

INVASIVE SPECIES ERADICATION PROGRAM

**Salem Hunt Residential Development
June Road
Town of North Salem, New York**

Lead Agency: Town of North Salem Planning Board
North Salem Town Hall
266 Titicus Road
North Salem, New York 10560

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Invasive Species Eradication Program

Tree-of-heaven, Black locust and Norway maple are all noted as present within the project site. These invasive species favor areas of disturbed soils and edge areas, aspects which will be prevalent with construction of the proposed action as currently designed. This plan will implement an invasive species monitoring and manual control program for the duration of construction and development of the project. It has been designed to carryover into the needed maintenance plans that will need to be developed and implemented by the proposed Homeowners' Association.

Approximately 43 percent of the site (17.3 acres) is proposed to be preserved as open space in a conservation easement, including the on-site watercourses and wetlands. However, these preserved areas are known to support invasive species which are altering the character of the woodlands and represent a long term risk to the native vegetative community.

By eliminating exotic vegetation, and reducing deer populations due to increased human activity on the site, nearby native plants will have less competition and therefore have more resources available for their own growth. An invasive species eradication program will be implemented at the project site as part of the overall development plan. Species targeted for removal include the following:

Tree-of-heaven (Ailanthus altissima)
Multiflora rose (Rosa multiflora)
Mugwort (Artemisia vulgaris)
Autumn olive (Eleagnus umbellata)
Garlic mustard (Alliaria petiolata)
Purple loosestrife (Lythrum salicaria)
Common reed (Phragmites australis)
Oriental bittersweet (Celastrus orbiculatus)
Porcelainberry (Ampelopsis brevipedunculata)
Japanese Barberry (Berberis thunbergii)
Japanese Stilt Grass (Microstegium vimineum)
Winged Euonymus (Euonymus alatus)

The above listed species and all other invasive non-native plants that are detrimental to the ecology of the project site will be removed during site development to the extent practicable. A qualified biologist/botanist will supervise the removal of invasive species. Invasive species can be removed in several ways, depending on the location and species of the plant:

1. If a shrub is isolated and does not have its root system entwined with other plants, it may be removed mechanically. As much of the root system as possible should be removed to prevent the possibility of the invasive plant sprouting from root pieces left behind.
2. If a shrub is growing amongst other native plants in a way that uprooting it may disturb surrounding native plants warranting preservation, the plant will be most safely and effectively removed by chemical means. To remove by chemical means, the plant should first be cut back to a few stubs and stumps, about twelve inches from the base. A concentrated solution of glyphosate (Round-up or equivalent) should be painted on the ends of the stumps. This technique is most effective in the early fall months but before the approaching dormant period. The use of pesticides in some townships is restricted due to health and safety concerns. Proper notification must be made prior to the

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application of all pesticides, and application made by a licensed applicator. Only hand-cutting and removal will be allowed within the Controlled Area.

3. Highly invasive groundcovers, such as Japanese honeysuckle, are difficult to eliminate due to their habit of rooting along any stem. Groundcovers of this type should be sprayed with glyphosate, using a very close and targeted application during the active growing season. If the plant is growing among other herbaceous or shrub material that would be harmed by spraying, the glyphosate should be applied by brush or mechanical removal should be considered. Repeated treatments may be necessary to remove the plant completely. Only hand-cutting and removal will be allowed within the Controlled Area.
4. Highly invasive annuals, such as garlic mustard, are difficult to eliminate due to their growth from seed that is widespread among the soil seed bank where the plants are found. Several methods may be utilized in removing this type of invasive plants. If the species is growing densely without other plants, the area may be sprayed with glyphosate during the active growing season, following the manufacturer's recommendations. Species may also be removed by hand. Both methods should be performed before plants set seed. Both methods also may need to be performed multiple times over a season and possibly over several seasons to completely eradicate the target species. Only hand-cutting and removal will be allowed within the Controlled Area.

Following development of the site, a maintenance plan will include the regular inspection of undisturbed areas within 100 feet of the development envelope, and removal of these species as necessary. This represents the transitional areas that are most susceptible to opportunistic settling of invasive species. It is anticipated that a schedule of inspections three times a year for the first three years following full project build out (early, mid and late growing season) will be adequate for the identification and removal of the invasive species in this area. The Town might also want to enter into an agreement with the entity that will be holding the conservation easement to determine if a regular program for monitoring of the conservation easement areas is also feasible.