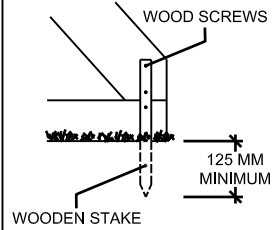


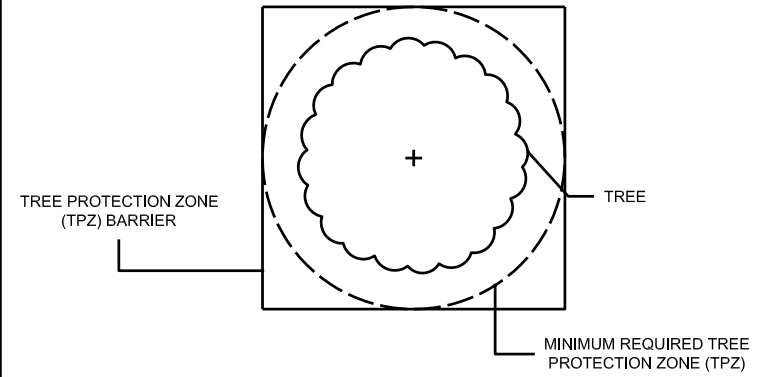
# STAKE DETAIL



## NOTES:

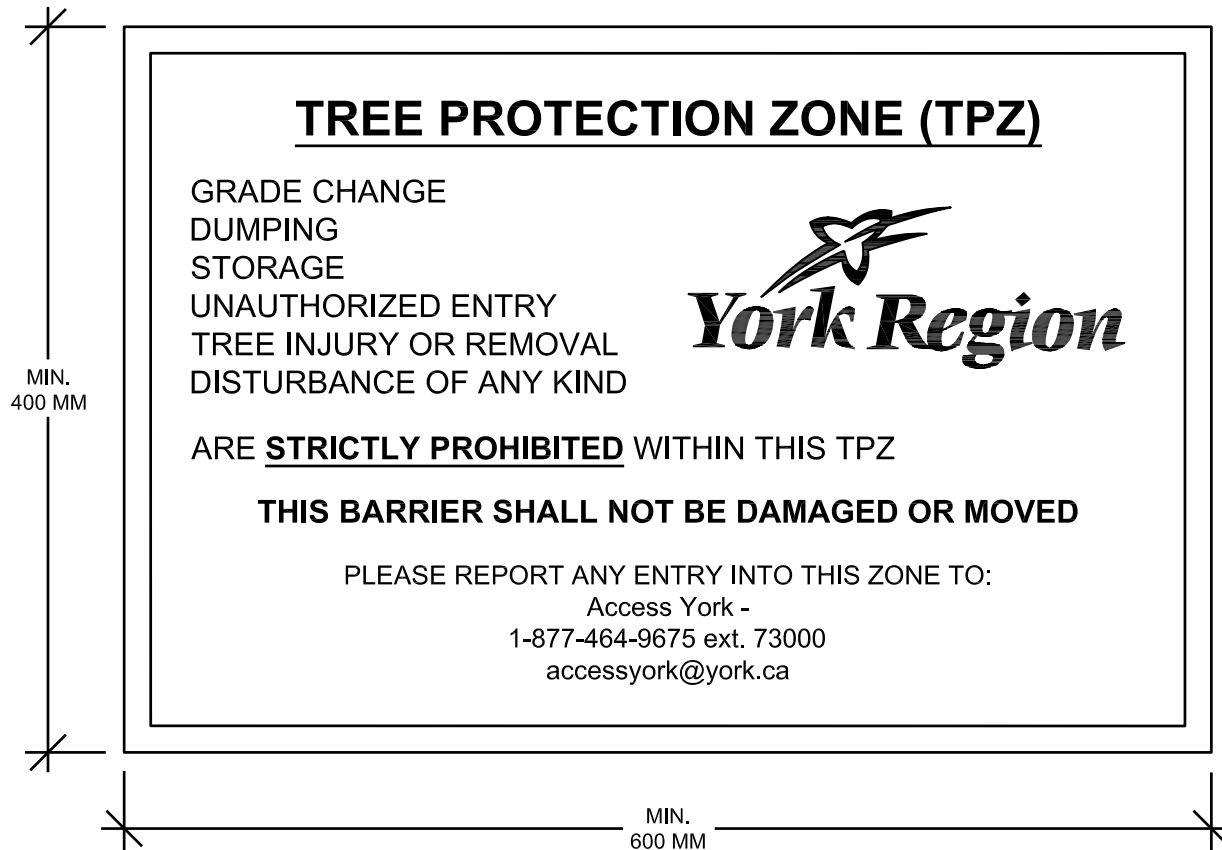
1. REFER TO YORK REGION STREET TREE & FOREST PRESERVATION AND COMPENSATION GUIDELINES FOR COMPLETE TREE PRESERVATION REQUIREMENTS.
2. TREE PROTECTION ZONE (TPZ) BARRIER SHALL BE INSTALLED AT THE OUTER LIMIT OF THE MINIMUM REQUIRED TPZ FOR EACH TREE TO BE PRESERVED.
3. TPZ IS DELINEATED AS A RADIUS, IN METRES, MEASURED OUTWARD FROM THE BASE OF THE TREE TO BE PROTECTED. THE TPZ RADIUS IS DETERMINED BASED UPON THE DIAMETER AT BREAST HEIGHT (DBH) OF THE TREE'S MAIN STEM. FOR MULTI-STEMMED TREES, THE DIAMETER AT BREAST HEIGHT (DBH) OF THE LARGEST-DBH STEM IS USED TO DETERMINE THE TPZ RADIUS. THE TPZ FOR ALL TREES 24 CM DBH OR LESS IS A MINIMUM OF 2.4 M. THE TPZ FOR TREES 25 CM OR GREATER IS 10 CM FOR EVERY CENTIMETRE OF DBH.
4. TPZ BARRIERS SHALL PROTECT CONTIGUOUS GROUPS OF TREES WHEREVER POSSIBLE.
5. TPZ BARRIERS SHALL BE ESTABLISHED, INSPECTED, AND APPROVED BY YORK REGION OR ITS DESIGNATE PRIOR TO THE COMMENCEMENT OF ANY SITE DISTURBANCE.
6. TPZ BARRIERS SHALL BE INSPECTED WEEKLY AND BE MAINTAINED IN GOOD WORKING ORDER AND APPEARANCE UNTIL COMPLETION OF ALL SITE WORKS.


## PLAN VIEW



## TREE PROTECTION ZONE (TPZ) BARRIER

DATE:	JAN 2025	SCALE	N.T.S.
REV.	X	X	NHF - 400



 <b>York Region</b>			Public Works Forestry	
TREE PROTECTION ZONE (TPZ) SIGNAGE				
DATE:		JAN 2025		SCALE N.T.S.
REV.	X	X	NHF - 401	

## General

- These notes are in support of York Region's Street Tree and Forest Preservation Guidelines. Refer to the Guidelines prior to undertaking any site disturbance in proximity to trees on York Region-owned property.
- York Region Street Tree and Forest Preservation Guidelines must be implemented if there is a reasonable likelihood that any site works will in any way encroach upon minimum required Tree Protection Zones (TPZs), whether such encroachment is planned or inadvertent, or if trees to be preserved are located within 10 metres of the limits of proposed site disturbance.

## Tree Protection Zone (TPZ)

- A minimum Tree Protection Zone (TPZ) will be established around every tree to be preserved in accordance with the York Region Street Tree and Forest Preservation Guidelines and a York Region-approved Tree Preservation Plan.
- No entry or activity shall be permitted within the TPZ without prior written approval of York Region Environmental Services Department, Natural Heritage and Forestry Division.
- Prohibited activities within the TPZ include but are not limited to: installation or attachment of any items to the tree; operation of equipment or machinery; storage of equipment, machinery or materials; access by any personnel; placement of trailers, temporary buildings or structures; flushing, storage or dumping of fuels, chemicals or other contaminants; stockpiling of soil; digging, trenching, or excavation; and/or change to existing grade.

## Tree Protection Zone (TPZ) Barrier

- A Tree Protection Zone (TPZ) barrier shall be constructed around the TPZ of every tree to be preserved in accordance with the York Region Street Tree and Forest Preservation Guidelines and a York Region-approved Tree Preservation Plan.
- Where trees to be protected are located in close proximity to each other, the TPZ barrier shall be installed to protect trees in contiguous groups.
- The TPZ barrier shall be installed prior to commencement of any site disturbance. Site disturbance shall not commence until the installation of all TPZ barriers has been completed, and has been verified and approved by York Region or its designate.
- The TPZ barrier shall be constructed on a 2x4 frame. The height of the frame shall measure a minimum of 1.2 m (4 feet), and the width of individual frame sections shall not exceed 2.4 m (8 feet).
- The frame shall be supported by diagonal 2x4 support legs installed inside the TPZ, secured to the frame using wood screws, and secured to the ground using an wooden stake installed a minimum of 125 mm into the ground. A minimum of 1 support leg shall be installed per 2.4 m (8 feet) of linear TPZ barrier distance, or per frame section.
- Framed construction fencing is the primary method for TPZ barrier construction. Orange construction safety fencing shall be securely and tightly stapled to the outside of the TPZ barrier frame to construct the framed construction fencing TPZ barrier type. Other fencing materials (e.g., chicken wire, green snow fence, etc.) shall not be used.
- Solid hoarding shall be installed where there is a significant risk of fill or other material being piled against the TPZ barrier, or where heavy machinery is to be operated in close proximity to the TPZ barrier. Plywood or oriented strand board (OSB) sheathing with a minimum thickness of 3/8" shall be affixed using wood screws to the outside of the TPZ barrier frame to construct the solid hoarding TPZ barrier type. Nails, staples or other fasteners shall not be used.
- Signage, as shown in typical detail drawing 'Tree Protection Zone (TPZ) Signage NHF-401', shall be installed on all sides of the TPZ barrier. The distance between individual signs shall not exceed 10 metres on any one side of the TPZ barrier.
- If described as required in the Tree Preservation Report, silt barrier fencing shall be installed using a 'no-dig' method as described in the York Region Street Tree and Forest Preservation Guidelines.

## Maintenance


- TPZ barriers shall remain in place and in good working order and appearance throughout the duration of site disturbance until completion of all works.
- TPZ barriers shall not be moved, modified or relocated at any time without the approval of York Region or its designate.
- TPZ barriers shall be inspected by a qualified tree professional once-weekly or on a schedule approved by York Region or its designate. Any deficiencies shall be noted in writing and any TPZ barriers found to be in substandard condition shall be repaired, modified or replaced as necessary within five working days of formal notification by York Region or its designate.

## Pruning

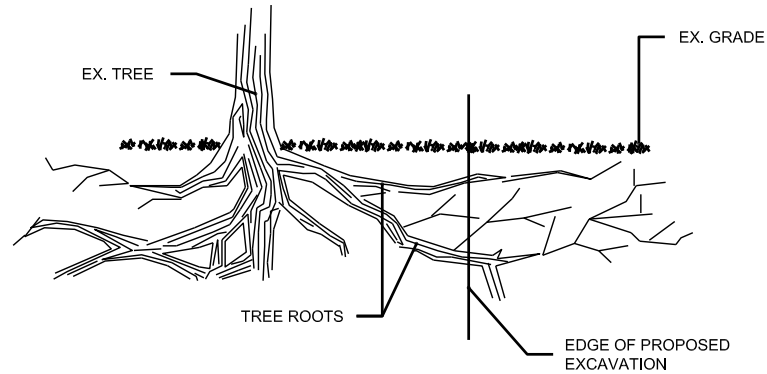
- No tree branches or tree roots shall be pruned without written approval of York Region or its designate. Any proposed pruning must be described in the Tree Preservation Report and must be approved by York Region or its designate prior to its undertaking.
- Approved pruning must be undertaken by an ISA Certified Arborist or an Ontario College of Trades 444A Arborist or Arborist Apprentice only.
- No trades personnel are permitted to prune tree branches or tree roots.

## Other

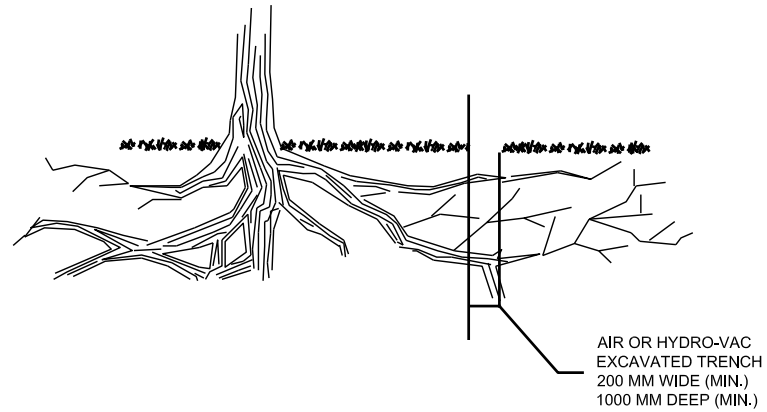
- Other tree preservation measures may be required to be implemented wherever site disturbance is proposed, anticipated or likely to occur within or in close proximity to Tree Protection Zones (TPZs) and trees to be preserved. Other acceptable tree preservation measures are described in the York Region Street Tree and Forest Preservation Guidelines.
- All proposed tree preservation measures must be described in the Tree Preservation Report and shown on the Tree Preservation Plan.
- York Region NHF shall be notified when tree protection measures have been installed
- At the sole discretion of YR NHF any existing trees that die or exhibit a decline in health prior to final acceptance shall be compensated for in accordance with the Street Tree and Forest Preservation Guidelines.

		Public Works Forestry	
STANDARD TREE PROTECTION NOTES			
DATE: JAN 2025		SCALE N.T.S.	
REV.	X	X	NHF - 402

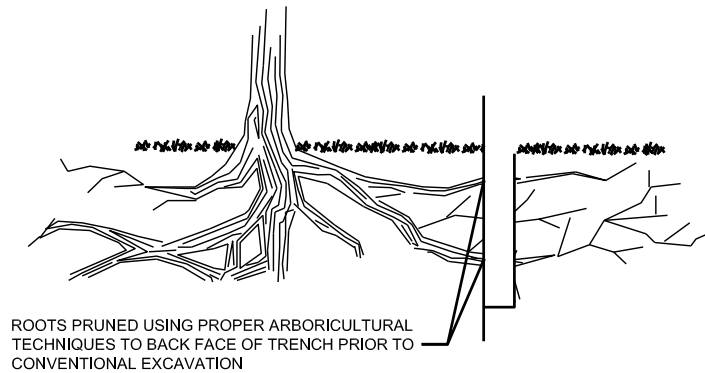
1. EXISTING CONDITIONS (TYP.)



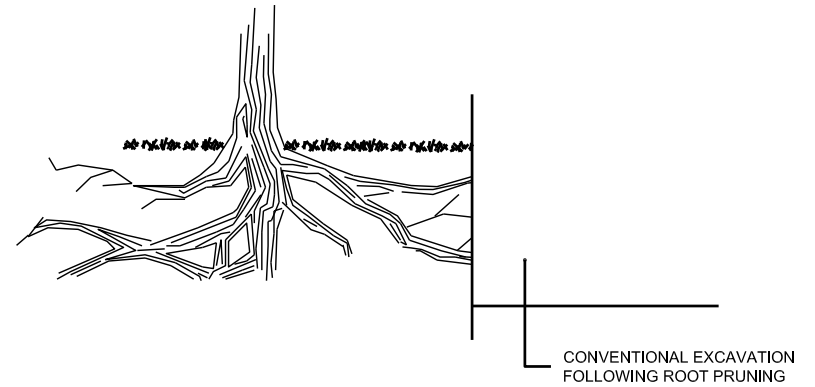
2. ROOT-SENSITIVE EXCAVATION (TYP.)




3. ROOT PRUNING (TYP.)



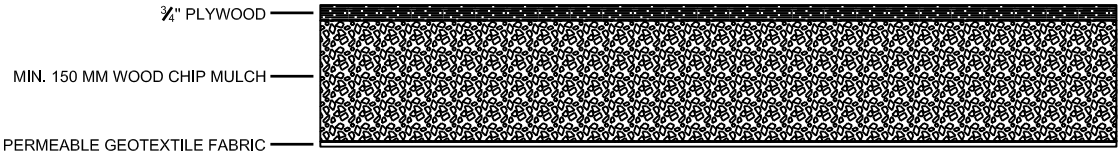
4. CONVENTIONAL EXCAVATION (TYP.)



 <b>York Region</b>			Public Works Forestry			
ROOT-SENSITIVE EXCAVATION AND ROOT PRUNING						
DATE:		JAN 2025		SCALE		N.T.S.
REV.		X	X	NHF - 403		

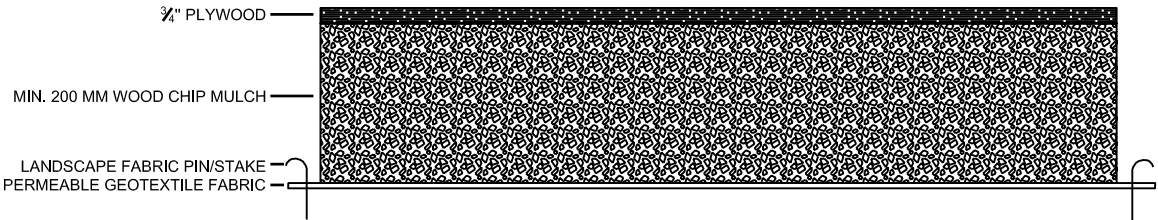
**LIGHT ROOT ZONE COMPACTION PROTECTION**

LIGHT ROOT ZONE COMPACTION PROTECTION SHALL BE IMPLEMENTED WHERE LIMITED NON-VEHICULAR ACCESS IN THE TPZ IS ANTICIPATED (E.G., OCCASIONAL FOOT TRAFFIC, WHEELBARROW).



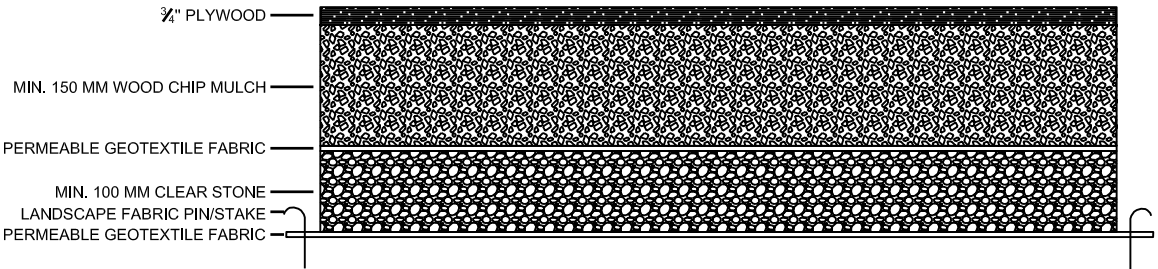
**MODERATE ROOT ZONE COMPACTION PROTECTION**

MODERATE ROOT ZONE COMPACTION PROTECTION SHALL BE IMPLEMENTED WHERE MORE FREQUENT NON-VEHICULAR ACCESS OR OCCASIONAL LIGHT VEHICLE (E.G., PICKUP TRUCK) ACCESS ACROSS THE TPZ IS ANTICIPATED.

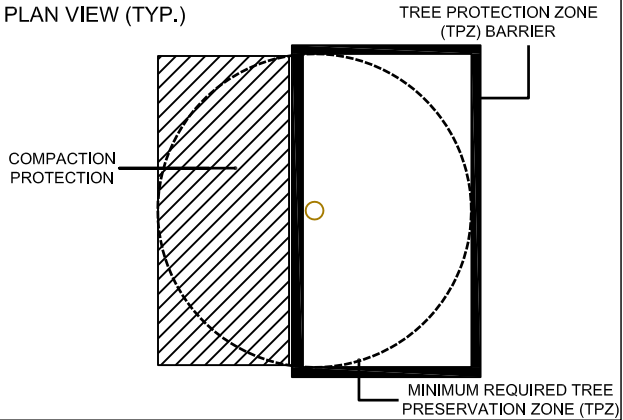


**HEAVY ROOT ZONE COMPACTION PROTECTION**

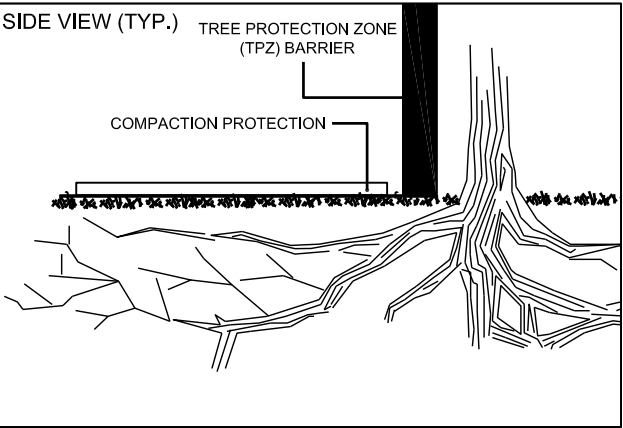
HEAVY ROOT ZONE COMPACTION PROTECTION SHALL BE IMPLEMENTED IN AREAS WHERE REGULAR VEHICLE ACCESS OR SIMILAR IMPACTS ARE ANTICIPATED IN THE TPZ.



PLAN VIEW (TYP.)



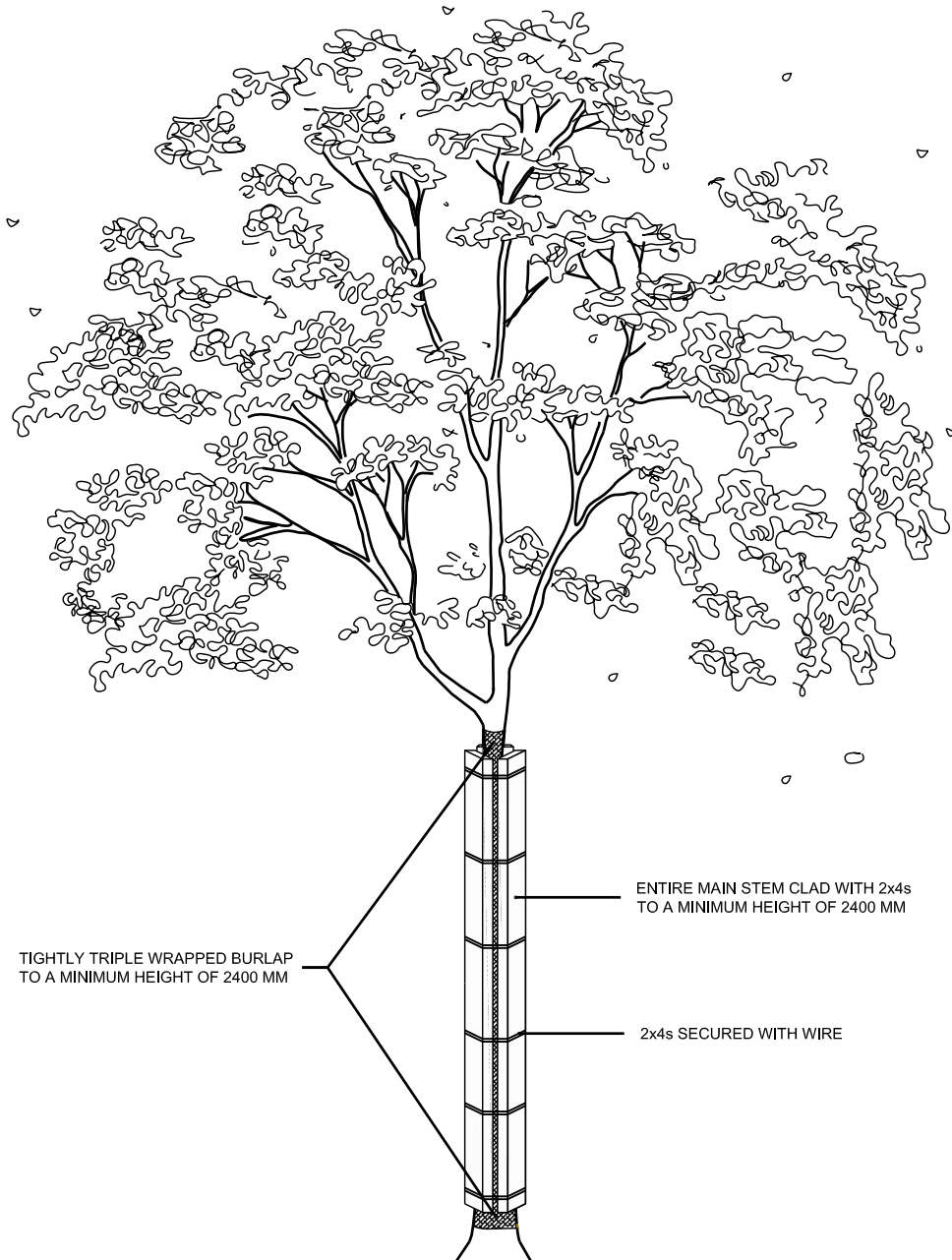
SIDE VIEW (TYP.)




Public Works  
Forestry

**ROOT ZONE COMPACTION  
PROTECTION**

DATE:		JAN 2025		SCALE		N.T.S.	
REV.		X		X		NHF - 404	



 <b>Public Works Forestry</b>		
<b>TREE STEM PROTECTION</b>		
DATE:	JAN 2025	SCALE N.T.S.
REV.	X	X
<b>NHF - 405</b>		