Minutes
Municipality of West Grey Committee of the Whole
Held on Tuesday, April 23, 2019 at 9:00 a.m.
At the Council Chambers – West Grey Municipal Office

Council
Mayor Christine Robinson, Deputy Mayor Tom Hutchinson,
Councillor Beth Hamilton, Councillor Rebecca Hergert,
Councillor Doug Hutchinson, Councillor Geoffrey Shea,
Councillor Stephen Townsend

Staff
Laura Johnston, CAO/Deputy Clerk; Mark Turner, Clerk; Brent Glasier, Director of Infrastructure and Public Works

Others
Katherine Hemstock, EIT, WSP Canada Inc.

Declarations of Pecuniary Interest & General Nature Thereof - None

Items of Business
The Director of Infrastructure and Public Works provided a brief background leading to the completion of the Structure Rating and Rationale Reports for bridges in West Grey.

Katherine Hemstock, EIT, from the engineering firm of WSP Canada Inc., reviewed the Structure Rating and Rationale Reports for bridges/culverts in the former Townships of Bentinck, Glenelg, and Normanby completed by WSP on behalf of the Municipality of West Grey.

The assets reviewed within the reports include bridges and culverts greater than three (3) metres in span as per the criteria for a structure defined by the Ontario Structure Inspection Manual (OSIM). There are a total of 106 structures, including the Durham and Neustadt Dams. The typical lifespan of a structure is between 75 and 100 years.

The Report detailed the age of the bridges and provided a Bridge Condition Index (BCI) regarding the condition of each bridge that was assessed. The condition and current and future needs of each bridge structure are also assessed on an ongoing basis during the biennial Ontario Structure Inspection Manual (OSIM) inspections.

The evaluation of the structures are based on the following primary criteria: bridge condition index (BCI), asset value, and emergency services-EMS and Fire; and the following secondary criteria: traffic, transportation network, municipal services-school board and waste management, historical significance, and detour impact. The primary and secondary criteria were each given a weighting criteria for rating purposes. An overall structure rating matrix was developed through the weighting system for the primary and secondary criteria.
Recommended actions for certain structures (bridges/culverts) based on the aforementioned criteria were provided by WSP, ranging from recommended permanent closure; continued monitoring, completion of rehabilitation work, potential closure at end of lifecycle; completion of rehabilitation work, replacement at end of lifecycle; completion of rehabilitation work, potential closure at end of lifecycle; completion of rehabilitation work, replacement at end of lifecycle; completion of rehabilitation work, potential closure at end of lifecycle; completion of rehabilitation work, replacement at end of lifecycle; completion of detailed inspection and required rehabilitation work, potential closure at end of lifecycle.

The four bridges and one culvert in Bentinck that are not candidates for rehabilitation, and therefore, potential candidates for closure, would cost an estimated $4,750,000 to replace. The four bridges and two culverts in Glenelg that are not candidates for rehabilitation, and therefore, potential candidates for closure, would cost an estimated $4,700,000 to replace. The four bridges and two culverts in Normanby that are not candidates for rehabilitation, and therefore, potential candidates for closure, would cost an estimated $3,850,000 to replace.

The Committee of the Whole questioned what the main sources of information were used to complete the studies. Katherine Hemstock indicated the main source of information include the OSIMs, extensive photos, history of bridges, and other rating criteria noted in the reports. The Committee of the Whole asked if it is possible to obtain OSIM information, and comments from agencies. Ms. Hemstock stated it is possible, and the Director of Infrastructure and Public Works indicated the OSIM inspection reports will be added to the West Grey website.

The Committee of the Whole questioned why traffic count were only conducted in September (2016), and not during other seasons. The Director of Infrastructure and Public Works stated the Ministry of Transportation Ontario recommends using either a Spring or Fall traffic count, noting it took 2 ½ months for West Grey staff to complete the traffic counts.

The Committee of the Whole questioned if traffic counts for County roads can be obtained from Grey County, and the Director of Infrastructure and Public Works replied that they can be provided.

The Committee of the Whole mentioned that historically a 15 tonne load limit was placed on bridges, and questioned what is the present weight limit for new bridges. Ms. Hemstock indicated new bridges generally have a 20 tonne load limit.
The Committee of the Whole noted the focus of the reports is on closures, so asked why is asset value used as a criteria. Ms. Hemstock responded that BCI deals with the current and short term, and the asset value criteria captures multiple cycles with needs to be assessed on an on-going basis through time.

An error on page 6 in the Glenelg Report will be changed as it notes on Table 3 that Structure G-044 has an overall rating of 16 whereas it should have an overall rating of 3.

The Committee of the Whole requested the structures listed in Table 1 in each study to include reference to the lots and concessions. Ms. Hemstock indicated she can provide lots and concessions references for each structure.

The Committee of the Whole sought clarification respecting the methodology for deriving the BCI. Ms. Hemstock stated the BCI system is based on certain conditions for each element for bridges, and each of the elements are given quantities and percentages to provide a BCI matrix.

The Committee of the Whole questioned if it is possible to re-generate charts without including the asset value criteria, and Ms. Hemstock stated it is possible and she will provide this information.

The Committee of the Whole indicated it will need to consider the distance between structures as part of the assessment. The Director of Infrastructure and Public Works mentioned that it may be appropriate to close both structures that are near to each other in some circumstances, if there are no or few properties in between.

The Committee of the Whole asked if the traffic counts map can be provided in a more legible format. Ms. Hemstock replied she will endeavor to do so.

The Committee of the Whole asked if agricultural societies and like rural groups were consulted. Ms. Hemstock noted not at this time, however, general considerations are taken into account in the studies, and most structures recommended for closure have insufficient load limits for large farm and commercial vehicles.

The Committee of the Whole asked if County assets can be provided on mapping to further assist in determining any impact on potential closures. The Director of Infrastructure and Public Works stated he will attempt to do so for a future meeting.
The Committee of the Whole mentioned it should be aware of any Grey County assets that might have future work to be done in the area of West Grey assets that might need work as well, to determine if any savings could be achieved by mutual tendering for work, as well as any planned uploading or downloading of Grey County and West Grey assets. The Mayor and Deputy Mayor will bring forward this issue at Grey County Council/Grey County Transportation Department.

The Committee of the Whole questioned what the difference is in the nature of abutment repairs compared to other repairable bridge items. The Director of Infrastructure and Public Works stated that no rebar were placed in bridges constructed in the 1920s so they are not as structurally sound, and a lot of bridge abutments are cracked beyond repair.

The Committee of the Whole questioned if the County GIS mapping has the ability to populate maps to indicate where businesses and emergency responders, for instance, are located. The CAO/Deputy Clerk replied that business mapping is underway with the County GIS Coordinator and is going to be awhile before completed.

The Committee of the Whole questioned if bridge replacement and rehabilitation costs can be paid through loans and grants, as opposed to directly on the tax base. Mayor Robinson indicated this can be discussed with the Director of Finance/Treasure at a future meeting.

The Committee of the Whole questioned what are the criteria used to determine the potential transfer of assets between West Grey and Grey County. The Director of Infrastructure and Public Works replied that a road rationalization study was completed by Grey County a number of years ago using certain criteria to determine how assets should be uploaded or downloaded.

The Committee of the Whole asked if the estimated values for replacement/rehabilitation are for high end or average upgrades. Ms. Hemstock responded that costs fluctuate year to year with tenders, noting the study estimates are conservative, and are based on the best time to request tenders to get competitive bids and on current value of materials. The cost of rehabilitation will rise as time goes by.

The Committee of the Whole noted the use of prefabricated bridges can be considered as a less expensive option with the same life expectancy. The Committee of the Whole asked if pony truss bridges are still constructed, and Ms. Hemstock replied that they are not, as new steel truss structures would be utilized.
The Committee of the Whole asked if the Ontario historical bridge listing indicates what historical values relate to each bridge. Ms. Hemstock replied that this information is available on-line and will be provided.

The Committee of the Whole questioned how traffic patterns are assessed, Ms. Hemstock responded that traffic criteria provides a range, and within the range, consideration is given to immediate local roads and proximity to higher tier roads and communities.

The Committee of the Whole asked if it is more difficult to close bridges with heritage designations. Ms. Hemstock stated it could come up through public comments or flagged with the environmental assessment – it is more of a road block when replacing heritage bridge structures as opposed to rehabilitating heritage bridges.

The Committee asked what are the requirements for closing a bridge. Ms. Hemstock indicated there is no need for a full municipal environmental assessment, and public consultation is at the discretion of the municipality. There is no other enabling legislation relating to bridge closures other than in the environmental assessment process.

The Committee of the Whole noted there is a reference in the studies that some prices for items are rising higher than the rate of inflation, and questioned which items are applicable. Ms. Hemstock stated that some materials, such as the price of asphalt increased dramatically a few years ago due to the price of oil, however, prices do fluctuate, same as for concrete, and environmental legislation has increased production costs, as has labour costs.

The Committee of the Whole asked how WSP decided upon the weighting for each criteria. Ms. Hemstock replied that WSP used other studies that used similar weightings for criteria, and that weightings are based on the potential impact of each criteria.

The Committee of the Whole questioned if the Kennedy Bridge traffic counts were scored when the bridge was open or closed. Ms. Hemstock indicated traffic counts were based on upstream and downstream traffic on roads in the vicinity of the Kennedy Bridge.

The Committee of the Whole noted consideration has to be given to potential future development in the municipality, such as the Forest Creek Estates Subdivision.
The Committee of the Whole questioned where there are records of bridge maintenance, and typical maintenance completed each year. The Director of Infrastructure and Public Works stated they are identified in the OSIM document.

The Committee of the Whole asked what does the typical bridge/culvert yearly annual maintenance entail. The Director of Infrastructure and Public Works mentioned it includes the washing of bridges and structures each year to get rid of salt and dirt accumulations, and Public Works staff will do visual inspections at that time. Trimming and brushing on or near bridges is also completed to ensure signs are visible near the structures. Debris around abutments is also eliminated. More extensive remedial work is completed by contractors.

The Committee of the Whole sought clarification if no maintenance is done on bridges recommended for closure. Ms. Hemstock stated in cases were bridges are beyond the point of rehabilitation, then no major maintenance work will be done.

The Committee of the Whole questioned if bridge closures include removal of the structures, and can bridges be retained for other uses. Ms. Hemstock stated it is up to the municipality, and a closed bridge could be used for pedestrian or snowmobile use, however, an assessment would have to be done to determine if it would pass a structural evaluation for those uses. If the bridge structure was not removed, the bridge will have to be barricaded and signage erected. The super-structure could be removed with abutments left in place to avoid having to work in the water.

The Committee of the Whole questioned if the Director of Infrastructure and Public Works concurs with the WSP recommendations. The Director noted he does concur with the report, although the WSP evaluation was more comprehensive in their review. The Director clarified that the closure recommendations do not necessarily mean the bridges will close immediately as some of these bridges could last for more than 20 years.

The Committee of the Whole asked if water proofing should be done to all structures to avoid having to wash them each year. Ms. Hemstock indicated water proofing is utilized when rehabbing a concrete deck, and noted there is no merit in doing abutments as it has to be overlain with something else (i.e. asphalt surface) as they are prone to water damage. The Director of Infrastructure and Public Works added that abutments aren’t generally exposed to salt.

The Director of Infrastructure and Public Works showed Committee of the Whole members an example of an OSIM inspection report.
The Committee of the Whole questioned why rehabilitation work is being completed on Bridge #51 at C.18 Normanby when it has a BCI rating of 60, instead of completing work on a structure that is identified as more urgently needing rehabilitation. Ms. Hemstock indicated the bridge is not recommended for closure, and is important for the area.

The Committee asked how the next steps in the process are determined. Ms. Hemstock stated it requires a strategic and management of assets discussion, and determination of how best to allocate financial resources.

The Committee of the Whole questioned if there should be more regular casual inspections for bridges with integrity issues. The Director of Infrastructure and Public Works indicated that WSP provides detailed maintenance reports each year, and public works will look after minor deficiencies. The Public Works Supervisor will also report to the Director if he sees deficiency issues.

The Committee asked if there are other issues not noted in the studies that they should be made aware of. The Director of Infrastructure and Public Works noted the public reaction for possible closures is one issue. Ms. Hemstock added that potential structure closures will be a heated issue, but stated it is important to remember that it is about the overall safety and financial welfare of West Grey ratepayers as a whole.

The Committee of the Whole questioned if the bridge rationalization studies information can be captured in the West Grey asset management plan. Ms. Hemstock suggested that information could be updated in conjunction with the biennial OSIM reports, and update the BCIs through site inspections. The Committee of the Whole also asked if WSP has, or knows of, any tools developed/being developed that could be used to assist West Grey in the development of West Grey’s Asset Management Plan. Ms. Hemstock responded “no” to both aspects of the question.

Ms. Hemstock will be invited to the next meeting to further discuss the studies.

The Committee of the Whole asked how should the municipality budget for cost of closure of bridges. Ms. Hemstock stated there are no comments in the studies on this issue, however, she can provide some ballpark estimates at the next meeting.

Page 15 of the Glenelg report will be amended as the P101 structure is referred to as a culvert whereas it is actually a pedestrian bridge.
Hergert-Townsend, Resolved that, the Committee of the Whole hereby
schedules a Committee of the Whole meeting for May 13, 2019, 9:00 a.m., to
further discuss the bridge rationalization studies. Carried.

Adjournment
Hergert-Townsend, Resolved that, we do now adjourn at 2:47 p.m., to meet
again on April 30, 2019, 9:00 a.m., or at the call of the Mayor. Carried.

(Signed) (Signed)
Christine Robinson, Mayor Mark Turner, Clerk