

Corporation of the Town of Mattawa **Public Works Department**

Box 390, 160 Water St., Mattawa, Ont., P0H 1V0 phone (705) 744-2424 fax (705) 744-0104 e-mail: mattawapw@on.aibn.com

REQUEST FOR PROPOSAL

FOR

LED STREET LIGHTING PROJECT

January 2015

REQUEST FOR PROPOSALS

Supply, Install & Maintain LED Street Lighting Fixtures

The Corporation of the Town of Mattawa seeks proposals from qualified firms (bidders) to provide 249 Light Emitting Diode (LED) streetlight fixtures. These LED streetlights are to replace existing cobra head style High Pressure Sodium fixtures installed throughout the municipality. This represents 100% of the street lights which The Corporation of the Town of Mattawa.

Proposal packages may be obtained from the Town Hall Monday - Friday, 9:00 A.M. to 5:00 P.M located at 160 Water Street in the Town of Mattawa, or by e-mail from Marc Mathon, Public Works Superintendent by request at <u>mattawapw@on.aibn.com</u> or from Amy Honen, Administrative Assistant by request at <u>info@mattawa.ca</u>.

Proposal submissions shall be accepted in a sealed envelope, clearly marked as to the contents, for example: "Mattawa LED Street Lighting Project and addressed to The Corporation of the Town of Mattawa – Public Works Department at the office of:

Francine Desormeau Deputy Clerk Mattawa Town Hall 160 Water St, Mattawa, Ont., P0H 1V0

Primary Contact for this Project is:

Marc Mathon, P.Eng Public Works Superintendent (705) 744-2424 (705) 498-2396 Cell

Submission will be accepted no later than 4 pm local time, Wednesday, February 18th, 2015

The Town of Mattawa (Town) employs a value based evaluation process and as such the lowest or any proposal may not necessarily be accepted. This document and RFP process does not constitute a call for tenders. Bidders undertake any expenditures related to the submission of a proposal at their own risk.

This RFP neither expresses nor implies any obligation on the part of the municipality to enter into a contract with any party submitting a response or responses. Power savings, fixture efficacy, very low maintenance, photometric performance and reliability form the foundation of a high performance LED fixture expected for this project. A holistic approach will be used when evaluating the LED fixture proposed. The objective of this project is to provide best value of product and installation for the Town achieving a 20 year maintenance free product life expectancy.

In support of this, all components should have the same level of quality and life expectancy. This includes LED light engine, power supply driver, photo cells, and any adaptive equipment (information pertaining to component parts will also contain the warranty life for each of the component part). The Town reserves the right to amend this RFP document at any time before the RFP Closing Date and will issue an addendum in the event of a change.

The Town reserves the right to negotiate, after the RFP Closing Date, with the successful proposer/bidder for services as they relate to the Supply and Installation of LED Street lighting, to finalize service arrangements in the best interests of the Town. In applying this privilege clause, the Town shall not be bound by trade or custom in dealing with and/or evaluating the responses to the RFP.

In submitting a proposal, the Bidder has accepted the reservation of rights (privilege clause) as set out herein and agrees to be bound by same.

1.0 Right to Accept or Reject Proposals: The Acceptance of rejection of proposals will be at the sole discretion of the Town of Mattawa (hereinafter referred to as the Town). The Town reserves the right to reject all or any proposals, and to not accept the lowest proposal.

The Town may accept any proposal or any portion of any proposal that may be considered to be in the best interests of the Town, based on a holistic evaluation of the proposals. The right is also reserved to waive formality, informality or technicality contained in any proposal. This includes the right to accept a proposal that is not strictly compliant with the instructions in the RFP document.

Late proposals will not be accepted by the Town. Submissions by fax and e-mail will not be accepted.

2.0 Inquiries During Proposal Preparation Period:

Should a bidder find discrepancies in, or omissions from the Request for Proposals, or should they be in doubt as to their meaning, he/she should notify the principal contact person immediately in writing, who may then send directive to all bidders listed as having obtained copies of this Request for Proposals. No oral interpretations shall be made to any bidder as to the meaning of any part of the Request for Proposals. If it is considered by the Town that correction, explanation or interpretation is necessary; a written addendum will be issued. All addenda will form part of the Proposal submission.

The bidder is advised that inquiries or questions concerning this Request of Proposals should be directed to the office of the **Public Works Department – Marc Mathon**, P.Eng by e-mail at <u>mattawapw@on.aibn.com</u> or by fax at 705 744-0104 or submitted to the Town Hall in paper form. Marc Mathon can be reached at (705) 744-2424 or by cell at (705) 498-2396.

3.0 Bidders to Investigate: Firms submitting proposals must satisfy themselves by personal examination of the project, and by such means as they prefer, to determine the actual conditions and requirements of the work.

The Town shall not be held liable for costs incurred by respondents in replying to this RFP.

4.0 General Conditions:

Proposals shall be valid for acceptance for a period of ninety (90) days from the closing date or such additional time as may be mutually agreed upon in writing.

Bidders who incur any expenditure related to the submission of a proposal and any subsequent negotiations with the Town do so at their own risk.

The Town wishes to firmly establish the total cost of the work to be performed prior to entering into a Contract. The Town requires that bidders supply a detailed bid price of the total cost including all fees, expenses and disbursements. If a contract is awarded, actual costs that exceed the bid price / total cost without prior written approval of the Town will not be paid.

The Town reserves the right to alter the number or distribution of the 3 LED light types it proposes to replace so as to provide the desired outcomes. Payment will be based on actual number of installed LED street lights by type.

INFORMATION OWNERSHIP

The successful bidder is advised that all information produced or collected in the course of this contract is to be considered the property of the Town and shall be turned over to the Town upon request.

REGULATIONS

The Contractor shall comply with all existing Federal, Provincial, and Municipal Regulations, guidelines and standards, and other authorities having jurisdiction, including but not limited to Hydro One and ESA permitting and inspections.

INDEMNITY

If the contract is awarded, the successful bidder will be required to indemnify and hold the Corporation of the Town of Mattawa harmless and against all liability and expenses, including solicitor's fees, howsoever arising or incurred, alleging damage to property or injury to, or death of, any person arising out or attributable to the bidder's performance of the contract awarded.

Any property or work to be provided by the bidder under this contract will remain at the bidder's risk until written acceptance by the Town; and the bidder will replace, at the bidder's expense, all property or work damaged or destroyed by any cause whatsoever.

WORKERS COMPENSATION (WSIB)

If the contract is awarded, the successful bidder shall supply the Town a valid WSIB letter of good standing or equivalent. The bidder shall also be responsible for obtaining and providing evidence that any Subcontractor is also covered and provide that information to the Town. No payments will be made without a valid clearance letter.

INSURANCE

The successful Contractor shall, at his expense, obtain and keep in force the duration of the contract, Commercial General Liability Insurance satisfactory to the Town, be written by an insurer licensed to conduct business in Ontario and include but not be limited to the following:

- a) A limit of liability of not less than \$5,000,000/occurrence.
- b) The Town of Mattawa shall be named as an additional insured;
- c) The policy shall contain a provision for cross liability in respect of the named insured;
- d) Non-owned automobile coverage with a limit of at least \$5,000,000 including contractual non-owned coverage;
- e) Products and completed operation coverage (Broad Form) with an aggregate limit not less than \$5,000,000.
- f) That 30 days prior notice of an alteration, cancellation or material change in policy terms which reduces coverage's shall be given in writing to the Town.
- g) Hostile fire

What should be included:

- Severability Of Interest Clause
- Contractual Liability Oral & Written
- Contingent Employer's Liability
- Employer's Liability
- Broad Form Property Damage
- Pollution From A Hostile Fire

DEFICIENCY CORRECTION

When project is completed, the Contractor is to request in writing that a final inspection be made. Upon the respective municipal unit agreement that work is complete, the contractor is to attend the final inspection and participate in the preparation of a deficiency list. The Contractor shall correct all deficient items and advise the Town in writing when complete.

TRAFFIC CONTROL & SAFETY

Traffic Control shall not be a separate pay item and shall be included in the proposed unit price for supply and installation of the LED street lights.

The Contractor shall complete all work in a safe manner for the traveling public and for all personnel on the work site. Traffic control shall be the responsibility of the Contractor and shall be carried out in accordance with the Provincial regulations pertaining to labor (Occupational Health and Safety Act) and Ontario Traffic Manual's Book 7 for traffic control.

Street lighting is often located near high voltage power lines. The Contractor shall be required to identify these locations and make arrangements to have a safe limit of approach as determined by Hydro One or by a qualified lineman with proper clearance/deviation credentials. Any costs associated with acquiring safe clearance reports shall be at the Contractors expense.

Any permits, materials, and labour necessary to make this conversion, is to be included in the unit item price for this work. All work shall be performed to the satisfaction of the Project Manager.

PROPOSAL VALIDITY

Proposals shall be valid for acceptance for a period of ninety (90) days from the closing date or such additional time as may be mutually agreed upon in writing.

5.0 **Proposal Requirements:**

5.01 **Background:** This project involves the replacement of approximately 249 High Pressure Sodium cobra head style street lights consisting of 70 Watt, 100 Watt and 150 Watt fixtures, with LED fixtures that will provide equivalent of better lighting at a significant savings in energy costs as well as maintenance costs over a life cycle of at least 15 years.

5.02 Existing Street Lighting Inventory

For the purpose of this RFP the Town has undertaken a high level inventory of our lighting system. It must be acknowledged that the count is an estimate which may or may not be exactly what is in the field. However, it forms the basis for the analysis and preparation of proposals. Payment will be based on what is actually supplied where there is a difference in number of each category of light fixture.

Quantity	Fixture Type	System Watts	Total System W	Colour Temp ^o K	CRI	Mean Lumens
141	HPS 70	$84 \mathrm{~W}$ (bench tested)	11,844	1900	22	5,500
56	HPS 100	144 W (bench tested)	8,064	2200	22	8,000
52	HPS 150	204 W (bench tested)	10,608	2200	22	13,800
249			30,516			

Our existing system involves municipally owned fixtures and arms fixed to non-owned Hydro One poles.

5.03 Existing Electrical & Maintenance Costs

- It is estimated that our street lights are on for **4,320 hrs per year**.
- The current electrical costs for street lighting are estimated to be **19 cents/kWh**. This estimated rate is based on 2014 Hydro One billing rates and the estimate accounts for consumption, delivery, regulatory charges, debt retirement charges, street light charge and the Ontario Clean Energy Benefit.
- The annual **maintenance** costs for street lights over a 6 year period (2008 to 2013) is **\$17,502.**
- 5.04 **Test Phase:** Following an initial review of the proposals the Town will establish a short list of bidders. The Town may request that one of each size of LED lamp be supplied by bidders to the Town at the Town's cost. The bidder will, upon request, supply and install of the proposed 3 LED street lights in locations provided by the Town for test and evaluation purposes.

The bidder shall provide the cost to the Town for the supply and installation of the 3 LED street lights as part of the submission in the appropriate form provided in the Bid Forms.

It is assumed that the bidder will use installers more local to the North Bay – Mattawa area for this sample installation. However, should the bidder logistically not be able to provide installation of test units, please explain and request installation by Owner as a qualification of your pricing of sample product as "supply only".

The test / sample installation will serve only to provide the Town with information to make their final selection of the successful bidder's proposal. The Town shall pay for and own the samples after they have been installed. The successful bidder will consider the LED samples installed to have been existing to the contract and the contract quantity shall be adjusted accordingly.

The evaluation period is expected to be contained within the proposal validity period.

5.05 Included Services:

Funding Assistance

The successful bidder will provide assistance in sourcing and accessing any available funding programs to assist with financing this project. These efforts should include, but not be limited to, those programs which may be offered through Ontario Power Authority and/or Hydro One. This availability of funds could affect the decision of the Town to implement this LED streetlight conversion.

The proposal should identify an estimate of OPA rebate or other funding available that this project would qualify for. The submission of the OPA rebate calculations per the application should accompany the proposal.

GIS Mapping Assistance

The bidder should also identify it's capacity to provide the services of providing GPS recordings for the municipal GIS program. The information to be collected would include:

- Location Description
- Pole number
- GPS coordinate
- Wattage
- Bracket type
- Condition of arm

Provisions to provide / convert the information into a format that conforms to the municipal GIS system will be provided by the Town, including an Excel spreadsheet if required.

5.06 **Base Information Contained in the Proposal:**

We are looking for the following information to be included in the proposals:

a) An analysis of the expected savings by implementing the proposed LED light fixtures in place of the existing HPS fixtures, expressed in both KWh and \$ based on the current Hydro One hydro rates for Mattawa, which can be estimated at 10 cents per kWh.

A complete specification of the LED light fixture & photocell being proposed for this project that includes at least the system wattage of the fixture along with proof of bench testing that will meet the approval of Hydro One for billing purposes. It is vitally important to the realization of the expected savings that Hydro One will accept the listed system wattages of the proposed LED lighting systems.

The actual calculated projected savings based on the Hydro One accepted wattages or by bench testing must meet or better the projected savings in the proposal.

- b) This project will involve the re-wiring of all fixtures. A specification / description for the connection and fuse holder for wiring the new fixture shall also be included in the proposal.
- c) Confirmation that the project cost involves a turnkey project in which the Town is not required to incur any costs outside those it specifically lists in the RFP or on the bid forms.
- d) A full and complete description of the warranty being proposed. Please refer to Section 6 of this RFP for warranty requirements of this project.
- e) The bidder may also propose, as an option to the Town, alternative products, additional services that would add value to the proposal, but must include specific information pertaining to additional costs, if any, and additional costs savings that may be produced if any.
- f) Describe the project team's qualifications and experience of the bidder in the field of street lighting.
- 5.07 **Pre-submission Site Inspection:** The bidder is strongly encouraged to do a visual inspection of the project site to obtain all the information required for preparing their proposal. This includes extending this inspection opportunity to their sub-consultants, should there be an intention to employ one or more sub-consultants. This shall include but not be limited to measurements, pictures of structures and project site and all other observations.

No extra costs shall be incurred by the Town on the basis of the contractor not being aware of a site, pole or arm condition. If an arm is found to be in poor condition, the bidder / contractor may at that time propose its replacement but will be subject to the approval of the project manager.

Information that is provided regarding Street light location is not exclusive or comprehensive and may be modified by the Project Manager. The locations and order of installation can be at the Contractors discretion but are subject to approval by the Town's Project Manager. The Town's Project Manager has the right to delay or omit any or all locations chosen by the Contractor.

5.08 LED Street Light Standards & Performance Specifications: The supply of all LED light fixtures should meet the following manufacture and operating specifications. Third party testing and evaluation, qualifying reports, and certification submissions should be supplied as part of the response to this RFP for all proposed LED Light Fixtures. A form has been prepared for providing this information located in the RFP's Bid Forms section.

Manufacturing / assembly facility should have the following designations with copies of recognized certifications included with the proposal.

- a) ISO 9001 Quality Management Systems
- b) RoHS Restriction of Hazardous Substances (certification applies to the facility that assembles the light engine, power supply and final fixture assembly)

The LED fixtures should comply with most if not all the following Standards and specifications. Necessary testing shall be from an approved laboratory. Qualifying reports for the following should be provided with this proposal if available:

- 1) ANSI 62.41 Surge Voltages in Low Voltage AC Power Circuits
- 2) ANSI C136.14, C136.15 (Field ID), C136.31 (Vibration) and C136.37 (SSL)
- 3) ANSI RP-8 American National Standard Practice for Roadway Lighting
- 4) IES LM 80-08 Measuring Lumen Maintenance of LED Light Sources
- 5) NEMA IEC60529 Degrees of Protection provided by Enclosures IP Code
- 6) Dimmable functions
- 7) 120 240 volts AC operating voltage and complies with ANSI C136.2
- 8) RoHS compliant and lead free
- 9) Passive thermal cooling
- 10) Capacitor's rated life is greater than or equal to the overall Driver's rated life
- 11) Single die cast aluminum alloy housing is preferred
- 12) Coated with a paint to provide corrosion resistance will be preferred.
- 13) Light weight fixture fully assembled weight under 25 lbs is preferred
- 14) IP-66 rated Light Engine with Full cut-off (Dark Sky Compliant)
- 15) Designed to prevent water ingress over the full life of the fixture.

16) Operating temperature range of -40° C to $+40^{\circ}$ C

- 17) Adjustable Pole Mount Connection/tenon mounts (Compatible with Cobra Head fittings)
- 18) Hinged, tool less or common tool electrical compartment access
- 19) Housing allows tilt adjustment

20) Levelling capacity

21) Metal bird stop

22) 3 prong twist lock photo cell receptacle and photocell included - ANSI 136.10

23) LED Power Supply and Photocell designed for 20 year maintenance free operation

24) LEDs color temperature range 4,000°K to 5,000°K

25) LED's minimum Color Rendering Index of 65

It will be important for the proposal to provide photometric information on the LED light fixture product line including but not limited to:

- Fixture output in lumens
- Available drive currents
- Fixture efficacy in lumens per watt
- Total system power consumption (plug watts)
- LED L70 rating in hours at 25°C (other temperature ratings optional)

5.09 Schedule:

If, during the initial evaluation of the proposals we see that a contract will be awarded, we may ask for test installations from a short list of bidders at our cost. If a contract is then awarded, the work is to commence as soon as possible after the contract has been awarded and signed. The project schedule is expected to be, but may be altered if the Town deems it to be necessary or as otherwise provided for in the contract and this proposal.

Proposal Release to Bidders:	February 2 nd , 2015.
Closing Date for Proposals:	February 18 th , 2015.
Proposal Review Test Installations:	Week of February 23 rd , 2015.
Proposal Selection and Award:	March 23 rd , 2015.

The Proposal must include the anticipated timetable to complete the work described in the proposal based on an estimated start date / award date of March 24th, 2015.

The successful respondent shall complete all work for all locations by the proposed completion date, unless otherwise agreed upon in writing by the Contractor and the Town.

5.10 **LED Street Light Installation:**

LED light fixtures are to be supplied, installed, levelled and/or aligned to the road surface as per the instructions of the manufacturer. Photocells shall be supplied & installed as required.

Connector Wire & Fuse Kits to be replaced

Over the last few years we have had an increased number of call outs related to failed connectors or wires as they are reaching beyond 35 years old. As such the bidder is to include in their price per fixture the supply of new wire, neutral and live connectors and fuse kits (including fuses) for every street light being installed. The bidder / contractor shall ensure that they are aware of and employ installers that are specifically aware of the ESA' "Guidelines for the Design, Installation, Operation & Maintenance of Street Lighting Assets" and specifically the requirements for bonding and fusing.

The successful Bidder will need to ensure that all aspects of their work and materials meet the ESA requirements, including warranty maintenance work and shall be included in the proposed unit price for supply and install of the LED streetlight.

- 5.11 **Reliability Testing mean time between failures:** The proposal will provide information in connection with any reliability testing that may have been undertaken on the proposed LED fixture products or components. This includes whether the power supply has been tested in accordance with Telecordia SR-332 Reliability Prediction Procedure for Electronic Equipment.
- 5.12 **Photocell:** preference will be for photocells having longer maintenance free life cycle. Please include specification information describing the maintenance free life cycle.

6.0 Warranty:

LED fixtures shall be provided with, a minimum, a ten (10) year full replacement warranty on all luminaire parts, including LED.s, power supplies, photocell and fixture housing.

The Contractor shall provide replacement fixtures at no cost to the Town for the entire warranty period. If replacement fixtures are not able to be made available within 5 working days of a failure occurrence, the Supplier will maintain, at no cost to the Town, 3 fixtures of the predominant size/voltage/type, and 1 fixture of the remaining size/voltage/types during the warranty period. Defective fixtures will be returned to the Supplier upon request, and at the Supplier's cost.

In addition to the standard warranty statement provided by the manufacturer of the various components of the lighting system the following shall also be considered failures warrantied by the bidder / contractor.

For the purpose of this warranty, failure of the fixture will be deemed to have occurred if the photocell fails to cause the light to turn on at dusk, or cycles on and off during the night or fails to turn the light off at dawn and the light remains on through the day.

For the purposes of this warranty, failure of the fixture will also be considered to have occurred if the light output of the fixture has diminished to 70% of initial levels (L70).

If the bidder cannot provide the following warranty feature, it will be important to show the warranty feature the bidder can provide that is as close as possible to that which is contained in the RFP. All warranty options will be given consideration.

We are asking bidders to include removals and installations for the first five (5) years of the warranty period the warranty. This means that for the first 5 years, the bidder will include labor, equipment and materials for all warranty calls to repair or replace light fixtures failing to operate as designed during the first 5 years of the warranty period.

Additional warranty provisions offered by the bidder, including extended term and labor costs will be given consideration.

7.0 Optional Maintenance Agreement

The Town is open to considering offers from bidders, should they be in a position to do so, an ongoing maintenance agreement. The Town may or may not proceed with this option, and reserves the right to exercise this option anytime within the first 5 years following substantial completion of this project.

The Town also reserves the right to issue an RFP for an alternate Maintenance/Service agreement at any time, and not exercise this option at all.

Please provide, if you are in a position to do so, at your option, an all-inclusive rate (\$/hour) for equipment and labor (i.e. mileage to and from site, labor, equipment, etc.) for each of the successive years, (year 6 to year 10).

These rates are to be based on entering the Town of Mattawa for the servicing of lights, and as such travel time to and from the Town of Mattawa are not to be charged as billable time (hourly charge begins when truck enters respective municipal jurisdictions and ends when leaving jurisdiction). The bidder may provide a mobilization amount to cover travel time in its submission. Prices indicated are to exclude HST.

The decision to proceed with this service agreement option shall rest solely with the Town and be priced separately in the Bid Forms section of this RFP.

8.0 Payments: Subject to the provisions of the contract documents, and in accordance with legislation and statutory regulations the Town shall apply a 10% holdback from payments made to the contractor. These funds held back shall be released to the contractor 45 days after the issuance of a Substantial Completion Certificate for payment subject to the applicable legislation and regulations.

The Contractor shall be paid using the Tender / Contract Prices, an amount equal to the proportionate value of the work performed or supplied to-date as certified by the project administrator appointed by the Town.

The contractor shall submit with each application for payment after the first, a declaration that all payments to sub-contractors and all other suppliers of products or services to this project have been paid in full as required, for work up to and including the latest progress payment received.

Before final inspection is completed and before applying for release of holdbacks or any other final payment, the Contractor shall submit to the Town all specified written guarantees, warranties on labor and / or material, owner's manuals, maintenance or operating manuals of any equipment.

9.0 **Project Time Frames:**

If, during the initial evaluation of the proposals we see that a contract will be awarded, we may ask for test installations from a short list of bidders at our cost. If a contract is then awarded, the work is to commence as soon as possible after the contract has been awarded and signed. The project schedule is expected to be, but may be altered if the Town deems it to be necessary or as otherwise provided for in the contract and this proposal.

Proposal Release to Bidders:	February 2 nd , 2015.
Closing Date for Proposals:	February 18 th , 2015.
Proposal Review Test Installations:	Week of February 23 rd , 2015.
Proposal Selection and Award:	March 23 rd , 2015.

The Proposal must include the anticipated timetable to complete the work described in the proposal based on an estimated award date of March 24th, 2015.

The successful respondent shall complete all work for all locations by the proposed completion date, unless otherwise agreed upon in writing by the Contractor and the Town.

10.0 Proposal Submission:

The submission of a proposal will be considered as a representation that the bidder has carefully investigated all conditions which may affect or may, at some future date, affect the performance of the items covered by the proposal, and that the bidder is fully informed concerning the conditions to be encountered, materials to be furnished, and services to be provided; also, that the bidder is familiar with all Federal and Provincial laws, all codes and regulations which in any way affects the prosecution of the work or persons engaged or employed in the work.

11.0 Street Light Product References

Please provide a minimum of 3 projects with which the proposed products have been installed and operational within the last 3 years. Please provide contact name, phone and e-mail address. The reference information should include the size of the project as well. Preference will be given to those references involving the same photocell working with the same fixtures.

12.0 Sub-Contractors: It will be important for the bidder to demonstrate that its proposed team (supplier of light fixtures & components and installers) meets or exceeds the service requirements of this RFP.

If Contractors or partners are to be used for this project, they are to be identified in a table. If so, describe the general range of services that the respective Contractors (companies or individuals) provide. If no Contractors or partners are identified, this will be interpreted to mean that only 'own resources' will be used.

13.0 Added Value & Exceptions or Variations:

'Added value' can be described as those additional benefits beyond the inherent worth of a good or service. Some examples for services include approach, expertise, references, resources, management, tools and/or methodologies, etc., or a combination of these.

The Town of Mattawa is interested in maximizing the value of expenditures as it relates to achieving additional value that would further benefit the Town and its operation, as well as its community of citizens and its tax based funding.

As such, bidders are encouraged to consider, develop and propose added value concepts, programs, components and the like that would further enhance the proposed acquisition represented in this RFP.

Describe the aspect(s) of your proposal believed to result in notable added value for this project.

'Exceptions or Variations' between any items identified in this RFP should be identified, especially in relation to light specifications and warranty as applicable, and provide a brief description of your exception or variation.

The Bidder may also provide a brief explanation of how the exception or variation of the proposed good(s)/service(s) still provides a viable option or alternative for the Town. A Form has been provided for this purpose in the Bid Forms Section.

14.0

LED STREET LIGHTING PROJECT BID FORMS

(to be filled out and submitted with your proposal)

BF1

PROJECT BID PRICING

The Bid Price shall include bidder's firm fixed price for the services as outlined in the Request for Proposal. The bidder is reminded that the Bid Price will not necessarily be the determining factor for award.

Proponents should include with the Bid Pricing, a detailed listing of the LED fixtures being provided with details of associated costs, and total costs (Fixed firm).

The Bid Price should also include unit pricing (take out and/or addition) to enable the Town to adjust quantities, if circumstances require adjustments. The Town reserves the right to increase or decrease quantities requested. Price per unit must be maintained for one (1) year from date of acceptance.

The Town may negotiate a final offer with the selected bidder if considered to be in the best interests of the Town.

Project Item Cost (Canadian funds only) - Supply of Materials and Installation of new LED fixtures, and removal and disposal of existing lights/fixtures on existing Town of Mattawa mounting arm. Bid Price includes warranty as described your proposal on LED fixtures and other items and services indicated within the RFP document.

NOTE: prices indicated are to exclude HST.

Original Unit to be Replaced	Estimated Quantity	Description of Proposed Replacement LED Unit	Estimated Replacement Quantity	Bid Price (Firm)	Sub-Total
70 W HPS	1				
100 W HPS	1				
150 W HPS	1				

a) Test Phase Sample Fixture Supply & Install (upon request)*

* It is assumed that you will use installers local to the North Bay – Mattawa area for this sample installation. However, should you logistically not be able to provide installation of test units, please explain and request installation by Owner as a qualification of your pricing for supply only.

Original Unit to be Replaced	11 0	Description of Proposed Replacement LED Unit	Estimated Replacement Quantity	Bid Price (Firm)	Sub-Total
70 W HPS	140				
100 W HPS	55				
150 W HPS	51				

b) Full Project – Supply & Install per Proposal

c) Replacement of Unusable 6' Mounting Arms

Indicate the additional cost per fixture that will be required to supply & install additional 6 foot mounting arm if existing Town of Mattawa mounting arm cannot be reused (\$/arm)______ (indicated prices are to exclude HST). This and any additional charges of this nature must be approved in writing by the Town prior to installation.

d) Maintenance Agreement (Optional)

Please provide an all-inclusive rate (\$/hour) for equipment and labor (i.e. mileage to and from site, labor, equipment, etc.) as indicated in the table below. These rates are to be based on entering the Town of Mattawa for servicing of lights, and as such travel time to and from the Town of Mattawa are not to be charged as billable time, but may be charged under mobilization should you need to be covered for that cost.

The decision to purchase this service agreement option shall rest solely with the Town of Mattawa and be priced separately as indicated below.

Warranty Period	Mobilization (\$ per call out)	Price – all inclusive \$ per hr
Year 6		
Year 7		
Year 8		
Year 9		
Year 10		

Note: prices indicated are to exclude HST

PERSONNEL & SUB-CONTRACTORS

Name	Title	Project Role	Employment Status E = Employee C = Contractor P = Partner	Pertinent Certifications / Qualifications

It is important that management and installation personnel / contractors are listed in the table above as part of the proposal submission.

TECHNICAL SUMMARY FORM – STANDARDS FOR LED FIXTURES BF3

In order to adequately evaluate product submissions it is important to identify the standards to which the proposed products have been certified to meet. Qualifying certificates or Reports will be required to support the yes / no answers for products that reach the testing phase of this project. If further certificates are available, please feel free to list them.

TECHNICAL SUMMARY OF STANDARDS TEMPLATE FOR	LED Light Fix	tures
Company name:	Date:	
Please indicate the following standards that your proposed light fixture meets:		
Certificate / Report available:	Yes	No*
Manufacturing Facility		
ISO 9001 Quality Management Systems		
RoHS Restriction of Hazardous Substances		
LED FIXTURES		
ANSI 62.41 – Surge Voltages in Low Voltage AC Power Circuits		
ANSI C136.10 – Locking Cell Photocell Devices		
ANSI C136.31 – 2001 Roadway Luminaire Vibration		
ANSI RP-8 – American National Standard Practice Roadway Lighting		
IES LM-79-08 – Electric and Photometric Measurements of Solid State Lighting Products		
IES LM -80-08 – Measuring Lumen Maintenance of LED Light Sources		
NEMA IEC60529 – Degrees of Protection provided by Enclosures – IP Code		
Telecordia SR-332 – Electric Equipment Reliability Standard		
ASTM B117 – Salt Spray Test Standard		
ASTM D1654 – Corrosion creepage Test Rating if available		
MIL-STD 810F Rain/Ice Test Standard		
CSA 22.1-02 – Canadian Electrical Code, Part 1		
IESNA IES Photometric files CD or Web Link		
Photocell Specification Sheet		
NEMA SSL 1		
NEMA SSL 3		

TECHNICAL SPECIFICATIONS OF PROPOSED LIGHT FIXTURES

In order to adequately evaluate product submissions it is important to identify the specifications to which the proposed products have been certified to meet. Qualifying certificates or Reports will be required to support the yes / no answers for products that reach the testing phase of this project.

TECHNICAL SUMMARY OF SPECIFICATIO	ONS TEMPLATE FOR LED Light Fixtures
Proposed Fixture:	Replacement for HPS 70 Watt
SPECIFICATION DESCRIPTION	VALUE (S)
IESNA Distribution Type	
RoHS Certified	
Housing Material	
Fully Assembled Weight (kgs)	
Dark Sky Compliant	
IP-66 Certified	
Quantity of Power Supplies in Fixture	
Power Supply operating Current (ma)	
Power Supply Operating Voltage (V)	
Photometric performance indicating the following:	
1. Fixture output in lumens	
2. Fixture efficacy in lumens per watt	
3. Total power consumption (system/plug watts)	
4. LED L70 rating in hours at 25 °C (other temperature	
ratings optional) Total Fixture Loss Factor	
	°C to °C
Operating Environment	<u>°C to </u> <u>°C</u>
Correlated Color Temperature	K
Color Rendering Index (CRI)	House Verse
LED Design Life	Hours: Years: Years:
Power Supply Design Life	Hours: Years: Years:
Power Supply Driver Capacitor rating at 85°C	Hours: Years: Years:
Photocell Design Life Telcordia SR-332 Reliability Results (Mean time	Hours: Years:
between failures)	Hours:
LED junction temperature for operating conditions @ 350 ma, 120 V and Ta 20°C	
1. LED junction temperature	
2. LED Maximum rated junction temperature	
3. Degrees below LED's maximum rated	
temperature	
LEDs meet IES LM-79	
Luminaire meets IES LM-80	
Electromagnetic Compatibility Compliance	
Surge Protection Rating	
Harmonic Distortion	

Proposed Fixture: Replacement for HPS 100 Watt SPECIFICATION DESCRIPTION VALUE (S) IESNA Distribution Type IESNA Distribution Type RoHS Certified Image: Second Sec	TECHNICAL SUMMARY OF SPECIFICATIO	ONS TEMPLATE FOR LED Light Fixtures
IESNA Distribution Type RoHS Certified Housing Material Fully Assembled Weight (kgs) Dark Sky Compliant IP-66 Certified Quantity of Power Supplies in Fixture Power Supply Operating Voltage (V) Photometric performance indicating the following: 5. Fixture output in lumens 6. Fixture efficacy in lumens per watt 7. Total power consumption (system/plug watts) 8. LED L70 rating in hours at 25 °C (<i>due temperature submoustanting</i> in hours at 25 °C (<i>due temperature submoustanting</i> in hours at 25 °C (<i>due temperature submoustanting</i> in hours at 25 °C (<i>due temperature submoustanting</i> in hours at 25 °C (<i>due temperature submoustanting</i> in hours at 25 °C (<i>due temperature submoustanting</i> in hours at 25 °C (<i>due temperature submoustanting</i> in hours at 25 °C (<i>due temperature submoustanting</i> in hours at 25 °C (<i>due temperature submoustanting</i> in hours at 25 °C (<i>due temperature submoustanting</i> in hours at 25 °C (<i>due temperature submoustanting</i> in hours at 25 °C (<i>due temperature submoustanting</i> in hours at 25 °C (<i>due temperature submoustanting</i> in hours at 25 °C (<i>due temperature submoustanting</i> in the hours: Years:	Proposed Fixture:	Replacement for HPS 100 Watt
RoHS Certified Housing Material Fully Assembled Weight (kgs) Dark Sky Compliant Dark Sky Compliant IP-66 Certified Quantity of Power Supplies in Fixture Power Supply operating Current (ma) Power Supply Operating Voltage (V) Photometric performance indicating the following: 5. Fixture output in lumens 6 6. Fixture efficacy in lumens per watt 7. Total power consumption (system/plug watts) 8. LED L70 rating in hours at 25 °C (duet texpectate material generation) °C to°C Operating Environment °C to°C Color Rendering Index (CRI) LED Design Life Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Photocell Design Life Hours: Years: Photocell Design Life Hours: Years:	SPECIFICATION DESCRIPTION	VALUE (S)
Housing Material Fully Assembled Weight (kgs) Dark Sky Compliant IP-66 Certified Quantity of Power Supplies in Fixture Power Supply Operating Current (ma) Power Supply Operating Voltage (V) Photometric performance indicating the following: 5. Fixture output in lumens 6. Fixture efficacy in lumens per watt 7. Total power consumption (system/plug watts) 8. LED L70 rating in hours at 25 °C (outer temperature rating optical) Total Fixture Loss Factor Operating Environment O'C Correlated Color Temperature Color Rendering Index (CRI) LED Design Life Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor nating at 85°C Hours: Years: Power Supply Driver Capacitor nating at 25°C Hours: Years: Hours: Years: Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years:	IESNA Distribution Type	
Fully Assembled Weight (kgs) Dark Sky Compliant IP-66 Certified Quantity of Power Supply operating Current (ma) Power Supply Operating Voltage (V) Photometric performance indicating the following: 5. Fixture output in lumens 6. Fixture efficacy in lumens per watt 7. Total power consumption (system/plug watts) 8. LED L70 rating in hours at 25 °C (where requerative rotings optiont) Total Fixture Loss Factor Operating Environment O'C toO'C toO'C Correlated Color Temperature Color Rendering Index (CRI) LED Design Life Hours: Years: Power Supply Driver Capacitor rating at 85°C Power Supply Driver Capacitor rating at 85°C Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor nating at 85°C Hours: Years: Photocell Design Life Hours: Years: Photocell Design Life Hours: Years: Photocell Design Life Hours: Years: Telcordia SR-332 Reliability Results (Mean time between failures)	RoHS Certified	
Dark Sky Compliant IP-66 Certified Quantity of Power Supplies in Fixture Power Supply Operating Current (ma) Power Supply Operating Voltage (V) Photometric performance indicating the following: 5. Fixture output in lumens 6. Fixture efficacy in lumens per watt 7. Total power consumption (system/plug watts) 8. LED L70 rating in hours at 25 °C (other rempeature rating: optical) Total Fixture Loss Factor Operating Environment O'C Color Rendering Index (CRI) LED Design Life Power Supply Driver Capacitor rating at 85°C Power Supply Driver Capacitor rating at 85°C Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Photocell Design Life Hours: Years: Hours: Years: Photocell Design Life Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Photocell Design Life Hours: Years: Hours: <t< td=""><td>Housing Material</td><td></td></t<>	Housing Material	
IP-66 Certified Quantity of Power Supplies in Fixture Power Supply operating Current (ma) Power Supply Operating Voltage (V) Photometric performance indicating the following: 5. Fixture output in lumens 6. Fixture efficacy in lumens per watt 7. Total power consumption (system/plug watts) 8. LED L70 rating in hours at 25 °C (other temperature rotings optional) Total Fixture Loss Factor Operating Environment°C to°C Correlated Color Temperature°K Color Rendering Index (CRI) Color Rendering Index (CRI) LED Design Life Hours:Years: Power Supply Driver Capacitor rating at 85°C Hours:Years: Photocell Design Life Hours:Years: Telcordia SR-332 Reliability Results (Mean time between failures) LED junction temperature for operating conditions @ 350 ma, 120 V and Ta 20°C 4. LED junction temperature 5. LED Maximum rated temperature 6. Degrees below LED's maximum rated temperature LEDs meet IES LM-80 Electromagnetic Compatibility Compliance Surge Protection Rating	Fully Assembled Weight (kgs)	
Quantity of Power Supplies in Fixture Power Supply operating Current (ma) Power Supply Operating Voltage (V) Photometric performance indicating the following: 5. Fixture output in lumens 6. Fixture efficacy in lumens per watt 7. Total power consumption (system/plug watts) 8. LED L70 rating in hours at 25 °C (observengeneure retings optical) Total Fixture Loss Factor Operating Environment O'C toO'C Color Rendering Index (CRI) LED Logarting the construction traing at 85°C Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Photocell Design Life Bower Supply Driver Capacitor rating at 85°C LED junction temperature 6. Degrees bel	Dark Sky Compliant	
Power Supply operating Current (ma) Power Supply Operating Voltage (V) Photometric performance indicating the following: 5. Fixture output in lumens 6. Fixture efficacy in lumens per watt 7. Total power consumption (system/plug watts) 8. LED L70 rating in hours at 25 °C (other temperature ratings optional) Total Fixture Loss Factor Operating Environment O°C toO°C Color Rendering Index (CRI) LED Design Life Power Supply Driver Capacitor rating at 85°C Power Supply Driver Capacitor rating at 85°C Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Photocell Design Life Hours: Years: Photocell Design Life Hours: Years: Between failures) LED junction temperature 6. Degrees below LED's maximum rated temperature	IP-66 Certified	
Power Supply Operating Voltage (V) Photometric performance indicating the following: 5. Fixture output in lumens 6. Fixture efficacy in lumens per watt 7. Total power consumption (system/plug watts) 8. LED L70 rating in hours at 25 °C (other temperature ratings optional) Total Fixture Loss Factor Operating Environment Correlated Color Temperature Color Rendering Index (CRI) LED Design Life Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Between failures) LED junction temperature for operating conditions @ 4. LED junction temperature 5. LED Maximum rated junction temperature 6. Degrees below LED's maximum rated temperature 6. Degrees below LED's maximum rated temperature LEDs meet IES LM-79 <td>Quantity of Power Supplies in Fixture</td> <td></td>	Quantity of Power Supplies in Fixture	
Photometric performance indicating the following: 5. Fixture output in lumens 6. Fixture efficacy in lumens per watt 7. Total power consumption (system/plug watts) 8. LED L70 rating in hours at 25 °C (other temperature ratings optional) """"""""""""""""""""""""""""""""""	Power Supply operating Current (ma)	
5. Fixture output in lumens 6. Fixture efficacy in lumens per watt 7. Total power consumption (system/plug watts) 8. LED L70 rating in hours at 25 °C (other temperature ratings optional) "C to°C to°C Operating Environment°C to°C Correlated Color Temperature°K Correlated Color Temperature°C to°C Correlated Color Temperature°K Color Rendering Index (CRI) LED Design Life Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Photocell Design Life Hours: Years: Hours: ED junction temperature for operating conditions @ 350 ma, 120 V and Ta 20°C 4. LED junction temperature 5. LED Maximum rated junction temperature 6. Degrees below LED's maximum rated temperature LED's maximum rated temperature LED's meet IES LM-79 Luminaire meets IES LM-80 Electromagnetic Compatibility Compliance Surge Protection Rating Surge Protection Rating	Power Supply Operating Voltage (V)	
6. Fixture efficacy in lumens per watt 7. Total power consumption (system/plug watts) 8. LED L70 rating in hours at 25 °C (other temperature ratings optional) Total Fixture Loss Factor Operating Environment O'C Correlated Color Temperature O'K Color Rendering Index (CRI) LED Design Life Power Supply Design Life Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Photocell Design Life Hours: Years: Photocell Design Life Hours: Years: Years: Years: Photocell Design Life Hours: Years: Years: Years: Photocell Design Life Hours: Border A. LED junction temperature Sto ma, 120 V and Ta 20°C 4. LED junction temperature Eleb Maximum rated junction tempe	Photometric performance indicating the following:	
7. Total power consumption (system/plug watts) 8. LED L70 rating in hours at 25 °C (other temperature rating: optional) Total Fixture Loss Factor Operating Environment °C to°C Correlated Color Temperature °K Color Rendering Index (CRI) LED Design Life Power Supply Driver Capacitor rating at 85°C Power Supply Driver Capacitor rating at 85°C Photocell Design Life Hours: Years: Photocell Design Life Hours: Years: Photocell Design Life Hours: Years: Piotocell Design Life Hours: Years: Photocell Design Life Hours: Years: Photocell Design Life Hours: Years: Photocell Design Life Hours: Years: Color Rendering conditions @ 350 ma, 120 V and Ta 20°C 4. LED junction temperature 6. Degrees below LED's maximum rated temperature LED's meet IES LM-79 Luminaire meets IES LM-80 Electromagnetic Compatibility Compliance	5. Fixture output in lumens	
8. LED L70 rating in hours at 25 °C (other temperature rutings optional) Total Fixture Loss Factor Operating Environment °C to°C Correlated Color Temperature °K Color Rendering Index (CRI) LED Design Life Power Supply Driver Capacitor rating at 85°C Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Power Supply Driver Capacitor rating at 85°C Hours: Years: Potocell Design Life Hours: Years: Telcordia SR-332 Reliability Results (Mean time between failures) LED junction temperature for operating conditions @ 350 ma, 120 V and Ta 20°C 4. LED junction temperature 6. Degrees below LED's maximum rated temperature LEDs meet IES LM-79 Luminaire meets IES LM-80 Electromagnetic Compatibility Compliance Surge Protection Rating	6. Fixture efficacy in lumens per watt	
ratings optional) Total Fixture Loss Factor Operating Environment °C to°C Correlated Color Temperature °C to°C Correlated Color Temperature °K Color Rendering Index (CRI) LED Design Life Hours:Years: Power Supply Design Life Hours:Years: Power Supply Driver Capacitor rating at 85°C Hours:Years: Power Supply Driver Capacitor rating at 85°C Hours:Years: Power Supply Driver Capacitor rating at 25°C Hours:Years: Telcordia SR-332 Reliability Results (Mean time between failures) Hours:Years: LED junction temperature for operating conditions @ 350 ma, 120 V and Ta 20°C	7. Total power consumption (system/plug watts)	
Total Fixture Loss Factor Operating Environment °C to°C Correlated Color Temperature °K Color Rendering Index (CRI) °K LED Design Life Hours:Years: Power Supply Design Life Hours:Years: Power Supply Driver Capacitor rating at 85°C Hours:Years: Power Supply Driver Capacitor rating at 85°C Hours:Years: Photocell Design Life Hours:Years: Photocell Design Life Hours:Years: Telcordia SR-332 Reliability Results (Mean time between failures) Hours:Years: LED junction temperature for operating conditions @ 350 ma, 120 V and Ta 20°C		
Operating Environment °C to°C Correlated Color Temperature °K Color Rendering Index (CRI) °K LED Design Life Hours:Years: Power Supply Driver Capacitor rating at 85°C Hours:Years: Power Supply Driver Capacitor rating at 85°C Hours:Years: Photocell Design Life Hours:Years: Photocell Design Life Hours:Years: Telcordia SR-332 Reliability Results (Mean time between failures) Hours:Years: LED junction temperature for operating conditions @ 14000000000000000000000000000000000000		
Correlated Color Temperature°KColor Rendering Index (CRI)		⁰ C to ⁰ C
Color Rendering Index (CRI)		
LED Design LifeHours:Years:Power Supply Design LifeHours:Years:Power Supply Driver Capacitor rating at 85°CHours:Years:Photocell Design LifeHours:Years:Photocell Design LifeHours:Years:Telcordia SR-332 Reliability Results (Mean time between failures)Hours:LED junction temperature for operating conditions @ 350 ma, 120 V and Ta 20°CHours:4. LED junction temperature		K
Power Supply Design LifeHours:Years:Power Supply Driver Capacitor rating at 85°CHours:Years:Photocell Design LifeHours:Years:Photocell Design LifeHours:Years:Telcordia SR-332 Reliability Results (Mean time between failures)Hours:LED junction temperature for operating conditions @ 350 ma, 120 V and Ta 20°CHours:4. LED junction temperature		V
Power Supply Driver Capacitor rating at 85°C Hours:Years: Photocell Design Life Hours:Years: Telcordia SR-332 Reliability Results (Mean time between failures) Hours: LED junction temperature for operating conditions @ 350 ma, 120 V and Ta 20°C Hours: 4. LED junction temperature Electromagnetic comparison temperature 5. LED Maximum rated junction temperature Electromagnetic Compatibility Compliance Luminaire meets IES LM-80 Electromagnetic Compatibility Compliance Surge Protection Rating Surge Protection Rating	8	
Photocell Design Life Hours: Years: Telcordia SR-332 Reliability Results (Mean time between failures) Hours: Hours: LED junction temperature for operating conditions @ 350 ma, 120 V and Ta 20°C Hours: Hours: 4. LED junction temperature		
Telcordia SR-332 Reliability Results (Mean time between failures) Hours:		Hours: Years:
Item failuresItem failuresLED junction temperature for operating conditions @ 350 ma, 120 V and Ta 20°C4. LED junction temperature5. LED Maximum rated junction temperature6. Degrees below LED's maximum rated temperatureLEDs meet IES LM-79Luminaire meets IES LM-80Electromagnetic Compatibility ComplianceSurge Protection Rating		
LED junction temperature for operating conditions @ 350 ma, 120 V and Ta 20°C 4. LED junction temperature 5. LED Maximum rated junction temperature 6. Degrees below LED's maximum rated temperature LEDs meet IES LM-79 Luminaire meets IES LM-80 Electromagnetic Compatibility Compliance Surge Protection Rating	between failures)	Hours:
4. LED junction temperature 5. LED Maximum rated junction temperature 6. Degrees below LED's maximum rated temperature LEDs meet IES LM-79 Luminaire meets IES LM-80 Electromagnetic Compatibility Compliance Surge Protection Rating	LED junction temperature for operating conditions @	
5. LED Maximum rated junction temperature 6. Degrees below LED's maximum rated temperature LEDs meet IES LM-79 Luminaire meets IES LM-80 Electromagnetic Compatibility Compliance Surge Protection Rating		
6. Degrees below LED's maximum rated temperature LEDs meet IES LM-79 Luminaire meets IES LM-80 Electromagnetic Compatibility Compliance Surge Protection Rating	v .	
temperature LEDs meet IES LM-79 Luminaire meets IES LM-80 Electromagnetic Compatibility Compliance Surge Protection Rating		
LEDs meet IES LM-79 Luminaire meets IES LM-80 Electromagnetic Compatibility Compliance Surge Protection Rating	0	
Luminaire meets IES LM-80 Electromagnetic Compatibility Compliance Surge Protection Rating		
Electromagnetic Compatibility Compliance Surge Protection Rating		
Surge Protection Rating		

TECHNICAL SUMMARY OF SPECIFICATIO	ONS TEMPLATE FOR LED Light Fixtures
Proposed Fixture:	Replacement for HPS 150 Watt
SPECIFICATION DESCRIPTION	VALUE (S)
IESNA Distribution Type	
RoHS Certified	
Housing Material	
Fully Assembled Weight (kgs)	
Dark Sky Compliant	
IP-66 Certified	
Quantity of Power Supplies in Fixture	
Power Supply operating Current (ma)	
Power Supply Operating Voltage (V)	
Photometric performance indicating the following:	
9. Fixture output in lumens	
10. Fixture efficacy in lumens per watt	
11. Total power consumption (system/plug watts)	
12. LED L70 rating in hours at 25 °C (other temperature	
ratings optional) Total Fixture Loss Factor	
	°C to °C
Operating Environment Correlated Color Temperature	°C to °C
	K
Color Rendering Index (CRI)	Houman Vooma
LED Design Life Power Supply Design Life	Hours: Years: Hours: Years:
Power Supply Driver Capacitor rating at 85°C	Hours: Years:
Photocell Design Life	Hours: Years:
Telcordia SR-332 Reliability Results (Mean time	
between failures)	Hours:
LED junction temperature for operating conditions @ 350 ma, 120 V and Ta 20°C	
7. LED junction temperature	
8. LED Maximum rated junction temperature	
9. Degrees below LED's maximum rated	
temperature	
LEDs meet IES LM-79	
Luminaire meets IES LM-80	
Electromagnetic Compatibility Compliance	
Surge Protection Rating	
Harmonic Distortion	

EXCEPTIONS AND VARIATIONS

RFP Section #	Description of Exception / Variation

BIDDER ACKNOWLEDGEMENT

I/We have received and allowed for addenda numbered _____ to ____ in preparing this Proposal Submission.

The bidder acknowledges that the Town of Mattawa does not warrant the accuracy of the information provided, all information and installation requirements shall be verified by the Contractor before proceeding with the work.

The Bidder acknowledges that the submission of a proposal on this project will be considered as a representation that the bidder has carefully investigated all conditions which may affect or may, at some future date, affect the performance of the services covered by the proposal, the entire area to be serviced as described in the RFP documents and that the bidder is fully informed concerning the conditions to be encountered, quality and quantity of work to be performed and materials to be furnished; also, that the bidder is familiar with all Federal and Provincial laws, and regulations which in any way may affect the prosecution of the work or persons engaged or employed in the work.

The Bidder acknowledges that the proposal is valid for acceptance for ninety (90) days from the time the Proposal closes.

Bidder's Signature	Date	
--------------------	------	--

Name (print) _____ Company _____