



# The Mining and Lands Commissioner

## In the matter of The Mining Act

### AND IN THE MATTER OF

An appeal against the refusal to issue permission to alter the side slope of the Etobicoke Creek Valley and to construct an underground parking garage in conjunction with a proposed apartment building on part of Block "B", Registered Plan 872 in the City of Brampton.

B E T W E E N :

SHIPP CORPORATION LIMITED

Appellant

- and -

THE METROPOLITAN TORONTO AND  
REGION CONSERVATION AUTHORITY

Respondents

F. J. Greenwood, Q.C. for the appellant.  
R. J. Patton for the respondent.

The appellant applied under clause b of section 3 of Ontario Regulation 735/73 to the respondent for permission to remove and replace fill on a parcel of land in the southerly part of the City of Brampton. The respondent refused the permission and upon an appeal being made to the Minister of Natural Resources under subsection 2c of section 27 of The Conservation Authorities Act, as amended by The Conservation Authorities Amendment Act, 1973, the power and duty of hearing the appeal was assigned to the Mining and Lands Commissioner by Ontario Regulation 404/77.

The subject lands are part of Lot 2 in Concession IW in the Township of Chinguacousy. The respondent owns a parcel of land in this township lot lying on the westerly side of Highway No. 10. The Etobicoke Creek flows in a southerly direction through the parcel owned by the respondent. The subject lands lie to the west of the parcel

owned by the respondent. They are composed of the southerly 800 feet of a larger tract of land owned by the appellant and are limited on the north by Elgin Drive. The appellant proposes, upon obtaining the necessary approvals, to construct an apartment building having luxury suites on the subject lands and the issue, in respect of this appeal, arises solely in connection with the concern for erosion at the southeast corner of the subject lands. The concern is limited to the southerly 200 feet of the subject lands and arises because the bed of Etobicoke Creek is tortuous and a curve toward the west touches for practical purposes the subject lands at a point approximately 40 feet from the southeast corner of the subject lands.

The easterly limit of the subject lands is a fixed boundary along an existing fence. The southerly limit of the subject lands intersects at an angle in excess of 90 degrees with the result that measurements taken from the southerly boundary are dependant upon their place of measurement.

In the course of negotiations a line referred to as the "top of bank" was established by officials of the respondent and this line was surveyed by an Ontario land surveyor and the elevations thereof were determined. The exhibits filed, particularly Exhibit 3, show the elevations of the entire subject lands and while there was no evidence to establish how accurate these elevations are and counsel for the respondent reminded the tribunal of this fact, I have no reason to believe that the elevations are not relative, if not accurate.

To generally identify the issue, there is a difference in elevation of thirty feet between the creek bank and the line referred to as the "top of bank", a distance of approximately ninety feet. Along some east-west lines there is a change in elevation of fifteen feet in a distance of fifteen horizontal feet which illustrates that there is a fairly steep incline in places.

To be more specific the elevation of the land above the westerly bank of the creek is 660 feet above sea level. As one proceeds westerly a distance of approximately ninety feet the elevations rise to 690 feet. The regional floodline was shown on Exhibit 3 at elevations between 670 or 675 and 675 or 680. The

steep incline mentioned above lies between elevations 660 feet and 675 feet and is most evident at a location approximately 150 feet northerly of the southeast corner of the subject lands. At this location the westerly curve of the creek has not reached its most westerly position and the steep incline is situate on the land of the respondent. As these contours are followed in a southerly direction they move onto the subject lands and as they approach the southerly limit of the subject lands they diverge slightly with the result that at the southerly limit the 660 elevation commences approximately five feet westerly of the southeast corner and the 675 feet elevation is approximately 50 feet westerly. In other words, this steep incline is more predominant on the land of the respondent lying between the subject lands and the creek although it does exist on the subject lands.

The appellant proposes to erect the aboveground portion of the apartment building at a location well above the top of the bank which, it was agreed, would have no problems of flooding or erosion. It was proposed that there be two levels of underground garages. The upper level was proposed to extend to a line approximately eighty feet westerly of the easterly limit of the subject lands. The elevation of the roof of the upper garage is to be approximately 680 feet. It was proposed that the lower underground garage extend to a distance of 42 feet from the easterly limit. The elevation of the lower underground garage is to be approximately 670 feet. The issue is that when the proposal is viewed from the point of view of soil stability, which was agreed to be the only point in issue, the slope between the creek bank and the roofs of the garages, particularly the lower garage, exceeds in steepness the slopes accepted by the practicing experts in geotechnology. This position was illustrated by the evidence of William Albert Trow, B.S.A., M.S.A., P.Eng, who is a member of a number of societies and who has been awarded the right to represent himself as a geotechnological engineer, a specialist in soil stability. Mr. Trow has had over twenty years of experience in this field and has practiced in the area in question. After indicating that the soils of the subject lands would probably be quite suitable for the proposed

construction as far as the question of composition of soils is concerned, he pointed out that at the southeasterly part of the subject lands the end result of the proposal would be significantly in excess of minimum standards for soil stability which he indicated would be a slope of one foot increase in elevation in a horizontal distance of three feet. His evidence in this regard was as follows:

"I feel that the safe long term slope would be three to one for this material and that is on the basis of my estimate of the physical characteristics and the effective angle of sheering resistance of this soil, assuming it is fully saturated at certain periods of the year. That is the way you usually look at it and a number of papers have demonstrated that theoretically the long term stable slope of any slope is one-half of this effective angle of sheering resistance which I have here. But it is demonstrated in nature along the slope. In all valleys Mother Nature is doing a full scale laboratory test all the time. It is not - and this has been going on for hundreds of years here. With the season the slope gradually subsides and sloughs down until it comes to an angle of equilibrium. If you measure farther away from the river where the river has not had any erosion, and measure the contours there, it is approximately three to one or larger. Where the river is cutting in, it is steeper locally. That slope is stable now because of the trees and because of the - most of the time - it is in a reasonably drained state - but from the long term point of view, eventually it would want to come to the same slope that it is upstream. So that you know really the proof of the theory is right there - just measure the contours and that is what Mother Nature, if you call her "Mother", that is what it comes to."

With respect to the particular site Mr. Trow indicated that the situation, while it is a concern, is not without an engineering solution. He indicated that the desired slopes can be obtained by diverting the creek to a more easterly position and protecting the bank with trees, shrubs and other devices to prevent erosion or by reducing the size of the underground garages in order that the easterly walls thereof would be at a location which would enable the obtaining of an appropriate slope. He also suggested an intermediate alternative of gabian walls or other protective devices along the property line with the replacement of adequate vegetation. At this stage in his evidence the witness described the possibility of

diverting the creek and the problems associated with the creek. In this regard his evidence was as follows:

"Q. What about the creek? The creek could be moved?

A. The creek could be diverted as well. Because of the shape it is going now there is a natural tendency for that creek to erode against that bank and until it alters its course it is going to keep on chewing on that bank and working at it.

Q. What bank is that?

A. That is the, that is this bank here. It is cutting down there. There is a natural tendency for it to be chewing on this side. So it is going to work its way farther and farther until either an oxbow develops up here and starts to cross here, maybe fifty or a hundred years from now. In the meantime it is chewing against that bank. It is not very active at the moment now. But in the course of the river it will.

Q. Eventually somebody is going to - well - you tell me what would the eventual result be in relation to the garage. Would work have to be done or what? Eventually say over a course of twenty-five, thirty years or longer.

A. Well I guess if nothing were done and it keeps chewing in, it could work faster. You know, I think it would take a little time to do it. I have not studied how this river floods, particularly in the spring down here. But there could be erosion protection which could be provided and stop it."

The witness indicated the westerly bank of the curve in the creek. During cross-examination by Mr. Greenwood the witness indicated that in addition to rectification of the slopes it is essential that erosion protection be installed on the creek. His evidence in this regard was as follows:

"A. The other qualification is that there has to be erosion protection on this river here because as I say with the spring flooding there is a natural tendency for that river to be chewing away so we cannot just put a 3 to 1 slope and leave it unprotected which it is now. There has to be some undertaking to prevent erosion or scouring of that bank along there. And I do not see any. There are some other qualifications. Really my qualifications are to have a slope at least 3 to 1 or flatter with vegetation on the slope to prevent the soil from being eroded off. And also erosion protection along here to prevent a cutting there because five years from now it may be over there and eroded all of that slope."

At the end of his evidence he gave the opinion that

with the proposed construction the risks of erosion and natural changing of the stream are more serious than they would be if the subject lands were left in a state of nature.

During the hearing the appellant indicated that it proposed to amend the plans to delete the southeasterly corners of both garages in order to permit the desirable slopes of 3 to 1 to be obtained and indicated its agreement to prepare a planting program that would stabilize the slopes resulting from the project. The matter was adjourned on two occasions to permit the parties to arrive at an engineering solution of the issue. However, no fruitful conclusion was reached by the parties.

This tribunal is satisfied that with the installation of erosion protective devices the latest proposal of the appellant could have been made to comply with the principles of The Conservation Authorities Act. The situation is unusual in that the appellant is not the riparian owner. The appellant has no right to divert the creek or to go onto the respondent's lands and construct gabian walls or other protective devices without the consent of the respondent as a landowner. To enable the current proposal to be brought to an acceptable solution within the areas of concern contained in The Conservation Authorities Act more than permission under the regulation of the respondent is required. While this tribunal may be able to provide such permission it has no authority to compel the respondent to permit the appellant to enter its lands and construct the improvements on its lands at its or the appellant's expense. These rights can only be derived through negotiation with the respondent as a landowner rather than as an administrative tribunal and I am satisfied that this tribunal has no jurisdiction to require the respondent to enter into an agreement as landowner.

I am satisfied that a matter of serious concern exists even with the proposed amendments. At a location approximately 160 feet from the southeast corner of the subject lands the proposal involves part of a very substantial building which will extend to within approximately 50 feet of the creek and while the levels can technically be brought within acceptable standards, such an approach

is validated only with the prevention of any further westward movement of the creek.

While this tribunal is impressed with the sincerity and the desire of the appellant to conform with the principles of The Conservation Authorities Act, the appellant is faced with a situation where it cannot, apart from the negotiation of property rights or interests, unilaterally achieve a satisfactory method of dealing with the risks of interfering with the existing natural conditions by the erection of structures associated with a residential property on the part of its site under consideration.

The question arose as to whether this tribunal should grant permission subject to conditions involving modification of the original submission, the amendment of grades and the planting of vegetation on the lands of the appellant but it is the view of this tribunal that such a position, even if it were legally appropriate, would be inconsistent with the principles of The Conservation Authorities Act and the regulation of the respondent as there is no assurance that the control of erosion would be established within any acceptable standards. While the maximum acceptable slopes may be established these slopes are dependant on the horizontal distance between the structure and the creek remaining constant and without erosion prevention devices, particularly methods of preventing the Etobicoke Creek from reducing such horizontal distance, I cannot conclude that, even as amended, the appeal is one that ought to be allowed.

IT IS ORDERED that the appeal in this matter be and is hereby dismissed.

AND IT IS FURTHER ORDERED that no costs shall be payable by either of the parties to this matter.

DATED this 11th day of October, 1977.

Original signed by G.H. Ferguson

MINING AND LANDS COMMISSIONER.