



ESSELTINE DRAIN Town of Kingsville

IN THE MATTER OF THE *DRAINAGE ACT*, R.S.O. 1990, CHAPTER D.17, AS AMENDED.

AND IN THE MATTER OF: An appeal to the Agriculture, Food and Rural Affairs Appeal Tribunal by **Carolyn Stockwell** under sections 48 and 54(1) of the *Drainage Act*, **John and Jennifer Fittler** under section 54(1) of the *Drainage Act*, and **1552843 Ontario Ltd. c/o Walter Branco** under section 54(1) of the *Drainage Act* with respect to the **Esseltine Drain**, in the Town of Kingsville, Ontario.

Before:

Paula Lombardi, Vice-Chair; Edward Dries, Vice-Chair; Jim McIntosh, Vice-Chair

Appearances:

Paul Courey, counsel for the Appellant, Carolyn Stockwell
Ed Hooker, counsel for the Respondent, the Town of Kingsville
Carolyn Stockwell, Appellant
Ken Vegh, Drainage Superintendent for the Town of Kingsville
John Fittler, Appellant
Mr. Dekker, appearing on behalf of Mr. Mucci, affected landowner
Scott Shilson, affected landowner
Christina Porrone, affected landowner
Will Bartlett, P. Eng., appearing as the Engineer in support of Ms. Stockwell's appeal
Mr. McCready, P.Eng., appearing as the Engineer for the Town of Kingsville
Mr. Lafontaine, P.Eng., appearing as the Engineer for the Town of Kingsville

DECISION OF THE TRIBUNAL

Background

The Tribunal held this hearing in the Town of Kingsville over a period of three days, November 20 and 21, 2018 and December 7, 2018. The Engineer's Report dated June 17, 2016 for the Esseltine Drain (the "Engineer's Report") was prepared by RC Spencer Associates Inc. and signed by Richard C. Spencer P. Eng. and Lou Zarlenga P. Eng.

An appeal was filed by Carolyn Stockwell under sections 48 and 54(1) of the *Drainage Act*, (the “Act”), **John and Jennifer Fittler** under section 54(1) of the *Act*, and **1552843 Ontario Ltd.** c/o Walter Branco under section 54(1) of the *Act*.

Jennifer Astrologo, Director of Corporate Services/Clerk of the Town of Kingsville, performed the duties of the Clerk of the Tribunal.

Preliminary Matters

There is no dispute that the Appellants have standing. There is no dispute that RC Spencer Associates Inc. was the duly appointed engineer under section 78 of the *Act* to produce the engineering report, the assessments of which are the subject of these appeals. Mr. Courey as a preliminary matter did raise an issue that Mr. Zarlenga, P. Eng., Senior Engineer and Drainage Specialist who signed the Engineer’s Report for the Esseltine Drain was not available to testify at the hearing.

Prior to the hearing, the Tribunal issued an order making all landowners assessed or compensated in the Report parties to the hearing.

The Town of Kingsville (“Town” or “Kingsville”) filed an Affidavit of Service, dated August 7, 2018 and an Affidavit of Supplementary Service dated September 17, 2018 as proof that all parties had been served with the Notice of Hearing.

Mr. Dekker on behalf of Mr. Mucci, Mr. Scott Shilson, and Ms. Christina Porrone all requested and were granted participant status.

As a preliminary matter, Mr. Shilson sought an extension of time to file an appeal before the Tribunal and be recognized as an Appellant. This request was denied. Mr. Shilson was a party to the hearing as a landowner assessed or compensated in the Engineer’s Report.

Mr. Walter Branco, President of 1552843 Ontario Inc., requested that the culvert that has been shown on plans and intended to serve a future stage of the subdivision be removed from the drainage works and that the assessment associated with the cost be removed from the Engineer’s Report. Mr. Branco indicated that if the culvert is required for a future stage of the subdivision the costs and other requirements can be dealt with through a development agreement.

On behalf of the Town, Mr. Hooker submitted Minutes of Settlement confirming the agreement between Mr. Branco and the Town. The appeal of Mr. Branco was therefore withdrawn.

The second preliminary matter raised by Mr. Courey related to the timing of the submission of the expert reports and additional information by the Town. Mr. Hooker, on behalf of the Town, submitted to the Tribunal background calculations that were reviewed by Mr. McCready relating to the calculation of the assessment values in the Engineer's Report. The Town's submission of additional information was made in response to a request made by the Tribunal. Mr. Courey expressed some concern with the manner of the communication, as the Tribunal had contacted the Town's Clerk directly to request the information. Mr. Courey acknowledged that the Town had copied him along with all of the Appellants on the response.

Mr. Courey also raised an issue with the credibility of the Engineer's Report as Mr. Zarlenga did not appear to provide evidence in support of the Engineer's Report. Mr. Lafontaine indicated that he was involved in the file during Mr. Zarlenga's tenure and attended the on-site meetings, Court of Revision and was involved in the preparation of the report and the assessment schedules.

Issues Raised

Appeals to the Esseltine Drain were filed under sections 48(1) and 54(1).

The section 48(1) appeals raise the following issues:

- a) The benefits set out in the Engineering Report are not commensurate with the costs; and
- b) The drainage works being proposed should be modified.

The compensation or allowances provided by the engineer are inadequate or excessive; and the engineer reported that the drain is not required. The section 54(1) appeal raises an issue with the distribution of the costs, assessments and benefits, of the Drainage Works.

It is normal practice for the Tribunal to hear the section 48 appeal before the section 54 appeal as it may potentially affect the allocation of the costs of the Drainage Works.

Hearing procedure

The parties agreed to a hearing procedure in order to reduce overlap of any testimony but allowing each party an opportunity to fully present and deliver their case and/or make any submissions in relation to their appeal(s).

The parties agreed that the section 48 appeals would be heard first following the normal practice with the appellants presenting their evidence first. The section 48 *Drainage Act* appeals would then be followed by the section 54 *Drainage Act* appeals and as set out in section 55 of the *Drainage Act*, the evidence of the Town's Engineer would be presented first.

The purpose of the Engineer's Report is to provide for the repair and improvements of the Esseltine Drain, being an existing municipal drain, and to convert the natural watercourse situated downstream of County Road 20 to a municipal drain. The repair and improvement of the drain is proposed under section 78 of the *Drainage Act*.

Evidence – Section 48 Appeals

Mr. Lafontaine, P.Eng., - Overview

Mr. Lafontaine was affirmed and provided an overview to the Tribunal of the Drainage Works. Mr. Lafontaine confirmed that he was involved in the preparation of the Engineer's Report with Mr. Zarlenga. Mr. Lafontaine indicated the he attended on-site meetings, was involved in the Court of Revision, assisted with the preparation of the Engineer's Report, and the preparation of the assessment schedule.

Mr. Lafontaine indicated that he was involved in the preparation of the Engineer's Report that is subject to this hearing but confirmed that the Engineers Report had been signed by Mr. Zarlenga. The Tribunal was advised that Mr Zarlinga has retired since submitting the Engineer's Report and was not present at the hearing. Mr. Courey raised a concern with Mr. Zarlenga's absence from the hearing.

Mr. Lafontaine indicated that the purpose of the Engineer's Report is to repair and improve the existing Esseltine Drain north of County Road 20 and improve the natural watercourse and ravine from County Road 20 downstream to Lake Erie. Authorization for the report had been granted by the Town under the authority of section 78 of the *Drainage Act*.

The Esseltine Drain provides outlet to approximately 300 hectares of land. -Mr. Lafontaine indicated that the Drainage Works being proposed include bringing fill into the ravine and natural watercourse located south of County Road 20 and constructing a concrete cable mat channel lining to stop the erosion. According to Mr. LaFontaine, some properties in the Esseltine Drain area are experiencing significant toe erosion and bank failure and the purpose of the drainage works is to prevent further erosion.

Mr. Lafontaine reviewed the calculations and rationale behind the allowances set out in the Engineer's Report. The allowances were all determined based on compensation for the land used, the land taken, and also provided tree allowances and other allowances for the Drainage Works.

Mr. Lafontaine reviewed the schedule of assessment in the Engineer's Report and indicated that the first step in preparing the schedule was to break out any special benefits or special assessment costs that would be assessed to specific properties. The remaining costs would then be levied against all properties within the drainage area. The majority of the costs of the works on the Esseltine Drain were in the downstream reach of the drain and related to the filling, grading and erosion protection required in the natural watercourse and ravine.

A benefit to outlet ratio of 20% benefit and 80% outlet was applied. Only 28 properties of the 447 located in the watershed were assessed for a benefit. The properties south of County Road 20 are predominantly residential and north of County Road 20 there are a mixture of urban and rural land uses along with a number of large greenhouse developments.

Benefit assessment was allocated to all affected lands adjacent to the drain that received a benefit or betterment from the Drainage Works. A benefit of approximately \$7,000 per hectare was applied along the existing watercourse due to the reconstruction of the existing flow channel.

In determining outlet, an equivalent hectares method and equivalent land use for each property was applied.

Mr. Shilson

Mr. Scott Shilson requested and was granted participant status at the hearing. Mr. Shilson advised the Tribunal that he owns lands adjacent to the Esseltine drain in the area downstream of County Road 20. Mr Shilson is a drainage contractor and he spent considerable time with Mr. Zarlenga in relation to construction cost estimates. Mr. Shilson stated that the project is needed and should proceed as designed.

Mr. Dekker

Mr. Dekker requested and was granted participant status on behalf of the Mucci Group. Mr. Dekker advised that the Mucci Group owns and operates numerous farms in the drainage area. The Mucci farms have been assessed for the Drainage Works in the amount of approximately \$1.9M representing 50% of total cost of the Drainage Works

Mr. Dekker expressed concerns relating to the assessments set out in the Engineer's Report particularly as they apply to the properties located south of County Road 20. Mr. Dekker was concerned with the overall costs of the Drainage Works.

The Drainage Report referred to the stormwater management ponds that were also dealt with at the Court of Revision. Mr. Dekker indicated that the stormwater management ponds restrict flow going into the Esseltine Drain and should mitigate the assessed value of the roof area applied to the Mucci property. Mr. Dekker expressed concerns with the assessment applied to the Mucci properties, as the properties did not receive any credit for their stormwater management ponds.

Mr. Dekker confirmed that the Mucci group was not opposed to the reconstruction of the Esseltine Drain and recognizes the need for repairs. The Mucci group is concerned over how the assessments have been allocated specifically between benefit and outlet liability. The Mucci group expressed a concern that the residences located south of County Road 20 receive a considerable benefit from the Drainage Works and should be paying more for the costs associated with the Drainage Works.

Ms. Porrone

Ms. Porrone requested and was granted participant status and expressed concerns with the amount of the assessment applied to her property. Ms. Porrone expressed concerns with her property being assessed more than other properties in the area. The Tribunal notes that Ms. Porrone is developing a subdivision in the area and was assessed based on the proposed land use.

Ms. Stockwell – Appellant

Ms. Stockwell confirmed that she owns approximately 35 acres and lives at the property legally described as Lot 11, Concession 2. Ms. Stockwell has lived at the property her entire life. The property was created by a grant from the crown in the 1700s and has been owned by Ms. Stockwell's family for approximately 200 years.

In describing the property and the historical character of the area, Ms. Stockwell indicated that it has good soil, good crops, and that orchards are located to the west of her property with cash crops and farmland in the surrounding area. Ms. Stockwell currently grows organic hay on the property.

Ms. Stockwell recalls the area being predominantly agricultural including hogs, cash crops and orchards. The Esseltine Drain was in existence and did provide drainage to the property when Ms. Stockwell was born. Ms. Stockwell indicated that the historical land uses along the Esseltine Drain was predominantly and traditionally agricultural and there were no large greenhouses in the area.

Ms. Stockwell advised the Tribunal that to her knowledge there have been no problems with the ravine and to her recollection no projects undertaken to reduce the erosion of the ravine. In Ms. Stockwell's opinion the development activities in the surrounding area changed the nature of the area. Ms. Stockwell indicated that the Esseltine Drain was established as an agricultural drain and the development of the area had not been appropriately planned by the Town.

In describing the current area and surrounding lands, Ms. Stockwell indicated that the lands located to the west that were historically an orchard are now a large industrial park. The lands to the south are scheduled for development and the first greenhouses in the area are located to the east.

Ms. Stockwell indicated that she appeared before Town Council to express concerns about the development of the greenhouses in the area. Ms. Stockwell noted that initially the greenhouses were not required to include stormwater management facilities on site, and surface runoff from outside the watershed boundary was directed to the Esseltine Drain. To resolve this issue, the Town required the construction of a stormwater management ponds and regrading of the Mucci property.

Ms. Stockwell indicated that the Fittler lands located to the north are used for conservation and traditional farming purposes. Ms. Stockwell expressed the opinion that any new development should be required to construct their own drainage. Ms. Stockwell confirmed that her farm consists of predominantly sandy loam and clay soil.

Ms. Stockwell indicated to the Tribunal that she did not see any benefit to her property from the Drainage Works being proposed. In response to questions from the Tribunal, Ms. Stockwell advised that her property does not have any subsurface tile drainage and that the old tiles that were previously located down the laneway were damaged beyond repair. The surface water on her property is dealt with through flat ditches and furrows and that there are no defined surface drains. Ms. Stockwell did indicate that a catchbasin is located in the southwest corner of her property but that she did not install the catchbasin. Although Ms. Stockwell indicated that she just recently discovered the catchbasin, in her opinion it does not provide any benefit and did not understand why it was installed.

Mr. Bartlett, P. Eng. - Engineering Evidence on behalf of Ms. Stockwell

Mr. Bartlett provided the Tribunal with an Engineer's Report along with his CV outlining the drainage projects he has been directly involved with throughout his career. Mr. Bartlett indicated that he has been involved in approximately 1,200 drainage reports under the *Drainage Act*.

Mr. Bartlett confirmed that he walked Ms. Stockwell's property and advised that it consists of a traditional farmhouse and the associated buildings. The topography on the property generally slopes from northeast to southwest with a low ridge in the middle of the farm that appears to obstruct the flow of surface water. There is no evidence that Ms. Stockwell's property is systematically tile drained. Mr. Bartlett also indicated that the soil appeared to be sandy in nature. It was his opinion that the proposed improvements on the Esseltine drain would provide no benefit to the Stockwell lands.

It was Mr. Bartlett's opinion that the septic systems on the lands adjacent to the natural watercourse south of County Road 20 are impacting groundwater by adding more water and exacerbating the seepage problem and, as a result, contributing to the erosion problem. Mr. Bartlett referred to the Golder report, the geotechnical report prepared for the Town, confirming that groundwater seepage is an issue. The Golder Report identified the ravine as a natural watercourse. Mr. Bartlett indicated that he did not see any calculations to differentiate baseflow from the stream.

It was Mr. Bartlett's opinion that without the drain the ravine would be subjected to natural erosion. It was Mr. Bartlett's opinion that the residential subdivision was impacting on the ravine. In the case where the land is vacant or in agricultural use it would be possible to flatten the slope of the banks and move the material into the ravine to partially fill the ravine and stabilize the banks. The Engineer's Report is proposing to import fill to raise the height of the ravine that significantly increases the cost of the Drainage Works. When questioned about whether the Drainage Works were required for the proper functioning of the Esseltine Drain, Mr. Bartlett was unable to determine, in his opinion, what is deficient and what needs to be repaired. Mr. Bartlett indicated that he did not observe any deficiencies of the drain along County Road 34.

Mr. Bartlett was unable to comment on whether the stormwater management ponds for the Mucci properties (greenhouses) are sufficient to control the surface water runoff from these properties into the drain. However, it was Mr. Bartlett's opinion that the stormwater management ponds do not affect the volume of water entering the Esseltine Drain.

Mr. Bartlett confirmed that every property in the drainage area is contributing water to the Esseltine Drain. Mr. Bartlett confirmed that the water flows throughout the Esseltine Drain to the ravine causing the toe erosion. Mr. Bartlett was of the opinion that seepage was a factor for the erosion which is supported by the Golder Report. On cross-examination, Mr. Bartlett confirmed that he was not asserting that seepage was the primary cause of the erosion nor did he take the position that the work does not need to be completed.

Mr. Bartlett confirmed that he was not presenting any alternative to the Drainage Works being proposed by the Engineer's Report. Mr. Bartlett indicated during cross-examination that the stormwater management ponds may not provide a benefit if they are not coordinated to work together. However, he did not provide any data to support that belief. Mr. Bartlett did confirm that he did not look at the Mucci site and cannot recall reviewing the Golder Report prepared by the Town on the stormwater management pond and berm.

In response to questioning from the Tribunal, Mr. Bartlett confirmed that if the drain never existed there would be no toe erosion. Mr. Bartlett also confirmed that there was no data available to determine whether the ravine would be impacted if there was no drain.

Mr. Bartlett also confirmed that the ditch inlet catchbasin at the corner of the Stockwell property was constructed in a manner to accept surface water and there is a berm in place indicating that there have been surface water flows in the area. It was his opinion that the inlet structure at the southwest corner of Ms. Stockwell's property could accept water as the property naturally slopes from the northeast to southwest and he doubted that it would accept any water from the neighbouring properties located to the south or west.

Mr. Bartlett also confirmed that he did not complete any calculations on the number or location of the septic systems in the area that could be contributing to seepage into the ravine. It was also determined that Mr. Bartlett did not take a topographical survey of the ridge he observed in the middle of Ms. Stockwell's farm.

Mr. Vegh, Town of Kingsville Drainage Superintendent

Mr. Vegh had been the Drainage Superintendent for the Town of Kingsville for approximately 10 years since June 2009 and is familiar with the Esseltine Drain and the Drainage Works.

Mr. Vegh confirmed that in an effort to be open and transparent, the Town held a series of public meetings and a question and answer session with the Engineer. The first on-site meeting was held in May 2015 and provided an opportunity for the area residents to ask questions. A summary of this meeting was provided as part of the Town's evidence.

Mr. Vegh confirmed that he walked the Esseltine Drain on numerous occasions and observed fallen trees, land erosion on both sides of the banks and obstructions that have caused the water flows to find the easiest path and, in his opinion, is in a general state of disrepair.

Mr. Vegh confirmed that the residential dwellings located close to the natural watercourse and ravine did not contravene the Town's by-laws. He had discussed the matter with the Town's Chief Building Official and Municipal Services was not made aware of any unlawful dwellings.

Mr. Vegh indicated that the water from Ms. Stockwell's property could be going to the catchbasin located on the DiMennema property. Mr. Vegh confirmed that the catchbasin at the Stockwell property is level with the surface of the land. However, Mr. Vegh did confirm that not all of the surface water flow from Ms. Stockwell's property could go into the catchbasin because some areas of the property are too low to naturally drain into the inlet.

Mr. Vegh confirmed that the request for the Drainage Works was initiated by the road authority. On cross-examination, Mr. Vegh confirmed that there was a complaint about the drainage in the area from a landowner located south of County Road 20.

Mr. McCready, P. Eng.

Mr. McCready was qualified as an expert witness in drainage matters and indicated that he has been working with RC Spencer Associates since approximately September 2016. In providing an overview of the Drainage Works, Mr. McCready indicated that surface water flows were resulting in damage to a downstream natural watercourse and ravine area that could no longer accept flows without damage.

Mr. McCready confirmed that under section 78 of the *Drainage Act* the Town is responsible for maintaining and repairing drainage works. Mr. McCready reviewed the authority of the municipality and in his opinion one of the projects that can be undertaken by the Town under section 78 of the *Drainage Act* and includes improving, extending to an outlet or altering drainage works. It was noted that there is nothing in section 78 of the *Drainage Act* relating to the request of an owner or road authority. Council on their

own initiative can commence the Drainage Works to implement better drainage and a petition is not required.

Mr. McCready confirmed that he reviewed the Golder Report prepared for the Town. That report suggested that seepage from the adjacent banks of the ravine was a natural and ongoing occurrence that has resulted in a minor degree of toe erosion. However, in his opinion, the ravine was being much more severely damaged by scour from flows within the channel from the upstream watershed.

Mr. Courey objected to Mr. McCready's evidence on the basis that he has no history with the Esseltine Drain project and only became involved after the Engineer's Report was completed and other than consultations with people, Mr. LaFontaine is the engineer with the most knowledge about the Drainage Works.

Mr. McCready discussed the toe erosion related to bank seepage and the scouring process from upstream flows which occurs to deepen the bottom of the ravine. In his opinion, the damage due to toe erosion related to bank seepage is insignificant in relation to the damage to the bottom of the ravine due to scour from upstream flows.

Mr. McCready concluded that the development of the residential area has not impacted groundwater levels. A review of the photographs provided showed exposed tree roots hanging in the air within the eroded channel. It was Mr. McCready's opinion that the erosion appeared to be quite rapid to the point that the trees are undermined.

Mr. McCready analyzed the Drainage Work being proposed by the Engineer's Report and was of the opinion that it would create a stable channel.

Based on Mr. McCready's review of the Engineer's Report and the Golder geotechnical report, it was his opinion that the natural watercourse can no longer tolerate the rate and volume of flow currently occurring. Mr. McCready advised that in preparing the Engineer's Report, Mr. Zarlenga considered other options such as totally enclosing the watercourse within the ravine, but that this option was cost prohibitive. Mr. McCready was of the opinion that the Drainage Works being proposed are appropriate for the situation and a reasonable design to repair the injuries caused by the upstream water drainage. In Mr. McCready's opinion the residential uses are only one of the factors contributing to the increased runoff rates and noted that the greenhouses in the area have constructed stormwater management ponds to accept water runoff from their properties.

In summary, Mr. McCready indicated that the source of the water running through the ravine and watercourse necessitates that the Drainage Work being proposed. Mr. McCready advised that in his opinion there was not one potential source of increased flow. The residential development in the area is expected over time, agricultural properties in the area do not appear to be abusing the drain, and greenhouse development is happening throughout the area with storm water management facilities on the property. However, Mr. McCready noted that all of these land uses together contribute to the surface water discharge that is damaging the downstream watercourse.

During cross-examination, Mr. McCready disagreed with Mr. Courey's statement that the seepage identified in the photographs along the banks could reasonably be inferred to be from a failed septic system. Mr. McCready agreed with Mr. Courey that no earthen structure can be considered a permanent device and further that over the course of history this ravine area has eroded. While this is the same watershed as historically existed in the area, the volume and rate of flow has changed over time due to several changes in land use including the intensification of agricultural uses (greenhouses) and residential development.

Evidence - Section 54 appeals

Mr. Lafontaine, P.Eng.

Mr. Lafontaine confirmed that he was involved in the preparation of the Engineer's Report and the Court of Revision for the Esseltine Drain. Mr. Lafontaine was involved in the hydrogeological aspect of the Drainage Works.

Mr. Courey questioned the qualification of Mr. Lafontaine as it related to the preparation of the Engineer's Report. Mr. Lafontaine confirmed that he was involved in the selection of the run-off factors, the rationale for the ratings applied was discussed with Mr. Zarlenga and confirmed that he can defend the calculations of the assessment set out in the Engineer's Report. Mr. Lafontaine indicated that he has not been involved in any projects under the *Drainage Act* where he has been appointed as the engineer. The Esseltine Drain is one of the main projects he has been directly involved in.

Mr. Courey expressed a concern with Mr. Lafontaine providing the evidence required as he did sign the Engineer's Report and was not a properly qualified expert. Mr. Hooker relied on the case of *R. v. Mohan* in support of the testimony provided by Mr. Lafontaine.

In *R. v. Mohan* [1994] 2 S.C.R. 9 (“Mohan”) the Supreme Court introduced a principled approach to the admissibility of expert evidence. The Supreme Court indicated that for expert evidence to be admitted, the following criteria must be met:

- (a) It must be relevant;
- (b) It must be necessary to assist the trier of fact;
- (c) It must not offend any exclusionary rule; and
- (d) It must come from a properly qualified expert.

In *Mohan* the Supreme Court held that it is not enough that the person selected to provide an opinion is an expert in his or her field. The Court found that it is necessary to establish that the person providing the opinion is an expert in the precise discipline or area of knowledge with respect to which the opinion is directed. The Tribunal took into consideration the concerns expressed by Mr. Courey with the absence of Mr. Zarlinga to provide expert opinion on the Engineer’s Report that he prepared. The Tribunal found that Mr. Lafontaine had been involved in and worked with Mr. Zarlinga in the preparation of the Engineer’s Report.

The Tribunal qualified Mr. Lafontaine to give expert opinion evidence but confirmed that it would give Mr. Lafontaine’s testimony the appropriate weight where necessary.

Mr. Lafontaine gave a general overview of the assessment schedule and indicated that the total cost was determined based on estimated construction costs, allowances and engineering fees. The special benefits and special assessments were removed from the calculation that included specific drain connections and the costs relating to Town’s road crossing improvements and private access culvert improvements.

Mr. Lafontaine confirmed that the assessments were split between what constituted a benefit and outlet liability to the lands within the watershed recognizing that the majority of the project costs were in the ravine area due to elevating the bottom and the construction of a cable concrete mat. The Drainage Works are required to repair damages due to the increased flow and in determining the assessments arrived at a benefit / outlet split of 20% – 80%. The total value of \$761,620 of benefit was assessed to twenty-eight properties of the four hundred and forty-seven properties located in the watershed.

In determining the assessments an equivalent hectare evaluation was conducted applying the method of assigning a factor to each property based on land use and multiplying by the specific area to come up with an equivalent hectare value. Mr. Lafontaine confirmed that the method applied in developing a factor for each land use is the method derived to accommodate for volume and rate of flow.

Mr. Lafontaine confirmed that a modified Todgham method was used to determine the assessments. Mr. Lafontaine stated that typically, the direct outlet assessments levied against lands adjacent to the drain very near the outlet of the drain are assessed very low values. However, in this case, in consideration of the high costs of the Drainage Works required to protect these same lands, the direct outlet assessment for the reach from Lake Erie to County Road 20 (Sta. 0 to Sta. 520) was significantly increased. This resulted in higher than typical outlet assessments against these properties.

Mr. Lafontaine confirmed that it is his opinion that the values used for the development of the assessments against the Mr. Fittler's and Ms. Stockwell's properties are consistent and reasonable. The outlet factors were determined using an average rate per hectare. Mr. Lafontaine confirmed that agricultural properties such as Mr. Fittler's and Ms. Stockwell's are assessed at a much lower rate than the non-agricultural properties or the greenhouse properties. Mr. Lafontaine believed that the total assessments were fair and reasonable and indicated that the Mucci properties represent 46% of the total assessment due to the extensive area of greenhouse lands and the higher rate of outlet liability applied to those lands.

Mr. Lafontaine confirmed that Ms. Stockwell's lands were surveyed as shown on Figure 27, marked as Exhibit 3, to show the direction of surface water flow on the property. The survey confirms that surface water flows over the adjacent lands to the southwest to the Esseltine Drain.

Mr. Lafontaine reviewed the assessments to determine whether it was a fair assessment of costs, and it was his opinion that all the assessments were distributed in a fair and equitable manner.

In response to questioning from Mr. Fittler, Mr. Lafontaine confirmed that the bush area on his property was not taken into consideration in determining an adjusted runoff factor for that particular land use. Mr. Lafontaine confirmed that the calculation relating to Mr. Fittler's property was based on the roof area, applying a factor of 10, agricultural area, applying a factor of 1, asphalt and concrete area applying a factor of 9, and gravel area, applying a factor of 8. The land classification of soil was presented to Mr. Lafontaine who confirmed that all soil types were treated as an equal factor for rate and volume of flow and that all agricultural land was treated in a similar manner.

During cross-examination by Mr. Courey, Mr. Lafontaine confirmed that it was Mr. Zarlenga who prepared and determined the assessments and the land use factors. Mr. Lafontaine confirmed that the same land use factors were applied to Ms. Stockwell's property, being 10 for the roof area, 1 for the agricultural lands, 8 for the gravel area, and 0.5 for the bush area. The bush area on Ms. Stockwell's lands were measured based on aerial photography using autocad.

Mr. Lafontaine confirmed that the survey of Ms. Stockwell's property was prepared in response to the appeal. Mr. Lafontaine confirmed that the inlet structure on Ms. Stockwell's property was not at ground level. Further, it was his opinion that the only evidence to show overland flow, being the survey, indicated that Ms. Stockwell's property drains towards the southwest corner of the property.

Mr. Lafontaine advised the Tribunal that the existing use of the land is determinative of the appropriate factor to apply and that the land use designations set out in the Official Plan are not considered in determining the appropriate factor to apply.

Mr. Lafontaine confirmed that it was the current conditions of the Esseltine drain that were considered in determining the Drainage Works. Base flow modelling was calculated for the area. The outlet assessment allocated to the baseflow in the ravine was based on the equivalent hectares method.

Mr. Lafontaine indicated that Mr. Zarlenga was not in attendance at the hearing due to his retirement. In response to questions raised by Mr. Courey, Mr. Lafontaine confirmed that he never observed a failed septic system. Mr. Lafontaine confirmed that he agreed with the division between outlet and benefit factors.

In response to questioning from the Tribunal, Mr. Lafontaine confirmed that the factors applied in calculating the assessments were determined by Mr. Zarlinga based on his experience and as suggested by the Ontario Ministry of Agricultural Food and Rural Affairs. Mr. Lafontaine confirmed that specific cropping practices of agricultural lands were not differentiated and there was no distinction for tilling practices. Mr. Lafontaine indicated that one acre equals one acre and it is not practical to differentiate agricultural practices nor can an engineer ask each property owner their plans for the property. No reduction factors were utilized in determining the assessments.

Mr. Lafontaine did confirm that peak flows for different storm intensities and durations were applied to accurately determine the size of the cable concrete channel.

Mr. McCready, P.Eng.,

Mr. McCready, in reviewing the allocation of the assessments, indicated that the Todgham Method was applied for the development of the Benefit/Outlet splits and the detailed outlet calculations. Mr. McCready explained that the outlet assessments increase as you move up the drain because the properties are utilizing a longer percentage of the length of the drain.

Mr. McCready reviewed the spreadsheet on costs and the factors applied for each land use and considered the nature of the sections and considered the assessments as fair. While Mr. McCready would normally divide a drain into several sections and assess each section separately, the Esseltine Drain assessment as developed by Mr. Zarlinga was left as only one section for the purpose of calculating assessments. Mr. McCready did apply his approach to the assessment calculations and concluded that breaking down the costs in four sections from the outlet to the top of the drain resulted in an approximately 10% lower assessment to the extreme upstream lands using the same land use factors that are in the Drainage Report.

Mr. McCready stated he would not have applied land use factors as high as those used in the report. In his opinion, the stormwater management ponds located on the greenhouse properties should have been calculated at a lower factor. Mr. McCready would have applied a factor of 8 for greenhouses and roof areas and concluded that he would end up with an outlet assessment similar to Mr. Zarlenga's.

However, Mr. McCready was of the opinion that although he applied a slightly modified assessment method to that of Mr. Zarlenga, the overall outcome was similar to the Engineer's Report confirming the validity of the assessments set out in the Engineer's Report.

Mr. McCready confirmed that Mr. Zarlenga's land use factors weighted at assessing developed areas are a bit higher than he would normally use, but it was Mr. McCready's opinion that the assessment set out by Mr. Zarlenga were done in a fair manner.

Mr. McCready confirmed that he reviewed the soils mapping for the area and the soils on Mr. Fittler's and Ms. Stockwell's lands are capable of growing high value crops.

The description of Ms. Stockwell's property as undulating and well drained is consistent with Ms. Stockwell's description of the property. Mr. McCready did not see any indications of large ponded or wet areas on Ms. Stockwell's property.

Mr. McCready confirmed that the drainage engineers have taken the position that distinguishing between outlet liability and injuring liability is difficult and the common practice is that most engineers assess as outlet which is referred to in the new design guidelines by the Ontario Ministry of Agricultural, Food and Rural Affairs.

Mr. McCready was of the opinion that every engineer has the right to develop runoff factors for various land uses as guided by OMAFRA publications and while he may not have had the same opinions as Mr. Zarlinga, he did not have any issues or concerns with the report or the assessments.

In reply evidence Mr. McCready stated that when preparing a drainage report the engineer does not examine every property to the extent of tile drainage or crops. The engineer does not rate farming practices or quality of farming practices as it relates to runoff. Agricultural land is assessed at a rate of 1.0 and bush at a rate of 0.5. There is no distinction in the assessment between cropland and pasture land.

Mr. McCready indicated that the purpose of the fill for the ravine is to raise the bottom elevation in order to stabilize the side slopes and protected by erosion control materials. It was his belief that the adjoining owners want the injury to the natural watercourse rectified.

On the issue of special benefits as suggested by Mr. Bartlett, Mr. McCready stated that a special benefit is normally assessed under section 26 of the *Drainage Act* allowing roads to be assessed for increased costs due to the presence of the road. Mr. Bartlett confirmed that a snake barrier fence could not be considered a special benefit to any one owner and there is no authority to assess the snake barrier fence against the County Road. McCready indicated that he cannot support the addition of several other special benefits being proposed by Mr. Bartlett.

Mr. McCready indicated that he did not see any evidence of a berm on Ms. Stockwell's property and that the issue of ponding was not mentioned until much later in the process, which is why they were not investigated in more detail.

Mr. McCready advised that he did not confirm the survey as the issues of ridges and ponding were not brought forward until the Court of Revision. Mr. McCready confirmed that he was brought into the project after the engineer's report was prepared and adopted. Mr. McCready confirmed that he did not do any field work or detailed calculations. Mr. McCready stated that there is no direct outlet for Ms. Stockwell's property to a municipal drain.

Mr. McCready reviewed the assessment analysis of Mr. Bartlett and found that his split was at 80/20 benefit to outlet while Mr. Bartlett's was at 75/25 and confirmed that the distinction in their analysis is the values allocated to special benefit. It was Mr. McCready's view that wastewater from the septic systems adjacent to the drain should not be directed to a watercourse and is appropriately dealt with in other pieces of legislation.

Mr. Fittler

Mr. Fittler expressed a concern with different types of soil being treated in the same manner with respect to run off values, as it was his opinion that different soils should be assessed using different factors. Mr. Fittler was of the opinion that consideration of the soil type and curve numbers should be taken into consideration when determining the appropriate assessment to be applied.

Mr. Fittler reviewed the run off coefficient sheets and soil mapping information in detail. Mr. Fittler confirmed that he engages in no till farming, which results in his soil having a higher water-holding capacity. Numerous videos of the area were presented by Mr. Fittler, some of which showed him walking up and down the Esseltine Drain during different rain fall events. Mr. Fittler did not provide any supporting documentation in terms of weather data to confirm the amount of precipitation received in the area.

Mr. Fittler indicated that there was a considerable difference between the rate of water flow between upstream and downstream properties. Mr. Fittler indicated that there was nothing he wanted to change with the existing drainage works as in his opinion they were functioning appropriately. Mr. Fittler advised the Tribunal that the appropriate assessment for his property would be to change the categories applied to his land and advised something closer to the bush area category would be more appropriate in the circumstances. Mr. Fittler advised the Tribunal that he adapted his farming system with a goal of minimizing erosion and therefore runoff and provided documentation in support of this practice. Mr. Fittler indicated that his farming practice won a conservation award.

Mr. Bartlett, P.Eng.

Mr. Bartlett confirmed that he has been a drainage engineer for approximately 49 years and has been writing reports under the *Drainage Act* for the past 47 years. Mr. Bartlett indicated that in his experience when he was the engineer of record responsible for preparing the report he has been criticized by the Tribunal if he did not appear to defend the engineer report.

Mr. Bartlett confirmed that he walked Ms. Stockwell's property and drafted the report submitted to the Tribunal. Mr. Bartlett confirmed that Ms. Stockwell's property is approximately 14 hectares that is utilized primarily for organic hay. The total cost of the report is just over 4 million dollars with approximately 3.3 million dollars being spent on the ravine located on the south side of County Road 20.

Mr. Bartlett reviewed the aerial drawing of the drain downstream of County Road 20 and identified the top of the slope and its proximity to the residential structures. It was Mr. Bartlett's opinion that the top of bank is located close to several structures and that any type of bank stability is going to directly benefit those properties. It is his opinion that the benefit assessment for those properties is too low.

Mr. Bartlett was concerned that if nothing was done to stop the continued erosion it would jeopardize the utilities on County Road 20. The profiles currently show a drop off immediately downstream of the county road culvert.

Mr. Bartlett was of the opinion that the assessment against Ms. Stockwell is disproportionate in that the benefit and special benefit levied against all other lands are too low, and the outlet liability on the Stockwell lands is not appropriately allocated.

Mr. Bartlett reviewed the assessment schedule for outlet and took into consideration the lands designated for future development, particularly those that have an existing plan of subdivision approval such as the industrial park. For these areas he applied a different factor recognizing their uses for industrial / commercial purposes. Based on Mr. Bartlett's assessment, it was his opinion that the assessment for Ms. Stockwell should be approximately \$11,700 as opposed to the \$46,000 in the Engineer's Report.

Mr. Bartlett disagreed with the method applied by Mr. Zarlenga in determining assessments. It was Mr. Bartlett's opinion that assessing the costs against the drain as a single reach would be acceptable if the work was the same for the entire length of the drain such as cleaning out an open drain. Mr. Bartlett indicated that you cannot lump the entire area together to develop an average and expect it to be fair. Mr. Bartlett's opinion is that the length factors need to apply to smaller reaches and apply the interval costs. It was Mr. Bartlett's opinion that the way the assessments were established represents a major flaw with the Engineer's Report and is extremely unfair.

Mr. Bartlett indicated that additional consideration should have been given to the type of soil having good drainage such as the sandy loam soil of Ms. Stockwell's property. In addition, the construction of a berm along the property line at Ms. Stockwell's property stops any water flow from the Stockwell property entering into the catchbasin. Mr. Bartlett felt that Ms. Stockwell's assessment should be further reduced for outlet due to the area of the bush. Mr. Bartlett also indicated that he did not observe any sanitary sewers in the residential areas.

Mr. Bartlett advised that the natural process of erosion is to progress upstream until such time as it reaches a stable bottom and the banks become stabilized.

Mr. Bartlett's opinion is that the one way to fix the assessment schedule is to break the drain into intervals and assess each interval individually.

During cross-examination by Mr. Hooker, Mr. Bartlett stated that Ms. Stockwell's land should not be viewed as permanent pasture because it has historically grown very good crops and should remain in its present state. While there was some concern about permanent ponding on Ms. Stockwell's property, Mr. Bartlett indicated that there was no evidence of permanent ponding and he would not expect permanent ponding to occur due to the type of soil present.

There was a discussion with respect to the costs of the snake barrier and the appropriate allocation of the costs associated with the implementation as they protect species at risk for the public good.

Mr. Bartlett agreed that the scouring effect of the water was deepening the channel. In response to questions from the Tribunal, Mr. Bartlett stated that planned urban development should be assessed at a higher rate if the draft plan of subdivision is registered and the owners are in the process of getting it approved.

When questioned about the wastewater being discharged by developed lands, Mr. Bartlett responded by questioning whether there should be a special benefit due to there being no sanitary sewers in the area because the drain needs to be oversized. Mr. Bartlett did confirm that he did not conduct any analysis of flows that might be attributable to discharge of wastewater into the drain.

When asked whether it was Mr. Bartlett's practice to levy a special benefit that is in the public good against a public property, Mr. Bartlett responded that it is not his practice as he has never encountered the requirement for snake barriers in any prior reports. Mr. Bartlett did indicate that this would be a controversial approach to assess this cost as a special benefit against the roads that are not related specifically to roads. Mr. Bartlett

confirmed that there are no provisions under the *Drainage Act* to assess this type of special benefit cost to the road.

Mr. Bartlett indicated that in his opinion the fill in the ravine downstream of County Road 20 is not necessary for the function of the drain and that the bottom of the drain could be reshaped, and cable concrete installed. No alternative design drawings or cost estimates were provided to the Tribunal.

Mr. Bartlett confirmed that he did not calculate the assessments for the entire Esseltine drain and only looked at Ms. Stockwell's assessment.

Findings and Analysis

The Tribunal accepts the evidence of the Town's Engineers in the matter of appeals under section 54 and agrees that the assessments are fair and reasonable. Mr. McCready acknowledged that while he may have calculated the assessments using a different methodology, the allocation would be substantially the same as what was proposed by Mr. Zarlenga. The Tribunal would prefer to have the engineer who prepared the report, including the assessment schedule to be present at hearings such as this; however, this is not always practical or possible. The Town presented the evidence through a qualified engineer, Mr. LaFontaine, who was involved in the preparation of the Engineer's Report and supplemented the evidence with the review of the Engineer's Report by Mr. McCready.

It was the position of the Town that the question before the Tribunal is how much the property owners in the watershed should be charged for the Drainage Works, and what aspect(s) of the Drainage Works should they be charged for.

Mr. Courey requested that the Tribunal take judicial notice that the portion of the watershed where Ms. Stockwell's property is situated consists of farmers who have farmed for centuries and continue to farm today. Mr. Courey argued that the development in the area including the greenhouses and industrial parks are impacting the watershed and should not be done at the detriment of others who choose not to develop their properties. Mr. Courey took the position that based on the evidence presented, the problems with the watershed is due to the development of residential housing and greenhouses putting pressure on the ravine and resulting in the slumping of the banks.

Mr. Courey identified four engineers being involved in the Engineer's Report including Mr. Zarlenga, Mr. Fontaine, Mr. McCready and Mr. Bartlett. Mr. Zarlenga did not present any evidence before the Tribunal, Mr. Lafontaine worked under the direction of Mr. Zarlenga, Mr. McCready did not conduct any field work and did not go on Ms. Stockwell's property.

Mr. Courey pointed out that Mr. Bartlett has been involved in the preparation of a significant number of reports and has a lifetime of experience in preparing engineer's reports under the *Drainage Act*.

Mr. Courey pointed the Tribunal to the evidence that Mr. Fittler and Ms. Stockwell are the only two property owners who have not exacerbated the problem with increased volumes of water discharge from their properties. Ms. Stockwell and Mr. Fittler are of the opinion that the assessment in the Engineer's Report has been incorrectly calculated.

Ms. Stockwell's appeals relates to her concerns about the costs and benefits of the Drainage Works. Ms. Stockwell expressed a concern that there is no cost benefit analysis provided for the Drainage Works making it impossible to challenge. Further, it is the position of Ms. Stockwell that she should not be placed in the position of having to commission an extensive engineering report to raise an issue with the assessments. A concern was raised that the Town needs to be cognizant of the significant increase in the costs applied to the properties in the area.

Mr. Courey expressed concern with the substantial costs to Ms. Stockwell of the hearing specifically for legal and engineering representation. Mr. Courey requested that these costs be allocated to the drain. The Tribunal reviewed the cost submissions and, in the circumstances, do not feel that it is appropriate for an individual's legal and engineering fees incurred in challenging the Engineer's Report to be allocated to the Town.

The Town highlighted the fact that no planning evidence was presented to challenge the development occurring in the Town.

The Tribunal finds that there was no evidence presented on the section 48 appeal that would support a revision to the Engineer's Report.

The Tribunal confirms that there was some evidence presented relating to the oversight of Mr. Fittler's bush area. While the evidence indicates that there may be some discrepancies in the calculation of the assessments, the Tribunal finds that these are negligible and result from the judgment of the engineer and no significant change would occur to the assessment. However, based on the evidence and information presented, the assessments are fair and reasonable for all properties located in the watershed area. No modification of the Fittler assessment is recommended.

Considerable evidence was submitted to the Tribunal in an attempt to justify reduced run off factors for the Fittler's and Stockwell lands. Similar arguments could be made for other

properties within the watershed. The rates applied to these two properties are the lowest in the assessment schedule and are rates normally used in such cases.

The Tribunal sympathizes with Ms. Stockwell and Mr. Fittler as existing agricultural property owners in what is also an urbanized area with increasing greenhouse intensification as an agricultural use.

The Tribunal has reviewed the cost submissions of the parties and finds that no costs are justified in the circumstances.

Order of the Tribunal

The Tribunal thereby orders the following:

1. That the appeals are denied.
2. That the non-administrative costs of the Municipality incurred with respect to this appeal shall form part of the cost of the drainage works, and such costs shall include the Engineer's fees and expenses for preparing the Report and the revised Report.
3. That each party shall bear their own costs.
4. That there shall be no other Order as to costs and all parties shall be responsible for their own costs.



Paula Lombardi
Vice-Chair

Dated at London, Ontario this 15th day of April 2019.