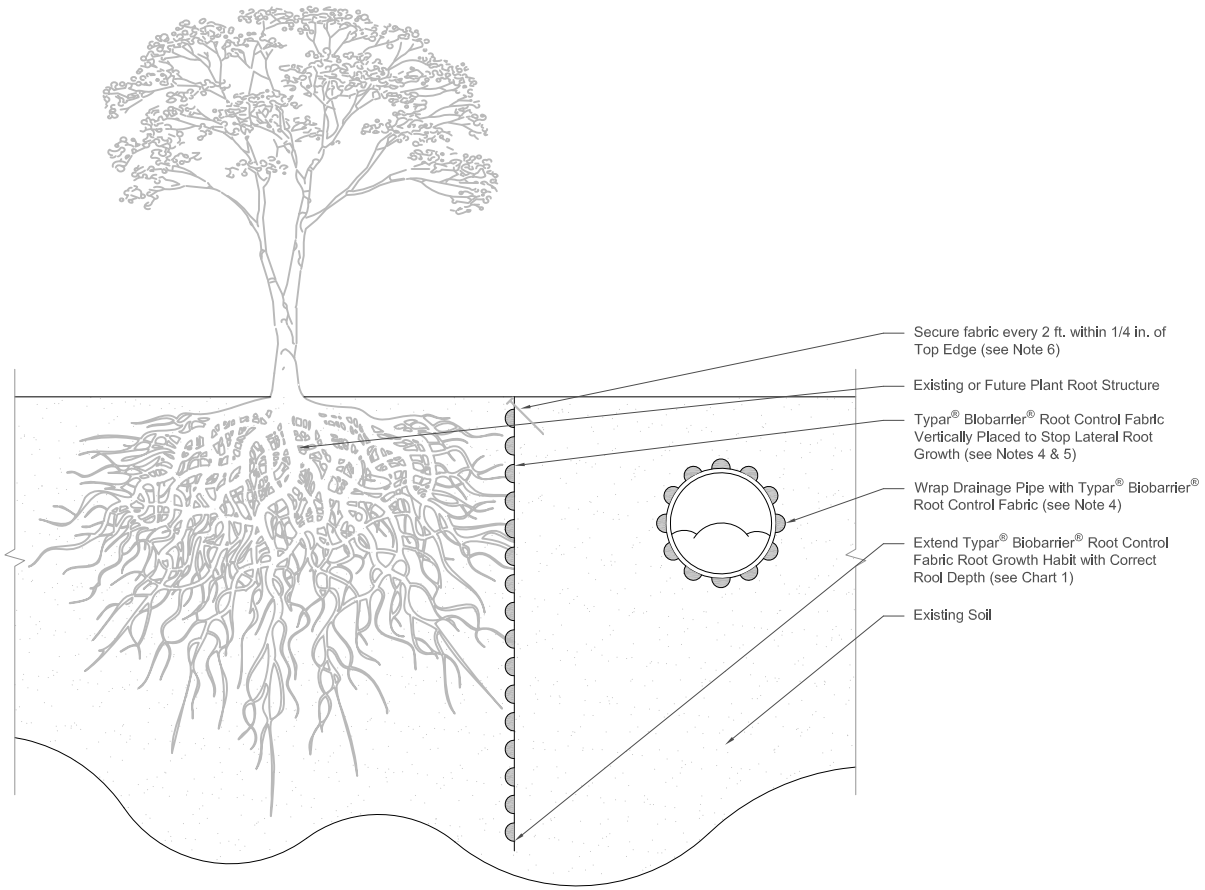

1 **Biobarrier® : Drain Line Application**
Scale : N.T.S.

NOTES:

Note 1: Contact your utility company prior to trenching. Consult a professional arborist if root trimming is required.
Note 2: Install & Cover Biobarrier® as soon as possible (within 12 hours) after opening. High temperatures and direct sunlight can reduce effective product life.
Note 3: Dig trenches a minimum of 4 in. wide for Typar® Biobarrier® Root Control Fabric. Trenches must be a minimum length of mature plant canopy plus(+) 10 ft., centered on the root source and adjacent to protection area.
Note 4: Install Typar® Biobarrier® Root Control Fabric on the side of the trench opposite the root source.
Note 5: Install Typar® Biobarrier® Root Control Fabric with Nodules facing toward root source.
Note 6: Fixing pins should penetrate fabric between the nodules 1/4 in. from top edge of fabric and at a 45 ° angle to the trench wall.

Specific advice on the use of Biobarrier® can be obtained from Polymer Group Inc.

Table 1 : Biobarrier® Specifications

Description	Data	
Product **Chemical Family**	Biobarrier® Root Control System Thermoplastic Polyolefin	
Composition	Polypropylene	> 74.8%
	UV Stabilizer	< 5%
	Trifluralin	< 20%
	Pigment Masterbatch[1]	< 0.5%
Appearance **Physical State** **Vapor Pressure**[2] **Boiling Point** **Solubility (H_2O)**[2] **Vapor Density** **Packing Density** **Odor** **pH** **Evaporation Rate** **Melting Point**[2] **Specific Gravity** **Percent Volatiles** **UV resistance** **Corrosivity** **Flamability** **Toxicity** **Hygroscopicity** **Explosivity**	Gray Fabric Solid 13.7 mPa @ 25°C Not Applicable 0.2 ppm @ 25°C Not Applicable Not Applicable Aromatic (Solvent) Not Applicable Not Applicable > 48.5°C 0.88-0.99 Nil High None Non-Flammable IV None None	
Fabric		
Unit Weight **Tensile Strength (lbs.)** **Elongation at Break (%)** **Mullen Burst Strength (psi)** **Puncture Strength (lbs.)** **Coefficient of Permeability (cm/sec.)**	4.0 45.0 > 70.0 175.0 50.0 3×10^{2}	
Nodule		
Base Diameter (in.) **Height** **Weight (os.)** **Spacing (in.)**	7/16 1/4 0.013 1-1/2	

[1]Contains Carbon Black : < 0.1%
[2]Trifluralin (CAS # 1582-09-8)
*Additional Information May Be Obtained From Polymer Group Inc. Upon Request

Chart 1: Examples of Intended Biobarrier® Root Control Applications & Roll Widths

Application	Root Control Width in. (cm)					
	12 (30)	**19.5 (50)**	**24 (61)**	29 (74)	**39 (99)**	**58.5 (149)**
Building Foundations					X	X
Burial Vaults/Tombstones						X
Containers			X	X	X	X
Curbs		X	X			
Drain Lines	X	X	X	X	X	X
Earthdams						X
Golf Greens/Tees/Cart Paths		X	X	X	X	
Landfills						X
Medians			X	X	X	
Paths	X	X	X	X		
Planting Beds		X	X	X	X	X
Pot 'N' Pot	SOLD IN 6" X 12" SWATCHES (500/BOX)					
Pots	X	X				
Retaining Walls				X	X	X
Roads		X	X	X		
Roof Gardens					X	X
Septic Tanks/Fields						X
Sidewalks		X	X	X		
Swimming Pools		X	X	X	X	
Tennis Courts		X	X	X	X	
Underground Pipes/Cables	X	X	X	X	X	X
Underground Storage Tanks						X
Utility Substations		X	X	X	X	
Biobarrier® Root Control is available in 20 ft. (6,1 m) or 100 ft. (30,5m) Roll Lengths						

Chart 1 is a general guide only. Your specific applications may require slightly different sizes. As a general rule, the greater the fabric width, the greater the degree of protection against costly root damage. But, like any other root barrier the protection does not extend beyond the edge of the fabric. So it's important to use adequate length and width to assure proper protection.

This field guide is provided as an aid to assessing root control in commonly encountered site conditions. Polymer Group Inc. accepts no responsibility for any loss or damage resulting from the use of this guide.

Please note that the information above is given as a guide only. All sizes and weights are nominal figures and may vary to what is published. Polymer Group Inc. cannot be liable for damage caused by incorrect installation of this product. Final determination of the suitability of any information or material for the use contemplated and the manner of its use is the sole responsibility of the user and the user must assume all risk and responsibility in connection therewith.

TYPAR Geosynthetics
70 Old Hickory Blvd. Old Hickory, TN 37138

Toll-Free: 1-800-541-5519
e.mail: geosales@fiberweb.com
website: www.typargeosynthetics.com

NOT FOR CONSTRUCTION

Biobarrier® Root Control Fabric
For Drain Line Applications

Specification, Design & Installation Guide