



August 23, 2022

Attention: Mr. John Shank

jshank@landscapeplan.ca



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95 Mural Street, Suite 207
Richmond Hill, ON L4B 3G2
www.landscapeplan.ca

Re: 875 Kingston Road - Pickering - Arborist Report and Tree Preservation Plan

Mr. Shank,

As per your request I have completed a site visit to 875 Kingston Road - Pickering, in preparation for an arborist report and tree preservation with regards to the proposed mixed-use building.

The enclosed report inventories all trees greater than 10cm DBH, both on and within 6m of the developable area. This inventory will include individual tag #s, both common and botanical names, DBH, and condition. Additionally, it will determine if any regulated trees are to be negatively impacted by the proposed development and provide a preservation strategy for all trees recommended for preservation.

Thirty-four trees have been inventoried as part of this project, one of which is located within the municipal road allowance. This City owned tree is heavily encroached upon by the proposed grading and is recommended for removal. Additionally, twenty-four privately owned trees located on the subject site are in conflict with or are heavily encroached upon by the proposed development and are to be removed. Authorization from the City is required prior to the removal of these twenty-five trees.

I trust this report meets your needs, if you have any questions or concerns feel free to contact me at cgavin@canopyconsulting.ca.

Regards,

Cletus Gavin *B.Sc. Earth Science & Biology*
President & Consulting Arborist
ASCA Registered Consulting Arborist #613
ISA Certified Arborist (ON-1576A)
Butternut Health Assessor # 439
TRAQ Certified



Arborist Report
&
Tree Protection Plan

875 Kingston Road
Pickering, ON

Prepared for:

Mr. John Shank



Tel: 905 669 6838 x 228; Fax: 905 669 3615
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Prepared By:

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August 23, 2022

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INTRODUCTION:

I have been commissioned by Mr. John Shank of *Landscape Planning Landscape Architects*, to complete an arborist report and tree protection plan for the proposed development located at 875 Kingston Road - Pickering. The report will identify all trees greater than 10cm BDH, provide a preservation strategy with recommendations and a tree protection plan depicting the trees' locations, the existing conditions and any proposed work. All field work and data collection were completed by Cletus Gavin, RCA #613 on May 9, 2022.

HISTORY AND ASSIGNMENT:

Mr. Shank has provided a survey and a site plan identifying the proposed development at 875 Kingston Road as per the Tree Protection Plan – TPP-1 in Appendix I. Upon the request of the client or municipality, *Canopy Consulting*, can be further retained beyond the current scope of work to provide on-site monitoring services and to provide any remedial actions deemed necessary.

Scope of work:

1. Inventory all trees greater than 10cm DBH, both on and within 6m of the subject site. The inventory will include a tag #, species, DBH, condition, comments and recommendations.
2. Determine if any regulated trees are to be negatively impacted by the proposed development.
3. Provide a preservation strategy for all trees recommended for preservation.

ASSUMPTION AND LIMITING CONDITIONS:

1. Care has been taken to obtain all information from reliable sources. *Canopy Consulting* can neither guarantee nor be responsible for the accuracy of information provided by others.
2. This report may not be used for any expressed purpose other than its intended purpose and alteration of any part of this report invalidates the report. Excerpts or alterations to the report, without the authorization of the author or his company invalidates its intent and/or implied conclusions.
3. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflect the condition of those items at the time of inspection; and 2) the inspection was made using accepted arboricultural practices and is limited to visual examination of accessible items without climbing, dissection, probing or coring and detailed root examination involving excavation. While reasonable efforts have been made to assess trees outlined in this report, there is no warranty or guarantee, expressed or implied, that problems or deficiencies with the tree(s) or any part(s) of them may not arise in the future. All trees should be inspected and re-assessed periodically.
4. The determination of ownership of any subject tree(s) is the responsibility of the owner and any civil or common-law issues, which may exist between property owners with respect to trees, must be resolved by the owner. A recommendation to remove or maintain tree(s) does not grant authority to encroach in any manner onto adjacent private properties.

TREE SURVEY AND RECOMMENDATIONS:

See TPP-1 plan in Appendix I for tree location, Table #1 for species identification, condition, and recommendations and Appendix II for corresponding Digital Images.

Table #1: 875 Kingston Road - Pickering

Tree #	Species Common Name (Biological Name)	D ¹ B H (cm)	Condition ²	Category ³	Comments	Recommendation ⁴	M ⁵ T P Z (M)
901	Russian Olive <i>Elaeagnus angustifolia</i>	17	P	4	- poor form, storm break, deadwood, in decline - heavily encroached upon by the proposed development	R	1.8
902	Manitoba Maple <i>Acer negundo</i>	38	F	1	- deadwood, poor form and union - in conflict with proposed development	R	2.4
903	Russian Olive <i>Elaeagnus angustifolia</i>	47	F	1	- poor union, vines, deadwood - in conflict with proposed grading	R	3.0
904	Russian Olive <i>Elaeagnus angustifolia</i>	27	F	1	- poor union, unbalanced, deadwood - in conflict with proposed grading	R	1.8
905	Russian Olive <i>Elaeagnus angustifolia</i>	26	F	2	- unbalanced, deadwood - clear of proposed development - shall retain its prescribed TPZ	P	1.8
906	Russian Olive <i>Elaeagnus angustifolia</i>	28	F	1	- poor union and union, deadwood - in conflict with proposed grading	R	1.8
907	Russian Olive <i>Elaeagnus angustifolia</i>	29	F	1	- storm break, unbalanced, deadwood - clear of proposed development - shall retain its prescribed TPZ	P	1.8
908	Russian Olive <i>Elaeagnus angustifolia</i>	16	F	1	- poor union and form, deadwood - clear of proposed development - shall retain its prescribed TPZ	P	1.8

¹ **DBH:** Diameter at Breast Height is a measurement in centimeters, using a caliper tape, of the tree stem at 1.37 meters above existing grade.

² **Condition:** A rating of **Hazardous/Dead/Poor/Fair/Good/Excellent** was determined for each tree by visually assessing all the above ground components of the tree, using acceptable arboricultural procedures as recommended in the “*Guide for Plant Appraisal*”, prepared under contract by the “*Council of Tree & Landscape Appraisers (CTLA)*, an official publication of the *International Society of Arboriculture (I.S.A.)*, 9th Edition, 2000”.

³ **Category #:**

1. Trees with diameters of 10 cm or more, situated on private property on the subject site.
2. Trees with diameters of 10 cm or more, situated on private property, within 6 m of the subject site.
3. Trees of all diameters situated on City owned parkland within 6 m of the subject site.
4. Trees of all diameters situated within the Municipal Road allowance adjacent to the subject site.

⁴ **Recommendation:** Preserve (**P**), Preserve with Injury (**PI**), Remove (**R**), Transplant (**T**)

⁵ **MTPZ:** Minimum tree protection zone distance as suggested by Canopy Consulting.

Tree #	Species Common Name (Biological Name)	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
909	Manitoba Maple <i>Acer negundo</i>	15	F	1	- deadwood, poor union - in conflict with proposed development	R	1.8
910	Manitoba Maple <i>Acer negundo</i>	28	F	1	- deadwood, poor union - in conflict with proposed development	R	1.8
911	Russian Olive <i>Elaeagnus angustifolia</i>	25	F	1	- poor form - in conflict with proposed development	R	1.8
912	Russian Olive <i>Elaeagnus angustifolia</i>	27	F	1	- poor form and union, unbalanced, deadwood - in conflict with proposed development	R	1.8
913	Russian Olive <i>Elaeagnus angustifolia</i>	10	P	1	- poor form unbalanced, deadwood - in conflict with proposed development	R	1.8
914	Russian Olive <i>Elaeagnus angustifolia</i>	16	P	1	- poor form and union, unbalanced, deadwood, storm break, in decline - in conflict with proposed development	R	1.8
915	Russian Olive <i>Elaeagnus angustifolia</i>	27	F	1	- poor union, unbalanced, deadwood - in conflict with proposed development	R	1.8
916	Russian Olive <i>Elaeagnus angustifolia</i>	27	P	1	- poor union and form, storm break, deadwood, in decline - clear of proposed development - shall retain its prescribed TPZ	P	1.8
917	Juniper <i>Juniperus spp.</i>	12	F	1	- deadwood - heavily encroached upon by the proposed development	R	1.8
918	Juniper <i>Juniperus spp.</i>	13	F	1	- deadwood - in conflict with proposed grading	R	1.8
919	Juniper <i>Juniperus spp.</i>	21	F	1	- deadwood, poor form and union - clear of proposed development - shall retain its prescribed TPZ	P	1.8
920	Juniper <i>Juniperus spp.</i>	15	F	1	- deadwood - in conflict with proposed grading	R	1.8
921	Scots Pine <i>Pinus sylvestris</i>	30	F	1	- deadwood, vines - clear of proposed development - shall retain its prescribed TPZ	P	2.4
922	Juniper <i>Juniperus spp.</i>	13	F	1	- deadwood - clear of proposed development - shall retain its prescribed TPZ	P	1.8
923	White Spruce <i>Picea glauca</i>	27	F	1	- deadwood - in conflict with proposed development	R	1.8
924	White Spruce <i>Picea glauca</i>	19	F	1	- deadwood - in conflict with proposed development	R	1.8
925	Juniper <i>Juniperus spp.</i>	15	G	1	- in conflict with proposed development	R	1.8
926	Manitoba Maple <i>Acer negundo</i>	23	F	1	- deadwood, poor union and form - in conflict with proposed development	R	1.8
927	Manitoba Maple <i>Acer negundo</i>	24	P	1	- deadwood, 80% dead - in conflict with proposed development	R	1.8
928	Juniper <i>Juniperus spp.</i>	14	G	1	- in conflict with proposed development	R	1.8

Tree #	Species Common Name (Biological Name)	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
929	Juniper <i>Juniperus spp.</i>	12	F	1	- deadwood, poor form - in conflict with proposed development	R	1.8
A	Austrian Pine <i>Pinus nigra</i>	30	F	1	- deadwood - clear of proposed development - shall retain its prescribed TPZ	P	2.4
B	Austrian Pine <i>Pinus nigra</i>	24	F	1	- deadwood, poor form, codominant - clear of proposed development - shall retain its prescribed TPZ	P	1.8
C	Austrian Pine <i>Pinus nigra</i>	31	F	1	- deadwood, poor form and union - in conflict with proposed grading	R	2.4
D	Austrian Pine <i>Pinus nigra</i>	24	F	1	- deadwood, in decline - in conflict with proposed grading	R	1.8
E	Austrian Pine <i>Pinus nigra</i>	32	G	1	- in conflict with proposed grading	R	1.8

Discussion:

City Owned Trees:

- As listed above, there are thirty-four trees greater than 10cm DBH involved with this project, one of which is located within the City road allowance, being tree no. 901. This tree is heavily encroached upon by the proposed driveway and grading. Such an encroachment will predispose this tree to irreversible decline and as such, is recommended for removal. Authorization from the City is required prior to the removal of this tree.

Privately Owned Trees Located within 6.0m of the Subject Site:

- There is one tree greater than 10cm DBH located on the adjacent property within 6.0m of the subject site, being tree no. 905. This tree is clear of the proposed development, shall retain its prescribed TPZ and as such, will not be disturbed during construction.

Privately Owned Trees Located on the Subject Site:

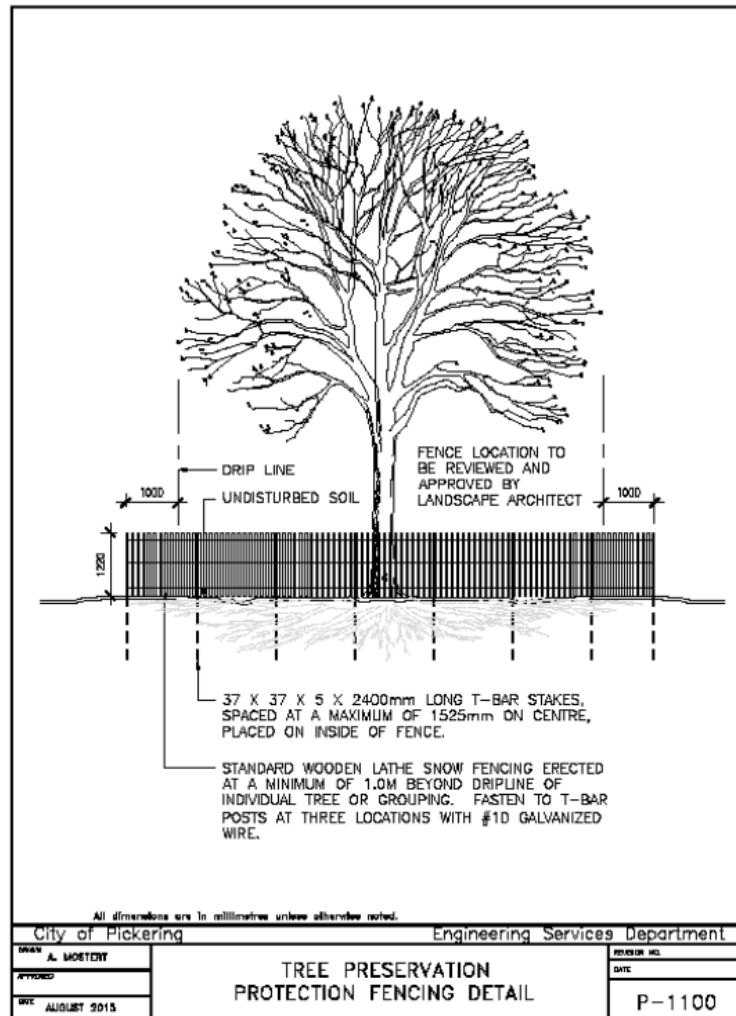
- There are thirty-two trees greater than 10cm DBH located on the subject site, being trees no. 902-904, 906-929 and A-E. Trees no. 907, 908, 916, 919, 921, 922, A and B are clear of the proposed development, shall retain their prescribed TPZs and as such, will not be disturbed during construction.
- Trees no. 902-906, 909-915, 917, 918, 920, 923-929 and C-E are in conflict with or heavily encroached upon by the proposed development and are to be removed. Authorization from the City is required prior to the removal of these twenty-four trees.

3. All other trees located on or within 6m of the subject site are less than 10cm in diameter and as such, were not included in this report.
4. To further protect each tree scheduled for preservation from the potential of construction disturbance, it is recommended that the below listed tree preservation recommendations are implemented.

1.0 ESTABLISH TREE PROTECTION ZONE

The purpose of the tree protection zone (TPZ) is to prevent root damage, soil compaction and soil contamination. Workers and machinery shall not disturb the tree protection zone in any way. To prevent access, the following is required:

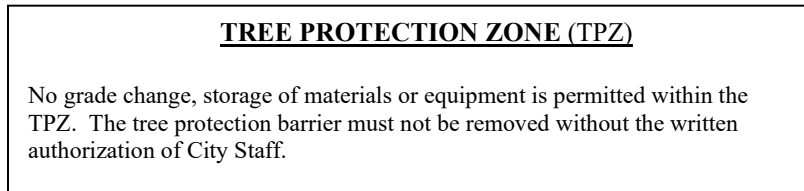
- 1.1 Install hoarding as per attached Tree Protection Plan in Appendix I.
- 1.2 Hoarding shall consist of the following:



<ol style="list-style-type: none"> 1. ALL EXISTING TREES WHICH ARE TO REMAIN SHALL BE FULLY PROTECTED WITH SNOW FENCING OR SIMILAR STRUCTURES ERECTED OUTSIDE THE DRIP LINE OF THE TREES, PRIOR TO COMMENCEMENT OF CONSTRUCTION. GROUPS OF TREES AND OTHER EXISTING PLANTINGS TO BE PROTECTED SHALL BE DONE IN A LIKE MANNER WITH SNOW FENCING OR OTHER SIMILAR STRUCTURES AROUND THE ENTIRE CLUMP(S). AREAS WITHIN THE PROTECTIVE FENCING SHALL REMAIN UNDISTURBED AND SHALL NOT BE USED FOR THE STORAGE OF BUILDING MATERIALS OR EQUIPMENT. 2. NO RIGGING CABLES SHALL BE WRAPPED AROUND OR INSTALLED IN TREES AND SURPLUS SOIL, EQUIPMENT, DEBRIS OR MATERIALS SHALL NOT BE PLACED OVER THE ROOT SYSTEMS OF THE TREES WITHIN THE PROTECTIVE FENCING. NO CONTAMINANTS ARE TO BE DUMPED OR FLUSHED WHERE FEEDER ROOTS OF TREES EXIST. 3. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION NECESSARY TO PREVENT DAMAGE TO TREES OR SHRUBS TO BE RETAINED. 4. WHERE LIMBS OR PORTIONS OF TREES ARE REMOVED TO ACCOMMODATE CONSTRUCTION WORK, THEY WILL BE CLEANLY CUT IN ACCORDANCE WITH ACCEPTABLE ARBORICULTURAL PRACTICES. 5. WHERE ROOT SYSTEMS OF PROTECTIVE TREES ARE EXPOSED DIRECTLY ADJACENT TO OR DAMAGED BY CONSTRUCTION WORK, THEY SHALL BE TRIMMED NEATLY AND THE AREA BACK-FILLED WITH APPROPRIATE MATERIAL IN A TIMELY MANNER TO PREVENT DRYING. 6. WHERE NECESSARY, THE TREES SHALL BE GIVEN AN OVERALL PRUNING TO RESTORE THE BALANCE BETWEEN ROOTS AND TOP GROWTH OR TO RESTORE THE APPEARANCE OF THE TREE. 7. TREES SCHEDULED FOR PRESERVATION THAT HAVE DIED OR BEEN DAMAGED BEYOND REPAIR SHALL BE REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE BY TREES OF A SIMILAR SIZE AND SPECIES OR SUCH SIZE AND SPECIES AS APPROVED BY THE LANDSCAPE ARCHITECT. 8. IF GRADES AROUND TREES TO BE PROTECTED ARE LIKELY TO CHANGE, THE CONTRACTOR SHALL BE REQUIRED TO TAKE SUCH PRECAUTIONS AS DRY WELLING AND ROOT FEEDING TO THE SATISFACTION OF THE CITY OF PICKERING. 9. SHOULD A CONFLICT OCCUR BETWEEN TREES SCHEDULED FOR PRESERVATION AND THE PROPOSED CONSTRUCTION, APPROVAL SHALL BE OBTAINED IN WRITING FROM THE CITY OF PICKERING PRIOR TO PROCEEDING WITH THE REMOVAL OF SUCH. 10. ANY TREES DESIGNATED FOR REMOVAL SHALL BE REMOVED IN ENTIRETY INCLUDING ALL STUMPS AND ROOTS AND DISPOSED OF OFF SITE. NO BURYING OF TREE BRANCHES AND STUMPS WILL BE PERMITTED. 		
City of Pickering Engineering Services Department		
DESIGN A. MOSTERT	TREE PROTECTION NOTES	PERSON NCL DATE
APPROVED		
DATE AUGUST 2015		P-1101

- 1.3 No fill, equipment or supplies are to be stored within the tree protection zone.
- 1.4 Activities, which are likely to injure or destroy tree(s), are not permitted within the TPZ.
- 1.5 No objects may be attached to tree(s) within the TPZ.
- 1.6 Tree protection barriers are to be erected prior to the commencement of any construction or grading activities on the site and are to remain in place in good condition throughout the entire duration of the project.

- 1.7 Once all tree/site protection measures have been installed you must notify City staff to arrange for an inspection of the site and approval of the site protection requirements.
- 1.8 All Hoarding shall not be removed until all construction activity is complete.
- 1.9 A sign that is similar to the illustration below must be mounted on all sides of a tree protection barrier for the duration of the project. The sign should be a minimum of 40cm x 60cm and made of white gator board, laminates or equivalent material.



2.0 ROOT PRUNING

When working within the tree protection zone, hand dig areas closest to each tree to prevent any unnecessary tearing or pulling of roots. Removal of roots that are greater than 2.5 centimeters in diameter or roots that are injured or diseased should be performed as follows:

- 2.1 Preserve the root bark ridge (similar in structure to the branch bark ridge). Directional Root Pruning (DRP) is the recommended technique and should be used during hand excavation around tree roots. Roots are like branches in their response to pruning practices. With DRP, objectionable and severely injured roots are properly cut to a lateral root that is growing downward or in a favorable direction.
- 2.2 All roots needing to be pruned or removed shall be cut cleanly with sharp hand tools, by a Certified Arborist or by the PCA.
- 2.3 No wound dressings\pruning paint shall be used to cover the ends of each cut.
- 2.4 All roots requiring pruning shall be cut using any of the following tools:
 - Large or small loppers
 - Hand pruners
 - Small hand saws
 - Wound scribers
- 2.5 Avoid prolonged exposure of tree roots during construction - keep exposed roots moist and dampened with mulching materials, irrigation or wrap in burlap if exposed for longer than 4 hours.

3.0 ESTABLISH MAINTENANCE PROGRAM

All maintenance work must be completed by the approved Project Consulting Arborist or an equivalent qualified arborist.

Pre-Construction:

3.1 Prune trees to remove deadwood, objectionable limbs while maintaining crown form.

During- Construction:

3.2 Irrigate tree preservation zones during drought conditions, June – September, to reduce drought stress.

3.3 Inspect the site every month to ensure that all hoarding is in place and in good condition. Inspect the trees to monitor condition.

Post-Construction:

3.4 Inspect the trees two times per year – May and September – to monitor condition for a minimum of 2 additional years.

4.0 LANDSCAPING

Any landscaping completed within the tree preservation zones, after construction is completed and hoarding has been removed, cannot cause damage to any of the trees or their roots. The trees must be protected for the same reasons listed above but without using hoarding.

4.1 **No grade changes** are permitted which include adding and/or removing soil.

4.2 **No excavation** is permitted that can cause damage to the roots of the tree.

4.3 **No heavy equipment** can be used to compact the soil within the tree preservation zone.

4.4 Any hard -surface sidewalks, paths, etc. should be constructed using permeable products such as interlocking stone, etc.

SUMMARY TABLE:

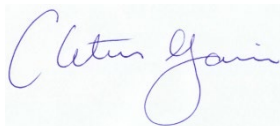
Tree Category	Total	Preserve	Preserve with Injury	Remove	Transplant
1 (Private tree located on the subject site)	1	0	0	1	0
2 (Private tree located on adjacent property)	1	1	0	0	0
3 (Tree located on City owned parkland)	32	8	0	24	0
Total	34	9	0	25	0

CONCLUSIONS:

Thirty-four trees have been inventoried as part of this project, one of which is located within the municipal road allowance. This City owned tree is heavily encroached upon by the proposed grading and is recommended for removal. Additionally, twenty-four privately owned trees located on the subject site are in conflict with or are heavily encroached upon by the proposed development and are to be removed. Authorization from the City is required prior to the removal of these twenty-five trees. Finally, with the above in mind, it is the consultant's opinion that if the above tree preservation recommendations are implemented, which includes installing tree protection hoarding as outlined in this report, proposed construction will not adversely affect the long-term health, safety and/or existing condition of all trees scheduled for preservation.

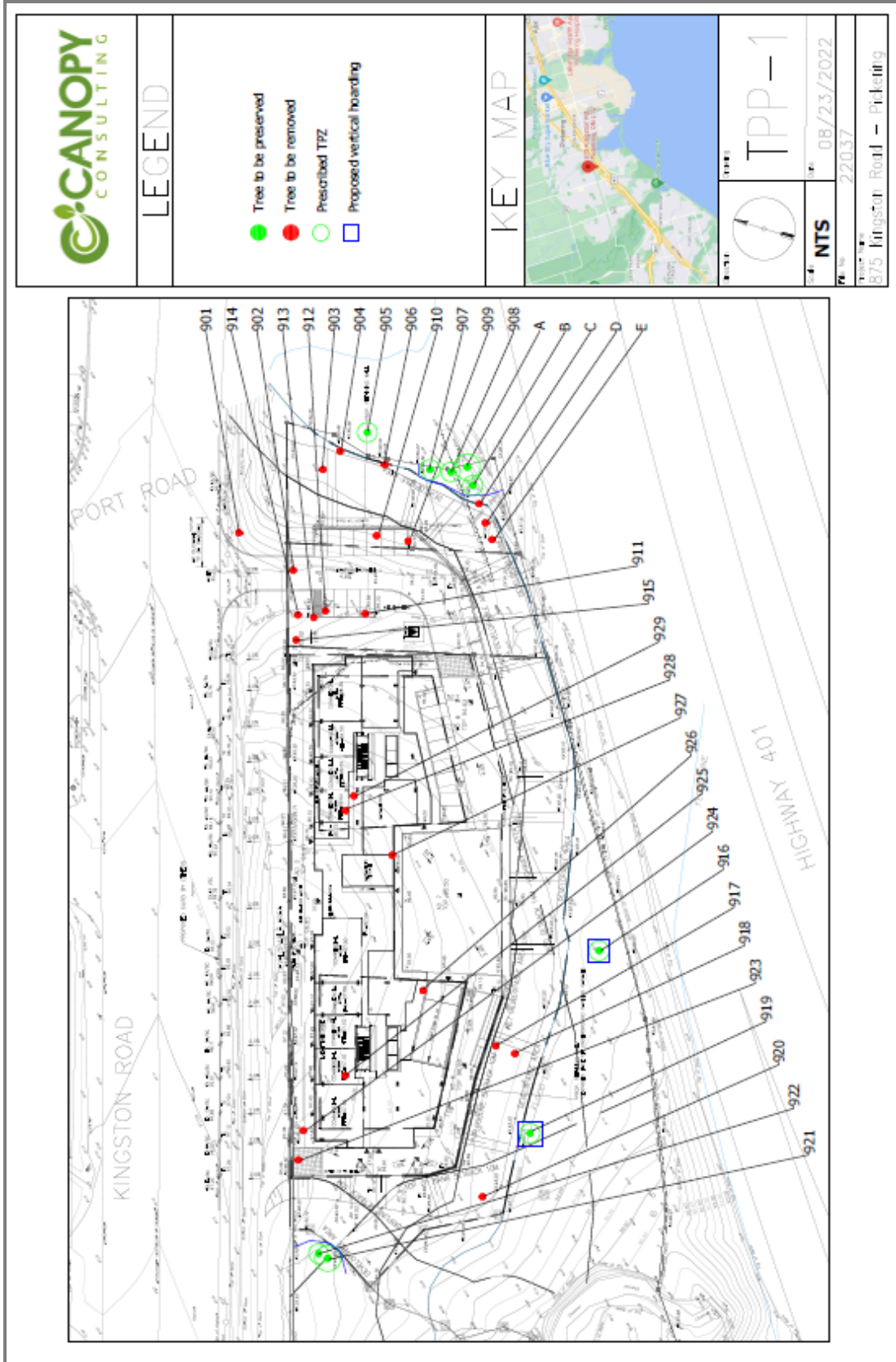
Trusting this report meets your needs. For further information, you may contact me directly at (416) 300-2957 or by email at cgavin@canopyconsulting.ca.

Sincerely,



Cletus Gavin *B.Sc. Earth Science & Biology*
President & Consulting Arborist
ASCA Registered Consulting Arborist #613
ISA Certified Arborist (ON-1576A)
Butternut Health Assessor # 439
TRAQ Certified

Appendix I: Tree Protection Plan – TPP-1



Appendix II: Digital Images



Photo #1: Trees no. 901-902 and trees less than 10cm DBH looking northeast.



Photo #2: Trees no. 908, A-E and trees less than 10cm DBH looking southeast.



Photo #3: Tree no. 909-911 looking south.



Photo #4: Trees no. 912-15 looking west.



Photo #5: Trees no. 917-927 looking southwest.



Photo #6: Trees no. 928-929 and trees less than 10cm DBH looking east.