



COST PROPOSAL

Project Name **Superior Street Reconstruction** LHB Project Number **150714**
 Client **City of Duluth** City Project No. **1507**
 Preparer **LHB/SRF** Date **1/8/2016**

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	TC Engineer	Traffic Engineer	Traffic Technician	Data Collection	Cost Estimating	Phasing/ Sequencing	Admin Asst.	Total Labor Costs (\$)	
		Joe Litman	Brad Scott	Nathan Bruno	Megan Goplin	Dan Shaw	Jon Siter		Heidi Bringman	Phil Barden				Barry Warner	Tim Wold	Bret Wieseler	Steve McHenry	Brent Jaspersen	Tom Richardson	Steve Prusak	Nick Erpelding	Scott Poska		Bri Betts	Tom Sachi	Roger Hendrickson	Curt Sohn		
1	Project Management	84	230	8	8	8	8	0	18	0	0	27	150	60	0	8	0	0	0	0	0	0	0	0	0	0	0	0	\$ 95,688
2	Public Involvement & Coord. Mtgs	31	60	0	40	0	0	6	40	0	0	6	52	24	0	0	0	0	0	8	0	0	0	0	0	0	0	\$ 38,564	
3	Initial Site Visits and Consultations	14	20	0	0	0	0	0	0	0	0	4	16	16	0	0	0	0	0	23	0	0	0	0	0	0	0	\$ 13,734	
4	Reconnaissance and Field Surveys	2	28	0	0	0	33	52	0	69	88	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 27,820	
5	Traffic Signal Design	6	24	0	0	0	16	0	0	16	0	0	0	0	0	0	0	0	0	440	0	540	630	120	0	0	20	\$ 183,662	
6	30% Design	24	274	164	88	4	20	230	0	260	0	0	8	0	0	0	0	0	260	65	80	62	0	0	0	0	0	\$ 174,715	
7	Final Design	65	947	453	346	0	82	1204	0	1362	668	16	0	0	0	0	0	0	40	55	0	170	0	0	0	0	0	\$ 564,568	
8	Lighting / Electrical Design	0	22	0	0	0	0	0	0	0	0	0	8	8	0	200	302	204	0	0	0	0	0	0	0	0	0	\$ 87,148	
9	Streetscape	4	56	0	0	0	0	0	64	0	0	0	83	366	633	0	0	0	0	0	0	0	0	0	0	0	0	\$ 132,169	
10	Construction Sequencing, Staging & Traffic Control	110	130	0	0	0	0	30	16	40	0	0	0	0	0	0	0	0	0	40	110	275	0	0	0	32	0	\$ 90,565	
11	District Hot Water	2	10	0	120	80	0	32	0	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 53,524	
12	Cost Estimating	12	42	0	0	0	9	0	0	0	0	0	8	12	8	0	0	0	0	5	0	15	0	0	36	0	0	\$ 22,911	
13	Bidding Assistance	7	12	0	0	0	0	0	0	4	0	0	6	10	0	4	0	0	0	6	0	0	0	0	0	0	0	\$ 7,156	
TOTALS		361	1855	625	602	92	168	1554	138	1989	756	66	331	496	641	212	302	204	300	642	190	1062	630	120	36	32	20	\$ 1,492,222	

OTHER DIRECT COSTS (ODC)	
Description	Cost
Travel (mileage at \$0.575/mile)	\$ 6,300
Mail / Delivery	\$ -
Supplies/ Printing at Cost	\$ 250
Survey Equipment	\$ 750
Total ODC	\$ 7,300

This proposal (3 pgs.) has been prepared and submitted by LHB Inc.
 Date: 1/8/16
 Submitted By: [Signature]

SUMMARY	
Labor Cost	\$ 1,492,222
Other Direct Costs	\$ 7,300
Total Est Cost	\$ 1,499,522
CDM Smith (Utility Specialist & Temp Water)	\$ 114,152
Barr (Environmental)	\$ 20,000
Total Est Costs	\$ 1,633,674

**WORK PLAN &
SUMMARY OF HOURS BY TASK**



Work 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	TC Engineer	Traffic Engineer	Traffic Technician	Data Collection	Cost Estimating	Cost Estimating	Phasing/ Sequencing	Admin Asst.	
		Joe Litman	Brad Scott	Nathan Bruno	Megan Goplin	Dan Shaw	Jon Suter		Heidi Bringman					Barry Warner	Tim Wold	Bret Wieseler	Steve McHenry	Brent Jaspersen	Tom Richardson	Steve Prusak	Nick Erpelding	Scott Poska		Bri Betts	Tom Sachi	Roger Hendricksor	Thomas Gorman	Curt Sohn	
Task 1 - Project Management		84	230	8	8	8	8	0	18	0	0	27	150	60	0	8	0	0	0	0	0	0	0	0	0	0	0	0	
1.01	Work Coordination (project tracking, billing, etc.)	20	60									4	30																
1.02	Correspondence	20	40									8	30																
1.03	Consultant Team Coordination	20	40										30																
1.04	PMT Meetings (10 Mtgs)	20	80	8	8	8	8		8			10	40	40		8													
1.05	SAC Meetings (5 Mtgs)	4	10						10			5	20	20															
Task 2 - Public Involvement and Coordination Meetings		31	60	0	40	0	0	6	40	0	0	6	52	24	0	0	0	0	0	8	0	0	0	0	0	0	0	0	
2.01	Public / Coordination Meetings (Includes Meeting Preparation)																				8								
2.02	Public Information Meetings (3 mtgs)	9	18						18			6	24	24															
2.03	Business/Building Owner Coordination Meetings (1 mtgs)	3	6						6				8																
2.04	One-on-One Business Owner Meetings & Coordination	16	30		40				16				12																
2.05	Utility Meeting	3	6						6				8																
Task 3 - Initial Site Visits and Consultation		14	20	0	0	0	0	0	0	0	0	4	16	16	0	0	0	0	0	0	23	0	0	0	0	0	0	0	
3.01	Internal Kick-off Meeting	8	8										8	8							8								
3.02	City Kick-Off Meeting and Information Gathering	6	6										8	8							15								
3.03	Meeting Minutes & Design Criteria Summary		6									4																	
Task 4 - Reconnaissance and Field Surveys		2	28	0	0	0	33	52	0	69	88	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4.01	Gopher One Call for Supplementary Survey							2				1																	
4.02	Vault Inventories (50 Vaults +/-) & Building Access Coordination		20					25	50		25	12																	
4.03	Retaining Walls Survey, Mapping & Structural Assessment	2	2					8			12	24																	
4.04	Supplementary Survey & Mapping		6								32	64																	
Task 5 - Traffic Signal Design		6	24	0	0	0	16	0	0	16	0	0	0	0	0	0	0	0	0	0	440	0	540	630	120	0	0	0	20
5.01	Alternatives Operations Analysis		4																		10		20						
5.02	Pedestrian Needs In-Field Assessment		4																		20								
5.03	Temporary Signal System Operations Analysis (Staging)		4																		10		40						
5.04	Signal Justification Reports		4																		50		170	50	120				
5.05	Temporary Signal Design and Specifications		4																		25		30	40					
5.06	Permanent Signal Design and Specifications (80 Sheets)		4																		305		280	540				20	
5.07	Design Meetings																				20								
5.08	Traffic Signal Foundations	6					16			16											260		80	62	0	0	0	0	
Task 6 - 30% Design		24	274	164	88	4	20	230	0	260	0	0	8	0	0	0	0	0	0	0	260	65	80	62	0	0	0	0	
6.01	Set Horizontal and Vertical Alignment Geometrics		80					80		40			8								200								
6.02	Preliminary Cross Sections	8	33							120																			
6.03	Retaining Wall Analysis for Rehabilitation/Replacement	4					20			20																			
6.04	Preliminary Water Layout		65					90		40																			
6.05	Temporary Water Layout (CDM Smith)	4	24																										
6.06	Preliminary Stormwater Layout		20	40																									
6.07	Hydrology			60																									
6.08	Preliminary Hydraulics			60				30																					
6.09	Preliminary Signal Layout, Phasing Analysis																				55	80							
6.10	State Aid Variance Submittal & Meeting	4	32					24		16																			
6.11	Util Design Mtgs (1-2 Meetings Ea per Water / Storm / HW)	4	16	4		4		6																					
6.12	ADA Design and Field Review		4		88					24									60										
6.13	Existing Signing Inventory and Layout																				10		40						

**WORK PLAN &
SUMMARY OF HOURS BY TASK**



Work 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	TC Engineer	Traffic Engineer	Traffic Technician	Data Collection	Cost Estimating	Cost Estimating	Phasing/ Sequencing	Admin Asst.	
		Joe Litman	Brad Scott	Nathan Bruno	Megan Goplin	Dan Shaw	Jon Suter		Heidi Bringman					Barry Warner	Tim Wold	Bret Wieseler	Steve McHenry	Brent Jaspersen	Tom Richardson	Steve Prusak	Nick Erpelding	Scott Poska		Bri Betts	Tom Sachi	Roger Hendricks	Thomas Gorman	Curt Sohn	
Task 7 - Final Design (60% and 90% Design)		65	947	453	346	0	82	1204	0	1362	668	16	0	0	0	0	0	0	40	55	0	170	0	0	0	0	0	0	
7.01	Title Sheet (1 sheet)		1								6																		
7.02	Statement of Estimated Quantities and Notes (4 sheets)	1	16	8	2					32																			
7.03	Standard Plates, Chart Index and Construction Notes (1 sheets)		4							4																			
7.04	Quantity Tabulations (20 sheets)	4	80	80	40			100		80	40									5		15							
7.05	Typical Sections (4 sheets)	4	24					30		32																			
7.06	Construction Details (30 sheets)	16	40	24	24			40		90												20							
7.07	ADA Intersection Layouts and Details (16 sheets)		25		176			30		40	30								40										
7.08	ADA Walk / Bldg Threshold Design Coordination		32		72			144																					
7.09	Concrete Paving Plans (12 Sheets)	2	72					144		24	48																		
7.10	Erosion Control Plan & SWPPP (15 sheets)		15	45						60	20																		
7.11	Temporary Water Service Plans (20 Sheets) - CDM Smith		16																										
7.12	Alignment Sheets (3 sheets)		18							24	12																		
7.13	Removals Plans (12 sheets)		96	48				72		120	60									10		40							
7.14	Construction Plan and Profile (12 sheets) @ 1" = 40' scale		336	144				384		480	240																		
7.15	Environmental Plan Sheets (4 Sheets)	2	6		24					32																			
7.16	Drainage Profiles (8 sheets)		16	80						60	40																		
7.17	Earthwork Summary (1 sheets)		12					30		40																			
7.18	X-Sections@ 50' + Intersections (120) 4 per sheet (30 sheets)		60					60		120	120																		
7.19	Retaining Walls																												
7.20	Gateway Tower (8 sheets)	8						40	80	80																			
7.21	Muffler Clinic (5 sheets)	8						32	60	60																			
7.22	Signing and Striping (34 Sheets)		8																		35	90							
7.23	Total = 418 Sheets (Includes Other Tasks)																												
7.24	Utility Relocation Letters / Coordination		12					24				8																	
7.25	Re-verify Utilities as Required 90 Days Before Construction		2					6																					
7.26	State Aid Hydraulics Submittal			16																									
7.27	City and MNDOT review Corrections		16	8	8			4		24	12																		
7.28	Special Provisions	20	40					6				8								5		5							
Task 8 - Lighting & Electrical Design		0	22	0	0	0	0	0	0	0	0	0	8	8	0	200	302	204	0	0	0	0	0	0	0	0	0	0	
8.01	Lighting Coordination meetings (2 trips Duluth, 8 conf calls)		8													32	32												
8.02	Lighting Analysis															20	40	20											
8.03	Preliminary Lighting/Electrical Layout		4										8	8		40	50	40											
8.04	60% Lighting/Electrical Design and Specifications		4													40	102	88											
8.05	95% Lighting/Electrical Design and Specifications (24 Sheets)		4													56	72	48											
8.06	Final Lighting/Electrical PS&E		2													12	6	8											
Task 9 - Streetscape		4	56	0	0	0	0	0	64	0	0	0	83	366	633	0	0	0	0	0	0	0	0	0	0	0	0	0	
9.01	Prepare 30% streetscape layout		16						10				20	60	110														
9.02	Prepare 60% streetscape layout, landscape, and detail plans		16						20				26	125	220														
9.03	Prepare 90% streetscape layout, landscape, and detail plans		12						20				30	155	275														
9.04	Prepare final (100%) streetscape plans and specifications (50 Sheets)		6						10				5	20	20														
9.05	Prepare final estimate of streetscape construction costs	4	6						4				2	6	8														
Task 10 - Construction Sequencing, Staging and Traffic Control		110	130	0	0	0	0	30	16	40	0	0	0	0	0	0	0	0	0	0	40	110	275	0	0	0	0	32	
10.01	Staging / Phasing Workshop Prep	6	6						16													20	10					16	
10.02	Staging Analysis, Layouts, Exhibits, Estimates	60	60					30		40											20		20					16	
10.03	Traffic Control Plans and Special Provisions (24 sheets)	24	24																			90	205						
10.04	Traffic Management	20	40																		20		40						
Task 11 - District Hot Water System		2	10	0	120	80	0	32	0	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11.01	Preliminary Hot Water Layout	1	4		30	24				70																			
11.02	Hot Water Layout Incorporated into Final Plans	1	4		70	32				120																			
11.03	Quantity Tabulations		2		12	8				16																			
11.04	Construction Details				8	16				32																			
Task 12 - Cost Estimating		12	42	0	0	0	9	0	0	0	0	0	8	12	8	0	0	0	0	0	5	0	15	0	0	0	0	0	
12.01	Construction Cost Estimating (30%)	4	12				3						2	3	2							5						14	
12.02	Construction Cost Estimating (60%)	6	24				3						3	3	3							5						14	
12.03	Construction Cost Estimate (90%)	2	6				3						3	6	3							5						8	
Task 13 - Bidding Assistance		7	12	0	0	0	0	0	0	4	0	0	6	10	0	4	0	0	0	0	6	0	0	0	0	0	0	0	
13.01	Attend Pre-Bid Conference	2	2										6																
13.02	Respond to Bidder Questions	4	6											8		4						4							