

279 Sarnia Road Townhomes

Tree Preservation Report

Project Location:

279 Sarnia Road, London, ON N6G 1N2

Prepared for:

Palumbo Homes 1055 Sarnia Road, London, ON N6H 5J9

Prepared by:

MTE Consultants Inc. 1016 Sutton Dr Suite A, Burlington, ON L7L 6B8

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MTE File No.: 52851-200

Engineers, Scientists, Surveyors.



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1.0 INTRODUCTION

MTE Consultants Inc. (MTE) was retained by the Palumbo Homes, to complete a detailed tree inventory prior to construction of a proposed townhouse development at 279 Sarnia Road. This includes trees on the property, those on the property line and those immediately leaning over from neighbouring parcels. [Appendix A Figure 1].

This report addresses the Tree Preservation Report requirements set forth by the City of London and evaluates the potential for tree preservation.

The proposed limits of construction and tree preservation details for the site are illustrated on the enclosed MTE drawings: Tree Preservation Plan TP1.1 [Appendix B].



Site Location

2.0 CRITERIA

This report has been prepared as a requirement of City of London Site Plan Approval process and conforms to Section 12 of the City of London Design Specifications & Requirements Manual (March 2022). Trees included in this inventory are all those onsite, bordering the property, and neighboring within three meters of the property line,

Data collected include Botanical and Common Name, DBH at 1.37m above grade, estimated height, canopy diameter, health and structural rating according to the following rating system:

Health:

Excellent (1) -health and vigour are exceptional, no pest, disease, or distress symptoms

- Good (2) -health and vigour are average, no significant or specific distress symptoms, no significant pest or disease
- Fair (3) -health and vigour are somewhat compromised, distress is visible, pest or disease may be present and affecting health, problems are generally correctable
- Marginal (4) -health and vigour are significantly compromised, distress is highly visible and present to the degree that survivability in in question
- Poor (5) -decline has progressed beyond the point of being able to return to a healthy condition again, long-term survival is not expected, moribund/ dead trees

Structure:

- Excellent (1) -no obvious structural problems
- Good (2) -some minor structural problems may be present which do not require corrective action
- Moderate (3) -normal, typical, structural issues present which can be corrected with pruning
- Marginal (4) -serious structural problems are present which may or may not be correctable with pruning, cabling, bracing, etc.
- Poor (5) -hazardous structural condition which cannot be effectively corrected with pruning or other measures, may require removal depending on location and the presence of targets

3.0 TREE INVENTORY

On January 10, 2024, a total of 38 trees were inventoried for this Tree Preservation Report.

The most abundant species inventoried is Black walnut (*Juglans nigra*) and Eastern White Cedar (*Thuja occidentalis*). Additional species within the limits of construction include Norway Maple (*Acer platanoides*), Silver Maple (*Acer saccharinum*), White Spruce (*Picea glauca*), White Pine (*Pinus strobus*), Scots Pine (*Pinus sylvestris*), Green Ash (*Fraxinus pennsylvanica*), and White Willow (*Salix alba*) [Appendix C].

According to the provided survey plan of existing tree locations, Trees #6, #7, #16, #22, #29, #30, #33, #34, #35, #38 appear to be boundary trees as defined by the Forestry Act:

(2) Every tree whose trunk is growing on the boundary between adjoining lands is the common property of the owners of the adjoining lands. 1998, c. 18, Sched. I, s. 21

Boundary trees are protected by the Forestry Act:

(3) Every person who injures or destroys a tree growing on the boundary between adjoining lands without the consent of the landowners is guilty of an offence under this Act. 1998, c. 18, Sched. I, s. 21.

Consent from the co-owners must be obtained prior to the damage or removal of any boundary trees.

4.0 DEVELOPMENT PROPOSAL AND TREE ASSESSMENT

The proposed townhouse development at 279 Sarnia Road aims to provide medium density housing at the address with 20 residential units. The development includes 10 parking spaces, sidewalks, and an asphalt driveway to access the dwellings.

Where possible, considerations have been made to avoid unnecessary tree removal.

Trees have been selected for removal based on health, structure, and spatial incompatibility with the site development plan.

Permission to remove city trees will have to be attained from the City of London Forestry department. These trees are located on the boulevard at 279 Sarnia Road - Tree #3, Tree #4 and Tree #5. The largest Tree #3 (DBH 68cm) has been identified as having poor structure with previous large branch failures.

In accordance with the provincial Forestry Act, consent must be attained for the removal of trees located on the property boundary. Boundary trees recommended for removal are identified as #6, #7, #16, #22, #29, #30, #33, #38. Tree #29 has a low live crown ratio of 15%. Trees #6 and #7 have poor structural form, as well as #16, #22, #30, #33 and #38.

Trees on the property for removal are #1, #8, #14, #15, #17, #18, #21, #24, #25, #26, #27, #28, and #32. Tree #1 is a White Spruce is affected with spruce canker. Tree #8 is a Norway Maple displaying poor structural form. Tree #14, a Black Walnut is afflicted with nectria canker. Tree #15 is a Norway Maple displaying poor structural form. Tree #17 is the largest tree inventoried, a White Willow with a trunk diameter of 105cm. This Willow is leaning and contains habitat cavities. Tree #18 is a Green Ash that is afflicted with EAB but still alive. Tree #21 along with #24, #26, #27, #28 are mature White Cedars with no obvious defects. Tree #25 is a White Pine with a broken top, chlorosis, and root girdling. Tree #32 is a mature Scots Pine in steep decline.

In total of the 38 trees inventoried 25 are suggested for removal to accommodate the development.

Trees #2, #9, #10, #11, #12, #13, #19, #20, #23, #34, #35, #36, #37 are trees suggested to be retained and preserved on site. These trees are projected to be compatible with the site development and should be protected by the City of London's tree protection specifications TPP-1 and TPP-2 (Appendix D).

5.0 TREE PROTECTION MEASURES

5.1 Standard Protection Measures

- Shall be in accordance with Section 12 of the City of London Design Specifications & Requirements Manual.
- Shall be implemented and verified by an ISA Certified Arborist prior to any land clearing, demolition, excavation, construction, or grading operations within 30m of the TPZ.
- **Tree Protection Zone** (TPZ) shall be delineated according to the Tree Preservation Plan TP1.1 (Appendix B) by orange vinyl fencing installed according to City of London Standard Drawing TPP-1 and TPP-2 Tree Preservation Details (Appendix D).
- Where the tree is flanked by a curb or sidewalk the barrier may be limited to the furthest extent of the grassed boulevard area.
- No equipment, materials or tools shall be stored within the TPZ.
- Tree protection fencing shall remain in place until all construction work is completed.
- An ISA Certified Arborist shall be contacted should work within the TPZ be required for any reason during the development process.
- Any damage to trees to remain that may happen because of demolition or construction shall be reported to an ISA Certified Arborist as soon as possible so that appropriate treatments can be applied, and documentation made.
- Tree tags shall be removed from all trees to remain when tree protection measures are removed.

5.2 Tree Removals

- Trees shall be felled to fall outside of the TPZ.
- Trees to be removed which have branches extending into the canopies of trees to remain should be removed by a qualified arborist.
- The arborist shall remove trees in such a way as to not injure remaining trees and understory vegetation.
- Trees shall be removed and disposed of off-site.
- To comply with the Migratory Birds Convention Act, tree removals should not occur within the migratory bird breeding season (April 9-August 16 for Canada Nesting Zone C2) without prior clearance from a qualified ornithologist.

Consent must be obtained to injure or remove City trees, contact trees@london.ca with details of your request.

5.3 Pruning

- Shall be completed by a qualified arborist.
- Root pruning may be incorporated to reduce the damage to roots due to ripping or tearing caused by excavating equipment.
- Hand digging, low pressure hydro-vac or air spades may be used to uncover roots for pruning or avoidance supervised by an arborist.

• Roots may be pruned to a depth which will meet construction requirements with approval from the City, and under the direct, on-site supervision of an ISA Certified Arborist.

5.4 Excavations

- May be conducted carefully using heavy equipment until roots greater than 5cm in diameter are encountered at the edge of a TPZ.
- Roots greater than 5cm in diameter should be exposed using less invasive methods (hand shoveling, air spade, hydro-excavating) and cut cleanly, by hand with clean tools.
- Avoid exposing excess root mass of trees marked for preservation.
- Roots >5cm in diameter damaged during excavations shall be exposed to sound tissue and cut cleanly with pruners or a saw.
- Exposed roots should be backfilled or covered as soon as possible.
- Roots shall not be left exposed overnight.
- In hot, dry weather it may be necessary to regularly wet exposed roots to prevent them drying out during immediate construction activity.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the proposed development plan, it is concluded that:

- i. Twenty-Five (25) trees will be removed to accommodate the construction at 279 Sarnia Road; and
- ii. Thirteen (13) trees inventoried will be preserved; and
- iii. Eight (8) of the Twenty-Five trees to be removed are boundary trees and will require neighbour's consent.
- iv. Three (3) of the Twenty-Five (25) trees for removal are located on the City of London's boulevard property, where the City of London will have to permit removal.

It is recommended that:

- v. tree preservation fencing be installed according to the location and details shown on the enclosed tree preservation drawings TP1.1 [Appendix B]; and
- vi. tree preservation fencing and mitigation measures be inspected by MTE Consultants Inc. prior to and during construction to ensure that it is installed correctly.

All of which is respectfully submitted,

MTE Consultants Inc.

Andrew Avsec ISA Certified Arborist ON-2031A 289-834-2612 <u>AAvsec@mte85.com</u> AXA:azp \mte85.local\mte\Proj_Mgmt\52851\200\Reports\Arborist Report\July 5 2024\279 Sarnia ST TPP.docx

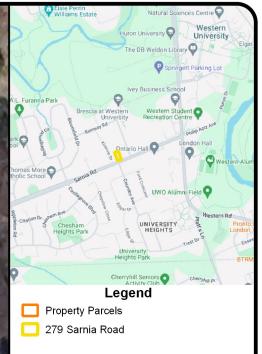


Figure 1 – Site Location









References

Map data ©2015 Google

Notes

This figure is schematic only and to be read in conjuction with accompanying text.

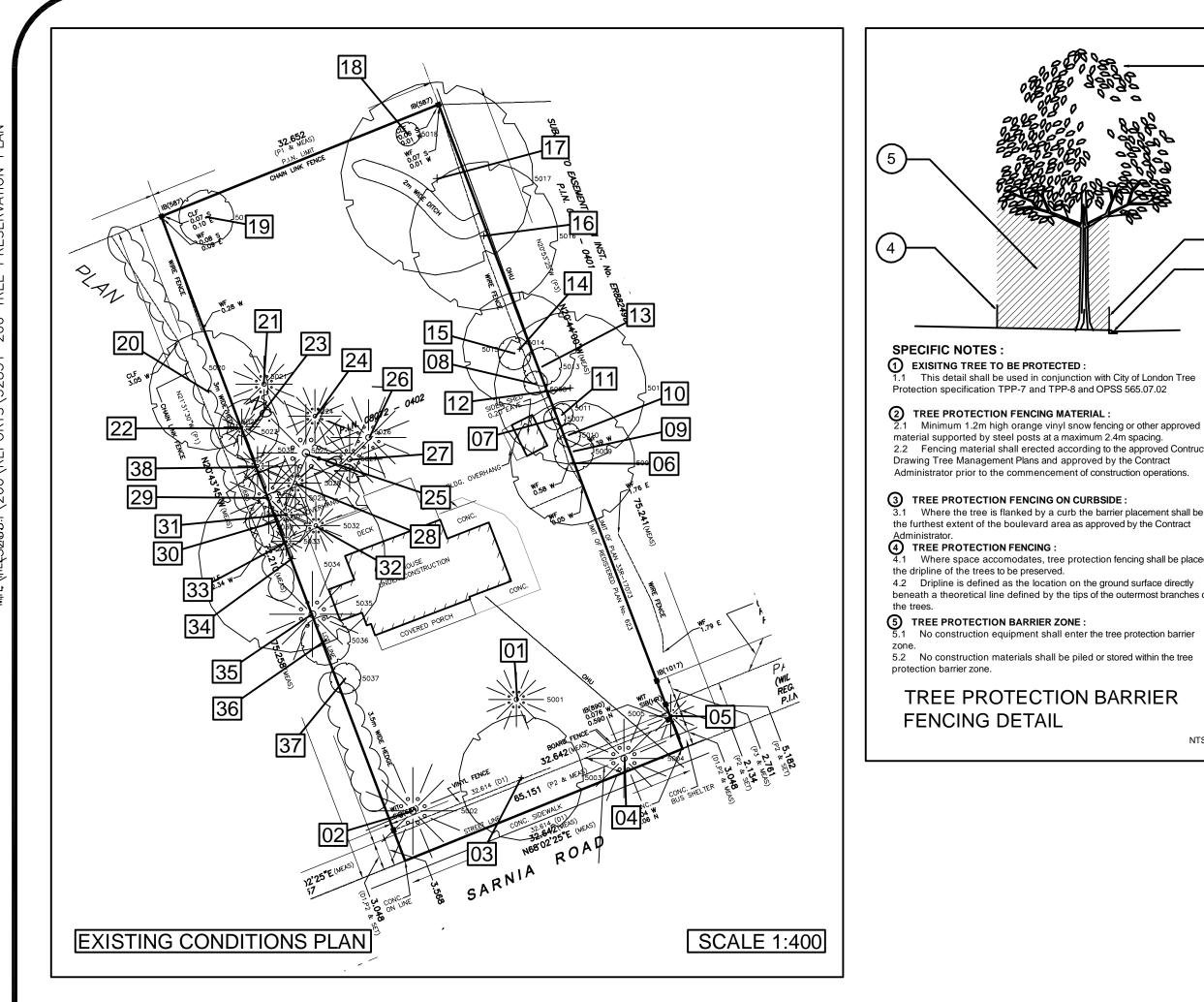
All locations are Approximate. City of London Open Source Parcel/Adress Data



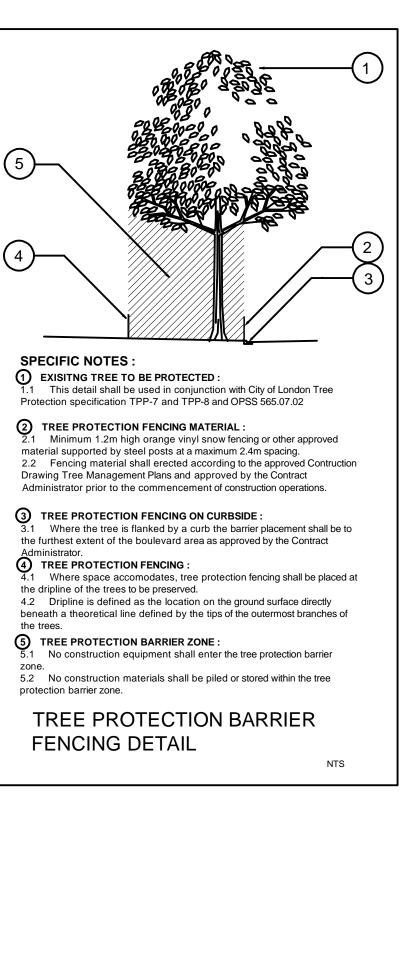


TP1.1 – Tree Protection Plan

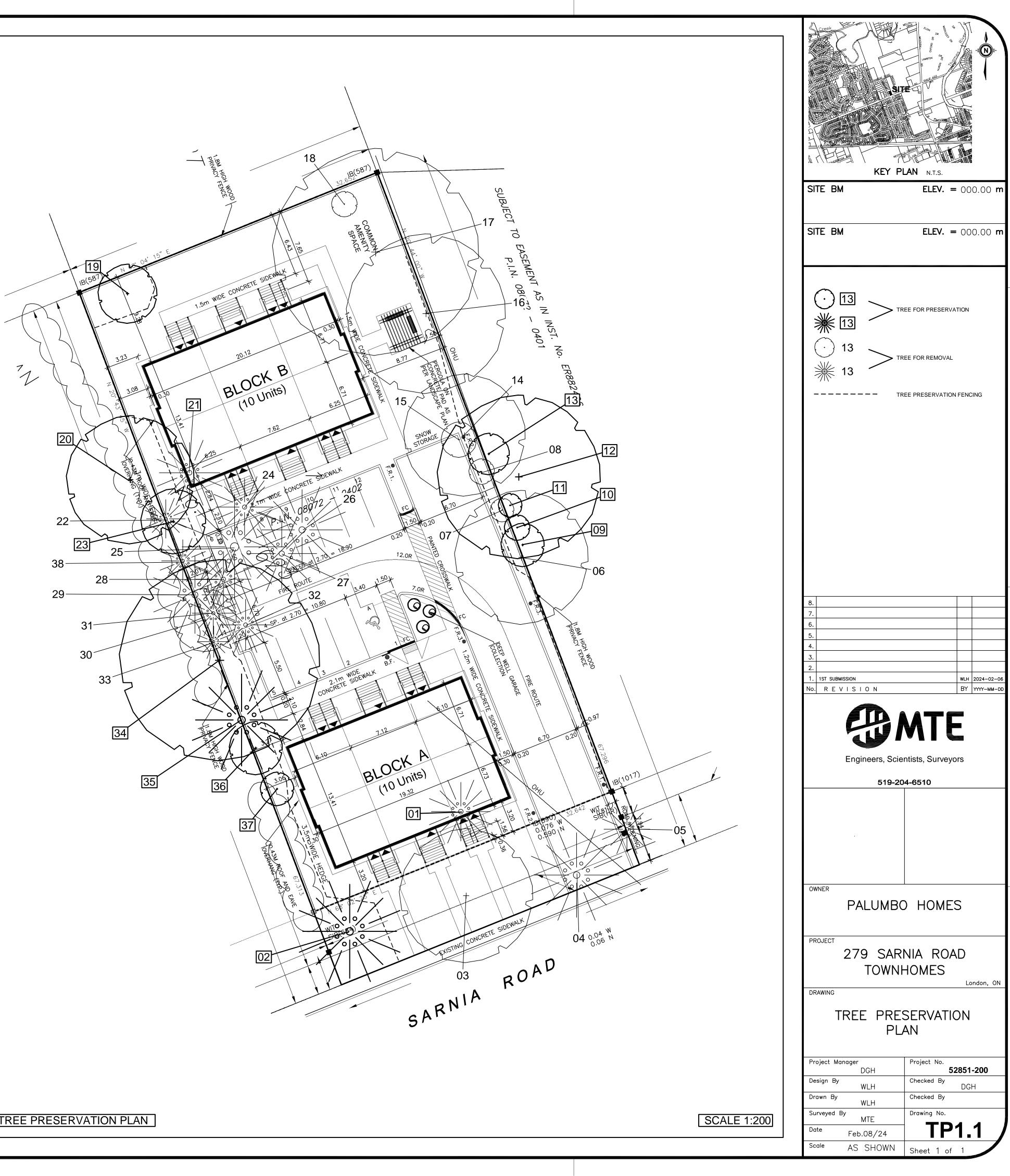




lre #	eCommon Name	Scientific Name	DBH (cm)	Stem 2	Canopy Rad. (m)	Health	Struct	Notes	Ownership	R
1	WHITE SPRUCE	Picea glauca	32	_	4	4	1	NECTRIA CANKER IN MUCH OF CROWN	PRIVATE	R
2	WHITE PINE	Pinus strobus	51		6	2	1	GOOD TREE	PRIVATE	P
3	NORWAY MAPLE	Acer platanoides	68		8	4	5	20cm HANGERS IN CROWN, PREVIOUS FAILURES, SPLIT IN NORTH SIDE OF TRUNK, DRYADS SADDLE PRESENT	CITY	R
4	NORWAY SPRUCE	Picea abies	46		6	1	1	CITY TREE	CITY	R
5	WHITE CEDAR	Thuja occidentalis	25		3	1	2	SLIGHT BEND IN TRUNK	CITY	R
6	BLACK WALNUT	Juglans nigra	68		8	2	2	ONE-SIDED GROWTH, AT EDGE OF GROVE	BOUNDARY	R
7	NORWAY MAPLE	Acer platanoides	12		1	2	3	POOR FORM, INVASIVE	BOUNDARY	R
8	NORWAY MAPLE	Acer platanoides	13		2	2	3	POOR FORM, INVASIVE	PRIVATE	R
9	BLACK WALNUT	Juglans nigra	22		3	4	5	HEAVY NECTRIA, CROOKED TOP	UWO	Ρ
10	NORWAY MAPLE	Acer platanoides	13		2	3	3	POOR FORM, INVASIVE	UWO	Ρ
11	NORWAY MAPLE	Acer platanoides	12		1	2	3	POOR FORM, INVASIVE	UWO	Р
12	BLACK WALNUT	Juglans nigra	83		10	1	1	GOOD TREE	UWO	Р
	BLACK WALNUT	Juglans nigra	21		3	1	1	GOOD TREE	UWO	P
	BLACK WALNUT	Juglans nigra	62		7	3	2	LOTS OF NECTRIA IN CROWN	PRIVATE	R
	NORWAY MAPLE	Acer platanoides	18	15	2	3	3	CODOMINANT, POOR FORM, INVASIVE	PRIVATE	R
	WHITE WILLOW	Salix alba	81	10	10	3	4	LEANING OVER YARD, 12M TO 1 SIDE	BOUNDARY	R
	WHITE WILLOW	Salix alba	105		13	3	4	LEANING OVER YARD, 12M TO 1 SIDE, HABITAT CAVITY	PRIVATE	R
	GREEN ASH	Fraxinus pennsylvanica	13		2	3	3	HANGING ON AFTER EAB	PRIVATE	R
19	BLACK WALNUT	Juglans nigra	30		4	1	1	GOOD TREE	PRIVATE	P
	BLACK WALNUT	Juglans nigra	65		8	1	1	AT TOP OF SLOPE ON NEIGHBOURS LAND. SOME INC. BARK IN CROWN	283 SARNIA	P
21		Thuja occidentalis	33		4	2	2	OK YARD TREE	PRIVATE	R
	WHITE CEDAR	Thuja occidentalis	21		3	2	2	OTHER HALF OF ONCE CODOMINANT TREE	BOUNDARY	R
	BLACK WALNUT	Juglans nigra	33		4	2	3	OK YARD TREE	PRIVATE	P
23		Thuja occidentalis	31		4	2	2	OK YARD TREE	PRIVATE	R
25		Pinus strobus	57		7	5	5	TOP OF TREE HAS BROKEN OFF, REMAINING CROWN IS CHLOROTIC, TRUNK GIRDLING AT ROOT FLARE	PRIVATE	R
26	WHITE CEDAR	Thuja occidentalis	44		5	2	2	OK YARD TREE	PRIVATE	R
	WHITE CEDAR	Thuja occidentalis	38		5	2	2	OK YARD TREE	PRIVATE	R
	WHITE CEDAR	Thuja occidentalis	30		4	2	2	OK YARD TREE	PRIVATE	R
29		Picea glauca	42		5	2	3	POOR TAPER, 15% LIVE CROWN RATIO	BOUNDARY	R
	SILVER MAPLE	Acer saccharinum	32	20	4	2	3	CODOMINANT, TOP IS LEANING WEST	BOUNDARY	R
	WHITE CEDAR	Thuja occidentalis	23	20	3	2	3	SUPRESSED CROWN	PRIVATE	R
	SCOT'S PINE	Pinus sylvestris	23		3	4	3	MORIBUND	PRIVATE	R
	WHITE CEDAR	Thuja occidentalis	17		2	2	3	SURPRESSED CROWN	BOUNDARY	R
34		Acer saccharinum	102		12	2	2	IN GOOD SHAPE FOR SPECIES AT THIS SIZE	BOUNDARY	P
34		Picea abies	50		6	2	2	DENSE CROWN, HEALTHY TREE	BOUNDARY	P
	BLACK WALNUT	Juglans nigra	27		3	2	2	SLIGHT BEND IN TRUNK	PRIVATE	P
	BLACK WALNUT	Juglans nigra	17		2	2 1	 1	GOOD TREE	PRIVATE	P
		Thuja occidentalis	23			1	3	MULTI-STEMMED, DESTINED FOR FAILURE.		
38	WHITE CEDAR				3		3	IVIULIT-STEIVIIVIED, DESTINED FUR FAILURE.	BOUNDARY	R
		2=21-40, 3=41-60, 4=61-80								
311	ucture: I=Excellent, Z=0	Good, 3=Fair, 4=Marginal, 5	J=PUUI							







TREE PRESERVATION PLAN



Inventory – Detailed Tree Inventory



Tree #	Common Name	Scientific Name	DBH (cm)	Stem 2	Canopy Rad. (m)	Health	Struct.	Notes	Ownership	Recommendation
1	WHITE SPRUCE	Picea glauca	32		4	4	1	NECTRIA CANKER IN MUCH OF CROWN	PRIVATE	REMOVE
2	WHITE PINE	Pinus strobus	51		6	2	1	GOOD TREE	PRIVATE	PRESERVE
3	NORWAY MAPLE	Acer platanoides	68		8	4	5	20cm HANGERS IN CROWN, PREVIOUS FAILURES, SPLIT IN NORTH SIDE OF TRUNK, DRYADS SADDLE PRESENT	CITY	REMOVE - CONTACT FORESTRY
4	NORWAY SPRUCE	Picea abies	46		6	1	1	CITY TREE	CITY	REMOVE - CONTACT FORESTRY
5	WHITE CEDAR	Thuja occidentalis	25		3	1	2	SLIGHT BEND IN TRUNK	CITY	REMOVE - CONTACT FORESTRY
6	BLACK WALNUT	Juglans nigra	68		8	2	2	ONE-SIDED GROWTH, AT EDGE OF GROVE	BOUNDARY	REMOVE - CONTACT NEIGHBOUR
7	NORWAY MAPLE	Acer platanoides	12		1	2	3	POOR FORM, INVASIVE	BOUNDARY	REMOVE - CONTACT NEIGHBOUR
8	NORWAY MAPLE	Acer platanoides	13		2	2	3	POOR FORM, INVASIVE	PRIVATE	REMOVE
9	BLACK WALNUT	Juglans nigra	22		3	4	5	HEAVY NECTRIA, CROOKED TOP	UWO	PRESERVE
10	NORWAY MAPLE	Acer platanoides	13		2	3	3	POOR FORM, INVASIVE	UWO	PRESERVE
11	NORWAY MAPLE	Acer platanoides	12		1	2	3	POOR FORM, INVASIVE	UWO	PRESERVE
12	BLACK WALNUT	Juglans nigra	83		10	1	1	GOOD TREE	UWO	PRESERVE
13	BLACK WALNUT	Juglans nigra	21		3	1	1	GOOD TREE	UWO	PRESERVE
14	BLACK WALNUT	Juglans nigra	62		7	3	2	LOTS OF NECTRIA IN CROWN	PRIVATE	REMOVE
15	NORWAY MAPLE	Acer platanoides	18	15	2	3	3	CODOMINANT, POOR FORM, INVASIVE	PRIVATE	REMOVE
16	WHITE WILLOW	Salix alba	81		10	3	4	LEANING OVER YARD, 12M TO 1 SIDE	BOUNDARY	REMOVE - CONTACT NEIGHBOUR
17	WHITE WILLOW	Salix alba	105		13	3	4	LEANING OVER YARD, 12M TO 1 SIDE, HABITAT CAVITY	PRIVATE	REMOVE
18	GREEN ASH	Fraxinus pennsylvanica	13		2	3	3	HANGING ON AFTER EAB	PRIVATE	REMOVE
19	BLACK WALNUT	Juglans nigra	30		4	1	1	GOOD TREE	PRIVATE	PRESERVE
20	BLACK WALNUT	Juglans nigra	65		8	1	1	AT TOP OF SLOPE ON NEIGHBOURS LAND. SOME INC. BARK IN CROWN	283 SARNIA	PRESERVE
21	WHITE CEDAR	Thuja occidentalis	33		4	2	2	OK YARD TREE	PRIVATE	REMOVE
22	WHITE CEDAR	Thuja occidentalis	21		3	2	2	OTHER HALF OF ONCE CODOMINANT TREE	BOUNDARY	REMOVE - CONTACT NEIGHBOUR
23	BLACK WALNUT	Juglans nigra	33		4	2	3	OK YARD TREE	PRIVATE	PRESERVE
24	WHITE CEDAR	Thuja occidentalis	31		4	2	2	OK YARD TREE	PRIVATE	REMOVE
25	WHITE PINE	Pinus strobus	57		7	5	5	TOP OF TREE HAS BROKEN OFF, REMAINING CROWN IS CHLOROTIC, TRUNK GIRDLING AT ROOT FLARE	PRIVATE	REMOVE
26	WHITE CEDAR	Thuja occidentalis	44		5	2	2	OK YARD TREE	PRIVATE	REMOVE
27	WHITE CEDAR	Thuja occidentalis	38		5	2	2	OK YARD TREE	PRIVATE	REMOVE

Tree #	Common Name	Scientific Name	DBH (cm)	Stem 2	Canopy Rad. (m)	Health	Struct.	Notes	Ownership	Recommendation
28	WHITE CEDAR	Thuja occidentalis	30		4	2	2	OK YARD TREE	PRIVATE	REMOVE
29	WHITE SPRUCE	Picea glauca	42		5	2	3	POOR TAPER, 15% LIVE CROWN RATIO	BOUNDARY	REMOVE - CONTACT NEIGHBOUR
30	SILVER MAPLE	Acer saccharinum	32	20	4	2	3	CODOMINANT, TOP IS LEANING WEST	BOUNDARY	REMOVE - CONTACT NEIGHBOUR
31	WHITE CEDAR	Thuja occidentalis	23		3	2	3	SUPRESSED CROWN	PRIVATE	REMOVE
32	SCOT'S PINE	Pinus sylvestris	28		3	4	3	MORIBUND	PRIVATE	REMOVE
33	WHITE CEDAR	Thuja occidentalis	17		2	2	3	SURPRESSED CROWN	BOUNDARY	REMOVE - CONTACT NEIGHBOUR
34	SILVER MAPLE	Acer saccharinum	102		12	2	2	IN GOOD SHAPE FOR SPECIES AT THIS SIZE	BOUNDARY	PRESERVE
35	NORWAY SPRUCE	Picea abies	50		6	2	2	DENSE CROWN, HEALTHY TREE	BOUNDARY	PRESERVE
36	BLACK WALNUT	Juglans nigra	27		3	2	2	SLIGHT BEND IN TRUNK	PRIVATE	PRESERVE
37	BLACK WALNUT	Juglans nigra	17		2	1	1	GOOD TREE	PRIVATE	PRESERVE
38	WHITE CEDAR	Thuja occidentalis	23		3	1	3	MULTI-STEMMED, DESTINED FOR FAILURE.	BOUNDARY	REMOVE - CONTACT NEIGHBOUR



TPP-1 and TPP-2 Specifications





12.4.1 Example for Boulevard Trees

Figure 12.1 Tree Preservation Details (TPP-1)

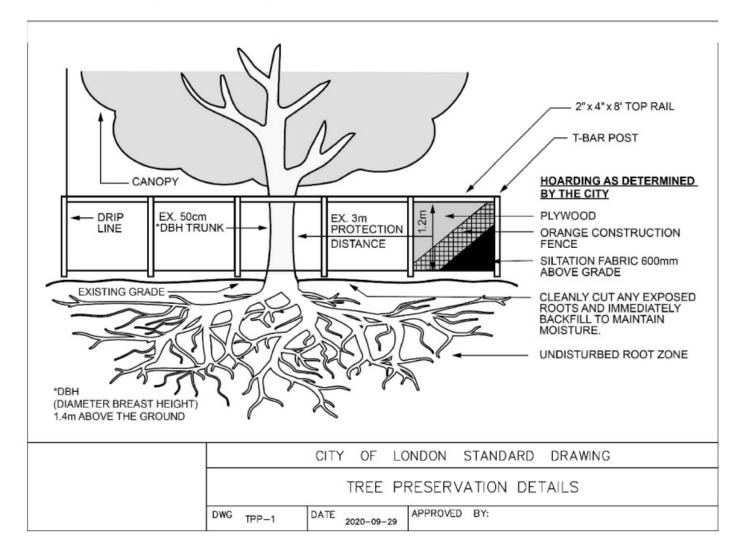
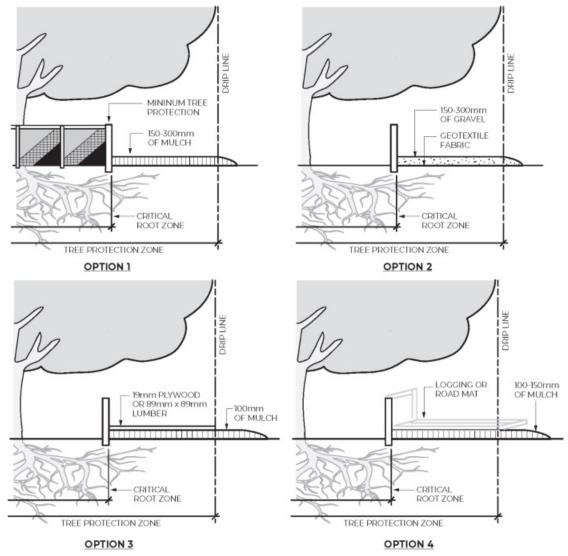




Figure 12.2 Tree Preservation Details (TPP-2 Horizontal Tree Protection)



NOTES

- 1. HORIZONTAL TREE PROTECTION (HTP) TO BE USED IN COMBINATION WITH TREE PROTECTION BARRIERS WHEN A FULL TREE PROTECTION ZONE CANNOT BE PROVIDED.
- 2. THE FOLLOWING DETAILS ARE EXAMPLES ONLY, AND PROJECT SPECIFIC HTP SHOULD BE DESIGNED BY THE PROJECT ARBORIST, SUBJECT TO APPROVAL BY THE CITY.
- STONE, GEOTEXTILE AND MULCH EXCEEDING 100MM MUST BE REMOVED FROM THE TPZ ONCE THE THREAT OF ROOT DAMAGE OR COMPACTION HAS PASSED.
- 4. THE USE OF HTP DOES NOT RELIEVE THE CONTRACTOR OF THE OBLIGATION TO PROTECT THE TREE FROM ABOVE AND BELOW GROUND DAMAGE. ANY PRUNING REQUIRED TO MINIMIZE CONSTRUCTION DAMAGE IS SUBJECT TO PRIOR APPROVAL FROM FORESTRY OPERATIONS.
- 5. FOR USE WHERE FULL TREE PROTECTION ZONES CANNOT BE PROVIDE. DESIGN AND APPLICATION TO BE APPROVED BY THE CITY OF LONDON ON SITE-SPECIFIC BASIS.