00	\$600.00	\$1,200.00
4080	Core Thickness & Density	1 Companion Core per Lot		1	2	\$55.00	\$55.00	\$110.00
				Total Minimum Cost for Section			\$655.00	
				Total Probable Cost for Section			\$1,310.00	

WSB Unit	Test Type/Material	Minimum Required Testing Rate	Number of Sources	Minimum Tests	Probable Tests	Cost Per Test	Minimum Cost	Probable Cost
Miscellaneous Testing								
3253	Topsoil Material - Gradation, Hydrometer, Organic Content, pH	At the direction of the Engineer.	940 CY	0	1	\$300.00	\$0.00	\$300.00
Total Minimum Cost for Section							\$0.00	
Total Probable Cost for Section							\$300.00	

WSB Unit	Project Charges	Rate (\$)	Quantity	Subtotal
CMT02	Field Technician Time	95	34	\$3,230.00
2120	Trip Charge	20	37	\$740.00
CMT01	Sample Pick-Up Time	75	40	\$3,000.00
CMT90	Project Administration	85	2	\$170.00
CMT70	Project Assistant	105	12	\$1,260.00
CMT80	Project Engineer	150	6	\$900.00
Field and Overhead Subtotal				\$9,300.00
Testing Subtotal (minimum-probable)				\$4,365.00 - \$6,950.00
Total Estimated Minimum Cost				\$13,665.00
Total Estimated Probable Cost				\$16,250.00