

Report

Report No. OCS2019-02	To: Council	Prepared By: Shawn Binns
Meeting Date: January 31, 2019	Subject: RFP OCS2018-14 Road Network Plan	Motion # _____
Roll #:		R.M.S. File #:

Recommendation(s):	Requires Action <input checked="" type="checkbox"/>	For Information Only <input type="checkbox"/>
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It is recommended:

1. That Report No. OCS2019-02 be received and adopted;
2. That RFP # OCS2018-14 be awarded to C.C Tatham in the amount \$94,865 plus HST with an upset project budget limit of \$105,000;
3. And that the Bidders be thanked and notified under the Director, Operations and Community Services signature.

Background:

In 2007, the Township's road inventory included approximately 386 km of hard top surface and 226 km of gravel surface roads. Currently, the inventory is made of up of 596 km of hardtop surface and 16 km of gravel roads. The Township's road system also consists of 50 bridges and structures greater than 3 metres.

The recent influx in residential development and more urbanized infrastructure and associated operating and capital requirements has created a need to review and update roads needs studies, road management practices and policies, as well as to assess and provide recommendations to shape the Township's Road Network as it approaches buildout over the next-twelve years.

Current situation

The Township has recently undertaken an in-depth review of Operations/Transportation (Roads Department) services, which highlighted the need for increased investment in the Township's road network.

The increase in hard top surfacing has led to additional requirements for maintenance and road safety considerations. This is compounded by the Township's rolling topography, narrow roads, speeds of travelling motorists and

limited shoulders and drainage.

The Township is responsible for 1230 lane kilometers of roadway, more than any other Municipality in the County of Simcoe. Levels of service for surface type, maintenance and asset management is required. The study will review various investment scenarios for service levels (cost/benefit) and associated performance measures.

Updates to the Township's Asset Management Plan and Development Charges Study are scheduled to take place in 2019.

The Township has commenced an update to its Official Plan.

According to Statistics Canada, between 2011 and 2016, there was a 5% increase in population in Oro-Medonte. The number of private dwellings increased from 7,475 in 2011 to 9,013 in 2016 representing a 21% increase over the five-year period. Of particular interest are provincial numbers, which forecast an additional 34% growth in population over the next 12 years. This has led to service pressures and the need to ensure viable long term plans are established to address current and future service level requirements.

The Township has a number of private roads, which over the years it has assumed various maintenance functions without formal agreement or consistent levels of service across the Municipality. A strategy, policy direction and defined levels of services is required.

The last Roads Needs Study update was completed in 2015. Updated road condition assessments were completed in 2017 using a PCI scale. There is a need to update the traffic counts and road classifications according to current counts and establish a policy and methodology for future traffic counts, road classification and associated roadway standards.

Changes to the makeup of the road network are necessitating a need to undertake a comprehensive review of speed limits across the Township.

The Roads Needs Study and current capital plan reflect current needs and do not consider long-term local and regional development and transportation patterns.

The Township maintains approximately 6km of Sidewalk – considering growth of settlement areas and active transportation requirements, a comprehensive policy direction for sidewalks and walkways is required.

The Township has become a world-class destination for road cycling attracting many visitors to the Township's roads. As the trend for cycling continues to rise, there will be greater potential for conflict between cyclists and motorists and additional Municipal considerations for safety/due diligence requirements.

Project Scope

The study will be broken out in three distinct but inter-related components consisting of the following:

Road System and Operations

Traffic Operations - Existing Conditions

- review the existing road system in context of local, collector, arterial (County roads) and highway (MTO) functions;
- identify designated cycling routes, sidewalks, and active transportation links (provided by Township);
- using empirical Strava data, (trips, ride and heat) highlight the current use of various roads by cyclists (with assistance from Township and County of Simcoe);
- identify designated haul routes (provided by Township);
- establish traffic volumes on the existing road system (through an appropriate traffic count program to be resolved with the Township - link volumes vs intersection counts, peak hour vs daily volumes; weekday vs weekend, average vs summer conditions, etc.);
- identify road system capacity deficiencies based on current volumes, road classifications and operational reviews; and
- identify private roads (provided by Township) and current maintenance practice i.e. Township / Private.

Traffic Operations - Future Conditions

- establish future traffic volumes on the road system in context of historic growth, anticipated general growth and development specific growth (considering major developments). Provide same considerations relating to cycling;
- identify road system capacity deficiencies based on future volumes, road classifications and operational reviews; and
- provide policy recommendations for levels of service i.e. maintenance and assumption relating to privately owned roads.

Travel Speeds

- for identified road sections (to be provided by the Township) undertake traffic volume and speed counts (1 day vs 3 day vs 7 day) to establish existing conditions;
- based on *Canadian Guidelines for Establishing Posted Speed Limits* (or other applicable guidelines), determine the recommended speed limit for the subject road sections; and

- provide recommendations accordingly for the noted road sections and recommendations for consideration on a global basis.

Road Classification

- based on existing and/or future traffic volumes, and the existing road system configuration, review the classification and definitions of the Township roads and provide recommendations (local vs collector vs arterial);and
- based on existing and/or future aggregate extraction areas/activities, identify future haul routes.

Road/Transportation Network

- in context of existing and future travel demands and desire lines, identify the need for future roads, road extensions, linkages, etc.;
- review considerations relating the Oro-Medonte Rail Trail (former CN Railway) and future transportation needs;
- identify existing Township roads that should be considered for transfer to the County road system, including those that serve as emergency detour routes for Highway 11 or Highway 400;
- review County and MTO plans for the upper tier road networks and potential implications to the Township road network;
- review the County of Simcoe Transit Plan and identify any future considerations for the Township's road network;
- consult with rail lines and utility partners to obtain input on long-term initiatives and possible considerations for this study; and
- provide policy recommendations for acquisition of sight triangles and lands for future road widening.

Road Standards

- review and provide recommendations on updating the Transportation policies within the Township's Official Plan;
- review the current Township road standards relating to road classification and cross-sections;
- confirm applicability of standards in context of road classification, traffic volumes and other appropriate criterion; and
- present recommended changes for consideration (local vs collector, urban vs rural, residential vs industrial, etc.).

Roads Needs Study

Road System Inventory

- establish road segments/sections in consideration of previous studies, Township GIS/asset management program, etc.; and
- inventory the road system to collect roadside environment information

MMS Classification

- establish road classification as per *Ontario Regulation 239/02 Minimum Maintenance Standards*.

Road Condition Appraisal & Needs Assessment

- review current asset management plan and lifecycle of road base and surfacing for the Township's road network;
- identify the need to improve each individual road section by comparing its existing physical characteristics to minimum thresholds and/or minimum tolerable standards, as determined from: PCI decision matrices; the *Inventory Manual for Municipal Roads*; and/or Township road standards and general road guidelines;
- identify road system needs as they may exist pertaining to:
 - road geometrics (substandard horizontal and/or vertical curves);
 - road and shoulder widths;
 - road surface type;
 - traffic operations; and
 - roadside drainage.
- detailed geometric design and drainage analysis is not anticipated; however it is assumed that areas of concern will be noted;
- identify applicable road improvement strategies and provide recommendations to address existing deficiencies, including corresponding costs; and
- provide recommended adjustments to asset management lifecycles based on field review.

Priorities

- determine a condition and priority rating for each road section; the priority rating system should consider risk factors such as road condition, roadside environment classification, AADT, etc.;
- develop a 10 year improvement program with associated costs and consideration for Township budgets; and

- consider various scenarios (eg. maintain existing budget, maintain existing PCI, improve PCI) and provide graphical representation of same.

Funding of \$90,000 was allocated and approved in the 2018 Budget.

Request for Proposals (RFP#OCS2018-14) was issued on October 30 and closed on November 27, 2018.

Analysis:

Request for Proposal OCS2018-14 was posted on the Township website and through Biddingo (a public procurement web portal).

A total of four proposals were received as follows:

Submission	Amount (excluding HST)
WSP	\$169,270
K.D Becking	\$89,500
R.J Burnside	\$95,267
C.C Tatham	\$94,865

The proposals were reviewed by a cross-functional internal committee using the following criteria:

Item	Evaluation Criteria	Points
1	Quality and Completeness of Proposal	15
2	Relevant Experience	20
3	Budget	25
4	Work Plan and Timelines	15
5	Personnel Summary and Company Background	20
6	Client References	5
Total Available Points		100

Following the review, it was determined that the proposal from C.C Tatham best met the Township's project objectives and provided the best overall value to the Township. Accordingly, it is recommended that Contract OCS: 2018-04 be awarded to C.C Tatham and Associates in the amount of \$94,865.

Following the award of the contract, a detailed overview of the work plan, project deliverables, approach and communication plan will be shared with Council and the Community. Reports will be provided to Council through monthly project tracking report with formal updates at project milestones. This will be outlined in the work plan once finalized.

Financial / Legal Implications / Risk Management:

Funding of \$90,000 was approved in the 2018 Budget. As the project was initiated in 2018, funding in the amount \$105,000 was accrued and funded through 2018 tax levy (\$78,750) and development charges (\$26,250).

The contract is structured as a lump sum contract, however a project budget of \$105,000 has been established to address additional field investigations that may be warranted as the project advances.

The Road Network Plan will provide long term strategic direction for the Township's 615km of road infrastructure which will ensure resources are optimized and long term needs and implications are understood. The plan will also establish baseline information and policy grounding for risk and infrastructure management which will lead to greater operational efficiency and reduction of risk exposure. Further, the plan will ensure that opportunities for development charges are fully leveraged for future infrastructure requirements.

Policies/Legislation:

Infrastructure for Jobs and Prosperity Act
Township of Oro-Medonte Asset Management Plan
Township of Oro-Medonte Official Plan

Corporate Strategic Goals:

Continuous Improvement and Fiscal Responsibility
Balanced Growth
Inclusive, Healthy Community
Enhanced Communications & Customer Service

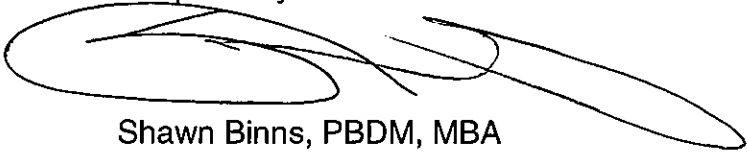
Consultations:

- Chief Administrative Officer
- Chief Financial Officer/Treasurer
- Director, Development Services
- Director, Corporate Services
- Manager, Infrastructure and Capital Projects
- Manager, Operations


Conclusion:

The Road Network Plan will include a review of current road conditions/needs, future roads needs and classifications, levels of service for asset management, existing agreements and practices. Additionally, the plan will review applicable standards and safety of roadways, resulting in the establishment of comprehensive long-term program/service levels for the management of Township roads that will guide future budget allocations and project prioritization.

Respectfully submitted:



Shawn Binns, PBDM, MBA
Director, Operations and Community Services

SMT Approval / Comments:	C.A.O. Approval / Comments: 
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