A. Recommendations

THAT Council receive Staff Report CSOPS.20.030, entitled “Peel Street Reconstruction Cross Section Options Report”;

AND THAT Council directs Staff to advance the Preliminary Design with one of the cross-section options presented below or direct staff to consider other options.

B. Overview

The purpose of this report is to present optional road cross-sections for the reconstruction of Peel Street as requested by Council on November 13, 2019. Staff Report CSOPS.19.065, entitled “Peel Street Reconstruction Public Information Centre Report” was received by Council along with the Peel Street Reconstruction Public Information Centre Report by MTE Consultants. Comments received at the Public Information Centre (PIC) suggested the Town advance a hybrid design referred to as Option 4.5, somewhere between Option 4, a rural cross-section and Option 5, the Town Standard Cross-section. The discussion at the PIC and in subsequent comments had quite a range of what level of service should be provided by Option 4.5. The Council resolution of November 13, 2019 directed Staff to bring a report to a future Committee of the Whole meeting with options on the level of service on Peel Street (Attachment #1).

C. Background

Peel Street was constructed years ago with a rudimentary level of service. The development that is serviced by this road includes the Cameron Street Subdivisions, Trailwoods Subdivision, Lora Bay Heights Condominium (Pending), Rainmaker Estates Condominium (Concept), 2 parcels of Town land, a few miscellaneous lots and the Town’s Water Treatment Plant (WTP). The street could serve as many as 420 residential units based on the parcels that have been created including the potential development on those parcels plus the WTP. This number is a maximum number and not likely to ever be realized. For example, based on a pre-consultation meeting with Town staff, the Rainmaker Estates development will likely have less than the
maximum allowed. Some of these units have an optional route of egress provided by the 10TH Line.

A map of the actual and potential properties that can or might access Peel Street is found in Attachment #2.

The 2014 Development Charges Background Study identifies Peel Street from Highway 26 to Cameron Street as a collector road to be reconstructed to an appropriate level of service to support the developments serviced by the road. The Study suggests the appropriate level of service is:

- Improvement Type: Reconstruct with storm sewer (urban section)
- Road Width: 8.5m
- Pedestrian Route: 1.5m sidewalk
- Streetlight: Standard streetlight (40m spacing one side)
- Street Tree: Street tree (20m spacing both sides)

The 2019 Development Charges Background Study contains the same identification of the appropriate level of service for Peel Street.

In addition to the Development Charges funded improvements, Peel Street north of Cameron Street and Bay Street from Peel Street to the Little Beaver River will be improved. There is very little traffic north of Cameron Street, so the preliminary design suggests reconstruction similar to the existing conditions with the inclusion of a sidewalk and pedestrian bridge over the Little Beaver River. The sidewalk and pedestrian bridge will link the Peel Street sidewalk with the exiting sidewalk on Bay Street east of the little Beaver River. The result of this design will be to advance active transportation connections and routes.

Peel Street also contains existing municipal services including a trunk water main and sanitary sewer. The typical private utilities are also present in the road.

The Town conducted a PIC to present the preliminary design options for the road’s cross-section on July 11 and 13, 2019. The options presented were:

1) Do Nothing;
2) Pave Existing;
3) Town Rural Standard;
4) Town Rural Standard with Paved Shoulders; and,
5) Town Standard Cross-Section.

**Do Nothing**

The “Do Nothing” option must be considered in any analysis. This was ruled out quickly as the sight lines over the hill are dangerous and the road does not provide service to all road users such as cyclists and pedestrians. The road is not paved which presents maintenance concerns due to the ever-increasing traffic. During winter thaws or summer rains the road surface deteriorates quickly from the traffic. During dry conditions the migration of dust is a concern to the residents.
Pave Existing

The “Pave Existing” option can also be ruled out quickly. The fundamental requirement for a paved road to have a reasonable life span is free draining road base material and a method to convey the water away from the road base.

The existing road base is comprised of sand and gravel, gravely sand, and some silt according to the Geotechnical Report. All the road base samples that were tested for grain size distribution found greater than 10% retained on the #200 sieve with one sample as high as 50%. Grain size distribution is a basic geotechnical test. A material sample is passed through a stack of sieves and the retained material on each sieve is captured and weighed to determine the percentage it represents in the total weight of the sample. The #200 sieve is the transition from sand to silt. For road structure granular material, the maximum percentage allowed passing the 200 sieve is 8%, anything above 10% is considered impermeable or not free draining. The existing granular structure of the road cannot be paved over and expect any reasonable life for the road surface. Even if the road structure were free draining, the existing ditches do not provide enough depth to drain the road base.

This option has the same deficiencies as the “Do Nothing” option. The sight lines over the hill are dangerous and the level of service to all road users in not acceptable.

Option 3 (Town Rural Standard) and 4 (Town Rural Standard with Paved Shoulders)

Options 3 and 4 are basically the same. The road cross-section is the Town Rural Standard as found in the Town’s 2009 Engineering Standards. Option 3 has gravel shoulders and Option 4 has paved shoulders. As mentioned above the fundamental requirement of a road design is the drainage of the granular structure. The Town standard granular structure is 600mm thick below the 90mm of asphalt. This depth of the road structure requires significantly deep ditches to achieve drainage. The road’s vertical and horizontal alignment is being adjusted and must match existing grades along the right of way limits. The deep ditches that will result in the reconstruction will, in some locations, not fit within the right of way. In the worst location the back slope of the ditch is well onto private property. In addition, these options would address sightlines on the hill but cross-sections do not address the needs of all road users, particularly the pedestrians.

As discussed later in the report, the Town’s Official Plan includes goals to promote active transportation, cycling and walking and creating linkages through Town. Bicycles are vehicles under the Highway Traffic Act, so they typically use the road. Neither Option 3 nor 4 provide any accommodation for pedestrian traffic as there is no room left within the road allowance due to the ditches. Without a sidewalk or trail, the opportunity to link the Georgian Trail with the existing sidewalks on High Bluff Lane, Timber Lane and Bay Street east of the Little Beaver River would be lost.

Option 5
Option 5 is the Town’s Standard Cross-Section. The storm sewer serves 2 purposes, in addition to taking storm water off the road, sub-drains are installed to drain the road structure. This change allows the road reconstruction to generally fit within the existing right of way. This road section also meets the needs of all road users. The road is wide enough to accommodate cyclists and the sidewalk can accommodate pedestrians.

Option Considerations

With respect to pedestrians, Peel Street and Bay Street have trails and sidewalks that meet them and there are currently no pedestrian facilities on either street. A pedestrian facility on these 2 streets and a pedestrian facility to cross the Little Beaver River would greatly enhance pedestrian connectivity in the area consistent with the objectives of the Official Plan.

The options considered were based on the direction of past Councils by their approval of the Town Engineering Standards. The Town only has 2 road cross-sections in the Standards, namely the Standard Cross-Section and the Rural Standard Cross-Section. The consultant was not tasked with developing a new unique cross-section for Peel Street.

Residents provided feedback through the PIC process and in subsequent correspondence. The majority of responses favoured Options 3 & 4. The significant opposition to elements within the options was to sidewalks and streetlights. It seems that the proponents of Options 3 & 4 did not understand that these cross-sections would not fit within existing right of way which would mean significant tree loss and regrading of private land.

D. Analysis

In order to consider options on the level of service on Peel Street, the Town’s needs of this road must be understood. While the history of the road is not known it was likely in place before 1949; the year that Cameron Street Phase 1 was registered. The rudimentary nature of Peel street would suggest that the road was advanced over the existing land down to the water without regard to its geometry. It may have been connected to Thornbury along King Street as, there is a collapsed bridge in the closed section of King Street right of way between Lansdowne Street and Peel Street. Highway 26 was assumed in 1927 as the route between Owen Sound and Barrie and its route through Thornbury is not well documented.

Official Plan Guidance

Improvements to Peel Street are required to support development through build-out according to the 2014 and 2019 Development Charges Background Study. The guidance for the level of service the road should provide originates in the Official Plan. The Official Plan identifies the road types of specific roads and defines the characteristics of road types. The Official Plan also lists Community Vision and Guiding Principles as well as Goals and Strategic Objectives. While the document speaks to how land is developed rather than specifically how roads should be built, there are number of references that provide some guidance.

From Section A1 The Community Vision and Guiding Principles, the last bullet states “enable residents to walk or cycle to work or shop”.
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From Section A1.1 Guiding Principles, Item 11 is “To establish an integrated transportation system that safely and efficiently accommodates various modes of transportation including walking, cycling, automobiles and trucks”.

From Section A3.1.2 Strategic Objectives, Item 7 “Encourage reductions in the use of private automobiles by promoting active transportation and the use of Transportation Demand Management measures such as public transit, cycling and walking.

From Section A3.4.2 Urban Community Character Strategic Objectives, Item 4 “Encourage the development of neighbourhoods which are: compact; provide an integrated network of pedestrian-oriented streets, pathways and cycling facilities; and provide an appropriate mix of housing types, community facilities, commercial and service uses, and open spaces”. And Item 6 last bullet “a pedestrian oriented development pattern”.

From Section A3.5.2 Rural and Open Space Character Strategic Objectives, Item 3 “Preserve and improve access to open space and shoreline areas, including the Niagara Escarpment, Nipissing Ridge and the Georgian Bay shoreline”.

From Section A3.8.2 Tourism and Recreation Strategic Objectives, Item 6 “Recognize and maintain the Georgian Trail as a regionally significant trail link, and to encourage appropriate access points in the long-term development of a Town-wide trail system”, and Item * “To create a high quality, all season trail system, contributing to the development of the Town as a world-class tourism destination”.

From Section A3.9.2 Infrastructure Strategic Objectives, Item 3 “Encourage the establishment of an integrated transportation system that safely and efficiently accommodates various modes of transportation including cycling, walking, automobiles and trucks, and public transit where feasible”, and Item 4 “Ensure the construction of all infrastructure, or expansions to existing infrastructure, occurs in a manner that is compatible with adjacent land uses, is cost effective and with a minimum of social and environmental impact”.

The Official Plan designated the land uses lining Peel Street as either Residential Recreational Area or Community Living Area, which are both Urban designations.

The Official Plan designates Peel Street as a Local Road. The characteristics of a local road are as follows:

Function
- Connect individual properties to collectors or arterials
- Carry comparatively low volumes of traffic

General Design Guidelines
- Right of Way width up to 20m and 23m for rural cross-sections
- 2 travel lanes
- Convenient linkages to collector roads
- Parking in rural areas is generally restricted
• Parking in urban areas may be allowed on both sides dependent on pavement width
• Access control not required

The 2014 and 2019 Development Charges Background Study designates Peel Street as a Collector Road. The characteristics of a Minor Collector Road in the Official Plan are as follows:

Function
• Connect neighbourhoods
• Distribute traffic to and from County Roads
• Provide access to adjacent land uses

General Design Guidelines
• Right of Way width up to 26m
• 2 travel lanes
• On-street parking generally permitted
• Access is partially controlled

The Official Plan discusses Active Transportation in Section D2.5. The section states, “Active Transportation (walking and cycling) is an important component of building active communities and reducing dependence on single occupant vehicles. In order to plan for and encourage walking and cycling, Council shall (note only clauses applicable are listed):

a) promote a connected safe and well-designed active transportation network which can include exclusive facilities for pedestrians and cyclists (sidewalks, bicycle lanes, trails, etc.) that are connected to origins and destinations within and beyond the Town;

e) require the provision of sidewalks in settlement areas and hamlets, where appropriate;

g) investigate and provide for bicycle lanes wherever possible in the construction or reconstruction of roads and bridges;

h) encourage and support measures which will provide for barrier-free design of pedestrian facilities;

i) support an accessible network that allows for use by all members of the community, which includes barrier-free design of pedestrian facilities which considers the location and width of sidewalks, use of curb cuts, pedestrian crosswalks and signals, etc.

k) encourage pedestrian and cycling amenities, both on the active transportation network and at key destinations, … and water fountains and benches along trail network;

m) ensure that all pedestrian and cycling routes are designed to be safe.

Guidance from the Development Charges Background Study

The Development Charges Background Study includes Peel Street North from Hwy 26 to High Bluff Lane and in the Road and Related Capital Program 2019 – Build Out. It should be noted
that this road section is listed as a Collector Road contrary to the Official Plan. Realistically the road does function as a collector road as it serves far more properties on roads that connect to it than properties that front on it.

The Development Charges Background Study lists the improvements of Peel Street as mentioned earlier, namely:

- Improvement Type: Reconstruct with storm sewer (urban section)
- Road Width: 8.5m
- Pedestrian Route: 1.5m sidewalk
- Streetlight: Standard streetlight (40m spacing one side)
- Street Tree: Street tree (20m spacing both sides)

The Development Charges Background Study does not prescribe the level of service for the road but simply reports the improvements for which monies were captured in the Development Charge.

**Municipal Utility Considerations**

The Town has municipal services under Peel Street that have been constructed under various contracts. The running lines for the municipal services do not conform with the 2009 Town Engineering Standards.

In addition to the existing services the Town needs to consider additional services that will require a running line within the ROW. Before the reconstruction of Peel Street can go ahead decisions on these services will be required.

**Sanitary Sewer**

Peel Street does not have a continuous sanitary sewer through its length. The Town owns land fronting on Peel Street where no sanitary sewer is present and a landowner that anticipates developing his land with multiple residential units also fronts on the section of Peel that does not have a sewer.

Currently, sanitary sewer is present on Peel Street from High Bluff Lane to Highway 26 and from Huron Street (unopened) to Bay Street. This leaves approximately 250m of Peel without a sanitary sewer.

The Town owns 2 parcels of land and 2 unopened road allowances that in total have an area of just under 1.2ha. Rainmaker Estates has a property that has an area of just under 1.0ha. The Town parcel has a development capacity of 16 to 98 units. The Rainmaker property has a development capacity of 7 to 44 units. There are no formal development applications for these lands.

The Town land could be serviced relatively easily with a regular depth sewer from the maintenance hole at Huron Street (unopened).
In order to service the Rainmaker Estates property with a gravity sewer a much deeper sewer would be required. Fortunately, the maintenance hole installed on Peel Street at Huron Street (unopened) was installed quite deep to service Timber Lane. A rough check of the sewer depth required at the Rainmaker property suggests a gravity sewer could service this property.

The developer of the Rainmaker Estates property has spoken with the Town’s Planning Department more than 6 months ago. The developer has spoken with Operations and indicated that he was interested in a sewer connection on Peel Street. The Operations Department recommended that he complete some preliminary engineering or a functional servicing report to determine what would be his best option to service the property with a sanitary sewer connection.

**Watermains**

The Town is currently advancing a Municipal Class Environmental Assessment to evaluate and select the preferred alternative to address the Town’s Water Storage and Distribution System needs in the West Pressure Zones 1, 2 and 3 and develop preliminary designs. There is a possibility that this assessment will identify a need for a trunk water main on Peel Street. The timing of a decision on whether the trunk main will be required is likely 8 to 12 months away and if required the construction could be 3 to 4 years away.

**Private Utilities**

The private utilities include Hydro, Gas Bell and Rogers. There is a mix of inground and overhead utility wires and pipes typical for the age of the infrastructure. Relocation of some of these utilities will likely be required and will be better understood as the design unfolds.

Council has asked Staff to investigate burying the overhead utilities as a method of hardening infrastructure against weather events. This was requested during a Staff report presentation regarding Elma and Alice Streets Reconstruction Project. Presumably this request of Council would be a consideration of any road reconstruction project.

Staff have communicated and met with Epcor to discuss burying overhead infrastructure. Epcor have provided a high-level estimate for a rehab project to change infrastructure from overhead to underground. The cost does not include the costs associated with other utilities. The cost is limited to the work in the right of way and is based on a kilometer of road. Epcor suggest the cost could be $680,000 including a 20% contingency. The estimate does not include engineering nor the cost to the homeowners for work on private land. The length of Peel Street and Bay Street is approximately 700m ($680,000 x 0.7 = $475,000).

**Summary of Analysis**

The classification of the road is in question as the Official Plan lists Peel Street as a Local Road and the Development Charges Background Study suggests it is a Collector Road. The road does have the characteristics of a Collector Road rather than a Local Road. The existing right of way width is generally 20m rather than the “up to 26m” which is a Collector Road characteristic or the 23m which is a Local Road Rural Section characteristic. To widen the right of way land would have to expropriated which would likely have a significant effect on the existing
properties. It seems that the reconstruction works will have to fit in the existing right of way width.

Active transportation is discussed in the Official Plan. It seems clear that a sidewalk or multi-use trail would be required along with a pedestrian crossing of the Little Beaver River to promote a connected safe and well-designed active transportation network.

A piped storm system will be required to handle the storm water as well as drain the road base. A traditional rural road section is not possible due to the conflicting requirements of mainly the space required for ditches and secondly the space required for a safe active transportation route within the existing 20m right of way.

A sanitary sewer will be required to service the Town land and possibly a development south of the Town land.

A trunk water main may be required. It may prove to be a challenge to find a route for a duplicate water.

Streetlights are a requirement of the Town Engineering Standards. Staff believe illumination of the road will be required.

It is likely that some utility relocation will be required.

**Cross-section Options**

From the Public Information Centre feedback there was interest in a road cross-section with a rural feel. Staff have developed 3 options for consideration and discussion. Attachment #4 provides a summary chart comparing the attributes of the 3 design options discussed below.

Essentially the design started with a piped storm system in order to fit the proposed work in the existing right of way. Then the design considered how to accommodate road users as per Official Plan Section A1.1 Guiding Principles, Item 11 “To establish an integrated transportation system that safely and efficiently accommodates various modes of transportation including walking, cycling, automobiles and trucks”.

For safety concerns, the design considered a 2.7m wide multi-use trail to separate active transportation from the vehicles on the road. With active transportation separated from the road the design considered a narrower road utilizing 2 -3.5m wide lanes. With the narrower lanes on-street parking would have to be ruled out as one parked car would impinge on the generally accepted 6m wide emergency vehicle route. The design options face the major limitation of the 20m right of way and the need to match existing grades at property line. The works need to be kept as narrow as possible to allow cut and fill slopes between the works and the existing grades along property line.

**Option 1 (Attachment #3)**

This has the most rural feel of the cross-section options. The centerline of the road is offset so that the works (outside edge of multi-use trail to back slope of ditch) are centered in the right
of way. The narrow road is the proper width of a rural road, but the shoulders have been narrowed. A shallow ditch is used to get the rural feel and the storm structures use an Ontario Provincial Standard bird cage lid that are typically used for rear yard catch basins. These lids may have clogging issues that might require additional maintenance. The shallow ditches would not permit the Town standard 500mm entrance culverts, 300mm culverts would have to used. The smaller culverts might have capacity issues or may require additional maintenance. The shallow ditches would not permit the Town standard 500mm entrance culverts, 300mm culverts would have to used. The smaller culverts might have capacity issues or may require additional maintenance. The shallow ditches would not permit the Town standard 500mm entrance culverts, 300mm culverts would have to used. The smaller culverts might have capacity issues or may require additional maintenance.

The works are the widest of the options at 15.2m leaving just 2.4m on either side of the works to grade back to existing ground elevation. In “fill” sections of the road, where the new road centerline road is higher than the existing centerline and the abutting property, there would be the risk of ditch water discharging onto private land.

This cross-section does seem to work with the existing utilities.

**Option 2 (Attachment #3)**

This a hybrid between rural and urban with a bit more of a rural feel. The centerline of the road is offset so that the works (outside edge of multi-use trail to back of swale) are centered in the right of way. The storm structures are moved into the road and flat ribbon curbs line the asphalt to protect the asphalt from edge damage. Behind the curbs there are shallow swales that are underlain with gravel that would function like a French drain or low impact development (L.I.D.). The ground cover might be grass in a turfstone paver to harden the boulevard similar to the turfstone boulevards behind the curbs in the entrance section of the Snowbridge subdivision. Subdrains would drain the road and boulevard granular base. Entrances would be paved drive through the shallow swale. The swales would be graded to direct the water to the road at each storm structure. The swales would require annual maintenance to remove winter sand and debris, there is not much tolerance. The works are slightly narrower that Option 1 at 14.3m leaving almost 3.0m on either side of the works to grade back to existing ground elevation. As mentioned above, in “fill” sections of the road there would be the risk of road water discharging onto private property.

This cross-section has some conflicts with existing utilities.

**Option 3 (Attachment #3)**

This is also a hybrid with a bit more of an urban feel. The centerline of the road is offset so that the works (outside edge of multi-use trail to 2m behind curb) are centered in the right of way. The storm structures are off the road and barrier curb will be utilized at the structures so that curb face storm inlets can be used. This will provide clearance from the 400mm water main. The rest of the road could use mountable curbs however, barrier curbs would be a better option to produce a better overland flow route. The boulevards would be graded to improve the overland flow route. The works are the narrowest of the options at 13.7m providing more than 3m on each side of the works to grade back to existing ground elevation.

This cross-section seems to work with the existing utilities. The centerline offset might need to be adjusted to work with the existing utilities. When the utilities were installed, they did not follow a consistent running line.
Option Selection Discussion

The options are presented for discussion. Council may wish to direct Staff to go ahead with one of the options or develop others. The selection of an option will allow the 30% design to advance. The project is still in the preliminary engineering phase. Some of the attributes of the options are compared on a spreadsheet found in Attachment #4.

Conclusion

Before Peel Street can be reconstructed the need for a trunk water main must be clarified. The Town is currently advancing a Municipal Class Environmental Assessment (MCEA) to evaluate and select the preferred alternative to address the Town’s Water Storage and Distribution System needs in the West Pressure Zones 1, 2 and 3.

Before Peel Street can be reconstructed, the sanitary servicing extension should be understood. The un-serviced lands that front on Peel Street should likely be serviced. The Rainmaker Estates project might be serviced by a gravity sewer off Peel Street pending a functional servicing study by the developer.

The cross-sections being discussed may be used for Peel Street only as a one-off design or it may become a new Town standard cross-section drawing.

North of Cameron Street a modified rural road section with a sidewalk is proposed for the remainder of Peel and Bay Street West up to the Little Beaver River. This section of the project is not funded by Development Charges. The ditches in this section will convey the storm water collected on Peel to Georgian Bay and the Little Beaver River. The sidewalk is possible because a ditch can be eliminated across the frontage of the WTP, the storm water drains to the bay and the river from the site.

During the preliminary engineering process, an individual asked about the Environmental Assessment (EA) process that was followed. The work proposed for the reconstruction of Peel Street fall under an A or A+ designation. This means that the work is pre-approved and can advance with notification to the public. The public information and consultation process that has been followed is not a Municipal Class Environmental Assessment requirement.

Staff is seeking direction from Council to advance the preliminary design with one of the road cross-section options or explore other options.

The Town’s Consultant MTE Engineering reports that their work is on hold until a road cross-section is confirmed. Once the cross-section is confirmed they can complete the functional design.

Much of the work on the 30% design is complete. Once the functional design is complete the 30% design drawings would be finished in 2 to 3 weeks.
The Preliminary Design Report, the final deliverable of MTE’s assignment, has not been advanced. MTE suggest the Preliminary Design Report would be finalized by mid-May.

The Preliminary Design assignment does not include a PIC to present the Preliminary Design Report to the public. Council may wish to have MTE undertake an additional PIC to present a selected cross-section or all three options to seek feedback from the public.

E. The Blue Mountains Strategic Plan

<table>
<thead>
<tr>
<th>Goal #3:</th>
<th>Support Healthy Lifestyles</th>
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<tbody>
<tr>
<td>Objective #1</td>
<td>Promote the Town as a Healthy Community</td>
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</table>

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<tr>
<th>Goal #4:</th>
<th>Promote a Culture of Organizational &amp; Operational Excellence</th>
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<tbody>
<tr>
<td>Objective #5</td>
<td>Constantly Identify Opportunities to Improve Efficiencies and Effectiveness</td>
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</table>

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<tr>
<th>Goal #5:</th>
<th>Ensure Our Infrastructure is Sustainable</th>
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</thead>
<tbody>
<tr>
<td>Objective #3</td>
<td>Implement Best Practices in Sustainable Infrastructure</td>
</tr>
<tr>
<td>Objective #4</td>
<td>Ensure that Infrastructure is Available to Support Development</td>
</tr>
</tbody>
</table>

F. Environmental Impacts

The construction activities will release greenhouse gases. Encouraging Active Transportation will reduce vehicle use.

G. Financial Impact

The preliminary engineering for Peel Street Reconstruction was approved in 2018 with the majority of the funding coming from Roads and Related Development Charges, and minor funding from the Water and Infrastructure and Public Works Asset Replacement Reserve Funds.

The Final Design and Construction was approved in the 2020 Capital Budget. This project won’t proceed in 2020 until Staff have a better understanding of the water distribution needs for the west part of the Town. This understanding will be determined through the Westside Water Storage and Distribution Class EA. Additional considerations will need to be given to future wastewater servicing needs on Peel Street.

H. In Consultation With

Shawn Everitt, CAO
Shawn Carey, Director of Operations
Sam Dinsmore, Deputy Treasurer/Manager of Accounting and Budgets
Allison Kershaw, Manager of Water Wastewater Services
Jim Mc Cannell, Manager of Roads and Drainage
Trevor Houghton, Manager of Planning
I. Public Engagement

The topic of this Staff Report has been the subject of a PIC which took place on July 11 and 13, 2019. Those who provided comments at the Public Meeting and/or Public Information Centre, including anyone who has asked to receive notice regarding this matter, have been provided notice of this Staff Report.

J. Attached

- Attachment #1 Resolution of Council November 13, 2019
- Attachment #2 Map of Properties that Potentially Use Peel Street
- Attachment #3 Option 1, 2 and 3 of Rural/Urban Cross-section with Multi-Use Trail
- Attachment #4 Option Comparison Spreadsheet

Respectfully submitted,

Michael Campbell
Construction Coordinator

Shawn Carey
Director of Operations

For more information, please contact:
Michael Campbell, C.E.T.
cc@thebluemountains.ca
519-599-3131 extension 275
November 13, 2019

Moved by: Odette Bartnicki        Seconded by: Jim Uram

THAT Council receive Staff Report CSOPS.19.065, entitled “Peel Street Reconstruction Public Information Centre Report”;

AND THAT Council receive the Peel Street Reconstruction Public Information Centre (PIC) Report by MTE Consultants Inc.;

AND THAT Council direct staff to bring a report to a future Committee of the Whole meeting with options on the level of service on Peel Street, CARRIED.

CERTIFIED TO BE A TRUE COPY

Krista Royal, Deputy Clerk
Peel Street

Option 1

Rural Look with Storm in Ditch
(Works 15.2m wide)
Peel Street

Option 2
Storm in Road
Shallow Swales
(Works 14.3m wide)
Peel Street
Option 3
Storm in Road
Overland Flow Route improved
(Works 13.7m wide)
## Option Comparison Spreadsheet

<table>
<thead>
<tr>
<th>Option</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodates all road users</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Width of works</td>
<td>15.2m</td>
<td>14.3m</td>
<td>13.7m</td>
</tr>
<tr>
<td>Storm system</td>
<td>Catch basins and small culverts prone to being plugged, increased maintenance,</td>
<td>Shallow swale has little capacity for debris, increased maintenance, could be lined with turfstone.</td>
<td>Best option for collecting storm water and creating an overland flow route.</td>
</tr>
<tr>
<td>Draining road structure</td>
<td>Likely</td>
<td>Questionable</td>
<td>Most conventional</td>
</tr>
<tr>
<td>Conflicts with existing utilities</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Separation of active transportation from vehicles</td>
<td>The 0.5m deep ditch should provide separation.</td>
<td>Virtually no separation.</td>
<td>Most conventional separation provided by barrier curb.</td>
</tr>
<tr>
<td>Cross section aesthetics</td>
<td>Most rural look with defined ditches and gravel shoulders, least robust design due to gravel shoulders.</td>
<td>Most hybrid, ribbon curb and shallow swale, turfstone could replace ribbon curb to support asphalt and harden swale.</td>
<td>Most urban, most robust design, the multi use trail could be sinuous where cut/fill slopes not required.</td>
</tr>
<tr>
<td>Vehicle access to properties</td>
<td>Entrances with 300mm culverts.</td>
<td>Entrance must have dip to match shallow swale.</td>
<td>Normal urban entrance.</td>
</tr>
<tr>
<td>Multi Use Trail</td>
<td>Cross street access to trail is limited by the ditches, cyclists should use trail.</td>
<td>Cyclist should use trail rather than narrow road.</td>
<td>Cyclist should use trail rather than narrow road.</td>
</tr>
</tbody>
</table>