

Re: TREE MANAGEMENT POLICY FOR PUBLIC LANDS

ACTING MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendation of the Director Engineering be adopted.

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TO: MUNICIPAL MANAGER 1989 MARCH 10
FROM: DIRECTOR ENGINEERING
SUBJECT: TREE MANAGEMENT POLICY FOR PUBLIC LANDS
PURPOSE: TO SEEK COUNCIL'S ENDORSATION OF THE ATTACHED TREE
MANAGEMENT POLICY

RECOMMENDATION:

1. THAT Council adopt the attached Tree Management Policy for Public Lands as Municipal Policy.

REPORT

Existing Practice

The Corporation's existing Tree Management Practice is limited to the removal of trees which are considered unhealthy or known to present a danger to the public or adjacent property. Corporation practice is to preserve trees for the continued enhancement of the environment and for the enjoyment of the public at large and not to remove them (nor top them) for the purpose of preserving or improving views.

Public Concerns

There are a number of concerns the public has raised regarding the removal or partial removal of trees on Municipal lands. These include:

1. The trees present a hazard to adjacent property.
2. The trees impair views.
3. Shading from the trees reduces the amount of sunlight which enters a yard.
4. Debris of leaves and twigs are a nuisance to clean up.
5. Roots may cause damage to underground utilities, sidewalks, driveways, and lawns.

As the situation presently exists, not all of these concerns are addressed through existing Corporation practise and no written policy exists to cover them.

Advantages of Trees on Municipal Land

There are many advantages to having trees growing on Municipal lands, such as:

1. Trees can make a major contribution to the living dimension of the Municipality.
2. Trees work to cleanse the urban environment and reduce carbon dioxide build up.
3. Trees can provide excellent visual buffers - for increased privacy or a reduction of visual impacts between incompatible land uses.
4. Trees can reduce noise levels.
5. Trees can help in soil stabilization and in preventing erosion.
6. Trees are a major factor in creating shade and combatting urban heat islands.

Tree Management Policy

The purpose of the attached policy is to provide clear and consistent tree management guidelines for staff involved with the planting, maintenance, and removal (where necessary and appropriate) of trees. It is staff's opinion that a consistent yet flexible Tree Management Policy is necessary to provide for a fair analysis and treatment of the problems, and to protect the large and growing investment the Corporation has in this element of our environment.

As public demand continues to grow for the Corporation to provide more service in terms of tree management, staff have become more involved in what could be called, in technical terms, "Urban Forestry" or, in other words, the management of trees in parks, on boulevards, rights-of-way, and easements that provides and maintains a standard of tree cover that enhances the environment in the Municipality.

Since a Tree Management Policy would impact on several departments within the Corporation, a staff committee, with representation of all the affected departments, was formed to coordinate and develop the recommended policy. The attached Tree Management Policy has been developed by a task group comprised of representatives of the Engineering, Planning & Building Inspection, and Parks & Recreation Departments.

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In order to provide a system that will offer efficient, fair, and consistent service to the public, staff is recommending that Council adopt the Tree Management Policy as described in the attached Policy statement.

There is no budget impact resulting from adoption of the policy because, in essence, the work involved in the administration of it is currently being done, although outside the realm of a formal policy.



E. E. Olson, P. Eng.,
DIRECTOR ENGINEERING

HDH/RF0:je
Attach.

cc: Director Administrative & Community Services
Director Planning & Building Inspection
Director Recreation & Cultural Services
Municipal Solicitor

TREE MANAGEMENT POLICY FOR PUBLIC LANDS

The purpose of this policy is to provide clear and consistent tree management guidelines. The policy focuses on the conservation, maintenance, planting and removal (under certain circumstances) of trees on "public lands". The various types of public lands include: road allowances (including lanes and boulevards), parks, public easements and other Municipal holdings as deemed fitting.

The Corporation recognizes that trees in the Municipality are an important environmental resource. As the major land owner in the Municipality with large parts of these holdings in a forested state, an overriding consideration in the Municipality's tree management policy is to maintain and improve the health of this resource, ie. our natural and planted urban treescape, as increasing urbanization occurs.

This policy is designed to help the Municipality strike a balance between its responsibility to preserve and enhance the Municipal treescape while at the same time providing a basis for tree maintenance/conservation, tree planting, and tree removal where necessary and appropriate.

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1.0 TREE MAINTENANCE/CONSERVATION

The Corporation will maintain and conserve trees on public lands, using present day tree culturing methods to help ensure their vigor and vitality.

The Corporation does not practice or permit, as regular tree maintenance, the removal of healthy tree tops (topping) for reasons of view, shade or litter.

2.0 TREE PLANTING

(a) Tree planting on all public lands shall be carried out subject to the approval of the Parks and Recreation Department.

(b) Planting will take into consideration the type of area, neighbourhood, existing trees, and future maintenance costs. Only desirable, long-lived trees of good appearance, beauty, adaptability and generally free from undesirable characteristics shall be planted on public lands. (See desirable tree species list.)

(c) Tree planting on public lands shall be done in a manner to avoid:

- present and future damage to utilities at, above, and below ground
- hazardous obstruction of traffic vision, traffic signals and signs, intersections and lanes
- creating an undue obstruction to street lighting
- creating a potential hazard to structures or buildings
- being other than of a permanent nature

(d) Requirements and restrictions:

I. Trees with a mature height within one metre of utility wires will not be planted under the wires.

II. Boulevard strips between curbs and sidewalks accommodating trees will desirably have a width of not less than 48" (1.2 m).

III. Boulevard trees will not be planted on unimproved roads. Where roads, boulevards and sidewalks have been pre-designed, boulevard planting can precede construction where appropriate.

3.0 TREE REMOVAL

The underlying philosophy of the tree management policy is to maintain and improve treescape. However, it is recognized that under special circumstances, after considering other alternatives, tree removal may be necessary. This section documents those special conditions under which trees may be removed.

3.0 Cont'd.

The treatment or removal of any tree or trees on all public lands shall be carried out subject to the prior consultation of the Parks and Recreation Department.

Where it has been necessary to remove a tree or trees, appropriate replacement trees will be planted in accordance with the desirable tree species list, where conditions warrant. (In natural areas reforestation will occur as required.)

If a tree falls within the guidelines for removal, then it will be removed completely - topping will not be considered as a solution to a tree problem.

3.1 Trees the Corporation May Remove at its Expense

- (a) Large trees which are very brittle by nature and are considered hazardous when in close proximity to private property. In addition, certain tree species which are not preferred for boulevards and laneways may be removed by the Corporation at its expense. (See Non-Preferred Species List, Appendix II.)
- (b) Dead trees or trees damaged beyond repair and which are, or will become, hazardous. This would include damage occurring from insects, disease, vandalism, vehicles, weed eaters, lawnmowers, extreme weather, and other causes.
- (c) Trees that are causing damage to adjacent private or public properties such as damage caused by roots to underground services, roads, driveways, sidewalks and walls. (Note: loss of views, too much shade, or too much leaf litter are not considered as damage.)
- (d) Trees that are creating a hazard due to their location by interfering with sight lines for pedestrian or vehicular traffic, traffic facilities, or with street lighting.
- (e) Trees growing on public lands where the canopies encroach severely over private property and where pruning will not resolve the encroachment problem.
- (f) Trees that prevent the installation or repair of underground sewer or water services (private or public services).
- (g) Removal of otherwise desirable trees under (c), (d), (e) and (f) above will be considered only as a last resort after other solutions are considered first, such as trimming, root pruning, transplanting, and similar measures.

3.2 Trees That Outside Utilities May Remove at Their Expense

To ensure the safety of citizens, utility companies consider it necessary to maintain their rights-of-way in a manner that will not compromise safety.

Where trees interfere with overhead wires or any other outside utility it may be removed after permission from the Corporation has been obtained.

Removal will occur only as a last resort and if it has been determined that alternative measures such as trimming, root pruning or transplanting are not suitable.

APPENDIX I

I DESIRABLE TREE SPECIES LIST FOR BOULEVARDS

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Small or Narrow Trees

Acer circinatum (Vine Maple)
Acer ginnala (Amur Maple)
Acer rubrum vars. 'Armstrong', 'Scanlon' (Red Maple)
Carpinus betulus pyramidalis (Pyramidal hornbeam)
Cercidiphyllum japonicum (Katsura tree)
Cornus florida (Flowering Dogwood)
Davidia involucrata (Dove Tree)
Fagus sylvatica var. 'Dawyck' (Pyramidal beech)
Fraxinus holatricha (Morain Ash)
Ginkgo biloba var. 'Sentry' (Columnar ginkgo)
Malus floribunda and selected small-growing crabapples
Prunus subhirtella autumnalis (Autumnalis cherry)
Prunus sargentii columnaris (Columnar Sargent cherry)
Prunus, flowering plums, x blieriana, 'Newport',
'Thundercloud', etc.
Styrax japonica (Snowdrop tree)

Medium Sized Trees

Acer Platanoides vars. 'Cavalier', 'Columnare', 'Crimson King', 'Emerald Queen', 'Globosum', 'Summershade', etc. (Norway Maple)
Acer rubrum (Red Maple) & vars. 'October Glory', 'Red Sunset', 'Schlesinger', etc.
Acer saccharum (Sugar Maple) vars. 'Green Mountain' and 'Sweet Shadow'
Betula nigra, B. papyrifera (River birch, paper birch)
Carpinus betulus (Hornbeam)
Fagus sylvatica heterophylla (Beech)
Fraxinus (Ash) vars. 'Flame', 'Golden Desert', 'Marshall Seedless', 'Rose Hill', 'Summit'
Gleditsia (Honeylocust) only thornless vars. like 'Skyline', 'Shademaster', etc.
Liquidambar styraciflua (Sweet gum) and newer vars.
Magnolia kobus
Malus, (flowering crabapples) 'Snowdrift', 'Wintergold', other medium sized vars.
Metasequoia (Dawn redwood)
Morus alba var. 'Kingan' (seedless mulberry)
Prunus cerasifera pissardi (Flowering Plum)
Prunus sargentii, P. whitcombi, P. yedoensis, 'Accolade', 'Akebono', 'Kwanzan', 'Shirofugen', 'Ukon', etc. (Flowering Cherries)
Quercus coccinea (Scarlet Oak)
Quercus palustris var. 'Crownright' (Pin Oak)
Quercus phellos, Q. shumardii (Willow oak, Texas red oak)
Tilia cordata (Littleleaf linden) & vars. 'Greenspire', 'Rancho', 'Salem' etc.
Tilia euchlora (Crimean linden)
Zilkova serrata 'Village Green'

APPENDIX I

I DESIRABLE TREE SPECIES LIST FOR BOULEVARDS (Cont'd.)

Large Boulevard Trees

Acer pseudoplatanus (Sycamore maple)
Fagus sylvatica & vars. cuprea, purpurea, (European beech,
copper beech, purple beech)
Ginkgo biloba & vars. (Maidenhair tree)
Liriodendron tulipifera (Tulip tree)
Quercus borealis, (Red Oaks)

ADDITIONAL TREE SPECIES AND VARIETIES MAY BE PLANTED IF
AUTHORIZED BY THE BURNABY PARKS & RECREATION DEPARTMENT.

II DESIRABLE TREE SPECIES LIST FOR CONSERVATION AREAS

Appropriate native species.

III DESIRABLE TREE SPECIES LIST FOR PARKS

According to design.

IV DESIRABLE TREE SPECIES LIST FOR OTHER AREAS
(eg. Public Squares, Trails)

According to design.

APPENDIX II

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NON-PREFERRED TREE SPECIES LIST FOR BOULEVARDS AND LANEWAYS

Reasons noted below. These trees may be planted if the problems are satisfactorily met. Some are desirable trees in the right situation.

Acer negundo, Acer saccharinum (Boxelder, silver maple). Break up badly in storms.

Ailanthus altissima (Tree of Heaven). Roots are invasive, suckers freely, is brittle.

Albizia julibrissin (Silk Tree). Vulnerable to fatal canker attacks.

Alnus rubra (Red alder). Short-lived brittle tree. Favourite of tent caterpillars.

Betula alba (White birch, Weeping white birch, etc.). Regular aphid infestations require 1-3 summer sprayings to control, otherwise sticky 'honeydew' drips from trees. (Many trees get aphids, but white birch is always more heavily attacked.)

Catalpa. Short-lived, brittle. Roots are worse on sidewalks than most trees.

Crataegus oxyacantha (Hawthorn, including Paul's Scarlet and several named varieties). See aphid problem under Betula, above. Hawthorns are heavily attacked.

Gleditsia triacanthos (Honeylocust). Thorny - choose thornless varieties. Ordinary honeylocust can damage walks.

Juglans nigra, J. regia (Black walnut, English walnut). Messy fruit, large leaves of English walnut are slippery on walks.

J. nigra roots are destructive.

Malus - fruiting applies. Fruit on walks.

Platanus spp. (London plane, sycamore). Destructive to paving, roots lift ground strongly, may invade sewers. Best with wide planting strips or cobble paving. Often need three sprayings yearly to control serious anthracnose disease.

Populus spp. (Poplars). Tops brittle, break up easily in storms. Roots damage sidewalks and may invade sewers.

Prunus - fruiting cherries, plums. Fruit on walks.

Pyrus - fruiting pears. Fruit on walks.

Quercus palustris (pin oak). Lower limbs keep growing downward, require a good deal of pruning when used for street trees. Var. 'Crownright' mostly avoids this.

Robinia pseudoacacia (Black locust). Thorny, though there are thornless vars. Relatively short-lived and brittle tree.

Salix spp. (Willows, including weeping). Roots enter sewers, tree brittle, short-lived.

Sophora japonica (pagoda tree). Is highly vulnerable to canker attack that is often fatal.

Sorbus aucuparia (Mountain Ash). Large crop of messy fruits may be sidewalk hazard.

Ulmus americana, U. parvifolia, U. pumila (American elm, Chinese elm). Unless sprayed yearly, these are apt to be defoliated by elm leaf beetle, Dutch elm disease, roots can break walks, may cause sewer problems.

ITEM 3
MANAGER'S REPORT NO. 24
COUNCIL MEETING 89/03/28

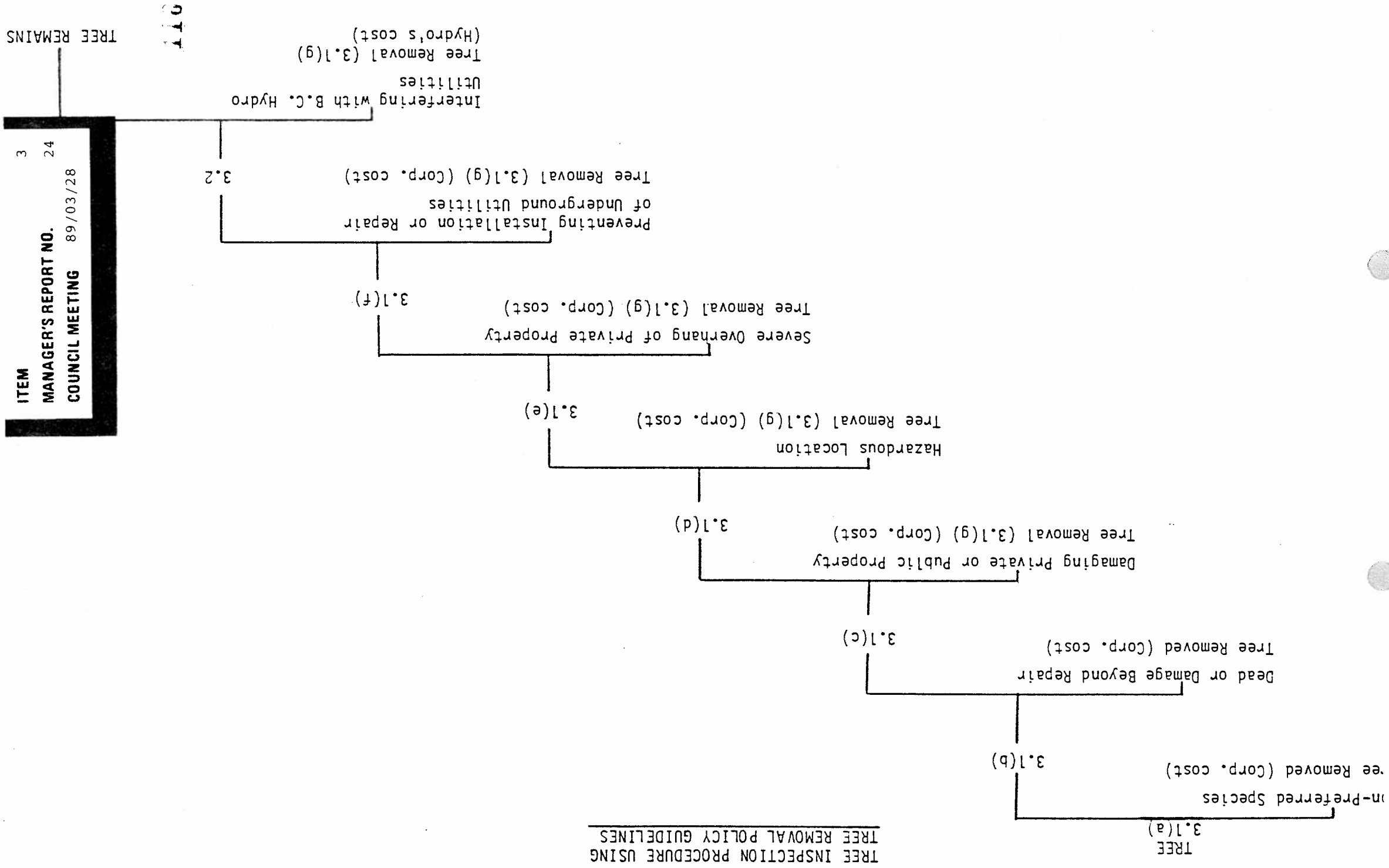
APPENDIX II

NON-PREFERRED TREE SPECIES LIST FOR BOULEVARD AND LANEWAYS
(Cont'd.)

MOST CONIFER TREES ARE NOT RECOMMENDED. Lower limbs can cause safety-visibility problems at driveways, alleys, intersections, signs and signals.

These species of trees will under certain conditions be considered for removal from boulevards and laneways by the Corporation of Burnaby.

TREE REMOVAL POLICY GUIDELINES



ITEM 3
MANAGER'S REPORT NO. 24
COUNCIL MEETING 89/03/28

APPENDIX III

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