THE CORPORATION OF THE TOWNSHIP OF HORTON

TRANSPORTATION & ENVIRONMENTAL SERVICES

March 1st, 2023
8:30 a.m.
Horton Council Chambers
2253 Johnston Rd.

1. Call to Order
2. Declaration of Pecuniary Interest
3. Minutes from Previous Meeting:
   i. February 1st, 2023 **PG.2**
4. Producer Responsibility ICI Public Meeting **PG.3**
5. County of Renfrew Draft Policies **PG.10**
6. Proposed GICB Budget **PG.45**
7. Award Tender PWC 2022-25 Transportation Master Plan **PG.49**
8. Bruce Street Rehabilitation Notice **PG.54**
9. Mullins Road 2023 Capital Rehabilitation **PG.56**
10. New/Other Business
11. Next Meeting:
    i. April 5th, 2023
12. Adjournment

RETURN TO AGENDA

THE CORPORATION OF THE TOWNSHIP OF HORTON

TES Committee Meeting

February 1st, 2023
8:30 a.m.

There was a meeting of the Transportation and Environmental Services Committee held in the Municipal Chambers on Wednesday January 4th, 2023. Present was Chair Doug Humphries, Deputy Mayor Tom Webster, and Mayor David Bennett, Public Advisory Members Bob Kingsbury, and Tyler Anderson. Staff present was Public Works Manager, Adam Knapp, and Executive Assistant Nichole Dubeau– Recording Secretary.

1. CALL TO ORDER
Chair Humphries called the meeting to order at 8:30 a.m.

2. DECLARATION OF PECUNIARY INTEREST
There was no declaration of pecuniary interest.

3. MINUTES FROM PREVIOUS MEETING:

- January 4th, 2023

Moved by Tyler Anderson
Seconded by Deputy Mayor Webster
THAT the Committee approve the January 4th, 2023 Minutes.

Carried

4. PRODUCER RESPONSIBILITY UPDATE
Public Works Manager Adam Knapp reviewed the report. There was committee discussion regarding notice to ICI ratepayers and that the Township will continue collection until the end of 2023 as it has been included in this year's budget.

5. COUNTY OF RENFREW 10-YEAR CAPITAL ROADS PLAN
Public Works Manager Adam Knapp reviewed the report.

6. ROAD MANAGEMENT PLAN 2018-2027 UPDATE
Public Works Manager Adam Knapp reviewed the report.

7. AWARD TENDER 2022-25 TRANSPORTATION MASTER PLAN
Public Works Manager Adam Knapp reviewed the report. Mayor Bennett requested that the committee wait to award the tender until preliminary budget discussion has taken place. The item has been tabled until the next Committee Meeting.

8. NEW/OTHER BUSINESS
There was no new/other business.

9. NEXT MEETING:

i. March 1st, 2023 at 8:30 a.m.

10. ADJOURNMENT
Chair Humphries declared the meeting adjourned at 9:15 a.m.

CHAIR Doug Humphries

PUBLIC WORKS MGR Adam Knapp

RETURN TO AGENDA

Township of Horton
COUNCIL / COMMITTEE REPORT

Title:	Date:	March 1st 2023
Producer Responsibility ICI Public Meeting	Council/Committee:	TES
	Author:	Adam Knapp, Public Works Manager
	Department:	Environmental

RECOMMENDATIONS:

THAT the TES committee agree with staff and recommend to Council that a public meeting be held on April 6th 2023 at 5pm in the Council Chambers to discuss with our ICI rate payers how the Township can best facilitate them post transition to producer responsibility.

FURTHER THAT staff be directed to mail out the attached invitation and promotion and education material to all ICI rate payers in Horton Township.

BACKGROUND:

As discussed in previous TES committee meetings.

ALTERNATIVES:

N/A

FINANCIAL IMPLICATIONS:

To be determined

ATTACHMENTS:

ICI Mail out invitation and Producer Responsibility P and E

CONSULTATIONS:

N/A

Prepared by: Adam Knapp, Public Works Manager

Reviewed by: Hope Dillabough, CAO/Clerk

RETURN TO AGENDA

Producer Responsibility Based Recycling in Horton Township

Public Meeting to be held at 5 pm on Thursday, April 6th, 2023

at the Horton Township Municipal Office

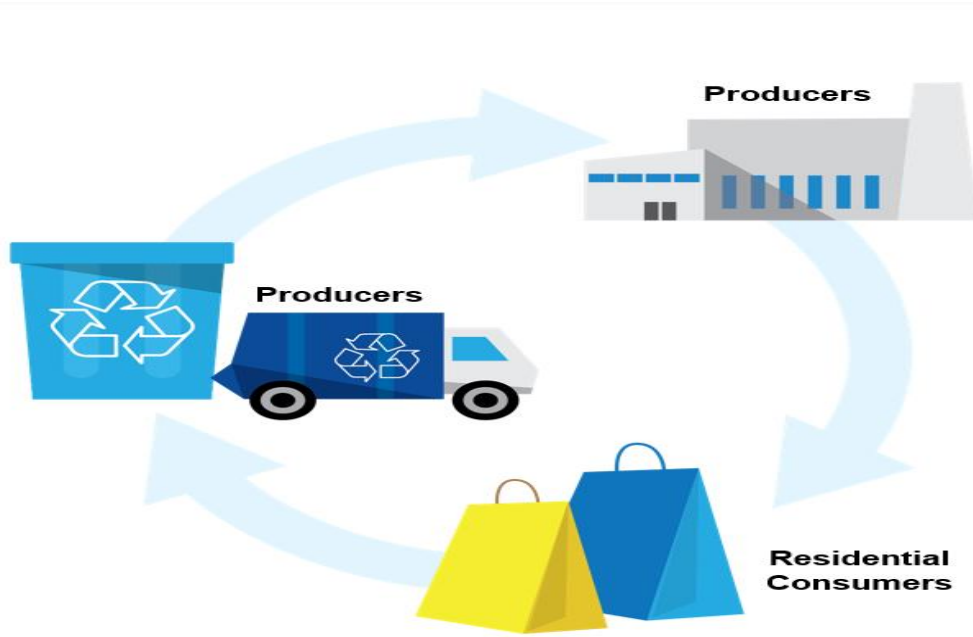
The Province of Ontario has mandated change to who funds and administers the collection of recyclables and the Township would like to hear how we can continue to service our Industrial, Commercial and Institutional ratepayers under the new model

RETURN TO AGENDA

- In Ontario, the blue box program is transitioning from a model of shared industry funding, to one of producer responsibility and shall be administered by a Producer Responsibility Organization (PRO).
- O. Reg 391/21 is a regulatory approach to waste management, where producers (companies that make and import products) are responsible for the waste generated from their products and packaging.
- The transition shall begin in 2023 and all communities shall transition by December 31st, 2025.

How the current model works

How the new model is proposed to work



RETURN TO AGENDA

Horton Township will transition on July 1st, 2023

September 30, 2021
Initial report deadline (s. 54)
Transition report deadline (s. 55)

July 1st, 2023.
Community transitions all eligible sources currently serviced by the municipality

January 1, 2026
Collection expanded to all communities outside of Far North and eligible sources not previously serviced by the municipality

October 1, 2021
Producer registration deadline (s. 45) (including some municipalities)

November 1, 2021
PRO registration deadline to be included as a rule creator (s. 14)

April 1, 2022
Processor registration deadline (s.49) (including municipal processors)

July 1, 2022
Initial allocation table deadline (s. 16)

RETURN TO AGENDA

Eligible Sources for Producer Funding

Current Model

single-family homes

seasonal dwellings

multi-unit residential buildings

50% funding does not include costs for Industrial, Commercial and Institutional (IC&I), even if delivered through municipal program

Proposed Model

single-family homes

seasonal dwellings

multi-unit residential buildings

public & private schools

specified retirement & long-term care homes

specified public spaces

RETURN TO AGENDA

Non - Eligible Sources

- O. Reg 391/21 does **not** require collection at:
- Industrial or commercial properties
- Business Improvement Areas (BIAs)
- Commercial farms
- Places of worship
- Weekend campgrounds (without permanent or seasonal households)
- Commercial properties along residential routes
- Public facing areas of municipal buildings or facilities (e.g., libraries, arenas)
- Not-for-profit organizations

RETURN TO AGENDA

What materials are included and excluded during transition ?

Still excluded:

- Hard or soft-cover books
- Flexible plastic used for containment of food (i.e., cling wrap, sandwich bags)
- Packaging & single-use items not primarily made of paper, glass, metal or plastic (i.e., wooden box, bamboo cutlery)
- Garbage bags, recycling bags, compostable waste bags
- Tissues, paper towel and other paper sanitary products
- Alcohol packaging
- Biomedical or hazardous waste
- Items designated under other diversion regulations

Transition Date to December 31, 2025:

PROs must collect/accept the same materials that were included in Horton's blue box program as of August 15, 2019. Materials that were collected with the blue box, but not designated under the Waste Diversion Transition Act program (e.g., pots and pans, books, etc.) will not be required to be collected.

January 1, 2026:

PROs must collect/accept all designated materials under the new regulation, but may stop collecting items not designated.

RETURN TO AGENDA

Township of Horton
COUNCIL / COMMITTEE REPORT

Title:	Date:	Mar 1st 2023
County of Renfrew Draft Policies	Council/Committee:	TES
	Author:	Adam Knapp, Public Works Manager
	Department:	Public Works

RECOMMENDATIONS:
THAT the TES committee receive this report as information pertaining to the attached draft policies from the County of Renfrew.

BACKGROUND:
The County of Renfrew is updating select policies and has provided the drafts to all 17 Municipal partners for review and comments from Council and Staff.

ALTERNATIVES:
N/A

FINANCIAL IMPLICATIONS:
N/A

ATTACHMENTS:
County PW-01 - Road Classification – DRAFT
County Policy PW-19 - Road Rationalization DRAFT
County PW-02 - Bridge Policy – DRAFT

CONSULTATIONS:
N/A

Prepared by: Adam Knapp, Public Works Manager

Reviewed by: Hope Dillabough, CAO/Clerk

RETURN TO AGENDA

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-01
POLICY: Roadway Classification and Design				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 1 of 10

POLICY STATEMENT

The County of Renfrew (County) believes that a roadway network performs most efficiently and effectively when the roads comprising that network are designed, built and operated to serve their intended purposes.

A classification system designates roads into different groups according to the type of service each group is intended to provide. By grouping roads with similar function and adopting a consistent set of standards, the County of Renfrew can improve transportation planning, road design, road maintenance, and road operations.

Therefore, this Policy dictates hierarchical systems of roadway classification, which shall apply to all roadways in the County Road system for maintenance and design.

POLICY DEFINITIONS

Arterial ~~Road~~: Roads whose primary function is to move traffic. Property access is very much a secondary consideration and may be restricted. A distinction may be made between major and minor arterials depending on the volume and nature of the traffic.

Collector: Roads whose function is both traffic movement and property access. A balanced approach between these often conflicting needs is to be taken.

Laneways: Roads typically found in an urban environment providing access to the rear of properties in the town core areas.

Local Roads: Roads whose function is primarily to provide access to property. Traffic movement is very much a secondary consideration.

Rural Roadways: Roadways passing through largely undeveloped areas and having an open drainage system.

Seasonal Roads: Roads typically of the rural variety which are not maintained during the winter months. In the months during which the roads are accessible they serve the same function as a local roadway.

RETURN TO AGENDA

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-01
POLICY: Roadway Classification and Design				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 2 of 10

Semi-Urban Roadways: Roadways passing through areas where the degree of development is approaching full development along a substantial portion of its length and may include those portions within an urban municipality or settlement. Such roads generally have an open drainage system but may be approaching or meeting warrants for drainage by closed (piped) systems. For Design Classification purposes, these roadways are grouped with Rural Roadways.

Significant Weather Event: An approaching or occurring weather hazard with the potential to pose a significant danger to users of the highways within a municipality.

Urban Roadways: Roads passing through areas where the degree of development is at or near full development along a substantial portion of its length and shall include those portions of road within an urban municipality or settlement. Such roads generally consist of curbs and gutters adjacent to the traveled portion of the roadway. Drainage is generally accommodated by a closed (piped) system.

POLICY CONTENT

1.0 MAINTENANCE CLASSIFICATIONS

Ontario Regulation 239/02, Minimum Maintenance Standards for Municipal Highways, under the Municipal Act provides a classification system for roads which must be used in establishing the minimum maintenance standards for all municipal roads.

The County shall annually review the classifications of County Road sections based on Regulation 239/02 and ensure the 'maintenance classification' for each section of road is up to date. The County also has approved 'Roadway Service Standards' which were developed to meet or exceed the requirements of Regulation 239/02. The County shall adhere to the requirements of the County Roadway Service Standards, as amended.

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-01
POLICY: Roadway Classification and Design				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 3 of 10

2.0 DESIGN CLASSIFICATIONS

For design and asset management planning purposes, all roads in the County's road system shall be classified according to their roadside environment and function within the system. In establishing the design classification of County road sections, the characteristics provided in Table 1 and Table 2 shall be used for rural roadways and urban roadways respectively.

The characteristics for design classifications of County Roads dictated in Table 1 and Table 2 have been adapted from the Transportation Association of Canada (TAC) Geometric Design Manual. Table 1 and Table 2 of this Policy are for establishing the design classification for County Roads only. When undertaking design for County Roads, or considering requests which would result in changes to County Roads, the additional restrictions recommended by the TAC Geometric Design Manual for each road classification shall be taken into consideration.

The Design Classifications shall be used to establish consistent minimum design criteria and target life-cycle best practices for County Roads.

The ~~County Engineer~~ **Director of Public Works & Engineering, or designate,** shall maintain the roadway **ongoingly.** ~~design classification of each road section and make any necessary classification changes annually~~. Major review and updates to this Policy shall be undertaken in conjunction with each rationalization update, which is to be conducted every five years, or as directed by County Council.

Table 1
RURAL ROAD DESIGN CLASSIFICATIONS

TAC Classification (County Design Class)	Freeway (R4)	Arterial (R3)	Collector (R2)	Local (R1)
AADT	≥12,000	<12,000	<5,000	<1,000
Posted Speed (km/h)	50 – 120	50 – 90	40 – 80	40 – 80
Connections	freeways arterials	freeways. arterials, collectors	arterials, collectors, locals	collectors, locals

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-01
POLICY: Roadway Classification and Design				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 4 of 10

Table 2
URBAN ROAD DESIGN CLASSIFICATIONS

TAC Classification (County Design Class)	Freeway / Expressway (U4)	Major Arterial (U4)	Minor Arterial (U3)	Collector (U2)	Local (U1)	Lane (U1)
AADT	>12,000	12,000 – 30,000	<12,000	<5000	<3,000	<500
Posted Speed (km/h)	80 – 110	50 – 80	40 – 80	40 – 80	≤50	≤30
Connections	freeways arterials	freeways. arterials, collectors	freeways. arterials, collectors	arterials, collectors, locals	collectors, locals	locals, lanes

3.0 DESIGN STANDARDS

Design standards for roads relate to safety and the longevity of the road in its current and future uses. The design standards for County Roads have been developed to ensure consistency across all sections in the system and that the design and construction of County Roads is becoming of their purpose, improving safety for all users.

3.1 Minimum and Desired Standards

The design standards for County Roads are based on the design classification of the individual road sections and have been developed incorporating MTO Design Manuals, the TAC Geometric Design Guide for Canadian Roads, and AASHTO Guide to Design of Pavement Structures. The minimum and desired standards considered in the design of County Road sections shall be as per Table 3.

Table 3
Minimum and Desired Design Standards

Standard	Rural		Urban	
	Minimum	Desired	Minimum	Desired
Design Speed (km/h)	R1 – 60 R2-R4 – 80	90	50	60

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-01
POLICY: Roadway Classification and Design				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 5 of 10

Standard	Rural		Urban	
	Minimum	Desired	Minimum	Desired
Lane Width (m)	3.25	3.5	3.25	3.5
Hardened Shoulder / Clearance Width (m)	0.5	R1 & R2 – 1.0 R3 & R4 – 1.5	0.1	1.0
Overall Shoulder Width (m)	1.5	2.0	N/A	N/A
Alignment Adequacy	Fair with Warning Signs	Good	Fair with Warning Signs	Good
Right of Way (ROW) Width (m)	20	26	20	26
Surface Composition (mm of HMA)	R1 – 30 R2 – 80 R3 – 120 R4 – 130	R1 – 40 R2 – 100 R3 – 130 R4 – 140	U1 – 40 U2 – 80 U3 – 120 U4 – 130	U1 – 80 U2 – 100 U3 – 130 U4 – 140
Base Composition	150mm Granular 'A' over 350mm Granular 'B' or equivalent sub-base			

*Unless identified otherwise, values apply to all Design Classifications
*HMA = Hot Mix Asphalt

The County's Asset Management Plan does not incorporate growth and typically projects costs are based on rehabilitation to similar geometry. As such, though capacity is evaluated during road section evaluations, it is not considered during design of a road section. Where minimum design standards are determined to not being met on a road section, efforts shall be made to have this corrected during design and construction on that road section and budgeted for accordingly.

When determining the design standard to be utilized, the County shall consider a twenty (20) year forecast of growth in traffic based on historical data. A typical value to be utilized is a growth rate of 1.5% unless determined otherwise based on increased growth in certain areas of the County.

RETURN TO AGENDA

3.2 Desired Road Cross-Sections

Included as Appendix A is a drawing illustrating the desired typical cross-sections for each design class. Circumstances may arise where the dimensions shown in the desired cross-sections may not be met; however, the proposed altered cross-section shall provide equivalent or greater strength of the corresponding desired typical cross-section and meet all other minimum design standards for the design classification of the road.

4.0 BEST PRACTICES

Best Practices should be structured with the goal that the right treatment takes place during the correct conditions for the life-cycle of a road in order to ensure that the return on investments in the County Road system is maximized. Achieving the recommended best practices outlined in this section may be limited due to the availability of funding or the prioritization of safety improvements. However, these Best Practices shall be used as a guideline when updating the County's Capital Asset Management Plan for Roads.

4.1 Road Improvement Methods

There are various types of improvement methods available in order to improve the condition of roads, and others continue to be developed. County staff shall continue to monitor new improvement methods which come available in the market and may present opportunities for Council consideration to pilot methods which may be considered viable economically and of benefit to County Roads.

The typical improvement methods currently considered on County Roads are provided in Table 4.

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-01
POLICY: Roadway Classification and Design				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 7 of 10

Table 4
Available Road Improvement Strategies

Improvement Type	Typical Improvements	General Description
Maintenance	- Crack Sealing; - Patching;	Operational maintenance to seal cracks and patch potholes.
Preventative Maintenance	- Microsurfacing; - Surface Treatment Overlay; - Slurry Seal;	Capital 'maintenance' to seal the roadway and prolong the service life of asphalt.
Minor Rehabilitation	- HMA Overlay; - Mill & Pave;	Capital resurfacing to prolong service life of road overall. Will include drainage improvements.
Major Rehabilitation	- Pulverize & Pave; - Base & Surface;	Capital replacement of surface with base rehabilitation and/or stabilization. Will include drainage improvements.
Reconstruction	- Full Reconstruction; - Partial Reconstruction;	Replacement of surface, unsuitable base material, and drainage infrastructure.

Each improvement type provides certain benefits when applied at the appropriate time in the life-cycle of a roadway; however, there are also certain restrictions which must be considered when planning road improvements as provided below.

Maintenance improvements are typically relatively the lowest cost improvement type and provide the greatest return on investment (ROI) if undertaken as soon as necessary. Maintenance improvements, early in the life-cycle of the road surface, will prevent accelerated deterioration of the surface from water infiltration and freeze-thaw action. However, undertaking maintenance later in the lifecycle of the road, when PCI has fallen below 85, should only be considered as a holding pattern as it would no longer provide the increased service life it would if done sooner. Maintenance improvements should be planned to occur throughout the life of a road as needed but prioritized 4 – 5 years after a new surface is applied via minor rehabilitation, major rehabilitation, or reconstruction.

RETURN TO AGENDA

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-01
POLICY: Roadway Classification and Design				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 8 of 10

Preventative maintenance improvements are typically the lowest cost Capital improvement which can be undertaken on roads. Preventative maintenance treatments will seal all cracks in the surface of the roadway to prevent water infiltration and significantly decrease deterioration from freeze-thaw action. However, undertaking preventative maintenance on a roadway with a PCI below 70, poor drainage, evident base issues, or poor alignment should only be considered as a holding pattern as it would not substantially improve the roadway or extend its service life. In order to maximize ROI, preventative maintenance should be planned to occur 8 – 10 years after a new surface is applied via minor rehabilitation, major rehabilitation, or reconstruction, when the PCI is 70 – 85.

Minor rehabilitation improvements typically come at a mid-range cost but can substantially prolong the service life of a road if completed at the right time in its life-cycle. Minor rehabilitation will provide a new surface and added strength to the roadway. However, undertaking minor rehabilitation on a roadway where there is evident base issues or where the PCI has fallen below 50 should only be considered as a holding pattern as it would only temporarily improve the road condition and relatively low service life extension for the expense. In order to maximize ROI, minor rehabilitation should be planned to occur 18 - 22 years after a new surface is applied via major rehabilitation, or reconstruction (8 – 14 years after preventative maintenance), when the PCI of the road is 50 – 65.

Major rehabilitation improvements typically come at a higher-range cost but will completely replace the road surface and substantially prolong the service life of a road so long as the base granular of the road are structurally sound. However, a greater treatment than major rehabilitation should be considered if there are poor alignments, a large amount of urban drainage infrastructure in poor condition, or substantial base issues over a large section of the road. In order to maximize ROI, major rehabilitation should be planned take place after the PCI has fallen below 45.

Reconstruction is the highest relative cost road improvement type on any road class. It will require complete removal and replacement of the existing surface, a substantial amount of base granular, and most if not all drainage infrastructure. Reconstruction should only be considered on roads with poor alignment, completely deteriorated/poor

RETURN TO AGENDA

base structure, poor drainage infrastructure, and/or where minimum design standards cannot be achieved using another method. In order to maximize ROI, reconstruction (if required) should be planned to occur after the PCI has fallen below 40.

4.2 Life-Cycle Management

Managing the life-cycle of a roadway involves following best practices, to ensure that the treatment being applied for a particular section of road is appropriate for the condition and design standard for the road, and that it is the most cost efficient treatment at that stage in the road's life-cycle.

Figure 1 below, provides a graphical comparison of three different life-cycle scenarios, comparing the age of a road with its condition. The three different scenarios are as follows:

- "Do Nothing" – life-cycle of a newly constructed road where no improvement takes place at any point throughout its design life;
- "No Major or REC" – life-cycle of a newly constructed road where no large capital costs are incurred through Major Rehabilitation or Reconstruction and only Preventative Maintenance or Minor Rehabilitation takes place throughout the design life of the road; and
- "Best Practices" – life-cycle of a newly constructed road where the 'return on investment' is prioritized and the most beneficial improvement type takes place at the correct moment in the design life of the road.

It should be noted that Reconstruction should still be considered where a roadway has significant base issues, un-safe alignment, or other issues which cause the road section to not meet minimum design standards. Following reconstruction, the life-cycle could then be managed to target the Best Practices scenario.

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-01
POLICY: Roadway Classification and Design				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 10 of 10

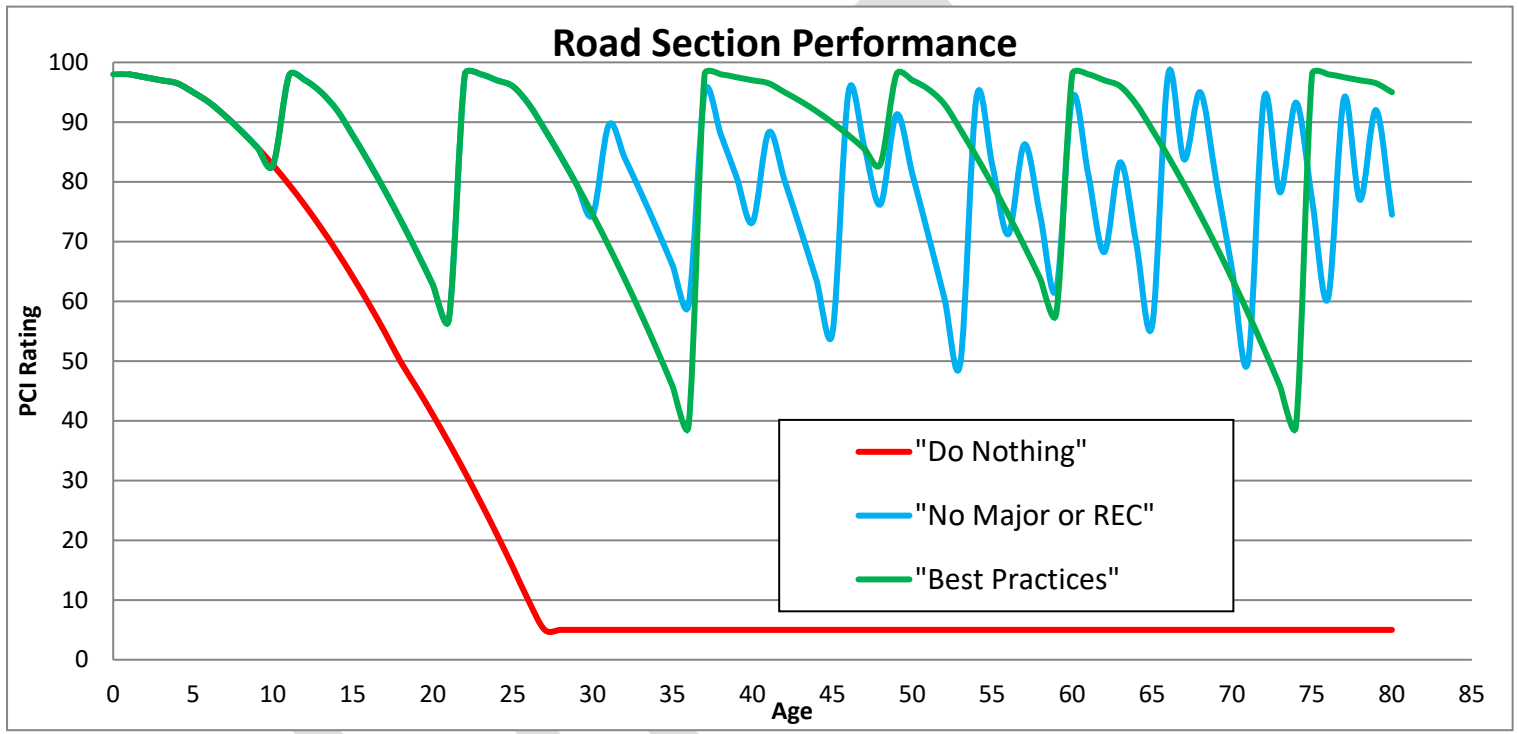
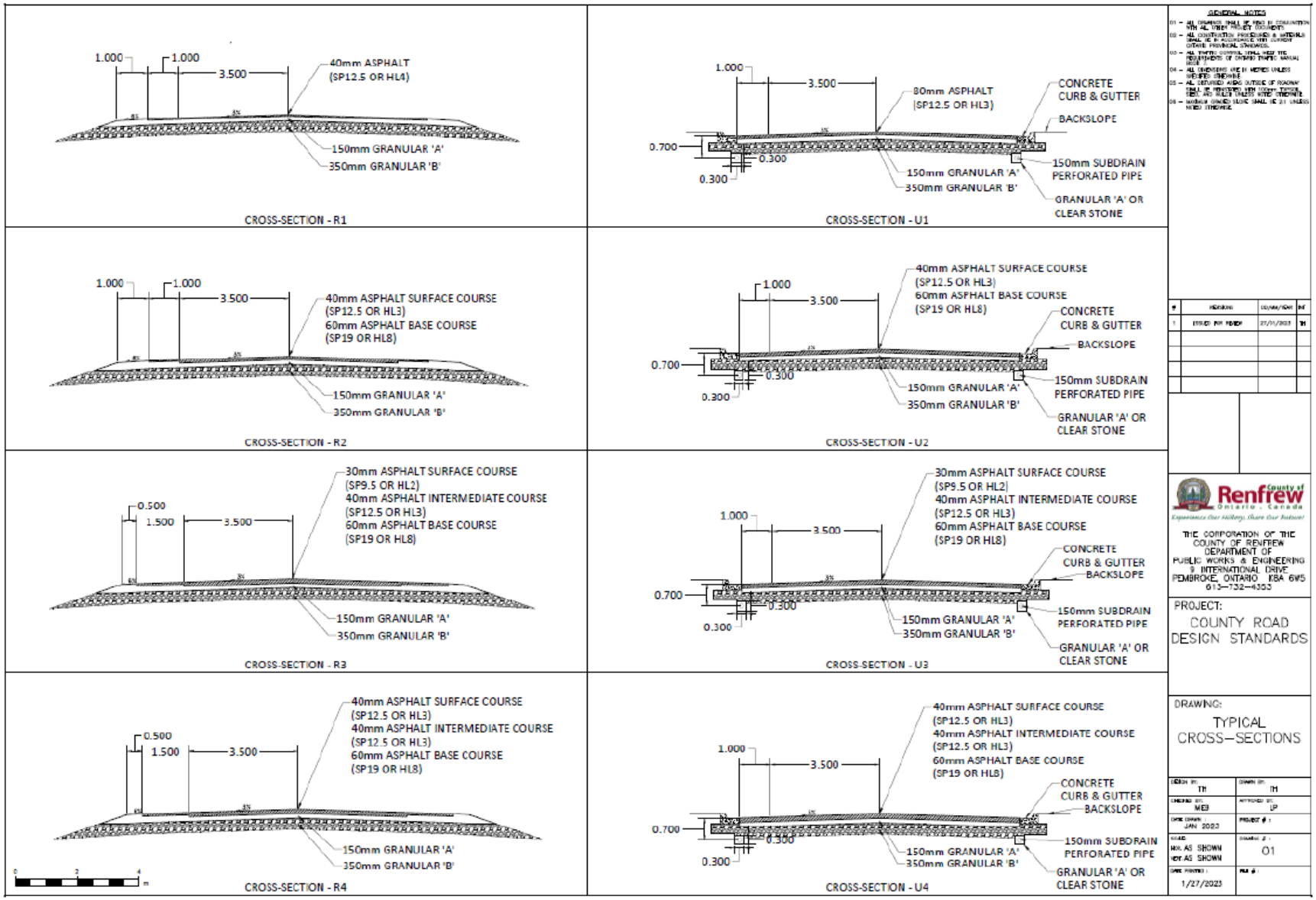


Figure 1 - Graphical Comparison of Road Deterioration based on Different Life-Cycle Scenarios

RETURN TO AGENDA

APPENDIX A
DESIRED DESIGN STANDARD TYPICAL CROSS-SECTIONS



RETURN TO AGENDA

~~Table 1~~

~~CHARACTERISTICS OF RURAL ROAD CLASSIFICATIONS~~

~~CHARACTERISTIC~~	~~URBAN FREEWAYS~~	~~URBAN ARTERIALS~~	~~URBAN COLLECTORS~~	~~URBAN LOCALS~~	~~ALLEY WAYS~~
~~Traffic Service~~	~~optimum mobility~~	~~traffic movement primary consideration~~	~~traffic movement & land access equal importance~~	~~traffic movement secondary consideration~~	~~little or no consideration~~
~~Land Service~~	~~no access~~	~~land access secondary consideration~~	~~traffic movement and land access equal importance~~	~~land access primary consideration~~	~~Primary consideration~~
~~Range of Traffic Volume A.A.D.T.~~	~~≥ 15,000~~	~~major 10,000-14,999 minor 4,000 – 9,999~~	~~major 1,000-3,999 minor 200 – 999~~	~~50 - 199~~	~~0 - 49~~
~~Traffic Flow~~	~~free flow~~	~~Uninterrupted flow except at signals~~	~~interrupted flow~~	~~interrupted flow~~	~~interrupted flow~~
~~Design Speed~~	~~90 – 110 km/h~~	~~70 – 90 km/h~~	~~60 – 90 km/h~~	~~50 – 90 km/h~~	~~≤ 50 km/h~~
~~Average Running Speed Off-peak Conditions~~	~~80 – 100 km/h~~	~~60 – 80 km/h~~	~~60 – 80 km/h~~	~~50 – 80 km/h~~	~~≤ 50 km/h~~
~~Vehicle Type~~	~~all types heavy trucks average 20 – 30%~~	~~all types up to 20% trucks~~	~~all types up to 30% trucks mostly single unit type~~	~~predominantly passenger cars and light to medium trucks and occasional heavy trucks~~	~~passenger cars and light trucks, rarely heavy trucks~~
~~Percentage of Total Length~~	~~up to 5~~	~~5 – 10~~	~~10 – 20~~	~~75 approx.~~	~~up to 5~~
~~Connects to~~	~~freeways arterials collectors~~	~~all classifications~~	~~all classifications~~	~~Arterials collectors locals~~	~~locals~~
~~Accommodation for Pedestrians~~	~~not permitted~~	~~permitted some special provision in semi urban~~	~~no special provisions~~	~~permitted no special provisions~~	~~permitted no special provisions~~

RETURN TO AGENDA

CHARACTERISTIC	URBAN FREEWAYS	URBAN ARTERIALS	URBAN COLLECTORS	URBAN LOCALS	ALLEY WAYS
(Local Responsibility)					
Accommo-dation for Cyclists	not permitted	areas additional lane width where volumes warrant	no special provisions	no special accommodation	no special accommodation
Parking Restrictions	not permitted exception emergencies	prohibited under normal circumstances	permitted some restrictions may apply	no restrictions	no restrictions
Typical Intersection Spacing	800 – 1600 m	200 – 800 m	120 m	60 m	60 m
Desirable Right-of-way Widths	≥ 30 m	26 – 30 m	20 – 26 m	20 m	≤ 20 m

*Adopted from Geometric Design Manual for Canadian Roads Transportation Association of Canada

~~Table 2~~

~~CHARACTERISTICS OF URBAN ROAD CLASSIFICATIONS~~

~~CHARACTERISTIC~~	~~URBAN FREEWAYS~~	~~URBAN ARTERIALS~~	~~URBAN COLLECTORS~~	~~URBAN LOCALS~~	~~ALLEY WAYS~~
~~Traffic Service~~	~~optimum mobility~~	~~traffic movement primary consideration~~	~~traffic movement & land access equal importance~~	~~traffic movement secondary consideration~~	~~little or no consideration~~
~~Land Service~~	~~no access~~	~~land access secondary consideration~~	~~traffic movement and land access equal importance~~	~~land access primary consideration~~	~~Primary consideration~~
~~Range of Traffic Volume A.A.D.T.~~	~~more than 20,000~~	~~major 15,000-20,000 minor 10,000-14,999~~	~~major 4,000-9,999 minor 500 – 3,999~~	~~50 - 499~~	~~0 - 49~~
~~Traffic Flow~~	~~free flow~~	~~Uninterrupted flow except at signals and cross walks~~	~~interrupted flow~~	~~interrupted flow~~	~~interrupted flow~~
~~Design Speed~~	~~70 – 110 km/h~~	~~50 – 90 km/h~~	~~60 – 70 km/h~~	~~50 – 60 km/h~~	~~≤ 50 km/h~~
~~Average Running Speed Off-peak Conditions~~	~~60 – 100 km/h~~	~~50 – 80 km/h~~	~~50 – 60 km/h~~	~~40 – 50 km/h~~	~~≤ 50 km/h~~
~~Vehicle Type~~	~~all types up to 20% trucks~~	~~all types up to 20% trucks~~	~~all types~~	~~passenger and service vehicles~~	~~passenger and service vehicles~~
~~Percentage of Total Length~~	~~up to 10~~	~~up to 30~~	~~up to 30~~	~~70 approx.~~	~~up to 5~~
~~Connects to~~	~~freeways arterials~~	~~freeways arterials collectors~~	~~arterials collectors locals~~	~~collectors locals~~	~~locals collectors~~
~~Accommodation for Pedestrians (Local Responsibility)~~	~~not permitted~~	~~sidewalks where warranted~~	~~sidewalks where warranted~~	~~sidewalks may or may not be provided~~	~~no special provisions~~

RETURN TO AGENDA

CHARACTERISTIC	URBAN FREEWAYS	URBAN ARTERIALS	URBAN COLLECTORS	URBAN LOCALS	ALLEY WAYS
Accommodation for Cyclists	not permitted	permit some additional lane width may be provided	where warranted	no special accommodation	no special accommodation
Parking Restrictions	not permitted	permitted some restrictions may apply	permitted some restrictions may apply	permitted on-site only	may not be permitted
Typical Intersection Spacing	800 – 1600 m	200 – 400 m	120 m	60 m	as required
Desirable Right-of-way Widths	≥ 30 m	26 – 30 m	20 – 26 m	20 m	≤ 20 m

*Adopted from Geometric Guide for Canadian Roads Transportation Association of Canada

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works & Engineering			**POLICY #:** PW-19
POLICY: Road Rationalization			
DATE: February 2023	**REV. DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 1 of 14

POLICY STATEMENT

The County of Renfrew believes that a roadway network performs most efficiently and effectively when the roads comprising that network are designed, built and operated to serve their intended purposes.

When first established the "Kings Highway System" provided a major inter-centre connector. The County Road system provides this same service on a reduced scale, connecting smaller centres of population and providing a "farm to market" road link. The local road acts as the final link in the system providing access to the abutting properties. These roles have changed very little over time. However, in many areas of the province significant changes in settlement patterns, population and employment have left some areas with designation of roads that is no longer appropriate.

The efficient and effective delivery of road services is a priority of municipal customers (the road user and taxpayer). One step in demonstrating accountability is in rationalizing road jurisdiction between a County and local municipalities. This rationalization policy will ensure that local roads serve primarily a local function and County roads serve a through traffic function. Another benefit to the transferring of roads is a that County road that is a low priority to the upper tier, once transferred, may become a high priority for the local municipality and see significant improvements over time.

The road rationalizing method as shown in this Policy permits a review of the road system within the County. The outcome of the review is a determination of the appropriate jurisdiction of a road or road section. Likewise a high volume local road carrying primarily through traffic may receive higher levels of service than the local municipality was able to provide.

Each County or Regional municipality has been granted the power under the Public Transportation and Highway Improvement Act or their respective Regional Act to establish, maintain, add or remove designated roads from or to their county or regional road system.

The Public Transportation and Highway Improvement Act (PTHIA) provides for the establishment of a county road system. The county road systems were established in the early years of this century by by-laws passed by each council. The roads which comprise a county road system established under the PTHIA are county roads whether they be in a town, a village or a township. When the task of determining what alterations have been made to the physical system or when it is desirable to review municipal service delivery, a new system can be

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works & Engineering			**POLICY #:** PW-19
POLICY: Road Rationalization			
DATE: February 2023	**REV. DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 2 of 14

designated by a new establishing by-law. In effect, the slate is wiped clean and the road system starts afresh.

POLICY CONTENT

PRINCIPLES OF ROAD RATIONALIZATION

- Upper tier roads, which are primarily transportation corridors, should provide continuous roadway service throughout the County.
- Upper tier roads should be capable of being upgraded to a reasonable standard consistent with the service to be provided.
- Upper tier roads should be along the shortest practical route, along existing roads and streets.

TERMS OF REFERENCE

- Evaluating criteria as outlined in the Application Guidelines.
- The request for Road Rationalization must be made as a Resolution of the lower tier municipality to the County to begin the process.
- The review will focus on the efficient and effective delivery of all road services within the County.
- Transfer roads to the local municipalities which serve primarily a local function.
- Transfer roads to the County which primarily serve a through traffic function.
- Consider road condition and compensation throughout the discussion of road transfers. A municipality may upgrade the roadway or provide the estimated amount of money for rehabilitation to the County.
- Pavement must meet or exceed the current County's Pavement Condition Index (PCI) of 70.
- Road Structure must meet or exceed the current County's standard specification as outlined in ***Policy PW-01, Roadway Classification and Design***. The County may request geotechnical testing from the municipality to confirm roadway structure.

RETURN TO AGENDA

- Involve the local municipalities in the decision making process by encouraging feedback and comments.

METHODOLOGY

The review of every road section within the County and local municipalities will be time consuming and probably unnecessary. By each local municipality identifying roads that they believe serve a through traffic function will save a time consuming road by road analysis.

- Review the criteria as shown in CRITERION AND THE WEIGHTS APPLIED and modify to meet specific municipal requirements.
- Apply the criteria to all existing County roads and roads identified by the local municipalities as candidates for upper tier road classification.
- Weight the criteria as shown in this document.
- Determine “cut-off” weight for inclusion of individual road sections in the County system.
- Develop a County road system.
- Determine the needs to be addressed (i.e. surface condition) prior to the transfer of roads to the local municipality or the acceptance of roads by the county.
- Determine impact on local municipalities as well as County.
- Present findings to Operations Committee and County Council.

CRITERIA AND THE WEIGHTS APPLIED

Criterion 1 Urban Center Connector

Connect Urban Centres to each other or to a Kings Highway unless such a service is now provided by a Kings Highway.

Weighting Applied = 3

Criterion 2 Kings Highway/Upper Tier Connector

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works & Engineering			**POLICY #:** PW-19
POLICY: Road Rationalization			
DATE: February 2023	**REV. DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 4 of 14

Connect major commercial and industrial areas, universities, hospitals, international border crossings and provincial boundaries, etc. to a Kings Highway or Upper tier road.

Weighting Applied = 2

Criterion 3 Heavy Industry Service

Provide service within 4 kilometres of consistent major attractors or generators of heavy vehicles.

Weighting Applied = 2

Criterion 4 Barrier Service

Provide service parallel to and across major barriers to free traffic movement such as freeways, watercourse or congested areas.

Weighting Applied = 1

Criterion 5 Resort Criterion

Provide service within 4 kilometres of a major resort and/or recreational areas.

Weighting Applied = 1

Criterion 6 Urban Cell Service

Provide service in urban areas within the cells formed by the Kings Highways and the streets selected by the above criteria, provided that the traffic demand existing on the street is considered predominantly for through traffic.

Weighting Applied = 0

RETURN TO AGENDA

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works & Engineering			**POLICY #:** PW-19
POLICY: Road Rationalization			
DATE: February 2023	**REV. DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 5 of 14

Criterion 7 Urban Arterial Extension

Provide service on those roads which are extensions of urban arterial streets, from the urban limits to the first intersection where the Average Annual Daily Traffic (AADT) is below 700 vehicles per day, then connect to an upper tier road or a Kings Highway by the shortest route.

Weighting Applied = 3

Criterion 8 Rural Cell Service

Provide service in rural areas within the cells formed by the Kings Highways and the roads selected by the above criteria.

Weighting Applied = 0

Criterion 9 Traffic Speed

Provide service on roads where the speed limit is 80km/hr.

Weighting Applied = 1

Criterion 10 Road Surface

Provide service on roads with an asphalt surface.

Weighting Applied = 0.5

Criterion 11 Traffic Volume

Provide service on roads with current traffic volumes greater than 1000 vehicles per day.

Weighting Applied = 0.5

Criterion 12 Road Right of Way

Provide service on roads with at least a 66 foot wide right of way.

Weighting Applied = 1

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works & Engineering			**POLICY #:** PW-19
POLICY: Road Rationalization			
DATE: February 2023	**REV. DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 6 of 14

APPLICATION PROCEDURE

Criterion 1 (Urban Centre Connector) and Criterion 7 (Urban Arterial Extension) are considered the most important criteria, as upper tier roads should serve as inter-municipal corridors to connect the small urban centres within the County. In order to apply Criterion 1 a determination of what constitutes an urban centre is required.

Criterion 1 Urban Centre Connector

This criterion is intended to identify roads which provide service to and from centres having commercial and possibly industrial development.

Urban centres are areas of concentrated development, not "ribbon" development.

The criterion is not intended to be applied to residential subdivisions which are developing in rural areas. When the residential development grows to a sufficient size, upper tier road service may be considered through the application of all of the criteria.

Criterion 2 Kings Highway/Upper Tier Road Connector

The intent of this criterion is to extend the Kings Highway or upper tier road to connect to the facilities mentioned and not to provide for lateral connections between highways/upper tier roads.

Major institutional/commercial/industrial complexes are areas generating more than 1000 vehicle trips per day.

Criterion 3 Heavy Industry Service

It is not intended that it be an upper tier responsibility to provide service to the entrance of every attractor or generator of heavy vehicles in an area. Rather, it is intended that upper tier service be provided close to the industry and that the distribution within the area of the industry be a lower tier responsibility.

"Close to" means within a distance of approximately 4.0 kilometres.

"Consistent major attractor or generator", in the case of gravel pits and quarries, is defined as approximately 9 months or more of operation per year.

RETURN TO AGENDA

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works & Engineering			**POLICY #:** PW-19
POLICY: Road Rationalization			
DATE: February 2023	**REV. DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 7 of 14

Landfill sites under the jurisdiction of, or serving the upper tier municipality, may also be considered as attractors of heavy vehicles and may be serviced by upper tier roads.

Criterion 4 Barrier Service

The intent of this criterion is to alleviate traffic on local roads by providing service parallel to or across barriers to traffic movement where upper tier service is justified. The barrier must be an obstacle to traffic wishing to cross it and it must be feasible to cross (i.e. freeways by interchanges and rivers by bridges).

Service is provided "parallel to" only if there is no other upper tier or provincial road providing that service within a reasonable distance and only along roadways which are used to reach barrier crossings.

Criterion 5 Resort Criterion

The intent of this criterion is to provide upper tier service close to resort/recreational areas or to a lower tier road system that distributes the traffic.

"Close to" means within a distance of approximately 4.0 kilometres from the edge of the resort development.

A major resort/recreational area is an area generating a minimum of 700 vehicle trips per day during normal season of operation.

Criterion 6 Urban Cell Service

The intent of this criterion is to identify roads in the cell under consideration at the spacing noted. The roads so identified must function predominately for through movement of traffic.

Roads which function as minor collectors for trips with origin and destination within the cell should be rejected.

The cell population density considered in identifying the appropriate spacing should be either the daytime or night time population whichever is greater.

Population Density	Additional service Required when spacing of roads is greater

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works & Engineering			**POLICY #:** PW-19
POLICY: Road Rationalization			
DATE: February 2023	**REV. DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 8 of 14

	than
less than 40 persons/hectare	2000m
between 40 and 125 persons/ha	1200m

Criterion 7 Urban Arterial Extension

The intent of this criterion is to provide for the extension of urban arterial streets into the rural areas to connect with an upper tier road or a Kings Highway. Traffic counts should be taken on both sides of the intersection with the upper tier and the extension continued through the intersection, only if both AADTs equal or exceed 700 vehicles per day.

Criterion 8 Rural Cell Service

The intent of this criterion is to provide upper tier service within the cell formed by the application of criteria 1 - 7 inclusive at spacing related to population density within the cells.

Upper tier roads or provincial highways in the subject upper tier or in adjacent upper tiers act as rural cell boundaries.

Population Density	Additional service Required when spacing of roads is greater than
less than 1 person/km^2	no additional service
1 person/ km^2	25 km
between 1 and 4 persons/km^2	20 km
between 4 and 8 persons/km^2	15 km
between 8 and 16 persons/km^2	10 km
greater than 16 persons/km^2	6 km

Criterion 9 Traffic Speeds

This criterion is intended to identify those roads which have a speed limit of 80 km/h. This is deemed to be a desirable speed limit allowing roads which predominately serve as inter-municipal links in a road network to do so efficiently.

CORPORATE POLICIES AND PROCEDURES			
SECTION: Public Works & Engineering			**POLICY #:** PW-19
POLICY: Road Rationalization			
DATE: February 2023	**REV. DATE:**	**COVERAGE:** All County Roads	**PAGE #:** 9 of 14

Criterion 10 Road Surfaces

This criterion is intended to identify those roads with an asphalt surface. These roads were deemed to be more appropriate to serve as upper tier roads, as this surface material would be more durable to withstand the greater traffic volumes, heavier vehicles and higher speeds as anticipated on upper tier roads.

Criterion 11 Traffic Volumes

This criterion was intended to identify roads with current traffic volumes greater than 1,000 vehicles per day.

Criterion 12 Road Right of Way

The intent of this criterion is to identify roads with a right of way width of 20.1 metres (66 feet). It is appropriate to be considered for an upper tier road designation that the road have at least a standard right of way.

Apply each of the criteria in this section to the existing upper tier road system and to local roads identified by each municipality as a provider of through traffic service. Criterion 6 and 8 are not included in the original application of criteria but could be used as a rationale for including additional roads or road sections to complete the road network. C The reasoning behind excluding this criterion in the original application is due to the good condition of most local roads and the fact the majority of population has access to a motor vehicle or alternate transportation services (i.e. transit).

After the criteria has been applied to each road being analyzed it is possible to determine how much weight each road has accumulated. By setting a minimum weighting of six points, a cut-off threshold is established for including a road in the upper tier system.

This would mean that to qualify for upper tier designation a road must meet either the criteria for Urban Centre Connector or the criteria for Urban Arterial Extension worth 3 points, plus all four criteria for Traffic Speed, Road Surface, Traffic Volume and Road Right-of-Way worth a combined total of 3 points, or another combination of criteria to have a total weight of 6. This becomes the yardstick to be used for recommending the re-designation of roads.

RETURN TO AGENDA

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-02
POLICY: Bridges ~~Bridge Design and Construction~~				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** County Structures and Bridges on Local Municipal Roads	**PAGE #:** 1 of 10

POLICY STATEMENT

The County of Renfrew (County), as the upper tier Municipality, has responsibility for all bridges located on either local Municipal roads or County roads within the boundaries of the County. This Policy outlines the criteria that must be met for new, existing, or replaced bridges to be considered County Structures. This Policy also outlines the standard to which County Structures must be designed and the procedure to be followed should a replaced bridge no longer meet the criteria to be a County Structure.

POLICY DEFINITIONS

Approach: The portion of a roadway or pathway leading to a bridge and includes all appurtenances belonging thereto. The portion under jurisdiction of the County, for County Structures, shall be 30m as measured from the outer most extreme of the structure. ~~The portion under the jurisdiction of the bridge authority shall be as specified in the relevant legislation measured from the outer most extreme of the structure.~~

Bridge: A structure, or series of structures~~, which provides a roadway or walkway for the passage of vehicles and pedestrians across an obstruction, gap or facility, which has a cumulative span of 3.0 m or greater~~ having a cumulative span of 3.0 m or greater, which provides a roadway or walkway for the passage of vehicles and pedestrians across an obstruction, gap or facility.

Low Volume Road: Roadway supporting an Average Annual Daily Traffic (AADT) of less than 400.

Functional Road Classification: A hierarchal grouping of roads according to the function they serve within the overall road system. Refer to Policy PW-01 (Road Classification System) for complete definitions~~ of each road class~~.

Return Period: The average period in years between occurrences of a discharge (flow) equalling or exceeding a given value, also referred to as the 'Design Flood Event Period'.

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-02
POLICY: Bridges ~~Bridge Design and Construction~~				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** County Structures and Bridges on Local Municipal Roads	**PAGE #:** 2 of 10

PROCEDURE

1. COUNTY STRUCTURE CRITERIA

Bridges, to qualify as a County Structure, must meet the following criteria:

- Be located within the municipal boundaries of the County of Renfrew;
- Be located within a public right-of-way, which is maintained year round; and
- Have a cumulative span of 3 metres, or greater.

1.1. Criteria No Longer Being Met

All crossings, designed in accordance with this Policy, which cease to meet the criteria of a County Structure after reconstruction, shall return to the jurisdiction of the local roadway authority.

During preliminary design for the crossing, the County of Renfrew shall maintain discussions with the local Municipality. Should it be identified during preliminary design that the subject bridge does not meet the criteria of a County Structure, County staff shall ensure reasonable alternatives to either remove the crossing while maintaining adequate access to each site or maintain the structure in its current status are explored. These alternatives shall be presented to Operations Committee and the local Municipality for consideration and input prior to commencing with detailed design of a preferred alternative.

Following construction, transfer to the local roadway authority shall commence upon acceptance of the finished works by representatives of the County and the local road authority. An amending By-law shall be passed by County Council to finalize the transfer to the local road authority.

1.2. Requests for Assumption as County Structure

Where a crossing, that is not considered a County Structure, requires replacement and it is anticipated that the replacement crossing will meet criteria of a County Structure, a hydraulic design meeting the provisions of this Policy shall be completed. The cost of

the hydraulic design shall be the responsibility of the local municipality. Where the proposed replacement crossing is confirmed to meet the criteria of a County Structure, the local municipality may request the structure be assumed by the County.

All requests for assumption as a County Structure shall be submitted, with hydraulic design, for review by the County Director of Public Works and Engineering, or designate. Following review, a recommendation regarding assumption as a County Structure shall be presented to the County's Operations Committee by the Director of Public Works and Engineering, or designate. The recommendation of the Operations Committee shall be subsequently presented to County Council for approval. The County shall be the ultimate authority in determining whether or not a proposed replacement structure will qualify as a County Structure.

Following approval of the assumption of a proposed replacement crossing as a County Structure, the cost of the design and construction of the replacement structure shall be shared equally between the County and the local Municipality. The structure shall be replaced subject to availability of funding and other priorities within the Asset Management Plan of both the local Municipality and the County. Maintenance and monitoring of the condition of the crossing shall remain the responsibility of the local Municipality until such time that construction for replacement of the crossing commences. However, except where an emergent need for replacement should arise, coordination of design, supervision of construction, and overall project management shall be the responsibility of the County.

Following replacement, an amending By-law shall be passed by County Council to finalize the transfer to the County. Until such time as the structure is transferred to the County, it shall remain under the jurisdiction of the local road authority.

2. DESIGN OF COUNTY STRUCTURES

As per Ontario Regulation 104/97, Standards for Bridges, as amended, of the Public Transportation and Highway Improvement Act (PTHIA), all bridges shall be designed in accordance with the most current version of the Canadian Highway Bridge Design Code

(CHBDC) as amended by the Ontario Ministry of Transportation (MTO) Structural Manual.

All bridge crossings over water shall have a hydraulic design completed in accordance with the provisions of this Policy. Bridges shall be designed to convey flows having a design return period as defined in Table 1 below, with the proper design soffit clearance and freeboard as stipulated in the MTO Highway Drainage Design Standards, as amended.

Table 1

Design Return Periods	**Design Return Period (Years)**	
Road Classification	Rural Roads	Urban Roads
Arterials	50	100
Collector	25	50
Locals	10	25
Seasonal/Alley	5	10

A 100-year return period shall be used as a check-flow for the design of all new or reconstructed County Structures to ensure that the travelled road over the bridge is not overtopped during such an event.

2.1. County Structures on Low Volume Roads

MTO Structural Manual Guidelines for the Design of Bridges on Low Volume Roads, as amended, shall be taken into consideration for all County Structures where the current and the 10-year projected Annual Average Daily Traffic (AADT) does not exceed 400.

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-02
POLICY: Bridges ~~Bridge Design and Construction~~				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** County Structures and Bridges on Local Municipal Roads	**PAGE #:** 5 of 10

3. RESPONSIBILITIES

3.1. County Structures

Design of and construction on a County Structure, or a new crossing anticipated to meet criteria to be a County Structure, shall be prepared under the supervision of, and approved by, a Professional Engineer licensed in the Province of Ontario. The Director of Public Works and Engineering, or designate, shall oversee and approve design and construction on all County Structures, or on new crossings anticipated to meet criteria to be a County Structure.

In reconstructing a County Structure, the County shall carry out the construction of the approaches so as to meet the design standards in force at that time. Should the work be required to extend beyond the 30m statutory limit of authority to meet these design standards, the County shall be responsible for all costs associated with the works.

A local road authority may, with approval of the County, undertake works on behalf of the County on a County Structure and its approaches. The County shall reimburse the cost of the works applicable to the structure and the portion of the approaches under the jurisdiction of the County.

3.2. Bridges on Local Municipal Roads

Where a bridge is under the jurisdiction of the local roadway authority (as it does not meet criteria to be a County Structure), the County may undertake, on behalf of the local roadway authority, the required biennial inspections of the bridge and provide recommendations for the required posting or maintenance of the structure to the local roadway authority. The local roadway authority shall be required, if it elects to have the County undertake the biennial inspections and provide recommendations regarding load postings, maintenance, etc., to enter into an indemnification agreement with the County holding the County harmless from any action or claims arising from the County's recommendations, etc.

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-02
POLICY: Bridges ~~Bridge Design and Construction~~				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** County Structures and Bridges on Local Municipal Roads	**PAGE #:** 6 of 10

The local municipality will be responsible for establishing the level of service to be provided at the crossing and to fund, manage and maintain the bridge in the manner that is most suitable for the local use.

4. REFERENCES

- **Municipal Act, 2001, c. 25, as amended** ~~Municipal Act Chapter M45 RSO 1990~~
- Bridges Act Chapter B12-RSO 1990**, as amended**
- Public Transportation and Highway Improvement Act Chapter P50-RSO 1990, **as amended**
- Canadian Highway Bridge Design Code ~~CSA S6-00~~**, as amended**
- **MTO Structural Manual**
- MTO Drainage ~~Management~~ Manual

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-02
POLICY: Bridges ~~Bridge Design and Construction~~				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** County Structures and Bridges on Local Municipal Roads	**PAGE #:** 7 of 10

~~All highway bridges shall be designed in accordance with the Canadian Highway Bridge Design Code CSA S6-00 as may be amended from time to time. In addition, all bridges over water shall be designed to convey flows having a return period as follows:~~

	~~Design Return Period (Years)~~	
~~Functional Roadway Classification~~	~~Rural Roads~~	~~Urban Roads~~
~~Arterials~~	~~50~~	~~100~~
~~Collector~~	~~25~~	~~50~~
~~Locals~~	~~10~~	~~25~~
~~Seasonal/Alley~~	~~5~~	~~10~~

~~The design and construction of a new bridge and modifications to existing bridges shall be prepared under the supervision of and shall be approved by the County Engineer.~~

~~All bridges under the jurisdiction and control of the County, which cease to meet the definition of a bridge after reconstruction, shall return to the jurisdiction of the roadway authority upon completion of the construction and acceptance of the finished works by the County Engineer. An amending by-law will be passed by County Council to affect the transfer to the local road authority.~~

~~All highway structures designed in accordance with the provisions of this policy and meeting the definition of a bridge shall upon the recommendation of the County Engineer and with the approval of the Operations Committee and County Council, be given a county bridge status. The structure shall then be reconstructed by the County subject to the availability of funding and other priorities within the County Road System. Until such time as the structure is adopted by the County, it shall remain under the jurisdiction of the local road authority.~~

~~All bridge structures under the jurisdiction and control of the County must be situated on a public road right-of-way, which is maintained year-round and has a minimum Average Annual Daily Traffic (AADT) volume of 100 vehicles.~~

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-02
POLICY: Bridges ~~Bridge Design and Construction~~				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** County Structures and Bridges on Local Municipal Roads	**PAGE #:** 8 of 10

~~In reconstructing a bridge, the County shall carry out the construction of the approaches so as to meet the design standards in force at that time. Should the work extend beyond the 30 m statutory limit of authority, the County will be responsible for all costs associated with the works.~~

~~A local road authority may with approval of the County, undertake works on behalf of the County on a bridge and its approaches. The County shall cover the cost of the works applicable to the structure and the portion of the approaches under the jurisdiction of the County.~~

~~IMPLEMENTATION:~~

~~Construction and Reconstruction of Bridges~~

~~Local Municipal Structures Meeting the Definition of a Bridge and situated on All-Season Maintained Roadways.~~

~~County bridge structures must be situated on a public right-of-way subject to all-season maintenance and have minimum Average Annual Daily Traffic (AADT) volume of 100 vehicles.~~

~~Where a highway structure located on a local municipal roadway is to be replaced, a hydraulic design shall be prepared in accordance with the provisions detailed in the policy. The cost of the hydraulic design and the review of the design by County staff shall be at the expense of the local municipality.~~

~~Where the proposed replacement structure will meet the definition of a bridge, the local municipality may request the structure to be adopted by the County. All requests will be reviewed by the County Engineer and a recommendation regarding assumption will be forwarded to the Operations Committee. Operations Committee's recommendation will subsequently be forwarded to County Council for approval. It is emphasized that the County of Renfrew will be the ultimate authority in determining whether or not the structure (being requested for assumption) qualifies as a County structure.~~

~~When the structure is approved for adoption by the County, the cost of the design and replacement or repair shall be shared equally between the County and the local municipality. Subsequent to the replacement, the bridge structure shall be under the jurisdiction of the~~

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-02
POLICY: Bridges ~~Bridge Design and Construction~~				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** County Structures and Bridges on Local Municipal Roads	**PAGE #:** 9 of 10

~~County thereafter. The timing of the replacement or repair of the structure shall be at the discretion of the County and subject to the availability of funding and other priorities.~~

~~Until such time as the structure is replaced or repaired, it shall remain under the jurisdiction of the local municipality in which it is situate. Maintenance of the structure during this period shall rest with the local municipality.~~

~~Local Municipal Structures Meeting the Definition of a Bridge on Seasonal Roads~~

~~Where a structure meeting the definition of a bridge is located on a seasonal road, the County may undertake, on behalf of the local municipality, the required biannual inspections of the structure and provide recommendations for the required posting or maintenance of the structure to the local municipality. The local municipality will be required, if it elects, to have the County undertake the bi-annual inspections and provide recommendations regarding load postings, maintenance, etc., enter into an indemnification agreement with the County holding the County harmless from any action or claims arising from the County's recommendations, etc.~~

~~The local municipality will be responsible for establishing the level of service to be provided at the crossing and to fund, manage and maintain the structure in the manner that is most suitable for the local use.~~

~~County Structures on Local Roads No Longer Meeting the Definition of a Bridge~~

~~The County shall design and reconstruct all bridges under its jurisdiction in accordance with the provisions contained in this policy. Where a replacement structure will no longer meet the definition of a bridge, the County Engineer will recommend to the Operations Committee and County Council that the structure be deleted from the County Road System.~~
~~Subject to the approval of the Operations Committee and County Council, the replacement structure shall be designed and reconstructed. Upon acceptance of the works by the County Engineer and subject to the passage of an amending by-law, the jurisdiction over the structure shall revert to the authority or authorities having jurisdiction over the roadway.~~
~~Works on Bridge Approaches~~
~~Works in Conjunction with a Bridge Replacement~~

Corporate Policies and Procedures				
DEPARTMENT: Public Works and Engineering				**POLICY #:** PW-02
POLICY: Bridges ~~Bridge Design and Construction~~				
DATE CREATED: April 2001	**REVIEW DATE:** February 2023	**REVISION DATE:**	**COVERAGE:** County Structures and Bridges on Local Municipal Roads	**PAGE #:** 10 of 10

~~Where the County replaces a bridge, it shall design and construct the approaches in accordance with the standards in force at the time of the work. Where it is necessary for the works to extend beyond the 30 m limits of County jurisdiction in order to meet the design standards, the County may, with the consent of the local road authority, reconstruct the approaches. The extended work on the approach shall be at no cost to the local road authority except as it relates to the acquisition of right of way to accommodate the works.~~

~~Local Road Works~~

~~Where a local road authority proposes to undertake works on the approach to a bridge, it shall give notice of its intent to do so to the County Engineer. Where it is in the interest of the County to do so, the County Engineer may with the approval of the Operations Committee and/or County Council, request works to be done on the approaches to and over the bridge. All cost associated with the works so requested shall be born by the County, subject to funding availability.~~

Township of Horton
COUNCIL / COMMITTEE REPORT

Title:	Date:	Mar 1st 2023
Proposed GICB Budget	Council/Committee:	TES And Recreation
	Author:	Adam Knapp, Public Works Manager
	Department:	PW and Recreation

RECOMMENDATIONS:

THAT the committee receive this report as information pertaining to the proposed budgetary proportions in the Green and Inclusive Buildings application.

BACKGROUND:

Staff and JP2G have composed and application to the GICB fund for a total of $439,786.18 in retrofit upgrades to the Community Center Facility. If successful 80% shall be funded from the Federal Government and the Township's share shall be $84,085.24. The funding required from the Federal Government is divided up over the next five years, except for JP2G's fees which a portion have already been billed and the remainder shall be billed for the design in the next year to front loaded the funding. The risk is that if construction is complete in just two years, the Township would be waiting for the last of the funding for a year or possibly longer. The detailed design shall also incorporate proposed non eligible GICB design elements, such as the HRV system in the change rooms, kitchen hood make up air unit, digital community display board, EV charging stations near the arena, shower facilities, and Staff invite Committee and Council to weigh in on other element throughout the design process to ensure the facility is designed to embrace other potential funding opportunities and the growth of Horton Township.

Staff recommends exploring internal funding options for the HRV system and kitchen hood make up air system, both being crucial occupant safety upgrades, during the retrofit project to capture any potential savings from having a contractor already mobilized on site.

ALTERNATIVES:

N/A

FINANCIAL IMPLICATIONS:

As stated in the GICB Budget Template

ATTACHMENTS:

GICB Budget Template

CONSULTATIONS:

Andrew McDonald – JP2G Consultants

RETURN TO AGENDA

Prepared by: Adam Knapp, Public Works Manager

Reviewed by: Hope Dillabough, CAO/Clerk

RETURN TO AGENDA

GICB Budget Template

Project Name	Horton Community Center Upgrades
Enter Application Number	AP-000003154
Project Type	Retrofit
Indigenous and/or Territories?	No
Select Budget Class	Class D
Contingency Percentage	21.00%

Suggested Contingency Range (However, MUST meet the minimum percentage in each Class Estimate)	
Class A Estimate	Estimates made after bids for a project have been received, evaluated, verified and once a contract is ready to be signed. Budgets for projects at this stage usually include a contingency of **5% to 10%.**
Class B Estimate	Estimates made at the *"Detailed Design"* stage when the project is ready for tendering. Budgets for projects at this stage usually include a contingency of **11% to 15%.**
Class C Estimate	Estimates at the *"Preliminary Design"* stage and may be referred to as pre tendering estimated. Budgets for projects at this stage usually include a contingency of **16% to 20%.**
Class D Estimate	Estimates at the *"Conceptual Design"* stage. Budgets for projects at this stage usually include a contingency of **21% to 30%.**

Subtotal Eligible Costs	$ 367,459.65
Eligible Contingency	$ 77,166.53
Total Eligible Costs	**$ 444,626.18**
Subtotal Ineligible Costs	$ -
Ineligible Contingency	$ -
Total Ineligible Costs	**$ -**
Total Project Costs	**$ 444,626.18**

These amounts will be calculated automatically as you fill out the Contingency Percentage above and the Eligible and Ineligible Costs columns below.

Funding Sources	Funding Source	Program Name	Organization / Department	Secured Funding ($)	Unsecured Funding ($)
Additional funding source 1				$ -	$ -
Additional funding source 2				$ -	$ -
Additional funding source 3				$ -	$ -
Additional funding source 4				$ -	$ -
Additional funding source 5				$ -	$ -
Additional funding source 6				$ -	$ -
Total funding from other sources				$ -	$ -

Federal Share (amount sought from GICB)	$ 355,700.94
ONLY enter amount if requesting less than Federal Share above	$ -
Applicant's Share (amount applicant will contribute)	$ 84,085.24
Amount of secured funding	$ -
Amount of unsecured funding	$ -
Total funding (including secured funding)	**$ 439,786.18**
Total Funding - All Sources (including unsecured funding)	**$ 439,786.18**

Please Note:

Total funding from all sources should equal to the total project costs identified above. If the amount is less, please describe how you will address this shortfall, including any Unsecured Funding.

Please provide an explanation **Please provide an explanation**

Annual Project Cost Breakdown - Amounts Requested (Federal Share, or less if requesting less than Federal Share)

2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	Total
	$ 125,737.22	$ 70,201.24	$ 70,201.24	$ 70,201.24	$ 336,340.94

CONTRACTS: PLEASE ENTER ALL NON-COMPETITIVE CONTRACTS (SOLE SOURCING)
If you have or are planning to enter into any non-competitive contracts for your project, please enter the name the contractors you will be working with, including the agreement date, service(s) provided, contract amount, and reason for sole-sourcing. All costs associated with non-competitive contractors must also be entered into the budget.

Please note: Recipients are responsible to ensure that contracts are awarded in a way that is fair, transparent and competitive. If you intend on awarding non-competitive contracts (sole-source) as part of your project, you must receive authorization from the Government of Canada prior to their signature in order for these costs to be deemed eligible for a federal reimbursement. Additional information will be required, and approval delays should be anticipated.

Contractor Name	Agreement Date	Service(s) Provided	Contract Amount	Enter reason for Non-Competitive (Sole-Source) Contracts
			$ -	
			$ -	
			$ -	
			$ -	
			$ -	
		Total	$ -	

Expense Information

Fill in this information for every project expense (eligible and ineligible).

#	Project Phase	Expense Name	Expense Type	Expense Description	Contract Type (if applicable)	Eligible Cost ($)	Ineligible Cost ($)
1	Design Phase	Design of Retrofit Project	Professional fees	Consultants are engaged to perform detailed design. Price based on fee letter and signed contract value (contract signed after April 1, 2021)	Competitive	$ 69,420.00	$ -
2	Construction Phase	Main Building Lighting Retrofit	Labour and materials	Replace/relamp all existing light fixtures in the Main building with new LED fixtures. Provide new occupancy/dimming controls in Main Entrance Lobby/Corridor, Kitchen Area, Washroom's and Main Hall Area.Re-lamp all remaining areas with new fixture compatible LED lamps. Replace all exit signs with new energy efficient LED running-man pictogram exit signs. Costing from consultant energy Audit Report.	Competitive	$ 50,000.00	$ -
3	Construction Phase	Main Building Changing AC to Heat Pumps	Labour and materials	The two 5 ton AC units serving the furnaces are due for replacement and can be replaced with new high efficiency air-source heat pumps, providing energy savings in the efficiency of the unit and reduction in greenhouse gas emissions.	Competitive	$ 20,000.00	$ -
4	Construction Phase	Main Building Furnace Controls Upgrade	Labour and materials	The two furnaces are controlled by wall-mount thermostats without scheduling capability. Motion-detection occupancy sensors coupled with programmable thermostats can be provided to allow the space temperature setpoints to be relaxed during unoccupied times. Costing from consultant energy Audit Report.	Competitive	$ 2,500.00	$ -

RETURN TO AGENDA

5	Construction Phase	Change Room Building Lighting Retrofit	Labour and materials	Replace all existing fixtures in the change room building with new energy efficient LED fixtures with integrated wireless sensors to add occupancy and dimming controls into spaces. Costing from consultant energy Audit Report.	Competitive	$ 9,000.00	$ -
6	Construction Phase	Arena Lighting Retrofit	Labour and materials	Remove existing Arena fixtures and associated wiring, provide new energy efficient LED highbay fixtures c/w integrated occupancy sensors to dim/turn off fixtures during vacancy. Provide new wiring and conduit. Costing from consultant energy Audit Report.	Competitive	$ 29,960.00	$ -
7	Construction Phase	Solar PV	Labour and materials	Provide a 10kW net-metered solar PV system to sell power back to the grid and offset a portion of the facility's greenhouse gas emissions. Priced with quotation from supplier, Ottawa Valley Solar.	Competitive	$ 58,200.00	$ -
8	Construction Phase	Structural Wind Resistance Retrofits	Labour and materials	The community center building may be retrofitted with structural components such as hurricane tie-downs, steel washers on sill plate anchor bolts, and steel hold-downs that would assist resilience in the event of wind speeds that are higher than the design wind speeds at the time of	Competitive	$ 75,000.00	$ -
9	Construction Phase	Staff administration time	Engagement activities	Township staff time for project administration throughout design and construction.	N/A	$ 30,000.00	$ -
10	Construction Phase	Permitting fees	Other	Estimated building permit fee at $0.4/sq.ft for commercial permit, plus $100 final inspection fee.	N/A	$ 3,379.65	$ -
11	Construction Phase	Accessibility Ramp at the Arena	Labour and materials	Install an accessability ramp from the main parking lot to the arena change room area.	Competitive	$ 20,000.00	$ -
12						$ -	$ -
13						$ -	$ -
14						$ -	$ -
15						$ -	$ -
16						$ -	$ -
17						$ -	$ -
18						$ -	$ -
19						$ -	$ -
20						$ -	$ -
21						$ -	$ -
22						$ -	$ -
23						$ -	$ -
499						$ -	$ -
500						$ -	$ -
					Non-Competitive Subtotals	$ -	$ -
					Non-Competitive Total	$	-

RETURN TO AGENDA

Township of Horton
COUNCIL / COMMITTEE REPORT

Title:	Date:	March 1st 2023
Award of Horton's Portion of the Joint Transportation Master Plan	Council/Committee:	TES
	Author:	Adam Knapp, Public Works Manager
	Department:	Public Works

RECOMMENDATIONS:

THAT the TES committee agree with Staff and recommend that Council award Horton's portion of PWC 2022-25 Transportation Master Plan (TMP) to Macintosh and Perry (MP).

FURTHER THAT an upset total of $50,000 in funding for the Transportation Master Plan be allocated from the Working Funds Reserve.

AND THAT this be included in the 2023 Budget for consideration.

BACKGROUND:

The Township of Horton participated in a Request for Proposal (RFP) for a TMP with the County of Renfrew and participating Municipalities. The RFP closed in late 2022 and each individual Municipality shall award their own perspective portion. The successful bidder and all participating Municipalities shall work in alliance with the County of Renfrew's Transportation Master Plan.

Six submissions were received and reviewed by Staff on the proposal evaluation sheet supplied by the County. Staff categorize this project as a priority due to Horton's significant growth rate that is anticipated to continue upon completion of the twinning of Hwy 17 in 2025/2026. The estimated budget for this project was an upset of $50,000 and MP's submission came in under the estimated cost but was not the lowest bid submission. The lowest bidder submitted an unfeasibly low blanketed cost for all lower tier participants and the submission scored 54/100 points displaying minimal interest or understanding of the scope involved to deliver a comprehensive plan to the lower tier participants with only an estimated 69 hours allocated to Horton's portion of the TMP.

The Townships Public Works Manager reviewed all submissions in detail and the CAO/Clerk Hope Dillabough examined the submission upon the PW Managers evaluations. Both Township evaluators agree that MP displayed advanced understanding of the Township and County as a whole and with 261 hours allocated toward Horton's portion of the TMP a quality tailor made plan can be delivered to accommodate the Township's future growth. The County of Renfrew and the majority of lower tier participants also agreed that MP scored the highest of all submissions with 88/100 points per the Township's evaluation and 81.4 per the County's evaluation.

MP's bid submission was for the total amount of $37,944.27 including HST and Staff have requested a significant contingency due to the length of the project and to ensure a quality plan

RETURN TO AGENDA

is delivered. The project is proposed to begin on April 13th 2023 with the final documents delivered by December 16th 2024.

MP is currently undertaking a TMP in Severn Township, a Municipality with a significantly larger population but similar geographical appeal, developmental challenges, and growth rate as Horton. The Growth in Severn was spurred by the twinning of Highway 400 and 11 and its location between the Township of Muskoka Lakes and the City of Orillia, a region that Staff believe serves as a model of what the Ottawa Valley may develop toward. Severn Township's vision is to preserve and enhance the natural environment while delivering a connected and active community that retains its rural traditions. Staff contacted the Director of Public Works in Severn Township, Derek Burke, and received a positive review of MP's work to date and was informed that they anticipate presenting the TMP at the Transportation Association of Canada conference this November.

The scope of work for the County of Renfrew and Participating Municipality TMPs will place significant emphasis on traffic operations, active transportation connectivity, and assessing the County and Participating Municipalities current transportation infrastructure (roads, bridges, and culverts) as well as updating existing and establishing new policies and design standards as well as road classifications. The TMP will also ensure forecasted future traffic volumes are adequately accommodated by the County and local road networks.

Macintosh and Perry's understanding of the scope of work includes the following:

1) An assessment of the current state of the County 's and Participating Municipalities current transportation network and infrastructure (roads, intersections, bridges, structural culverts, and trails), including recommendations for network optimization and improvements to address growth and travel demand based on an updated 10-year study timeline.

2) Provide mobility across all transportation modes that is safe, connected, sustainable, affordable, and accessible for residents of all ages and abilities. We will conduct a cost/benefit analysis to determine the feasibility of a future transit system for the County and for The Town of Arnprior.

3) Review active transportation network gaps and the opportunities to better integrate the County network with existing local municipality networks.

4) Develop a sustainable transportation network implementation plan that reflect future development scenarios for the short term, medium term and long term that will assist the County in prioritizing capital works and investing efficiently.

5) Update the County and Participating Municipality Road classification system, assess the County's future arterial and collector road needs, and update/draft new design standards and policies for Renfrew County transportation infrastructure.

6) Implement a meaningful consultation and engagement process for Public Works staff, business communities, the public and external stakeholders that meets the Municipal Class EA (MCEA) requirements for a TMP.

7) Develop an implementable action plan with recommended capital projects and/or initiatives for transportation infrastructures (roads, AT facilities, Bridges, and Structural

culverts, etc.) based on priority, estimated cost, and timelines for completion (by 2031), under the Municipal Class Environmental Assessment process.

ALTERNATIVES:

N/A

FINANCIAL IMPLICATIONS:

$37,944.27 including HST from the Working Funds Reserve

ATTACHMENTS:

MP Schedule of Pricing Horton TMP

CONSULTATIONS:

Hope Dillabough – Horton Twp CAO/Clerk
Derek Burke – Severn Twp Director of Public Works
Taylor Hanrath – Manager of Infrastructure (County of Renfrew)

Prepared by: Adam Knapp, Public Works Manager

Reviewed by: Hope Dillabough, CAO/Clerk

RETURN TO AGENDA

McINTOSH PERRY MOBYCON

Time-Task Matrix (Hours Only): PW 2022-025 TMP: Professional Services for Development of a Transportation Master Plan - Township of Horton

HORTON TOWNSHIP

	Project Management and Quality Reviews			Public & Agency Engagement (Consultation)	Transportation Planning / Traffic Engineering			Active Transportation		Road Safety and Design			Policy and Planning		Infrastructure Assessment				Technical/Support Staff	Total Hours	MP Disbursements	Total Fees
	Project Manager M.Delibasic, M.Sc., P.Eng.	Deputy Project Manager K.Prince, M.Sc., P.Eng., PMP	QA/QC Reviewer C.Shillinglaw, P.Eng.	N. Farrell, B.Sc., MCIP, RPP	Transportation Planner / Traffic Engineer (Lead) T.Goyz, M.Sc., P.Eng.	Transportation Planner / Traffic Engineer B.Lee, P.Eng.	Traffic Engineer & GIS M. Patenaude, P.Eng.	Active Transportation Planner Emily	Active Transportation Planner Eric	Municipal Engineer (Lead) C. McDonald, P.Eng.	Senior Traffic Specialist D.Steed	Senior Associate S.Sam	Land Development Planner (Lead) B.Claire	Land Development Planner A. MacleodI	Municipal Engineer (Lead) M.Sexton P.Eng.	Municipal Engineer A.Siciliano, P.Eng.	Structural Engineer A.Yun, M.A.Sc., P.Eng.	Structural Engineer S.Dexter, P.Eng.				
2023 Hourly Rates	$ 170	$ 154	$ 178	$ 138	$ 154	$ 117	$ 109	$ 150	$ 120	$ 142	$ 134	$ 200	$ 134	$ 134	$ 150	$ 117	$ 150	$ 126	$ 81			
PROJECT MANAGEMENT																						
Project Start-up Meeting	1	1																		2		$ 324
Monthly Virtual Project Meetings (x18 Meetings)	4	2						3												9		$ 1,438
PM Sub-Total	5	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	11	$ -	$ 1,762
PHASE 1 - EXISTING CONDITIONS ASSESSMENT																						
Project Initiation																						
Prepare Updated Work Plan, Schedule		1																	1	2		$ 235
Prepare Study Notice, Stakeholder Engagement Plans, Communication Plans, and Contact Lists				1															1	2		$ 219
Prepare Online and Promotion Material (Including Online Survey)	1			1	1			1											1	5		$ 693
Sub-Total	1	1	0	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3	9	$ -	$ 1,146
Information Gathering and Background Material Review																						
Site Investigations	1	1						1												3	$ 300	$ 774
Data Collection and Processing		1					1		1										2	5		$ 545
Assemble and Review Existing Township Information And Documents (Policies, Inventories, Planning Studies, GIS Shapefiles, etc.)							1		1					1		1				4		$ 480
Establish Future Growth Plans for Township						1	1													2		$ 227
Establish TMP Goals and Objectives Based on Policy and Planning Context Reviews	1						1													2		$ 279
Sub-Total	2	2	0	0	0	1	4	1	2	0	0	0	0	1	0	1	0	0	2	16	$ 300	$ 2,306
Establish Existing Conditions, Identify System Issues and Opportunities																						
Review Existing Road Classifications and Asset Management Plan						1	2								2					5		$ 636
Develop Base (2023) Transportation Model						1	4													5		$ 555
Develop Screenline Criteria Process					1		1													2		$ 263
Establish Road Classification and Hierarchy					1		1								1					3		$ 413
Review and Analyze Collision Data							1					4								5		$ 909
Review Existing AT Facilities and Accessibility Infrastructure								2	2										1	5		$ 621
Identify Key Intersections and Corridors					1															1		$ 154
Identify Transportation System Issues and Deficiencies / Commentary on Established Trends					1							2							2	5		$ 716
Establish Opportunities to Meet TMP Goals and Objectives	1				1					1										3		$ 466
Prepare and Submit Interim Report Summarising Initial Findings	1		2		2	2	6	1	2			1	1						8	26		$ 3,097
Interim Presentation to Township Public Works Staff	1	1		1															2	5		$ 624
Sub-Total	3	1	2	1	7	4	15	3	4	1	0	7	1	0	3	0	0	0	13	65	$ -	$ 8,454
Phase 1 Total	6	4	2	3	8	5	19	5	6	1	0	7	1	1	3	1	0	0	18	90	$ 300	$ 11,906
PHASE 2 - Traffic Operations and Safety/ Road Network Assessment																						
Transportation Modelling and Network Assessment																						
Forecasting of Base Transportation Model into Short Term and Long Term Scenarios, Including Planned Capital Works (10-Year Plan)						1	4													5		$ 555
Identify Network Deficiencies for Future Scenarios following Screenline Analysis, Traffic Operations and Collision and Safety Reviews					1		4													5		$ 591
Downtown Parking Assessment						1	1													2		$ 227
Traffic Calming Review and Best Practices Review					1			1												2		$ 304
TDM and Potential Technologies Review						1							1						2	4		$ 413
Sub-Total	0	0	0	0	2	3	9	1	0	0	0	0	1	0	0	0	0	0	2	18	$ -	$ 2,090
Active Transportation (AT) Plan																						
Assess Active Transportation Network and Identify Potential Solutions								1	2											3		$ 390
Assess Active Transportation Solutions								1	2											3		$ 390

McINTOSH PERRY MOBYCON

Time-Task Matrix (Hours Only): PW 2022-025 TMP: Professional Services for Development of a Transportation Master Plan - Township of Horton

HORTON TOWNSHIP

	Project Management and Quality Reviews			Public & Agency Engagement (Consultation)	Transportation Planning / Traffic Engineering			Active Transportation		Road Safety and Design			Policy and Planning		Infrastructure Assessment				Technical/Support Staff	Total Hours	MP Disbursements	Total Fees
	Project Manager M.Delibasic, M.Sc., P.Eng.	Deputy Project Manager K.Prince, M.Sc., P.Eng., PMP	QA/QC Reviewer C.Shillinglaw, P.Eng.	N. Farrell, B.Sc., MCIP, RPP	Transportation Planner / Traffic Engineer (Lead) T.Goyz, M.Sc., P.Eng.	Transportation Planner / Traffic Engineer B.Lee, P.Eng.	Traffic Engineer & GIS M. Patenaude, P.Eng.	Active Transportation Planner Emily	Active Transportation Planner Eric	Municipal Engineer (Lead) C. McDonald, P.Eng.	Senior Traffic Specialist D.Steed	Senior Associate S.Sun	Land Development Planner (Lead) B.Claire	Land Development Planner A. MacLeod	Municipal Engineer (Lead) M.Sexton P.Eng.	Municipal Engineer A.Siciliano, P.Eng.	Structural Engineer A.Yun, M.A.Sc., P.Eng.	Structural Engineer S.Dexter, P.Eng.				
2023 Hourly Rates	$ 170	$ 154	$ 178	$ 138	$ 154	$ 117	$ 109	$ 150	$ 120	$ 142	$ 134	$ 200	$ 134	$ 134	$ 150	$ 117	$ 150	$ 126	$ 81			
Review Safety as it relates to Vulnerable Road Users								1				1								2		$ 350
Update/Draft New Active Transportation Design Guidelines								1	2											3		$ 390
Active Transportation Implementation Plan and Updated Strategy	1							2	2											5		$ 710
Sub-Total	1	0	0	0	0	0	0	6	8	0	0	1	0	0	0	0	0	0	0	16	$ -	$ 2,230
Policies and Design Standards Update																						
Review and Update/Create New Town Transportation Policies (Road Classifications, Trails, and Active Transportation)					1			1		1			1							4		$ 579
Policy Recommendations for On-going Maintenance and Life-Cycle Needs														1	1	1				3		$ 401
Updates to Engineering Standards (Roads, Bridges, Structural Culverts, AT Infrastructure. Including X-sections)			1								1				1	1				4		$ 579
Sub-Total	0	0	1	0	1	0	0	1	0	1	1	0	1	1	2	2	0	0	0	11	$ -	$ 1,559
Preferred Solutions and Alternatives																						
Identify Solutions to Address Network Deficiencies					1			1		1	1								4	8		$ 903
Assess and Evaluate Network Solutions, Select the Preferred Solution(s)							1	1		1		1							4	8		$ 925
Prepare Cost Estimates of Preferred Network Solution under Phased Scenarios	1				1										1	1			4	8		$ 915
Sub-Total	1	0	0	0	2	0	1	2	0	2	1	1	0	0	1	1	0	0	12	24	$ -	$ 2,744
Public and Stakeholder Consultation																						
Preparation of Consultation Materials		1		1			1												2	5	$ 200	$ 763
Agency/Stakeholder Meetings and Consultation	1				1			1											2	5		$ 636
Public Information Centre (PIC)	1			1				2												4		$ 608
Prepare and Submit Engagement Summary Report #2	1	1			1		2												4	9		$ 1,021
Sub-Total	3	2	0	2	2	0	3	3	0	0	0	0	0	0	0	0	0	0	8	23	$ 200	$ 3,027
Draft TMP Document																						
Prepare and Submit Draft TMP Document	1	1			1	2	8	2	3	1		1	1						8	29		$ 3,371
Draft TMP Presentation to Public Works Staff	1	1		1	1														4	8		$ 940
Sub-Total	2	2	0	1	2	2	8	2	3	1	0	1	1	0	0	0	0	0	12	37	$ -	$ 4,311
Phase 2 Total	7	4	1	3	9	5	21	15	11	4	2	3	3	1	3	3	0	0	34	129	$ 200	$ 15,961
PHASE 3 - DOCUMENTATION AND FINALIZATION																						
Comprehensive Transportation Master Plan																						
Refine Preferred Solution	1				1	1	2	1	1				1			1			3	12		$ 1,424
Prepare and Submit Final Draft TMP	1		2		1			1	2			1							4	12		$ 1,594
Presentation of the Final Draft to Standing Committee	1			1																2		$ 308
Presentation of the Final Draft to Township Council	1			1																2		$ 308
Final Document Handover		1																	2	3		$ 316
Sub-Total	4	1	2	2	2	1	2	2	3	0	0	1	1	0	0	1	0	0	9	31	$ -	$ 3,950
Phase 3 Total	4	1	2	2	2	1	2	2	3	0	0	1	1	0	0	1	0	0	9	31	$ -	$ 3,950
Project TOTAL - Hrs	22	12	5	8	19	11	42	25	20	5	2	11	5	2	6	5	0	0	61	261	$ 500	$ 33,579
Project TOTAL - Price (HST excluded)	$ 3,742	$ 1,847	$ 891	$ 1,102	$ 2,924	$ 1,292	$ 4,593	$ 3,750	$ 2,400	$ 709	$ 267	$ 2,200	$ 668	$ 267	$ 899	$ 587	$ -	$ -	$ 4,941		$ 500	$ 33,579

RETURN TO AGENDA

Township of Horton
COUNCIL / COMMITTEE REPORT

Title:	Date:	March 1st 2023
Bruce Street County Road 20 Rehabilitation Notice Letter	Council/Committee:	TES
	Author:	Adam Knapp, Public Works Manager
	Department:	Public Works

RECOMMENDATIONS:

THAT the TES committee receive this report as information regarding the rehabilitation of Bruce Street in 2023.

BACKGROUND:

As part of the County of Renfrew's 10-year Capital Roads Rehabilitation Plan Bruce Street, also known as County Road 20, shall be rehabilitated during the construction season of 2023. The details of the rehabilitation are captured in the notice letter delivered to the Township on February 14th 2023.

Staff believe this is an opportunity for the Township to capitalize on potential savings for the proposed Mullins Road rehabilitation due to the close vicinity of these two projects.

ALTERNATIVES:

N/A

FINANCIAL IMPLICATIONS:

N/A

ATTACHMENTS:

Bruce Street CR- 20 Rehabilitation Notice Letter
Mullins Road Estimate Minimum Contracted Work

CONSULTATIONS:

N/A

Prepared by: Adam Knapp, Public Works Manager

Reviewed by: Hope Dillabough, CAO/Clerk

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Department of Public
Works & Engineering

County of Renfrew
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9 INTERNATIONAL DRIVE
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FAX: 613-732-0087
www.countyofrenfrew.on.ca

February 14, 2022

Mr. Adam Knapp
Punlic Works Manager
Township of Horton
2253 Johnston Road
Renfrew, ON K7V 3Z8
Via email: aknapp@hortontownship.ca

Dear Mike:

RE: Rehabilitation of County Road 20 (Bruce Street)

The County currently has one proposed Capital Road Project planned to be completed in 2023 in the Township of Horton.

The project is planned for County Road 20 (Bruce Street) from Highway 60 (Stewart Street) to Garden of Eden Road. This project is planned to include a mill and pave operation with spot curb replacements from Highway 60 to approximately 100 metres east of Moore Street. There will be a storm sewer repair completed just east of Moore Street. Bruce Street from the mill and pave operation limit to Garden of Eden Road will have a micro surface treatment applied.

If you or any members of your staff have any questions or would like to discuss the project in more detail, we would be pleased to host a virtual meeting at your earliest convenience.

Sincerely and yours truly,

Richard Bolduc, A.Sc.T.
Manager of Operations
rbolduc@countyofrenfrew.on.ca

rjb:meb

cc: Lee Perkins, C.E.T., MBA, Director of Public Works & Engineering, County of Renfrew
Taylor Hanrath, Manager of Infrastructure, County of Renfrew
Mike Behm, C. Tech, Supervisor of Technical Services, County of Renfrew
David Bennett, Township of Horton
Hope Dillabough, CAO/Clerk, Township of Horton

RETURN TO AGENDA

Township of Horton
COUNCIL / COMMITTEE REPORT

Title:	Date:	Mar 1st 2023
Mullins Road 2023 Capital Rehabilitation	Council/Committee:	TES
	Author:	Adam Knapp, Public Works Manager
	Department:	Public Works

RECOMMENDATIONS:

THAT the TES Committee review this report as information and will be discussed during the 2023 budget for consideration.

FURTHER THAT the proposed funding for the rehabilitation be $30,000 from Development Charges, $55,000 from the Gravel Haul and Supply Fund, $125,000 from CCBF (Gas Tax) and $140,000 from reserves for a total of $350,000.

BACKGROUND:

Staff propose to minimize the contracted work to strictly the portions the Township is not equipped for or is not cost effective to keep in house such as pulverizing the existing surface, hauling and application of 50 mm Granular A and 50 mm of super pave 12.5 as well as line painting the road platform. The in-house portion shall consist of shouldering, driveway tie ins, brushing and ditch re-profiling / cleanout.

Staff propose to release the tender as soon as the 2023 budget is approved. Available funding, per Staff's estimate, does not allow for repaving of the extended aprons or intersection at Eady Road. If the bid submissions come in under the estimated amount Staff shall extend the paved surface as far as possible to utilize all available funding. If the estimates are significantly above the estimated cost Staff shall not recommend proceeding with the work at this time and shall instead look to apply a Cape Seal to Goshen Road, currently planned for 2024, and reconfigure the 10 Year Paved Roads Capital Rehabilitation Plan to suit.

Completing this project is a pivotal hurdle that shall allow the Township to shift the focus of our Capital Roads Rehabilitation Plan to maintenance and paved road network expansion over the next 10 years. The 10 Year Paved Roads Capital Rehabilitation Plan shall be presented to Committee and Council once the 2023 budget is passed.

ALTERNATIVES:

Option #1

Not proceed with any Capital Rehabilitation in 2023 to accommodate Mullins Road in 2023. Staff does not support this option as other roads will deteriorate beyond the point of performing rejuvenating treatments and become flagged for costly rehabilitation if the timeline is shifted in this manner.

RETURN TO AGENDA

Option #2
Proceed with 2024's proposed Capital Rehabilitation Works in 2023 which are as displayed below:

		2024
Road Network		
LCB		
644 - Goshen Road		
Cape Seal		$137,644.92
809 - Cobus Rd		
Fog Seal		$16,564.80
812 - Lime Kiln Road		
<Asset Replacement>		$61,799.76
Road Network Total		
Cumulative Total		$216,009.48

Staff cautions that proceeding with this option will push the estimated funding feasibility of proceeding with Mullins Road rehabilitation to 2026 or 2027 as maintaining our good roads should be the priority over allowing a road already in a deteriorated condition to continue to decline. The completion of Mullins Road shall be one of 3 asset replacements proposed in the upcoming 10-year plan and is the rehabilitation costliest to complete.

FINANCIAL IMPLICATIONS:

Funding allotments as proposed in the recommendation and alternatives to an upset limit of $350,000

ATTACHMENTS:

Mullins Road Estimate Minimum Contracted Work

CONSULTATIONS:

N/A

Prepared by: Adam Knapp, Public Works Manager

Reviewed by: Hope Dillabough, CAO/Clerk

RETURN TO AGENDA

Mullins Rd Estimate (Minimum Contracted Work)						
From:	Johnston					
To:	Eady Rd					
Treatment Type:	**Super Pave 12.5**					
Average Lane Width (m)	**6.5**					
Item	**Category**	**Life Extension**	**Lane-Km Treated**	**Lane-Km-Years**	**Unit Cost**	**Total Cost**
Pulverise (150mm +/- 15 mm)			1.45		$4.00	$37,700.00
50 mm GA			1.3		$7.00	$59,150.00
50 mm SP 12.5			1.3		$22.00	$185,900.00
Line Painting			1.3		$0.23	$1,943.50
						$0.00
						$0.00
						$0.00
						$0.00
						$0.00
						$0.00
						$0.00
						$0.00
						$0.00
Notes:					Sub Total	$284,693.50
					7% Contingency	$19,928.55
					HST	$39,600.87
					Non Refundable HST	$5,385.72
					Total after HST rebate	$310,007.76
					Total before HST rebate	**$344,222.91**

RETURN TO AGENDA