

MEMORANDUM

TO: William Hennessy - Town of New Scotland
FROM: Daniel Biggs, RLA - Weston & Sampson
DATE: June 16, 2017
SUBJECT: Maple Road Park - Vegetation Maintenance Recommendations

The following guidelines and recommendations are for the implementation of a Vegetation & Trail Maintenance Plan for the proposed Maple Road Park, located within the Town of New Scotland, New York.

SECTION 1: TRAIL MAINTENANCE

The proposed concept plan includes trails constructed from natural materials, specifically stone dust and hardwood mulch, and a section of wooden boardwalk. Maintenance of the trails is important to ensure that visitors to the park can safely navigate through the trail system, and that the pathways are clearly defined.

- **Stone Dust:** Primary trails comprised of stone dust are proposed along the eastern end of the site to connect users to the parking lots, barn, and nearby rail trail. A maintenance schedule should be developed for year-round upkeep of the trails that includes:
 - Replenishment of any displaced stone
 - Removal of any high/low spots within the trail to ensure an even walking surface
 - Raking & smoothing of the trail to ensure ADA compliance
- **Hardwood Mulch:** Secondary trails comprised of hardwood mulch are proposed along the eastern and southern ends of the site as a natural low-difficulty hiking/walking trail through the woods and meadows of the park. A maintenance schedule should be developed for year-round upkeep of the trails that includes:
 - Replenishment of any displaced mulch
 - Removal of any high/low spots within the trail to ensure an even walking surface
- **Boardwalk:** The boardwalk is proposed to be installed over existing wetlands located at the northern edge of the site. A wooden material is recommended for the construction of this segment as to remain consistent with the natural environment of the park. A maintenance schedule should be developed for year-round upkeep of the boardwalk that includes:

- Inspection of the railings & foot boards for decay, cracks, signs of wear, etc.
- Inspection of hardware for any safety hazards (rusty nails, loose boards, etc.)
- Removal of any vegetation growing on the boardwalk (poisonous vines, weeds, etc.)

SECTION 2: VEGETATION MAINTENANCE

The park consists of 4 main types of vegetative areas; wetlands, forest, lawns and meadows. During the initial construction of the site, swaths of land at the southern end of the park are proposed to be cleared of larger trees and reclaimed as a successional meadow ecosystem. The existing wetlands along the northern edge of the site are proposed to remain and be integrated into the park. Much of the site will remain forested, with lawn spaces developed near parking areas and around the relocated barn structure.

- **Forest:** The proposed forested area of the site should remain undisturbed apart from clearing trees as needed to allow for the construction of the trail system. Suggested maintenance includes:
 - Removal of invasive & poisonous plant species
 - Removal of vines from trees
 - Selective pruning of deadwood from trees within 10' of the proposed trail system
 - Selective pruning of tree limbs above the proposed pathway to allow for 10' of clear space above the trail
- **Wetlands:** Wetlands should be delineated prior to construction and flagged to ensure they remain undisturbed. Aside from the construction of the boardwalk, very little disturbance should take place within the wetland areas. Suggested maintenance includes:
 - Removal of invasive species from the surrounding wetland area
 - Removal of poisonous plant species that are located within 10' of the proposed boardwalk and trail system
 - Selective pruning of tree limbs above the proposed pathway to allow for 10' of clear space above the trail
- **Meadows:** Along the southern edge of the site, the existing forested area is proposed to be thinned out and replaced with a natural meadow ecosystem. Most trees should be removed from this area during construction, except for any specimen trees as identified by the Town or Project Landscape Architect. Suggested maintenance includes:
 - Removal of invasive & poisonous plant species to promote biodiversity
 - Selective pruning of deadwood from trees within 10' of the proposed trail system
 - Selective pruning of tree limbs above the proposed pathway to allow for 10' of clear space above the trail
 - Removal of vines from trees
 - Annual mowing with no fertilization (no mowing between March & September)
 - Removal of any undesirable tree greater than 20' in height

- **Lawns:** Limited lawn space is proposed in the areas immediately adjacent to the parking lots and around the barn to provide space of picnic pavilions and informal fields. Suggested maintenance includes:
 - Mowing, fertilizing & weeding in a manner consistent with the current operating procedures of the Town of New Scotland Department of Parks & Recreation

SECTION 3: INVASIVE & POISONOUS SPECIES MANAGEMENT

To maintain the biodiversity and general health of both the park and its potential users, invasive and poisonous plant species should be periodically removed from the park. Outlined below is a general management strategy for the control and removal of these plants.

- **General Maintenance & Removal Strategy:**
 - **Pulling individual plants**
 - If less than 3/8 inch in diameter, plants can be removed by hand. Small seedlings can be pulled and will not re-sprout. If greater than 3/8 inch, use a hand tool that pulls the shrub out, such as an "Uprooter" or "Root Talon". Removing by hand is easier if the soil is moist. Hand-pulling tools can cause soil disturbance so work to minimize soil disturbance and tap soil and plants back into place after pulling plants. Disturbed soil may result in increased seed germination.
 - **If pulling individual plants is impractical**
 - Spray foliage of short plantings or seedlings with an herbicide. Glyphosate (common name: Roundup) will kill all actively growing vegetation on which it is sprayed. Triclopyr (common name: SureGuard) will kill broadleaf plants and will not harm grasses when applied properly.
- **Oriental Bittersweet (*Celastrus Orbiculatus*)**
 - Small infestations can be hand-pulled but the entire plant should be removed including all the root portions. For climbing vines, first cut the vines near the ground at a comfortable height to kill upper portions and relieve the tree canopy. Try to minimize damage to the bark of the host tree. Rooted portions will remain alive and should be pulled, repeatedly cut to the ground or treated with herbicide. Cutting without herbicide treatment will require vigilance and repeated cutting because plants will re-sprout from the base.
- **Poison Ivy (*Toxicodendron radicans*)**
 - Firstly, try pulling the plants. This may be the best way to be rid of poison ivy since it works fast and you can see immediate results. Be sure to suit up properly. Wear gloves (be sure they don't have holes) to cover exposed skin on the hands. Be sure to cover every part of the body that may come in contact with the plant. When removal has

been completed, wash the exposed clothes at least twice, or even throw them out. It may seem extreme, but taking a few moments of extra precaution before the task could save hours (or days) of discomfort afterward.

- When pulling the plant, make sure to dig out about eight inches beneath the plant to ensure all the roots have been removed. Then cover the area with cardboard or paper to prevent regrowth. Once the offending plant and its roots have been pulled out of the ground, deposit it into a leak proof garbage bag for garbage collection.
 - If pulling the plants by hand is impractical, spray the leaves of the plant with roundup, every two weeks, until the plant is dead. Be careful not to spray plants that are not intended to be killed. Do not spray when a rainstorm is imminent—this will render the herbicide ineffective.
- **Buckthorn (*Rhamnus cathartica*)**
 - Target buckthorn plants that are producing fruit. Remove these fruit-bearing trees first and that will reduce the amount of seeds added to the soil each year.
 - Buckthorn seeds in the soil can continue to germinate for many years. Buckthorn management is a multi-year commitment. Once buckthorn plants have been removed, follow up over time to remove the plants that continue to germinate.
 - Ways to prioritize management:
 - Remove trees with fruit first
 - If there are areas with relatively few buckthorn trees, start management there and keep the nice areas nice; then work towards the areas that are more heavily infested
 - Continue to follow-up in the areas where buckthorn has been previously removed to ensure the plant does not repopulate
 - **Honeysuckle (*Lonicera spp.*)**
 - Do not cut down honeysuckle. Cutting down will not kill the plant, but may encourage more growth as honeysuckle sprouts quite easily from their roots. The size of the shrubs and the size of the invasion should be taken into consideration. If the infestation is composed of seedlings and small plants, then pulling out or removing seeds by hand will work out well. Trying that with a bigger bush will be ineffective and inefficient.
 - With larger infestations, herbicide can be used to get rid of bigger honeysuckle plants. A 1% solution of glyphosate (i.e. Roundup) can be sprayed on the foliage or applied by sponge. With well-established stands, cut the bush to ground level and spray or paint the stumps with 20-30% solution of glyphosate or an 8% solution of triclopyr (i.e. OrthnoBrush B-Gon concentrate). Make sure to read and follow the label instructions carefully when using herbicides. Also, use a method that would prevent damage to nearby native plants.