



**REQUEST FOR PROPOSAL 69/2013**

**CONSULTING SERVICES TO DEVELOP A  
STORMWATER MANAGEMENT MASTER PLAN**

For The Corporation of the City of Thunder Bay  
-- Infrastructure and Operations Department - Environment Division --

**Proposal Closing Date and Time  
Tuesday, December 10, 2013  
at 4:00 p.m., local time**

**Proposals are to be Delivered to:**

**City of Thunder Bay  
Supply Management Division  
Victoriaville Civic Centre (main floor)  
111 Syndicate Avenue South  
Thunder Bay, ON P7E 6S4**

## **INFORMATION TO BIDDERS**

### **Definitions**

**Proponents(s)/Bidder(s):** means all persons, partnerships or corporations who respond to this RFP and includes their heirs, successors, and permitted assigns.

**City:** means The Corporation of the City of Thunder Bay

**Contract:** means the agreement to be entered into between the Successful Bidder and the City with respect to the supply of the Goods and or Services. It shall be based upon this RFP, with any agreed upon amendments, and shall include any plans and specifications and will be held to cover the supply of any and all work, labour, implements and materials that could be reasonably required to properly and satisfactorily supply the Goods or Services.

**Request for Proposal:** means this Request for Proposal (RFP) document including all schedules, parts and attachments, as issued by the City, including any addenda or amendments made to it after initial issue.

**May:** Used in this document denotes permissive.

**Must/Shall/Will:** Used in this document denotes imperative.

**Successful Bidder:** means the Proponent/Contractor/Bidder whose RFP submission is/are accepted and who has/have agreed to supply the Goods and/or Services as outlined herein.

### **Submission**

If your firm is interested in this project, please submit **five (5)** sealed copies and **one (1)** electronic flashdrive of your proposal submission to the address shown on the cover page.

All submissions are to be clearly marked as to contents.

### **Document Fee**

The City charges a non-refundable fee of **\$35.00** (inclusive of taxes) for documents payable by cheque or cash. If downloaded, the fee is to be included in the submission.

### **Closing Date and Time**

Consideration will be given to your proposal if received in the Supply Management Office not later than the date and time shown on the cover page.

**The lowest cost proposal will not necessarily be accepted, and the City reserves the right to reject any and all proposals and/or re-issue the RFP in its original or revised form.**

Facsimile, e-mail, or telephone proposals will not be accepted

### **Late Proposals**

Proposals received after the deadline will not be considered. The City will assume no responsibility for submissions that do not arrive in the Supply Management Office by the specified closing date and time. Late submissions will be returned unopened to the proponent.

### **Grounds for Disqualification of Submission**

The City will disqualify or deem submissions non-compliant for the following reasons, unless otherwise noted in this document:

- Failure to submit documents in accordance with the closing date and time on the cover page or any subsequent addenda.
- Failure to complete, sign and return submittal form provided.
- Failure to comply with any of the mandatory requirements.

### **Litigation**

No bid shall be accepted from any Contractor, its principals, directors or any officer of that firm, or another related person (as determined by the Manager Supply Management, in his or her sole and unreviewable discretion), with whom the City is engaged in unresolved litigation.

### **Questions/Inquiries**

Communications concerning this Request for Proposal are to be in writing and directed to;

**Tina Caputo, Buyer (or designate)**  
Supply Management Division

phone (807) 625-2286 - fax (807) 622-0181

e-mail [tcaputo@thunderbay.ca](mailto:tcaputo@thunderbay.ca)

Inquiries must not be directed to other City employees or Elected Officials. Directing inquiries to other than those designated may result in your bid being rejected. The deadline for questions/inquiries will be **Tuesday, December 3, 2013 at 12:00 noon.**

All clarification requests are to be sent in writing to the individual mentioned above. No clarification requests will be accepted by telephone. Responses to clarification requests will be provided to all interested parties.

Any and all changes to the Request for Proposal will be issued by the Manager, Supply Management (or designate) in the form of a written addendum.

### **Acknowledgement of Addenda**

If addenda are issued, their receipt is to be acknowledged by the proponent by including them as part of the proposal submission to ensure that all requirements are included in the submission. Failure to include all addenda may result in your submission not being considered. The City will assume no responsibility for oral instructions or suggestions.

Addenda will be provided to all who have registered with the City Supply Management Division. As well, they will be posted on the City's website for download. [www.thunderbay.ca/supply](http://www.thunderbay.ca/supply). It is the bidder's responsibility to check the website prior to closing for any issued addenda. The City will assume no responsibility for any addendum not received.

### **Review of Requirements**

All proponents should carefully review this solicitation for defects or questionable matter. Comments or the need for clarification must be made in writing as requested in this RFP. Protests based on any omission or error, or on the content of the solicitation, will be disallowed if these faults have not been brought to the attention of the Supply Management Division as per the terms set out in this Request.

### **Sustainable Environmental Social Initiatives**

The City is committed to a procurement process for Goods and Services that takes into account sustainable environmental and ethical considerations. Potential partners of the City must respect fundamental human rights and treat their workers fairly and with respect. They are also expected to strive continually towards minimizing the environmental impact of their operations.

### **References**

The submission of a proposal authorizes the City to contact all references provided. Failure to provide references and details of experience may result in this proposal not being considered.

### **Freedom of Information**

All proposals submitted to the City become the property of the City, and as such, are subject to the provisions of the Municipal Freedom of Information and Protection of Privacy Act.

This will confirm that the City will not use/disclose the information provided, without proper authorization, and will keep the information in a physically secure location to which access is given only to staff requiring access.

### **Bidder Debriefings**

Bidder debriefings will be offered for procurements valued at \$40,000 or higher and must be requested within 60 calendar days following the date of the contract award.

### **Rights Reserved by the City**

Proposals will be evaluated from firms or individuals that can demonstrate that they have the necessary staffing, facilities, experience, ability and financial resources to perform the work in a satisfactory manner. Proven track record must be demonstrated.

The City reserves the right to inspect the bidder's facility and to perform such investigations as may be deemed necessary to insure that competent personnel and management and suitable equipment/material will be used in the performance of this contract.

Submission of a proposal indicates acceptance by the firm of the conditions contained in this Request for Proposal, unless clearly and specifically noted in the proposal and in any contract between the City and the firm(s) selected.

The City reserves the right without prejudice to reject any or all proposals and to determine in its own best judgement the firm best qualified to undertake this contract.

The City is not responsible for any costs incurred by the proponents in the preparation of their response to the proposal call or attendance of any selection interviews. The City will not accept responsibility for any delays or costs with any reviews or approval process.

The Evaluation Committee reserves the right to be the sole judge of the acceptability of any proposal, and also any alternative proposed, and to purchase the service which in its opinion most closely meets the operating requirements of the City.

The City, unless it otherwise states, reserves the right to award by item, or part thereof, groups of items, or all items of the proposal, and to award contracts to one or more proponents submitting identical submissions as to price; to reject any and all submissions in whole or in part; to waive technical defects, irregularities and omissions, if in so doing, the best interest of the City will be served.

The City reserves the right to cancel the contract without cause and without incurring any liability whatsoever if deemed in the best interest of the City to do so.

The City reserves the right to terminate the contract without notice if due to non-performance and unsatisfactory service and unsatisfactory product performance.

The City reserves the right to call in alternate services if the proponent is unable to provide the service when it is requested.

The decision of the Evaluation Committee shall be final and without recourse.

Prices must be firm for the duration of the contract.

The City reserves the right to award this contract in whole or in part without recourse or penalty that which is deemed most advantageous to the City.

The City has the right to negotiate with the proponent that presented the most attractive proposal.

The City of Thunder Bay Council shall have the final authority on all matters regarding this Request for Proposal.

This is an invitation for proposals and not a tender call.

### **Attachments**

- Standard Terms and Conditions for Tenders, Proposals, Contracts and Quotations
- Certificate of Insurance
- Reference Material File access is available upon request. (Reference Material list on page 17)

**NOTE RE Reference Material File:** All proponents shall provide, to the City of Thunder Bay, the email addresses for all staff that will need access to the Reference Material File, so that the link, username and password can be provided.

**City Contact:** Tina Caputo at [tcaputo@thunderbay.ca](mailto:tcaputo@thunderbay.ca).

### **Indemnity**

The successful proponent shall indemnify and hold the City harmless from and against any liability, loss, claims, demands, costs and expenses, including reasonable legal fees, occasioned wholly or in part by any acts or omissions either in negligence or in nuisance whether wilful or otherwise by the bidder, its agents, officers, employees or other persons for whom the bidder is legally responsible.

### **Insurance**

The successful proponent shall, at its own expense, obtain and maintain until the termination of the contract, and provide the City with evidence of:

Comprehensive general liability insurance on an occurrence basis for an amount not less than Two Million (\$2,000,000 dollars) and shall include the City as an additional insured with respect to the City's operations, acts and omissions relating to its obligations under this Agreement, such policy to include non-owned automobile liability, personal injury, broad form property damage, contractual liability, owners' and contractors' protective, products and completed operations, contingent employers liability, cross liability and severability of interest clauses;

Automobile liability insurance for an amount not less than Two Million (\$2,000,000) dollars on forms meeting statutory requirements covering all vehicles used in any manner in connection with the performance of the terms of this Agreement.

Professional Liability: The successful proponent shall carry insurance covering the work and services described in this Agreement. Such policy shall provide coverage for an amount not less than five hundred thousand (\$500,000) dollars. The City will not accept an agreement which limits the liability of the proponent to the amount of its liability insurance coverage.

The policies shown above will not be cancelled or permitted to lapse unless the insurer notifies the City in writing at least thirty (30) days prior to the effective date of cancellation or expiry. The City reserves the right to request such higher limits of insurance or other types of policies appropriate to the work as the City may reasonably require.

The successful proponent shall not commence work until such time as evidence of insurance has been filed with and approved by the Manager Supply Management for the City. The successful Firm shall further provide that evidence of the continuance of said insurance is filed at each policy renewal date for the duration of the contract.

**Workplace Safety and Insurance Act** (From Successful Contractor Only)

The Contractor shall also furnish evidence of compliance with all requirements of the Workplace Safety & Insurance Act. Independent operators will need CONFIRMATION from the Workplace Safety & Insurance Board (WSIB).

- i.e.    i) Certificate of Clearance  
         ii) Letter of Good Standing  
         iii) Independent Operator Letter

**In Reference To Workplace Safety & Insurance Act**

The City requires all contractors and independent operators to have a Status Ruling done from the WSIB prior to any work being carried out for the City.

The City may not issue a purchase order to any contractor or independent operator until "Confirmation" from the WSIB is received. If further information on WSIB is required, please contact the local WSIB.

**Evaluation**

An Evaluation Committee has been established to review and evaluate each proposal based on the criteria and scoring listed on page 8.

**Presentations**

Based upon evaluation results of the RFP, the City may require a presentation from any or all of the top three (3) highest scoring proponents prior to award; in which case, the presentation would form part of the final evaluation. All such presentations will be at the bidder's expense. Any additional information may in no way materially alter or add to the submission originally proposed.

Presentations will be conducted on a date and location to be determined. Successful proponent(s) will be contacted to set up a meeting time and place for their presentation. It is anticipated that the presentation will consist of a brief five minute introduction of the evaluation committee, followed by a presentation by the proponent (maximum 30 minutes), and concluded with a thirty (30) minute question and answer period.

Failure to provide a presentation on the date specified may be cause for disqualification.

	<b>CRITERIA</b>	<b>MAX. SCORE</b>
1.	Cost to the City of Thunder Bay	25
2.	Track record, demonstrated experience with similar projects, expertise and qualifications in Stormwater Management Master Planning. References to be provided.  Qualifications and expertise (firm credentials, project manager, key team personnel). Detailed resumes of key team members to be provided.	25
3.	Quality of the proposal and compliance with the proposal requirements and specifications. Demonstrates an understanding of objectives and scope of work. Degree to which the proposal addresses the project goals and objectives as listed in the tasks.	35
4.	Ability to commence immediately, development of a detailed schedule and complete project within the time frame indicated. (See page 12).	5
5.	Demonstrated commitment to Environmental/Social Stewardship in work plan and professional philosophy.	5
6.	Value Added/Innovative Techniques as related to this proposal.	5
	<b>Submission Evaluation Sub-Total</b>	<b>100</b>
7.	Interview/Presentation	<b>15</b>
	<b>Total Available Points</b>	<b>115</b>

**Proposal Call And Requirements:**

The Corporation of the City of Thunder Bay (City), Infrastructure and Operations, Environment Division, invites proposals from qualified firms for **Consulting Services for the Preparation of a Stormwater Management Master Plan**, in accordance with the following City of Thunder Bay Standard Terms and Conditions for Tenders, Proposals, Contracts and Quotations, General Requirements and Terms of Reference.

Submissions should include, but not necessarily be limited to, the following:

1. Total Cost/Fee to the City – HST extra;
2. A proposed total fixed fee in Canadian dollars (HST Extra) detailing the project fees including a detailed cost breakdown showing the major activity costs, hours spent by each staff member and their respective hourly rates and miscellaneous costs associated with the project (i.e. disbursements, travel costs, printing, incidentals, postage, courier, facsimile, long distance charges, etc.) Proposals are to be submitted as a lump sum dollar amount and are to include all work as requested in the RFP;
3. A brief description of your firm – its clients, its history, its projects, its staff;
4. A company description, exact location and address;



5. Current personnel with length of service and experience including a list of the personnel who will be working on the project, their roles and qualifications;
6. Company contacts, c/w telephone numbers and e-mail addresses;
7. A summary of your understanding of this proposal;
8. An outline of the services and methodology to be provided addressing all aspects regarding the Terms of Reference/Scope of Work;
9. Include a roadmap to outline the services and methodology addressing all aspects regarding the Consultation Plan;
10. Your firm's experience in similar projects completed with respect to the development of Stormwater Management Master Plans;
11. Samples/Descriptions of previous work;
12. List of references associated with completed projects;
13. A detailed schedule for work completion, including the start date and any significant milestone dates;
14. Environmental and Social initiatives your firm may have undertaken;
15. Include a schedule of per diem and hourly rates for all personnel. These will apply to work carried out beyond the scope of this RFP;
16. Value Added/Innovative techniques as related to this proposal;
17. Any other supporting information you may wish to include with your submission.

In order for the City to evaluate proposals fairly and completely, offers should follow the format set out herein and provide all of the information requested. Failure to complete and include information as required may result in your submission not being considered.

## **TERMS OF REFERENCE**

### **Project Overview**

The City of Thunder Bay (City) wishes to retain a multi-disciplinary consulting engineering firm to complete a Stormwater Management Master Plan. The purpose of the Master Plan is to provide an integrated process to evaluate existing infrastructure and policies, identify drainage system deficiencies, and develop an implementation plan, including capital planning estimates and possible funding mechanisms for a long-term sustainable program, including the development of policy to manage stormwater in Thunder Bay, in conjunction with City staff.

The Terms of Reference lays out the scope, objectives and deliverables for the development of the Stormwater Management Master Plan.

### **Background**

The City of Thunder Bay is located in Northwestern Ontario on the north shore of Lake Superior. The City has had a relatively stable population of 109,000 but is anticipating more growth in the future due to a projected boom in the mining sector.

Surrounded by forests, the City occupies an area of 323 square kilometres, of which 129 are within the defined Urban Limit and 22 are within the defined Suburban Residential area. The balance of the land is defined as rural.

The development of a Stormwater Management Master Plan is a priority for the City, a commitment that was first adopted in the Earthwise Community Action Plan (City of Thunder Bay, 2008) and later reinforced in the

City of Thunder Bay Strategic Plan (City of Thunder Bay, June 27, 2011). Additionally, a number of recent policies and plans make direct linkages to the issue of stormwater, including the City's Urban Design and Landscape Guidelines (City of Thunder Bay, December 2012), Urban Forest Management Plan (City of Thunder Bay, January 2013) and Engineering and Development Standards (City of Thunder Bay, January 2013)

Historically, development in Thunder Bay has been relatively slow but steady compared to other urban centres in Ontario. Much of the existing development has pre-dated the requirement for stormwater management apart from the standard storm sewer infrastructure construction and maintenance. Addressing stormwater management in existing, built up areas will be a significant challenge for this Master Plan.

The City of Thunder Bay, like many other Ontario urban centres has experienced extreme storm and flooding events that have led to considerable flood and erosion damage. The most recent example of this was the storm of May 27 and 28, 2012 which caused significant flooding and resulted in the City being declared a disaster area due to widespread basement flooding and other property damage.

### **Project Objectives**

The objective of this project is to prepare a Stormwater Management Master Plan in accordance with the Municipal Engineers Association Municipal Class Environmental Assessment process for the production of Master Plans (Section A.2.7 of the Class Environmental Assessment document).

The Master Plan shall include:

- A characterization of the existing environmental conditions for all watersheds within the City;
- An assessment of the effectiveness of existing stormwater management infrastructure at reducing the negative impacts of stormwater on the environment;
- An assessment of the impacts of climate change on the effectiveness of existing infrastructure;
- The identification of new stormwater measures, retrofit opportunities or improvements to existing infrastructure that could improve the level of water quality and flow capacity;
- A determination of the framework for an Asset Management model that incorporates costs of capital, operations and maintenance, and replacement with a life-cycle approach;
- An identification of recommended strategy and policies for stormwater management in the City; and
- A recommended implementation plan

The Consultant should identify any additional services which will be required to complete the assignment. Bidders are to understand that no additional charges for any equipment, material and/or labour will be entertained unless the additional charges have had prior written approval by an authorized city official.

### **Project Approach**

City staff representing the Environment, Roads, Planning, Engineering and Parks Divisions, have identified a number of issues, challenges and goals related to stormwater management. The information gathered has provided direction in the development of the desired outcomes, objectives and deliverables for the Stormwater Management Master Plan.

In addition to the specific objectives and outcomes which will be outlined in the Scope of Work, several broad themes have emerged in discussions with staff:

- Consultation with external agencies and organizations: It is important that local organizations with related responsibilities and knowledge of aspects of stormwater management be involved in the Master Planning process. These organizations include, but are not limited to:
  - Lakehead Region Conservation Authority
  - Lakehead University
  - EcoSuperior
  - Northshore Remedial Action Plan
  - Northshore Steelhead Association
- Integrated Corporate Approach: The roles and responsibilities of stormwater management are undertaken by a number of different Divisions within the City of Thunder Bay. Roles may be formal or informal, direct or indirect. External agencies, as well as private land owners, also have supporting responsibilities. All of these parties should participate, where appropriate, in the development and implementation of the Stormwater Management Master Plan. In addition to the administrative/jurisdictional issues, the Master Plan must also completely address the infrastructure and watercourse constraints.
- Integrated Planning and Design Approach: New developments and redevelopments within the City need a consistent and fair policy approach. The planning processes need to include the opportunity and provide incentives to developers to incorporate best practices for stormwater management into their plans at an early stage.
- Incorporate Appropriate Best Management Practices into Design and Operations: The engineering design, operations and maintenance of stormwater infrastructure should reflect current Best Management Practices to protect and enhance the natural environment.

## **Meetings**

Proponents shall make provisions in their Proposal submission for the following:

- As required, telephone discussions between the City's representative (to be defined) and the Consultant to discuss progress, concerns, etc.
- The Consultant creating, maintaining and retaining records of all meetings, telephone discussions and interviews including agendas, minutes, presentation materials, etc.
- Monthly project progress meetings with the City's project management team and/or Project Steering Committee. A minimum of two meetings will be held in Thunder Bay. The remaining may either be held in person or by Webinar.
- Allowance for a minimum of 6 meetings with various city departments.
- Allowance for a minimum of 2 presentations to the Project Steering Committee members in advance of anticipated presentations to City Council.
- Allowance for 2 presentations to update City Council on the status of the Project and deliverables.
- All required public meetings to satisfy the requirements of the Class EA process (anticipate a maximum of 4 meetings outside of core business hours).

The Consultant will be expected to prepare the required advertisements, presentation materials, handouts, etc. for public meetings; the City will be responsible for advertising and media for all public meetings and will cover the cost of hall rentals.

### **Timelines for Project**

The **draft Stormwater Management Master Plan** shall be submitted no later than twelve (12) months after award of this proposal, with the **final Stormwater Management Master Plan** to be submitted for approval not later than eighteen (18) months after award of this proposal. The proponent is required to include in their detailed project schedule timelines to reflect the completion of the draft report and final report.

### **Scope Of Work**

The Stormwater Management Master Plan shall be city wide to address infrastructure, watercourse and ecosystem health, policies, public education and implementation. The project scope has been partitioned on the basis of providing a SWM Plan with clear outcomes for the future health and safety of the residents of Thunder Bay, the protection of existing and future potential development and the protection and enhancement of watersheds and watercourses. The following sub-sections detail the project scope and desired outcomes.

#### **Task 1 – Review and Characterize the Study Area**

The City of Thunder Bay boundaries, shown in **Exhibit 1Map** (Reference Material File), and the main watercourses conveying flow through the City to Lake Superior are:

- Mosquito Creek
- Kaministiquia River
- Pennock Creek
- Neebing River
- McIntyre River
- McVicar Creek
- Current River

These watercourses, along with Lake Superior, are receiving bodies for stormwater runoff; however, in some locations, they function as an integral part of the stormwater infrastructure. Although the Stormwater Management Master Plan is for use within the City of Thunder Bay, the consultant must also take into account and characterize the impact of flow from drainage areas upstream of the City boundaries in their analysis and assessment, using existing information available through the Lakehead Region Conservation Authority or other sources.

Components of the characterization shall include:

- Identification of land use and environmental conditions of each watershed;
- A review of policy and regulatory direction;
- Review of any previous technical studies carried out within the City;
- Identification of natural hazards such as flood-prone areas or areas susceptible to erosion.
- A summary of data gaps based on the review and consolidation of existing information.

If a requirement to fill data gaps is identified, the Consultant shall prepare a detailed program outlining the information to be collected, and the preferred method for conducting the work. The Consultant, along with the Project Steering Committee, to be defined, will determine the most cost effective approach to obtaining the

data. Bidders are to understand that no additional charges for any equipment, material and/or labour will be entertained unless the additional charges have had prior written approval by an authorized city official.

### **Task 2 – Evaluate the Effectiveness of Existing Infrastructure**

The consultant is required to assess the effectiveness of existing stormwater and drainage systems at reducing the impact of stormwater on the environment. Based on this assessment the consultant will identify and predict the potential impacts of existing development and future proposed developments on stormwater quantity, stormwater quality, water balance and erosion.

A critical component of the assessment will be a determination of the potential impacts of climatic change on the effectiveness of existing infrastructure.

The consultant will assess the ability of the system to reproduce pre-development flow conditions, reducing urban peak flows, flooding and overland erosion. They will also assess the system's ability to improve stormwater quality and reducing sediment and other contaminant loads.

In addition, as the City of Thunder Bay does not currently have a comprehensive hydrologic and hydraulic model, the consultant shall provide a framework for a stormwater model that could be implemented as funding becomes available.

These assessments will require:

- Identification of all significant elements of the existing minor system and major system flow routes;
- Through the review of historic information and in consultation with City Staff, identify capacity issues within the minor and/or major system drainage networks;
- Through the review of existing information and/or field work determine the capacity and maximum targets of each of the receiving watercourses or water bodies with respect to water quantity threshold, water quality threshold and erosion threshold. These thresholds may be dictated by “bottlenecks” in the system or general watercourse characteristics;
- A review of applicable climate change data and recommendations for the approach to take when designing stormwater infrastructure. This would include a review of the existing IDF Curves for Thunder Bay.
- Identification of potential risks, vulnerabilities and liabilities involved in the long term maintenance of infrastructure due to climatic change.
- Review the City's current modelling capabilities and make recommendations for a suitable model for minor and major flow assessment, along with recommendations for the necessary monitoring and calibration of the model.

### **Task 3 – Identify New Stormwater Measures and Retrofit Opportunities**

The Consultant will be required to identify the most applicable measures and best management practices suitable for the City of Thunder Bay. The City would like to explore the opportunities for innovative approaches such as stormwater reuse, Low Impact Development (LID) and green infrastructure for lot level controls, conveyance controls and end of pipe facilities.

In order to determine the effectiveness of the new measures, it will be necessary to implement a stormwater quality monitoring program.

This task would include the following work:

- Based on the characteristics of the City of Thunder Bay area (e.g. climate, soils, topography, bedrock depth, land cover etc.) Review and assess the applicable stormwater management measures and practices.
- Prepare a suite of stormwater management measures and practices that are most applicable for the City of Thunder Bay. This suite of measures should have an emphasis on lot level and conveyance controls and the interaction to reduce the size and/or eliminate the need for end of pipe facilities. Also particular focus on applicable measures in retrofit scenarios and addressing existing development areas with minimal or no existing stormwater management controls.
- Determine where city lands could be used for Stormwater Management.
- Determine the objectives and components of an effective watershed monitoring program linked to measuring the impact of the Stormwater Management Master Plan
- Review existing monitoring programs and identify additional monitoring locations, measurements, and required equipment.

#### **Task 4 – Identify Recommended Strategy for Stormwater Management**

Based on the information and recommendations from the previous tasks, the consultant shall develop an overall strategy for stormwater management that most effectively manages stormwater flow characteristics, water quantity, water quality, water balance and erosion. The strategy should identify targets and objectives to guide the City's approach and the techniques to be used. Where possible, the targets should be specific and quantifiable.

As required by the Class EA process, a wide and diverse range of alternatives should be considered and assessed for applicability to the targets and objectives of the Master Plan. The most applicable measures and practices should be evaluated in terms of feasibility, construction cost, long term operations and maintenance costs and effectiveness in improving water quality, water quantity and overland flow characteristics.

This task will include the following work:

- In accordance with Phases 1 and 2 of the Municipal Class EA planning process, the strategy will provide a statement of problems, opportunities and alternatives;
- An identification of specific stormwater management systems and facilities that should be built or retrofitted, including the continuation of the combined sewer separation program identified under the Pollution Prevention and Control Plan (COTB 1999);
- Identification of Low Impact Development (LID) or other technology that should be promoted as part of any new development, redevelopment, upgrades or infrastructure replacement;
- Recommendations for new policies to be incorporated into the Official Plan to ensure that the strategies developed in this process are incorporated into the overall municipal planning process;
- Recommendations for new Engineering and Development Standards;
- Recommendations for a watershed monitoring framework to measure stormwater management outcomes.

### **Task 5 – Identify a Framework for a Stormwater Asset Management Plan**

In order to best manage the maintenance and renewal of the City's stormwater assets, an asset management plan is required. This plan would enable the City to cost-effectively manage its asset renewal projects as well as any new infrastructure which must be maintained over the long-term such as new SWM ponds. The following tasks, at a minimum, are to be completed as part of this assignment:

- Determine the components of a suitable asset management model;
- Review the City's current data base/modelling capabilities;
- Consult with various City departments on their role with respect to asset management, contracting, maintenance, etc. to ensure a product that is useful for all appropriate users;
- Identify all the SWM assets and liabilities within the system; and
- Determine the framework for such an asset model to be constructed and maintained in the long term.
- Provide recommendations for the implementation of the Stormwater Asset Management Plan as identified above.

### **Task 6 – Develop an Implementation Plan for the Recommended Strategy**

The Consultant will prepare an implementation plan detailing the estimated capital cost for each component. The plan will be prioritized to identify the most effective approach to implementing the required works and will consider the capital and maintenance resources available to the City. The Consultant will also identify any additional Environmental Assessment requirements that may be required outside the scope of this project as well as any technical approvals required.

The implementation plan must include:

- A 20 year capital plan for the construction of new stormwater infrastructure and the replacement of existing systems and facilities.
- Identification of responsibility for the installation of new stormwater infrastructure, upgrading and maintenance of existing stormwater infrastructure, including finding requirements and potential funding sources based on the preferred strategy.
- Identification of the requirements and mechanisms for the incorporation of the recommended stormwater technologies into new development, redevelopment, upgrades or infrastructure replacement.
- Development of appropriate policies and recommendations regarding how they are to be incorporated into the Official Plan, zoning by-laws, sewer use by-laws, engineering design standards and any other relevant by-laws or regulations.
- Provide recommendations for the approach to monitoring and enforcement of stormwater related by-laws and regulations, with associated operating costs.
- Recommendations for an effective organizational structure to ensure coordinated implementation of SWM design, review, policies, standards, operations and maintenance.

### **Consultation**

Public and agency involvement is a key component of a robust SWM Plan as public engagement is essential in managing public assets. The consultant will develop a Consultation Plan to be implemented early during the project. The project will be undertaken as a Master Plan in accordance with the requirements of the Municipal Class Environmental Assessment (2007) and will address, at a minimum, Phases 1 and 2 of the Planning and Design Process of that Class EA.

The consultant shall also submit the report to any affected agency for their review and approval in principle of the recommended strategy. This may include, but is not limited to, the Lakehead Region Conservation Authority (LRCA), the Ministry of the Environment (MOE) and Ministry of Natural Resources (MNR). Opportunities to engage the public throughout the study will also be incorporated into the consultation plan. The consultant will also develop a strategy, for consideration by the City of Thunder Bay, of an on-going public outreach and engagement program to enhance public awareness, appreciation and impact of the Stormwater Management.

### **Summary of Deliverables**

The deliverables for this project include:

1. The consultant will produce a draft Consultation Plan within a month of the award of the contract and following review and discussion with the Steering Committee will finalize the Consultation Plan for use during the duration of the study.
2. Stormwater Management Master Plan for the City of Thunder Bay that addresses the outcomes outlined in the Scope of Work. The major components of the Plan shall include, but not necessarily be limited to:
  - Water quality, water quantity and erosion thresholds and criteria for watercourses within the City of Thunder Bay.
  - Identification of existing capacity issues within the infrastructure system (minor and major) and identification and prioritization of required upgrades to address these capacity issues.
  - Updated City of Thunder Bay Engineering and Development Standards and the City of Thunder Bay IDF curve. Further, a process to ensure standards remain current with respect to potential climate change effects shall be identified.
  - A catalogue of lot level, conveyance and end of pipe stormwater management measures and best management practices applicable to the City of Thunder Bay area.
  - A framework for an asset management model.
  - Recommendations for the implementation of a Stormwater Asset Management Plan.
  - A 20 year capital plan for the construction of new stormwater infrastructure and the replacement of existing systems and facilities.
  - A watershed monitoring framework to measure SWM outcomes.
  - SWM policies, standards and implementation procedures.
  - Recommendations for an effective organization structure to ensure coordinated implementation of SWM design, review, policies and standards.
- 2a. Ten (10) paper copies of the draft report.
- 2b. Five (5) bound paper copies of the final report in 8 ½" x 11" format and one (1) electronic copy of the report on a flash drive, in a format acceptable to the City.
3. Copies of all digital files created for the purpose of this study. These files will be submitted in a form compatible with the City of Thunder Bay's system. All mapping to be consistent with the City's Geographic Information System.



## **Reference Material List**

- City Manager's Office. (June 22, 2012). *City of Thunder Bay Flood Disaster - "Go Forward" Strategies and Actions*. Corporate Report No. 2012.107, Thunder Bay.
- City of Thunder Bay. (2008). *EarthWise Thunder Bay Community Environmental Action Plan*. Thunder Bay.
- City of Thunder Bay. (December 2012). *Urban Design and Landscape Guidelines*. Thunder Bay.
- City of Thunder Bay. (January 2013). *Engineering and Development Standards*. Thunder Bay.
- City of Thunder Bay. (June 27, 2011). *Strategic Plan 2011 - 2014*. Thunder Bay.
- Lakehead Region Conservation Authority, City of Thunder Bay (1987). *Master Drainage Study*. Thunder Bay.
- City of Port Arthur. (1969). *Report and Technical Discussion on Drainage in the South End for the City of Port Arthur*. Thunder Bay.
- City of Thunder Bay. (1999). *Thunder Bay Pollution Prevention and Control Plan*. Thunder Bay.
- The Water Working Group. (2012). *The City of Thunder Bay's Official Plan Review: Through a Water Lens*. Thunder Bay.
- The North Shore Remedial Action Plan, Lakehead University, Lakehead Region Conservation Authority, EcoSuperior Environmental Programs. (2011). *Stormwater Impacts Assessment McVicar Creek, South Neebing River, Lyons/Third Ave Drainage Channels*. Thunder Bay.
- Ontario Clean Water Agency/Stantec. (May 2011). *Stormwater Management for the City of Thunder Bay. Scoping Study Phase 1*.
- City of Thunder Bay Official Plan (2002)
- City of Thunder Bay Zoning By-Law (2010)
- City of Thunder Bay Sewer Use By-Law (1992)
- Lakehead Source Protection Plan (Jan 2012)
- List of reference documents LRCA Floodplain Mapping Reports

## **Exhibit 1 – Map**

**SUBMITTAL FORM**

(This page **must be** completed and returned with your submission)

Proponent Covenant:

I/We the undersigned authorized signing officer of the proponent, hereby declare that no person, firm or corporation other than the one represented by the signature below, has any interest in this submission.

I/We further declare that all statements, schedules and other information provided in this submission are true, complete and accurate in all respects to the best knowledge and belief of the proponent.

I/We further declare that this submission is made without collusion, connection, knowledge, or comparison of figures or arrangement with any other company, firm or persons making a submission and is in all respects fair.

I/We understand that this may result in the rejection of our submission if this declaration is found to be untrue.

I/We have received, allowed for and included as part of our submission all issued Addenda.

---

PRINT LEGAL NAME OF FIRM

---

MAILING ADDRESS

---

CITY

---

POSTAL CODE

---

NAME OF CONTACT PERSON (PLEASE PRINT)

---

PHONE NUMBER

---

FAX NUMBER

---

CELLULAR NUMBER

---

E-MAIL ADDRESS

---

**SIGNATURE OF AUTHORIZED OFFICIAL**

---

PLEASE PRINT NAME

---

DATE

## **NOTICE TO BIDDERS**

### **\$35.00 Fee for Tender and Proposal Documents**

\$30.97 - Plus **13% HST (\$4.03) for a total of \$35.00**  
(effective July 1, 2010)

The City of Thunder Bay charges a non-refundable fee for tender and proposal documents, payable by cheque, cash or debit. Cheques are payable to the **City of Thunder Bay**.

When downloading tender or proposal documents you are expected to pay the document fee should you decide to submit a proposal or tender.

- \* enclose your **cheque** with your tender or proposal submission.
- \* write the tender or proposal reference number on your cheque.

Note: There is **no charge** for Request for Quotations, Expressions of Interest, Sales or Auction bids.

Note: The Document Fee for **Engineering Contracts** and tenders issued by **Consulting Engineering firms** on behalf of the City, will be stated in each contract document. The fee will vary.

### **Downloading Documents**

**Reminder:** When downloading documents, it is the Vendor's responsibility to **re-visit** the City's website prior to submitting, to check for any **addenda** that may be issued. **The Addenda must be attached to your tender/proposal document.**

**Special Note:** When downloading tender/proposal/quotation documents, we strongly recommend that you **complete and FAX** the attached **REQUEST FORM** to our office.

### **Submitting Tenders, Proposals and Quotations**

- When submitting **tenders** enclose **two (2) copies** of your tender in the envelope.
- When submitting **proposals** enclose the number of copies **as stated in the proposal** document.
- When submitting **quotations** submit only **one (1) copy**.
- Attach any/all **addenda** to your tender, proposal or quotation document.
- Write the tender/proposal/quotation **Reference Number** on your envelope.

If you have any questions please call the **Supply Management** office at **(807) 625-2252**.

The City of Thunder Bay **Web Site** Address for a Listing of Tender Information and Downloading Documents is:  
**[www.thunderbay.ca/supply](http://www.thunderbay.ca/supply)**

From:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Ph: \_\_\_\_\_

City of Thunder Bay  
**Supply Management Division**  
Victoriaville Civic Centre  
111 Syndicate Ave S (main floor)  
THUNDER BAY ON  
P7E 6S4

**PROPOSAL #** \_\_\_\_\_

CLOSING DATE

\_\_\_\_\_

When **Downloading** Proposal Documents, **cut or fold this page in half** and **Affix this ADDRESS LABEL** to your proposal submission envelope.  
Please indicate the Proposal #. Also include your firm's name in the top left corner.



SUPPLY MANAGEMENT DIVISION  
Victoriaville Civic Centre (main floor)  
111 Syndicate Avenue S  
PO Box 800  
Thunder Bay, ON P7C 5K4

FINANCE & CORPORATE  
SERVICES DEPARTMENT

Tel: (807) 625-2252  
Fax: (807) 622-0181

**REQUEST FORM**

**REQUEST FOR BIDDER INFORMATION**

**COMPLETE and FAX this Form to Supply Management if you are interested in submitting a response to the RFP.**

**FAX: (807) 622-0181**

Note: It is the responsibility of the Bidder to check the City's Website for any addenda or updates prior to submitting your proposal.

**PROPOSAL#** \_\_\_\_\_

**DESCRIPTION OF PROPOSAL** \_\_\_\_\_

**YOUR BUSINESS NAME** \_\_\_\_\_

**ADDRESS** \_\_\_\_\_

**PO BOX #** \_\_\_\_\_

**CITY** \_\_\_\_\_

**POSTAL CODE** \_\_\_\_\_

**PHONE** (     ) \_\_\_\_\_

**FAX** (     ) \_\_\_\_\_

**CONTACT PERSON** \_\_\_\_\_

**EMAIL ADDRESS** \_\_\_\_\_

**[www.thunderbay.ca/supply](http://www.thunderbay.ca/supply)**