

REPORT
ADMINISTRATIVE SERVICES COMMITTEE
MEETING DATE: JUNE 26, 2007

GENERAL DISCUSSION

Administrative Services
JUN 26 2007
Committee Meeting

FROM: Environmental Policy Department
Legal Department

ITEM # 4

DATE: June 7, 2007

SUBJECT: Pesticide By-Law

LOCATION: Town wide

WARD: Town wide

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RECOMMENDATION:

That the recommendations regarding the proposed Implementation Strategy to support the Pesticide By-Law in the report dated June 7, 2007, be approved.

That By-Law 2007-123, 'A by-law to amend, By-law 2007-036, being a by-law to regulate the use of pesticides within the Town of Oakville', be enacted.

EXECUTIVE SUMMARY:

Staff is responding to Council's direction regarding the Pesticide By-law 2007-036 to recommend an implementation strategy including an evaluation and reporting process, and improvements to the bylaw including an amendment that would provide for the protection of trees and shrubs in the event of wide spread infestations such as, but not limited to, Gypsy Moth and the Emerald Ash Borer by June 30th, 2007.

The report is divided into sections on:

- I. Implementation Strategy
- II. By-Law 2007-036: Recommended Improvements
- III. By-Law Evaluation

The Implementation Strategy addresses community education and outreach, and by-law enforcement. The work of the Pesticide Task Force (under a separate agenda item) informed the development of the community education and outreach component. Staff reviewed the necessary requirements to provide effective by-law enforcement through to prosecution. Details on both components of the Implementation Strategy are provided in the body of the report.

Staff reviewed By-law 2007-036 with reference to other municipal by-laws, local community issues, and staff expertise, and is recommending minor amendments in accordance with Council's direction. These minor amendments being brought forward for Council's consideration relate to the Oakville Lawn Bowling Club, Buckthorn and

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other invasive species, hydro substations and similar uses, use of pesticides for personal protection, and infestation.

Several mechanisms are recommended to evaluate the impact of the Pesticide By-law. Staff anticipates being in a position to report on the impact of the Pesticide By-law in early winter 2009 following one full growing season. It is recommended that an annual report be provided to Council for year-end in future years.

BACKGROUND:

On February 12, 2007, at a Special Meeting of Council, direction was provided to staff as follows:

"That staff develop an implementation strategy drawing on best practices from other municipalities that have adopted pesticide regulation by-laws in their communities including a process for annual reporting to council on the effectiveness of the by-law at reducing the quantity of pesticides being applied in the urban area as well as any recommended improvements to the bylaw. Staff is directed to present this strategy, and any recommended by-law amendments, to Council by June 30th, 2007."

Also, "That staff draft and bring to Council a by-law amendment, if necessary, that would provide for the protection of trees and shrubs in the event of wide spread infestations such as, but not limited to, Gypsy Moth and the Emerald Ash Borer."

Pesticide By-Law 2007-036 was passed by Council on February 12, 2007 as 'A by-law to regulate the use of pesticides within the Town of Oakville.' (Appendix A)

COMMENT/OPTIONS:

To address Council's direction, the following report is provided for Council's consideration, divided into the following sections:

- I. Implementation Strategy
- II. By-Law 2007-036: Recommended Improvements
- III. By-Law Evaluation

I. Implementation Strategy

Staff has defined two components of an Implementation Strategy that include:

- Community Education and Outreach, and
- By-law Enforcement.

Community Education and Outreach Component

As the first component of the implementation strategy, staff recommends community education and outreach to support broad awareness and promote by-law compliance.

Council approved the formation of the Pesticide Task Force on March 26, 2007, and staff has worked with the Task Force to complete their mandate 'to provide advice to Council on the creation and execution of an education strategy to enhance efforts already being undertaken by the Town and Region of Halton to support the objectives of the Pesticide By-law and encourage cooperation and support from all sectors of Oakville's community'. The report from the Pesticide Task Force is presented as a separate agenda item. Staff has considered and included the recommendations of the Task Force in the development of the community education and outreach component of the Implementation Strategy.

The component comprises two phases with the first phase covering the period from July to the end of the year and the second phase covering 2008 onwards.

Phase 1 – Mid-2007 – December, 2007

The items presented below represent actions that may be implemented with existing 2007 staff and budget resources.

- Focus on target audiences (retailers, service providers, and residents), key messages and the education plan priorities recommended by the Pesticide Task Force:
 1. Notification to all property owners
 2. Development of an Oakville Guide to Our Pesticide By-Law
 3. Website
 4. Fall Workshop
 5. Pesticide By-Law Hotline (low volume of calls – 2007)
- Incorporate further education program components in 2008 operations budgeting process following the recommendations within the Pesticide Task Force report

Phase 2 – 2008 Onward

The items listed below represent a preliminary work plan with implementation that would be contingent upon 2008 and future budget preparation and approvals processes:

- Carry out 2008 education program following the recommendations within the Pesticide Task Force report, i.e. Retailer's Toolkit and Guide to... Video, evaluation/documentation, emphasizing that the By-Law is in effect, supported by fines/penalties

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- Prepare for a high volume of calls for good green gardening and by-law compliance advice expected to begin in early March/April until late fall
- Increase staff resources by 0.6 FTE student coop in horticultural program to conduct the education and outreach program with emphasis on the Pesticide By-Law hotline and communication to target audiences that may include using contracted resources for some program delivery, e.g. outreach to retailers, green gardening advisor
- Report to Council in early 2009 (Refer to the report section III By-Law Evaluation)

The table below summarizes the proposed preliminary work plan for the education and outreach component of the Implementation Strategy. The 2007 program items are anticipated to be accomplished with existing staff and budget resources. The 2008 program items would be included for consideration in the preparation of the 2008 budget and implementation would be subject to the preparation, review and approvals processes.

Proposed Education and Outreach Component	Preliminary Staff and Cost Estimates (\$)	
	Phase 1	Phase 2
	July to December 2007	2008
Staff	Existing 0.25 FTE student (\$7,500 April to December)	New 0.6 FTE coop student dedicated to Pesticide Hotline / Education and Outreach (April to December) New \$16,000
Notices/Resources/Website/Events	\$15,500 existing budget	\$60,000 base budget (notices, website, events, resource materials, advertising, displays) New \$15,000 Video New \$10,000 Retailers Toolkit and Outreach (possible (contracted service))
TOTAL ESTIMATE	\$23,000 existing including 0.25 FTE student)	\$101,000 (\$60,000 base budget, \$41,000 new request including 0.6 FTE)

By-law Enforcement Component

Staff of the Clerks (By-law Enforcement), Environmental Policy, Legal, and Parks and Open Space Departments met frequently over the last several months to develop the By-Law enforcement component of the Implementation Strategy. Development of this component included consideration of the enforcement programs of municipalities with pesticide by-laws, and community and staff issues.

The enforcement options used by municipalities with pesticide by-laws range from using the by-law as leverage for education to intent to enforce through prosecution. Many of the existing pesticide by-laws of cities such as Toronto, Halifax, and Windsor, have been phased in with a year or more of by-law awareness/warning to support compliance.

In the development of the work plan, presented below, it was necessary to consider and address issues regarding:

- Staffing
- Training
- Sampling

The effectiveness of enforcement is anticipated to relate to the degree of staff competency in terms of producing the necessary evidence and documentation specific to this by-law.

Staffing:

A new 2008 1 FTE for by-law enforcement would provide additional capacity for staff to manage the expected high volume of complaints during the first few years after the by-law comes into effect. Complaint response is required within 24 to 48 hours to enable the site inspection to have the highest degree of success in determining whether non-permitted pesticides have been applied. There is a possibility that a large number of complaints would be registered on weekends. In some municipalities there is a municipal response to anonymous calls.

It is generally acknowledged by other municipalities with pesticide by-laws that have been in effect for several years (Halifax, Toronto) that the number of complaints/inquiries /infractions decreases after several years. This would coincide with the need for additional By-Law Enforcement Officers as the community grows in North Oakville.

This new FTE would be included in the 2008 budget submission for consideration by Council. If the budget is approved in March 2008, then it is expected that hiring could occur by May 2008. Training of the new By-Law Enforcement staff would be scheduled for summer 2008, and at that time the necessary sampling resources and equipment would be purchased, so that capacity to enforce the By-law through prosecution would be achieved by fall 2008.

Training:

Enforcement of pesticide by-laws is generally supported by By-Law Enforcement Officers trained in:

- Integrated pest management
- General horticultural practices
- Pesticide toxicology, and
- Soil, plant and insect sampling protocols

It will be necessary to build by-law enforcement capability by providing specific training to staff. This training/education is not available from one resource. The training package would involve coordination with several different agencies such as:

- Ministry of the Environment for toxicology
- Royal Canadian Golf Association for their Integrated Pest Management Program practices
- Ontario Ministry of Agriculture, Food and Rural Affairs for horticultural education particularly around trees and shrubs
- Landscape Ontario for Integrated Pest Management with special references to the cultural, mechanical and other practices that would be acceptable under the By-law, and
- By-law enforcement training in Gravenhurst (held in March and November)

Upon contacting other municipalities, it does not appear that external resources are contracted for enforcement.

Sampling:

In discussions with Toronto staff, complaint investigation of properties involves obtaining evidence, including sampling of soil, plants, and insects using specific sampling protocols, specialized equipment, and legal sampling requirements, in addition to the usual by-law enforcement procedures. Analysis of any samples must be done at an accredited laboratory having Canadian Association for Environmental Analytical Laboratories (CAEAL) certification. The cost for sample analyses range from \$300 to \$3,000 per sample depending on the type of sample material and parameter being tested. A budget allocation should be identified to allow for equipment resources and sample analysis to support enforcement.

The first priority within the Implementation Strategy is education and outreach. While this component continues from 2007 into 2008, staff proposes to build capacity and resources to be in a position to effectively enforce the By-law through prosecution, if necessary, by fall 2008. The proposed enforcement work program would be included in the 2008 budget and implementation would be contingent upon the 2008 budget preparation, review and approval processes.

In order to provide effective enforcement it is necessary to have properly trained staff, adequate resources and a practical timeline to develop the capacity to enforce the By-Law.

Recommended activities and estimated implementation timeframe include:

- Establish short form wording and approval of set fines (expected to be approximately \$300, pending approval by the Chief Justice) to support ticketing by January 1, 2008 (Note: The maximum fine of \$5,000 pending conviction is already in place for January 1, 2008.)
- Identify By-Law Enforcement Officer staff request in the 2008 budget process (fall 2007)
- Request allocations for training, sampling equipment/resources, and laboratory analysis in the 2008 operations budget planning process to support enforcement (fall 2007)
- Hire By-Law Enforcement Officer (May 2008), contingent upon 2008 budget approval (March 2008)
- Develop training program (horticulture, soil sampling, integrated pest management, legal procedures) for By-law staff (spring 2008)
- Purchase required sampling and associated equipment (summer 2008)
- Set up laboratory resource (summer 2008)
- Initiate training program for By-Law Enforcement Officer(s) (summer 2008)
- Enforce the by-law on a complaint basis with fines and penalties (fall 2008)
- Train other By-Law Enforcement Officers to address expected work load (fall 2008)
- Report to Council annually on effectiveness of By-law in the reduction of pesticide use. (Refer to the report section III By-Law Evaluation)

The following table presents a summary of preliminary staff and budget estimates for a work plan to support effective by-law enforcement through prosecutions with properly trained and resourced staff. Implementation would be contingent upon 2008 budget processes and approvals.

Proposed By-law Enforcement Component	Preliminary Staff and Cost (\$) Estimates – 2008
Staff	New FTE \$100,000
Training (\$3,000 per staff)	\$15,000 (5 staff)
Sampling Equipment and Resources	\$2,500
Sample Testing Allocation	\$5,000
TOTAL ESTIMATE	New FTE (1.0) \$122,500

Subject to 2008 budget approvals, staff would follow the proposed By-law Enforcement work plan to enable effective enforcement through to prosecutions by fall 2008.

II. By-Law 2007-036: Recommended Improvements

Staff has reviewed By-law 2007-036 with reference to other municipal by-laws, local community issues, and staff expertise, and is recommending minor amendments in accordance with Council's direction.

Minor amendments are brought forward on:

- A. Oakville Lawn Bowling Club
- B. Buckthorn and Other Invasive Species
- C. Hydro Substations and Similar Uses
- D. Use of Pesticides for Personal Protection
- E. Infestation

A. Oakville Lawn Bowling Club

The Town owns and manages the 100 year old Oakville Lawn Bowling Club located at 111 King Street that involves many participants from the community. The turf surface at the lawn bowling green is bentgrass. Due to the nature of the game, turf must be mowed very low and must receive a significant nutrient program to keep the green healthy. Low mowing, continued irrigation and high nutrient levels predispose the green to diseases.

In order to maintain a quality of green, the option to apply fungicide, in accordance with integrated pest management principles, is recommended to combat disease since there are no known organic-based pesticides available for this purpose at this time. Some diseases affecting bentgrass can destroy a green in as little as 48 hours if untreated.

On April 10, 2007 the City of Peterborough amended their Pesticide By-Law Number 05-077 to allow for exempted use of a private lawn bowling green within the city.

To address the specific management needs of the greens at the Oakville Lawn Bowling Club, it is recommended to revise clause 3j. to read as follows:

- 3j) On an I.P.M. accredited golf course or **at the Oakville Lawn Bowling green**, provided that any such use or application is in keeping with the integrated pest management program in place **at the golf course or lawn bowling green**.

B. Buckthorn and Other Invasive Species

The Town owns and manages 792 hectares of natural areas (woodlots and valleylands) and uses Integrated Pest Management/Integrated Plant Health Care. Probable threats exist, such as Gypsy Moth and Emerald Ash Borer infestations that have the potential to decimate the Town's urban forest. In these cases responses with *Bacillus thuringiensis* i (Bti) and tree injections, respectively are the likely defense mechanisms. In the case of the invasive weed 'Buckthorn', there are no organic products available

and the Town currently, cuts this shrub to the base and paints a very small amount of a chemical pesticide on the remaining stems. This is the acknowledged integrated plant health care response to this problem that is becoming a greater issue and has the potential of taking over Oakville's woodlots and urban forest. To address the potential significant damage to Oakville's woodlots, valleylands and along trail systems from Buckthorn and other invasive species, the following amendment is recommended:

3k) to control buckthorn or other invasive species in woodlots, valleylands and along trail systems;

C. Hydro substations and similar uses

To clarify the wording to provide exemption for the use of non-permitted pesticides at Oakville Hydro substations, and further in circumstances where railway tracks are laid, e.g. Canadian National Railway / GO Train rail corridors, it is recommended that a safety exemption be added. In the drafting of the By-Law it was considered that possibly the Clause 3.i. "To control, destroy, reduce or repel, directly or indirectly, an animal, plant or other organism which is harmful to human health" would apply to the hydro substation or railway use. However, in staff's view the issue seems to be one more of safety first and staff considers it appropriate to strengthen the by-law to have a specific clause added as follows:

3l) at a hydro substation, a utility distribution station or within a hydro or railway corridor.

D. Use of Pesticides for Personal Health Protection

To ensure clarity with respect to the use of insecticides for personal protection in circumstances such as West Nile Virus, staff recommends that a new clause be added to Article 3, such as is found in several other pesticide by-laws (Toronto, Windsor, Newmarket, Thorold among others) as follows.

3m) as an insect repellent for personal use.

E. Infestation

As noted above, Council requested that staff draft and bring to Council a by-law amendment, if necessary, that would provide for the protection of trees and shrubs in the event of wide spread infestations such as, but not limited to, Gypsy Moth and the Emerald Ash Borer.

To address Council's direction, staff reviewed other municipal pesticide by-laws that include consideration of infestations and, in particular, the By-laws of the Cities of Toronto and London.

To allow for response to infestations to protect Oakville's trees and shrubs in the event of wide spread infestations by the Gypsy Moth, Emerald Ash Borer and, potentially, other pests, it is recommended that the following amendments be added:

Definitions:

Infestation – means the presence of pests in numbers or under conditions which involve an immediate or potential risk of substantial loss or damage to property.

Pest – means an animal, a plant or other organism that is injurious, noxious or troublesome, whether directly or indirectly, and an injurious, noxious or troublesome condition or organic function of an animal, a plant or other organism.

3n) to control or destroy pests which have caused an infestation to property.

The By-law 2007-123 'A by-law to amend By-law 2007-036, being a by-law to regulate the use of pesticides within the Town of Oakville.' (Appendix B) is recommended by staff to address minor amendments that will clarify language, application and support effective enforcement in accordance with Council's direction.

III. By-Law Evaluation

There are several mechanisms that can be applied to evaluate the impact of the Pesticide By-law based on a review of Toronto and Halifax By-Law evaluation and assessments, Region of Halton Health Department resources, and other potential data sources. Staff is recommending that by-law evaluation may include consideration of such data as:

- Number of complaints per year
- Number of charges per year
- Number of by-law enquiries per year (phone, email, mail)
- Pesticide use related question in the Town survey
- Number of public events, displays and demonstration seminars with documentation of public feedback including attendance numbers
- Interview/survey of retail sales outlet sales managers to gauge impact on sales/products
- Lawn care service provider feedback to gauge services and impact
- Rapid Risk Factor Surveillance System (RRFSS) by the Region of Halton Health Department (A standard, on-going phone survey that randomly polls about 100 Halton adults on health practices and behaviours and on public opinion and awareness of health issues. In 2004 a RRFSS module was developed to evaluate awareness of the Naturally Green pesticide campaign and gauge

pesticide use. In 2004 results showed that 45% had used pesticides on their lawn, garden or hard surfaces.)

- Potentially, the new Federal Sales Information Reporting Regulations, and provincial listings of pesticide vendors and applicators licensees.

Staff anticipates being in a position to report on the impact of the Pesticide By-law in early winter 2009 following one full growing season. It is recommended that an annual report be provided to Council for year-end in future years.

CONSIDERATIONS:

(A) PUBLIC

The input from the public was received through delegations at the Council meetings of February 5 and 6, 2007 and through consideration of the work of the Pesticide Task Force.

(B) FINANCIAL

The details of the financial impacts are represented in the report. The implementation strategy involves two components. The community education and outreach component includes a 2007 phase (\$23,000) that can be implemented with existing budget and staff resources and a proposed 2008 phase (\$101,000). The enforcement component recommends a 2008 program for an estimated \$122,500. Implementation of the 2008 proposals for both community education and outreach, and enforcement would be subject to the 2008 budget preparation, review and approvals processes.

(C) IMPACT ON OTHER DEPARTMENTS & USERS

The implementation of the Pesticide By-Law impacts the following Departments: Parks and Open Space, Environmental Policy, Clerks (By-Law Enforcement) and Legal. The community of Oakville as a whole will be impacted by the Pesticide By-Law.

(D) CORPORATE AND/OR DEPARTMENT STRATEGIC PRIORITIES

This report addresses the Council's Strategic Priority to enhance our natural environment, and to have programs and services that are environmentally sustainable.

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Legal Department
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APPENDICES:

Appendix A – By-law Number 2007-036 'A by-law to regulate the use of pesticides within the Town of Oakville'.

Appendix B – By-law Number 2007-123, 'A by-law to amend By-law 2007-036, being a by-law to regulate the use of pesticides within the Town of Oakville.'



Cindy Toth, Director
Environmental Policy Department



Douglas Carr, Town Solicitor
Legal Department

Appendix 'A'

THE CORPORATION OF THE TOWN OF OAKVILLE

BY-LAW NUMBER 2007-036

A by-law to regulate the use of pesticides within the Town of Oakville

WHEREAS Section 11(2), clause 6 of the *Municipal Act, 2001* authorizes the Town to enact bylaws which provide for the protection of the "health, safety and well-being" of Town residents;

AND WHEREAS the Council of the Town of Oakville desires to respond to the concerns expressed by Town residents about the health risks associated with the use of pesticides;

AND WHEREAS regulating the non-essential use of pesticides will help to promote and protect the health of Town residents.

THEREFORE THE COUNCIL ENACTS AS FOLLOWS:

Definitions

1. In this by-law, the following word has the following meaning:

I.P.M. accredited golf course – means a golf course that:

- i. Obtains and maintains accreditation in a recognized integrated pest management program from the IPM-PHC Council of Ontario, or equivalent, as determined by the Town; and
- ii. Provides proof of I.P.M. accreditation to the Town Clerk on or before January 31st of each year.

Pesticide - means:

- iii. A product, an organism or a substance that is a registered control product under the federal *Pest Control Products Act* which is used as a means for directly or indirectly controlling, destroying, attracting or repelling a pest or for mitigating or preventing its injurious, noxious or troublesome effects.
- iv. Despite Subsection (i), a pesticide does not include the products listed in Schedule "A" to this by-law.

Offence

2. No person shall apply or cause or permit the application of a pesticide within the boundaries of the Town of Oakville.

(continued)

Exceptions

3. Notwithstanding Article 2, it is permitted to apply or use a pesticide in the following cases:
- a. In a public or private swimming pool;
 - b. To control termites;
 - c. As a wood preservative;
 - d. To exterminate or repel rodents;
 - e. For injection into trees, stumps or wooden poles;
 - f. To purify water for human or animal use;
 - g. Inside of a building;
 - h. On land used for the commercial production of food;
 - i. To control, destroy, reduce or repel, directly or indirectly, an animal, plant or other organism which is harmful to human health; or
 - j. On an I.P.M. accredited golf course, provided that any such use or application is in keeping with the integrated pest management program in place.

Penalty

4. Any person who contravenes this by-law is guilty of an offence and, upon conviction, is liable to a fine or penalty provided for in the *Provincial Offences Act*, as amended.

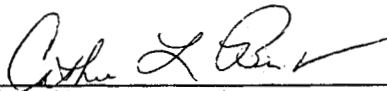
Effective Date

5. This By-law comes into force and effect on January 1, 2008.

PASSED by Council this 12th day of February, 2007



MAYOR
ROB BURTON



CLERK
CATHIE L. BEST

Schedule "A"

- (1) A product that uses pheromones to lure pests, sticky media to trap pests or "quick-kill" traps for vertebrate species considered pests, such as mice and rats.

- (2) A product that is or contains only the following active ingredients:
 - a) A soap;
 - b) A mineral oil, also called "dormant or horticultural oil";
 - c) Silicon dioxide, also called "diatomaceous earth";
 - d) Biological pesticides, including Bt (*Bacillus thuringiensis*) and nematodes;
 - e) Borax, also called "boric acid" or "boracic acid";
 - f) Ferric phosphate;
 - g) Acetic acid;
 - h) Pyrethrum or pyrethrins;
 - i) Fatty acids;
 - j) Sulphur; or
 - k) Corn gluten meal.

Appendix 'B'

THE CORPORATION OF THE TOWN OF OAKVILLE

BY-LAW NUMBER 2007-123

A by-law to amend By-law 2007-036,
being a by-law to regulate the use of
pesticides within the Town of Oakville

WHEREAS section 11(2), clause 6 of the *Municipal Act, 2001*, as amended, authorizes The Corporation of the Town of Oakville to enact by-laws which provide for the protection of the "health, safety and well being" of Town residents;

AND WHEREAS Council passed By-law 2007-036 (the "Pesticide By-Law") to respond to the concerns expressed by Town residents about the health risks associated with the use of pesticides;

AND WHEREAS it is desirable to amend the Pesticide By-law as set forth below;

THEREFORE THE COUNCIL OF THE CORPORATION OF THE TOWN OF OAKVILLE ENACTS AS FOLLOWS:

1. Section 1 of the Pesticide By-Law is hereby amended by adding the following definitions:

Infestation – means the presence of pests in numbers or under conditions which involve an immediate or potential risk of substantial loss or damage to property.

Pest - means an animal, a plant or other organism that is injurious, noxious or troublesome, whether directly or indirectly, and an injurious, noxious or troublesome condition or organic function of an animal, a plant or other organism.

2. Section 3 of the Pesticide By-Law is hereby amended by deleting 3 j and replacing it with the following:

j. On an I.P.M. accredited golf course or at the Oakville Lawn Bowling green, provided that any such use or application is in keeping with the integrated pest management program in place at the golf course or lawn bowling green;

3. Section 3 of the Pesticide By-Law is hereby amended by adding the following:

k. to control buckthorn or other invasive species in woodlots, valleylands and along trail systems;

l. at a hydro substation, a utility distribution station or within a hydro or railway corridor;

m. as an insect repellent for personal use; or

n. to control or destroy pests which have caused an infestation to property.

PASSED by the Council this 3rd day of July, 2007.

MAYOR

CLERK