



**CITY OF CLOQUET
City Council Agenda
Tuesday, August 15, 2017
7:00 p.m.
City Hall Council Chambers**

CITY COUNCIL WORK SESSION

5:30 Shamrock Landfill Tour (meet at landfill site)

Roll Call.

2. **Pledge of Allegiance.**

3. **Approval of Agenda.**

a. Approval of August 15, 2017 Council Agenda

4. **Approval of Council Minutes.**

- a. Work Session Minutes from the August 2, 2017 meeting
- b. Regular Council Minutes from the August 2, 2017 meeting
- c. Special Meeting Minutes from the August 9, 2017 meeting

5. **Consent Agenda.**

Items in the Consent Agenda are considered routine and will be approved with one motion without discussion/debate. The Mayor will ask if any Council members wish to remove an item. If no items are to be removed, the Mayor will then ask for a motion to approve the Consent Agenda.

- a. Resolution No. 17-71, Authorizing the Payment of Bills
- b. Temporary On-Sale Liquor License – Cloquet Educational Foundation

6. **Public Hearings.**

None.

7. **Presentations.**

None.



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8. Council Business.

- a. Resolution No. 17-72, A Resolution Awarding 2017 City Hall Roof Replacement Bid
- b. Resolution No. 17-73, A Resolution Rejecting Bid for Skate Park Improvements
- c. SEH proposal for Cloquet Avenue Street Signals

9. Public Comments.

Please give your name, address, and your concern or comments. Visitors may share their concerns with the City Council on any issue, which is not already on the agenda. Each person will have 3 minutes to speak. The Mayor reserves the right to limit an individual's presentation if it becomes redundant, repetitive, irrelevant, or overly argumentative. All comments will be taken under advisement by the Council. No action will be taken at this time.

10. Council Comments, Announcements, and Updates.

12. Adjournment.

Cloquet City Council Work Session
Wednesday, August 2, 2017

DRAFT

Present: A. Bailey, D. Bjerkness, K. Kolodge, S. Langley, R. Maki, Mayor Hallback

Absent: J. Rock

Staff: J. Barclay, A. Cottingham, C. Peterson, J. Palmer,

Other: F. Yetka, City Attorney; K. Backstrom, M. Drysdale, J. Domke, SKB/Shamrock; J. Peterson, Pine Journal

SKB Extending Hours of Operation/Increasing Paper Sludge Limits

- Mr. Cottingham gave the background of the Conditional Use Permit Amendment request by SKB Environmental/Shamrock Landfill. The CUP is to amend the hours of Shamrock Landfill to operate between the hours of 7:00 am and 7:00 pm, seven days per week. They are also requesting the removal of the 20% cap of the total annual volume of paper sludge waste and allow for the acceptance of the sludge on a 24-hour basis. A public hearing was held on December 13, 2016.
- The Planning Commission has reviewed the CUP amendment application and is recommending the approval of the hours of operation, seven days per week and extend the volume of sludge cap to 40% with stipulations. The application was put on hold until Council meets with Shamrock. As a separate issue, SKB/Shamrock has received a "Special Event" approval to extend their hours from 5:00 to 7:00 to bring materials from Ashland dredging to the facility .
- Mr. Drysdale, attorney for SKB discussed the 2 amendments that are being requested. The amendments reflect new information and changes since 2011 when the original CUP was approved such as the restricted hours and percentage of paper sludge. In 2014, a noise study showed no significant impacts to neighboring properties. Mr. Drysdale also stated they are willing to install a state of the art monitoring gas collection program if there becomes a concern, which there currently is none.
- Mr. Drysdale emphasized that if the City approves the proposed changes, the need for the flexible hours for a special event clause goes away. There would be no reason to challenge "special event".
- Mr. Yetka verified that they are not asking for Council to take action at the Council meeting tonight, but to be on a future agenda.
- Mr. Yetka asked for verification of taking the special event language out if the Council approves the CUP amendment. Mr. Drysdale replied the Council may want to leave the language in, however the amendment approval would address SKB concerns and they wouldn't need to challenge the language.
- Council Bjerkness asked for explanation of what their competitive disadvantage is. Mr. Backstrom stated the existing ordinance limits flexibility for SKB to give verbal quotes to potential clients by not having complete information to meet a bid. A customer wants to partner with someone who will give them the least amount of risk and can bid a project.

- Discussion on methane gas. SKB staff stated that the basis for 20% was due to the prior owner being unwilling to install a monitoring system. SKB is willing to comply and address adequately through monitoring and collecting if it becomes necessary. An MPCA permit is required for a facility such as this.
- Councilor Bjerkness questioned what the City's obligation to this amendment is or future changes? Mr. Yeka answered that the city needs to make a decision when the applicant has requested this to be placed back into the system. An action needs to be taken to approve or not approve based on valid reasons. If there is no action, the amendment is automatically approved.
- Mr. Cottingham added that the city's landfill consultant worked with SKB/Shamrock Landfill consultant on the paper sludge resulting in satisfaction with monitoring and collection.
- Mr. Drysdale assured that if something detectable were to come up, it would be dealt with immediately.
- An invitation was extended to the Council and public to tour the facility at any time. Information such as test results and numbers are available at any time. Council members agreed to tour the facility as the August 15th Work Session to better understand. Mr. Yetka stated the Council needs to be prepared to take action after the tour at the Regular Meeting.
- Mr. Drysdale stated that they would not request the Council to act on a motion at the August 15th meeting but at a future meeting.

There being no further business, the meeting adjourned at 6:45 p.m.

Respectfully submitted,

James Barclay
Interim City Administrator

Regular Meeting

Roll Call

Councilors Present: Bailey, Bjerckness, Kolodge, Langley, Maki, Mayor Hallback

Councilors Absent: Rock

Pledge of Allegiance



AGENDA

MOTION: Councilor Langley moved and Councilor Bailey seconded the motion to approve the August 2, 2017 agenda. The motion carried unanimously (6-0).

MINUTES

MOTION: Councilor Bjerckness moved and Councilor Maki seconded the motion to approve the minutes of the Work Session and Regular Meeting of July 18, 2017. The motion carried unanimously (6-0).

CONSENT AGENDA

MOTION: Councilor Bjerckness moved and Councilor Kolodge seconded the motion to adopt the consent agenda of August 2, 2017 approving the necessary motions and resolutions. The motion carried unanimously (6-0).

- a. Resolution No. 17-68, Authorizing the Payment of Bills and Payroll
- b. Approval of Storm Water Facilities Maintenance Agreement between the City of Cloquet and Country Club Patio Homes
- c. Approval of Storm Water Facilities Maintenance Agreement between the City of Cloquet and ISD #94

PUBLIC HEARINGS

There were none.

PRESENTATIONS

There were none.

ATV ORDINANCE AND LICENSING PROCEDURE

MOTION: Councilor Langley moved and Councilor Bjerckness seconded the motion to table **ORDINANCE 468A, AN ORDINANCE AMENDING AND REPLACING CLOQUET CITY CODE CHAPTER 5.6, REGULATING THE OPERATION OF SPECIAL VEHICLES INCLUDING MOTORIZED GOLF CARTS, ALL-TERRAIN VEHICLES, UTILITY TASK VEHICLES AND MINI-TRUCKS WITHIN THE CITY OF CLOQUET** until the August 15, 2017 meeting to allow time for the City Attorney to interpret the registration process. The motion carried unanimously (6-0).

The Mayor and City Council of the City of Cloquet does hereby ordain that Chapter 5.6 of the Cloquet City Code is hereby amended and replaced with the following:

Section 5.6: Regulation of Special Vehicles, Snowmobiles, ATV's and Off-Highway Motorcycles Within City Limits

5.6.01 Intent. It is the intent of this Section to supplement Minnesota Statutes chapters 84 and 169, as they may be amended from time to time, with respect to the operation of snowmobiles, all-terrain vehicles (ATV's), off-highway motorcycles and special vehicles as defined in Minn. Stat. 169.045. This section is not intended to otherwise allow what Minnesota State Statutes prohibit, nor prohibit what Minnesota State Statutes allow.

5.6.02 Definitions.

Subd. 1 Snowmobiles. "Snowmobiles" as used in this Section shall have the meaning as defined in Minn. Stat. Section 84.81 as it may be amended from time to time

and presently means any self-propelled vehicle or any vehicle propelled or drawn by a self-propelled vehicle designed to travel across ice or snow steered by skis or runners, but not operated exclusively upon railroad or trolley tracks.

Subd. 2 All-terrain Vehicles/ATV. “All-terrain vehicle or ATV” as used in this Section shall have the meaning as defined in Minn. Stat. Section 84.92 as it may be amended from time to time and presently means a motorized flotation-tired vehicle, of not less than three low pressure tires, but not more than six tires that is limited in engine displacement of less than 800 cubic centimeters and total dry weight of less than 900 pounds.

Subd. 3 Off-Highway Motorcycle. “Off-highway motorcycle” as used in this Section shall have the meaning as defined in Minn. Stat. Section 84.787 as it may be amended from time to time and presently means a motorized, off-highway vehicle traveling on two wheels and having a seat or saddle designed to be straddled by the operator and handlebars for steering control, including a vehicle that is registered under chapter 168 for highway use if it is also used for off-highway operation on trails or unimproved terrain.

Subd. 4 Motorcycle. “Motorcycle” as used in the Section shall mean every motor vehicle not otherwise defined above having a saddle for the use of the rider, and designated for travel on not more than 3 vehicles in contact with the ground, including motor scooters and bicycles with a motor attached, but excluding a tractor.

Subd. 5 Motorized Golf Cart. A vehicle commonly known as a golf cart, having at least three wheels and either an electric or gas powered motor.

Subd. 6 Mini-Truck. As defined in Minn. Stat. § 169.01, subd. 40(a), which presently is a motor vehicle that has four wheels; is propelled by an electric motor with a rated power of 7,500 watts or less or an internal combustion engine with a piston displacement capacity of 660 cubic centimeters or less; has a total dry weight of 900 to 2,200 pounds; contains an enclosed cabin and a seat for the vehicle operator; commonly resembles a pickup truck or van, including a cargo area or bed located at the rear of the vehicle; and was not originally manufactured to meet federal motor vehicle safety standards required of motor vehicles in the Code of Federal Regulations, title 49, sections 571.101 to 571.404, and successor requirements. A mini-truck does not include: a neighborhood electric vehicle or a medium-speed electric vehicle as defined by § 73.11; or a motor vehicle that meets or exceeds the regulations in the Code of Federal Regulations, title 49 section 571.500, as it may be amended from time to time.

Subd. 7 Utility Task Vehicle (UTV). A utility task vehicle means a side-by-side, four-wheel drive, off-road vehicle that has four wheels, is propelled by an internal combustion engine with a piston displacement capacity of 1,200 cubic centimeters or less, and has a total dry weight of 1,800 but less than 2,600 pounds.

Subd. 8 Motor Vehicle. “Motor Vehicle” as used in this Section shall mean every self-propelled device in, upon or by which any person or property is or may be transported or drawn within the City, regardless of whether the motor vehicle is required by law to be registered with the State of Minnesota and regardless of whether the driver, operator or person in physical control of the vehicle is required by law to have obtained a license, permit or endorsement to a license so as to lawfully operate the motor vehicle within the State of Minnesota. A Motor vehicle shall not include a vehicle moved solely by human power, but shall include without limitation the following:

- A. Snowmobile as defined in Subdivision 1;
- B. Recreational vehicles and ATV’s, including but not limited to the following:
 - (1) Motorized dirt bike having two or more wheels; and
 - (2) Motorized all-terrain vehicle having three or more wheels, such as a three-wheeler or four-wheeler; and,
- C. Off-highway motorcycle as defined in Subdivision 3;
- D. Motorcycle as defined in Subdivision 4.
- E. Any other motor vehicle as shall be defined in this Section regardless of the vehicle's number of wheels or mode of self-propulsion if other than solely by human power, including but not limited to the following types of commonly understood vehicles:
 - (1) Automobile;
 - (2) Truck; and

- (3) Van
- (4) Motorized Golf Cart as defined in Subdivision 5
- (5) Mini-truck as defined in Subdivision 6
- (6) Utility Task Vehicle as defined in Subdivision 7

5.6.03 Restrictions on Use. This Section shall not unreasonably restrict the use of snowmobiles, ATV's, motorcycles or other motor vehicles as shall be defined in this Section, upon any street, road, highway or other place within the City in the manner and place permitted by the laws of the State of Minnesota. However, from and after the adoption of this Code section no person shall drive, operate or be in physical control of any motor vehicle as shall be defined in this Section on the private property of another within the City without the express permission of the owner of the property, nor shall any person drive, operate or be in physical control of a motorized golf cart, all-terrain vehicle, utility task vehicle or mini-truck as shall be defined in this Section upon any lands owned, controlled or regulated by the City and used as a City Park, or otherwise owned by the City, except where specifically permitted by the City as shall be provided for below in this Section.

In that regard, the Mayor, subject to the consent of the Council, shall be instructed to determine what areas of the City owned, controlled or regulated lands, if any, will be allowed for this use, and in areas so designated it shall be lawful to drive, operate or be in physical control of a motorized golf cart, all-terrain vehicle, utility task vehicle or mini-truck. For purposes of designating permitted areas, the City shall post signs of the type normally used in highway traffic regulation by the City designating the areas in which such use will be permitted.

Unless otherwise specifically modified herein, the City hereby adopts the provisions of Minn. Stat. §84.92 to §84.929 relating to the operation of ATV's, §84.787 to §84.796 relating to off-highway motorcycles and §84.81 to §84.915 relating to the operation of snowmobiles, as they are amended from time to time and adopt them by reference.

5.6.04 Authorized Use of motorized golf carts, all-terrain vehicles, utility task vehicles and mini-trucks by permit only.

Subd 1. Motorized golf carts, all-terrain vehicles, utility task vehicles and mini-trucks, are permitted on public roads, streets and alleys in the City of Cloquet only as provided in this ordinance.

Subd 2. It is prohibited for a person under age 16 to operate a motorized golf cart, all-terrain vehicle, utility task vehicle or mini-truck on streets, alleys, sidewalks or other public property in the City of Cloquet.

Subd 3. No person shall operate a motorized golf cart, all-terrain vehicle, utility task vehicle or mini-truck on streets, alleys, sidewalks or other public property without obtaining a permit as provided herein.

A. Every application for a permit shall be made on a form supplied by the city and shall contain all of the following information:

- (1) The name and address of the applicant.
- (2) Model name, make and year and number of the motorized golf cart, all-terrain vehicle, utility task vehicle, or mini-truck.
- (3) Current driver's license or reason for not having a current license.
- (4) Other information as the city may require.

B. The operator of an all-terrain vehicle or utility task vehicle shall either have a valid driver's license and/or a valid ATV safety certificate issued by the Commissioner of the Department of Natural Resources. Proof of the same must be in the possession of the operator at all times.

C. The annual permit fee shall be as set forth in the annual fee schedule promulgated by the City Council, as may be amended from time to time.

D. Permits shall be granted for a period of one year and may be renewed annually Jan. 1 to Dec. 31.

E. No permit shall be granted or renewed unless the following conditions are met:

- (1) The applicant must demonstrate that he or she currently holds or has held a valid Minnesota driver's license to operate a mini-truck.
- (2) The applicant may be required to submit a certificate signed by a

physician that the applicant is able to safely operate a motorized golf cart, all-terrain vehicle or utility task vehicle on designated roadways.

- (3) The applicant must provide evidence of insurance in compliance with the provisions of Minnesota Statutes concerning insurance coverage for the golf cart, all-terrain vehicle, utility task vehicle or mini-truck.
- (4) The applicant has not had his or her driver's license revoked as the result of criminal proceedings.
- (5) The applicant for a permit to operate an all-terrain vehicle or utility task vehicle shall either have a valid driver's license and/or a valid ATV safety certificate issued by the Commissioner of the Department of Natural Resources.

Subd 4. Motorized golf carts, all-terrain vehicles, utility task vehicles, and mini-trucks are permitted to operate only on city streets, not state or federal highways, except to cross at designated intersections.

Subd 5. Motorized golf carts, all-terrain vehicles, utility task vehicles, and mini-trucks are prohibited from city sidewalks except for purposes of snow removal or unless otherwise exempt as provided herein.

Subd 6. Except for purposes of snow removal, motorized golf carts, all-terrain vehicles, and utility task vehicles may only be operated on designated roadways from sunrise to sunset, unless equipped with original equipment headlights, taillights, rear-facing brake lights as well as front and rear turn-signal lamps. Except for purposes of snow removal, they shall not be operated in inclement weather or when visibility is impaired by weather, smoke, fog or other conditions, or at any time when there is insufficient visibility to clearly see persons and vehicles on the roadway at a distance of 500 (Five Hundred) feet.

Subd 7. Motorized golf carts shall display the slow-moving vehicle emblem provided for in Minn. Stat. §169.045, as it may be amended from time to time, when operated on designated roadways.

Subd 8. Motorized golf carts, all-terrain vehicles, utility task vehicles, and mini-trucks shall be equipped with a rear-view mirror to provide the driver with adequate vision from behind as required by Minn. Stat. §169.70.

Subd 9. The operator of a motorized golf cart, all-terrain vehicle, utility task vehicle or mini-truck may cross any street or highway intersecting a designated roadway.

Subd 10. When operating a motorized golf cart, all-terrain vehicle, utility task vehicle or mini-truck, the operator must have a copy of the permit in his or her possession, provide proof of insurance and properly display permit in plain sight as designated by permit.

Subd 11. Every person operating a motorized golf cart, an all-terrain vehicle, a utility task vehicle or a mini-truck under permit on designated roadways has all the rights and duties applicable to the driver of any other vehicle under the provisions of Minn. Stat., ch. 169, as it may be amended from time to time, except when these provisions cannot reasonably be applied to motorized golf carts or mini-trucks and except as otherwise specifically provided in Minn. Stat. §169.045(7), as it may be amended from time to time.

Subd 12. Mini-truck equipment requirements:

- A. A mini-truck may be operated under permit on designated roadways if it is equipped with all of the following:
 - (1) At least two headlamps.
 - (2) At least two tail lamps.
 - (3) Front and rear turn-signal lamps.
 - (4) An exterior mirror mounted on the driver's side of the vehicle and either an exterior mirror mounted on the passenger's side of the vehicle or an interior mirror.
 - (5) A windshield.
 - (6) A seat belt for the driver and front passenger.
 - (7) A parking brake.

Subd 13. The Cloquet Police Department may suspend or revoke a permit granted hereunder upon a finding that the holder thereof has violated any of the provisions of this section or Minn. Stat., Chapter 169, as it may be amended from time to time, or if there is evidence that the permit holder cannot safely operate the motorized golf cart, all-terrain vehicle, utility task vehicle or mini-truck on the designated roadways.

Subd 14. The number of occupants on the golf cart, all-terrain vehicle, utility task vehicle or mini-truck may not exceed the design occupant load.

5.6.05 Exemptions, No permit required.

Subd. 1. Nothing in this subchapter shall prohibit a person from operating a motorized golf cart, all-terrain vehicle, utility task vehicle or mini-truck for the following purposes:

- A. Authorized city staff may operate city owned motorized golf carts, mini-trucks, all-terrain vehicles or utility task vehicles without obtaining a permit within the City on city streets, sidewalks, trails, rights-of-way, and public property when conducting city business;
- B. For law enforcement purposes;
- C. For public safety purposes including fire department and ambulance service;
- D. For emergencies and exigent circumstances as determined by the Chief of Police for the City of Cloquet.

5.6.06 Limitation of Liability. Nothing in this sub-chapter shall be construed as an assumption of liability by the City of any injuries to persons or damage to property which may result from the operation of a motorized golf cart, all-terrain vehicle, utility task vehicle or mini-truck by a permit holder, other authorized user, the grant of such permit, or the failure by the City to revoke such permit.

5.6.07 Violations and Penalties. Any person violating any provision of this code section shall be guilty of a misdemeanor and is subject to having any permit previously granted under this sub-chapter revoked.

EFFECTIVE DATE.

Subd. 1 This Ordinance shall be in full force and in effect from and after its passage, approval, recording and publication as provided by law.

PUBLIC COMMENTS

- Barb Wyman, Nelson Road, stated that the public is invited to tour the Shamrock Landfill with Councilors on August 15, 2017, 5:30 p.m. as the Council Work Session.

COUNCIL COMMENTS, ANNOUNCEMENTS, AND UPDATES

Councilor Bjerkness, commended Interim Jeff Palmer and the Cloquet Police Department on a successful National Night Out.

On a motion duly carried by a unanimous yea vote of all members present on roll call, the Council adjourned.

James Barclay, Interim City Administrator

A red stamp with the word "DRAFT" in a bold, sans-serif font. To the left of the text is a small icon of a document with a folded corner.

Special Meeting

Roll Call

Councilors Present: Bailey, Bjerkness, Kolodge, Maki, Rock, Mayor Hallback

Councilors Absent: Langley

AGENDA

MOTION: Councilor Bailey moved and Councilor Bjerkness seconded the motion to approve the August 9, 2017 Special Meeting agenda. The motion carried unanimously (6-0).

MOTION: Councilor Bjerkness moved and Councilor Kolodge seconded the motion to approve the contract and appointment of Aaron Reeves to the position of City Administrator effective no later than October 2, 2017. The motion carried unanimously (6-0).

On a motion duly carried by a unanimous ye a vote of all members present on roll call, the Council adjourned.

James Barclay, Interim City Administrator



CLOQUET

ADMINISTRATIVE OFFICES

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REQUEST FOR COUNCIL ACTION

To: Mayor and City Council
From: James Barclay, Interim City Administrator
Date: August 9, 2017

ITEM DESCRIPTION: Cloquet Educational Foundation Temporary On-Sale Liquor License

Proposed Action

The City Council is asked to consider the application from the Cloquet Educational Foundation for the approval of the issuance of a temporary on-sale liquor license for a fund-raising event to be held at Avenue C on August 26, 2017, The issuance of the license is subject to notification of neighbors, fencing of area as identified on description, hours of operation, provision of certificates of insurance, adequate security being provided and approval by the Commissioner of Public Safety.

Background/Overview

Attached the City Council will find an application for a temporary on-sale liquor license from the Cloquet Education Foundation. The Foundation is seeking the license for a one day event to be held on Saturday, August 26, 2017 at Avenue C. The hours of the event are from 11:00 a.m. to midnight. The event will include games for kids during the day, food, beverages and live music until 11:00 p.m.

Under Minnesota Statute and City Code, in order to allow for the event proposed, the business is required to obtain a temporary liquor license, which again under Minnesota Statute and City Code, can only be issued to a Club or licensed non-profit organization. This is the first time the Cloquet Educational Foundation has applied for a Temporary On Sale license.

Under the Code, the operator is required to hire law enforcement for enforcement purposes. Under current City Code, this would require the applicant to hire two (2) police officers at \$50.00/hr. each for the duration of the event.

Policy Objectives

Approval of a temporary license is required under Section 6.3 of the Municipal Code and Minnesota Statutes 340A.404. Under these rules, only a non-profit organization is allowed to obtain a permit for such purposes.

Financial/Budget/Grant Considerations

The City's fee schedule requires a \$50 fee for each license which has been paid. The cost of security is \$50/hour for each police officer for the duration of the event.

Advisory Committee/Commission Action

None.

Supporting Documentation Attached

- Temporary on-sale liquor license application



August 9, 2017

Mayor Dave Hallback
City of Cloquet
1307 Cloquet Avenue
Cloquet, MN 55720

Dear Mayor Hallback & Members of the City Council:

I'm writing on behalf of Avenue C's Block Party, which is scheduled for August 26, 2017 from 11:00 a.m. to midnight. Along with numerous fun activities, Avenue C will be providing a variety of food and beverages to the guests attending this fundraising event. Avenue C is generously donating a portion of the proceeds from this event to the Cloquet Educational Foundation (CEF). We are very grateful for their support!


The proceeds from this fundraiser will assist the CEF in supporting a wide range of educational experiences for students in the Cloquet School District from preschool to high school graduation. Cloquet schools' student population (grades K - 12) is approximately 2,500. Almost 50% of our students are living in low-income households. The CEF serves as a vital resource to local students and their education. We don't replace state and federal funding but work to supplement these funds to provide enhanced learning opportunities to benefit Cloquet's youth. Fundraising efforts, like the Avenue C Block Party, are vital to our ability to fund these important initiatives.

To learn more about how the CEF enhances education in Cloquet, the reverse side of this letter shows a listing of the educational activities funded during the 2016-2017 school year, which totaled \$69,228. As you can see, thousands of students participate in these initiatives. For additional information about the work of the foundation, please visit our website at www.cloquetedfoundation.org.

I sincerely appreciate your thoughtful consideration of this fundraising event. If you have any questions, please contact me at (office) 218.879.3806 (cell) 218.348.4150 or jkermeen@isd94.org.

The CEF is a 501(c)3 non-profit organization (Tax ID #41-1543092).

Warm regards,


Jeannie Kermeen
Executive Director

enc: *IRS letter of determination*

The Cloquet Educational Foundation provides opportunities for academic, artistic, athletic, cultural, and social growth for children and youth in the Cloquet area by financially supporting programs and activities.

www.cloqueteducationalfoundation.org • 302 14th Street, Cloquet, MN 55720 • (218) 879-3806

2016- 2017 Cloquet Educational Foundation Grant Awards			
Awarded	October 4, 2016 Grant Awards	Population	Students
\$600	Battle of the Books	1-5 grades	200
\$1,800	CMS Science Research Projects (partially funded by MN Power Foundation)	7 grade	240
\$1,000	Community Education Fee Waivers	k-12 grades	120
\$2,500	CHS Fee Waivers Program (partially funded by Frandsen Bank)	9-12 grades	24
\$750	Community Sharing and Giving	1-2 grades	50
\$800	Title 1 Family Engagement Event	1-5 grades	200
\$1,575	History Live! Live Interactive Video Sessions	6 grade	200
\$1,414	Read 180	7-8 grades	35
\$2,000	CMS Educational Field Trip Diary of Anne Frank (funded by Frandsen Bank)	8 grade	185
\$700	Jr. Great Books	1-3 grades	50
\$1,000	Student Inventors Fair	4-5 grade	50
\$2,000	Math Masters MOEMS	4-8 grades	125
\$2,000	Building Minds with KEVA Planks	k-12 grades	2,000
\$2,253	Second Graders Research Dinosaurs	2 grade	200+
\$2,500	Knowledge Bowl	6-12 grades	150
\$2,500	Destination Imagination	6-12 grades	80
\$1,600	Trimester Behavior Reward	k-5 grades	1,200
\$3,960	Smart Boards for classrooms	k-12 grades	125
\$500	CHS Music Dept. (Sons of Norway donation)	7-12 grades	100
\$500	CHS Nordic Skiing (Sons of Norway donation)	7-12 grades	50
\$482	Restorative Justice Program*	9-12 grades	80
\$285	Children's Fall Festival*	early ed - elem	100
\$1,912	Power-Up Program*	6-8 grades	557
\$1,025	Student Activities*	9-12 grades	720
\$1,740	Electronic Bulletin Board and Signage*	k-5 grades	620
\$1,455	Signage & Head End Equipment for Office and Entrance*	k-12 grades	550
Awarded	January 4, 2017 Grant Awards		
\$1,000	Our Artist, Our Story (funded by US Bank Foundation)	k-5 grades	650
\$1,000	Power Lunch	1-2 grades	48
\$2,500	Young Frontiers Respect Retreat	7-12 grades	204
\$2,400	Link Crew	9, 11, 12 grades	199
\$582	Matter, Mass, Volume, & Density Labs	6-8 grades	200
\$ 600	Washington DC Study Trip (funded by Frandsen Bank)	C. Swanson	5
\$2,000	CMS/CHS Science Research Project/UMD...Science Fair	Middle and High School	340
\$1,000	"I Love to Read" Author/Illustrator	k-5 grades	1,175
\$1,000	ECFE Scholarships	early ed	120
\$500	OSMO Pizza Company Kits	3 grade	225
\$400	"U Can Ukulele Too!"	k-5 grades	206
\$385	iPad App and Styluses for Art	9-2 grades	100
\$765	National Scripps Spelling Bee Challenge	5-8 grades	60
\$600	National Geographic Geo Bee Challenge	5-8 grades	105
\$600	Future Problem Solvers	Middle and High School	15
\$500	Elementary Robotics/Technology	4 th – 8 th grades	45
\$400	Little Opera of the North (funded by US Bank Foundation)	Grades 1-5	400
\$1,500	Restorative Practice Experts	Middle and High School	90
\$300	Young Author's Conference	6 th grade	25
\$1,250	Drug Free Week at CHS	7-12 grades	729
\$750	ME to WE	6-8 grades	200
Awarded	May 3, 2017 Grant Awards		
\$3,145	Youth Frontiers Courage Retreat	7 grade	197
\$1,200	Prairie Fire Children's Theatre (partially funded by US Bank Foundation)	2nd-12th grades	75
\$1,500	All Night Grad Party	12th grade	100+
\$1,500	Where Everyone Belongs (WEB) Mentoring program	8th grade	48
\$1,000	Top 20 Schools	5-8 grades	40+
\$2,000	Physical Education (Snowshoes)	5-8 grades	480
\$69,228	Grants Funded Total	Students Served	13,752+

* Annual Fund Drive funds

The Cloquet Educational Foundation provides opportunities for academic, artistic, athletic, cultural, and social growth for children and youth in the Cloquet area by financially supporting programs and activities.

www.cloqueteducationalfoundation.org • 302 14th Street, Cloquet, MN 55720 • (218) 879-3806



Minnesota Department of Public Safety
Alcohol and Gambling Enforcement Division
445 Minnesota Street, Suite 222, St. Paul, MN 55101
651-201-7500 Fax 651-297-5259 TTY 651-282-6555
**APPLICATION AND PERMIT FOR A 1 DAY
TO 4 DAY TEMPORARY ON-SALE LIQUOR LICENSE**

Name of organization	Date organized	Tax exempt number	
CLOQUET EDUCATIONAL FOUNDATION	1989	41-1543092	
Address	City	State	Zip Code
302 14 TH STREET	CLOQUET	Minnesota	55720
Name of person making application	Business phone	Home phone	
RYAN KOLAK	(218) 499-8485		
Date(s) of event	Type of organization		
SATURDAY, AUGUST 26 TH	<input type="checkbox"/> Club <input checked="" type="checkbox"/> Charitable <input type="checkbox"/> Religious <input type="checkbox"/> Other non-profit		
Organization officer's name	City	State	Zip Code
RUSS SMITH	CLOQUET	Minnesota	55720
Organization officer's name	City	State	Zip Code
JEANNIE KERMEEN	CLOQUET	Minnesota	55720
Organization officer's name	City	State	Zip Code
		Minnesota	
Organization officer's name	City	State	Zip Code
		Minnesota	

Location where permit will be used. If an outdoor area, describe.

207 AVENUE C, CLOQUET, MN 55720

AVENUE C RESTAURANT REAR PARKING LOT

If the applicant will contract for intoxicating liquor service give the name and address of the liquor license providing the service.

RIUDOGG LLC dba AVENUE C

LICENSE # 4

207 AVENUE C, CLOQUET, MN 55720

BUYERS CARD # 40578

If the applicant will carry liquor liability insurance please provide the carrier's name and amount of coverage.

CINCINNATI \$2,000,000

APPROVAL

APPLICATION MUST BE APPROVED BY CITY OR COUNTY BEFORE SUBMITTING TO ALCOHOL AND GAMBLING ENFORCEMENT

City or County approving the license	Date Approved
Fee Amount	Permit Date
Date Fee Paid	City or County E-mail Address
	City or County Phone Number

Signature City Clerk or County Official

Approved Director Alcohol and Gambling Enforcement

CLERKS NOTICE: Submit this form to Alcohol and Gambling Enforcement Division 30 days prior to event.

ONE SUBMISSION PER EMAIL, APPLICATION ONLY.
PLEASE PROVIDE A VALID E-MAIL ADDRESS FOR THE CITY/COUNTY AS ALL TEMPORARY PERMIT APPROVALS WILL BE SENT BACK VIA EMAIL. E-MAIL THE APPLICATION SIGNED BY CITY/COUNTY TO AGE.TEMPORARYAPPLICATION@STATE.MN.US



CITY ADMINISTRATOR'S OFFICE

1307 Cloquet Avenue, Cloquet MN 55720
Phone: 218-879-3347 Fax: 218-879-6555
www.ci.cloquet.mn.us
email: admin@ci.cloquet.mn.us

CITY OF CLOQUET
TEMPORARY ON SALE LIQUOR LICENSE APPLICATION

Check all that apply: Indoor Entertainment Outdoor Entertainment No Entertainment

Organization Name: CLOQUET EDUCATIONAL FOUNDATION

Organization Address: 302 14TH STREET

City, State, Zip: CLOQUET, MN 55720

Purpose of the Organization: EDUCATIONAL EXCELLENCE

Is this organization a:

- Charitable, religious, or non-profit organization? Yes No
If yes, attach a copy of the non-profit certificate of incorporation or IRS 501(c)(3) letter.
- Political committee registered under Minnesota Statute 10A.14? Yes No
- Organization which has been existence for three (3) years? Yes No

Contact Person Name: RUSS SMITH / RYAN KOLAK

Address: 207 AVENUE C

City, State, Zip: CLOQUET, MN 55720

		<u>RUSS</u>
Home Phone	Work Phone	Cell Phone
		<u>RYAN (651) 491-0282</u>

RKSMITH1508@GMAIL.COM

E-Mail Address

RYANKOLAK.AVEC@GMAIL.COM

Event Dates and Times: SATURDAY AUGUST 26TH 11AM - 1PM

Purpose of the Event: TO BRING COMMUNITY TOGETHER AND RAISE FUNDS FOR EDUCATION

Estimated Total Attendance at the Event: 500-750

Name of Location for Event: AVENUE C

Address for Event: 207 AVENUE C, CLOQUET, MN 55720

Is the event a Community Festival? Yes No (Must be designated by the Cloquet City Council.)

Will organization contract for intoxicating liquor? Yes No

If yes, please list:

Name of on sale license holder: RIVODGG LLC
AVENUE C

Address: 207 AVENUE C, CLOQUET, MN 55720

Contact Person: RYAN KOLAK Phone No. (218) 499-8485

Full Year On Sale Intoxicating Liquor License No. 4 / BUYERS CARD # 40578

Will event be outdoors? Yes No

What type of enclosure will be used for the outdoor area? ORANGE SNOW FENCING, PORTA

JOHNS AND TRUCK

(Area shall be enclosed by a fence or other enclosure)

Describe all types of entertainment to be provided at the event. If entertainment is not planned, describe what will occur.

LIVE MUSIC, FOOD AND BEVERAGE, GAMES FOR KIDS

Days / Times of Entertainment: SATURDAY, AUGUST 26TH 11AM-12AM

Will there be a band? Yes No

Will the entertainment be amplified? Yes No

Has this organization had any temporary liquor or wine licenses in the City of Cloquet in the past 12 months? Yes No

If yes, list the Event and Date(s): _____

The City of Cloquet reserves the right to request additional information to assist in the evaluation of this application.

I do hereby swear that the answers in this application are true and correct to the best of my knowledge. I do authorize the City of Cloquet, its agents and employees, to obtain information and to conduct an investigation, if necessary, into the truth of the statements set forth in this application and my qualifications for this license.

Signature of Applicant: [Signature] Date: 8/4/2017

Print Name RYAN THOMAS KOLAK
First Middle Last

FOR CITY USE ONLY: (When applicable)				
	Signature:	Approved:	Denied:	Date:
Police Chief:				
City Administrator:				

INTERNAL REVENUE SERVICE
District Director

DEPARTMENT OF THE TREASURY
1100 Commerce St., Dallas, TX 75242

Person to Contact:
CUSTOMER SERVICE DIVISION

Cloquet Educational Foundation, Inc.
509 Carlton Ave.
Cloquet, MN 55720-1757

Telephone Number:
(800) 829-1040

Refer Reply to:
Mail Code 4940 DAL

Date:
March 27, 1997

EIN:
41-1543092

Dear Sir or Madam:

Our records show that Cloquet Educational Foundation, Inc. is exempt from Federal Income Tax under section 501(c)(3) of the Internal Revenue Code. This exemption was granted in May 1986 and remains in full force and effect. Contributions to your organization are deductible in the manner and to the extent provided by section 170 of the Code.

We have classified your organization as one that is not a private foundation within the meaning of section 509(a) of the Internal Revenue Code. Your organization is described in section 170(b)(1)(A)(vi) of the Code.

If gross receipts for your organization reach \$25,000 or more, in any one year, the organization will be required to file Form 990, Return of Organization Exempt from Income Tax.

This letter may be used to verify your tax-exempt status.

If we may be of further assistance, please call the telephone number listed above or write to us at the address in the letterhead, Mail Code 4940 DAL.

Sincerely,

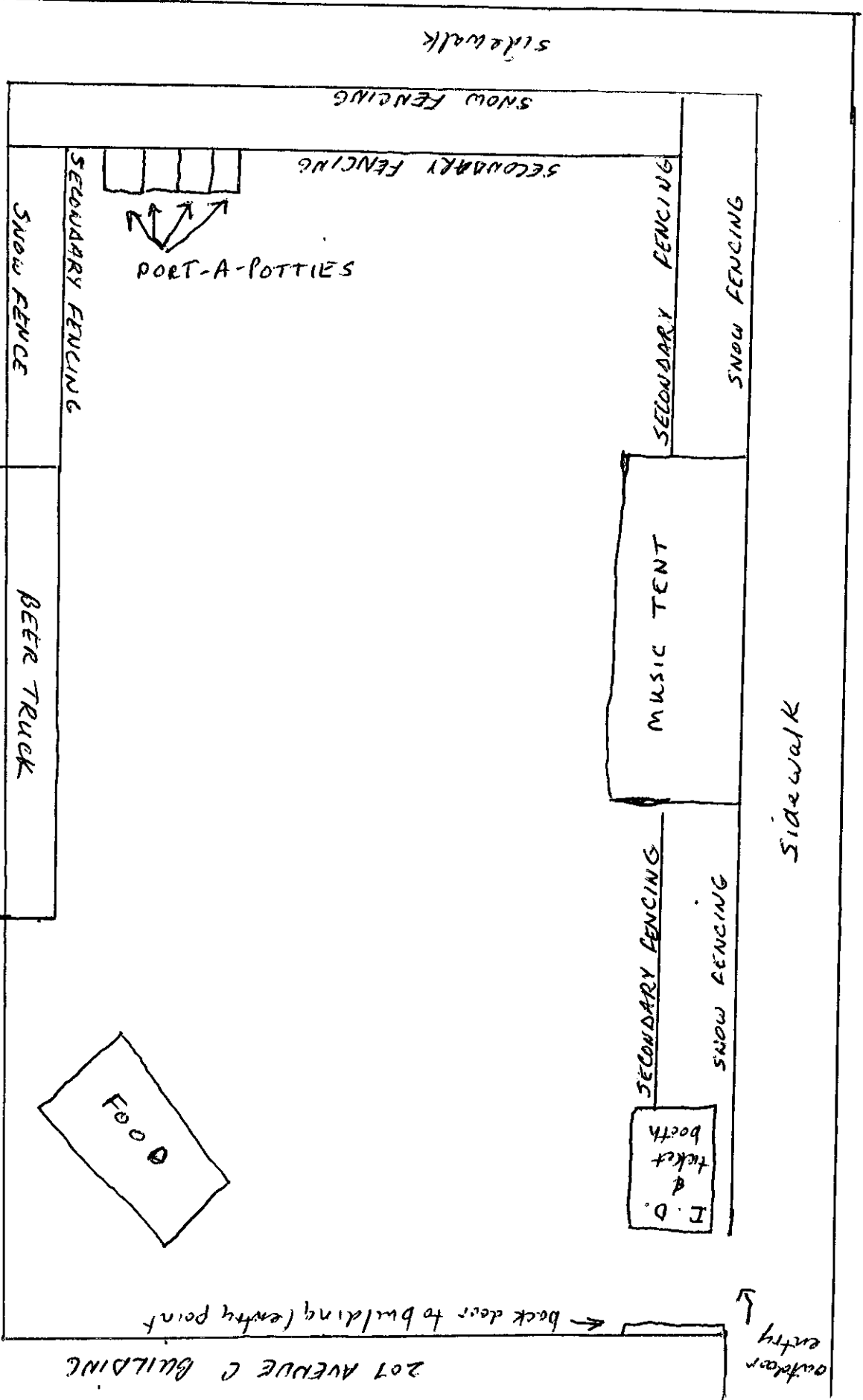
W. Mann

W. Mann
Manager, Employee Plans
and Exempt Organizations
Customer Service Section

*Cloquet Educational
Foundation*

*Carrie
Oswald*

AVENUE B



ARCH STREET

outdoor entry

207 AVENUE C BUILDING

back door to building (entry point)

side walk

MUSIC TENT

I.D. & TICKET booth

FOOD

BEER TRUCK

PORT-A-POTTIES

EMPLOYEE PARKING LOT

BUILDING

SNOW FENCE

SECONDARY FENCING

SECONDARY FENCING

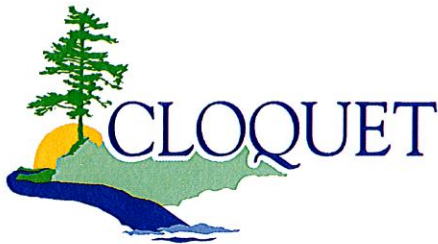
SNOW FENCING

side walk

SECONDARY FENCING

SNOW FENCING

SNOW FENCING



DEPARTMENT OF PUBLIC WORKS

1307 Cloquet Avenue; Cloquet, MN 55720
Phone: (218) 879-6758 Fax: (218) 879-6555
Street - Water - Sewer – Engineering - Park
www.ci.cloquet.mn.us

REQUEST FOR COUNCIL ACTION

To: Mayor and City Council
From: Caleb Peterson, Public Works Director
Reviewed By: James Barclay, Interim City Administrator
Date: August 15, 2017

ITEM DESCRIPTION: Awarding Bid for 2017 City Hall Roof Replacement

Proposed Action

Staff recommends that the City Council move to adopt **RESOLUTION NO. 17-72, A RESOLUTION AWARDDING 2017 CITY HALL ROOF REPLACEMENT BID.**

Background/Overview

In recent years, the existing flat roof systems at City Hall (original to the Building’s construction) have been patched multiple times as leaks have continued to arise. Some leaks have been minor while others have resulted in collapsed ceiling tiles and damage to light fixtures. The existing roof system has reached the end of its useful life. Roof replacement was identified as part of the public facilities plan adopted by Council and included in the 2017 budget and CIP.

The scope of work for the project includes replacement of the three flat roof sections with a 60-mil fully adhered EPDM roof system. Energy efficiency will also be addressed as the current insulation will be replaced to provide a minimum R-value of R-35 compliant current energy code.

The project was advertised and bids were opened on Thursday, August 3, 2017. Two bids were received with Commercial Roofing being the low bid at \$117,862.00. The bids received were as follows:

Bidder	Base
Commercial Roofing, Inc.	\$ 117,862.00
Antonsen Construction, Inc.	\$ 123,500.00
Budget Estimate	\$ 130,000.00

Policy Objectives

N/A.

Financial/Budget/Grant Considerations

The budget for this project is \$130,000. The low bid from Commercial Roofing totals \$117,862.00.

Advisory Committee/Commission Action

N/A.

Supporting Documents Attached

- Resolution No. 17-72

**CITY OF CLOQUET
COUNTY OF CARLTON
STATE OF MINNESOTA**

RESOLUTION NO. 17-72

**A RESOLUTION AWARDED
2017 CITY HALL ROOF REPLACEMENT BID**

WHEREAS, The City has requested proposals for replacement of three flat roof systems on the City Hall Building; and

WHEREAS, The City of Cloquet advertised and received the following bids for the project:

Bidder	Base
Commercial Roofing, Inc.	\$ 117,862.00
Antonsen Construction, Inc.	\$ 123,500.00

AND WHEREAS, The apparent low bid from Commercial Roofing, Inc. was found to meet the minimum bid requirements.

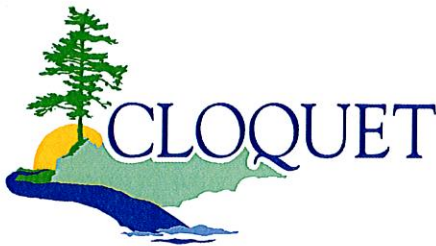
NOW, THEREFORE, BE IT RESOLVED, BY THE CITY COUNCIL OF THE CITY OF CLOQUET, MINNESOTA, That the bid from Commercial Roofing, Inc. in the amount of \$117,862.00 is hereby accepted.

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF CLOQUET THIS 15th DAY OF AUGUST, 2017.

Dave Hallback, Mayor

ATTEST:

James Barclay, Interim City Administrator



DEPARTMENT OF PUBLIC WORKS

1307 Cloquet Avenue; Cloquet, MN 55720
Phone: (218) 879-6758 Fax: (218) 879-6555
Street - Water - Sewer – Engineering - Park
www.ci.cloquet.mn.us

REQUEST FOR COUNCIL ACTION

To: City Council
From: Caleb Peterson, Public Works Director
Reviewed By: James Barclay, Interim City Administrator
Date: August 15, 2017

ITEM DESCRIPTION: Rejecting Bid for Skate Park Improvements

Proposed Action

Staff recommends the City Council move to adopt **RESOLUTION 17-73, REJECTING BID FOR SKATE PARK IMPROVEMENTS.**

Background/Overview

Advocated by a group of local youth for several years, the Athletic Park skate park was supported by the Park Commission and City Council and ultimately included in the 2017 budget and CIP. In June 2016, Council entered an agreement with Stantec for conceptual design. A second contract covering preparation of construction documents and construction administration was executed in December.

Authorization to solicit bids for the proposed improvements was granted by the Council on July 5, 2017. Bids were advertised beginning July 13, 2017 and were received and opened on August 3, 2017. One bid was received as follows:

Bidder	Amount
Boldt Company	\$ 415,000.00
Engineer's Estimate	\$ 307,000.00

Policy Objectives

Park Master Plan Policy 1.3 – Improvements to parks shall follow a process that engages park users, stakeholders, and neighbors to ensure changes are aligned with community needs and interests.

Park Master Plan Policy 2.5 – All park resources shall be maintained in a way that ensures they are safe and attractive.

Financial/Budget/Grant Considerations

The 2017 budget includes \$350,000 in sales tax funding for the proposed improvement. Engineering services for the project totaled \$36,500, the security system is estimated at \$3,100 and the engineer's estimate for construction is \$307,000 for an estimated total cost of \$346,600. To date, the user group has raised approximately \$9,000 in additional donations and grants to supplement the project budget.

Given the only bid received was \$100,000 (30%) over budget, staff is recommending the Council take action to reject all bids at this time. In the interim, staff will coordinate with the engineer and prospective bidders and attempt to identify potential cost saving measures which could be incorporated into a rebid process.

Upon initial review, the fact that only one bid was received would indicate the proposed completion date of June 2018 may have been too restrictive. More schedule flexibility allowing spring construction may produce more competitive bids. Additional factors may also be addressed pending further comments from other contractors on why they chose not to bid our project.

It's worth noting that this project is the first contract bid under the recently adopted PLA requirements. While it is unclear if this had any impact, staff did receive comments from one potential subcontractor who indicated they are not willing to bid projects under the current PLA agreement language. Specifically, they questioned Article III; which reads:

"All employees covered by this Agreement now in the employ of the Contractor shall remain members in good standing in their respective Unions during the term of the Agreement and all employees hereinafter employed by the Contractor will become members of the respective Unions within seven (7) days after the date of their employment and shall remain members of the Unions in good standing during the term of this Agreement."

The question was; "Do all existing employees of the contractor, if not currently represented by a union, have to join the union in order to work on the contracted project?" Unfortunately, multiple attempts to clarify this with the local labor body were unsuccessful and the contractor indicated that while they have worked under other PLAs, this specific language was not included so they declined to submit a bid. To date, staff has not received comments from other potential subcontractors regarding the PLA requirement or the specific language above.

Advisory Committee/Commission Action

N/A.

Supporting Documentation Attached

- Resolution 17-73

**CITY OF CLOQUET
COUNTY OF CARLTON
STATE OF MINNESOTA**

RESOLUTION NO. 17-73

A RESOLUTION REJECTING BID FOR SKATE PARK IMPROVEMENTS

WHEREAS, The City has included funding for construction of a skate park at Athletic Park as part of the 2017 Budget and CIP; and

WHEREAS, A public input process was undertaken to best determine the scope of said improvements; and

WHEREAS, The City Council has awarded a contract to Stantec to complete design plans and specifications for proposed improvements; and

WHEREAS, The City of Cloquet advertised and received the following bids for the project:

<u>Bidder</u>	<u>Bid Amount</u>
Boldt Company	\$ 415,000.00

AND WHEREAS, The apparent low bid from Boldt Company was substantially higher than the engineer's estimate and designated budget for the project.

NOW, THEREFORE, BE IT RESOLVED, BY THE CITY COUNCIL OF THE CITY OF CLOQUET, MINNESOTA, That the bid from Boldt Company in the amount of \$415,000.00 is hereby rejected.

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF CLOQUET THIS 15TH DAY OF AUGUST, 2017.

Dave Hallback, Mayor

ATTEST:

James Barclay, Interim City Administrator




DEPARTMENT OF PUBLIC WORKS

1307 Cloquet Avenue; Cloquet, MN 55720
Phone: (218) 879-6758 Fax: (218) 879-6555
Street - Water - Sewer – Engineering - Park
www.ci.cloquet.mn.us

REQUEST FOR COUNCIL ACTION

To: Mayor and City Council
From: John Anderson, Assistant Engineer
Reviewed By: James Barclay, Interim City Administrator
Date: August 15, 2017



ITEM DESCRIPTION: Cloquet Avenue Traffic Signal Design

Proposed Action

Staff recommends the City Council move to approve the letter proposal in the amount of \$17,800 from Short Elliot Hendrickson Inc. to complete traffic signal design services for the Cloquet Avenue signals at 10th and 14th Streets.

Background/Overview

The Capital Improvement Plan calls for a “Streetscape Project” on Cloquet Avenue in 2018. As part of the project, updates and repairs are needed for the traffic signal systems at the intersections of Cloquet Avenue and 10th Street and Cloquet Avenue and 14th Street.

Signal design is a specialized field requiring knowledge of both electrical and traffic engineering. Staff requested proposals from two engineering consulting firms with expertise in these two areas. The two firms came recommended by the Minnesota Department of Transportation District 1 staff and the City of Duluth staff both of whom have previously worked with these consultants on traffic signal projects. The firms were asked to prepare a letter of proposal describing a proposed scope of work and the fee associated with that work. The two firms submitted their proposals for staff review. Based on the proposals submitted, staff recommends the City Council award the work to SEH Inc. The proposal submitted by SEH indicates a solid understanding of the City’s needs. SEH staff that are involved are based out of St. Paul and have a strong background in this type of design. The SEH proposal includes additional items, such as construction costs, that were not addressed by the SRF proposal.

Policy Objectives

To advance proposed capital improvement projects in accordance with State law.

Financial/Budget/Grant Considerations

\$2,000,000 is included as part of the 2018 Capital Improvement Plan for completion of the project. The proposed design and construction services fee of \$17,800 is included as part of the project budget. The fees included in the proposals received are as follows:

Firm	Design Fee	Construction Services	Total
Short Elliot Hendrickson Inc.	\$11,800	\$6,000	\$17,800
SRF Consulting Group Inc.	\$14,940	N/A	\$14,940

To Mayor and Council
Cloquet Avenue Traffic Signal Design
August 15, 2017
Page 2

Advisory Committee/Commission Action

N/A

Supporting Documentation Attached

- Short Elliot Hendrickson Inc. letter proposal
- SRF Consulting Group Inc. letter Proposal



Building a Better World
for All of Us®

July 18, 2017

RE: Cloquet, Minnesota
Revised Signal System Designs
Cloquet Avenue at 10th Street
Cloquet Avenue at 14th Street
SEH No.CLOQU0000.00

Mr. John Anderson, PE
Assistant City Engineer
City of Cloquet
1307 Cloquet Avenue
Cloquet, Minnesota 55720

Dear Mr. Anderson:

Short Elliott Hendrickson Inc. (SEH) appreciates the opportunity to submit this proposal to the City of Cloquet for design and construction services for two (2) revised traffic signal systems, at the intersections of Cloquet Avenue with 10th Street North and 14th Street North.

For your information, SEH has significant experience in all aspects relating to traffic signals. This experience includes study and analysis of the need for traffic signals, writing ICE-signal justification reports, design of new traffic signal systems, modifications of existing traffic signal systems, Emergency Vehicle Preemption (EVP) design, traffic signal timing and coordination, preparation of bid documents and construction inspection. Since 1978, SEH staff members have designed more than 1,000 traffic signals and more than 300 additional EVP system designs. A number of these designs have been completed for various agencies in Minnesota (including signal design and construction services for traffic signal systems in the cities of Duluth, Grand Rapids and Virginia and for MnDOT District 1). All designs are prepared to meet State Aid Standards. SEH's work is well accepted by all agencies, and the signals and EVP systems have all operated satisfactorily upon completion.

For your consideration, we have put together the following Work Scope for performing the work. The Work Scope is fairly well defined based on anticipated cooperative efforts of SEH and the City of Cloquet for this work. The Work Scope provides flexibility to make the most efficient use of SEH and City staff.

Work Scope

1. Using copies of the existing plans for each traffic signal system provided to us by the City, a detailed site visit to confirm current equipment placement and conditions of each existing signal system, and available geometric drawings or survey information provided by the City (for intersection geometric and sidewalk modifications proposed to be completed by the City as part of the entire project), SEH will put together a 20 scale base layout of each intersection for use in developing traffic signal design plan sheets.

Engineers | Architects | Planners | Scientists

Short Elliott Hendrickson Inc., 3535 Vadnais Center Drive, St. Paul, MN 55110-5196
SEH is 100% employee-owned | sehinc.com | 651.490.2000 | 800.325.2055 | 888.908.8166 fax

2. SEH will prepare all plans and technical specifications directly related to the revision of each existing traffic signal system. These items will be submitted to the City for review, comments, and coordination. After receiving comments, SEH will revise these items and make changes as necessary.
3. SEH will coordinate with the City with respect to pedestrian curb ramp locations and pedestrian landing areas that the City will design as part of the project, to provide for ADA compliant pedestrian push button locations. SEH will review proposed City curb ramp designs and offer input on these designs that will best fit the revised signal system and meet ADA requirements for pedestrian and maintenance access.
4. Final plans for each revised signal system (including intersection layout, field wiring diagram, all applicable details, and "for information only" plan sheets of the existing signal systems), and technical special provisions for the traffic signal system work will be prepared. An Engineer's construction cost estimate will also be prepared. The plan sheets will be signed by a licensed civil engineer. The design will be in conformance with applicable state and local electrical codes, the Minnesota Manual on Uniform Traffic Control Devices (MnMUTCD), Minnesota Department of Transportation Standard Specifications, and MnDOT State Aid Standards.
5. Original signed final plans and technical specifications will be submitted to the City for inclusion into your complete bid document set for the project. It is assumed that the City will prepare all bid documents for the project, prepare and submit advertisements for bids, and perform overall construction contract administration. Any revisions to the traffic signal related items required during the review and bidding process will be completed by SEH in a timely manner, and revised items will be returned to your attention as soon as possible for inclusion into the complete bid document set.
6. SEH will be available to answer bidder questions during the bidding process, and assist the City with issuing any necessary addendums due specifically to the traffic signal revision work. SEH can attend the pre-construction meeting if requested, and we have budgeted hours for attending this meeting at the beginning of construction. SEH will also review traffic signal shop drawings as applicable and follow up with the electrical contractor regarding approval of these shop drawings.
7. As part of the proposed project scope, SEH will budget for four (4) site visits during construction and can assist (as desired) with the following:
 - Staking traffic signal equipment locations prior to construction.
 - Being present during signal turn-on to verify that all signal components are operating properly.
 - Reviewing final construction of each traffic signal system and providing a punch list to the electrical contractor.
 - It is anticipated that the City will oversee day to day routine construction work on each signal system as part of the complete project to save on signal costs, with SEH being available over the phone and via email to respond to construction related questions. If needed, SEH is available to visit the project site during construction to address signal construction related issues not able to be addressed over the phone or via email.

8. SEH will complete final record drawings of each revised traffic signal system for City records and information.
9. Any traffic signal timing work related to these revisions will also be completed by SEH as part of this project, and SEH will coordinate input of these updated timings with the City and Contractor to ensure that these timings are entered into each intersection traffic signal controller cabinet.
10. SEH will prepare a 2-page Signal Justification Letter (SJL) for each intersection, for City signature and submittal to the District State Aid office. No updated traffic counts are proposed to be completed as part of this task (existing traffic volume information will be used in this analysis and each letter report).

Note that for State Aid approval of revised traffic signal system work, some form of signal justification documentation is required to be submitted by the local agency in order for State Aid funds to be used on the traffic signal work. For revisions to existing signal systems, the 2-page format has been a low cost but acceptable means to meet these State Aid requirements.

Staff

SEH proposes to use the following staff members to assist the City on an ongoing basis for the above mentioned work items:

John M. Gray, PE – Project Manager

John has worked on traffic signal design and construction services with SEH for over 29 years, and his experience includes the design of more than 1,000 traffic signals and 300 emergency vehicle preemption systems. He will be responsible for the design and construction phases of this project.

Other staff members are available as needed to assist in the timely and detailed completion of this project.

Schedule

SEH can begin work on this project upon a Notice to Proceed being issued by the City and submittal of proposed intersection geometrics for the complete project. SEH will work with the City to set a more specific schedule for this project once authorization to proceed is given by the City.

Proposed Contract/Fees

The proposed work program includes initial site visit, plan sheet and technical specification preparation, Signal Justification documentation, and construction assistance. All work, as defined above, will be done on an hourly basis, plus the actual cost of reimbursable expenses.

All work, as defined above, will be done on an hourly basis for the following costs not-to-exceed (except to exceed as otherwise approved by the City):

Site visit, plans, technical specifications, and SJL preparation	\$10,300
Input on pedestrian curb ramp design (as related to signal systems)	\$1,500
Construction related services	\$6,000
<i>Total Signal Design and Construction Costs:</i>	<i>\$17,800</i>

The above costs do not include attending any City Council or City Committee meetings.

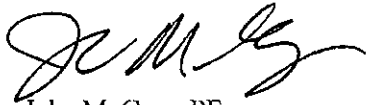
Mr. John Anderson, PE
July 18, 2017
Page 4

Any additional tasks added to or deleted from this project due to significant changes in the general scope of the project or the project itself including, but not limited to, changes in size, complexity of character or type of construction, shall be by written amendment to the contract signed by both parties.

We appreciate the opportunity to provide a letter proposal to the City of Cloquet for traffic signal design and construction services along Cloquet Avenue. Feel free to contact me at 651.490.2073 or email me at jgray@sehinc.com if you have any questions or comments regarding this letter proposal.

We look forward to hopefully assisting the City of Cloquet on this project. Thank you.

Sincerely,
SHORT ELLIOTT HENDRICKSON INC.


A handwritten signature in black ink, appearing to read 'J M Gray', written in a cursive style.

John M. Gray, PE
Senior Professional Traffic Engineer



MEMORANDUM

TO: John Anderson, Assistant City Engineer
City of Cloquet – Engineering Department

FROM: John M. Gray, PE 

DATE: July 18, 2017

RE: Cloquet Avenue at 10th Street, 14th Street
Preliminary Signal System Review
SEH No. CLOQU0000.00

The City of Cloquet will be completing a mill and overlay project along Cloquet Avenue in 2018 which will pass through two (2) existing traffic signal systems: at 10th Street North and at 14th Street North. As part of the impending mill and overlay project, it is anticipated that pedestrian curb ramps at each intersection will be reconstructed to make these ADA compliant. With this work, there will be impacts to each signal system that need to be addressed with the design of the complete project.

At minimum, the proposed project work will need to include loop detector replacement due to mill and overlay work along with handhole adjustment (for those handholes in the area of sidewalk construction) and possible pedestrian push button relocations to align push button locations with new pedestrian curb ramps.

Given the age of each signal system (approximately 30 years or more since either signal system was installed), the City is considering other improvements to these signal systems to bring each system up to current design standards. In advance of the 2018 construction project, the City has requested input from traffic signal design consultants about potential scope of the signal modification work and the estimated preliminary costs to complete these modifications. As available budget allows, the City will consider various modifications to each signal system to address current maintenance issues as well as to prolong the life of each signal system.

From documentation provided to us by the City, along with a detailed review of each signal system to determine current conditions and existing equipment, the following signal modification items are presented for City consideration. With each proposed modification, a preliminary estimated construction cost is included.

1. Loop Detector Replacement

For 10th Street, all loop detectors will be required to be replaced due to mill and overlay and curb ramp work (including stop bar detection on both 10th Street approaches). We recommend having 4 loop detectors installed in each Cloquet Avenue left turn lane to accommodate future left turn signal phasing should the City want to upgrade to either protected/permissive phasing (5-section RYG-YLA-GLA signals with left turns allowed on a protected green arrow and a permissive green ball) or flashing yellow arrow operation (4-section RLA-YLA-FYLA-GLA, with options for both protected and protected/permissive phasing). Thus, a total of 16 loop detectors are recommended to be installed with the mill and overlay work. Estimated cost per loop detector

installation is approximately \$1,000 per detector (or \$16,000 for all in-roadway loop detector work).

The same recommendations exist for 14th Street loop detectors, including having 4 loop detectors installed in each Cloquet Avenue left turn lane for future left turn phasing considerations. This results in a total of 20 loop detectors recommended to be installed with the mill and overlay work. For an estimated cost of \$1,000 per detector, total estimate for loop detector work at this intersection is \$20,000.

2. Controllers and Cabinets

From review of the controller cabinet log books provided to us by the City and pictures provided of each controller cabinet, both cabinets are at least 25-30 years old and contain cabinet equipment that is aged or obsolete. With the typical signal system estimated to have a full life-span of 30-40 years before full replacement is considered, we strongly recommend that the City consider having both controller cabinets replaced. Upgraded cabinet facilities will reduce maintenance concerns as well as provide greater flexibility in future operations at each intersection (including for potential Cloquet Avenue left turn operations).

The exception to any equipment replacement work would be regarding the controller unit for the 10th Street signal. This unit is a newer Econolite ASC-3 controller which is capable of all current operations including enhanced left turn phasing operations for Cloquet Avenue. We recommend that this controller unit be salvaged and reinstalled with any cabinet replacement work.

The controller unit at 14th Street is an aged Econolite ASC-8000 unit that is limited in future operations and is recommended to be replaced.

New controller cabinets can be installed on existing cabinet foundations (using existing conduits into each foundation) which will reduce signal down time for any cabinet replacements to a day or two. Estimated cost for a new controller cabinet (using existing controller) at 10th Street is \$25,000. Estimated cost for a new controller and cabinet at 14th Street is \$28,000. Note that these costs would include contractor and supplier assistance with set-up, programming, and turn-on of each cabinet.

3. Pedestrian Push Buttons

10th Street:

Push buttons are currently mounted on the traffic signal poles and are non-ADA compliant buttons. At minimum, we recommend that these buttons be replaced on the existing signal poles with ADA compliant solid-state push buttons (which have a small red indicator light and audible beep that alerts pedestrians that their call has been received) at a cost of \$200 per button (or \$1,600 for the full intersection). Note that these are **not** APS (audible) push buttons that are currently being installed for upgraded curb ramp installations, but these are acceptable for use on non-Trunk Highways for when an agency elects to provide ADA compliant push buttons at a lower cost.

Push buttons are currently not located to meet ADA requirements with upgraded pedestrian curb ramps, as signal poles are either too far from projected ADA compliant ramp locations or too

close to the curb and not able to be placed next to an ADA compliant landing area. To address this issue, separate push button stations are recommended to be installed on each corner of the intersection for all push button placements. A typical standard ADA compliant push button station is estimated at \$1,500 per installation (or \$12,000 for all 8 push button installations). Estimated cost for the audible APS push buttons is \$1,000 per button (or \$8,000 for all 8 buttons). Thus, total estimated cost for a full APS system is \$20,000. Note that City could consider using solid-state push buttons on the new push button stations to save on initial costs – as mentioned APS push buttons are not yet required on State Aid projects unless these are to be installed on a signal system with trunk highway approaches. Use of solid-state push buttons would reduce the cost of the enhanced pedestrian push button installations from \$20,000 to \$13,600.

There may also be opportunities to place APS push buttons on existing or relocated traffic signal poles depending on where the final curb ramps and landing areas are installed, should these locations meet all ADA requirements. This would save on costs of separate push button stations.

14th Street:

Push buttons are currently mounted on both the traffic signal pole and a separate push button station on each corner of the intersection and are non-ADA compliant buttons. At minimum, we recommend that these buttons be replaced on the existing signal poles/push button stations with ADA compliant solid-state push buttons at a cost of \$200 per button (or \$1,600 for the full intersection).

Push buttons are currently not located to meet ADA requirements with upgraded pedestrian curb ramps, as signal poles AND existing push button stations are either too far from projected ADA compliant ramp locations or too close to the curb and not able to be placed next to an ADA compliant landing area. To address this issue, separate NEW push button stations are recommended to be installed on each corner of the intersection for all push button placements. As mentioned above for the 10th Street signal system, total estimated cost for a full APS system at 14th Street is \$20,000. Note again that City could consider using solid-state push buttons on the new push button stations to save on initial costs. Use of solid-state push buttons would reduce the cost of the enhanced pedestrian push button installations from \$20,000 to \$13,600.

4. Vehicle Signal Heads

At both signal systems, there are a total of eight (8) 12-inch 3-section RYG signal heads. Signal heads appear to be in reasonably good condition and the housings should be able to be reused. However, the following can be noted at both signal systems:

- LED indications are not present for any of the 24 signal indications at each intersection. To save on both power costs (LED indications use 80-90 percent less energy than the incandescent indications currently in-place) and on maintenance costs (LED indications typically last 8-10 years or more before replacement is required versus 1-2 years for the standard incandescent light bulb indications), we strongly recommend that these signals be upgraded to be LED indications.

Estimated cost to upgrade these indications to be LED is around \$125 per indication or \$3,000 for the entire intersection. Typical pay-back on these up-front costs (due to power savings) is typically 1-2 years.

- There are far left and far right indications present for the side street approaches at both intersections but NOT for the Cloquet Avenue approaches. For a new signal installation, a far left indication is standard practice to have installed. We recommend that the City consider having a far left signal head installed facing each Cloquet Avenue approach at both intersections to enhance visibility of the signal heads especially for vehicles in the left turn lanes. Estimated cost to install two new 12-inch 3-section RYG signal heads at each intersection is \$1,000 per signal head (including LED indications and revised pole mounted bracketing) or \$2,000 per intersection.

5. Pedestrian Signal Heads

At both signal systems, non-LED 12-inch x 12-inch 2-section "Walk/Don't Walk" pedestrian signals are present. This type of pedestrian signal is no longer used for any new signal installations. Current practice is to utilize the international standard "Hand/Walking Person" indications instead of the word indications. Also, a one-section (16-inch x 18-inch) pedestrian signal housing is the standard housing now used in the State of Minnesota.

For all pedestrian signals, we strongly recommend having LED Countdown Timer indications installed. These provide the standard Hand/Walking Person indication but also include a timer that counts down from when the flashing don't walk is first displayed to provide pedestrians the amount of time remaining to cross the intersection. These have proven to be very popular with pedestrians.

For the eight (8) pedestrian signal heads at each intersection, upgrading to one-section Countdown Timer LED indications is estimated to cost \$600-\$800 per signal head (including the LED indication) for a total cost of \$4,800 to \$6,400 per signal system.

6. Street Lights

At both signal systems, there are decorative street lights installed on the mast arm poles on the northwest and southeast corners. It is anticipated that these street lights use high pressure sodium (HPS) lights instead of LED fixtures. To save on power and maintenance costs, we recommend that the City consider having these street lights replaced with LED fixtures. With this upgrade, it is likely that the entire street light housing would be required to be replaced as retrofitting these housings is not guaranteed to be able to be done. It was noted that this type of housing is used only on the signal poles and not along the Cloquet Avenue corridor and thus there may be some room for consideration of upgrading these housings to either a standard cobrahead type LED street light or to another style decorative LED street light.

Estimated cost to upgrade each street light on the signal mast arm poles is approximately \$1,000 per light (or \$2,000 per intersection).

7. Handholes

At both signal systems, concrete handholes with heavy duty square metal frames and covers are used in the sidewalk areas. This type of handhole cover is no longer used and is difficult to maintain over time as these are quite heavy to open and the handles on the covers often break off. In addition, for any sidewalk and curb ramp work to make these areas ADA compliant, these

handhole frames and covers are difficult to set to grade and take up a large part of the sidewalk area.

Some of the existing handholes will likely fall in the landing areas or potentially in the truncated dome areas. While we do not recommend relocation of these handholes in all cases, we do recommend that the larger metal frames and covers be replaced with a smaller round metal handhole cover to reduce the area of handhole exposed and also to make placing these to finished sidewalk grade easier to construct and maintain. There are a total of 8 handholes at 10th Street and 9 handholes at 14th Street that are in sidewalk or bituminous lot areas that are recommended to have metal frames and covers replaced. Estimated cost to replace each handhole frame and cover is approximately \$500 per handhole (or \$4,000 at 10th Street and \$4,500 at 14th Street).

8. Painting Signal Systems

Both signal systems are dark bronze in color and are showing significant signs of rusting and fading paint. We recommend that the City consider having both signal systems fully repainted as part of this project. Estimated cost to paint each signal system is approximately \$8,000 per signal system and would include repainting of the mast arm, mast arm pole, street light extension, signal bracketing, and pole base.

9. Emergency Vehicle Preemption (EVP)

Neither signal system has Emergency Vehicle Preemption (EVP) for police, fire, and ambulance use, which would appear to be desirable to have along this corridor given the presence of a fire station to the west. Sight distance is generally good on all intersection approaches at both intersections to allow for EVP detectors to be placed on the mast arms or pedestal poles of each intersection approach (no separate advance detectors are anticipated to be needed). At 14th Street, a two-way detector installed on both mast arms facing Cloquet Avenue is recommended to account for a significant horizontal curve extending through the intersection.

The City has two options for EVP operation: the standard "strobe light" detection system ("Opticom") that requires an emitter to be installed on each emergency vehicle to access the system, and a siren-based ("sonic") system that utilizes the emergency vehicle's siren to activate the EVP system.

The Opticom system is far more reliable and provides detection from up to a half mile away from the intersection for clear sight distance to the detector unit. This includes a detector and LED confirmation light installed on the mast arm (or atop a pedestal pole) that is aimed towards oncoming traffic on the approaching signal pole. Aiming of detector heads is critical and there may be need to adjust the aiming of these heads from time to time to provide maximum sight distance but this is typically the only maintenance required for this type of system. This system does require that all emergency vehicles accessing the system have a separate "strobe light" emitter attached to the vehicle (current estimated emitter cost unknown, but likely to be around \$1,000 per vehicle). However, this type of system provides a long-term solution (systems typically operate for the life of the signal system) and is a highly reliable means of accepting emergency calls to the signal system. A typical Opticom system costs around \$8,000 per intersection (not including emitters).

The Sonic system also costs around \$8,000 to \$10,000 per intersection but does not require any additional equipment to be installed on emergency vehicles. This system uses the existing sirens on the emergency vehicle to activate the system, with a microphone-like detector installed on the near side mast arm (or pedestal pole) that picks up an approaching siren. Reliability of this type of system is mixed with curves and buildings in the line of sound sometimes providing mixed calls to the system. For communities with a low number of signal systems, this is an economical way of adding EVP to the signal system without having to upgrade their emergency vehicles. As with the Opticom system, maintenance includes re-aiming or readjusting the microphone from time to time. The standard warranty is the same as for an Opticom system, but overall lifespan of this type of system is unknown given that this type of system is not widely used.

For overall long-term reliability and given the number of signal systems in the Cloquet area, we recommend that the City consider using the Opticom system and adding the emitters to their emergency vehicles due to much stronger performance than the Sonic system.

Also of consideration to the City – should the City elect to add EVP to the 10th Street and 14th Street systems as part of the upcoming project, the City may also want to consider adding EVP to the Trunk Highway 33 system to the west so that all signals along Cloquet Avenue (and in the vicinity of the fire station on Cloquet Avenue) have EVP. Cost to add EVP to the Trunk Highway 33 system is also around \$8,000 to \$10,000 and would require State approval to add given that this is a State owned and operated signal system.

10. Overhead Street Name Signs

The 14th Street signal system has “14th St” signs overhead for driver information but the 10th Street signal system does not have overhead street name signs. Typical cost to add an overhead street name sign is approximately \$500 to \$700 per sign and is recommended for the mast arms facing each Cloquet Avenue approach to 10th Street.

11. Left Turn Phasing

Both intersections have separate striped left turn lanes for the Cloquet Avenue approaches but no separate left turn phasing. Given that traffic count information is not known for these approaches, the need for adding left turn phasing is also unknown. However, for peak through traffic periods, having dedicated left turn phasing may be beneficial to limit delays to left turning motorists.

The City has two options for providing left turn phasing for eastbound and westbound traffic at each intersection: 5-section protected-permissive left turn phasing and 4-section flashing yellow arrow phasing. Protected/permissive left turn phasing could be added with existing controller cabinet facilities but flashing yellow arrow phasing would require that both controller cabinets be replaced.

For both 10th Street and 14th Street left turns, a 3-foot extension would be required to be installed on both mast arms so that the left turn signal head would be centered on the approaching left turn lane. This would also require that the existing 3-section RYG overhead signal head be relocated from the end of each mast arm to a strap-on mid mast arm mount centered on the approaching through lane so that there is a signal head centered on both the left turn lane and approaching

through lane. A far-left pole mounted left turn signal would also be required to be installed so that there are two left turn signal heads facing each approach. This would be the case for either of the two left turn phasing operations.

Not including any loop detector or controller cabinet upgrade costs listed elsewhere, the estimated cost to add left turn phasing to each Cloquet Avenue approach is approximately \$10,000 per signal system.

This upgrade is not required to be completed but would enhance the ability to operate each signal system's left turn capabilities during peak traffic periods. If left turning traffic volumes are significant especially during peak traffic periods, we recommend that the City consider this upgrade.

12. Overhead Signals for Side Street Approaches

The 10th Street and 14th Street approaches to Cloquet Avenue currently have pedestal pole mounted signal heads installed on the far left and far right sides of each approach. Pedestal poles provide limited visibility of approaching signal heads – the lack of overhead signals on an intersection approach has been shown to increase crash frequency in many cases. We recommend that the City consider adding mast arm poles and overhead signals facing each side street approach to Cloquet Avenue to enhance visibility, provide a better location for EVP detection placement, and also to allow for overhead street name sign installations to provide more driver information. For any new signal installations, overhead signal installations are standard for all intersection approaches.

Pedestal poles for both intersections are currently located in less than optimal locations for curb ramp enhancements and both vehicular and pedestrian visibility (potentially due to utility issues in each area). We recommend that these pedestal pole installations (2 per intersection) be eliminated and new mast arm poles be installed on the northeast and southwest corners at locations that could be used for ADA compliant push button installations. Estimated cost per mast arm pole installation is approximately \$12,000 per pole.

If mast arm poles are not desired to be installed at this time, we recommend that the City consider having the existing pedestal poles relocated as part of this project to place these poles for ADA compliance as well as enhance visibility of these signal heads. Estimated cost to remove and replace each pedestal pole is approximately \$5,000 per pole.

For further consideration of this upgrade, we recommend a field visit to review options for signal pole placements.

13. Service Equipment

Both signal systems use older meters and disconnects instead of the current standard battery back-up ready free-standing signal service cabinets. A free-standing service cabinet with room for future battery back-up equipment is the current minimum standard for new signal installations.

For both signal systems, the existing power equipment looks to be in reasonably good condition and could be maintained as is. The likelihood of needing to have battery back-up capabilities (to

allow for a signal system to be in operation for around 8 hours during a power outage) at these locations is probably low. Given the estimated cost of \$5,000 per service cabinet to provide a battery back-up ready cabinet and another \$3,000 per cabinet to provide full battery back-up capabilities, we do not recommend that any modifications be made to the service equipment at either intersection at this time.

14. Traffic Signal Cables

Existing signal cables at both signal systems are likely original (25-30 years old or longer) and may be in need of replacement to ensure longer life span of each signal system. Log book information is not showing any significant issues with cable repairs or failures, but traffic signal cables typically are recommended for use for around a 30 year lifespan before replacement should be considered.

In many similar revision type projects, we have recommended that all signal cables be replaced while the controller cabinet is being replaced to enhance the life span of the entire signal system and ensure that cables (along with additional spare conductors) are available for all types of signal operations (including enhanced left turn phasing). With mice and other rodents often getting into signal pole bases, damage to signal cables of this age has been common.

Replacing all signal cables typically costs around \$8,000 to \$10,000 per intersection and typically requires that the signal system be out of operation for 1-2 weeks to allow for all existing cables to be removed and replaced.

15. Traffic Signal Conduits

All existing conduits under roadways appear to be 3-inch rigid steel conduits and are likely in reasonably good condition. For added capacity, the City may want to consider installing another 3-inch conduit under the east leg at 10th Street and under the west leg at 14th Street. The current 3-inch conduits under these intersection legs are used to run signal cables from the controller cabinets to 2 corners of each intersection. With this number of cables and limited capacity within one 3-inch conduit, there is little room to add cables to either conduit should the need arise in the future. While the intersection is under construction, adding a second conduit under the above mentioned intersection approaches can be done fairly inexpensively with minimal impact to area traffic.

Adding a 3-inch directionally bored conduit under an intersection approach is estimated to cost \$3,000 per installation.

16. Bump-Out Considerations

At both intersections, we recommend that the City consider adding bump-outs on each corner of the intersection (as allowable to maintain adequate right turning access) to provide more room for upgraded pedestrian curb ramps and better clearance from existing signal system components (poles and handholes). Access on some corners is tight and getting ADA compliant ramps installed at some locations will be challenging due to the presence of these signal components. With parking provided on all legs at both intersections and no separate right turn lanes present,

Cloquet Avenue at 10th Street, 14th Street
Preliminary Signal System Review
July 18, 2017
Page 9

there is opportunity for the City to consider bump-out construction with pedestrian curb ramp design work to provide better pedestrian provisions in the commercially developed area.

Costs for bump-out construction are not included, as it is assumed that typical curb and gutter and sidewalk costs would be used to provide bump-outs on any corner.

As noted above, there are a number of potential improvements that the City can consider at each intersection and signal system. If needed, we are available to meet with you on site to go over each of the above mentioned enhancements if that helps the City make decisions on which items make sense to include with the 2018 construction project.

A summary sheet is also attached for your information which includes the estimated cost for each of the potential signal modifications.

With regards to signal consultant costs to complete revised plans and technical specifications (and any required Signal Justification documentation as needed by State Aid), we estimate these costs at \$17,800 for completing design work at both signal systems. A proposed scope and preliminary letter proposal is attached with this letter for your information and consideration which details all work that would be included by SEH for the traffic signal design work on the project. The \$17,800 cost includes signal construction assistance costs of \$6,000 for providing signal staking assistance, being present during signal turn-ons, final inspection and punch list preparation, follow-up with the signal contractor to ensure that all punch list items are addressed, and final record drawing preparation.

We hope that this information provides you with insight needed to help evaluate and implement the appropriate and cost-effective signal modifications for each intersection.

Please feel free to contact me at 651.490.2073 or email me at jgray@sehinc.com to discuss further as needed. As mentioned above, we are also available to meet with you to go over any of the information provided above or in the attached preliminary letter proposal for design services. Thank you.

c: Caleb Peterson, City of Cloquet

attachments

Cloquet Avenue at 10th Street

Revise Signal System Preliminary Estimated Costs

Prepared by JMG (SEH) on July 17, 2017

Work Item	Quantity	Unit Cost	Total Cost
Item 1 - Loop Detector Replacement	16	\$1,000	\$16,000
Item 2 - Controller Cabinet Replacement	1	\$25,000	\$25,000
Item 3 (Pedestrian Push Buttons)			
Pedestrian Push Buttons (Solid State on Signal Poles)	8	\$200	\$1,600
Pedestrian Push Button Stations	8	\$1,500	\$12,000
APS Push Buttons	8	\$1,000	\$8,000
Solid State Push Buttons on Push Button Stations	8	\$1,700	\$13,600
APS Push Buttons on Push Button Stations	8	\$2,500	\$20,000
Item 4 (Vehicle Signal Heads)			
LED Signal Indication Replacement in Existing Signals	24	\$125	\$3,000
Add Far Left Signals for Cloquet Avenue Approaches	2	\$1,000	\$2,000
Item 5 - Pedestrian Signal Head Replacement	8	\$700	\$5,600
Item 6 - Upgrade Street Lights to be LED	2	\$1,000	\$2,000
Item 7 - Adjust Handholes and Replace Covers	8	\$500	\$4,000
Item 8 - Paint Signal System	1	\$8,000	\$8,000
Item 9 (Emergency Vehicle Preemption)			
Opticom System (not including emitters)	1	\$8,000	\$8,000
Vehicle Mounted Emitters for Opticom	varies	\$1000/emitter	-
Sonic (Siren-Activated) System	1	\$9,000	\$9,000
Item 10 - Overhead Street Name Signs	2	\$600	\$1,200
Item 11 (Left Turn Phasing for Cloquet Avenue approaches) (Note - upgraded controller cabinet is required for flashing yellow arrow operations)	1	\$10,000	\$10,000
Item 12 - Overhead Signals for 10th Street Approaches (via new mast arm pole installation on NE and SW corners)	2	\$12,000	\$24,000
Relocate Pedestal Poles instead of Overhead Signals	2	\$5,000	\$10,000
Item 13 - Service Cabinet Installation (Equipment Upgrading)	1	\$5,000	\$5,000
Add Battery Back-up Equipment to New Cabinet	1	\$3,000	\$3,000
Item 14 - Replace all Traffic Signal Cables and Conductors	1	\$9,000	\$9,000
Item 15 - Install Additional 3-Inch Conduit	100'	\$30	\$3,000

Cloquet Avenue at 14th Street

Revise Signal System Preliminary Estimated Costs

Prepared by JMG (SEH) on July 17, 2017

Work Item	Quantity	Unit Cost	Total Cost
Item 1 - Loop Detector Replacement	20	\$1,000	\$20,000
Item 2 - Controller and Cabinet Replacement	1	\$28,000	\$28,000
Item 3 (Pedestrian Push Buttons)			
Pedestrian Push Buttons (Solid State on Signal Poles)	8	\$200	\$1,600
Pedestrian Push Button Stations	8	\$1,500	\$12,000
APS Push Buttons	8	\$1,000	\$8,000
Solid State Push Buttons on Push Button Stations	8	\$1,700	\$13,600
APS Push Buttons on Push Button Stations	8	\$2,500	\$20,000
Item 4 (Vehicle Signal Heads)			
LED Signal Indication Replacement in Existing Signals	24	\$125	\$3,000
Add Far Left Signals for Cloquet Avenue Approaches	2	\$1,000	\$2,000
Item 5 - Pedestrian Signal Head Replacement	8	\$700	\$5,600
Item 6 - Upgrade Street Lights to be LED	2	\$1,000	\$2,000
Item 7 - Adjust Handholes and Replace Covers	9	\$500	\$4,500
Item 8 - Paint Signal System	1	\$8,000	\$8,000
Item 9 (Emergency Vehicle Preemption)			
Opticom System (not including emitters)	1	\$8,000	\$8,000
Vehicle Mounted Emitters for Opticom	varies	\$1000/emitter	-
Sonic (Siren-Activated) System	1	\$9,000	\$9,000
Item 11 (Left Turn Phasing for Cloquet Avenue approaches) (Note - upgraded controller cabinet is required for flashing yellow arrow operations)	1	\$10,000	\$10,000
Item 12 - Overhead Signals for 14th Street Approaches (via new mast arm pole installation on NE and SW corners)	2	\$12,000	\$24,000
Relocate Pedestal Poles instead of Overhead Signals	2	\$5,000	\$10,000
Item 13 - Service Cabinet Installation (Equipment Upgrading)	1	\$5,000	\$5,000
Add Battery Back-up Equipment to New Cabinet	1	\$3,000	\$3,000
Item 14 - Replace all Traffic Signal Cables and Conductors	1	\$9,000	\$9,000
Item 15 - Install Additional 3-Inch Conduit	100'	\$30	\$3,000

July 17, 2017

Mr. John Anderson
Assistant City Engineer
City of Cloquet
1307 Cloquet Avenue
Cloquet, MN 55720

Subject: Proposal for Professional Services for Cloquet Avenue Signal Revisions
Cloquet, Minnesota

Dear Mr. Anderson

Based on your request, SRF Consulting Group, Inc. (SRF) is pleased to submit this proposal to provide professional services for traffic signal revisions at two intersections on Cloquet Avenue in downtown Cloquet. The signal revision work is scheduled for 2018 construction, and would occur concurrent with a planned 2-mile mill-and-overlay project that includes ADA curb ramp upgrades. The goal of the signal revisions will be to:

- replace detection loops;
- upgrade to LED indications;
- add emergency vehicle preemption;
- update signal controllers;
- re-paint poles and mast arms, and;
- upgrade pedestrian pushbuttons and indications to current design standards.

Our team will be led by Project Manager, Nicholas Erpelding, PE, PTOE. Nick is familiar with the process and requirements for traffic signal design in northeast Minnesota, having worked with the City of Duluth and MnDOT District 1 on several recent projects.

Nick will be supported by a team with significant signal design experience. Luke James, who is currently helping Nick prepare design plans and specifications for the 10-signal Superior Street reconstruction project in Duluth, will serve as the lead Project Engineer. Nick's and Luke's resumes are attached to this proposal.

Scope of Services

We propose to carry out the work as described in the attached Scope of Work.

www.srfconsulting.com

One Carlson Parkway North, Suite 150 | Minneapolis, MN 55447-4443 | 763.475.0010 Fax: 763.475.2429

An Equal Opportunity Employer

Assumptions

- Our work will be completed to MnDOT standards.
- Our initial task will be to prepare a signal warrant analysis using City-provided traffic count data.
- We assume both signals will be justified, even if not strictly meeting volume warrants, due to the benefit they provide for pedestrians.
- We assume one concept set of plans (30% plans) and draft final set of plans, specifications and estimate (90% P,S&E) will be needed for City review and comment, before providing final (100%) P,S&E.
- We assume construction administration tasks, such as bidding assistance, response to contractor questions, construction staking, and construction inspection will not be required, though we would be happy to add these services to the scope of work if desired.
- We assume coordinated signal timing plan development, implementation and fine-tuning will not be required. We are similarly happy to provide these services upon request.

Schedule

We assume design work will be completed in Fall 2017, with an anticipated Winter 2017-2018 bid date for Summer 2018 construction.

Basis of Payment/Budget

We propose to be reimbursed for our services on an hourly basis for the actual time expended. Other direct project expenses, such as printing, supplies, reproduction, etc., will be billed at cost, and mileage will be billed at the current allowable IRS rate for business miles. Invoices will be submitted monthly for work performed during the previous month. Payment is due within 30 days.

Based on our understanding of the project and our scope of services, we estimate the cost of our services to be **\$14,940.00**, which includes both time and expenses.

Changes in the Scope of Services

It is understood that if the scope or extent of work changes, the cost will be adjusted accordingly. Before any out-of-scope work is initiated, however, we will submit a budget request for the new work and will not begin work until we receive authorization from you.

Standard Terms and Conditions

The attached Standard Terms and Conditions (Attachment A), and Scope of Work (Attachment B), together with this proposal for professional services, constitute the entire agreement between the Client and SRF Consulting Group, Inc. and supersede all prior written or oral understandings. This

agreement may only be amended, supplemented, modified or canceled by a duly executed written instrument.


Acceptance/Notice to Proceed

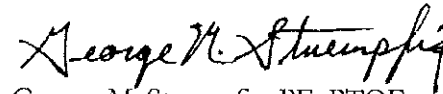
A signed copy of this proposal, mailed or emailed to our office, will serve as acceptance of this proposal and our notice to proceed. The email address is ncrpelding@srfconsulting.com.

We sincerely appreciate your consideration of this proposal and look forward to working with you on this project. Please feel free to contact us if you have any questions or need additional information.

Sincerely,

SRF CONSULTING GROUP, INC.


Nicholas Erpelding, PE, PTOE
Senior Associate


George M. Stuempfig, PE, PTOE
Principal

NJE/GMS/nje

- Attachment A – Standard Terms and Conditions
- Attachment B – Scope of Work
- Attachment C – Project Staff Resumes

Approved

(signature)
Name _____
Title _____
Date _____

This cost proposal is valid for a period of 90 days. SRF reserves the right to adjust its cost estimate after 90 days from the date of this proposal.

**ATTACHMENT A
STANDARD TERMS AND CONDITIONS**

The Standard Terms and Conditions together with the attached Proposal for Professional Services constitute the entire Agreement between the CLIENT and SRF Consulting Group, Inc. ("SRF") and supersede all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

1. STANDARD OF CARE

- a. The standard of care for all professional services performed or furnished by SRF under this Agreement will be the care and skill ordinarily used by members of SRF's profession practicing under similar circumstances at the same time and in the same locality. SRF makes no warranties, expressed or implied, under the Agreement or otherwise, in connection with SRF's service.
- b. The CLIENT shall be responsible for, and SRF may rely upon, the accuracy and completeness of all requirements, programs, instructions, reports, data, and other information furnished by CLIENT to SRF pursuant to this Agreement. SRF may use such requirements, reports, data, and information in performing or furnishing services under this Agreement.

2. INDEPENDENT CONTRACTOR

All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of the CLIENT and SRF and not for the benefit of any other party. Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the CLIENT or SRF. SRF's services under this Agreement are being performed solely for the CLIENT's benefit, and no other entity shall have any claims against SRF because of this Agreement or the performance or nonperformance of services hereunder.

3. PAYMENT TO SRF

Invoices will be prepared in accordance with SRF's standard invoicing practices and will be submitted to the CLIENT by SRF monthly, unless otherwise agreed. Invoices are due and payable within thirty (30) days of receipt. If the CLIENT fails to make any payment due SRF for services and expenses within forty-five (45) days after receipt of SRF's invoice thereafter, the amounts due SRF will be increased at the rate of 1-1/2% per month (or the maximum rate of interest permitted by law, if less). In addition, SRF may, after giving seven days written notice to the CLIENT, suspend services under this Agreement until SRF has been paid in full of amounts due for services, expenses, and other related charges.

4. OPINION OF PROBABLE CONSTRUCTION COST

Any opinions of costs prepared by SRF represent its judgment as a design professional and are furnished for the general guidance of the CLIENT. Since SRF has no control over the cost of labor, materials, market condition, or competitive bidding, SRF does not guarantee the accuracy of such cost opinions as compared to contractor or supplier bids or actual cost to the CLIENT.

5. INSURANCE

SRF will maintain insurance coverage for Workers' Compensation, General Liability, Automobile Liability and Professional Liability and will provide certificates of insurance to the CLIENT upon request.

6. INDEMNIFICATION AND ALLOCATION OF RISK

- a. To the fullest extent permitted by law, SRF agrees to indemnify and hold harmless the CLIENT, their officers, directors and employees against all damages, liabilities or costs (including reasonable attorneys' fees and defense costs) to the extent caused by SRF's negligent acts under this Agreement and that of its subconsultants or anyone for whom SRF is legally liable.
- b. To the fullest extent permitted by law, the CLIENT agrees to indemnify and hold harmless SRF, their officers, directors and employees against all damages, liabilities or costs to the extent caused by the CLIENT's negligent acts under this Agreement and anyone for whom the CLIENT is legally liable.

7. TERMINATION OF AGREEMENT

Either party may at any time, upon seven days prior written notice to the other party, terminate this Agreement. Upon such termination, the CLIENT shall pay to SRF all amounts owing to SRF under this Agreement, for all work performed up to the effective date of termination.

8. OWNERSHIP AND REUSE OF DOCUMENTS

All documents prepared or furnished by SRF pursuant to this Agreement are instruments of service, and SRF shall retain an ownership and property interest therein. Reuse of any such documents by the CLIENT shall be at CLIENT's sole risk; and the CLIENT agrees to indemnify, and hold SRF harmless from all claims, damages, and expenses including attorney's fees arising out of such reuse of documents by the CLIENT or by others acting through the CLIENT.

9. USE OF ELECTRONIC MEDIA

- a. Copies of Documents that may be relied upon by the CLIENT are limited to the printed copies (also known as hard copies) that are signed or sealed by SRF. Files in electronic media format of text, data, graphics, or of other types that are furnished by SRF to the CLIENT are only for convenience of the CLIENT. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.
- b. When transferring documents in electronic media format, SRF makes no representations as to long-term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by SRF at the beginning of this Assignment.
- c. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- d. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of this data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within sixty (60) days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the sixty (60) day acceptance period will be corrected by the party delivering the electronic files. SRF shall not be responsible to maintain documents stored in electronic media format after acceptance by the CLIENT.

10. FORCE MAJEURE

SRF shall not be liable for any loss or damage due to failure or delay in rendering any service called for under this Agreement resulting from any cause beyond SRF's reasonable control.

11. ASSIGNMENT

Neither party shall assign its rights, interests or obligations under this Agreement without the express written consent of the other party.

12. BINDING EFFECT

This Agreement shall bind, and the benefits thereof shall inure to the respective parties hereto, their legal representatives, executors, administrators, successors, and assigns.

13. SEVERABILITY AND WAIVER OF PROVISIONS

Any provisions or part of the Agreement held to be void or unenforceable under any laws or regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon the CLIENT and SRF, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision. Non-enforcement of any provision by either party shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

14. SURVIVAL

All provisions of this Agreement regarding Ownership of Documents and Reuse of Documents, Electronic Media provisions, Indemnification and Allocation of Risk, and Dispute Resolution shall remain in effect.

15. DISPUTE RESOLUTION

If negotiation in good faith fails to resolve a dispute within the thirty (30) days of notice of the dispute, or time period specified by applicable law, then the parties agree that each dispute, claim or controversy arising from or related to this Agreement or the relationships which result from this Agreement shall be subject to mediation as a condition precedent to initiating legal or equitable actions by either party. Unless the parties agree otherwise, the mediation shall be in accordance with the Commercial Mediation Procedures of the American Arbitration Association then currently in effect. A request for mediation shall be filed in writing with the American Arbitration Association and the other party. No legal or equitable action may be instituted for a period of ninety (90) days from the filing of the request for mediation unless a longer period of time is provided by agreement of the parties. Cost of mediation shall be shared equally between the parties. Mediation shall be held in a location mutually agreed upon by the parties. The parties shall memorialize any agreement resulting from the mediation in a mediated settlement agreement, which agreement shall be enforceable as a settlement in any court having jurisdiction thereof.

16. CONTROLLING LAW

This Agreement is to be governed by the law of the principal place of business of SRF.

17. SITE SAFETY

SRF shall not at any time supervise, direct, control or have authority over or charge of, nor be responsible for, the construction means, methods, techniques, sequences or procedures, or for safety and security precautions and programs in connection with the work performed by any Contractor for the Project, nor for any failure of any Contractor to comply with laws and regulations applicable to such Contractor's work, since these are solely the Contractor's rights and responsibilities. SRF shall not be responsible for the acts or omissions of any Contractor or Owner, or any of their agents or employees, or of any other persons (except SRF's own employees and consultants), furnishing or performing any work for the Project, except as specifically outlined in SRF's scope of services.

Scope of Work



10823.PP

Client: City of Cloquet

Project: Cloquet Avenue Traffic Signal Revisions

Project Overview:

Signal revision design for two intersections in downtown Cloquet:

- Cloquet Avenue and 14th Street
- Cloquet Avenue and 10th Street

The signal revisions are scheduled for 2018 construction, and would occur concurrent with a planned 2-mile mill-and-overlay project that includes ADA curb ramp upgrades. The goal of the signal revisions will be to:

- replace detection loops;
- upgrade to LED indications;
- add emergency vehicle preemption;
- update signal controllers;
- re-paint poles and mast arms, and;
- upgrade pedestrian pushbuttons and indications to current design standards.

TASK NO. TASK DESCRIPTION

1.0 Project Management & Coordination

Assumptions:

- Project will begin in July, 2017 and be completed by March, 2018 (9 months).
- Up to 2 hours of remote video conferencing meeting time via *Skype for Business* for one SRF staff person is included. Although not included in this fee estimate, we view in-person meeting time as important, and are happy to provide a revised fee estimate if desired.
- Brief monthly status updates by phone or email.

Client Deliverables:

- None.

SRF Deliverables:

- Monthly invoices and status updates.

2.0 Signal Warrant Analysis

Assumptions:

- City to provide traffic count data.
- City review only. MnDOT review not required.
- SRF Basic QA/QC.

Client Deliverables:

- Traffic count data. We are flexible on format: options include 8+ hours of weekday turning movement counts (AM, Midday, PM), 24-hour tube counts on each approach, or other similar strategies.

Scope of Work



10823.PP

Client: City of Cloquet
Project: Cloquet Avenue Traffic Signal Revisions

- 2.1 Perform signal warrant analysis for each intersection. Verify if signals meet volume warrants. If signals do not meet volume warrants, provide recommendation on whether signals are justified based on benefit provided to pedestrians.
- 2.2 Summarize results of signal warrant/justification analyses in brief memo format. One memo per intersection.

SRF Deliverables:

- Draft signal justification memos (2). PDF format.
- Final signal justification memos (2). PDF format.

3.0 Concept/Final Design

Assumptions:

- Design to MnDOT standards.
- City review only. MnDOT review not required.
- Sufficient right-of-way is available for necessary improvements.
- temporary (wood pole/span wire) traffic signal design not included. Traffic control during construction to be provided by flagger or all-way stop control.
- Ped ramp design plans and details to be completed by City. SRF to coordinate with City on ped pushbutton locations. City to be responsible for removal plans, stormwater and utility design plans, and any other required roadway design plans.
- Signal plans will be part of the larger mill-and-overlay planset. SRF will provide PDFs that can be inserted. SRF will use standard MnDOT border.
- No interconnect is required between the two signals, or between the signals and a central location.
- SRF Basic QA/QC.

Client Deliverables:

- Topo survey to construction limits, including ROW info, in CAD format (DWG or DGN).
- Proposed roadway design (curb lines if modified, striping, pavement markings including crosswalks) in CAD format (DWG or DGN).
- As-built signal plans (already provided as part of RFP).

- 3.1 30% Concept Layouts. Provide for City review to confirm work to be performed and approximate pushbutton locations.
- 3.2 90% Draft Final PS&E. Provide draft plans, Division SS special provisions and construction cost estimate for City review.
- 3.3 100% Final PS&E. Provide final plans, Division SS special provisions and construction cost estimate. PDF format to be inserted into overall planset by City.

SRF Deliverables:

- 30% concept layouts (2). 11x17 PDF format.
- 90% and 100% design plans. 11x17 PDF format, plus CAD design files as desired. Detail sheets (4), signal layouts (2), field wiring diagrams (2), mast arm mounted sign details (2).
- 90% and 100% Division SS special provisions. Word and PDF formats.
- 90% and 100% Construction cost estimate. PDF format.



ENGINEERS
PLANNERS
DESIGNERS

Attachment C
Project Staff Resumes

Project Manager

Nicholas Erpelding, PE, PTOE
Senior Associate

Project Engineer

Luke James, EIT
Traffic Engineer

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An Equal Opportunity Employer

Nicholas Erpelding, PE, PTOE

Senior Associate – Advanced Transportation Systems



Nick has 16 years of experience in traffic and transportation engineering with a focus on traffic signal design and operations. His work includes coordinated signal timing optimization and implementation for hundreds of intersections; traffic signal and pedestrian signal design; Transit Signal Priority (TSP) design and implementation, and ITS planning and design for clients across the upper Midwest. Nick's other traffic engineering experience includes roadway lighting design and traffic impact study preparation.

Areas of Expertise

- Traffic Signal Operations:
 - Coordinated Signal Timing Optimization
 - Transit Signal Priority (TSP)
- Traffic Signal Design
- ITS Planning and Design
- Roadway Lighting Design
- Traffic Impact Studies

Education

Bachelor of Science in Civil Engineering, University of Notre Dame, 2001

Traffic and Transportation Engineering; Northwestern University, 2002

Registration

Professional Engineer:

- Minnesota #44582
- Colorado #45101
- North Dakota #5870
- Texas #108189
- Wisconsin #42780-6

Professional Traffic Operations Engineer: #2094

Professional Affiliation

Institute of Transportation Engineers (ITE)

North Central Section - Institute of Transportation Engineers (NCITE); Past President

Minnesota Surveyors and Engineers Society

Continuing Education

SRF Quality Management Training

Selected Recent Traffic Signal Design Experience

Superior Street Reconstruction Signal and Interconnect Design, City of Duluth. Task Manager. Prepared signal and interconnect design plans and specifications for this proposed 3-year, 10-intersection reconstruction project. The design, 90% complete as of mid-2017, incorporates emergency vehicle preemption and transit signal priority, fiber optic interconnect, flashing yellow arrow indications and complete ADA pedestrian facility upgrades. Prepared signal justification reports for MnDOT approval.

Kenwood/Arrowhead Reconstruction, City of Duluth. Project Manager. Led a two-consultant team. Prepared design plans and specifications for a two-intersection reconstruction project. Project included concept geometric layouts, preliminary and final roadway, utility, stormwater and pedestrian ramp design, and traffic design including two traffic signals, fiber optic interconnect, and red-light enforcement beacons. Devised a staging plan that allowed the project to be substantially constructed in just one season, minimizing disruption for area residents and commuters. Prepared signal justification reports for MnDOT State Aid approval.

Multimodal Facility Traffic Signal Design, Duluth Transit Authority and City of Duluth. Project Manager. Designed one new traffic signal and revisions to two existing signals adjacent to the new multimodal transit facility in the City of Duluth. Two of the signals incorporate the use of Transit Signal Priority to allow buses only to call left turn phases from a shared through/left turn lane open to mixed traffic to improve bus travel times. Prepared signal justification reports for MnDOT State Aid approval.

Grand Avenue Pedestrian Beacons, MnDOT District 1. Task Manager. Hired as subconsultant as part of a larger roadway reconstruction project in Duluth. Prepared design plans and specifications for 5 pedestrian crossing beacons. Worked with equipment vendors to determine requirements for mixed hard-wire/solar powered system. Coordinated with prime consultant's roadway lighting designer to accommodate pedestrian beacon wiring in lighting conduits. Prepared plans for insertion into prime consultant's



Nicholas Erpelding, PE, PTOE

Senior Associate – Advanced Transportation Systems

overall plan set. Coordinated with MnDOT staff to address construction questions.

US 85 Bypass Traffic Signals, NDDOT. Led signal design for the three intersections on the new northwest bypass in Williston, North Dakota. Design include both interim and permanent signals, as well as work zone traffic control and advanced warning flashers.

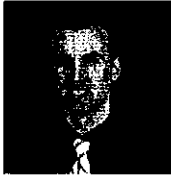
Columbia Road Reconstruction Traffic Signal Design and Timing, City of Grand Forks. Prepared temporary and permanent signal design plans for the reconstruction and widening of Columbia Road between 11th and 14th Avenue. Developed and implemented optimized interim and permanent coordinated signal timing plans For Phase 2.

Shady Oak Road Reconstruction (TH 62 and TH 212 Interchanges), City of Eden Prairie. Led the traffic signal design, signal interconnect design and coordinated signal retiming tasks for a multi-phase, 8-intersection, two-interchange roadway reconstruction project in the southwest Twin Cities metro area. Prepared temporary signal plans to accommodate a complex multi-stage construction schedule. Prepared signal justification reports for multi-agency approval.



Luke James

Traffic Engineer – Advanced Transportation Systems



Luke has four years of traffic and transportation engineering experience. He is primarily involved with traffic signal design, signing/pavement marking design, temporary traffic control plans, traffic analysis, signal timing, and construction inspection. His responsibilities include the preparation of design plans, specifications, construction cost estimates, and reports, including MnDOT Signal Justification Reports and Intersection Control Evaluations.

Areas of Expertise

- Traffic Signal Design Plans, Specifications, & Cost Estimates
- Traffic Signal Warrants Analysis, Signal Justification Reports, Intersection Control Evaluations
- Traffic Operational Analysis, Synchro/SimTraffic Modeling
- Signing & Pavement Marking Design
- Temporary Traffic Control & Detour Plans
- Construction Inspection

Education

Bachelor of Civil Engineering,
University of Minnesota, 2013

Registration

Engineer in Training: Minnesota
#144123

Certification

MnDOT Signal and Lighting #11228

Professional Affiliation

Institute of Transportation Engineers,
North Central Section

Continuing Education

MnDOT Signal and Lighting
Certification

MnDOT Traffic Signal Timing and
Coordination

Selected Recent Traffic Signal Design Experience

Superior Street Reconstruction, Duluth, Minnesota.

Prepared traffic signal plans for ten traffic signals in downtown. The design included fiber optic interconnect, Flashing Yellow Arrow (FYA) indications, and ADA pedestrian accommodations.

CSAH 112 Reconstruction, Long Lake, Minnesota.

Prepared signal design plans, specifications, cost estimates, and signal justification reports for two traffic signals. The plans included Flashing Yellow Arrow and fiber interconnect.

Main Avenue Mill and Overlay, Moorhead, Minnesota.

Prepared traffic signal plans and estimate for one traffic signal. The plans included FYA, fiber interconnect, and railroad preemption.

Cedar Grove Intersection Improvements, Eagan, Minnesota.

Assisted in the preparation of specifications and estimate for revisions to two existing traffic signals that included the addition of FYA, APS push buttons, and fiber interconnect.

Robert Street Reconstruction, West Saint Paul, Minnesota.

Worked on signal design plans for 15 temporary signals. These plans included 5-section “doghouse” style heads.

Centennial Road at 43rd Avenue, Bismarck, North Dakota.

Luke prepared traffic signal plans and estimate for one traffic signal. The design included FYA and right turn overlaps.

