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EXHIBIT A

February 13, 2018

Duncan C. Schwensohn, PE
Senior Engineer
City of Duluth
411 West First Street, Room 211

**SUPERIOR STREET RECONSTRUCTION
LAKE AVENUE – 2ND AVENUE EAST (RE-DESIGN)
CITY PROJECT 1507TR
CITY CONTRACT NO. 22759**

The City is requesting revisions to the current project design between Lake Avenue and 2nd Avenue East to shorten the left turn lane at Lake Avenue and eliminate the center left turn lane between 1st Avenue East and 2nd Avenue East.

The proposed changes are intended to increase the pedestrian and bump out spaces along these blocks. The elimination of the 11-ft turn lane and center left turn lane from the roadway will add approximately 5.5-ft of additional walk width at each block face.

The current design included traffic study (SRF Report No. 013-8265, dated December 2, 2013) and design recommendations as follows (in part):

- At Lake Avenue: The westbound queuing issue identified under both existing and year 2017 p.m. peak hour conditions at the Superior Street/Lake Avenue intersection is expected to continue under year 2035 conditions. The westbound queue is expected to extend approximately 500 feet, which will impact all approaches of the 1st Avenue E intersection, and impede overall intersection operations.
- At Lake Avenue: It is recommended that the westbound left-turn phase be modified to a lagging phase at the Superior Street/Lake Avenue intersection.
 - A minimum of 100 feet of additional westbound left-turn lane storage is necessary to allow for efficient traffic operations. However, extending the westbound left-turn lane the entire length of the block would ensure that the westbound left-turning queue would not impede westbound through and right-turning vehicles at the Superior Street/Lake Avenue intersection.

The current design extends the turn lane the length of the block between Lake Avenue and 1st Avenue East. Turn lanes and center left turn lanes between 1st Avenue East and 2nd Avenue East are provided for intersection and operational symmetry and based on current use and operation

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along the block, including the Hart Ramp, and which are expected to continue. The proposed changes will benefit pedestrian activities and intersection crossing length at the affected blocks however they are also likely to cause operational issues during peak hours or higher parking demand at the Hart Ramp including back-ups in westbound and eastbound traffic along Superior Street and at the intersections.

The proposed curb revisions will require the following primary changes to the plan:

- Revisions and re-design to project curb lines/grades and surface grades along the street, parking lanes, and amenity zones to ensure connections to building entries.
- Revisions to storm sewer to the new curb locations.
- Revisions to other project utilities including hot water, steam, and water dur to the storm sewer adjustments.
- Re-design of intersection grading and ADA pedestrian ramps.
- Revisions to vault plans.
- Revisions to the proposed signal designs and APA push button locations.
- Revisions to the project lighting, handholes and conduit routing.
- Revisions to the streetscape plans to adjust streetscape amenities and special concrete layout.
- Revisions to the project SWPPP.
- Revisions to the project typical sections.
- Revisions to the project cross sections.
- Revisions to project tabulation charts and quantities to capture the changes.
- Revisions to other sheets to update the revised layout background for overall plan completeness.
- Updates and revisions to the City's One Office system for quantity tracking.
- Change order preparation and management to re-issue the affected sheets.

A detailed fee estimate is attached for your review.

We appreciate the opportunity to continue providing services for this project. Upon review if you have any questions concerning our proposal or would like to meet to review please do not hesitate to call.

LHB



Brad Scott, P.E.
Project Manager

Attachments: Fee Estimate Worksheet

c: LHB File # 150714

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COST PROPOSAL

Project Name **Superior Street Reconstruction**
 Client **City of Duluth**
 Preparer **LHB/SRH**

LHB Project Number **150714**
 City Project No. **1507**
 Date **2/2/2018**

Work Plan Task	Description	Project Principal	Project Manager	Project Engineer	Project Engineer	Project Engineer	Project Engineer	Civil Designer	Landscape Architect	Lead Technician	Civil Technician	Admin Asst.	Project Manager	Landscape Architect	Landscape Architect	Sr. Lighting Engineer	Lighting Engineer	Lighting Technician	Roadway Engineer	Sr. Traffic Engineer	Traffic Engineer	TC Engineer	Traffic Technician	Data Collection	Cost Estimating	Phasing/ Sequencing	Admin Asst.	Total Labor Costs (\$)	
		Joe Litman	Brad Scott	Nathan Bruno	Megan Goplin	Dan Shaw			Heidi Bringman					Barry Warner	Tim Wold	Bret Wieseler	Steve McHenry	Brent Jaspersen	Tom Richardson	Steve Prusak	Nick Erpelding	Luke James	Clay Bayer	Bri Betts	Tom Sachi	Roger Hendrickson	Curt Sohn		
1	Project Management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
2	Public Involvement & Coord. Mtgs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
3	Initial Site Visits and Consultations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
4	Reconnaissance and Field Surveys	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
5	Traffic Signal Design	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
6	30% Design	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
7	Final Design	13	144	127	175	64	24	227	0	327	74	49	0	18	0	1	3	0	0	32	50	12	0	0	0	0	0	\$ 147,480	
8	Lighting / Electrical Design	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
9	Streetscape	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
10	Construction Sequencing, Staging & Traffic Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
11	District Hot Water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
12	Cost Estimating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
13	Bidding Assistance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
TOTALS		13	144	127	175	64	24	227	0	327	74	49	0	18	0	1	3	0	0	32	50	12	0	0	0	0	0	0	\$ 147,480
OTHER DIRECT COSTS (ODC)																							SUMMARY						
Description																							Labor Cost \$ 147,480						
Travel (mileage at \$0.575/mile)																							Other Direct Costs \$ -						
Mail / Delivery																							Total Est Cost \$ 147,480						
Supplies/ Printing at Cost																													
Survey Equipment																													
Total ODC \$ -																							Total Est Costs \$ 147,480						

