Purpose
This policy exists to ensure all trees and other established vegetation on the main campus are protected from injury or destruction, and to ensure the responsibilities of individuals involved with required activities putting them at risk are formally addressed.

Scope
All construction, renovations, repairs or other required activities on campus that put trees and established vegetation at risk of being injured or destroyed.

Policy Reference
The Corporation of the City of Guelph, Private Tree Protection By-law Number (2010) - 19058.

Definitions
Established Vegetation: For the purpose of this policy, established vegetation refers to any mature and or rare woody shrubbery or ground cover other than grass firmly rooted in a location which complements the surrounding landscape, buildings and aesthetics of the campus.

Emergency Work: Emergency work refers to any work required to be carried out immediately in order to prevent imminent danger to life, health or property, and includes the destruction or injuring of trees required because of the state of the trees resulting from natural events (including lightning, wind, hail or extreme snow event) or unforeseen causes (including automobile accident), or to permit repairs to building structures or drains.

Tree Protection Zone: A tree protection zone refers to the area that shall be totally enclosed and not disturbed during construction or renovation projects, during scheduled or emergency repair work or during other campus activities. No excavating, grade altering, storage of materials, parking of vehicles, equipment, fuel or toxic materials are allowed inside the zone. Refer to Tree Protection Plan below regarding the calculation of a Tree Protection Zone.

Policy
General
The protection and preservation of trees and established vegetation is very important at the University of Guelph. Except if in conformity with the Campus Master Plan, the Arboretum Master Plan, or in an emergency situation, no trees or established vegetation shall be injured, destroyed or removed without written authorization from the Physical Resources, Grounds Manager or designate, or the written approval of the University of Guelph, Landscape Advisory Committee. Upon approval being granted to remove a tree(s), a “Tree Removal Notice” shall be posted by the construction coordinator on all subject trees at least two weeks prior to removal, indicating the reason for the removal and contact information.

Scheduled or Emergency Structural or Utility Repairs
Prior to scheduled or emergency structural or utility repairs being performed within a tree protection zone or in close proximity to established vegetation, the applicable discipline manager shall contact the Physical Resources, Grounds Manager or designate. The Grounds Manager or designate will implement a tree and/or established vegetation protection plan and follow up with a recovery plan if required. In all instances, directional boring shall be considered as an option to trenching.
Construction and Renovation Projects

- Upon completion of detailed design development and prior to the start of the bidding process, detailed engineered drawings must be reviewed and have the written approval of the University of Guelph, Landscape Advisory Committee.

- Tree removal for project purposes requires the written authorization of the Landscape Advisory Committee prior to bidding. After such approval, a “Tree Removal Notice” shall be posted on all subject trees at least two weeks prior to removal, indicating the reason for the removal and contact information.

![Tree Removal Notice](image)

Authorization to remove this tree has been granted by the University of Guelph, Landscape Advisory Committee

The reason for the removal:

- [ ] Structurally Unsafe
- [ ] Conformity with Master Plan
- [ ] Repairs to Building, Structure, Utilities, Drainage

For more information, call extension 52053

- Where trees and/or established vegetation not accounted for in the planning process will be at risk of being injured or destroyed, the project manager shall contact the Physical Resources, Grounds Manager or designate, and the University of Guelph Landscape Advisory Committee before the affecting construction task starts.

- Work shall be planned to protect the health of trees and/or established vegetation. In all instances, directional boring shall be considered as an option to trenching. The project manager or construction coordinator shall seek advice from the Grounds Manager or designate, or the Landscape Advisory Committee to mitigate damage.

- If authorization cannot be obtained due to unavailability and an immediate decision is required, it is the responsibility of the applicable Design, Engineering and Construction project manager to implement a tree protection plan in compliance with this policy. A tree protection plan and/or established vegetation protection plan is required when construction or renovation activities may negatively impact trees and/or established vegetation.
• If trees must be removed because of the project, with the written consent of the Grounds Manager or designate, or the Landscape Advisory Committee, the project will be charged for their replacement as follows:
  
  o Two trees (6.5 cm replacement) for every tree removed under 15 cm in diameter.
  
  o Each tree removed between 15 and 50 cm in diameter will cost five replacement trees (6.5 cm in diameter).
  
  o Trees removed over 50 cm in diameter will cost the project a minimum of $2,500 per tree.
  
  o If one of the University’s most valued specimens over 50 cm in diameter is removed, the value will be assessed by an external arborist and the estimated value charged to project.
  
  o If the tree protection plan is not followed, the contractor will be financially responsible for resulting damage to trees. Regardless of the current disposition of the plant, $150.00 per cm of trunk diameter at breast height will be withheld from payment due to the contractor hired.

• If established vegetation must be removed because of the project, with the written consent of the Grounds Manager or designate or the Landscape Advisory Committee, the project will be charged and the value withheld from payment due to the contractor hired at a cost of market value plus 150%.

• The contractor will be financially responsible for resulting damage to plantings. The value of the cost of the damage will be withheld from payment due to the contractor hired at market value plus 150%.

Tree Protection Plan

1. Calculate the Tree Protection Zone (TPZ)
The tree protection zone is the area from the trunk of the tree to one meter beyond the drip line.

2. The TPZ shall be totally enclosed with fencing. Standard four (4) foot high snow fence with posts on eight (8) foot centers is accepted as a minimum. If soil or materials are piled adjacent to the TPZ then solid plywood fence is required to stop erosion and runoff into the TPZ. In order to further protect the TPZ from erosion and runoff, the finish grade around the site must not be changed.

3. Signage shall be attached by the construction coordinator to fencing at the TPZ every 25 linear feet. Signs must be a minimum 40 cm x 40 cm and state the following:
4. If roots are exposed and have been damaged, an inspection should be made by the Grounds Manager or designate to determine the course of action. If roots are damaged, clean cuts should be made before the site is backfilled. After proper authorization to work on the site, Grounds staff will make any pruning corrections to roots and above ground tree parts if requested by the project manager or construction coordinator.

5. The area adjacent to the TPZ must also be protected. Roots go beyond drip line. Therefore, the area outside the protective fencing (at least 1 ½ times the distance of the drip line) must be protected. To prevent soil compaction, filter fabric must be placed on the ground surface and a minimum of 6 inches of coarse wood chips is to then be applied on top of the fabric. If woodchips are not available, 6 inches of clear crushed stone can be spread on top of the fabric to be removed at the end of the project.

6. Barrier fencing shall not be removed unless authorized by the project manager. The applicable project manager may be confirmed through the Physical Resources, Design, Engineering and Construction department by emailing treehelp@pr.uoguelph.ca.

Established Vegetation Protection Plan

1. The project manager shall consult with the Grounds Manager or designate to establish an appropriate protection zone for the type of established vegetation at risk.

2. The protection zone shall be calculated as per a TPZ i.e., one meter beyond the edge of vegetation and identified with signage that states the following:

   **Established Vegetation Protection Zone**

   The area within the Established Vegetation Protection Zone shall not be disturbed.

   Barrier fencing shall not be removed unless authorized by the Physical Resources Project Manager.

   For information, contact the Physical Resources, Design, Engineering and Construction Department by emailing: treehelp@pr.uoguelph.ca

Note: Any alternatives to any of the above protective measures shall be authorized by the University of Guelph Grounds Manager or designate or the Landscape Advisory Committee.