



Talbot Mackenzie & Associates

Consulting Arborists

CONSTRUCTION IMPACT ASSESSMENT & ARBORIST REVIEW

415 & 435 Michigan Street, Victoria

PREPARED FOR: Starlight Investments Ltd
c/o CitySpaces Consulting Ltd.
5th Floor - 844 Courtenay Street
Victoria, BC
V8W 1C4

PREPARED BY: Talbot, Mackenzie & Associates
Tom Talbot – Consulting Arborist
ISA Certified # PN-0211A
TRAQ – Qualified

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Box 48153 RPO - Uptown Victoria, BC V8Z 7H6
Ph: (250) 479-8733
Fax: (250) 479-7050
Email: tmtreehelp@gmail.com



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Jobsite Property: 415 - 435 Michigan Street, Victoria

Date of Site Visit(s): November 28, 2017, May 22, July 25 and August 12, 2019

Site Conditions: Flat property with two existing apartment towers, inground pool and above ground parking. Construction storage and landscape renovation activity present.

Summary: From the information that was compiled during our preliminary review of the townhouse building, and covered bike storage structure locations, it is our opinion that two bylaw-protected Douglas-fir trees and one protected arbutus are located where their removal will be required. Replacements trees that are of a size and number required by the municipality should be installed within the landscape areas to replace the function of the removed trees. It will also be necessary to remove several non-protected trees, including one each of English holly, Norway spruce, Horse chestnut, Hedge maple and Manitoba maple, two English hawthorn and a hedge row of 17 English laurel shrubs.

It should be possible to mitigate the impacts of the building construction on the trees that are located along the municipal frontage, Neighbouring properties, one bylaw-protected Elm tree and most of the remaining non protected trees that have not been identified for removal in the body of this report. We are not aware of, and did not review, any requirements to upgrade or install services across the municipal frontage or any other offsite work or improvements as part of this assignment.

Assignment: Provide arborist services to:

- Examine and document the tree resource within the property boundaries located where they could potentially be impacted, on the municipal property fronting these properties and on the neighbouring properties where they could be impacted.
- Review the preliminary site and building location drawing and assess the potential impacts on the resource of bylaw-protected, municipal trees and neighbouring trees related to the construction of a multi-unit residential townhouse building, the demolition of two covered parking structures and the construction of two covered bicycle storage structures on this site.
- Outline mitigation strategies to reduce the impacts on the bylaw-protected, municipal and neighbouring trees that are to be retained.

Method: During our June 14, 2017 site visit, at your request, we visually examined the above ground portions of the trees on the municipal frontage of this property, and the bylaw-protected and other trees on the property located where they could potentially be impacted by the construction of a residential housing complex along the front of the 415 Michigan Street property. During our follow up site visits on May 22, July 25 and August 12, 2019 we documented and reviewed the trees on this and the adjacent properties that could potentially be impacted by the demolition of the carport structures and construction of the bicycle storage structures.

For ease of identification in the field, we attached numbered metal tags to the lower trunk of each subject tree or tree grouping located within the property boundaries. The trees on the municipal frontage and on adjacent properties, where they could be impacted have not been tagged, however they have been assigned a number that is entered on the attached tree location diagram. The information that was compiled is entered on a tree resource spreadsheet attached to this report, and includes the tree number, trunk diameter (d.b.h.), a defined critical root zone (CRZ) or root protection area, the canopy spread, the health and structural condition of the tree, the status regarding tree removal and retention, the species tolerance to construction impacts and any noted remarks or recommendations.

Tree Resource: The resource of trees located on the property, the municipal frontage and neighbouring properties where they could potentially be impacted include the following trees:

Bylaw-protected trees

- Douglas-firs *Psuedotsuga menziesii* – two trees
 - #95 - 69 d.b.h.
 - #94 - 84 cm at d.b.h.
- Arbutus *menziesii* - one three stemmed tree
 - #92 - 4/7/12 cm d.b.h.
- Elm *Ulmus species* - one tree
 - #1677 - 82 cm d.b.h.

Non - protected trees –

- English holly *Ilex aquifolium* – #97, 1673(hedge row of 6 trees), 1684, 1686 and 1688.
- Norway spruce *Abies picea* – #96.
- Horse chestnut *Aesculus hippocastunum* – #93.
- Hedge maple *Acer campestre* – #90.
- Lawson cypress – #1672
- Manitoba maple – #1673
- Tulip tree – #1674
- English hawthorn – #1679 – 10 individual trees measuring less than 25 cm d.b.h.
- English hawthorn – #1681 – 26 cm d.b.h.
- English hawthorn – #1682 – 24 cm d.b.h.
- English hawthorn – #1683 – 10 cm d.b.h.
- English hawthorn – #1685 – 21 cm d.b.h.
- English hawthorn – #1687 – 12/15 cm d.b.h.
- Elm – #1675 – 10 individual stems measuring less than 12 cm d.b.h.
- Elm – #1678 – 15/23/44 cm d.b.h.

- English laurel – #1680 – hedgerow of 17 shrubs with stems measuring less than 20 cm d.b.h.
- European birch – #1689 – 40 cm d.b.h.

Municipal trees

- Four European Silver birch *Betula pendula* 'alba', Nt5, Nt7, Nt9 and Nt16 are located along the municipal property fronting 415 and 435 Michigan Street.
- Four Kwanzan Flowering cherries *Prunus serrulata* Kwanzan Nt6, Nt8, Nt10 and Nt15 are located along the municipal property fronting 415 and 435 Michigan Street.
- One Canoe birch Nt11 is located on the 415 Michigan Street frontage, however it is a smaller tree measuring >10 cm in diameter and is located away from the area of construction and where it is unlikely to be impacted.

Neighbouring trees

- European Silver birch – #Nt,17, Nt18, Nt19, Nt20, Nt21, and Nt22. Row of 6 non-protected trees measuring 15 cm to 35 cm d.b.h. located on the adjacent property at 406 Simcoe Street
- Western Red cedar – Nt13 and Nt14. Two bylaw-protected trees measuring 66 cm and 88 cm d.b.h. located on the adjacent property at 345 Michigan Street
- Western hemlock – Nt12 – Non protected tree measuring 30 cm d.b.h. located on the adjacent property at 345 Michigan Street

Potential Impacts: During our site visit and review of the plans that were supplied, we identified to what extent the bylaw-protected trees will be impacted. The following trees are located where they cannot be protected and retained, therefore they have been designated for removal and replacement:

- Two bylaw-protected Douglas-fir trees located within the building footprint on the 415 Michigan Street property, and one arbutus tree located within the proposed garbage storage area on the 435 Michigan Street property.
- One each non-protected Norway spruce, and Horse chestnut located within or in close proximity to the main building footprint, two English holly (one in the building footprint and one on the west side of the 415 Michigan building), one Hedge maple tree within the proposed garbage storage area and one Manitoba maple located where it will be impacted close to the bike storage building on the 435 Michigan Street property.
- A hedgerow of non protected English laurel shrubs #1680 and two non protected English hawthorn trees #1681 and 1682 located within or close to the footprint of the bike storage building on the 415 Michigan Street property.

Other bylaw-protected trees, or trees located on neighbouring properties where they could potentially be impacted by the demolition of the existing covered carports and construction of the bike storage building on the 415 Michigan street property but are designated for retention include.

- Elm #1677 bylaw- protected tree located on the subject property
- The five European Silver birch located on the adjacent 406 Simcoe Street property
- The two Western Red cedar and one Western hemlock on the adjacent 345 Michigan English holly, Street property

Trees to be retained

The birch and flowering cherry trees on the municipal frontage are located where the construction will encroach within the defined critical root zone areas, but where there is a change in grade and retaining wall along the property boundary that will have restricted root growth in this direction. The trees are located where, in our opinion, there is a reasonable expectation that they can be isolated from the construction impacts and retained if all excavation and construction activity is restricted to the area within the property boundaries. The canopy of the municipal European birch #NT7 encroaches over the property boundary and where some canopy pruning may be required.

The trees located on neighbouring properties have been identified for retention and there is a reasonable expectation that they can be isolated from the construction impacts and retained if the recommendations outlined in this report are adhered to throughout the construction phase.

Elm #1677 located on the subject property is to be protected and retained.

It is our understanding that all of the remaining non protected trees not indicated for removal in the preceding paragraphs are to be retained unless they are found to be in conflict with the construction activity and therefore would be removed in that eventuality.

Tree Retention Guidelines and General Recommendations:

We recommend the following procedures be implemented to reduce the impacts on the municipal trees that are to be retained.

Barrier fencing: The row of municipal trees that are located on the municipal frontage adjacent to the area of construction should be isolated from the construction impacts by erecting protective barrier fencing along the street curb, closest sidewalk edge and along the driveway edge. The critical rooting area, that is not beneath the existing asphalt or hardscape surfacing, of Elm #1677 and the adjacent Western Red cedar and Western Hemlock should also be protected by erecting barrier fencing.

The barrier fencing to be erected must be a minimum of 4 feet in height, of solid frame construction that is attached to wooden or metal posts. A solid board or rail must run between the posts at the top and the bottom of the fencing. This solid frame can then be covered with plywood, or flexible snow fencing (see attached diagram). Signs must be posted around the protection zone to declare it off limits to all construction related activity. The fencing must be erected prior to the start of any construction activity on site (i.e. site clearing, demolition, pavement removal, excavation and construction), and remain in place through completion of the project. The project arborist must be consulted before this fencing is removed or moved for any purpose. Solid hording material may also be required to protect the trunks of trees from mechanical injury where vehicles or machinery are permitted close to tree trunks.

Townhouse Building footprint: Site preparation for the building footprints will encroach up to the Michigan Street property boundary and will require the removal of the existing retaining wall. It is our opinion the impacts on the municipal trees can be successfully mitigated by terminating the excavation at the property boundary with no encroachment into the municipal property. The project arborist should supervise any excavation along the property boundary

where this excavation encroaches within the critical root zone areas of municipal trees that are to be retained. The arborist should also supervise the excavation to remove the existing retaining wall along this property boundary.

Servicing: Plans for the replacement or upgrade to the underground services were not provided or reviewed prior to the preparation of this report. It is our understanding that all of the underground services are to be located beneath the driveway access. To avoid potential impacts with the roots of the municipal trees, we recommend installing these services along the driveway entrance that is on the west side of the proposed townhouse buildings to be constructed and be located outside the critical root zones of the municipal trees.

The project arborist should review the location and details of the service locations once they have been finalized. The arborist should also supervise any excavation for services that fall within the critical root zone areas of trees that are to be retained.

Pruning: Pruning may be required where the canopies of the municipal trees encroach over the property boundary and where clearance for construction access is required. The project arborist should review the pruning requirements once the building location has been surveyed and laid out on site and make recommendation as to the best approach for pruning the trees while reducing the impacts on their structure. All the pruning must be completed by an ISA Certified arborist or completed to ANSI A300 standards.

Carport Demolition: It is our understanding that the demolition of the existing carports is to be restricted to the removal of the aboveground portions of the structures only with all of the existing asphalt paving and underground portions of the supports to be left in place.

- The neighbouring the European Silver birch trees are protected by the existing site perimeter fencing and the root systems protected by the existing asphalt surfacing. Minor pruning of the canopies where they encroach over the property boundary may be required to facilitate the work.
- Most of the canopy of Elm #1677 is above the height of the proposed work and should not be in conflict, however minor clearance pruning may be required. Most of its root zone is covered by the existing asphalt surfacing that is to remain in place. Any exposed soils within the elm root zone should be protected from the construction activity by erecting protective barrier fencing, Solid hording should be placed around the lower trunk to prevent accidental mechanical injury.

Bike Storage buildings: Two bike storage buildings are proposed to be constructed within the subject properties. The storage structure behind the 435 Michigan street building is located where there are no bylaw-protected or neighbouring trees that will be impacted. Arbutus #92 has been identified for removal to facilitate construction of a garbage storage area.

The footprint of the bike storage unit for the 415 Michigan Street building is located along the west property boundary. Two Western Red cedar, *Thuja plicata*, trees and one Western hemlock, *Tsuga heterophylla*, tree are located on the adjacent property where they could potentially be impacted by the structure location.

- #Nt 12 - 30 cm Western hemlock located 10-metres from the structure
- #Nt 13 - 86 cm Western Red cedar located 7-metres from the structure
- #Nt 14 - 66 cm Western Red cedar located 4-metres from the structure

All the trees and shrubs to be removed or pruned appear to be located within the boundary line of the subject property and are a species or a size that are not protected by the municipal tree protection bylaw and include English laurel, hawthorn and young elm trees.

The structure will encroach within a portion of one quadrant of the critical root zone of the 66 cm cedar while the other two trees are isolated from the construction by the 66 cm cedar that grows between these two trees and this structure.

To reduce the potential impacts on this tree, we recommend:

- Prior to the commencement of construction, the critical root zone area outside the area of encroachment should be isolated from the construction activity by erecting protective barrier fencing.
- An arborist supervises the excavation for the footprint of this structure and prune any roots encountered to encourage rapid wound wood development and the formation of new root structures.
- The excavation be limited to the depth required to reach the layer of bearing soil required to support the slab-on-grade floor of the structure.
- The excavation outside the slab footprint be limited to the space required for the form work, approximately 30 cm outside this slab.
- Following the excavation and during and following construction, the trees will benefit from supplemental irrigation throughout the dry summer months, to assist the trees in responding to any root loss that has occurred

It is our understanding that a path shown to connect this storage structure to Michigan street on the original plans reviewed has been relocated closer to the building to limit the encroachment into the root zones of the neighbouring trees.

Work area and material storage: It is important that the storage of excavated soil, and construction material be located within the existing paved parking areas or elsewhere on the property where they are not in conflict with the trees that are to be retained.

Clients responsibility: It is the responsibility of the client or his/her representative to contact the project arborist for the purpose of:

- Locating the barrier fencing
- Reviewing the arborist reports and retention plans with the project foreman or site supervisor during a pre-construction site meeting
- Locating work zones, where required.
- Supervising excavation, blasting and other construction activities where they encroach within critical root zones of the municipal and other trees that are to be retained.

Please do not hesitate to call us at (250) 479-8733 should you have any further questions. Thank You.

Yours truly,
Talbot Mackenzie & Associates



Tom Talbot & Graham Mackenzie
ISA Certified, & Consulting Arborists

Enclosures: Tree Resource spreadsheet, Key to headings in resource table, Barrier fencing specifications, Barrier fencing location diagram.

Disclosure Statement

Arborists are professionals who examine trees and use their training, knowledge and experience to recommend techniques and procedures that will improve their health and structure or to mitigate associated risks.

Trees are living organisms, whose health and structure change, and are influenced by age, continued growth, climate, weather conditions, and insect and disease pathogens. Indicators of structural weakness and disease are often hidden within the tree structure or beneath the ground. It is not possible for an Arborist to identify every flaw or condition that could result in failure nor can he/she guarantee that the tree will remain healthy and free of risk.

Remedial care and mitigation measures recommended are based on the visible and detectable indicators present at the time of the examination and cannot be guaranteed to alleviate all symptoms or to mitigate all risk posed.

Key to Headings in Resource Table

d.b.h. – **diameter at breast height** - diameter of trunk, measured in centimetres at 1.4 metres above ground level

CRZ – **critical root zone** - estimated optimal size of tree protection zone based on tree species, condition and age of specimen and the species tolerance to root disturbance. Indicates the radial distance from the trunk, measured in metres.

Crown spread – indicates the diameter of the crown spread measured in metres to the dripline of the longest limbs.

Condition health/structure –

- Good – no visible or minor health or structural flaw
- Fair – health or structural flaw present that can be corrected through normal arboricultural or horticultural care.
- Poor – significant health or structural defects that compromise the long-term survival or retention of the specimen.

Bylaw status – status of trees on the property and frontage

- Protected - tree that is protected under the current tree protection bylaw.
- Not protected - tree that is not protected under the current tree protection bylaw.
- Municipal - Tree that is located on the municipal frontage.

Tree status – Planned status of tree retention within proposed development

- Retain – Retention of tree proposed
- Possible retain – Retention possible with precautions
- Remove – Removal required or recommended

Relative Tolerance – relative tolerance of the selected species to development impacts.

TREE RESOURCE
for 415 and 435 Michigan Street

Tree #	d.b.h. (cm)	CRZ	Common Species Name	Latin name	Canopy Spread (metres dia)	Condition Health	Condition Structure	Bylaw status	Retention status	Relative Tolerance	Remarks / Recommendations
97	18/22 25/28	4.0	English holly	<i>Ilex aquifolium</i>	9.0	Good	Fair	Not Protected	Remove	Good	
96	47	5.0	Norway spruce	<i>Picea abies</i>	11.0	Fair	Poor	Not Protected	Remove	Moderate	Thinning canopy. Multiple stems in canopy, weakness at stem union
95	69	8.0	Douglas-fir	<i>Pseudotsuga menziesii</i>	14.0	Fair	Fair	Protected	Remove	Poor	Multiple stems in canopy.
94	84	9.0	Douglas-fir	<i>Pseudotsuga menziesii</i>	15.0	Fair	Fair	Protected	Remove	Poor	Small needles. Heavily end-weighted secondary stem.
93	66	6.0	Horse chestnut	<i>Aesculus hippocastanum</i>	15.0	Good	Fair	Not Protected	Remove	Good	Slight canopy asymmetry. Canopy reduced previously. Decay visible in old failure wounds on stems and on trunk below main union.
92	4\7/12	3.0	Arbutus	<i>Arbutus menziesii</i>	4.0	Good	Good	Protected	Remove	Poor	
90	27/30 /35	5.0	Hedge maple	<i>Acer campestre</i>	9.0	Good	Fair	Not Protected	Remove	Moderate	
5	33	5.0	European Silver birch	<i>Betula pendula alba</i>	8.0	Fair	Fair	Municipal	Retain	Moderate	Located on the east side of the driveway entrance to 435 Michigan Street
6	42	5.0	Kwanzan Flowering cherry	<i>Prunus serrulata Kwanzan</i>	13.0	Fair	Fair	Municipal	Retain	Moderate	Located on the west side of the driveway entrance to 435 Michigan Street. Large surface roots. The spread of the critical roots may be restricted by the retaining wall along the property boundary and raised site grade approximately 4 metres from the base of the trees.
7	60	7.0	European Silver birch	<i>Betula pendula alba</i>	14.0	Good	Fair	Municipal	Retain	Moderate	Canopy asymmetry. Heavy corrected trunk lean. Response growth on opposite side of lower trunk. The spread of the critical roots may be restricted by the retaining wall along the property boundary and raised site grade approximately 4 metres from the base of the trees.

TREE RESOURCE
for 415 and 435 Michigan Street

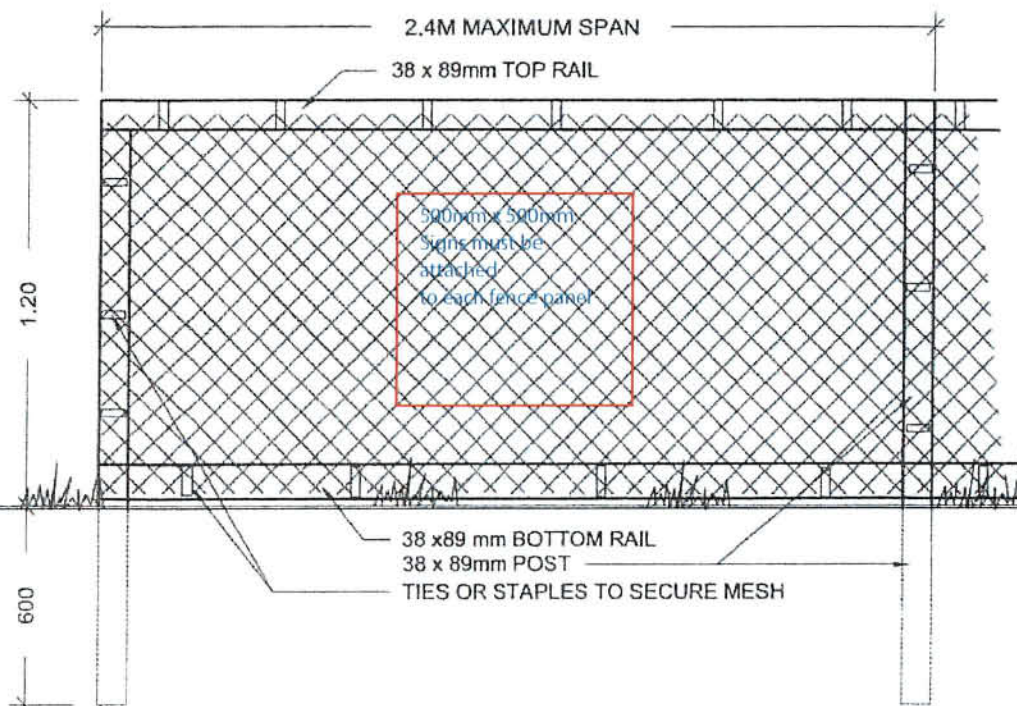
Tree #	d.b.h. (cm)	CRZ	Common Species Name	Latin name	Canopy Spread (metres dia)	Condition Health	Condition Structure	Bylaw status	Retention status	Relative Tolerance	Remarks / Recommendations
8	40	5.0	Kwanzan Flowering cherry	<i>Prunus serrulata Kwanzan</i>	12.0	Fair	Fair	Municipal	Retain	Moderate	Canopy asymmetry, weighted over street. Dieback in canopy, Cherry Bark Tortrix infestation. Large scarred surface roots. The spread of the critical roots may be restricted by the retaining wall along the property boundary and raised site grade approximately 4 metres from the base of the trees.
9	46	5.0	European Silver birch	<i>Betula pendula alba</i>	17.0	Fair/poor	Fair	Municipal	Retain	Moderate	Canopy asymmetry, weighted over street. Thinning foliage. Located on the west side of the driveway entrance to 415 Michigan Street and in front of the existing building.
10	12	2.0	Kwanzan Flowering cherry	<i>Prunus serrulata Kwanzan</i>	4.0	Good	Good	Municipal	Retain	Moderate	Located on the west side of the driveway entrance to 415 Michigan Street and in front of the existing building.
11	8	2.0	Canoe or Jacquemonti birch	<i>Betula papyrifera</i>	4.0	Good	Good	Municipal	Retain	Moderate	Located on the west side of the driveway entrance to 415 Michigan Street and in front of the existing building.
Nt15	39	4.0	Kwanzan Flowering cherry	<i>Prunus serrulata Kwanzan</i>	11.0	Fair	Fair	Municipal	Retain	Moderate	Some dieback in canopy. Weakness at limb unions
Nt16	53	6.0	European Silver birch	<i>Betula pendulum alba</i>	15.0	Good	Good	Municipal	Retain	Moderate	
1672	27	3.0	Lawson cypress	<i>Chamaecyparis lawsoniana</i>	6.0	Good	Good	Not Protected	Retain	Good	Competition from pine in park
1673	46	5.0	Box elder, Manitoba maple	<i>Acer negundo</i>	14.0	Fair	Fair	Not Protected	Remove	Good	Asymmetric canopy. Canopy spread 7 metres into property. Surface rooted.
1674	24/33	5.0	Tulip tree	<i>Liriodendron tulipifera</i>	9.0	Fair	Fair	Not Protected	Retain	Poor	Stunted form, 2 stems. Roots lifting asphalt.
Nt17	aprox. 35	4.0	European Silver birch	<i>Betula pendula alba</i>	7.0	Fair	Good	Not Protected	Retain	Moderate	Located on adjacent property to the rear (406 Simcoe). Some stress in canopy
Nt18	aprox. 20	3.0	European Silver birch	<i>Betula pendula alba</i>	6.0	Good	Good	Not Protected	Retain	Moderate	Located on adjacent property to the rear (406 Simcoe Street).

TREE RESOURCE
for 415 and 435 Michigan Street

Tree #	d.b.h. (cm)	CRZ	Common Species Name	Latin name	Canopy Spread (metres dia)	Condition Health	Condition Structure	Bylaw status	Retention status	Relative Tolerance	Remarks / Recommendations
Nt 19	aprox. 20	3.0	European Silver birch	<i>Betula pendula alba</i>	5.0	Good	Good	Not Protected	Retain	Moderate	Located on adjacent property to the rear (406 Simcoe Street). Roots lifting asphalt. Surface to retain.
Nt 20	aprox. 20	3.0	European Silver birch	<i>Betula pendula alba</i>	5.0	Poor	Poor	Not Protected	Retain	Moderate	Located on adjacent property to the rear (406 Simcoe Street). Declining health. Unlikely to survive.
Nt 21	aprox. 20	3.0	European Silver birch	<i>Betula pendula alba</i>	5.0	Fair	Good	not Protected	Retain	Moderate	Located on adjacent property to the rear (406 Simcoe Street). Some stress in canopy
Nt 22	aprox 15	2.0	European Silver birch	<i>Betula pendula alba</i>	4.0	Fair	Good	Not Protected	Retain	Moderate	Located on adjacent property to the rear (406 Simcoe Street). Some stress in canopy
1675	>12	2.0	Elm	<i>Ulmus</i>	1.0	Good	Good	Not Protected	Retain	Good	10 stems under 12 cm diameter. Appear to be seedlings or root suckers from larger elm tree. Near southwest corner of property and extending up to 8 metres from rear property boundary
1676	>23	3.0	English holly	<i>Ilex aquifolium</i>	4.0	Fair	Fair	Not Protected	Retain	Good	6 trees composed of 13 separate stems less than 23 cm diameter along west property boundary
1677	82	9.0	Elm	<i>Ulmus</i>	20.0	Fair	Good	Protected	Retain	Good	Some stress in canopy
1678	15/23/44	8.0	Elm	<i>Ulmus</i>	11.0	Good	Fair	Not Protected	Retain	Good	Stump originates on subject property. 24 cm stem supported by conflicting hawthorn stem. Stem larger above point of support than below.
1679	>25	3.0	English hawthorn	<i>Crataegus laevigata</i>	5 to 7	Fair/poor	Fair/poor	Not Protected	Retain	Good	10 individual trees comprised of 20 stems
1680	>20	3.0	English laurel	<i>Prunus laurocerasus</i>	5 to 7	Good	Fair	Not Protected	Remove	Good	Hedge of approximately 17 shrubs composed of approximately 36 to 40 stems. Stumps originate on subject property.
1681	26	3.0	English hawthorn	<i>Crataegus laevigata</i>	5.0	Fair	Fair	Not Protected	Remove	Good	
1682	24	3.0	English hawthorn	<i>Crataegus laevigata</i>	3.0	Fair	Poor	Not Protected	Remove	Good	Poorly tapered trunk

TREE RESOURCE
for 415 and 435 Michigan Street

Tree #	d.b.h. (cm)	CRZ	Common Species Name	Latin name	Canopy Spread (metres dia)	Condition Health	Condition Structure	Bylaw status	Retention status	Relative Tolerance	Remarks / Recommendations
Nt 14	66	7.0	Western Red cedar	<i>Thuja plicata</i>	6.0	Good	Good	Protected	Retain	Moderate	Located on adjacent property at 345 Michigan Street
Nt 13	86	9.0	Western Red cedar	<i>Thuja plicata</i>	8.0	Good	Good	Protected	Retain	Moderate	Located on adjacent property at 345 Michigan Street
Nt 12	30	5.0	Western hemlock	<i>Tsuga heterophylla</i>	4.0	Fair	Fair	Not Protected	Retain	Poor	Located on adjacent property at 345 Michigan Street. Low live crown ration. Somewhat suppressed by adjacent larger cedar tree
1683	10	2.0	English hawthorn	<i>Crataegus laevigata</i>	3.0	Fair	Fair	Not protected	Retain	Good	Stunted by hemlock
1684	15	2.0	English holly	<i>Ilex aquifolium</i>	3.0	Good	Fair	Not protected	Retain	Good	Corrected lean
1685	21	3.0	English hawthorn	<i>Crataegus laevigata</i>	6.0	Fair	Poor	Not protected	Retain	Good	Uncorrected trunk lean
1686	20/20/ 22	3.0	English holly	<i>Ilex aquifolium</i>	4.0	Good	Fair	Not protected	Remove	Good	Topped
1687	12\15	3.0	English hawthorn	<i>Crataegus laevigata</i>	7.0	Fair	Fair	Not protected	Retain	Good	
1688	12	2.0	English holly	<i>Ilex aquifolium</i>	3.0	Good	Fair	Not protected	Retain	Good	On property boundary with #45 Michigan Street.
1689	40	4.5	European Silver birch	<i>Betula pendula alba</i>	9.0	Good	Good	Not protected	Retain	Moderate	



TREE PROTECTION FENCING

FENCE WILL BE CONSTRUCTED USING

38 X 89 mm (2"X4") WOOD FRAME:

TOP, BOTTOM AND POSTS. *

USE ORANGE SNOW-FENCING MESH AND

SECURE TO THE WOOD FRAME WITH

"ZIP" TIES OR GALVANIZED STAPLES

* IN ROCKY AREAS, METAL POSTS (T-BAR
OR REBAR) DRILLED INTO ROCK WILL BE
ACCEPTED

500mmx500mm signs must be attached to each fence panel
at 10 metre intervals

DETAIL NAME:

TREE PROTECTION FENCING

DATE: Oct 30/07
DRAWN: DM
APP'D: RR
SCALE: N.T.S.

E105
DRAWING

#20-463

There is no solution - yet. But I am

Lot A
Plan 15791

Lot 1
Plan 16497

issues:
 257-262 246

1. $\mathcal{L}(\mathbf{y}|\mathbf{x}) = \prod_{i=1}^n p(y_i|\mathbf{x})$
 2. $\mathcal{L}(\mathbf{y}|\mathbf{x}) = \prod_{i=1}^n p(y_i|\mathbf{x}_i)$
 3. $\mathcal{L}(\mathbf{y}|\mathbf{x}) = \prod_{i=1}^n p(y_i|\mathbf{x}_{-i})$
 4. $\mathcal{L}(\mathbf{y}|\mathbf{x}) = \prod_{i=1}^n p(y_i|\mathbf{x}_i, \mathbf{x}_{-i})$
 5. $\mathcal{L}(\mathbf{y}|\mathbf{x}) = \prod_{i=1}^n p(y_i|\mathbf{x}_i, \mathbf{x}_{-i}, \mathbf{y}_{-i})$



Burrowes H
 Suite 100, 1428 Ave
 Winnipeg, MB

project:
Proposed
815.430
VIC

Sta
consultant

648

drawn
KB/MCH
checked

scale
as indicated
sheet title:
Existing Site Pla

g-fund (1991)

SITE PLAN - EXISTING