# Tree Inventory and Preservation Plan Report
# 12909 Kennedy Road
# Caledon, Ontario

prepared for

**Candevcon Group Inc.**
**9358 Goreway Drive**
**Brampton, ON L6P 0M7**

prepared by

KUNTZ FORESTRY CONSULTING Inc.

PO Box 1267 Lakeshore W PO
146 Lakeshore Road West
Oakville ON L6K 0B3
289.837.1871
www.kuntzforestry.ca
consult@kuntzforestry.ca

12 June 2024

KUNTZ FORESTRY CONSULTING INC Project P4232

## Introduction

Kuntz Forestry Consulting Inc. was retained by Candevcon Group Inc. to complete a Tree Inventory and Preservation Plan Report as part of a development application for the property located at 12909 Kennedy Road in the Town of Caledon, Ontario. The subject property is located at the southeast corner of Kennedy Road and Old School Road, within an agricultural area.

The work plan for this study included the following:

- Prepare inventory of the tree resources over 10cm diameter at breast height (DBH) on and within six metres of the disturbance limit and trees of all sizes within the Town road right-of-way;
- Evaluate tree saving opportunities based on proposed site plans; and,
- Document the findings in a Tree Inventory and Preservation Plan report.

The results of the evaluation are provided below.

### Methodology

The tree inventory was conducted on 10 June 2024. Trees greater than 10cm DBH on and within six metres of the disturbance limit and trees of all sizes within the Town road right-of-way were included in the tree inventory. Trees were located using KFCI's Trimble GPS unit with an accuracy of +/- 30cm. Trees included in the inventory were tagged using the numbers 414-499, 500, 501, and 664-700. Trees on the subject property that could not be tagged were identified as Trees A-H. Trees on neighbouring properties were identified using the numbers 1-50. Five (5) polygons (groups of trees) were identified as P1-P5. Refer to Table 1 for the results of the inventory and Figure 1 for the locations of the trees. See Appendix A for photographs of the trees.

Individual tree resources were visually assessed for condition utilizing the following parameters:

**Tree #** – Number assigned to trees that corresponds to Figure 1.
**Species** – Common and botanical names provided in the inventory table.
**DBH** – Diameter (centimeters) at breast height, measured at 1.4 m above the ground.
**Condition** – Condition of tree considering trunk integrity (TI), crown structure (CS) and crown vigor (CV). Condition ratings include poor (P), fair (F), and good (G).
**Crown Dieback** – Percentage of dead branches within the crown.
**Dripline** – Radius of crown in metres.
**Comments** – Any other relevant tree condition information.

### Existing Site Conditions

The subject property is currently occupied by agricultural lands with a detached house, multiple barns, sheds, and a gravel driveway providing access to Kennedy Road. Natural Heritage System land passes through the north corner of the property. Tree resources exist in the form of landscape and naturally-occurring trees. Refer to Figure 1 for the existing site conditions.

## Individual Tree Resources

The inventory documented 183 trees and five (5) polygons on and within six metres of the disturbance limit.

Tree resources were comprised of Austrian Pine (*Pinus nigra*), Black Walnut (*Juglans nigra*), Blue Spruce *(Picea pungens*), Copper Beech (*Fagus sylvatica*), Eastern Cottonwood (*Populus deltoides*), Eastern White Cedar (*Thuja occidentalis*), English Walnut (*Juglans regia*), Freeman Maple (*Acer × freemanii*), Honey Locust (*Gleditsia triacanthos 'inermis'*), Manitoba Maple (*Acer negundo*), Norway Maple (*Acer platanoides*), Norway Spruce (*Picea abies*), Pear (*Pyrus spp*.), Red Maple (*Acer rubrum*), Scots Pine (*Pinus sylvestris*), Shagbark Hickory (*Carya ovata*), Silver Birch (*Betula pendula*), Silver Maple (*Acer saccharinum*), Sugar Maple (*Acer saccharum*), Trembling Aspen (Populus tremuloides), White Birch (Betula papyrifera), White Fir (*Abies concolor*), White Mulberry (*Morus alba*), White Pine (*Pinus strobus*), White Spruce (*Picea glauca*), and Willow (*Salix spp*.)

## Proposed Development

The proposed development includes the demolition of the existing house, barns, and sheds, and the construction of a residential subdivision with public roads, a park, and a storm water management pond. Refer to Figure 1 for the proposed development.

## Discussion

The following sections provide a discussion and analysis of development impacts, tree removal requirements and tree preservation relative to the proposed development.

*Development Impacts/Tree Removals*

The removal of 146 trees and two (2) polygons will be required to accommodate the proposed development. These trees directly conflict with proposed re-grading or significant encroachment into their minimum tree protection zones (mTPZs) would be required such that they would not be expected to tolerate the resulting injuries. Refer to Table 1 for tree removal information.

Trees 2, 9, 11-16, 18, 20, 22-34, 39-49, and P2 require removal and are located partially for fully on neighbouring property. Permission from the respective property owners will be required prior to their removal. The remainder of the trees identified for removal are located on the subject property.

Refer to Figure 1 for the location of trees identified for removal.

*Tree Preservation*

The preservation of 37 trees and three (3) polygons will be possible with the use of appropriate tree protection measures as indicated on Figure 1. Tree protection measures must be installed prior to the commencement of the proposed works to ensure tree resources identified for preservation are not impacted by the development. Refer to Figure 1 for the location of trees identified for preservation, prescribed tree preservation fencing, tree preservation plan notes, and the tree protection fencing detail. Refer to Table 1 for tree preservation information.

Areas within the tree protection zone shall remain undisturbed for the duration of site construction and shall not be used for the storage of excavated fill, building/construction materials, or equipment.

Dripline encroachment is required for Trees 1, 3-7, 19, 21, 36-38, and P3-P5 to accommodate construction; however, given that adequate protection is still being afforded relative to their stem diameter, they are expected to respond well to injury. The minimum tree protection zones (mTPZ) utilized in this preservation exercise are consistent with the policies implemented by numerousl municipalities across southern Ontario. The mTPZs for each diameter class are outlined in the table below:

| Diameter at Breast Height (DBH) | mTPZ (radius) |
|---|---|
| <10cm | 1.2m |
| 10-29cm | 1.8m |
| 31-40cm | 2.4m |
| 41-50cm | 3.0m |
| 51-60cm | 3.6m |
| 61-70cm | 4.2m |
| 71-80cm | 4.8m |
| 81-90cm | 5.4m |
| 91-100cm | 6.0m |
| >100cm | Dripline or 12m |

Prior to construction, under the supervision of a Certified Arborist, AirSpade or HydroVac technology must be utilized to excavate a trench at the proposed disturbance limits within the driplines of Trees 1, 3-7, 19, 21, 36-38, and P3-P5. Exposed roots must be pruned within the trench in accordance with Good Arboricultural Standards and the trench back filled with native soil material.

It is presumed that the entire siter will be re-graded except for the proposed park area. Preservation recommendations may change pending more detailed site plan and/or grading plan.

## Tree Compensation

The Town of Caledon requires tree compensation for any healthy tree removal. The compensation ratio is below:

| Diameter at Breast Height (DBH) | Compensation Ratio |
|---|---|
| <10cm | Not applicable |
| 10-20cm | 1:1 |
| 21-35cm | 2:1 |
| 36-50cm | 3:1 |
| 51-65cm | 4:1 |
| >65cm | 5:1 |

To compensate for the removal of healthy trees required for removal due to the development 318 replacement trees are required. Refer to Table 1 for details.

## Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by Candevcon Group Inc. to complete a Tree Inventory and Preservation Plan as part of a development application for the property located at 12909 Kennedy Road in Caledon, Ontario. A tree inventory was conducted and reviewed in the context of the proposed development plan.

The findings of the study indicate a total of 183 trees and five (5) polygons on and within six meters of the disturbance limit. The removal of 146 trees and two (2) polygons is required to accommodate the proposed development. The preservation of the remaining 37 trees and three (3) polygons will be possible with the use of appropriate tree protection measures.

The following recommendations are suggested to minimize impacts to trees identified for preservation. Refer to Figure 1 for additional Tree Protection Plan Notes and tree preservation fence detail.

- Tree protection barriers and fencing should be erected at locations as prescribed on Figure 1. All tree protection measures should follow the guidelines as set out in the tree preservation plan notes and the tree preservation fencing detail.

- No construction activity including surface treatments, excavations of any kind, storage of materials or vehicles, unless specifically outlined above, is permitted within the area identified on Figure 1 as a tree protection zone (TPZ) at any time during or after construction.

- Branches that extend beyond prescribed tree protection zones that require pruning must be pruned by a qualified Arborist or other tree professional. All pruning of tree branches must be in accordance with Good Arboricultural Standards.

- Site visits pre, during and post construction are recommended by either a certified consulting arborist (I.S.A.) or registered professional forester (R.P.F.) to ensure proper utilization of tree protection barriers. Trees should also be inspected for damage incurred during construction to ensure appropriate pruning or other measures are implemented.

Respectfully Submitted,

**Kuntz Forestry Consulting Inc.**

Isaac Baik

Isaac Baik, B.Sc. Conservation Biology
Ecologist, ISA Certified Arborist #ON-2685A
Email: Isaac.baik@kuntzforestry.ca
Phone: 289-837-1871 ext. 106

*Limitations of Assessment*

*Only the tree(s) identified in this report were included in the inventory. The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These may include a visual examination taken from the ground of all the above-ground parts of the tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of attack by insects, discoloured foliage, the condition of any visible root structures, the degree of lean (if any), the general condition of the trees and the identification of potentially hazardous trees or recommendations for removal (if applicable). Where trees could not be directly accessed (ie. due to obstructions, and/or on neighbouring properties), trees were assessed as accurately as possible from nearby vantage points.*

*Locations of trees provided in the report are determined as accurately as possible based on the best information available. If official survey information is not provided, tree location in the report may not be exact. In this case, if trees occur on or near property boundaries, an official site survey may be required to determine ownership.*

*Furthermore, recommendations made in this report are based on the site plans that have been provided at that time. These recommendations may no longer be applicable should changes be made to the site plan and/or grading, servicing, or landscaping plans following report submission.*

*Notwithstanding the recommendations and conclusions made in this report, it must be recognized that trees are living organisms, and their health and vigor constantly change over time. They are not immune to changes in site conditions or seasonal variations in the weather conditions. Any tree will fail if the forces applied to the tree exceed the strength of the tree or its parts.*

*Although every effort has been made to ensure that this assessment is reasonably accurate, the trees should be re-assessed periodically. The assessment presented in this report is valid at the time of inspection.*

# Table 1. Tree Inventory

Location: 12909 Kennedy Rd Caledon Date: 10 June 2024 Surveyors: IB

| Tree # | Common Name | Scientific Name | DBH | TI | CS | CV | CDB | DL | mTPZ | Comments | Action | Comp |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | White Spruce | *Picea glauca* | ~25 | G | G | G | 0 | 2 | 1.8 | | Preserve | |
| 2 | White Pine | *Pinus strobus* | ~31 | G | G | G | 0 | 3.5 | 2.4 | | Remove | 2 |
| 3 | Norway Maple | *Acer platanoides* | ~31 | G | G | G | 0 | 4 | 2.4 | | Preserve | |
| 4 | White Pine | *Pinus strobus* | ~31 | G | G | G | 0 | 4 | 2.4 | ~3.5m from property line | Preserve | |
| 5 | Eastern White Cedar | *Thuja occidentalis* | ~10 | G | G | G | 0 | 2 | 1.8 | ~2m from. Property line | Preserve | |
| 6 | Eastern White Cedar | *Thuja occidentalis* | ~14 | G | G | G | 0 | 2 | 1.8 | ~2m from property line | Preserve | |
| 7 | Eastern White Cedar | *Thuja occidentalis* | ~15,13,10,10 | F | G | G | 0 | 2 | 1.8 | Codominant at base | Preserve | |
| 8 | Eastern White Cedar | *Thuja occidentalis* | ~16,13,10 | F | G | G | 0 | 2 | 1.8 | Codominant at base | Preserve | |
| 9 | Eastern White Cedar | *Thuja occidentalis* | ~10,9,8,7,7 | F | G | G | 0 | 2 | 1.8 | Codominant at base | Remove | 1 |
| 10 | Norway Maple | *Acer platanoides* | ~24 | G | G | G | 0 | 3 | 1.8 | ~3m from property line | Preserve | |
| 11 | Eastern White Cedar | *Thuja occidentalis* | ~8,8,7,7,6,5 | F | G | G | 0 | 1.5 | 1.2 | Codominant at base, on property line | Remove | |
| 12 | Eastern White Cedar | *Thuja occidentalis* | ~8,8,7,7,6,5 | F | G | G | 0 | 1.5 | 1.2 | On property line | Remove | |
| 13 | White Spruce | *Picea glauca* | ~18 | G | G | G | 0 | 2.5 | 1.8 | On property line | Remove | 1 |
| 14 | White Pine | *Pinus strobus* | ~13 | G | G | G | 0 | 1.5 | 1.8 | | Remove | 1 |
| 15 | White Birch | *Betula papyrifera* | ~12 | G | G | G | 0 | 2 | 1.8 | | Remove | 1 |
| 16 | White Birch | *Betula papyrifera* | 11 | G | G | G | 0 | 1.5 | 1.8 | On property line | Remove | 1 |
| 17 | White Fir | *Abies concolor* | ~25 | G-F | G-F | G-F | 0 | 2 | 1.8 | Exposed roots (L), leaning (L), asymetrical crown (L), ~2m from property line | Preserve | |
| 18 | Eastern White Cedar | *Thuja occidentalis* | ~15,10 | F | G-F | G-F | 0 | 2 | 1.8 | Codominant at base | Remove | 1 |
| 19 | Norway Maple | *Acer platanoides* | ~18 | G | G | G | 0 | 3 | 1.8 | | Preserve | |
| 20 | Eastern White Cedar | *Thuja occidentalis* | ~16,14,9 | F | G | G | 0 | 2.5 | 1.8 | Codominant at base | Remove | 1 |
| 21 | White Birch | *Betula papyrifera* | ~20 | G | F | G | 0 | 2 | 1.8 | Codominant at 1.6m | Preserve | |
| 22 | Eastern White Cedar | *Thuja occidentalis* | ~17 | G | G | G | 0 | 2 | 1.8 | | Remove | 1 |
| 23 | Eastern White Cedar | *Thuja occidentalis* | ~10,8,8 | F | F | G | 0 | 2 | 1.8 | Codominant at base, poor form (M) | Remove | 1 |
| 24 | Honey Locust (shadem | *Gleditsia triacanthos 'inermis'* | ~8 | G | G | G | 0 | 2 | 1.2 | Located at the corner of a shed on neighbouring property | Remove | |
| 25 | Eastern White Cedar | *Thuja occidentalis* | ~27,17 | F-P | G-F | F | 0 | 2 | 1.8 | Codominant at base, poor form (M) | Remove | 2 |
| 26 | Eastern White Cedar | *Thuja occidentalis* | ~26,17 | F | G-F | G-F | 0 | 2 | 1.8 | Codominant at base | Remove | 2 |
| 27 | Manitoba Maple | *Acer negundo* | ~15 | P | F-P | G | 0 | 5 | 1.8 | Leaning (H) towards property, poor form (H) | Remove | 1 |
| 28 | White Spruce | *Picea glauca* | ~41 | G | G | F | 0 | 2 | 3 | | Remove | 3 |
| 29 | Black Walnut | *Juglans nigra* | ~22 | G | G-F | G | 0 | 4 | 1.8 | Asymetrical crown (L) | Remove | 2 |
| 30 | Blue Spruce | | ~31 | G | G | G | 0 | 2.5 | 2.4 | | Remove | 2 |
| 31 | Silver Maple | *Acer saccharinum* | ~48,45 | G-F | G | G | 0 | 6 | 3 | Codominant at 1.3m, ingrown fence | Remove | 3 |
| 32 | White Spruce | *Picea glauca* | ~30 | G | G | G | 0 | 2 | 2.4 | | Remove | 2 |
| 33 | White Spruce | *Picea glauca* | ~30 | G | G | G | 0 | 2 | 2.4 | | Remove | 2 |
| 34 | Eastern White Cedar | *Thuja occidentalis* | ~15,12 | F | F | F | 0 | 2 | 1.8 | Codominant at base, grapevine competition | Remove | 1 |
| 35 | Manitoba Maple | *Acer negundo* | ~48,38 | F | F-P | G | 0 | 5 | 3 | Codominant at base, poor form (M) | Preserve | |
| 36 | Trembling Aspen | *Populus tremuloides* | ~5 | G | G | F | 30 | 1 | 1.2 | Behind board fence | Preserve | |
| 37 | Pear species | *Pyrus spp.* | ~8 | G | G | G | 0 | 1.5 | 1.2 | | Preserve | |
| 38 | Copper Beech | *Fagus sylvatica* | ~7 | G | G | G | 0 | 1 | 1.2 | | Preserve | |
| 39 | Eastern Cottonwood | *Populus deltoides* | ~12 | G | G-F | G | 0 | 0 | 1.8 | | Remove | 1 |
| 40 | Manitoba Maple | *Acer negundo* | ~35 | P | P | G-F | 0 | 4 | 2.4 | Poor form (H) | Remove | 2 |
| 41 | Eastern Cottonwood | *Populus deltoides* | ~15 | G | G | G | 0 | 3 | 1.8 | | Remove | 1 |
| 42 | Willow species | *Salix spp.* | ~28,15,15 | F | G-F | G-F | 0 | 4 | 1.8 | Codominant at 1m, ingrown fence | Remove | 2 |
| 43 | Willow species | *Salix spp.* | ~17,15,12 | F | G-F | G-F | 0 | 4 | 1.8 | Codominant at base | Remove | 1 |
| 44 | Eastern White Cedar | *Thuja occidentalis* | ~110 | G | F | G | 0 | 4 | 6.6 | Codominant at 1.7m, ~0.8m from property line | Remove | 5 |
| 45 | Eastern White Cedar | *Thuja occidentalis* | 5,34,50,48,39 | F | G-F | G-F | 0 | 6 | 3.6 | Codominant at base, leaning (L) | Remove | 4 |
| 46 | Eastern White Cedar | *Thuja occidentalis* | ~45,45,45 | G-F | G-F | G-F | 0 | 4 | 3 | Codominant at 1m | Remove | 3 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 47 | Eastern White Cedar | *Thuja occidentalis* | ~68,50 | F | F | G-F | 0 | 3 | 4.2 | Codominant at 1m, poor form (M) | Remove | 5 |
| 48 | Manitoba Maple | *Acer negundo* | ~14,10 | P | P | G-F | 0 | 3 | 1.8 | Codominant at base, leaning (H) towards property, growing through fence | Remove | 1 |
| 49 | Eastern White Cedar | *Thuja occidentalis* | ~52,50 | G-F | F | G-F | 0 | 4 | 3.6 | Codominant at 1.4m | Remove | 4 |
| 50 | Red Maple | *Acer rubrum* | ~9,7 | G | G-F | G | 0 | 2 | 1.2 | Codominant at 1.3m | Preserve | |
| 414 | Norway Maple | *Acer platanoides* | 78 | G | G-F | G-F | 0 | 6 | 4.8 | Codominant at 1.5m | Remove | 5 |
| 415 | Norway Spruce | *Picea abies* | 42 | G | G-F | G-F | 0 | 3.5 | 3 | Asymetrical crown (L) | Remove | 3 |
| 416 | Norway Spruce | *Picea abies* | 70 | G | G | G | 0 | 4 | 4.2 | | Remove | 5 |
| 417 | Sugar Maple | *Acer saccharum* | 58 | G | G-F | F | 20 | 5.5 | 3.6 | Poor form (L) | Remove | 4 |
| 418 | Sugar Maple | *Acer saccharum* | 109 | F | G | G | 0 | 8 | 6.6 | Trunk injury (M) | Remove | 5 |
| 419 | Sugar Maple | *Acer saccharum* | 91.5 | G | G | G | 0 | 7 | 6 | | Remove | 5 |
| 420 | Sugar Maple | *Acer saccharum* | 95 | G | G | G | 0 | 7 | 6 | | Remove | 5 |
| 421 | Silver Birch | *Betula pendula* | 56 | G | G | G | 0 | 6 | 3.6 | | Remove | 4 |
| 422 | Austrian Pine | *Pinus nigra* | 23 | F | F | G-F | 0 | 3 | 1.8 | Crook (M) | Remove | 2 |
| 423 | Norway Maple | *Acer platanoides* | 61 | G | G-F | G | 0 | 4 | 4.2 | Asymetrical crown (L) | Remove | 4 |
| 424 | Sugar Maple | *Acer saccharum* | 98 | G | F | G | 0 | 7 | 6 | Codominant at 2m, slime flux (L) | Remove | 5 |
| 425 | White Pine | *Pinus strobus* | 79 | G | G-F | G-F | 0 | 6 | 4.8 | | Remove | 5 |
| 426 | Sugar Maple | *Acer saccharum* | 92 | G | G | G | 0 | 8 | 6 | | Remove | 5 |
| 427 | Norway Spruce | *Picea abies* | 54 | G | G | G | 0 | 3.5 | 3.6 | | Remove | 4 |
| 428 | Norway Spruce | *Picea abies* | 34 | G | G | G | 0 | 2 | 2.4 | | Remove | 2 |
| 429 | White Pine | *Pinus strobus* | 54 | G-F | G-F | G-F | 0 | 4 | 3.6 | Leaning (L), asymetrical crown (L) | Remove | 4 |
| 430 | Scots Pine | *Pinus sylvestris* | 38 | G | F | G-F | 0 | 3 | 2.4 | Poor form (M), crook (L) | Remove | 3 |
| 431 | Norway Spruce | *Picea abies* | 37.5 | G | G | G | 0 | 2 | 2.4 | | Remove | 3 |
| 432 | Norway Spruce | *Picea abies* | 30 | G | G | G | 0 | 2 | 2.4 | | Remove | 2 |
| 433 | Scots Pine | *Pinus sylvestris* | 46 | G | F | G-F | 0 | 4 | 3 | Asymetrical crown (M) | Remove | 3 |
| 434 | Scots Pine | *Pinus sylvestris* | 64 | G | G | G | 0 | 4 | 4.2 | | Remove | 4 |
| 435 | Norway Spruce | *Picea abies* | 24 | G | F | G-F | 0 | 1.5 | 1.8 | Asymetrical crown (H) | Remove | 2 |
| 436 | Norway Spruce | *Picea abies* | 24 | G | F | G-F | 0 | 2.5 | 1.8 | Asymetrical crown (H) | Remove | 2 |
| 437 | Norway Spruce | *Picea abies* | 55 | G | G | G | 0 | 5 | 3.6 | | Remove | 4 |
| 438 | Norway Spruce | *Picea abies* | 87 | F | G-F | G | 0 | 3.5 | 5.4 | Codominant at 1.5m | Remove | 5 |
| 439 | White Pine | *Pinus strobus* | 25 | G | G | G | 0 | 3 | 1.8 | | Remove | 2 |
| 440 | White Pine | *Pinus strobus* | 19,17 | F | F-P | G-F | 0 | 4 | 1.8 | Codominant at 1m, poor form (H) | Remove | 1 |
| 441 | White Pine | *Pinus strobus* | 27 | G | G | G | 0 | 3 | 1.8 | | Remove | 2 |
| 442 | White Pine | *Pinus strobus* | 18 | G | G | G | 0 | 3 | 1.8 | | Remove | 1 |
| 443 | White Pine | *Pinus strobus* | 20,20 | G-F | G-F | G | 0 | 2.5 | 1.8 | Codominant at base | Remove | 1 |
| 444 | White Pine | *Pinus strobus* | 23 | G | G | G | 0 | 3 | 1.8 | | Remove | 2 |
| 445 | Manitoba Maple | *Acer negundo* | 15,12 | F | F-P | G | 0 | 4 | 1.8 | Coodminant at base, leaning (H), poor form (H) | Remove | 1 |
| 446 | Norway Spruce | *Picea abies* | 11 | G | G-F | F-P | 60 | 2 | 1.8 | suppressed crown | Remove | 1 |
| 447 | Norway Spruce | *Picea abies* | 16 | G | G | F | 30 | 2.5 | 1.8 | | Remove | 1 |
| 448 | Norway Spruce | *Picea abies* | 20 | G | G | G | 0 | 2 | 1.8 | | Remove | 1 |
| 449 | White Birch | *Betula papyrifera* | 22,17,14 | F-P | F | G | 0 | 3 | 1.8 | Codominant at base, growing directly against building | Remove | 2 |
| 450 | Manitoba Maple | *Acer negundo* | 18 | G | G | G | 0 | 2.5 | 1.8 | | Remove | 1 |
| 451 | Trembling Aspen | *Populus tremuloides* | 23 | G | G | G | 0 | 4 | 1.8 | | Remove | 2 |
| 452 | Norway Maple | *Acer platanoides* | 15 | G | F | G | 0 | 3 | 1.8 | Acsymetrical crown (M) | Remove | 1 |
| 453 | Trembling Aspen | *Populus tremuloides* | 23 | G | F | G | 0 | 4 | 1.8 | Asymetrical crown (M) | Remove | 2 |
| 454 | Eastern White Cedar | *Thuja occidentalis* | 26,22 | G | F | G | 0 | 2 | 1.8 | Codominant at 1.2m | Remove | 2 |
| 455 | Eastern White Cedar | *Thuja occidentalis* | 20 | G | G | G | 0 | 2 | 1.8 | | Remove | 1 |
| 456 | Eastern White Cedar | *Thuja occidentalis* | 36,25,25 | F | G | G | 0 | 2 | 2.4 | Codominant at base | Remove | 3 |
| 457 | Eastern White Cedar | *Thuja occidentalis* | 34,15 | G-F | G-F | G | 0 | 2 | 2.4 | Codominant at 1m | Remove | 2 |
| 458 | Eastern White Cedar | *Thuja occidentalis* | 26,17 | G | G-F | G | 0 | 2 | 1.8 | Codominant at 1.2m | Remove | 2 |
| 459 | Eastern White Cedar | *Thuja occidentalis* | 16,15,14 | F | F | G-F | 0 | 2.5 | 1.8 | Codominant at base, leaning (M) | Remove | 1 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 460 | Eastern White Cedar | *Thuja occidentalis* | ~25,24,23 | G-F | F | G-F | 0 | 2.5 | 1.8 | Codominant at base, lost leader (M) | Remove | 2 |
| 461 | Austrian Pine | *Pinus nigra* | 35 | G-F | G-F | G-F | 0 | 3 | 2.4 | Leaning (L), asymetrical crown (L) | Remove | 2 |
| 462 | English Walnut | *Juglans regia* | 36 | G | F | G | 0 | 4.5 | 2.4 | Codominant at 1.6m | Remove | 3 |
| 463 | English Walnut | *Juglans regia* | ~65 | P | P | G | 0 | 7 | 4.2 | Codominant at 1.6m, union failure | Remove | 4 |
| 464 | English Walnut | *Juglans regia* | 27,25,,15,15 | F-P | F | G | 0 | 5 | 2.4 | Codominant at base, poor form (M) | Remove | 2 |
| 465 | Austrian Pine | *Pinus nigra* | 28 | G-F | G-F | G | 0 | 2.5 | 1.8 | ingrown fence, asymetrical crown (L) | Remove | 2 |
| 466 | Austrian Pine | *Pinus nigra* | 53 | G | G | G | 0 | 3 | 3.6 | | Remove | 4 |
| 467 | Austrian Pine | *Pinus nigra* | 28,28 | G | G-F | G-F | 0 | 2 | 1.8 | Codominant at 1.3m | Remove | 2 |
| 468 | Austrian Pine | *Pinus nigra* | 38 | G | G | G | 0 | 3 | 2.4 | | Remove | 3 |
| 469 | Austrian Pine | *Pinus nigra* | 29 | G | F | G | 0 | 2 | 1.8 | Crook (M) | Remove | 2 |
| 470 | Austrian Pine | *Pinus nigra* | 36 | G | G | G | 0 | 2.5 | 2.4 | | Remove | 3 |
| 471 | Austrian Pine | *Pinus nigra* | 15 | G-F | P | P | 0 | 2 | 1.8 | Bowed (H), poor form (H) | Remove | 1 |
| 472 | Austrian Pine | *Pinus nigra* | 39 | G | F-P | G | 0 | 3 | 2.4 | Poor form (H) | Remove | 3 |
| 473 | Austrian Pine | *Pinus nigra* | 26 | G | P | P | 80 | 2 | 1.8 | Poor form (H) | Remove | 2 |
| 474 | Austrian Pine | *Pinus nigra* | 32 | G | G-F | F | 20 | 2 | 2.4 | | Remove | 2 |
| 475 | Austrian Pine | *Pinus nigra* | 26 | F | P | F | 0 | 2.5 | 1.8 | Lost leader (M), poor form (H), broken branches (H) | Remove | 2 |
| 476 | Shagbark Hickory | *Carya ovata* | 21 | G | G | G | 0 | 3 | 1.8 | | Remove | 2 |
| 477 | Shagbark Hickory | *Carya ovata* | 22 | G | G | G | 0 | 2.5 | 1.8 | | Remove | 2 |
| 478 | Shagbark Hickory | *Carya ovata* | 20 | G | G | G | 0 | 2 | 1.8 | | Remove | 1 |
| 479 | Shagbark Hickory | *Carya ovata* | 19 | G-F | F-P | G | 0 | 3 | 1.8 | Leaning (L), poor form (H) | Remove | 1 |
| 480 | Shagbark Hickory | *Carya ovata* | 19,10 | G | G-F | G | 0 | 3 | 1.8 | Codominant at 1.3m | Remove | 1 |
| 481 | White Pine | *Pinus strobus* | 18 | G | G | G | 0 | 2 | 1.8 | | Remove | 1 |
| 482 | White Pine | *Pinus strobus* | 18 | G | G | G | 0 | 2 | 1.8 | | Remove | 1 |
| 483 | White Pine | *Pinus strobus* | ~10 | G | G | G | 0 | 2 | 1.8 | | Remove | 1 |
| 484 | Eastern White Cedar | *Thuja occidentalis* | 18,10 | F | F | F | 0 | 1.5 | 1.8 | Codominant at 1m, poor form (M) | Remove | 1 |
| 485 | Manitoba Maple | *Acer negundo* | 55 | F-P | F-P | G-F | 0 | 6 | 3.6 | Leaning (H), poor form (H), epicormic branching (H) | Remove | 4 |
| 486 | Norway Maple | *Acer platanoides* | 34 | G | G-F | G | 0 | 6 | 2.4 | Asymetrical crown (L) | Remove | 2 |
| 487 | Manitoba Maple | *Acer negundo* | 17,15 | G-F | F | G | 0 | 3 | 1.8 | Codominant at 1m | Remove | 1 |
| 488 | Norway Maple | *Acer platanoides* | 17,13 | F | F | G | 0 | 2.5 | 1.8 | Codominant at base, poor form (M), growing from base of garage | Remove | 1 |
| 489 | Manitoba Maple | *Acer negundo* | ,21,21,20,18, | P | P | G | 0 | 6 | 1.8 | Codominant at base, leaning (H), poor form (H) | Remove | 2 |
| 490 | Manitoba Maple | *Acer negundo* | 24.5 | G-F | P | F-P | 80 | 4 | 1.8 | Top failure (H), epicormic branching (H) | Remove | 2 |
| 491 | Manitoba Maple | *Acer negundo* | 21 | F | F-P | G-F | 0 | 4 | 1.8 | Leaning (M), poor form (H) | Remove | 2 |
| 492 | Manitoba Maple | *Acer negundo* | 15 | F | F-P | G-F | 0 | 4 | 1.8 | Leaning (M), epicormic branching (M), poor form (H) | Remove | 1 |
| 493 | Manitoba Maple | *Acer negundo* | 20 | F | F-P | G-F | 0 | 4 | 1.8 | Leaning (M), bowed (M), poor form (H), growing from base of shed | Remove | 1 |
| 494 | Manitoba Maple | *Acer negundo* | 17,15 | F | F | G-F | 0 | 3 | 1.8 | Codominant at 1m, poor form (M) | Preserve | |
| 495 | Manitoba Maple | *Acer negundo* | 17,15,13 | F | F | G | 0 | 3.5 | 1.8 | Codominant at base, poor form (M) | Remove | 1 |
| 496 | Manitoba Maple | *Acer negundo* | 43 | G | G-F | G-F | 0 | 5 | 3 | | Remove | 3 |
| 497 | Manitoba Maple | *Acer negundo* | ~20 | G | F | F | 0 | 3 | 1.8 | Grapevine competition (H) | Remove | 1 |
| 498 | Manitoba Maple | *Acer negundo* | 15,10 | G-F | F | G-F | 0 | 4 | 1.8 | Codominant at 1m, ingrown fence | Remove | 1 |
| 499 | Willow species | *Salix spp.* | 11 | G | G | F | 0 | 3 | 1.8 | | Remove | 1 |
| 501 | Eastern Cottonwood | *Populus deltoides* | 26 | G | G | G | 0 | 4 | 1.8 | | Remove | 2 |
| 502 | Manitoba Maple | *Acer negundo* | ~15 | F | F | F | 0 | 4 | 1.8 | Leaning (M) towards property | Remove | 1 |
| 664 | Norway Maple | *Acer platanoides* | 45.5 | G | F | G | 0 | 4 | 3 | spiral seam, poor form (M) | Remove | 3 |
| 665 | Norway Maple | *Acer platanoides* | 39 | G-F | G-F | G-F | 0 | 4 | 2.4 | Spiral seam, asymetrical crown (L) | Remove | 3 |
| 666 | Norway Maple | *Acer platanoides* | 34 | G | G-F | G | 0 | 4 | 2.4 | | Remove | 2 |
| 667 | Sugar Maple | *Acer saccharum* | 18.5 | G | G | G | 0 | 3 | 1.8 | | Remove | 1 |
| 668 | Sugar Maple | *Acer saccharum* | 18.5 | G | G | G | 0 | 3 | 1.8 | | Remove | 1 |
| 669 | Austrian Pine | *Pinus nigra* | 36,26 | G-F | F | G-F | 0 | 3 | 2.4 | Codominant at 1.3m | Remove | 3 |
| 670 | Austrian Pine | *Pinus nigra* | 33 | G | F | G-F | 0 | 3 | 2.4 | Asymetrical crown (M) | Remove | 2 |
| 671 | Austrian Pine | *Pinus nigra* | 32,30 | F | F | G-F | 0 | 4 | 2.4 | Codominant at 1.2m, asymetrical crown (L) | Preserve | |
| 672 | Austrian Pine | *Pinus nigra* | 21,18,12 | F-P | P | F | 30 | 3 | 1.8 | Codominant at base, poor form (H) | Preserve | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 673 | Austrian Pine | *Pinus nigra* | 41,35 | F-P | P | G-F | 0 | 4 | 3 | Leaning (M), codominant at 1.2m, poor form (H) | Preserve | |
| 674 | Austrian Pine | *Pinus nigra* | 35,30,24 | G | F | G-F | 0 | 4 | 2.4 | Codominant at 1m | Preserve | |
| 675 | Austrian Pine | *Pinus nigra* | 36,24,22 | F-P | P | F | 30 | 4 | 2.4 | Leaning (M), codominant at 1m, poor form (H) | Preserve | |
| 676 | Austrian Pine | *Pinus nigra* | 35 | G | G-F | G-F | 20 | 4 | 2.4 | | Preserve | |
| 677 | Austrian Pine | *Pinus nigra* | 32,33 | F | P | F | 30 | 4 | 2.4 | Codominant at 1.2m, poor form (H) | Preserve | |
| 678 | Austrian Pine | *Pinus nigra* | 35 | G | G-F | F | 30 | 3 | 2.4 | | Preserve | |
| 679 | Austrian Pine | *Pinus nigra* | 47 | G | G | G | 0 | 4 | 3 | | Preserve | |
| 680 | Eastern White Cedar | *Thuja occidentalis* | 12 | G | F | P | 90 | 2 | 1.8 | Winterburn (H) | Preserve | |
| 681 | Austrian Pine | *Pinus nigra* | ~49 | G | G-F | F | 40 | 4 | 3 | | Preserve | |
| 682 | Eastern White Cedar | *Thuja occidentalis* | 17 | G-F | G-F | G-F | 0 | 2 | 1.8 | Bowed (L) | Preserve | |
| 683 | Austrian Pine | *Pinus nigra* | 38,24 | G | F | F | 40 | 4 | 2.4 | CDodominant at 1.3m, poor form (M) | Preserve | |
| 684 | Austrian Pine | *Pinus nigra* | 51 | G | F | F | 30 | 4 | 3.6 | Codominant at 2.2m, poor form (M) | Preserve | |
| 685 | Austrian Pine | *Pinus nigra* | 24 | G-F | P | P | 70 | 3 | 1.8 | Poor form (H) | Preserve | |
| 686 | Austrian Pine | *Pinus nigra* | 44 | G | G-F | F | 40 | 3 | 3 | | Preserve | |
| 687 | Austrian Pine | *Pinus nigra* | 23 | G | G-F | F-P | 60 | 3 | 1.8 | | Remove | 2 |
| 688 | Austrian Pine | *Pinus nigra* | 20 | F | P | P | 0 | 3 | 1.8 | Lost leader (H), poor form (H) | Preserve | |
| 689 | Austrian Pine | *Pinus nigra* | 41,26 | G | F | G-F | 0 | 4 | 3 | Codominant at 1.4m, poor form (M) | Remove | 3 |
| 690 | Austrian Pine | *Pinus nigra* | 58 | G | F | G-F | 0 | 4 | 3.6 | Codominant at 2m, poor form (M) | Preserve | |
| 691 | Manitoba Maple | *Acer negundo* | 15 | F-P | F-P | G-F | 0 | 3 | 1.8 | Codominant at base, union failure | Preserve | |
| 692 | Manitoba Maple | *Acer negundo* | 16 | F | F-P | G-F | 0 | 3 | 1.8 | Codominant at 1m, lost leader (M) | Preserve | |
| 693 | Black Walnut | *Juglans nigra* | 44 | G-F | G-F | G | 0 | 6 | 3 | Codominant at 2m | Remove | 3 |
| 694 | Black Walnut | *Juglans nigra* | 37 | G | G | G | 0 | 5 | 2.4 | | Remove | 3 |
| 695 | Black Walnut | *Juglans nigra* | 36 | G | G-F | G-F | 0 | 5 | 2.4 | Codominant at 1.6m, asymetrical crown (L) | Remove | 3 |
| 696 | Black Walnut | *Juglans nigra* | 17 | G | G | G | 0 | 3 | 1.8 | | Remove | 1 |
| 697 | Black Walnut | *Juglans nigra* | 38 | G | G | G | 0 | 5 | 2.4 | | Remove | 3 |
| 698 | White Mulberry | *Morus alba* | 30 | G-F | F | G-F | 0 | 4 | 2.4 | Codominant at 2m | Remove | 2 |
| 699 | Black Walnut | *Juglans nigra* | 32 | G-F | G-F | G | 0 | 4 | 2.4 | | Remove | 2 |
| 700 | Black Walnut | *Juglans nigra* | 30 | G | G | G | 0 | 5 | 2.4 | | Remove | 2 |
| A | Norway Spruce | *Picea abies* | ~20 | G | G | G | 0 | 3 | 1.8 | | Remove | 1 |
| B | White Pine | *Pinus strobus* | ~22 | G | G | G | 0 | 3 | 1.8 | | Remove | 2 |
| C | Norway Spruce | *Picea abies* | ~10 | G | G | F-P | 60 | 2 | 1.8 | Suppressed lower crown | Remove | 1 |
| D | White Pine | *Pinus strobus* | ~19 | G | G | G | 0 | 2.5 | 1.8 | | Remove | 1 |
| E | Norway Spruce | *Picea abies* | ~11 | G | F | G | 0 | 1.5 | 1.8 | Asymetrical crown (M) | Remove | 1 |
| F | Austrian Pine | *Pinus nigra* | ~34 | G | G-F | F | 0 | 3 | 2.4 | Asymetrical crown (L), grapevine competition | Remove | 2 |
| G | White Spruce | *Picea glauca* | ~14 | G | G | G | 0 | 2 | 1.8 | | Remove | 1 |
| H | White Pine | *Pinus strobus* | ~15 | G | G | G | 0 | 2 | 1.8 | | Remove | 1 |
| P1 | *Eastern White Cedar, N* | *Thuja occidentalis, Picea a* | 5-25 | G | G | G | 0 | 2 | 1.8 | 20 trees total. Three trees 10-20cm DBH and one tree ~25cm DBH. Average DBH 10cm | Remove | 5 |
| P2 | *Eastern White Cedar* | *Thuja occidentalis* | 5-12 | F | F | F | 0 | 2 | 1.8 | 6 trees, average DBH 9cm. One tree ~12cm | Remove | 1 |
| P3 | *Beech cultivar* | *Fagus sylvatica* | 2-4 | G | G | G | 0 | 0.5 | 1.2 | 8 trees, average DBH 3cm | Preserve | |
| P4 | *Freeman Maple* | *Acer X Freemanii* | 12-14 | G | G | G | 0 | 2.5 | 1.8 | 5 trees, average DBH 13cm. ~1m from fence | Preserve | |
| P5 | *Freeman Maple* | *Acer X Freemanii* | 7 | G | G | G | 0 | 2 | 1.2 | 3 trees, all ~7cm DBH. ~1.2m from fence | Preserve | |

| **Codes** | | |
|---|---|---|
| DBH | Diameter at Breast Height | *(cm)* |
| TI | Trunk Integrity | *(G, F, P)* |
| CS | Crown Structure | *(G, F, P)* |
| CV | Crown Vigor | *(G, F, P)* |
| CDB | Crown Dieback | *(%)* |
| DL | Dripline (Radius) | *(m)* |
| mTPZ | Minimum Tree Protection Zone (Radius) | *(m)* |
| Comp | Compensation | # |
| ~ = estimate, P = poor, F = fair, G = good, (VL) = very light, (L) = light, (M) = moderate, (H) = heavy | | |

## Appendix A. Site Photographs

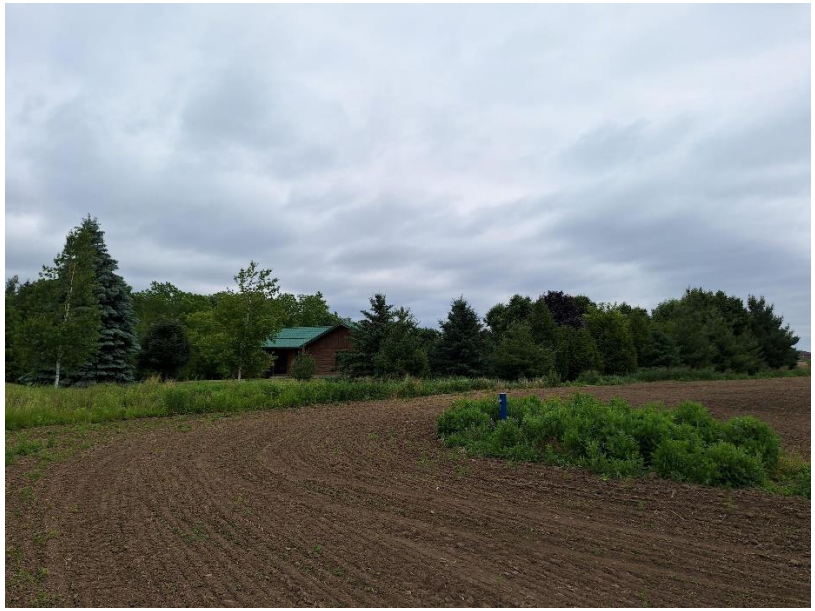

Image 1. Tree 1-16

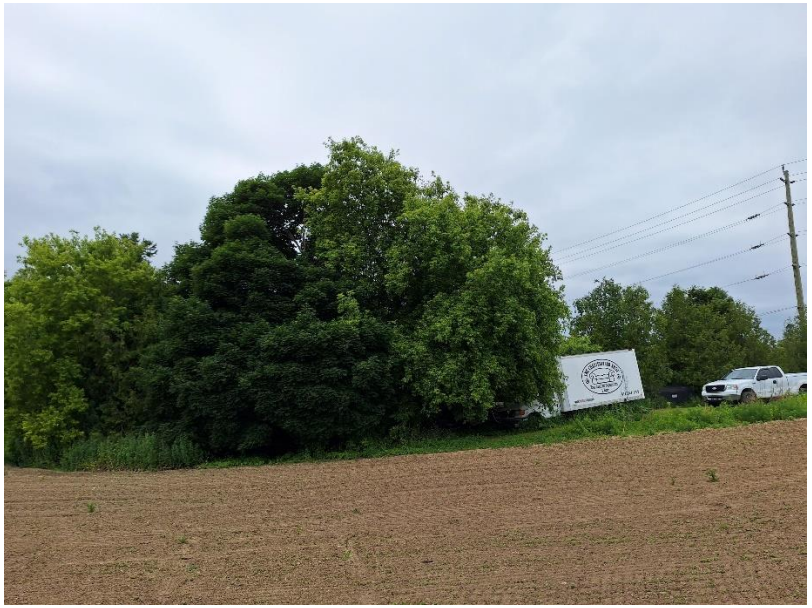

Image 2. Tree 17-26

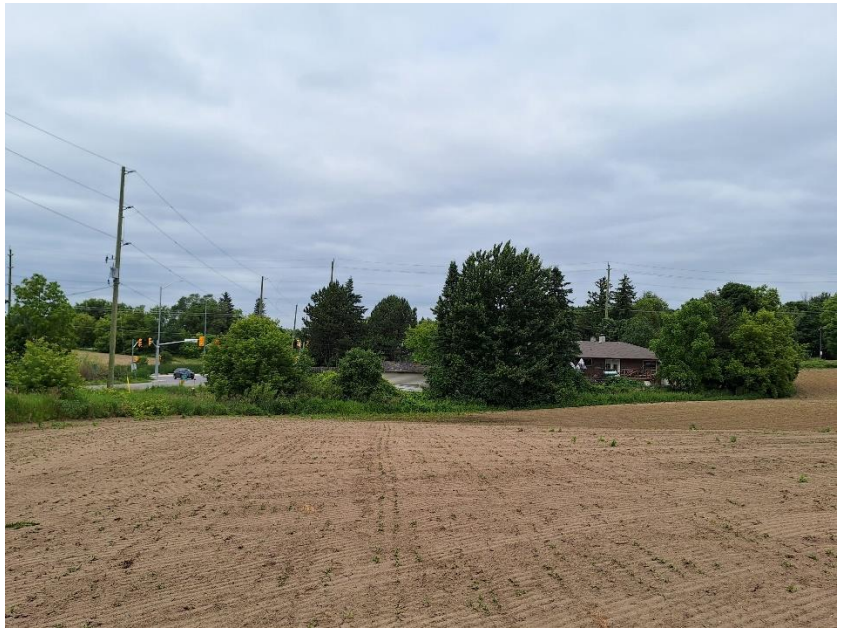

Image 3. Tree 27-34

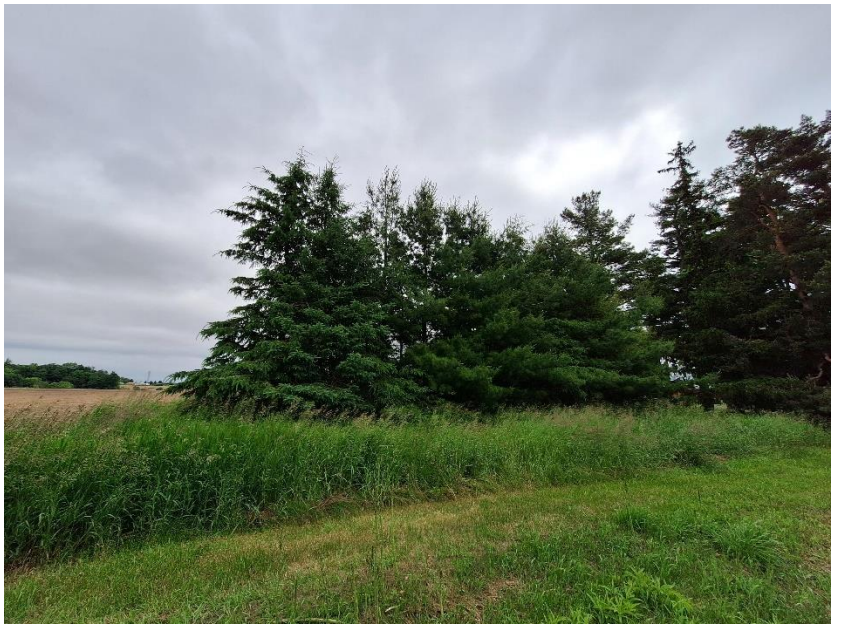

Image 4. Tree 439-448

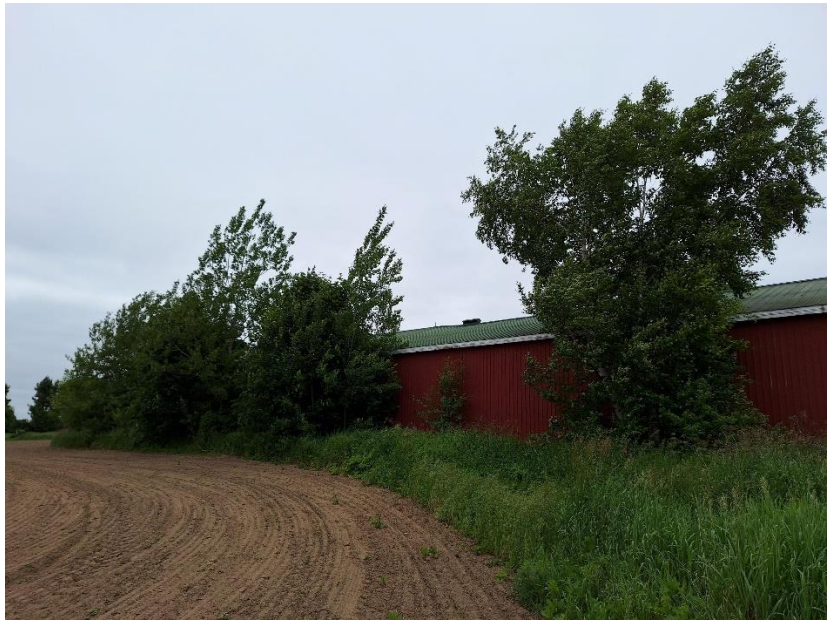

Image 5. Tree 449-453

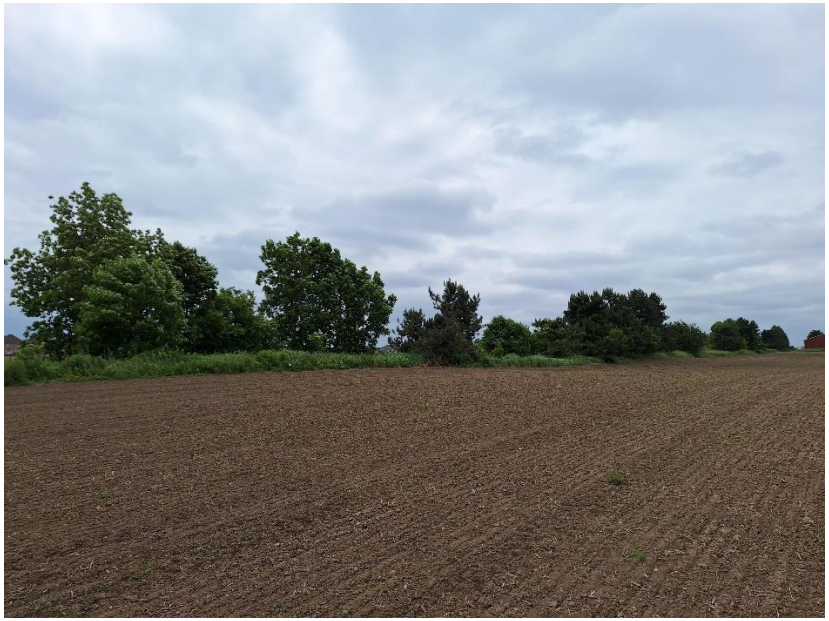

Image 6. Tree 454-480

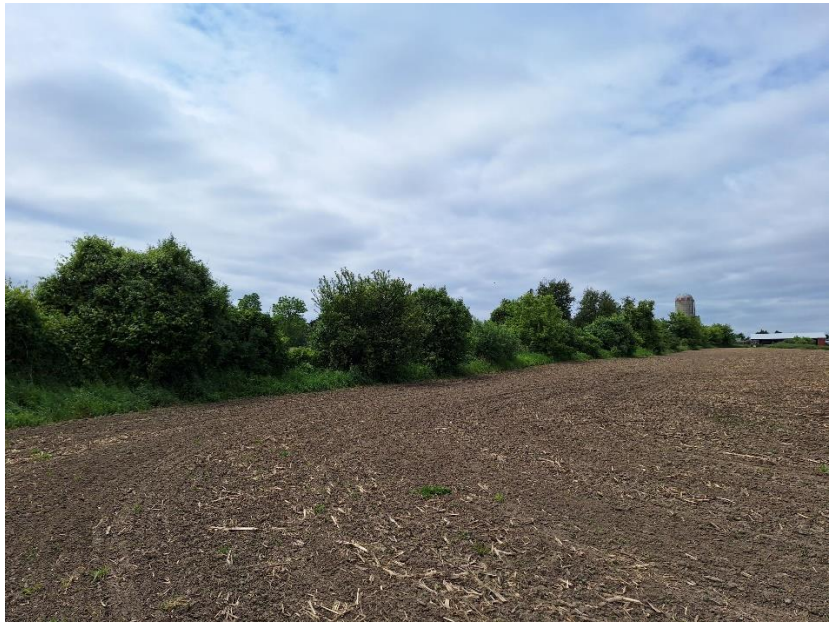

Image 7. Tree 494-497

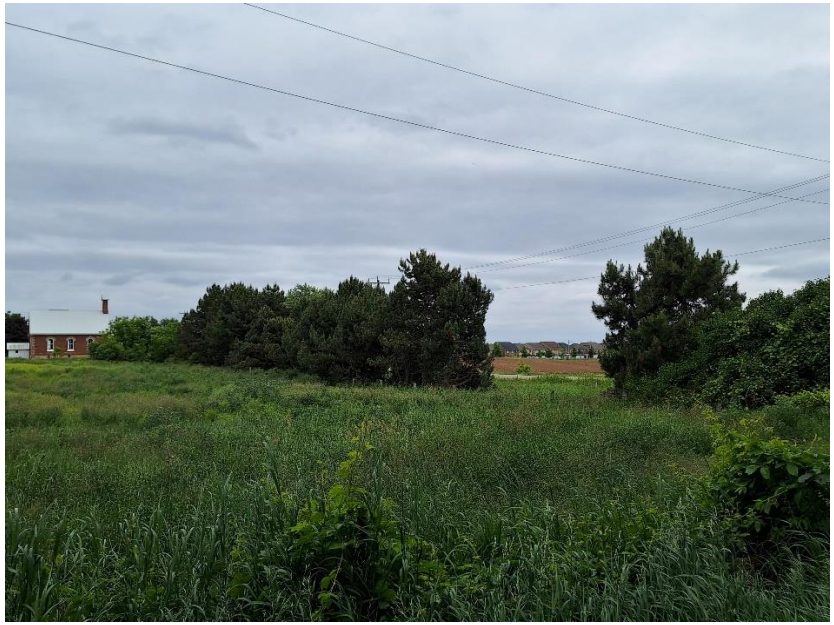

Image 8. Tree 669-692

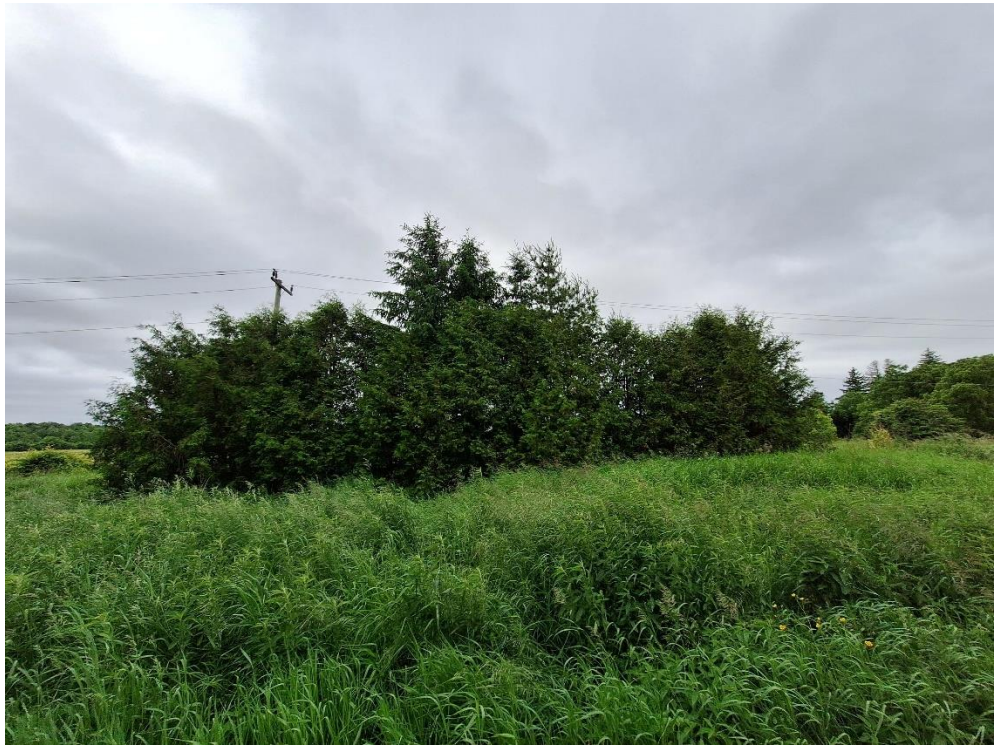

Image 9. P1

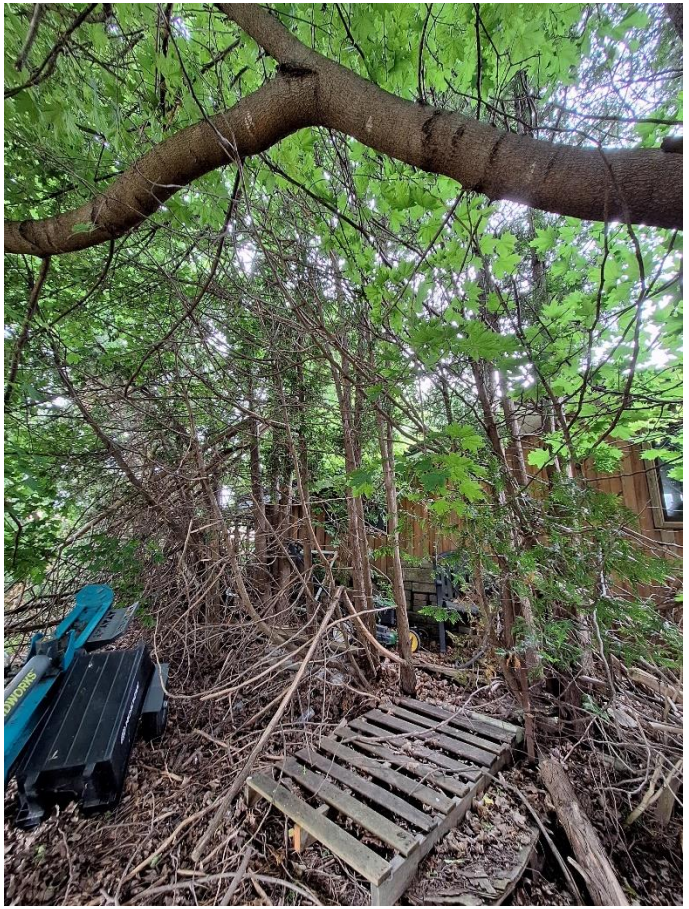

Image 10. P2

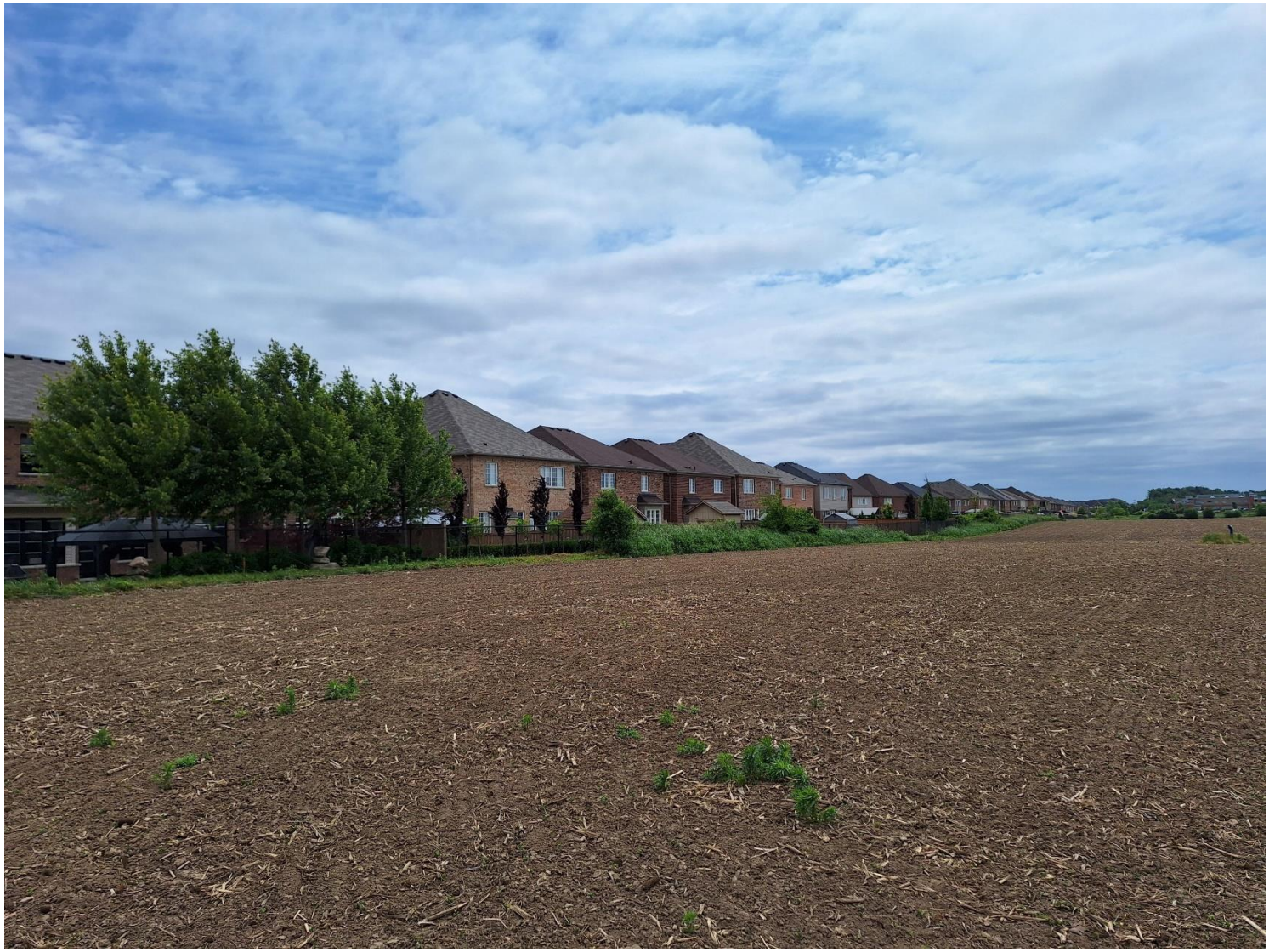

Image 11. East property boundary (facing south)

Image 12. Existing driveway and house (facing north)

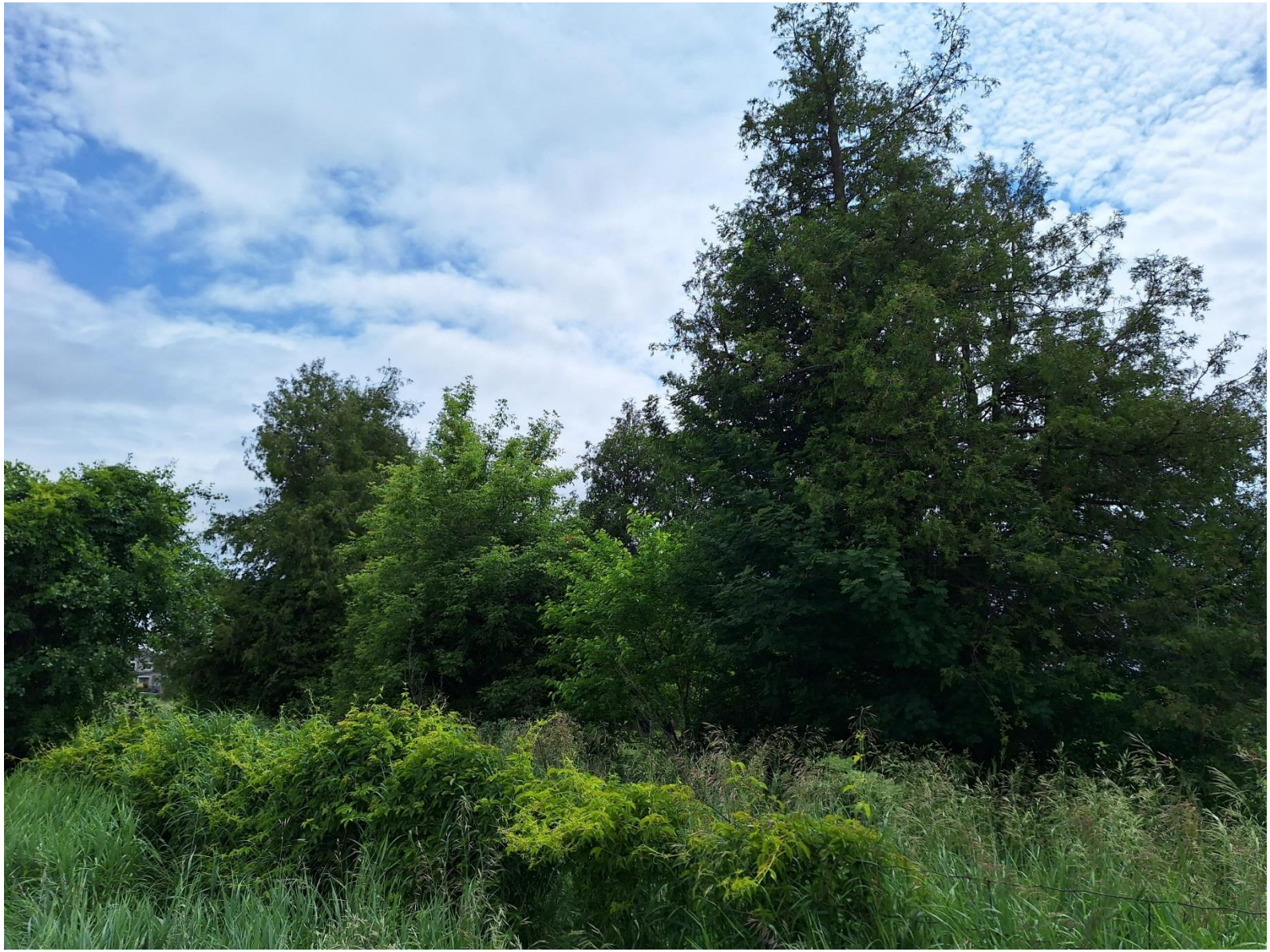

Image 13. Tree on north side of Dixon's Union Cemetery (facing south)