PROFESSIONAL ENGINEERING SERVICES AGREEMENT

LHB, INC. & CITY OF DULUTH

THIS AGREEMENT, effective as of the date of attestation by the City Clerk, is made by and between the City of Duluth, Minnesota hereinafter referred to as the "City" and:

Name: **LHB, INC.**
Address: **21 West Superior Street, Suite 500, Duluth, MN 55802**

hereinafter referred to as the "Engineer", in consideration of the mutual promises contained herein.

Payments as described in Section V shall be made from Funding **411-035-5530**; Project # **2167**; and Resolution No. **23-0601R**, passed on **August 14, 2023**.

The professional engineering services obtained by the City under this agreement concern the following described project hereinafter referred to as the "Project":

Project Number: **2167**
Project Name: **Campus Connector Segment 6 Design Phase**
Project Description: **Engineering Services for the Design Phase of Campus Connector Segment 6**

The professional engineering services to be provided under this agreement consist of those phases A through G checked below. A more particular description of each phase is contained in Section II, "Basic Services", of the agreement.

	Phase	Description
☒	A.	Study and Report Phase
☒	B.	Preliminary Survey Phase
☒	C.	Preliminary Design Phase
☒	D.	Final Design Phase
☒	E.	Bidding Phase
☐	F.	Construction Survey and Layout Phase
☒	G.	Construction Administration and Inspection Phase

SECTION I. GENERAL

A. ENGINEER

The Engineer shall provide professional engineering services for the City in all phases of the Project to which this agreement applies, serve as the City's professional engineering representative for the Project as set forth below and shall give professional engineering consultation and advice to the City during the performance of services hereunder. All services provided hereunder shall be performed by the Engineer in accordance with generally accepted Engineering standards to the satisfaction of the City.

B. NOTICE TO PROCEED

The Engineer shall only begin performance of each Phase of work required hereunder upon receipt of a written Notice to Proceed by City representative with that Phase.

C. TIME

The Engineer shall begin work on each successive phase promptly after receipt of the Notice to Proceed and shall devote such personnel and materials to the Project so as to complete each phase in an expeditious manner within the time limits set forth in Section II. Time is of the essence to this agreement.

D. CITY'S REPRESENTATIVE

The City's representative to the Engineer shall be the City Engineer or his or her designees assigned in writing.

E. ENGINEERING GUIDELINES

All work performed as part of this project shall conform to the most current edition of the Engineering Guidelines for Professional Engineering Services and Developments as approved by the City Engineer and on file in the office of the City Engineer.

F. SUBCONSULTANTS

Engineer may contract for the services of sub-consultants to assist Engineer in the performance of the services to be provided by Engineer hereunder but the selection of any sub-consultant to perform such services shall be subject to the prior written approval of the City Engineer. Engineer shall remain responsible for all aspects of any services provided by such sub-consultants to City under this Agreement. City shall reimburse Engineer for sub-consultant services under the categories of services to be provided by Engineer under Phases A through G, as applicable.

SECTION II. BASIC SERVICES

A. STUDY AND REPORT PHASE

☒ Included in this Agreement
☐ Not included in this Agreement

The Engineer shall:

1) City's Requirements

Review available data and consult with the City to clarify and define the City's requirements for the Project.

2) Advise Regarding Additional Data

Advise the City as to the necessity of the City's providing or obtaining from others data or services in order to evaluate or complete the Project and, if directed by the City's representative, act on behalf of the City in obtaining other data or services.

3) Technical Analysis

Provide analysis of the City's needs, planning surveys, site evaluations, and comparative studies of prospective sites and solutions.

4) Economic Analysis

Provide a general economic analysis of various alternatives based on economic parameters and assumptions provided by the City.

5) Report Preparation

Prepare a report containing schematic layouts, sketches and conceptual design criteria with appropriate exhibits to indicate clearly the considerations involved and the alternative solutions available to the City and setting forth the Engineer's findings and recommendations with opinions of probable total costs for the Project, including construction cost, contingencies, allowances for charges of all professionals and consultants, allowances for the cost of land and rights-of-way, compensation for or damages to properties and interest and financing charges (all of which are hereinafter called "Project Costs").

6) Report Presentation

Furnish three copies of the report and present and review the report in person with the City as the City Representative shall direct.

7) Supplementary Duties

The duties and responsibilities of Engineer during the Study and Report Phase shall also include any additional duties and responsibilities to be provided pursuant to the Engineer's proposal attached as Exhibit B.

8) Completion Time

The Study and Report Phase shall be completed and report submitted by **February 28, 2024**.

B. PRELIMINARY SURVEY PHASE

☒ Included in this Agreement

☐ Not included in this Agreement

After written authorization by the City's representative to proceed with the preliminary survey phase, the Engineer shall:

1) General

Perform topographic survey as necessary to prepare the design and provide Construction Survey and Layout as described in Section II.F

2) Boundary Survey

Perform boundary survey if checked.

3) Document Presentation

Furnish a CADD file of the survey base map to the City. Files shall be in the software specified in the Engineering Guidelines for Professional Engineering Services and Developments described in Section I.E.

4) Supplementary Duties

The duties-responsibilities of the Engineer during the preliminary survey phase shall also include any additional duties and responsibilities to be provided pursuant to the Engineer's proposal attached as Exhibit B.

5) Completion Time

The preliminary survey phase shall be completed and submitted by **February 1, 2024**.

C. PRELIMINARY DESIGN PHASE

☒ Included in this Agreement
☐ Not included in this Agreement

After written authorization by the City's Representative to proceed with the Preliminary Design Phase, the Engineer shall:

1) Preliminary Design Documents
Prepare preliminary design documents consisting of final design criteria, preliminary drawings and outline specifications.

2) Revised Project Costs
Based on the information contained in the preliminary design documents, submit a revised opinion of probable Project costs.

3) Preparation of Grants; Environmental Statements
Preparation of applications and supporting documents for governmental grants, loans or advances in connection with the Project, preparation or review of environmental assessments and impact statements; review and evaluation of the effect on the design requirements of the Project of any such statements and documentation prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.

4) Renderings and Models
Providing renderings or models for the City's use.

5) Economic Analysis
Investigations involving detailed consideration of operations, maintenance and overhead expenses; providing value engineering during the course of design; the preparation of feasibility studies, cash flow and economic evaluations, rate schedules and appraisals; assistance in obtaining financing for the Project; evaluating processes available for licensing and assisting the City in obtaining licensing; detailed quantity surveys of material, equipment and labor; and audits of inventories required in connection with construction performed by the City.

6) Document Presentation
Furnish three copies of the above preliminary design documents and present and review such documents in person with the City as the City Engineer may direct.

7) Supplementary Duties
The duties and responsibilities of the Engineer during the Preliminary Design Phase shall also include any additional duties and responsibilities to be provided pursuant to the Engineer’s proposal attached as Exhibit B.

8) Completion Time
The Preliminary Design Phase shall be completed and report or plan submitted by **November 1, 2024**.

D. FINAL DESIGN PHASE

☒ Included in this Agreement
☐ Not included in this Agreement

1) Drawings and Specifications

On the basis of the accepted preliminary design documents and the revised opinion of probable Project costs, prepare for incorporation in the contract documents Construction Plans to show the character and extent of the Project and specifications.

2) Approvals of Governmental Entities

Furnish to the City such documents and design data as may be required for, and prepare the required documents so that the City may apply for approvals and permits of such governmental authorities as have jurisdiction over design criteria applicable to the Project, and assist in obtaining such approvals by participating in submissions to and negotiations with appropriate authorities.

3) Adjusted Project Costs

Advise the City of any adjustments to the latest opinion of probable Project costs, identify cause of change and furnish a revised opinion of probable Project cost based on the drawings and specifications.

4) Contract Document Preparation

Prepare final plans and specifications for the Project, which shall include incorporation of plans and specifications prepared by subconsultants. Engineer shall assist in the preparation of contract documents. Engineer shall prepare all necessary project/plan review forms checklists, labor compliance requests, wage determination requests, bidding documents and other forms to assist the City with procuring Bids. Engineer shall review all plans and specifications and supporting documentation and resolve any inconsistencies in said documents being incorporated into the Contract prior to bid. To the extent possible, the Engineer will follow the document format supplied by the City and use the standard terms and conditions supplied by the City in preparation of these documents.

5) Real Estate Acquisition: Legal Description

Based on preliminary design documents, furnish a legal description and recordable reproducible 8-1/2" X 11" plat of each parcel of real estate in which the City must acquire an interest in order to proceed with construction of the Project.

6) Document Presentation

Furnish three copies of the above documents and present and review them in person with the City.

7) Supplementary Duties

The duties and responsibilities of the Engineer during the Final Design Phase shall also include any additional duties and responsibilities to be provided pursuant to the Engineer's proposal attached as Exhibit B.

8) Completion Time

The Final Design Phase shall be completed and contract documents submitted by **May 1, 2026**.

E. BIDDING PHASE

☒ Included in this Agreement
☐ Not included in this Agreement

The Engineer shall:

1) Assist in Bidding

Assist the City in obtaining bids for each separate City contract for construction, materials, equipment and services.

2) Advise Regarding Contractors and Subcontractors

Consult with and advise the City as to the acceptability of subcontractors and other persons and organizations proposed by the City's contractor(s) (hereinafter called "Contractor(s)" for those portions of the work as to which such acceptability is required by the bidding documents).

3) Consult Regarding Substitutes

Consult with and advise the City as to the acceptability of substitute materials and equipment proposed by the contractor(s) when substitution prior to the award of contracts is allowed by the bidding documents.

4) Evaluation of Bids

Assist the City in evaluating bids or proposals and in assembling and awarding contracts.

5) Supplementary Duties

The duties and responsibilities of the Engineer during the Bidding Phase shall also include any additional duties and responsibilities to be provided pursuant to the Engineer's proposal attached as Exhibit B.

6) Completion Time

The bidding phase shall be completed by **September 1, 2026**.

F. CONSTRUCTION SURVEY AND LAYOUT PHASE

☐ Included in this Agreement
☒ Not included in this Agreement

1) General

This phase of work may or may not be performed in conjunction with Phase G, "Construction Administration and Inspection Phase" of this agreement. Inclusion of this phase in the agreement does not imply that services identified under Phase G are to be provided unless specifically indicated in this agreement.

2) Duties

The Engineer shall provide horizontal and vertical control line and grade to enable construction of the improvement as depicted in the Project plans. The number of control points to be established by the Engineer shall be sufficient to permit the construction contractor to construct the improvement within the construction tolerances established in the Project specifications. In addition, the number of control points shall be consistent with standard engineering practice.

3) Accuracy

The Engineer shall provide the horizontal and vertical control points within the same measurement tolerances as the construction tolerances established in the Project specifications. The Engineer shall be responsible for the accuracy of the control points which are established. The Engineer shall be responsible for costs which may result from errors in placement of control points. The Engineer shall be required to establish control points at Engineer's costs only one time. Control points which are lost, damaged, removed or otherwise moved by the Contractor

or others shall be promptly replaced by the Engineer and costs for such replacement shall be computed on a time and materials basis, and reimbursed by the City. The Engineer shall take all reasonable and customary actions to protect the control points established by the Engineer.

4) Supplementary Duties

The duties and responsibilities of the Engineer during the construction survey and layout phase shall also include any additional duties and responsibilities to be provided pursuant to the Engineer's proposal attached as Exhibit B.

5) Completion Time

The construction survey & layout phase shall be completed by **N/A**.

G. CONSTRUCTION ADMINISTRATION AND INSPECTION PHASE

☐ Included in this Agreement

☒ Not included in this Agreement

1) General Duties

Consult with and advise the City and act as its representative as provided herein and in the General Conditions of the construction contract for the Project. This phase of the work may or may not be performed in conjunction with Phase F "Construction Survey and Layout Phase" of this agreement. Inclusion of this phase in the agreement does not imply that services identified under Phase F are to be provided unless specifically indicated in this agreement.

2) Construction Inspection and Reporting

Make visits to the site with sufficient frequency at the various stages of construction to observe as an experienced and qualified design professional the progress and quality of the executed work of the contractor(s) and to ensure that such work is proceeding in accordance with the contract documents. During such visits and on the basis of on-site observations, the Engineer shall keep the City informed of the progress of the work, shall endeavor to guard the City against defects and deficiencies in such work and may disapprove or reject work failing to conform to the contract documents.

3) Warranty Inspection

Eleven months following construction completion, conduct an inspection to document any items to be repaired by the contractor under the conditions of the construction contract warranty. Submit work to be corrected to the Contractor and the City.

4) Review of Technical and Procedural Aspects

Review and approve (or take other appropriate action in respect to Shop Drawings), the results of tests and inspections and other data which each contractor is required to submit, determine the acceptability of substitute materials and equipment proposed by the contractor(s), and receive and review (for general content as required by the specifications) maintenance and operating instructions, schedules, guarantees, bonds and certificates of inspection which are to be assembled by the contractor(s).

5) Contract Documents

Receive from each contractor and review for compliance with contract documents all required document submissions including but not limited to performance and payment bonds, certificates of insurance report forms required by any City, State or Federal law or rule or regulation and submit the forms to the City for final approval.

6) Conferences and Meetings

Attend meetings with the contractor, such as preconstruction conferences, progress meetings, job conferences and other Project-related meetings, and prepare and circulate copies of the minutes thereof including to the City.

7) Records

a) Maintain orderly files for correspondence, reports of job conferences, shop drawings and samples, reproductions of original contract documents, including all work directive changes, addenda, change orders, field orders, additional drawings issued subsequent to the execution of the contract, the Engineer's clarifications and interpretations of the contract documents, progress reports, and other Project-related documents.

b) Keep a diary or log book, recording the contractor's hours on the job site, weather conditions, data relative to questions of work directive changes, change orders, or changed conditions, list of job site visitors, daily activities, decisions, observations in general, and specific observations in more detail, as in the case of observing test procedures and send copies to the City. Take multiple photographs of the Work and keep a log and file of the photos. Specifically maintain records of acceptance and rejection of materials and workmanship.

c) Record names, addresses and telephone numbers of all the contractors, subcontractors, and major suppliers of materials and equipment.

8) Reports

a) Furnish the City periodic reports, as required, on progress of the work and of the contractor's compliance with the progress schedule and schedule of shop drawings and sample submittals.

b) Consult with the City, in advance of scheduled major tests, inspections, or start of important phases of the Work.

c) Draft proposed change orders and work directive changes, obtaining back-up material from the contractor, and make recommendations to the City regarding change orders, work directive changes and field orders.

d) Report immediately to the City upon the occurrence of any accident.

9) Contract Interpretation, Review of Quality of Work

Issue all instruction of the City to the contractor(s); issue necessary interpretations and clarifications of the contract Documents and in connection therewith prepare change orders as required, subject to the City's approval; have authority, as the City's representative, to require special inspection or testing of the work; act as initial interpreter of the requirements of the contract documents and judge of the acceptability of the work there under and make decisions on all claims of the contractor(s) relating to the acceptability of the work or the interpretation of the requirements of the contract documents pertaining to the execution and progress of the work.

10) Change Orders and Revisions

Prepare change orders to reflect changes in the Project requested or approved by the City, evaluate substitutions proposed by the contractor(s) and make revisions to drawings and specifications occasioned thereby, and provide any additional services necessary as the result of significant delays, changes or price increases occurring as a direct or indirect result of material, equipment or energy shortages.

11) Review of Applications for Payment

Based on the Engineer's on-site observations as an experienced and qualified design professional and on review of applications for payment and the accompanying data and schedules, determine the amount owing to the contractor(s) and recommend in writing payments to the contractor(s) in such amounts; such recommendations of payment will constitute a representation to the City, based on such observations and review, that the work has progressed to the point indicated, that, to the best of the Engineer's knowledge, information and belief, the quality of such work is in accordance with the contract documents (subject to an evaluation of such work as a functioning Project upon substantial completion, to the results of any subsequent tests called for in the contract documents, and to any qualifications stated in his recommendation), and that payment of the amount recommended is due the contractor(s).

12) Determination of Substantial Completion

Conduct an inspection to determine if the Project is substantially complete and a final inspection to determine if the work has been completed in accordance with the contract documents and if each contractor has fulfilled all of his obligations there under so that the Engineer may recommend, in writing, final payment to each contractor and may give written notice to the City and the contractor(s) that the work is acceptable (subject to any conditions therein expressed).

13) Authority and Responsibility

The Engineer shall not guarantee the work of any contractor or subcontractor, shall have no supervision or control as to the work or persons doing the work, shall not have charge of the work, shall not be responsible for safety in, on, or about the job-site or have any control of the safety or adequacy of any equipment, building component, scaffolding, supports, forms or other work aids. If the Engineer determines that there are deficiencies in materials or workmanship on the Project, or otherwise deems it to be in the best interest of the City to do so, the Engineer shall be responsible to stop any contractor or subcontractor from performing work on the Project, until conditions giving rise to this need, therefore, are rectified.

14) Engineer Not Responsible for Acts of Contractor

The Engineer shall not be responsible for the supervision or control of the acts or omissions or construction means, methods or techniques of any contractor, or subcontractor, or any of the contractor(s)' or subcontractors' or employees or any other person (except the Engineer's own employees and agents) at the site or otherwise performing any of the contractor(s) work; however, nothing contained in this paragraph shall be construed to release the Engineer from liability for failure to properly perform duties undertaken by him in these contract documents or this agreement.

15) Preparation of Record Drawings

The Engineer shall prepare a set of record drawings in accordance with the Engineering Guidelines for Professional Engineering Services and Development described in Section I.E.

16) Manuals

The Engineer shall furnish operating and maintenance manuals; protracted or extensive assistance in the utilization of any equipment or system (such as initial start-up, testing, and adjusting and balancing); and training personnel for operation and maintenance.

17) Supplementary Duties

The duties and responsibilities of the Engineer during the construction administration and inspection phase shall also include any additional duties and responsibilities to be provided pursuant to the Engineer’s proposal attached as Exhibit B.

18) Completion Time

The construction administration and inspection phase shall be completed by **N/A**.

SECTION III. CITY'S RESPONSIBILITIES

A. FURNISH REQUIREMENTS AND LIMITATIONS

Provide all criteria and full information as to the City's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expendability, economic parameters and any budgetary limitations; and furnish copies of all design and construction standards which the City will require to be included in the Drawings and Specifications.

B. FURNISH INFORMATION

Assist the Engineer by placing at the Engineer's disposal all available information reasonably known to and in possession of the City.

C. REVIEW DOCUMENTS

Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by the Engineer.

D. OBTAIN APPROVALS AND PERMITS

Furnish approvals and permits from all governmental authorities having jurisdiction over the Project and such approvals and consents from others as may be necessary for completion of the Project.

E. ACCOUNTING, LEGAL AND INSURANCE SERVICE

Provide such accounting, independent cost estimating and insurance counseling services as may be required for the Project, such auditing service as the City may require to ascertain how or for what purpose any contractor has used the monies paid to him under the construction contract, and such inspection services as the City may require to ascertain that the contractor(s) are complying with any law, rule or regulation applicable to their performance of the work except as otherwise provided in Section II.

F. NOTIFY THE ENGINEER OF DEFECTS OR DEVELOPMENT

Give prompt written notice to the Engineer whenever the City observes or otherwise becomes aware of any development that affects the scope or timing of the Engineer's services, or any defect in the work of the contractor(s).

G. COSTS OF THE CITY'S RESPONSIBILITIES

Bear all costs incidental to compliance with the requirements of this Section III.

SECTION IV. GENERAL CONSIDERATIONS

A. SUCCESSORS AND ASSIGNS

The City and the Engineer each binds their respective partners, successors, executors, administrators and assigns to the other party of this agreement and to the partners, successors, executors, administrators, and assigns of such other party, in respect to all covenants of this agreement; the Engineer shall not assign, sublet, or transfer their respective interests in this agreement without the written consent of the City. Nothing herein shall be construed as creating

any personal liability on the part of any officer or agent of any public body which may be a party hereto, nor shall it be construed as giving any rights or benefits hereunder to anyone other than the City and the Engineer.

B. OWNERSHIP OF DOCUMENTS

All drawings, specifications, reports, records, and other work product developed by the Engineer in connection with this Project shall remain the property of the City whether the Project is completed or not. Reuse of any of the work product of the Engineer by the City on extensions of this Project or any other Project without written permission of the Engineer shall be at the City's risk and the City agrees to defend, indemnify and hold harmless the Engineer from all damages and costs including attorney fees arising out of such reuse by the City or others acting through the City.

C. ESTIMATES OF COST (COST OPINION)

Estimates of construction cost provided are to be made on the basis of the Engineer's experience, qualifications and the best of their professional judgment, but the Engineer does not guarantee the accuracy of such estimates as compared to the contractor's bids or the Project construction cost.

D. INSURANCE

1) Engineer shall provide the following minimum amounts of insurance from insurance companies authorized to do business in the state of Minnesota:

a) Workers' compensation insurance in accordance with the laws of the State of Minnesota.

b) Commercial General and Automobile Liability Insurance with limits not less than **$1,500,000** Single Limit shall be in a company approved by the city of Duluth; and shall provide for the following: Liability for Premises, Operations, Completed Operations, Independent Contractors, and Contractual Liability. Umbrella coverage with a "form following" provision may make up the difference between the commercial general and auto liability coverage amounts and the required minimum amount stated above.

c) Professional Liability Insurance in an amount not less than **$1,500,000** Single Limit; provided further that in the event the professional liability insurance is in the form of "claims made," insurance, Engineer hereby commits to provide at least 60 days' notice prior to any change to the Professional Liability Insurance policy or coverage ; and in event of any change, Engineer agrees to provide the City with either evidence of new insurance coverage conforming to the provisions of this paragraph which will provide unbroken protection to the City, or, in the alternative, to purchase at its cost, extended coverage under the old policy for the period the state of repose runs; the protection to be provided by said "claims made" insurance shall remain in place until the running of the statute of repose for claims related to this Agreement.

d) **City of Duluth shall be named as Additional Insured** under the Commercial General and Automobile Liability Policies. Engineer shall also provide evidence of Statutory Minnesota Workers' Compensation Insurance. Engineer to provide Certificate of Insurance evidencing such coverage with notice to City of cancellation in accordance

with the provisions of the underlying insurance policy included. The City of Duluth does not represent or guarantee that these types or limits of coverage are adequate to protect the Engineer's interests and liabilities.

2) Certificates showing that Engineer is carrying the above described insurance in the specified amounts shall be furnished to the City prior to the execution of this Agreement and a certificate showing continued maintenance of such insurance shall be on file with the City during the term of this Agreement.

3) The City shall be named as an additional insured on each liability policy other than the professional liability and the workers' compensation policies of the Engineer.

4) The certificates shall provide that the policies shall not be cancelled during the life of this Agreement without advanced notice being given to the City at least equal to that provided for in the underlying policy of insurance.

5) Except as provided for in Section IV.D.1.d) above, Engineer hereby commits to provide notice to City at least 30 days in advance of any change in the insurance provided pursuant to this Section IV or in advance of that provided for in the underlying insurance policy or policies whichever is longer. For the purposes of Section IV.D of this Agreement, the term, "changed", shall include cancellation of a policy of insurance provided hereunder and any modification of such policy which reduces the amount of any coverage provided thereunder below the amounts required to be provided hereunder or otherwise reduces the protections provided under such policy to City.

E. HOLD HARMLESS

To the fullest extent permitted by law, Engineer agrees that it shall defend, indemnify, and hold harmless the City, its officers, employees, and agents, past or present, from and against any and all claims including but not limited to claims for contribution or indemnity, demands, suits, judgments, costs, and expenses (including attorneys' fees) asserted by itself or any person or persons including agents or employees of the City of Duluth or Engineer by reason of death or injury to person or persons or the loss or damage to property arising out of, or by reason of, any act, omission, operation or work of Engineer or its employees while engaged in the execution or performance of services under this Agreement. Said obligations to defend, indemnify, and hold harmless shall include, but not be limited to the obligation to defend, indemnify, and hold harmless the City in all matters where claims of liability against the City arise out of, relate to, are attributable to, are passive or derivative of, or vicarious to the negligent, intentional, or wrongful acts or omissions of Engineer, including but not limited to the failure to supervise, breach of warranty, the failure to warn, the failure to prevent such act or omission by Engineer, its employees, or its agents, and any other source of liability. Said obligations to defend, indemnify, and hold harmless shall be triggered upon the assertion of a claim for damages against City. On ten days' written notice from the City of Duluth, Engineer shall appear and defend all lawsuits against the City of Duluth growing out of such injuries or damages. Engineer shall not be required to indemnify City for amounts found by a fact finder to have arisen out of the sole negligent or intentional acts or omission of the City unless Engineer should fail to comply with its insurance obligations in this contract to the detriment of City, in which case Engineer shall indemnify, defend, and hold harmless the City for any and all amounts except amounts attributed to intentional, willful or wanton acts of the City.

This Section, in its entirety, shall survive the termination of this Agreement if any amount of work has been performed by Engineer. Nothing in this provision shall affect the limitations of liability of the City as set forth in Minnesota Statutes Chapter 466.
Engineer understands this provision may affect its rights and may shift liability.

Engineer shall defend and hold and save the City, its officers, employees, representatives and agents, and the Architect, harmless from liability of any nature or kind, including costs and expenses, for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the City, unless otherwise specifically stipulated in the Technical Specifications.

F. TERMINATION

1) This agreement may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill its obligation under this agreement through no fault of the terminating party; provided that no such termination may be affected unless the other party is given not less than fifteen (15) calendar days' prior written notice (delivered by certified mail, return receipt requested) of intent to terminate.

2) This agreement may be terminated in whole or in part in writing by the City for its convenience; provided that the Engineer is given (1) not less than fifteen (15) calendar days' prior written notice (delivered by certified mail, return receipt requested) of intent to terminate and (2) an opportunity for consultation with the City prior to termination.

3) Upon receipt of a notice of intent to terminate from the City pursuant to this agreement, the Engineer shall (1) promptly discontinue all services affected (unless the notice directs otherwise), and (2) make available to the City at any reasonable time at a location specified by the City all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have accumulated by the Engineer in performing this agreement, whether completed or in process.

4) Upon termination pursuant to this agreement, the City may take over the work and prosecute the same to completion by agreement with another party or otherwise.

G. LAWS, RULES AND REGULATIONS

The Engineer agrees to observe and comply with all laws, ordinances, rules and regulations of the United States of America, State of Minnesota, the City of Duluth and their respective agencies and instrumentalities which are applicable to the work and services to be performed hereunder.

H. INDEPENDENT CONTRACTOR STATUS

Nothing contained in this agreement shall be construed to make the Engineer an employee or partner of the City. The Engineer shall at all times hereunder be construed to be an independent contractor.

I. FEDERAL FUNDING

If Federal Funds (i.e. HUD, FEMA, Revenue Sharing) are utilized as a source of Project funding, the Engineer shall abide by the terms of all Federal requirements in the performance of duties hereunder.

J. AMENDMENT OF AGREEMENT

This agreement shall be amended or supplemented only in writing and executed by both parties hereto.

K. WAIVER OF CLAIM

The Engineer waives the right to make any claim whatsoever against any officer, agent or employee of the City for, or on account of, anything done, or omitted to be done, in connection with the drafting or ratification of this contract. In addition, if it is determined that this contract was not drafted or ratified in conformity with Minnesota or federal law, or City of Duluth ordinance or charter provisions, or if the contract includes obligations that are void as to Minnesota or federal law or City of Duluth ordinance or charter provisions, the Engineer agrees to raise no defense and make no claim against the City on the basis of ratification, laches, estoppel, or implied contract. **The Engineer understands this provision may affect its rights and may shift liability and specifically agrees to the same.**

SECTION V. PAYMENT

A. BASIS OF BILLING

City shall pay the Engineer based on hourly rates for all services rendered under Section II Phases A through G, an amount not to exceed the amount in Section V.C, including any and all Project-related expenses such as travel, reproduction of reports and drawings, tolls, mileage, etc. For the purposes of this agreement, the principals and employees of the Engineer and their hourly rates are set forth in Exhibit A.

B. PAYMENT FOR WORK COMPLETED

1) Monthly progress payments may be requested by the Engineer for work satisfactorily completed and shall be made by the City to the Engineer as soon as practicable upon submission of statements requesting payment by the Engineer to the City. When such progress payments are made, the City may withhold up to five percent (5%) of the vouchered amount until satisfactory completion by the Engineer of all work and services within a phase called for under this agreement. When the City determines that the work under this agreement for any specified phase hereunder is substantially complete, it shall release to the Engineer any retainage held for that phase.

2) No payment request made pursuant to subparagraph 1 of this Section V shall exceed the estimated maximum total amount and value of the total work and services to be performed by the Engineer under this agreement without the prior authorization of the City. These estimates have been prepared by the Engineer and supplemented or accompanied by such supporting data as may be required by the City.

3) Upon satisfactory completion of the work performed hereunder, and prior to final payment under this agreement, and as a condition precedent thereto, the Engineer shall execute and deliver to the City a release of all claims against the City arising under or by virtue of this agreement.

4) In the event of termination by City under Section IV.F., upon the completion of any phase of the Basic Services, progress payments due Engineer for services rendered through such phase shall constitute total payment for such services. In the event of such termination by City during any phase of the Basic Services, Engineer also will be reimbursed for the charges of independent professional associates and consultants employed by Engineer to render Basic Services, and paid

for services rendered during that phase on the basis of hourly rates defined in Exhibit A of this agreement for services rendered during that phase to date of termination by Engineer's principals and employees engaged directly on the Project. In the event of any such termination, Engineer will be paid for all unpaid additional services plus all termination expenses. Termination expenses mean additional expenses directly attributable to termination, which, if termination is at City's convenience, shall include an amount computed as a percentage of total compensation for basic services earned by Engineer to the date of termination as follows: 10% of the difference between the amount which the Engineer has earned computed as described in paragraphs A and B of this section and the maximum payment amount described in paragraph C of this section. The above applies only if termination is for reasons other than the fault of the Engineer.

C. TOTAL NOT TO EXCEED:

All payments under this Contract are not to exceed **One Hundred Thirty-Eight Thousand, Eight Hundred Ninety-Eight and 00/100 Dollars** ($**138,898.00**).

SECTION VI. SPECIAL PROVISIONS

The following exhibits are attached to and made part of this agreement:

1) Exhibit A, Engineer's Hourly Rates
2) Exhibit B**,** Engineer's Proposal

In the event of a conflict between the agreement and any Exhibit, the terms of the Agreement will be controlling.

SECTION VII. COUNTERPARTS

This Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original as against any party whose signature appears thereon, but all of which together shall constitute but one and the same instrument. Signatures to this Agreement transmitted by facsimile, by electronic mail in "portable document format" (".pdf"), or by any other electronic means which preserves the original graphic and pictorial appearance of the Agreement, shall have the same effect as physical delivery of the paper document bearing the original signature.

[Remainder of this page intentionally left blank. Signature page to follow.]

IN WITNESS WHEREOF, the parties have hereunto set their hands on the date of attestation shown below.

CITY OF DULUTH-Client

By: _____
Mayor

Attest:

By: _____
City Clerk

Date: _____

Countersigned:

_____
City Auditor

Approved as to Form:

_____
City Attorney

LHB, INC.

By: _____

Its: _____
Title of Representative

Date: _____

LHB BRAUN INTERTEC

WORK PLAN

EXHIBIT A

PROJECT NAME **Campus Connector Segment 6**
CLIENT **CITY OF DULUTH**
PREPARER **LHB**

PROJECT NUMBER **230505**
DATE **07/20/2023**

COST PROPOSAL

		LHB															
		Jon Siiter	Megan Goplin	Adam Beissel	Adam Besse	Nathan Bruno	Kyle Marynik	Austen Bryan	Heidi Bringman	Steve Hohenstein	Paul Vogel	Tony Hanson	Joe Litman	Linda Nelson			
Work Task	Description	Project Principal	Project Manager	Roadway/Trail Engineer	Utility Lead	Drainage Lead	Structural Engineer	Lighting Lead	Visual Quality Lead	Senior Technician	Land Surveyor	Survey Tech	Quality Manager	Admin	TOTAL HOURS	TOTAL EXPENSES	TOTAL LABOR COST PER TASK	TOTAL COST PER DELIVERABLE
1.00	**INITIAL SITE VISITS AND CONSULTATIONS**	**10**	**18**	**7**	**0**	**0**	**2**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**41**	**$ -**	**$ 6,077.00**	**$ 6,077.00**
1.01	Gather and review existing information / Initial Site Visit	2	2	4			2										$ 1,370.00	$ 1,370.00
1.02	Project Management & Consultant Team Coordination	2	8														$ 1,596.00	$ 1,596.00
1.03	(3) Status Meetings with City	6	6														$ 2,052.00	$ 2,052.00
1.04	Gopher State One Call & Utility Verification			1													$ 113.00	$ 113.00
1.05	Parking Commission exhibits and meeting attendance (1)		2	2						4							$ 946.00	$ 946.00
2.00	**PUBLIC & STAKEHOLDER ENGAGEMENT**	**0**	**24**	**18**	**0**	**0**	**0**	**0**	**24**	**28**	**0**	**0**	**0**	**0**	**94**	**$ -**	**$ 12,194.00**	**$ 12,194.00**
2.01	(3) Public Meetings		16	12					16	16							$ 7,852.00	$ 7,852.00
2.02	(3) Meeting with ISD 709/Congdon School		8	6					8	12							$ 4,342.00	$ 4,342.00
3.00	**RECONNAISSANCE, FIELD SURVEYS, & GEOTECHNICAL**	**2**	**7**	**10**	**0**	**0**	**0**	**0**	**0**	**36**	**20**	**60**	**0**	**0**	**135**	**$ 1,750.00**	**$ 16,098.00**	**$ 17,848.00**
3.01	Field Survey & Mapping		2	4						20	12	40				$ 1,750.00	$ 9,116.00	$ 10,866.00
3.02	Right-of-way and easement assistance	1	2	4						12	8	20					$ 5,694.00	$ 5,694.00
3.03	Permitting	1	2														$ 494.00	$ 494.00
3.04	Geotechnical investigation (Braun)																See Sub-Consultants Below	
3.05	Identification and coordination of tree removals with City (Prior to 11/1/26)		1	2						4							$ 794.00	$ 794.00
4.00	**PRELIMINARY RECOMMENDATIONS AND COSTS**	**5**	**12**	**16**	**0**	**3**	**0**	**0**	**0**	**24**	**0**	**0**	**0**	**0**	**60**	**$ -**	**$ 7,516.00**	**$ 7,516.00**
4.01	Analyze Records, Reports, and Data	1	2	4		2											$ 1,238.00	$ 1,238.00
4.02	Develop Design and Cost Alternatives (Assumes 2 Alternatives)	4	8	12		1				24							$ 5,974.00	$ 5,974.00
4.03	Meet with Project Engineer to Select Preferred Alternatives		2														$ 304.00	$ 304.00
5.00	**PRELIMINARY DESIGN**	**5**	**27**	**22**	**0**	**20**	**12**	**0**	**0**	**32**	**0**	**0**	**0**	**2**	**120**	**$ -**	**$ 15,380.00**	**$ 15,380.00**
5.01	Set Horizontal and Vertical Alignment Geometrics		4	12						12							$ 3,212.00	$ 3,212.00
5.02	Preliminary Cross Sections		4	4						12							$ 2,308.00	$ 2,308.00
5.03	Existing Retaining Wall Evaluation for Sufficiency - Rec. Memo	1					4										$ 658.00	$ 658.00
5.04	Preliminary Retain Wall Plans	2					4			8							$ 1,680.00	$ 1,680.00
5.05	Preliminary Stormwater Layout		1			6											$ 1,028.00	$ 1,028.00
5.06	Hydrology					4											$ 584.00	$ 584.00
5.07	Preliminary Hydraulics Report to State Aid					8											$ 1,168.00	$ 1,168.00
5.08	City Utility Design Mtgs (1 Meeting Storm)		2			2											$ 596.00	$ 596.00
5.09	Third party utility coordination meeting		2	4										2			$ 944.00	$ 944.00
5.10	ADA Design and Field Review		2	2													$ 530.00	$ 530.00
5.11	Prepare Draft Project Memo	1	8				4										$ 1,874.00	$ 1,874.00
5.12	Final Project Memo	1	4														$ 798.00	$ 798.00
6.00	**FINAL DESIGN**	**18**	**39**	**100**	**4**	**38**	**66**	**0**	**0**	**272**	**0**	**0**	**4**	**5**	**546**	**$ -**	**$ 64,176.00**	**$ 64,176.00**
6.01	Title Sheet (1 sheet)		1							4							$ 568.00	$ 568.00
6.02	Statement of Estimated Quantities and Notes (2 sheets)		4	8		2				4							$ 2,220.00	$ 2,220.00
6.03	Standard Plates, Chart Index and Construction Notes (1 sheet)		1	4						4			1				$ 1,215.00	$ 1,215.00
6.04	Quantity Tabulations (8 sheets)		2	8	1	6				24							$ 4,760.00	$ 4,760.00
6.05	Typical Sections (2 sheets)		2	8						12							$ 2,456.00	$ 2,456.00
6.06	Alignment Sheets (2 sheets)			2						8							$ 1,058.00	$ 1,058.00
6.07	Existing Conditions (2 Sheets)		2	6		2				12							$ 2,522.00	$ 2,522.00
6.08	Construction Details (Approx. 16 sheets)		2	6	1	4				12							$ 2,994.00	$ 2,994.00
6.09	ADA Intersection Layouts and Details (4 sheets)		4	8						24							$ 4,008.00	$ 4,008.00
6.10	Erosion Control Plan & SWPPP (6 sheets)		1			12				8							$ 2,736.00	$ 2,736.00
6.11	Construction Plan and Profile (3 sheets) @ 1" = 20' scale		4	16	1	4				32			1				$ 6,703.00	$ 6,703.00
6.12	Drainage Profiles (3 sheets)					8				4							$ 1,584.00	$ 1,584.00
6.13	Street Lighting (Assumed not included)																$ -	$ -
6.14	Earthwork Summary (1 sheet)		1	6						16							$ 2,494.00	$ 2,494.00
6.15	X-Sections @ 50' + Intersections 4 per sheet (8 sheets)		2	8						16							$ 2,872.00	$ 2,872.00
6.16	Retaining Wall Plans	16					60			80			1				$ 18,575.00	$ 18,575.00
6.17	Traffic Control and Permanent Signing/Pavement Markings (est. 6 Sheets)		2	16						8							$ 2,944.00	$ 2,944.00
6.18	Third Party Utility Relocation Letters / Coordination		2	2						4				1			$ 1,040.00	$ 1,040.00
6.19	Re-verify Utilities as Required 90 Days Before Construction		1	2													$ 378.00	$ 378.00
6.20	Special Provisions (Grading & Structural)	2	8		1		6						1	4			$ 3,049.00	$ 3,049.00
7.00	**COST ESTIMATES**	**2**	**4**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**11**	**$ -**	**$ 1,651.00**	**$ 1,651.00**
7.01	Project Estimates at Preliminary, 30%, 60%, 90% and 100%	2	4				4						1				$ 1,651.00	$ 1,651.00
8.00	**PROJECT BIDDING**	**1**	**6**	**38**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**45**	**$ -**	**$ 5,396.00**	**$ 5,396.00**
8.01	Bidding Assistance	1	2	2													$ 720.00	$ 720.00
8.02	Construction Administration		4	36													$ 4,676.00	$ 4,676.00
	TOTAL HOURS	**43**	**137**	**211**	**4**	**61**	**84**	**0**	**24**	**396**	**20**	**60**	**5**	**7**	**1052**			
	COST PER HOUR	$ 190	$ 152	$ 113	$ 180	$ 146	$ 117	$ 180	$ 150	$ 104	$ 180	$ 103	$ 195	$ 94				
	TOTAL COST	**$ 8,170**	**$ 20,824**	**$ 23,843**	**$ 720**	**$ 8,906**	**$ 9,828**	**$ -**	**$ 3,600**	**$ 41,184**	**$ 3,600**	**$ 6,180**	**$ 975**	**$ 658**				

SUMMARY

TOTAL LABOR	$ 128,488.00
TOTAL EXPENSES	$ 1,750.00
SUB CONSULTANTS (BRAUN-GEOTECH)	$ 8,660.00
TOTAL FEE	**$ 138,898**

CAMPUS CONNECTOR SEGMENT 6 DESIGN PHASE

Project #2167, SAP 118-090-027

CITY OF DULUTH

July 26, 2023

LHB

COPY

EXHIBIT B

July 26, 2023

Patrick Loomis, PE,
Project Engineer

City of Duluth -
Engineering Division

411 W. 1st Street, Room
240 City Hall

Duluth, Minnesota
55802-1191

ploomis@duluthmn.gov

RE: CAMPUS CONNECTOR SEGMENT 6 DESIGN PHASE, #2167, SAP 118-090-027

A critical element to the project's success will be assembling a team with the project background, proven experience, technical skills, and commitment to delivering a project that meets the City's goals, objectives, and schedule. The following advantages underscore our unique qualifications.

Project Knowledge and Expertise - LHB has a proven record delivering on trail designs for Safe Routes to School projects throughout Minnesota. One such project was the College Street Segment, constructed in 2016. Because of our successful collaboration on the College Street project, we will be teaming with some of the same members for the Campus Connector project. Our team's understanding of the design issues, the City's priorities, and the needs of the project, in addition to our relationships with other stakeholders – MnDOT, MnDNR, the Duluth School District, and Congdon Park neighborhood - will provide the City with efficient service and effective project delivery.

Comprehensive Team Skills - LHB has the right team to address the needs presented by the project's design requirements. Throughout our history of working on City, trail, and projects at and around Congdon Park Elementary School, we have shown a working understanding of multi-use trail standards, erosion control to protect trout streams, bicycle and pedestrian needs, and design in urban and campus settings. Our respective team members present the credentials, experience, and expertise to deliver on the core design needs.

Commitment to Quality - Plan set quality is paramount to a successful project. Our work with the City ensures we have the experienced staff to deliver plans that will serve the City's needs, throughout the design process and into construction. Our team is fluent in City and MnDOT design standards and procedures, and we commit team resources to check and cross-check work products in accordance with our rigid quality control protocol to provide high-quality deliverables.

Capacity and Delivery - Our project team is ready and committed to delivery of this project on a schedule that meets or exceeds the City's timeline for delivery. We have the staff available and poised to make an immediate impact on this project and drive solutions and outcomes in the near term. Our proposal includes preparing a detailed schedule that expands on the City's timeline in the RFP which we intend to use to ensure key milestones and deliverables are provided on time.

Jon Siiter, PE
Project Principal
Jon.Siiter@LHBcorp.com
d 218.279.2456 **c** 218.590.0048

Megan Goplin, PE
Project Manager
Megan.Goplin@LHBcorp.com
d 218.249.7152 **c** 608.239.9471

21 West Superior Street, Suite 500, Duluth, MN 55802
General 218.727.8446 Fax 218.729.2507 | www.LHBcorp.com

PROJECT UNDERSTANDING

The City of Duluth (City) is requesting engineering proposals for the construction of Campus Connector Segment 6, connecting the existing shared use path along Tischer Creek to the Lakewalk at 32nd Avenue East. Federal Transportation Alternative Program (TAP) funding will be used for the construction of shared-use paths, and other associated pedestrian and bicycle facilities such as walks and pedestrian ramps. Congdon Park Drive from East 1st Street to Superior Street would be reconstructed as part of the project. The non-participating street work will use local funds. Plans and specifications will be in accordance with Federal Aid, MnDOT State Aid and City of Duluth Standards. LHB has a thorough understanding of the requirements of the City of Duluth, Federal and MnDOT State Aid and has worked on several similar projects in the City of Duluth and greater Minnesota.

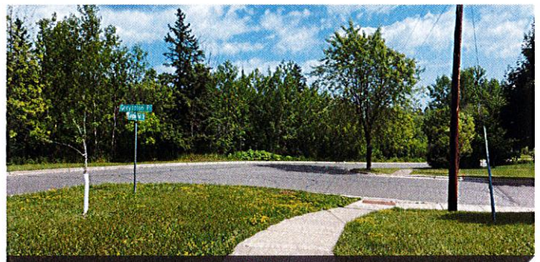
Segment 6:

This segment will consist of the reconstruction of Congdon Park Drive from East 1st Street to Superior Street. The new 20-foot-wide bituminous roadway section will include curb and gutter on both sides and an 8-foot-wide bituminous shared-use path on the east side to connect to the existing path that ends at 1st Street. Storm water system upgrades will be part of the street reconstruction to manage a 10-year storm event and provide water quality as determined by the City's stormwater engineer.

Congdon Park Drive and Superior Street Intersection

The project will also include intersection enhancements at the intersection of Superior Street and Congdon Park Drive. These are expected to include pedestrian ramp upgrades at all four quadrants to meet ADA standards, curb extensions and possibly a concrete center median. This intersection is located adjacent to Congdon Elementary School and serves as an important crossing location for students and parents walking to school from the Congdon neighborhood north of Superior Street. Recently, a 20-mph school speed zone was implemented in the area because of concerns about crossing safety at this location.

From Superior Street to the Lakewalk connection, the 8-foot-wide bituminous shared-use path is expected to be constructed along the east side of Congdon Park Drive and 32nd Avenue East. From Superior Street to 32nd Ave East there is no existing sidewalk on the east side of the roadway. There is a narrow grass boulevard along the back of curb then the grade drops off steeply down to Tischer Creek. This area is expected to require an approximately 7-foot-high retaining wall with a railing mounted on top. In addition, there will be some utility impacts with this path alignment. A Minnesota Power utility pole would likely need to be relocated, as well as a fire hydrant at the SE quadrant of Greysolon and 32nd Avenue East.


The utility pole may need relocation at the Greysolon Place intersection

In addition to the intersection improvements at Superior Street, pedestrian ramp improvements at Greysolon Place and Greysolon Road will be needed to meet ADA standards. Consideration should also be made for ADA pedestrian ramp improvement, and a crossing, at the entrance to the Congdon School parking lot. Level 3 ADA pedestrian ramp design will be needed for all quadrants of all intersections within the project.


ADA improvements and the entrance to Congdon School to be considered

For the lower portion of this segment, the shared-use path is expected to run along the east side of 32nd Avenue East until it meets up with the existing Lakewalk trail. The path would replace the existing sidewalk along this stretch. Existing driveways impacted by the trail construction will be reconstructed with new concrete aprons extending through the shared-use path, and connections to private walks and steps will be maintained.


Lakewalk Trail connection at 32nd Avenue East

1. GOALS AND OBJECTIVES

The general goals and objectives for the project includes:

- Connect existing shared-use path segments to complete the connection from the Tischer Creek Trail to the Lakewalk, moving towards the goal of completing the Campus Connector trail network.
- Improve safety for pedestrians and bicyclists at Superior Steet and Congdon Park Drive.
- Improve accessibility for all users.
- Improve the function, performance, and durability of Congdon Park Drive from 1st Street to Superior Street through reconstruction.
- Engage and collaborate with stakeholders, including ISD 709 and Congdon Park Elementary leaders, residents, business owners, and bike and ped advocacy groups.
- Manage the project design and probable construction costs to meet the City's budget, schedule, and requirements.

Issues and Opportunities

Federal Aid Funding: The use of federal funds on the project will require the completion of a MnDOT Project Memorandum (PM). The PM will evaluate potential social, economic, and environmental (SEE) impacts related to the proposed project. We have included a task for completion and approval of a Project Memorandum for this segment. The different funding sources will require separate tracking in the project SEQ and estimates. LHB has a proven track record of delivering both State Aid and Federal Aid projects and we understand the importance of getting this process started early in design.

Utility Coordination: Robust utility coordination will be an important part of the project. LHB will follow MnDOT's utility coordination process to identify and mitigate potential crossing conflicts and impacts to above ground utilities. There are overhead utilities present near the proposed shared-use path that will likely be impacted. There is also a 'SICK' traffic sensor system near the intersection of 32nd Avenue East and Greysolon for detecting and warning traffic if they are over height prior to the railroad bridge. One of the poles for this system may be impacted by the path construction. Early engagement with the third-party utility providers is critical in making sure the project schedule is met, and to reduce conflicts during construction.

32nd Ave. E. & Greysolon 'SICK' sensor alerts traffic if over height limit

Site investigation, Survey, & Geotechnical: LHB will collect a full topographic survey for the project, including all surface features within the project limits necessary to complete the design. The survey will provide enough information for the design team to coordinate tie-ins at the project perimeter as well as provide level 3 ADA ramp design at all intersections. We will also provide right-of-way mapping based on existing monuments and documents. Having accurate right-of-way mapping to identify the need for easements early in the process will be important. Our team will provide easement language and exhibits necessary to support obtaining any required easements. The survey will be supplemented by information provided by the City in the form of GIS utility mapping and record drawings, as well as information gathered during the utility coordination process and site visits, to create a complete base map.

LHB's structural engineers will assess the need for new retaining walls and will examine existing retaining walls along the project to evaluate condition and determine if they will be able to withstand construction. If new retaining walls are required or if existing retaining walls need replacement, LHB can add retaining wall design as an additional service.

Existing utilities will be evaluated

We have partnered with Braun Intertec to provide geotechnical services for the project. Braun's investigation will include soil borings every 400 feet, with additional cores as needed to determine the location of bedrock. The findings will be summarized in a geotechnical report along with recommendations for utility excavation, design, and construction of roadway, estimated R-value, and pavement design.

Stakeholder Participation: Our team is familiar with the neighborhoods surrounding this project and recognizes the importance of engaging with stakeholders. This project traverses a mostly residential neighborhood and stakeholders include residents, Independent School District 709, Congdon Park Elementary School leaders and families, and bike and ped advocacy groups. We expect to hear concerns about the crossing of Superior Street and ideas for improving safety for elementary students. We will likely also hear concerns about preserving mature boulevard trees along the project, especially along 32nd Avenue East. We anticipate three public engagement meetings as part of the project. Three additional meetings are expected with ISD 709. Our team will also provide exhibits required for parking commission approval and will attend at least one parking commission meeting. LHB has led the public engagement process on several projects throughout the City of Duluth and is committed to engaging with stakeholders in a respectful way in an effort to make sure their concerns are heard and incorporated into the design where feasible.

1. GOALS & OBJECTIVES, CONT.

Mature trees

Street Lighting: It is assumed that new street lighting will not be part of the project and that existing lighting will be maintained. If street lighting is added to the scope, our team can provide that design as an additional service. This would include coordination with the City to select appropriate dark sky fixtures and performing lighting calculations to ensure required light levels are met.

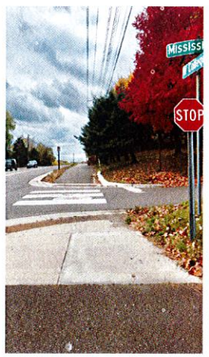
We assume no new street lighting will be part of the project at this time

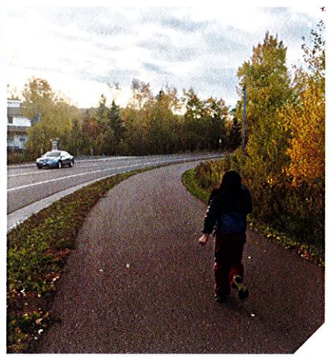
Phasing and Traffic Control: Coordination and phasing will be important to make sure that disruptions to vehicles, pedestrian and bicycle traffic is reduced to the extent possible. Coordination with stakeholders will help the team understand the critical routes for residents and businesses, and work to stage the project in a way that minimizes disruptions where possible. Every effort will be made to avoid major construction work adjacent to Congdon Elementary School when school is in session.

Stakeholders may include residents, Congdon School, bike/ped groups, etc.

The team at LHB is pleased to provide this proposal for the opportunity to be a part of improving our community though this important project. Our work in the community over the years along with our knowledge of the City of Duluth and State and Federal Aid requirements, make us uniquely qualified to deliver a coordinated design and a successful project.

2. EXPERIENCE:





LOWELL TO LAKEWALK TRAIL
City of Duluth | Duluth, MN

This Safe Routes to School trail is a 10-ft, shared-use path travelling along College Street from 19th Avenue East to Kenwood Avenue, connecting the University of Minnesota-Duluth and College of St. Scholastica. The project is part of the larger, approximately 4.5-mile-long, proposed Lowell to Lakewalk Trail System which will interconnect Duluth's Lowell Elementary School, Congdon Park, Chester Park, and Kenwood neighborhoods with the Lakewalk trail system near London Road. LHB considered a number of possible courses for the trail. LHB worked with a variety of stakeholder groups along the route including residents, the educational systems, Northwoods Children's Home, Unitarian Universalist Congregation, St. Louis County, MnDNR, and USACE.

ESKO TRAIL
Carlton County | Esko, MN

The 0.7 mile Esko trail provides a critical link between the community and the schools as well as linking many community areas to this vital trail system. Construction was completed in 2013. The goal of this "Safe Routes to Schools" project was to develop a non-motorized, shared-use trail connection with the Carlton County Transportation Department between the residential areas in Esko to the school. This connector trail link provides bicyclists, pedestrians, and in-line skaters access to a variety of destinations as it works its way safely through Esko. In the planning and public participation engagement phases of this project, LHB worked closely with the Carlton County Transportation Department, Esko City staff, and the public. LHB engaged local residents and businesses to provide their input about the corridor.

2. EXPERIENCE CONT.:

TH 61 GRAND MARAIS RECONSTRUCTION
MnDOT | Grand Marais, MN

Trunk Highway 61 is the key regional corridor connecting local communities and serving as a vital economic link for businesses, industry, and tourism along Lake Superior's North shore. The project reconstructed the roadway through the downtown core of Grand Marais. 3/4-mile of rural commercial corridor was converted to an urban section including new public utilities and ADA-compliant pedestrian and bike facilities. Traffic calming improvements included narrowing the roadway, delineating parking areas, and adding landscape amenities. Access was improved by consolidating roadway connection points and establishing standard entrances in lieu of less formalized connections. LHB's robust public engagement process addressed project impacts, staging, and sequencing to minimize construction disruption. The project accomplished its immediate goals to improve active transportation, safety, and tourism and business access.

PINE CITY BIKE TRAIL
Pine City Public Works | Pine City, Minnesota

This Safe Routes to School trail creates a critical link between the Twin Cities to Twin Ports trail, links many Pine City community areas, and provides a dedicated RRFB crossing across the St. Croix Scenic Byway / Main Street. It creates a primary link and trail artery from north to south, connecting numerous important areas from the Courthouse to the Pine City High School. With the trail amenities, this trail creates a non-motorized route for children and adults in the Pine County area. This connector trail link is approximately four miles in length and will provide bicyclists, pedestrians, and in-line skaters access to a variety of destinations as it works its way through Pine City. LHB worked proactively with Pine County, Pine City, and the school district to define and prioritize project goals, anticipate potential obstacles to successful completion, assist with funding requirements, and to maintain project schedules and deliver a successful project. LHB included county, public, and private agency stakeholders at the appropriate intervals, in individual and/or group meetings. This strategy helped to actively engage the private and government agencies in the public involvement process to become supporters and advocates for the project in an effort to simplify the process of obtaining ROW and permits. These agencies included: MnDOT, Federal Highway, City Departments, DNR, Pine County, Pine County School District, and the Pine City Council.

BIG RIVERS REGIONAL TRAIL
Dakota County | Eagan, MN

LHB designed the Minnesota River Greenway Phase I Federal Aid project, a trail that extends from Lone Oak Road to I-494. The project is part of the Minnesota River Greenway that will ultimately travel 17 miles across five cities. The Minnesota River Greenway incorporates and integrates the local environment to create a system where users and habitat can interact.

This winding, 10-foot-wide, bituminous trail section starts north of where the existing trail transitions to the I-494 pedestrian ramp. This extension allows users to travel south along TH 13, beneath the I-494 bridge, to a new trail gateway constructed at the intersection of TH 13 and Lone Oak Road. The section travels through an area that was a combination of trunk highway right-of-way and DNR parkland consisting of roadside ditches and wooded areas with brush. The trail's designed alignment minimized impacts to significant trees and wetlands.

LILYDALE REGIONAL PARK & TRAIL
City of St. Paul | St. Paul, MN

Lilydale Regional Park is a 636 acre park located in the south central Mississippi river flat area of Saint Paul. The park provides hiking and biking trails, fishing, and more. LHB has developed a master plan through an extensive public process for the redevelopment of the park. Phase I and II of the master plan are complete. Phase I construction consisted of the environmental remediation of two former land-fill sites. Remediation efforts have been required throughout road and trail construction based on the industrial history of the park.

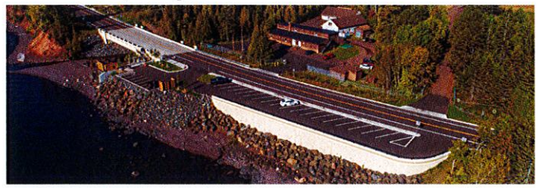
Other key design components of the park's development included a new parkway road, additional on and off road trails, rest areas, an open space park pavilion located on the shores of Pickerel Lake, and a gateway monument. The Pickerel Clearing site will include multiple park shelters and restroom facilities. LHB is planning a network of trails, including rustic hiking, multi-use paved, and boardwalks. With these projects, signage and environmental remediation programs have been implemented throughout the park. The Lilydale Gateway is the first project to receive funding through the Saint Paul Parks Conservancy.

2. EXPERIENCE CONT.:

SUPERIOR STREET RECONSTRUCTION

City of Duluth | Duluth, MN

The project consisted of full-depth street reconstruction and new signal systems. Utility work included a new water main and service laterals; a temporary water main to provide service during construction; converting the existing steam system to hot water; and a new storm sewer. Private utility work (MP electrical) occurred concurrently with the project. Project improvements included new streetscape elements consisting of decorative and accessible sidewalks, street furniture, landscaping, lighting, and other amenity features. Due to the number and complexity of the utility systems in the design, LHB delivered a complete 3D rendered model of the utilities along the entire project corridor, including inplace utilities identified by potholing and locating. Independent clash detection software was then utilized iteratively for each system to verify clearance and cover requirements. The project included structural retrofit or abandonment of inplace building vaults and areaways that consisted of subsurface building space extending out from the building and beneath the sidewalk of Superior Street. A cast-in-place retaining wall was constructed between 2nd and 3rd Avenues East on the lower side of Superior Street above a parking lot.



FRENCH RIVER BRIDGE & WAYSIDE REST

St. Louis County | Duluth, MN

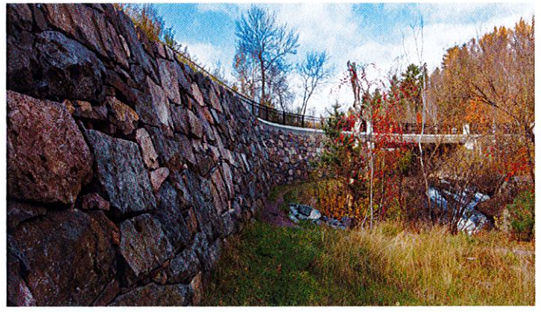
The project replaced Bridge 906 (MnDOT Bridge No. 69A70) an existing 99-year-old, 5-span, open spandrel arch bridge with a single-span prestressed beam structure, featuring high level aesthetics. A 22-foot-high, cast-in-place concrete retaining wall was built along the shore of Lake Superior to expand and improve the wayside facility. An ADA accessible interpretive wall and overlook structure near the mouth of the French River, a protected trout stream, documents the area's rich fisheries legacy, and sanitary and storm sewer upgrades protect Lake Superior's water quality. The nearly 900-foot-long urban design grading project was valued at $4.3M and opened to traffic in the fall of 2020.

CSAH 61 RETAINING WALL

St. Louis County | Duluth, MN

LHB provided design and construction administration services in connection with the construction of a cast-in-place concrete retaining wall to protect an existing wayside facility on CSAH 61 along Lake Superior, just northeast of Duluth, MN. The existing shoreline had suffered severe damage from high water levels and punishing storms. The popular wayside is the starting line for the Garry Bjorklund Half Marathon.

LHB's design focused on four core elements: an approximately 500-foot-long concrete retaining wall that incorporated a level of aesthetics consistent with its setting; a pedestrian link that improved access from the wayside parking area to the lakeshore; reconstruction of the in-place wayside parking area; and safety improvements along CSAH 61.



SKYLINE RETAINING WALL, CHESTER BOWL

City of Duluth | Duluth, MN

After Duluth's 100-year-flood event in June 2012, historic Skyline Parkway's retaining walls at Bridge No. L6115 required repairs. LHB investigated the site and provided topographic survey of the roadway, slopes, and existing retaining wall features. Coordination with multiple entities for geotechnical work, MnDNR permitting, MnDOT Cultural Resources Office, State Historic Preservation Office, and Federal ER Report preparation was conducted. The project was then broken into two regions - the Easterly Site (east of Bridge No. L6115) where the existing concrete retaining wall was extended to stabilize the slope - and the Westerly Site (west of Bridge No. L6115) where the existing large, dry stack stone, retaining wall was disassembled then connected to and reassembled in front of a new, cantilever concrete, retaining wall. LHB provided cost estimation, preliminary and final design plans in accordance with City of Duluth, MnDOT, and Federal plan requirements and submitted for MnDOT approval, and coordination from inspection through construction administration.

2. EXPERIENCE CONT.:

Key Staff

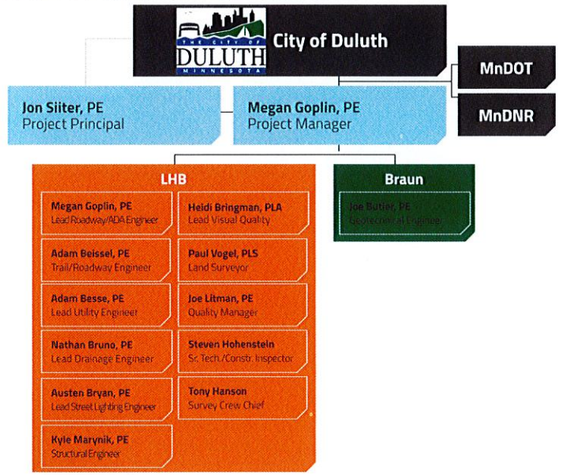
We have assembled a team of highly qualified professionals for each of the major project tasks who we feel will bring a great deal of value to the project. Each of our key team members has a set of unique and highly respected skills that make them a good fit with the respective project needs. As Project Principal, Jon Siiter will bring over 30 years of experience to the table. Jon has served in this role for many similar type projects and will be an invaluable resource for any overarching project issues, and in quality assurance, ensuring consistency and adherence to standards throughout the project. Megan Goplin will serve as Project Manager and will lead the design tasks. Megan has been practicing civil engineering for over 15 years and has extensive experience in public involvement, and pedestrian and roadway design including geometric layout, utility design, and project management.

The following team members will assist with this project: Adam Beissel will provide roadway/paved trail design; Adam Besse will serve as Lead Utility Engineer; Nathan Bruno is Lead Drainage Engineer; Heidi Bringman will lead the visual quality efforts; Electrical Engineer Austen Bryan specializes in power relocation and lighting; Kyle Marynik is the Structural Engineer knowledgeable in retaining wall design. Paul Vogel, PLS, will lead Land Survey efforts with Tony Hanson as Survey Coordinator; Steven Hohenstein holds all critical MnDOT certifications for this type of work and will provide construction inspection, utilizing his extensive experience inspecting pavement construction; and Joe Litman, who brings his knowledge of Federal funding and years of design experience, as Quality Manager. Additionally, our long-standing partner Braun Intertec will bring the geotechnical experience of Joe Butler.

LHB and Braun have designated the leading people in our firms with the understanding needed to hit the ground running, and to provide a quality project for the City.

Federal Aid, Municipal State Aid, & City of Duluth Street and Utility Standards

The City of Duluth has been LHB's number one priority as a client: we hope the City would agree that we have an excellent record of delivery of projects on time and within budget. Our project staff have the working knowledge of City standards and practices garnered from several major and recent City projects that include multi-year phasing, State requirements, and work throughout Duluth, including projects along this trail system.



3. PERSONNEL:

JON SIITER

PE

Project Principal

Jon has been responsible for the design, construction and investigation/inspection of bridges and structures for 30 years. His experience includes new design, historic rehabilitation design and inspection of structures utilizing steel, reinforced concrete, prestressed concrete, post tensioned concrete, stone masonry, brick masonry and timber. Jon has been responsible for design engineering for numerous bridge structure types including haunched steel plate girder, flared continuous steel plate girder, rolled steel beam, steel truss, prestressed concrete girder, stone and brick masonry and concrete slab spans for various state, county and municipal agencies. He has also investigated and rated over 2,000 existing bridges and structures from simple timber spans to complex movable steel trusses.

Relevant Project Experience

CITY OF DULUTH | DULUTH, MN
First Street Retaining Wall Design

Congdon Boulevard Slope Repairs

ST. LOUIS COUNTY | DULUTH, MN
French River Bridge & Wayside Rest

MNDNR | LUTSEN, MN
Gitchi Gami Trail Bridge - Lutsen

MEGAN GOPLIN

PE (MN)

Project Manager/Lead Roadway/Trail

Megan brings over 15 years of professional experience in site, stormwater, utility, roadway, ADA and intersection design for both public and private clients. She offers extensive knowledge in national accessible building codes and is proficient in AutoCAD Civil 3D, including Federal and State-Aid projects. Megan has worked on many public roadway, trail and park projects for government clients. She is a strong advocate of client interaction and coordination with the project team throughout the design and construction process. Her responsibilities as Project Manager include monitoring in-house progress to achieve project milestones and provide project deliverables on schedule; day to day communication with the City's Project Manager; and communication with all of the project team members.

Relevant Project Experience

CITY OF DULUTH | DULUTH, MN
Lowell to Lakewalk Trail, Ph. 1
Western Waterfront Trail Workshop

DAKOTA COUNTY | VARIOUS
Big Rivers Regional Trail; Eagan, MN
Mississippi River Regional Trail East
North Creek Greenway
Babcock Trail, Inver Grove Heights, MN

LARRY BEACH CONSTRUCTION | NORTH BRANCH, MN
Turn Lane & Trail

3. PERSONNEL CONT.:

ADAM BEISSEL

PE

Trail/Roadway Engineer

Adam has almost 10 years of civil engineering experience specializing in site plan design. He is dedicated to a design and processes that integrates the needs of the client with those of the community, as well as applicable codes and standards. His project experience covers a broad spectrum, including large scale industrial facilities, city streets, and commercial building site plans. Adam has been part of these projects in a variety of capacities including design, construction inspection and administration, project management and owners representative.

Relevant Project Experience

CITY OF DULUTH
Superior Street Reconstruction

Lowell to Lakewalk Trail

East 1st Street & East 1st Street Alley

MNDOT | GRAND MARAIS, MN
TH 61 Mill & Overlay

DAKOTA COUNTY | EAGAN, MN
Big Rivers Regional Trail; Eagan, MN

ADAM BESSE

PE (MN)

Lead Utility Engineer

Adam has a combined 17 years of experience on construction and engineering projects, specializing in site and municipal design. His design skills include site grading, sanitary sewer conveyance, water distribution systems, site drainage, stormwater control and treatment systems, and roadway design. Adam is also experienced in construction administration, and construction site review.

Relevant Project Experience

CITY OF DULUTH
Superior Street Reconstruction, Utility Engineer

ESSENTIA HEALTH/CITY OF DULUTH/ MNPOWER | DULUTH, MN
Vision Northland Utility Projects, Utility Engineer

EVER-GREEN ENERGY | BULRINGTON, VT
Steam Plant Survey & Design, Utility Engineer

CITY OF GAND MARAIS; GRAND MARAIS, MN
Sewer Force Main Leak Repair, Engineer

CITY OF DULUTH | DULUTH, MN
Raleigh Street Reconstruction, Project Manager

NATHAN BRUNO

PE (MN)

Lead Drainage Engineer

Nathan has 17 years of design experience in civil engineering specializing in water resource engineering. His extensive experience includes designing storm water treatments ponds, storm sewer and other conveyance systems, bridge hydraulics, sanitary sewers, water mains, site grading and drainage plans, and SWPPP's for both public and private clients. He has extensive experience with MnDOT State Aid design standards and permitting standards including NPDES, Minnesota Department of Health, and BWSR, so he can assure compliance with permitting agencies. Nathan Duluth Water & Sewer Inspection certified, QPSWPPP certified, and uses structural and non-structural BMP's to meet treatment goals and design standards.

Relevant Project Experience

CITY OF DULUTH
Superior Street Reconstruction, Drainage Engineer

MNDOT | GRAND MARAIS, MN
TH 61 Mill & Overlay, Drainage Engineer

SRF | DULUTH, MN
Arrowhead Road, Kenwood Ave. & W. Cleveland, Drainage Engineer

AUSTEN BRYAN

PE (MN)

Lead Street Lighting Engineer

Austen's background includes power and control applications including power loading calculations (MV switchgear [4.16kV], MCC [480V], and LV distribution [120/240V]), power analysis and equipment/cable sizing, cable tray design and loading, motor control scheme developments/analysis, and material requisition development/approval drawing review. Austen is experienced in helping clients develop building layouts, control panel layouts, and detailed design associated with instrumentation control. He has experienced in pipeline pump station/terminal design including both new construction and existing facility integration.

Relevant Project Experience

MNDOT/ISTHMUS | CARLTON, MN
S.P. 0910-35 TH 210 Intersection

MNDOT | GARRISON, MN
S.P. 1804-90 Reconstruct and Roundabout on US 169

KYLE MARYNIK

PE (MN)

Structural Engineer

Kyle is a structural engineer for LHB's Bridge Design Group, with over 14 years of experience in bridge and structure design, evaluation, and construction administration. His educational background in civil engineering and industrial technology, paired with his exceptional design software, organizational, and communication skills, make him a key asset on complex, multifaceted projects. Kyle is able to respond to contractor and bridge inspector questions, visit the sites as needed, and develop effective and efficient solutions to a wide array of problems that can develop on bridge construction projects.

Relevant Project Experience

ST. LOUIS COUNTY | DULUTH, MN
French River Bridge & Wayside Rest

CITY OF DULUTH | DULUTH, MN
Congdon Boulevard Slope Repairs

Skyline Retaining Wall at Chester Bowl

Twin Ponds Bridge & Wall Rehab

HEIDI BRINGMAN

PLA (MN), LEED AP BD+C, CDT, CCCA, MWPCP

Lead Visual Quality

Heidi is a licensed Landscape Architect with 22 years of experience, and works in LHB's Landscape Architecture and Planning Group. Heidi's areas of specialization include public engagement, site master planning, and the design of trails, parks, and public spaces for a variety of communities. She enjoys working on both small and large scale projects, and has assisted many municipal and private clients with establishing and implementing design standards.

Relevant Project Experience

CITY OF DULUTH | DULUTH, MN
Lakewalk & Brighton Beach

Western Waterfront Trail

Lakewalk Extension Feasibility Study

Lowell to Lakewalk Trail

CARLTON COUNTY | ESKO, MN
Safe Routes to School Pedestrian Trail

3. PERSONNEL, CONT.:

PAUL VOGEL

PLS (MN)

Land Surveyor

Paul has over 34 years of surveying experience and has provided services for various private and public clients. Paul's role is to complete and oversee a variety of professional assignments to facilitate the completion of roads, building sites, recreational areas, developments, and bridges. He performs ALTA/ACSM, boundary, cadastral, topographic, environmental site and route surveys, which involve section subdivision, right-of-way acquisition, and preparation of appropriate legal descriptions. Paul prepares design, concept plats, preliminary plats, final plats, site maps, and a variety of exhibits for land transfers, right-of-way acquisition, easements, and utility infrastructure. He also provides research, computations, layout, field work, drafting, and correspondence.

Relevant Project Experience

CITY OF DULUTH
Superior Street Reconstruction, Land Surveyor

ESSENTIA HEALTH/CITY OF DULUTH/ MNPOWER | DULUTH, MN
Vision Northland Utility Projects, Land Surveyor

CITY OF DULUTH | DULUTH, MN
Superior Street - Lester River Road to TH61

MNDOT | GRAND MARAIS, MN
TH 61 Mill & Overlay, Land Surveyor

ANTHONY HANSON

Survey Technician

Anthony has over 20 years of construction inspection and construction survey staking experience for roadway, bridge, and utility construction projects. His keen construction sense aids contractors early on in a project to help maintain design intent, meet the budget, and the adhere to the project's schedule. Anthony's depth of experience working directly with MnDOT on Trunk Highway construction projects for four construction seasons, as well as with LHB team members on State Aid and local bridge construction projects gives him unique skills and insight into the construction administration process and successful working relationships with contractors and various authorities with jurisdiction including private companies, municipalities and state agencies. He is certified in MnDOT Bridge Construction; MnDOT Bituminous Street; MnDOT Grading & Base I & II; MnDOT Concrete Field I & II; and MnDOT Aggregate Production.

Relevant Project Experience

CITY OF DULUTH
Superior Street Reconstruction

MNPOWER PROJECTS | VARIOUS LOCATIONS
4th Avenue Duct Bank

JOE LITMAN

PE

Quality Manager

Joe will ensure the project receives the necessary resources and that project quality is continually maintained. Joe's engineering background, including over 36 years at LHB, is in roadway design, bridge rehabilitation, and new bridge structure design. He has extensive involvement in the management, design, funding assistance, and construction administration of civil and structural projects. As LHB's Chief Operating Officer, Joe is part of the Operations Committee. He oversees the Quality Management System (QMS) and ensures quality issues across the company are reviewed on a monthly basis, and the QMS is audited annually.

Relevant Project Experience

DAKOTA COUNTY | VARIOUS
Mississippi River Regional Trail East; Rosemount, MN

Big Rivers Regional Trail; Eagan, MN

BOLTON & MENK | VARIOUS
CSAH 42 Trail; Dakota County, MN

Lower Sioux Pedestrian Bridge; Morton, MN

CITY OF DULUTH | DULUTH, MN
Congdon Boulevard Sheeting

JOE BUTLER

PE (MN)

Geotechnical Engineer

Joe is the lead project manager and engineer in Braun's Duluth office, and is responsible for daily oversight of our Duluth field and laboratory personnel. His work on geotechnical projects includes examining soil samples, design calculations, preparing recommendations for engineering reports, report compilation and monitoring project budgets. His work on construction testing projects includes oversight of field inspection and testing services, reviewing paperwork and tests for field services, monitoring budgets, communicating with clients and contractors, attending project meetings and troubleshooting issues.

Relevant Project Experience

MULTI-USE TRAIL | BLACKDUCK, MN

CONGDON BOULEVARD SLOPE REPAIRS | DULUTH, MN

CONSTRUCTION OF MESABI TRAIL SEGMENTS | FAYAL TOWNSHIP, MN

MIDWAY EAST WEST TRAIL PAVING | BEMIDJI, MN

MESABI TRAIL, CASH 7 TO MARBLE SEGMENT | WEST OF MARBLE, MN

STEVEN HOHENSTEIN

Sr. Tech./Constr. Inspector

Steven is certified in Duluth Water & Sewer Inspection, Duluth HDPE, MnDOT Aggregate Production; MnDOT Grading and Base I & II; MnDOT Bituminous Street; and MnDOT Concrete Field I & II. Steven has been with LHB for 15 years which, combined with his prior employment, totals 22 years of experience in the preparation of roadway and utility construction plans, inspection, surveying and construction administration. Steven's design and construction administration experience includes numerous State and Federal Aid funded projects. He is fluent in the requirements and processes of a State Aid funded project and has worked on a number of projects utilizing One Office documentation and administration software.

Relevant Project Experience

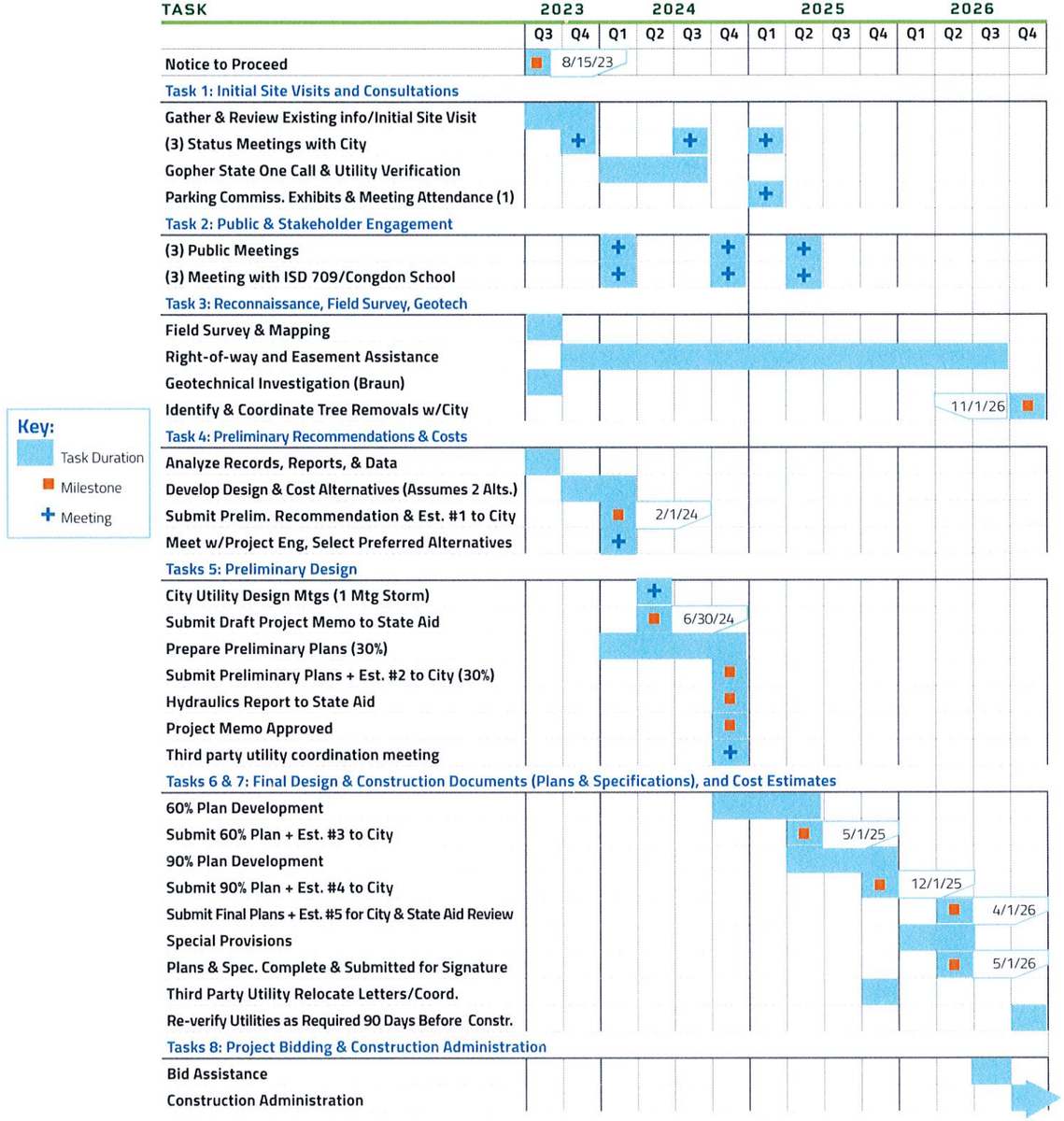
CITY OF DULUTH
Superior Street Reconstruction, Sr. Tech.

MNPOWER | DULUTH, MN
Vision Northland Utility Projects, Sr. Tech.

MNDOT | GRAND MARAIS, MN
TH 61 Mill & Overlay, Sr. Tech, Const. Insp.

CITY OF DULUTH | DULUTH, MN
Superior Street - Lester River Road to TH61, Sr. Tech, Const. Insp.

4. WORK PLAN (DETAILED ON FOLLOWING PAGE 10)



5. REFERENCES

ROBBIE HASS, PE
COOK COUNTY, HIGHWAY DEPARTMENT HEAD
609 EAST FOURTH AVENUE
GRAND MARAIS, MN 55604
(218) 387-3014, ROBERT.HASS@CO.COOK.MN.US

JINYEENE NEUMANN, PE
CARLTON COUNTY, COUNTY ENGINEER
1630 COUNTY ROAD 61
CARLTON, MN 55718-8170
(218) 384-9150, JINYEENE.NEUMANN@CO.CARLTON.MN.US

MICHAEL K. KALNBACH, PE
MNDOT DIST. 1, PROJECT ENGINEER
101 NORTH HOOVER ROAD
VIRGINIA, MN 55792
(218) 725-2745,MICHAEL.KALNBACH@STATE.MN.US

WORK PLAN

PROJECT NAME **Campus Connector Segment 6**
CLIENT **CITY OF DULUTH**
PREPARER **LHB**

PROJECT NUMBER **230505**
DATE **07/20/2023**

Work Task	Description	LHB Jon Siiter Project Principal	Megan Goplin Project Manager	Adam Beissel Roadway/Trail Engineer	Adam Besse Utility Lead	Nathan Bruno Drainage Lead	Kyle Marynik Structural Engineer	Austen Bryan Lighting Lead	Heidi Bringman Visual Quality Lead	Steve Hohenstein Senior Technician	Paul Vogel Land Surveyor	Tony Hanson Survey Tech	Joe Litman Quality Manager	Linda Nelson Admin	TOTAL HOURS
1.00	**INITIAL SITE VISITS AND CONSULTATIONS**	**10**	**18**	**7**	**0**	**0**	**2**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**41**
1.01	Gather and review existing information / Initial Site Visit	2	2	4			2								
1.02	Project Management & Consultant Team Coordination	2	8												
1.03	(3) Status Meetings with City	6	6												
1.04	Gopher State One Call & Utility Verification			1											
1.05	Parking Commission exhibits and meeting attendance (1)		2	2						4					
2.00	**PUBLIC & STAKEHOLDER ENGAGEMENT**	**0**	**24**	**18**	**0**	**0**	**0**	**0**	**24**	**28**	**0**	**0**	**0**	**0**	**94**
2.01	(3) Public Meetings		16	12					16	16					
2.02	(3) Meeting with ISD 709/Congdon School		8	6					8	12					
3.00	**RECONNAISSANCE, FIELD SURVEYS, & GEOTECHNICAL**	**2**	**7**	**10**	**0**	**0**	**0**	**0**	**0**	**36**	**20**	**60**	**0**	**0**	**135**
3.01	Field Survey & Mapping		2	4						20	12	40			
3.02	Right-of-way and easement assistance	1	2	4						12	8	20			
3.03	Permitting	1	2												
3.04	Geotechnical investigation (Braun)														
3.05	Identification and coordination of tree removals with City (Prior to 11/1/26)		1	2						4					
4.00	**PRELIMINARY RECOMMENDATIONS AND COSTS**	**5**	**12**	**16**	**0**	**3**	**0**	**0**	**0**	**24**	**0**	**0**	**0**	**0**	**60**
4.01	Analyze Records, Reports, and Data	1	2	4		2									
4.02	Develop Design and Cost Alternatives (Assumes 2 Alternatives)	4	8	12		1				24					
4.03	Meet with Project Engineer to Select Preferred Alternatives		2												
5.00	**PRELIMINARY DESIGN**	**5**	**27**	**22**	**0**	**20**	**12**	**0**	**0**	**32**	**0**	**0**	**0**	**2**	**120**
5.01	Set Horizontal and Vertical Alignment Geometrics		4	12						12					
5.02	Preliminary Cross Sections		4	4						12					
5.03	Existing Retaining Wall Evaluation for Sufficiency - Rec. Memo	1					4								
5.04	Preliminary Retain Wall Plans	2					4			8					
5.05	Preliminary Stormwater Layout		1			6									
5.06	Hydrology					4									
5.07	Preliminary Hydraulics Report to State Aid					8									
5.08	City Utility Design Mtgs (1 Meeting Storm)		2			2									
5.09	Third party utility coordination meeting		2	4										2	
5.10	ADA Design and Field Review		2	2											
5.11	Prepare Draft Project Memo	1	8				4								
5.12	Final Project Memo	1	4												
6.00	**FINAL DESIGN**	**18**	**39**	**100**	**4**	**38**	**66**	**0**	**0**	**272**	**0**	**0**	**4**	**5**	**546**
6.01	Title Sheet (1 sheet)		1							4					
6.02	Statement of Estimated Quantities and Notes (2 sheets)		4	8		2				4					
6.03	Standard Plates, Chart Index and Construction Notes (1 sheet)		1	4						4			1		
6.04	Quantity Tabulations (8 sheets)		2	8	1	6				24					
6.05	Typical Sections (2 sheets)		2	8						12					
6.06	Alignment Sheets (2 sheets)			2						8					
6.07	Existing Conditions (2 Sheets)		2	6		2				12					
6.08	Construction Details (Approx. 16 sheets)		2	6	1	4				12					
6.09	ADA Intersection Layouts and Details (4 sheets)		4	8						24					
6.10	Erosion Control Plan & SWPPP (6 sheets)		1			12				8					
6.11	Construction Plan and Profile (3 sheets) @ 1" = 20' scale		4	16	1	4				32			1		
6.12	Drainage Profiles (3 sheets)					8				4					
6.13	Street Lighting (Assumed not included)														
6.14	Earthwork Summary (1 sheet)		1	6						16					
6.15	X-Sections @ 50' + Intersections 4 per sheet (8 sheets)		2	8						16					
6.16	Retaining Wall Plans	16					60			80			1		
6.17	Traffic Control and Permanent Signing/Pavement Markings (est. 6 Sheets)		2	16						8					
6.18	Third Party Utility Relocation Letters / Coordination		2	2						4				1	
6.19	Re-verify Utilities as Required 90 Days Before Construction		1	2											
6.20	Special Provisions (Grading & Structural)	2	8		1		6						1	4	
7.00	**COST ESTIMATES**	**2**	**4**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**11**
7.01	Project Estimates at Preliminary, 30%, 60%, 90% and 100%	2	4				4						1		
8.00	**PROJECT BIDDING**	**1**	**6**	**38**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**45**
8.01	Bidding Assistance	1	2	2											
8.02	Construction Administration		4	36											
	TOTAL HOURS	**43**	**137**	**211**	**4**	**61**	**84**	**0**	**24**	**396**	**20**	**60**	**5**	**7**	**1052**