

**COLEMAN TOWNSHIP**  
**ASSET MANAGEMENT PLAN**

July 5, 2013

Prepared for:

**TOWNSHIP OF COLEMAN**  
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## STATEMENT OF CONFIDENTIALITY

This Report is the property of J.L. Richards & Associates Limited and is intended for the use of Coleman Township to evaluate asset considerations for the referenced project. This document may contain information such as the knowhow, personnel, billing rates and methodology of the firm. J.L. Richards & Associates Limited's competitors could identify in this Report technical, industrial, human resources and financial information that would provide them with considerable advantage in other projects and may cause damage to the operations of J.L. Richards & Associates Limited.

## 1.0 EXECUTIVE SUMMARY

J.L. Richards & Associates Limited (JLR) has been retained by Coleman Township (Township) to prepare this Asset Management Plan (AMP) for the municipality. This comprehensive AMP provides an inventory of the municipality's tangible infrastructure assets and provides a supporting capital renewal and replacement plan for the 5 year time horizon and a general renewal plan for the 10 year time horizon.

This plan is prepared in consideration of the primary asset management plan objective of providing sustainable municipal services to the community that meet defined levels of service at minimum cost. The municipal assets that are included in this report include roads, bridges, water supply systems and buildings. The detailed AMP asset inventory lists are provided in Appendix A. Following is an asset class summary based on the replacement values that have been identified for the lists provided in Appendix A:

<b>Asset Category</b>	<b>2013 Replacement Value</b>
Roads	\$8,307,160
Bridges	\$750,000
Water Supply System	\$1,735,000
Buildings	\$2,017,463
<b>Total (All Assets)</b>	<b>\$12,809,623</b>

Funding sources are also documented on the AMP worksheets provided in Appendix A. Following is a summary of the capital expenditure and funding sources in the current year (2013) budget:

<b>Revenue/Funding Source</b>	<b>2013 Value</b>
Capital Expenditures	\$396,552
Municipal Tax Revenues	\$153,000
Gas Tax	\$35,000
Other	\$35,000
Total Revenues	\$223,000
<b>Funding Excess / (Shortfall)</b>	<b>(\$173,552)</b>

This report also provides asset management strategies and financing plans for the Township in a detailed manner for the five year planning time horizon and in general terms for the ten year planning time horizon.

## 2.0 INTRODUCTION

Municipal asset management planning involves the planning, design, construction, operation and maintenance of infrastructure elements required to provide services to the public at the service levels identified. Asset management also includes planning in regard to renewing, replacing or disposing of infrastructure assets at the end of their service life. This asset management plan will also allow the community to better understand the services delivered by the municipality and the costs associated with each service.

Coleman Township has developed this asset management plan to support the objective of effectively providing municipal services in an efficient and low cost manner at the identified levels of service. Levels of service are statements of service delivery based on direction from Council, municipal bylaws, community needs, and legislative and regulatory requirements.

Following are the functional objectives of this AMP:

- To undertake an effective asset management planning process that is efficient and utilizes financial resources in the most effective way possible for the benefit of the entire Coleman Township community.
- To facilitate the collection, coordination, sharing and communicating of tangible asset information to ultimately support the municipality's financing of their asset delivery and renewal.
- To identify and deliver levels of service that meets the needs of the community.
- To undertake operating, maintenance and capital funding plans that support the defined levels of service.
- To provide the tools to manage infrastructure assets in a sustainable manner.

Infrastructure assets that are included on this AMP include roads, one (1) bridge, one (1) water supply system and municipal buildings. Levels of condition assessment vary between the asset classes. The best asset condition information available was utilized for this plan and it is expected that the level and quality of asset condition assessment will improve as this plan is updated in the future.

This AMP provides the financial planning framework to meet the level of service goals over the 5 year time horizon. This AMP also describes the financial planning requirements for reconstruction, renewal or disposal of assets at the end of their useful service life.

This AMP has been developed through a consultative process involving Coleman Township senior staff, Council and consultant J.L. Richards & Associates Limited. A proprietary asset spreadsheet program has been utilized to support the inventorying of tangible asset data and the development of the strategic and financial asset management planning strategies presented.

This AMP has been evaluated by the current Council and it is recommended that it should be updated prior to each yearly budget deliberation. Planning for the current year will be

undertaken as part of Council's yearly budget process. Best estimates of future revenue sources will be reflected in mid-term time horizon planning (2-5 years). Long term planning (10 year) will focus on life cycle planning of tangible infrastructure assets in consideration of local municipal strategies and preparation for application to future funding programs offered by higher tiers of government.

### **3.0 INVENTORY OF INFRASTRUCTURE ASSETS**

Coleman Township tangible infrastructure assets have been documented in Infrastructure Inventory Tables which have been developed based on field review observations and on PSAB information provided by the municipality. These tables are provided in Appendix A.

A significant proportion of Coleman Township's tangible asset value is held in their road network. Coleman Township currently maintains 52 kilometres of two lane roadway with a replacement value of \$8.3 million. Other significant tangible assets include one bridge (Larose Bridge), a municipal water distribution system, and municipal buildings.

Specific descriptions and current replacement value information has been provided for each infrastructure element in order to support the AMP objectives. Following is a general overview of the information provided:

#### Asset Class and Types

Assets are described both by the asset class (e.g. roads) and asset type within the class (e.g. High Volume Local (HVL) and Low Volume Local (LVL)).

#### Service Description

A description of the service(s) provided by the asset is provided. Details of the service delivered to the community by the asset will be provided in subsequent sections of the report by identification of the Level of Service (LOS) and the Operating Performance Indicators (OPI) for each respective level of service.

#### Quantity / Extent

The quantity description must be suitable to allow meaningful replacement and depreciation valuations to be placed on each asset.

#### Asset Condition

The current condition of assets are rated based on the assessment of good, fair, and poor from field review and/or as provided by the municipality. Asset condition is assessed according to the knowledge of the municipality and standard engineering practices. This rating is used to assign improvement priorities and is not intended to provide safety ratings or identify specific functional deficiencies. This rating does not replace statutory and legal condition rating assessments.

### Financial Accounting Valuation

Financial valuation uses current year replacement costs and depreciation assumptions utilize standard straight-line depreciation over the expected service life of the asset.

### Replacement Cost Valuation

Replacement cost valuations are based on the best information available at present. In the case of roads, current construction unit costs have been utilized to estimate replacement cost values for the current surface provided. For buildings, replacement costs identified by the municipality's property insurer have been used. Supporting information for replacement cost valuations are provided in Appendix B.

### Asset Age and Identification of Next Capital Improvement

The asset age and distribution of average age of the asset class is provided based on the best information available at this time.

### Capital Improvement Cost Estimates

Capital improvement requirements have been prioritized over the 5 year time horizon. Improvement work has been identified based on the current condition of the asset, identified deficiencies and upgrades required to meet LOS objectives for the asset class. Improvement priorities have been assigned by Coleman Township Council within the framework of this AMP.

## **4.0 DESIRED LEVEL OF SERVICE**

Levels of service are statements of service delivery based on Council direction, municipal documents, community needs, and legislative and regulatory requirements. Levels of service can be defined from the perspective of the municipality or the community. Although both are interconnected, this report presents the LOS actions provided by the municipality. Following is an articulation of the delivery of services:

- The AMP provides a framework for sustainable provision of tangible assets, each which provides a service to the community.
- The level of service related to each asset class is provided by the municipality as a service support activity. Depending on the asset and the level of service provided, this may be described as a quantity, unit cost, response time, or any other quantity that helps define the service. Activities to support LOS objectives may be proactive (e.g. annual inspections) or reactive (e.g. responding to pipe breakage calls). LOS support activities also include maintenance tasks that help extend asset life.

It should be noted that a good balance between asset improvement through capital funding and ongoing maintenance programs provides the most effective cost efficiencies and best allocation of resources to meet LOS objectives.

## Roads

Level of service objectives for each element within the road network are based on the functional classification of the subject road.

Roads within the municipality are divided into Rural High Volume Local (HVL) roads which support the highest traffic volumes within the Township and that provide access to 20 or more residences. Rural Low Volume Local (LVL) roads support low traffic volumes and service less than 20 residences.

The level of service objective for HVL roads is a Double Surface Treatment (DST) with a “Good” condition rating. Over the long term, HVL roads will receive capital investment priority in regard to improving surface deficiencies, alignment deficiencies (curves and hills) and drainage deficiencies (ditches and culverts). Capital projects will be identified at a suitable level of detail to allow application to funding opportunities presented by higher levels of government.

The level of service objective for LVL roads is Single Surface Treatment (SST) wearing surface with a “Fair” condition rating. Capital projects for LVL roads will be identified for inclusion on the Township’s capital priority list and for the purpose of application to funding opportunities presented by higher levels of government.

## Bridges

One bridge is recorded in Coleman Township’s asset database. Larose Bridge, which is owned jointly with the Town of Cobalt, provides an overpass of the Ontario Northland Railway track corridor and connects Nipissing Road in Coleman Township with the Town of Cobalt. A maximum 5 tonne load rating has been assigned to the structure, however details of the conditions of this rating are not known by Coleman Township at this time.

Larose Bridge in its entirety is operated and managed by the Town of Cobalt. Inspections reports have been provided by the Town of Cobalt and are provided in Appendix C along with photographs of the structure.

Desired levels of service for Larose Bridge are to ensure the structure provides safe passage for pedestrians and for traffic meeting the posted load limits. The bridge condition must be verified through statutory condition inspections and recommendations resulting from the inspections should become part of future AMP’s. In this way, all recommendations can be addressed in the time frame recommended. Performance of this statutory inspection through application of the Ontario Structure Inspection Manual (OSIM) is beyond the scope of this AMP.

## Water Distribution System

Coleman Township provides municipal water supply to 49 residential customers via 3,470 metres of distribution mains. Properties on the following roads receive this service: Coleman Road, Creighton Drive, Kerr Lake Road, Lower O’Brien Road, Upper O’Brien Road, Martin Drive, Nipissing Road, Pump House Road, Short Street and West Cobalt Road.

The Town of Cobalt is responsible for operation and management of the system and for identification of deficiencies in the system. Coleman Township has not been advised by the

Town of Cobalt of any capital expenditure requirements that may require funding in the short term (1-5 year) time horizon.

Level of service objectives for the water distribution system are primary based on statutory requirements of meeting the provincial Safe Drinking Water Act which is administered through the new Drinking Water Works Permit (DWWP) system. The current replacement asset value has been provided by Coleman Township.

### Buildings

Although not a requirement of the provinces MIII planning requirement, this AMP has been prepared to document building assets owned by Coleman Township and to identify general levels of service objectives.

A condition assessment of the Coleman Township Municipal Building was undertaken by JLR in 2012. The municipal building complex provides the primary functional services delivered by the Township. The building includes elements described as Office Space, Fire Hall, Community Hall, Council Chambers and Public Works.

Level of service objectives for the provision and use of buildings in Coleman Township are based on recent condition assessments and through monitoring by Coleman Township staff and Council of ongoing buildings condition and deficiencies.

Two classes of level of service objectives have been identified. Firstly, building integrity is to be provided by identification of capital expenditure requirements necessary to maintain a safe and functional space. The second level of service requirement is related to providing barrier free access according to current and future legislation.

In addition to the replacement of the roof which has been identified as requiring capital expenditure in the short term, 6 additional recommendations are contained in the JLR condition assessment report. These capital expenditure requirements are included on the short term (1-5 year) yearly expenditure forecasts in Appendix A.

## **5.0 ASSET MANAGEMENT STRATEGY**

An effective asset management strategy identifies actions that are required to facilitate efficient use of the municipality's tangible assets to provide the desired levels of service in a way that:

- Is sustainable.
- Effectively manages risk.
- Is provided at the lowest lifecycle cost.

Coleman Township's implementation strategy combines many individual strategies, in effect providing a hybrid form of effective service delivery specific to the Township's objectives and resources. When taken together, these individual strategies combine to deliver the low cost solutions for the levels of service identified. This initial planning process provides an excellent start toward the building of a successful asset management program.

The general components of Coleman Township's strategy are:

- Seek opportunities for partnerships.
- Undertake actions and policies that lower the lifecycle cost of assets.
- First priority is given to regular inspection and maintenance activities to reduce unexpected repairs and increase asset life.
- Second priority is given to opportunities for significant renewal and rehabilitation activities to extend the service life of an asset and therefore reduce the life cycle costs.
- The third and final priority is given to replacement activities that occur once an asset has reached the end of its useful life.

#### Seek Opportunities for Partnerships

Coleman Township has an excellent record in regard to partnering with other agencies and companies. Procurement methods can also have a significant impact on the efficient management of assets and the resultant effective delivery of services. Procurement strategies include working with other municipalities, pooling projects and resources, and utilizing alternative financing that uses design-build-finance models to delivery services to the community.

Specific examples of partnerships undertaken are with the Town of Cobalt who provides expertise and cost sharing with Coleman Township for the water supply system and for Larose Bridge. Coleman Township also works with local material providers to lower the cost of road building material by leveraging their close proximity to the suppliers. A major part of Coleman Township's road work plan results from successful association with a local company, Miller Paving.

#### Lower Life Cycle Costs

The primary asset value of the Township is related to roads. Coleman Township maintains 52 km (104 lane km) of roadways with surfaces made up of gravel (51%), single surface treatment (11%), double surface treatment (45%) and paved (3%).

Service life of a newly constructed road is dependent on the design, traffic volumes and surface treatment. Generally gravel roads require resurfacing every 10 years, single surfaced roads every 15 years, double surfaced roads every 20 years, and paved roads every 25 years. The yearly depreciation value is based on a 35 year useful service life with full reconstruction of the road at that time.

Coleman Township utilizes a very effective "Life Cycle Improvement Strategy". Roads that are rated in poor condition generally fail to meet identified levels of service objectives to provided roads with conditions that are either fair or good. It has been proven that a road surface that is well maintained and regularly resurfaced will extend the useful service life of the underlying granular materials in addition to the road surface. Improving drainage of the roadways will serve to increase road performance in terms of ride and safety, as well as increasing the proportion of road granulars that may be reused in future road reconstruction.

### Lower Renewal and Rehabilitation Costs

The Township currently is undertaking a successful and cost effective ongoing road improvement strategy. This is being done by partnering with road contractors to reduce the cost of the ongoing resurfacing program and to recycle asphalt material generated from local Highway 11 improvement projects. In this way Coleman Township will continue to leverage their location adjacent the Highway 11 Trans Canada corridor to provide low cost road renewal improvements within the community.

## **6.0 FINANCING STRATEGY**

This Financing Strategy has been prepared to present a complete plan that integrates the AMP with municipal revenue streams and yearly budgeting. This will allow Coleman Township with the tools to balance their levels of service objectives with available resources. Revenue streams are described below.

### Property Tax Revenues

A portion of the Township's municipal property tax revenue has traditionally been allotted to capital infrastructure projects. Large projects are often funded through the development of a dedicated reserve account that is built up from property tax revenues over a number of years for ultimate use during the specific infrastructure project identified. The capital funding from the municipal tax base for the past three years and the projected capital funding for the short term (1-5 years) is presented below.

<b>Year</b>	<b>Infrastructure Capital Funding from Property Tax Base</b>
2010 (Actual)	\$ N/A
2011 (Actual)	\$ N/A
2012 (Actual)	\$153,280
2013 (Projected)	\$153,000
2014 (Projected)	\$153,000
2015 (Projected)	\$153,000
2016 (Projected)	\$153,000
2017 (Projected)	\$153,000

### Gas Tax Fund Revenues

Coleman Township receives revenues from the Federal Gas Tax Fund program. The funding is intended to provide predictable, long term revenue for the revitalization of infrastructure and the resulting environmental benefits. Projects are chosen and prioritized by the local municipality. The capital funding from the Gas Tax Fund for the past three years and the projected capital funding for the short term (1-5 years) is presented below.

Year	Infrastructure Capital Funding from Gas Tax Fund
2010 (Actual)	\$ N/A
2011 (Actual)	\$ N/A
2012 (Actual)	\$35,000
2013 (Projected)	\$35,000
2014 (Projected)	\$35,000
2015 (Projected)	\$35,000
2016 (Projected)	\$35,000
2017 (Projected)	\$35,000

Additional Funding Sources

The primary source of additional funding opportunities is through infrastructure programs offered by the provincial and federal governments. These programs have historically required a 1/3 – 1/3 – 1/3 commitment between the Township and the other two levels of government.

Successful funding applications are generally supported by a planned and prioritized list of infrastructure capital projects, and a relatively well detailed scope of work for the projects identified as top priority. This AMP satisfies the first requirement to identify capital projects within the Townships planning horizon. This AMP has identified high priority projects which are candidates for future infrastructure funding programs offered by upper levels of government.

Project specific preliminary design brief reports will typically be required to support successful funding applications. Although these design briefs are beyond the scope of this assignment, JLR would be please to provide this service to the Township in preparation of funding opportunities.

Funding Shortfalls

Any net funding shortfalls that are experienced following application of revenues from municipal property tax sources, gas tax fund, and additional funding sources (such as infrastructure programs offered by upper levels of government) are covered through debt financing arrangements.

**7.0 SUMMARY AND RECOMMENDATIONS**

This AMP provides the Township of Coleman with a structured process for planning financial strategies that will support the delivery of municipal services at desired levels of service. This process also identifies capital infrastructure priorities for each year of the entire short term planning time horizon (year 1-5) and a general renewal plan for the 10 year time horizon (year 6-10).

Identification of capital infrastructure priorities will position the Township to effectively take advantage of infrastructure funding programs offered by upper levels of government. This AMP allows the Township to identify the highest priority projects meeting the funding criteria and to effectively describe and assigned benefits to the identified projects for the purpose of supporting funding applications.

Following are the current highest priority infrastructure projects as identified in this AMP. All projects are scheduled to be undertaken in 2013 at the estimated capital costs presented:

1. Portage Bay Road Improvements (Ski Club Road to End)	\$77,900
2. Portage Bay Road Improvements (Hwy. 11 to Ski Club Road)	\$45,100
3. Bass Lake Road Surfacing (Tracks southerly 3,000m)	\$61,500
4. Bass Lake Road Improvements (Hwy. 11B to Tracks)	\$78,461
5. Gillies Depot Road Improvements (Entire)	\$38,745

We trust the information contained in this Asset Management Plan meets the requirements of the Township. We look forward to your inquiry should you have questions or comments related to the information presented.

Respectfully submitted,

J.L. RICHARDS & ASSOCIATES LIMITED

**Original on File**

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