(undulining=italics) { running head (upper head)



SOLAR ZONING: A MUNICIPAL LAW APPROACH

-by Pat Reed\*

the Canadian Environmental Law The following is, in part, an extract from a brief prepared for CELRF in response to a working paper of the Ontario Ministry of Energy entitled "Perspectives on Access to Sunlight," Bmitted sections deal with the -common law, and, in particular, with recent developments in the law of nuisance relevant to the subject.

### Introduction

In Canada, a small but growing body of literature indicates a lively interest in the potential of solar energy as a source of heating. A review of this material reveals the usual time-lag between development of the technology for using a resource and development of necessary legal mechanisms for allotting and protecting rights involved in its use.

Since the matter falls within Section 92 of The British North America Act and within the range of matters generally left by the provinces to be dealt with on the municipal level, it is submitted that municipal planning law will be the primary means of sorting out these rights. In this case, the various planning acts should be examined with a view to any necessary revisions. The Planning Act of Ontario is considered here, and suggestions are made for amendments which would integrate protection of solar use into the existing municipal law framework.

The suggested amendments are: (1) to provide authority for a system of municipal approvals for specific solar energy facilities and for registration of certificates of approval; (2) to provide authority for municipalities to

\* Associate editor, CELR ... AMAIN ALL pitrate at bottom of page where this article starts

pass by-laws varying zoning requirements where it is deemed necessary to protect an approved solar facility or where it is desirable either to enable a proposed building to utilize solar energy or to allow construction on land affected with a solar essement; (3) to provide authority for municipalities to control the height, location and density of vegetation where where it is necessary to protect an approved solar facility.

Prior to examining the statute, however, some notice should be taken of the state of the technology, of situations in which protection of solar access is most likely to be considered, and of the degree to which zoning for solar use could come into conflict with more traditional zoning considerations.

#### The State of the Art

"Active," roof-mounted solar collectors have received the most attention in the literature. These have long been in use in some parts of the world as a simple, efficient and inexpensive means of supplying hot water for domestic purposes. As sources of space-heating, however, they are neither estimple net as inexpensive as bulky facilities for storing heat and fairly sophisticated arrangements for circulating it are required.

A desirable alternative is the "passive" collector, created by designing or altering the south wall of a building to absorb and retain more of the warming rays of the sun. Having the entire area of the wall available for collecting heat and its entire bulk available for storage increases the efficiency of the system while decreasing its complexity. With such a system, heat circulates largely by radiation and convection, aided as necessary by fans.

More extensive use of solar energy would be possible if the southerly portion of lots could be protected, making it possible to utilize various kinds of light reflectors (snow or light coloured paving, for example) to increase the amount of light reaching a south wall or an active roof-top collector. South lot protection would also make possible the use of detached solar collectors where it is not possible to orient the building itself to the south, or a collector could be incorporated into a green-house, swimming pool or other detached structure.

It will be seen that protecting roof-top solar collectors is minimum protection and might not by itself encourage optimum use of solar energy.

## The Planning Approach

Detailed discussion of planning problems and techniques is beyond the scope the return of of this paper. It is submitted, however, that the powers needed by municipalities to deal with problems of solar use can be deduced from a limited number of generalized circumstances likely to arise as a result of publics a degine to utilize perception of the desirability of utilizing solar energy.

Section 35 of The Planning Act gives municipalities some limited powers to deal with the first three situations. The fourth is clearly ultravires municipal powers. Whether and to what extent there should be a change in the law is a policy decision. Such a change is suggested here

in this respect at least merits discussion. It is not just a question of having some monstrous structure intrude into a residential neighbourhood.

It is also a question of permitting placement of a house in an irregular way on its lot, in an area which where uniform set-back is normally required. Authority to permit the first is certainly premature. Authority to permit the second, with suitable safeguards, is very much needed.

#### Solar Zoning

Municipalities rely on paragraph 35 (1) 4 of The Planning Act for authority to pass by-laws which protect access to light and air where land is redeveloped.

s.35(1) By-laws may be passed by the councils of municipalities:

4. For regulating the cost or type of construction and the height, bulk, location, size, floor area, spacing, external design, character and use of buildings or structures to be erected within the municipality or within any defined area or areas or upon land abutting on any defined highway or part of a highway, and the minimum frontage and depth of the parc€l of land and the proportion of the area thereof that any building or structure may occupy.

A by-law intended to protect access to sunlight written under this section would surely be valid, particularly if supported by a statement in the Official Plan. There would be instances where such a by-law would be perfectly functional from a technical point of view as well. This would be true for a major downtown development, where the placement of structures is negotiated with the builder, and for some subdivisions.

However, in areas already built up, solar zoning would have to be superimposed upon existing zoning. This could, at best, create large number of legal non-conforming uses and might well result in inequities to many landowners.

At Canadian latitudes, sunlight comes only from the south, southeast and southwest. Protection of solar use would require that the height of structures

and vegetation be controlled in one or more of those directions.

The degree of control required would be a function of the number of hours of sunlight it was desired to protect and the type of solar facility (roof collector, south wall of a building, area at ground level) involved.

The needed restrictions on land use would, therefore, be in addition to any existing building restrictions and could in certain instances effectively sterilize ownership rights unless authority to give exemptions from other sorts of by-law and zoning requirements were broadened.

#### Approvals

Innovations in the law should mesh readily with the legal framework that is already in place. Since a building permit would be required for instal—lation of a solar factilty, a reasonable approach to an approvals system would be to make it part of the building permit system. As municipalities develop expertise in dealing with solar installations, it should become possible to codify situations where a permit and certificate of approval would issue on the authority of the building department, pursuant to the requirements of a general by—law.

At the beginning of the system, however, there would be few instances where this convenient system could be used, other than where the applicant owned all the affected land. Registration of a certificate of approval against the title of affected property would have a result similar to registration of an easement for utilities. The owner could not build in a way which would interfere with the transmission of the protected sunlight, and there would be limitations on planting trees. Unlike other easements for utilities, these limitations would not be confined to a readily measurable strip along the perimeter of a property. They could impinge upon it in any one of a

would would with the system, approvals must/necessarily issue and a few at a time, under special by-laws. A power to pass such special by-laws might be set out as section 35d of TheyAct.

A certificate, when issued, should be valid only if it is registered and this is a matter which a collector installed within a limited period of time. Ain order to ensure would require specific legislation preserving rights to light. Some mechanism would be above planning flexibility, approvals should not last forever but should be limited incorporated in this new legislation to allow for review of the certificate on the either according to the expected life of the solar facility, the life of request of the affected property owner in light of the hardships alleged to be suffered the building or of the neighbourhood generally. They could, however, be by this person renewable, and, where the neighbourhood has remained stable, there should be a presumption in favour of renewal.

#### <u> Variation of Zoning Requirements</u>

of solar energy would be to permit municipalities to pass by-laws varying the relevant items in paragraph 4 of subsection 35 (1) in individual cases.

A paragraph could be added to the subsection authorizing such variances where it is "deemed necessary" because an approval affects land or where it "is desirable" to enable a proposed building to utilize solar energy.

Most variations would have to do with building height, lot coverage or placement of buildings on their lots.

Use of the by-law making process for such variations is intended to ensure more thorough consideration and more public discussion than is normally achieved when a Committee of Adjustment deals with a minor variation.

Use of "deemed necessary" in the first instance is intended to give a municipality the authority necessary to protect the equities of an owner of affected land while protecting an installation that is in existence that it has approved. Use of the term "is desirable" in the second instance would place a greater onus on the proponent of a by-law to permit a structure otherwise not permitted.

Shade\_Control

under which they ear Municipalities in Ontario do not have authority to control vegetation on private property, either to preserve it or to forbid or remove it. Beneficlaries of an easement do have certain rights in this regard. By addition amondmen of a subparagraph to subsection 35 (1), Municipalities might be given control over the desightyxxoestionxondxolongsityxofxxinesxxonxorizitexprobetty height, location and density of inxereexplantingxes trees on private property affected by a registered twexsetaexfactities Established growth would not be affected, and, since it is not proposed to make solar use mandatory, owners could plant to cast If solar rights are to be effective, then shade on their own buildings. However, trees planted in the critical sector to the south of an approved collector would be controlled axxsmessesxeme as to species and placement, from the date when actual notice of the appliof the solar facility cation for approvalis given, tegether with a copy of a plan showing the protected sector, to all owners and occupants of an affected property, so that their luture planting would not inferfere with the solar facility.

It is suggested that the quality of the notice given is especially important in the case of central of vegetation. Such control on private property, -except where an easement for utilities has been previously reserved, is movel and may not be widely understood at first. Future purchasers would also receive actual notice as a result of the registration of the certificate and a copy of the plan.

#### Large Developments

The suggested amendments to autsection 35 outlined above would also enlarge the scope of subsection 35a (2), which affects larger developments and comes into play when a municipality has an Official Plan and passes a devalopment control by-law.

s.35a(2) Where there is an official plan in effect in a municipality, the council of the municipality in a by-law passed under section 35 may, as a condition of development or redevelopment of land or buildings in the municipality or in any defined area or areas thereof, prohibit or require the provision, maintenance and use of the following facilities and matters or any of them and may regulate the maintenance and use of such facilities and matters:

The subsections of 35a provide for, <u>inter alia</u>, facilities for access ramps, walkways and other means of pedestrian access, easements for watercourses, ditches, and land drainage works and sanitary sewers. Easements required for unobstructed access to sunlight could easily be added, whether conveyed to the municipality or not.

#### Bemedies

The normal remedy for interference with an easement is an action in the space. A normal remedy for interference with an easement is an action in the space. However, both a ratepayer and section of the lanning Oct and section as municipality presently have power under section 43, and under section 470 of the Municipal Act to restrain contravention of a by-law. These interfered could no doubt be extended to interfered situations where solar solar solar rights are being interfered with.

FOOTNOTES

Authored by Diane Pax, a lawyer with the Ontario Ministry of Energy. A carry engly month of these standards of the standards of Technology by Home Owners in British Columbia,", Westx @esstx Envisemmental

- 92(13) Property and Civil Rights in the Province.
- R.S.O. 1970, c. 349, as amended.

4. AXXXXMEXAIMMEMEXAESXXEMEMEXESXXEXXXXXXXXXX The Planning Act, supre at 3, s.42(1).

The City of Regina has had a new comprehensive by-law drafted by Professor/ Dannis Hefferon bi Osgoode Hall/Law School and Michael B. Vaughan, /a Toronto splicitor which is based on the planned-use development concepts of maximixing the use of natural topography and environment in a neighbourhood max instead of imposing artificial zoning requirements as most againg

In Ontario, the Official Plan outlines broad planning principles. Policies are implemented by restricted-area by-laws in conformity with such policies.

5. The Planning Act, supra at 3, s.35(7)(a).

R.S.O. 1970, 0.284.

7. R.S.O. 1970, C. 284, as amended.

# RESPONSE OF THE CANADIAN ENVIRONMENTAL LAW ASSOCIATION TO "PERSPECTIVES ON ACCESS TO SUNLIGHT"

In May of 1978, the Ministry of Energy published a discussion paper, "Perspectives on Access to Sunlight", to stimulate discussion of the importance of access to solar energy in view of it's potential impact on land-use patterns in Ontario. "Perspectives" pointed out that the law of Ontario does not protect solar access for most urban landowners since there is not automatic right to the light which crosses the property of others. While it is possible under existing law for neighbours to agree in writing not to block one another's sunlight, at best, such agreements are cumbersome, expensive and legally complex. An urban solar user in Ontario is generally unable to obtain legally secure access nuisance to sunlight. The existing remedy of MERK and the possibility of enforcement of an easement for light, as pointed out "Prespectives", are uncertain, and although it is possible that willing courts could adapt traditional judicial remedies, such as nuisance, for this purpose, such an approach would be "at best, fragmented and haphazard". "Perspectives" raises, but does not answer the question whether legislation to protect access to sunlight for the purposes of solar energy is necessary or desirable in Ontario.

This is the response of the Canadian Environmental Law Association to "Perspectives on Access to Sunlight". This response was prepared by Patricia M. Reed, B. A., L.L.B. of the Board of Directors of the Canadian Environmental Law Association, Michael E. James of the Quelph Law Firm of James & Geisler - Jaems, and John Willms, of the Toronto Law Firm of Vaughan, Willms. The response was coordinated by J. F. Castrilli, Chairman of the Law Reform and Legislation Committee of CELA, and edited by John Swaigen, CELA's general counsel.

We have concluded that legislation to protect access to sunlight for the purposes of providing solar energy is in fact, important and necessary in light of our diminishing energy resources, in light of the availability of technology to use solar energy, in light of the lively interest in the potential of solar radiation as a source of heating, and in light of the present use of solar energy in Ontario. Not only will the failure to pass appropriate legislation seriously deter landowners from installing solar energy collectors and inhibit the growth of a potentially important industry which need not be dominated by large corporations and which will be accessible to the small businessman, but present users of solar technology will continue to be in jepardy. As "Perspectives" has recognized

The implementation of these principles will depend greatly on further consideration of the impact of exercising the rights on neighbouring landowners. This will involve consideration of factors such as the size and location of solar collectors needed to reasonably service any given property, and the degree of interference which can be tolerated at various levels of efficiency. The type of engineering and scientific research must be done as a background and a supplement to any legal commentary.