

Litowski

31 Dorthy Drive, Bay Of Quinte

Planting plan created by Watersheds Canada

Survey Date: 12/04/2019





Schedule A:

Plants & Property

Land Characteristics

This planting plan is designed based on the land characteristics identified during the day of the site visit. Plants are chosen according to the soil and light conditions on your property. The number of plants chosen for each planting compartment takes into account the square metre area of the space, as well as the amount of current vegetation cover. **Your property is part of ecoZone: 6a**

Land Characteristics by Compartment

	Length	Width	Area	pH	Soil	Moisture	Light	Height
A	20m	15m	300m ²					
B	30m	15m	450m ²	normal	loamy	normal	full sun	any
C	30m	10m	300m ²	normal	loamy, clay	moist	partial sun	any
	80m	13.33m	1050m ²					

Plant Selection Summary

The following shrubs and trees are chosen for their suitability and survivability given the current soil and light conditions in each compartment on your property, as well as preferable features.

Plant Species	A	B	C	Potted	Bareroot	Wildflower
Silver Maple	1	1		2		
White Birch	3			3		
Chokecherry	1		3	4		
Gray Dogwood	3			3		
Red Osier Dogwood	14		10	2	22	
Canadian Serviceberry	2	2	1	5		
Black Chokeberry	12	15			27	
Nannyberry	6				6	
New England Aster	6	3				9
Butterfly Milkweed	3					3
Black-Eyed Susan	3					3
Sweet Oxeeye	3	3				6
Highbush Cranberry		3		3		
Ninebark		4		4		
Black Elderberry		3		3		
Pasture Rose		15	10		25	
Wild Bergamot		4				4
Bebb Willow			3	3		
Buttonbush			3	3		
Witch Hazel			4	4		
Tamarack			2		2	



Subtotal	57	53	36	39	82	25
Totals	146					

Plant Information

The following table summarizes key information about each plant selected for your property.



Silver Maple

Height: 30m

The Silver Maple is a fast growing, deciduous Maple tree famous for its majestic, mature form. This species has a broad, round crown that sits on top of a tall straight trunk reaching 30m in height. Its ascending branches give this tree a full, bushy appearance. Silver Maple leaves can be differentiated from other Maple leaves due to the deep notches on their lobes. It has a silvery white colour on its underside in contrast to bright, light green topside. During the fall, the leaves on the Silver Maple turn a reddish orange to bright golden yellow. Between late April and May, inconspicuous, small greenish red flowers bloom and by June turn to yellowish-green or brownish pairs of winged keys. The Silver Maple's shallow, spreading root system and ability to withstand flood and drought make it an excellent tree to utilize for erosion control and shoreline stabilization.



White Birch

Height: 15-25m

The Paper Birch is a medium-sized (15-25m), deciduous tree which may also be referred to as White Birch or Canoe Birch. This species produces a sparse, irregular crown which arises from a slender trunk. This tree is best known for distinctive white, horizontally flaking bark, from which its name is derived. The Paper Birch produces light green, egg-shaped, 5-10 cm long leaves alternately arranged. During the fall, the light green foliage turns a bright yellow colour. During the spring, catkins appear and produce winged seed keys which mature and drop between the fall and following spring.



Chokecherry

Height: 6-9 m

The Chokecherry is a large deciduous shrub or small tree which grows between 6 and 9 m tall and is a member of the Rose family. It produces a twisted or crooked trunk as well as a narrow, oval to round crown composed of many slender branches. Leaves are alternately arranged, simple, have a deep green upper surface, and light matte green undersides with tufts of hair at the vein axils. During the fall, foliage turns a vibrant deep red to fire yellow or orange. Between May and June, small showy white flowers grow in cylindrical clusters on the terminal ends of branches. By mid-August, flowers turn into shiny deep red or black cherries, which hang in elongated clusters. The fruit is ripe by September and provides a food source for birds and small mammals. The Chokecherry is often found as pure stands forming thickets, or mixed with other early succession shrub and tree species. This fast-growing plant can quickly invade logged land, abandoned farms, and exposed shorelines. The fibrous and wide-spreading root system of this shrub make it an ideal plant for erosion control and bank stabilization. This species possesses the ability to withstand moderate flooding and drought.



Gray Dogwood

Height: 2-3m

The Gray Dogwood, also referred to as Northern Swamp Dogwood or Panicle Dogwood, is a medium-sized, deciduous shrub which typically grows 2-3m. This species is multi-stemmed, with a full, round form. The leaves are green and arranged alternately along the branches. During the fall, leaves turn a bright red to deep purple colour. Between May and June, showy clusters of small white flowers bloom. These flowers turn into white fleshy berries late in the summer. The reddish-pink stems hold the berries throughout the winter, creating an artful contrast to the gray bark and snowy scenery. The Gray Dogwood is tolerant of a variety of environmental conditions and its complex, fibrous root system make it an ideal plant to use for controlling erosion.



Red Osier Dogwood

Height: 1.5-4m

The Red Osier Dogwood is a medium-sized, deciduous shrub native throughout Northern and Western North America which typically grows to 1.5-4m. This species is multi-stemmed with numerous erect and ascending bright red branches that create a loose and spreading form. Leaves produced are simple, two-toned with a dark green upper side and light green underside. They are arranged opposite each other along the branches. During the fall, the foliage turns a brilliant red to dark purple. Clusters of small, creamy white flowers form on the terminal ends of the branches between June and July. The Red Osier Dogwood produces blueish-white fruiting bodies during late summer, which may persist throughout the winter. This shrub's berries provide an important winter food source for numerous species, from large deer to small wintering birds.



Canadian Serviceberry

Height: 3-5 m

The Canadian Serviceberry is a multi-stemmed shrub or small tree which grows from 3-5 m in a dense round form. This plant may also be known by the common names: Juneberry, Shadblow, or Shadbush. Early in the spring, prior to leaf development, clusters of fragrant, showy white flowers bloom along the branches. By July, these flowers give way to the fruiting bodies. The fruits are initially small, green berries, which grow to the size of blueberries and turn a deep purple-blue upon maturation during the fall. Leaves produced are finely toothed and spear-shaped. Throughout the summer, leaves are dark green and turn a dramatic orange-red during the fall.



Black Chokeberry

Height: 1-3m

The Black Chokeberry is a medium sized deciduous shrub that typically grows between 1-3m with edible fruit. This species requires full sun to partial shade and can tolerate soil conditions from loamy and moist to rocky and dry. Naturally, Black Chokeberry is found in wet wooded areas such as; swamps, along shorelines, and within forest understory. This species is multi-stemmed, and forms thickets from stems which arise from the roots. Leaves are simple, growing alternately along the branch turning a bold red to orange during the fall. During spring, clusters of showy, white flowers appear turning into dark purple berries by fall. This species is resistant to drought, insects, pollution, and disease. The Black Chokeberry is often cultivated as an ornamental plant and food product. Additionally, this species is useful for bank stabilization and erosion control applications.



Nannyberry

Height: 3 m

Nannyberry is a large deciduous shrub species that typically grows about 3 m in height. The leaves are dark green, ovate shaped, oppositely arranged, have a pointed tip, and have finely toothed margins. The flowers are showy, white colored, appear in flat topped clusters, and bloom in May. These flowers produce blueish black berries, which are edible to humans and persist throughout the winter. The flowers are beneficial to pollinator species, like bees and butterflies. The fruit is beneficial to wildlife species, including birds and small mammals. This shrub has attractive fall foliage. The root system is extensive, making this plant valuable for controlling erosion and stabilizing loose soil. This shrub can be pruned to have a single stem and grown as a small tree instead of a shrub.



New England Aster

Height: 2m

New England Aster is a showy perennial wildflower with an average height of about 120 cm but can grow up to 2 m tall. It has a central stem with branching in the upper half covered in fine white hairs. Its leaves clasp these stems as they have no petioles. The basal leaves are spatula-shaped, while the stem leaves are alternate and lance-shaped. The leaves are also covered in soft white hairs. Its showy flowers are clustered at the ends of the central stem and surrounding branches. Each flower is composed of 30+ deep purple ray florets surrounding numerous golden disk florets. These plants excel in moist soils with lots of sun. It is often found along lake shorelines, forest edges, in wet meadows, or in marshes/swamps. New England Aster reproduces and spreads using both achenes, which are dispersed by wind and a rhizomatous root system, allowing this plant to colonize open areas. It is also known to easily colonize recently disturbed areas so could be considered for difficult sites that are hard to grow on. This wildflower species attracts lots of pollinators such as bees and butterflies but rarely attracts wildlife, such as wild turkey, deer, and rabbit.



Butterfly Milkweed

Height: 0.5 m

Butterfly Milkweed is a very attractive perennial wildflower that typically grows about 0.5 m tall. This plant may also be known by the common name Showy Milkweed. The leaves are green coloured, alternately arranged, narrow and lance-shaped, and have entire margins. The flowers are showy, fragrant, bright orange coloured, have five tiny petals, appear in clusters of 8-25, and bloom between June and August. Butterfly Milkweed is easy to grow and is low maintenance. This wildflower spreads well and can be used to naturalize un-vegetated areas. The roots can be useful for controlling erosion and stabilizing shorelines. The flowers are beneficial to pollinator species, like bees and butterflies. It is also a larval host for caterpillars of the endangered Monarch Butterfly, thus planting this species where possible can help protect this at risk species.



Black-Eyed Susan

Height: 1 m

Black-Eyed Susan is a popular biennial or a short-lived perennial wildflower species that typically grows about 1 m in height. Its leaves are green, alternately arranged, lance shaped, and covered with bristly hairs giving the leaf a grey/green colour. The flowers are daisy-like, have 8-20 yellow ray florets surrounding numerous dark brown disk florets, and blooms between June and September. The flowers are beneficial to pollinator species, like bees and butterflies. The seeds are also beneficial to wildlife species, like birds and small mammals. This flower blooms for long periods.



Sweet Oxeeye

Height: 2m

Sweet Oxeeye, also known as False Sunflower, is an attractive, herbaceous, perennial wildflower, which can grow to almost 2 m tall. The flowers are perched atop a stiff stem, with a brownish-yellow center cone surrounded by bright yellow to orange rays. Leaves are 5-12 cm long and 2-8 cm wide, oppositely arranged along the stem, ovate to lanceolate in shape, and have a toothed margin. This wildflower grows best in moist, well-drained soils, preferring full sun, but will tolerate partial shade. Some common natural habitats for the Sweet Oxeeye are prairies, meadows, forest edges, and stream banks. Sweet Oxeeye is drought tolerant so could be planted in difficult dry sites, but will grow best with regular watering. A large variety of insect species are attracted to the Sweet Oxeeye, making it a great addition to a habitat garden.



Highbush Cranberry

Height: 3 m

Highbush Cranberry is a large deciduous shrub species that typically grows about 3 m in height. The branches on this shrub are dense with arching stems, creating a full form. The leaves are oppositely arranged, Maple leaf shaped, have 3 lobes, and have entire or toothed margins. The flowers are showy, creamy white coloured, appear in flat clusters with larger florets surrounding smaller ones, and bloom between May and June. These flowers change into drooping, bright red berry clusters that persist throughout the winter. While the berries are edible to humans, they are very tart when consumed raw so are typically cooked first. This shrub has very attractive fall foliage, changing a reddish purple colour. The flowers are beneficial to pollinator species, like bees and butterflies. The fruit is beneficial to wildlife species, including birds and small mammals. The root system is extensive, making this shrub valuable for controlling erosion and stabilizing loose soil. This species can be found across Canada from Newfoundland to British Columbia, but is most commonly found in Ontario and Quebec.



Ninebark

Height: 2-3m

The Common Ninebark is a very hardy, large (2-3m in height), deciduous shrub naturally occurring within riparian zones. This species is often planted as an ornamental shrub for its exfoliating bark which reveals reddish-light brown inner bark. This shrub is multi-stemmed with numerous horizontal and ascending branches creating a full, round shape. The Common Ninebark produces dull green, ovate to round shaped leaves with three to five lobes per leaf. During the fall the leaves turn brilliant yellow or dark purple. Between May and June, showy, bell-shaped flowers bloom in clusters on the terminal ends of the branches. During the summer, these flowers give way to small green or green-yellow berries which turn a bright red upon ripening.



Black Elderberry

Height: 4 m

The Black Elderberry is a large, fast-growing, deciduous shrub or small tree, which typically grows to 4m. This species tolerates a variety of conditions and is commonly found in sunny locations with well-drained soils. Black Elderberry can be single or multi-stalked with numerous branches creating a full, round body. Leaves are compound, with 5-7 leaflets that grow opposite each other along the branch. During the fall, leaves tend to turn a pale yellow. During late May to early June, this species produces flowers that are ivory white and grow in flat topped clusters. By late August, flowers turn to glossy, deep purple fruit, which attract a variety of wildlife like songbirds and small mammals. Ripe fruit is edible for humans and is commonly made into jams and jellies. The root system of this species is shallow, and can form colonies through suckering.



Pasture Rose

Height: 1.5 m

The Pasture Rose is a small (1.5m), deciduous shrub which often spreads through suckers to form colonies or thickets in the wild. This species grows erect from a central base with sprawling branches, creating a dense, irregular bush. This shrub produces compound leaves, consisting of 5 to 7 leaflets arranged alternately along the branches. The Pasture Rose yields beautiful 5 centimeter wide white to pink flowers, which bloom in the early summer lasting for approximately a month. The rose hip fruit develops after the flower has died and turns bright red as it ripens. During the fall, the olive green leaves turn yellow to deep red or purple.



Wild Bergamot

Height: 1 m

Wild Bergamot is a perennial wildflower species that is member of the mint family and can grow about 1 m tall. Its stems are light green and smooth with abundant branching on the upper half. The leaves are oppositely arranged, broadly lanceolate shaped, 6-10 cm long, and have toothed edges. The also leaves emit a aromatic minty/oregano scent when crushed. The flowers are showy, pink/lavender coloured, appear on the ends of flowering stems, and bloom between July and September. The flowers bloom in the center of the head first, moving outwards creating a wreath. The flowers are beneficial to pollinator species, like bees and butterflies. This wildflower spreads well and can be used to naturalize un-vegetated areas. The roots can be useful for controlling erosion and stabilizing shorelines.



Bebb Willow

Height: 5 m

The Bebb Willow is a mid-sized deciduous shrub species that can grow up to 5 m in height. This plant may also be known by the common names Beaked Willow and Diamond Willow. The leaves are alternately arranged, dull green in colour, have wrinkled and hairy undersides, are narrow and elliptic in shape (but broad for willow), and have toothed margins. The bark is reddish or grayish-brown in colour and may have diamond-shaped patches along the main stems. The catkins are light green or yellow coloured and appear with the leaves between May and June. The roots can useful for controlling erosion and stabilizing shorelines.



Buttonbush

Height: 2 m

Buttonbush is a small to medium-sized deciduous shrub species which typically grows about 2 m in height. This plant may also be known by the common name Button Willow. Twigs are slender to stout and dark red-brown in colour with white speckling. The leaves are bright green coloured, shiny, ovate shaped, oppositely arranged, and have entire margins. The flowers are tiny, tubular, white, fragrant, and appear densely on distinctive, spherical clusters in June. These flowers turn into a dense cluster of seeds, which remain on the plant throughout the winter. The flowers are beneficial for pollinator species, including hummingbirds and butterflies. This is a hardy, adaptable species and an excellent choice for planting on wet shoreline sites.



Witch Hazel

Height: 4-9m

The Witch Hazel is a deciduous understory shrub, with a broad and rounded crown which typically grows 5-9m. This species can sometimes take on the form of a tree. Witch Hazel is most recognizable for its 2 cm long, spidery, bright yellow flowers, which bloom during late fall. Leaves produced are alternate, simple, 6-15 cm in length, and obovately shaped. These leaves are dark green on top with paler undersides and turn yellow during the autumn. Witch Hazel leaves produce hairs on their principal veins, are asymmetrical at their base, scalloped, and sometimes coarsely toothed. In addition, the leaves contain 5-7 straight, parallel, ascending veins per side. The twigs are slender, zigzagged, tawny, and smooth when mature. Witch Hazel fruiting bodies are short, thick, light brown capsules that become woody upon maturation. This species is typically multi-stemmed with two or more trunks, which are crooked and 10-15 cm in diameter.



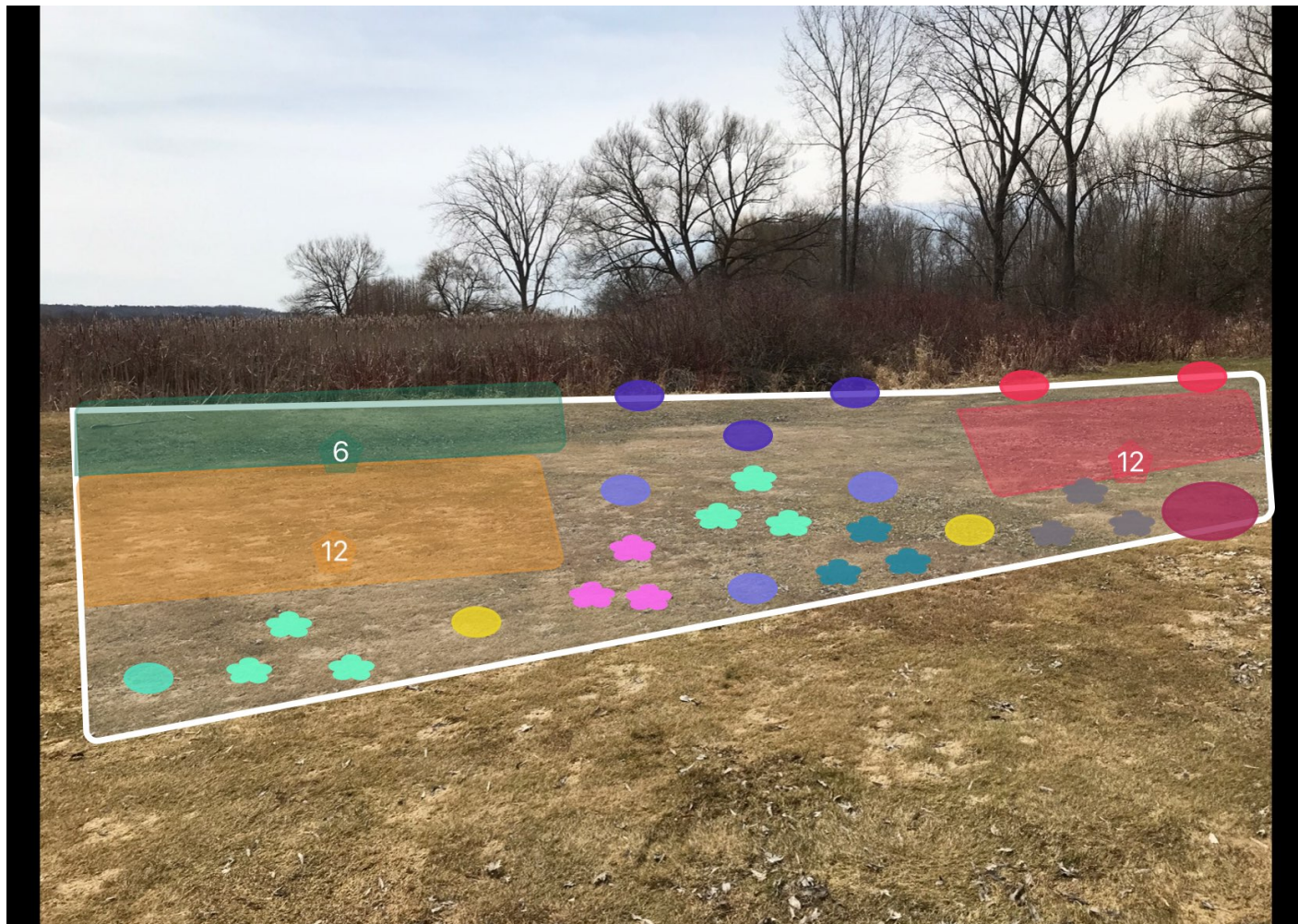
Tamarack

Height: 20 m

Tamarack is a small to medium sized, deciduous coniferous tree species that grows up to 20 m tall. This plant may also be known by the common name American Larch. The bark is scaly and reddish brown coloured. The needles are delicate, 2-4 cm long, blueish-green coloured, grow in clusters of 15 to 25, and change golden yellow in the fall. This tree provides food and habitat for wildlife species, including birds and mammals. Tamarack is a fast-growing, long lived species that can live up to 150 years and is found across all of Canada. The wood from this tree is decay-resistant and has been used to make railway ties, posts, and crates. Tamarack is considered unique because it is the only conifer species to drop its needles in the fall.

Compartment A

Naturalization Area



Silver Maple

1



Chokecherry

1



Red Osier Dogwood

12

2



Black Chokeberry

12



White Birch

3



Gray Dogwood

3



Canadian Serviceberry

2



Nannyberry

6



New England Aster

6



Butterfly Milkweed

3



Black-Eyed Susan

3



Sweet Oxeeye

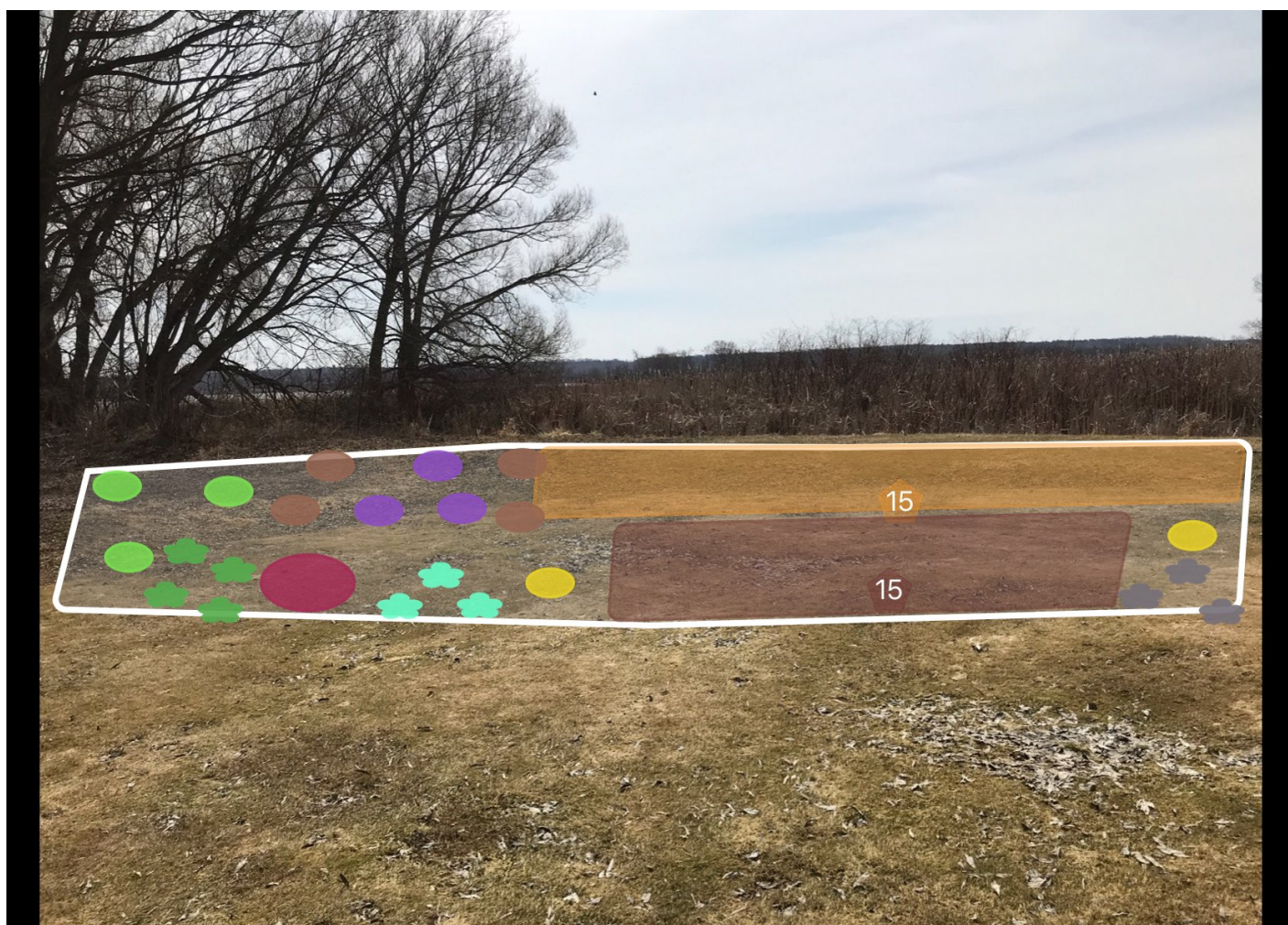
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Compartment B

Naturalization Area

Dry bank moist behind

- ⚖️ PH: normal
- 🌱 DEPTH: potted, bareroot, wildflowers
- 💧 MOISTURE: normal
- 🌱 SOIL TYPE: loamy
- 📏 PLANT HEIGHT: any
- ☀️ LIGHT CONDITIONS: full sun



Silver Maple

1



Black Chokeberry

15



Sweet Oxeye

3



Canadian Serviceberry

2



New England Aster

3



Highbush Cranberry

3



Ninebark

4



Black Elderberry

3



Pasture Rose

15



Wild Bergamot

4

Compartment C

Naturalization Area

- ⚖️ PH: normal
- 🌱 DEPTH: potted, bareroot, wildflowers
- 💧 MOISTURE: moist
- 🌾 SOIL TYPE: loamy, clay
- 📏 PLANT HEIGHT: any
- ☀️ LIGHT CONDITIONS: partial sun



Chokecherry

3



Canadian Serviceberry

1



Bebb Willow

3



Red Osier Dogwood

10



Pasture Rose

10



Buttonbush

3



Witch Hazel



Tamarack



Schedule B

Financial Summary

Project by: Watersheds Canada

Shoreline Re-Naturalization Starter Kit includes: free site visit, customized re-naturalization planting plan for your shoreline property, native plants including free bare root (small) and potted (large) plants and wildflowers, coconut fibre pads to deter grass from growing around new plantings, tree guards for all deciduous trees, mulch for your wildflowers, Plant Care Guide with instructions on how to take care of your new plants, Habitat Creation Guide and a Wildflower Garden Guide.

Our planting plans are created onsite with you and provide detailed information and plans to re-naturalize your shoreline property. We take photos of areas for planting and overlay native plants that are well suited to your property based on site conditions such as soil type and sunlight availability.

We will work with you to create a plan that works for you including options for low growing plants in areas where views are important.

Item	Quantity	Cost/Item	Subtotal
Starter Kit fee			\$395
Free potted plants	15	\$0	\$0
Paid potted plants	24	13.00	312.00
Free bareroot plants	25	\$0	\$0
Paid bareroot plants	57	2.25	128.25
Free wildflowers	10	\$0	\$0
Paid wildflowers	15	6.00	90.00
Total costs			925.25



Schedule C

Project Agreement

Stewardship Agreement

Please indicate your agreement to this proposed plan by signing the following Stewardship Agreement and submitting it, along with your financial contribution, to:

Watersheds Canada

115-40 Sunset Blvd. Perth ON K7H 2Y4

Plant Availability

Please note that plant species may need to be changed based on plant stock availability at the time of ordering.

Project Completion

Upon receiving your signed stewardship agreement and financial contribution, a date will be booked for you to pick up your Natural Edge Kit. Watersheds Canada will supply all plants and materials. If you are paying for the planting to be completed for you, a date will be arranged for Watersheds Canada to plant your shoreline, bringing the plants and materials with them. If there are particular dates that you would prefer, we will do our best to accommodate your requests.

The Natural Edge Stewardship Agreement with Watersheds Canada

Agreement made this _____ Day of the Month of _____ in the Year _____.

BETWEEN Stanley Litowski 31 Dorthy Drive Trenton Ontario K8V AND **Watersheds Canada** 115-40 Sunset Blvd. Perth ON K7H 5P5 (Hereinafter called the **OWNERS**)
2Y4 (Hereinafter called **WC**)

WHEREAS the Owners and WC have met and discussed plans for shoreline naturalization on the specified area(s) in Schedule A existing on the Owners' land;

WHEREAS the Owners indicate approval of the project as proposed; and

WHEREAS the project is, or will be for the benefit of the Owners and others;

NOW THEREFORE THE PARTIES AGREE AS FOLLOWS:

1. This Agreement shall be in effect for a period of 5 years, commencing with the date of this Agreement.
2. The Owners and WC agree that the areas where the work is to be performed is as described in Schedule A.
3. The Owners agree to pick up their Natural Edge Starter Kit from WC's office and plant their shoreline within two days of receipt. The Owners will provide "after" photos of the work completed to be used for reporting purposes. If the Owners wish to have the planting completed for them, then WC or it's contractors, employees and agents will complete the planting at cost, as indicated in Schedule B.
4. If the planting is to be completed by WC, then the Owners grant WC, its contractors, employees and agents, the right to enter the property to perform the work agreed upon as outlined in Schedule A. In addition, WC, its contractors, employees and agents may inspect the work performed for the purposes of monitoring the project and survival assessment, with prior agreement with Owners for date and time of inspection.
5. The Owners agree to contribute the "Landowner contribution" and pay the costs indicated in Schedule B.
6. In instances where the Owners are to pay WC for work to be performed (outlined in Schedule A), the Owners agree to provide payments to WC prior to the commencement of that operation. Failure of payment shall constitute a breach of this Agreement and the Owners agree that this Agreement will be terminated and thereupon the Owners agree to pay WC the estimated costs of the operations of the project completed to date, if any.
7. The Owners agree, if necessary, to perform a reasonable amount of maintenance, which is described in the Native Plant Care Guide, available at naturaledge.watersheds.ca.
8. If a contractor is required to perform the work outlined in Schedule A, then the contractor carrying out the work on the land described will be required to take out and furnish evidence of a comprehensive policy of public liability and property damage coverage. The contractor and their workers will be required to be in good standing with the Workplace Safety and Insurance Board (WSIB) prior to performing the work.
9. The Owners agree not to remove, destroy or alter the project without prior consultation and approval of WC. Pruning and trimming planted nursery stock, or adding replacement native nursery stock is exempt.
10. The Owners agree not to mow the planted area.
11. The Owners do acknowledge that WC, its contractors, employees and agents, having performed said works, are not under further obligation with respect to survival of nursery stock, inspection, or maintenance.
12. The Owners, in the absence of negligence, hereby remise, release and forever discharge WC, its contractors, employees and agents from all claims and demands for injuries, including death, loss, damages and costs in any way related to or connected with installation and maintenance of the work described or resulting from any deleterious effects of the work to the land or to the lands and buildings thereon retained by the Owners.

IN WITNESS WHEREOF the parties have agreed to the contents of this plan; SIGNED:

Watersheds Canada

Stanley Litowski

Representative Signature:

Owner Signature:





About this program

About Watersheds Canada

Watersheds Canada is a non-profit organization and registered Canadian charity committed to working with landowners, communities, and organizations to protect lakes and rivers through developing effective, transferable, and long-term solutions.

This program was created by Watersheds Canada

We believe that every person has the right to access clean and healthy lakes and rivers in Canada. At Watersheds Canada, we work to keep these precious places naturally clean and healthy for people and wildlife to continue using for years to come. We love working with others to meet the needs of local communities, whether you're a concerned citizen, a landowner, a lake association looking for help, or a coalition of groups interested in activating your local community.