

# **Invasive Species Management Plan**

for  
15 Liberty Way  
Franklin, MA  
(Map 320, Lot 4)

September 7, 2023  
Revised: October 24, 2023  
Revised: November 14, 2023

**ADDRESSED TO:**

Municipal Building  
Franklin Conservation Commission  
355 E. Central Street  
Franklin, MA 02038

**PREPARED BY:**

Goddard Consulting LLC  
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Northborough, MA 01532

**PREPARED FOR:**

Atlantic Oliver 15 Liberty Way LLC  
c/o Oliver Street Capital  
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Boston, MA 02110

## 1.0 INTRODUCTION

As described in the Notice of Intent submission, invasive species management is proposed as mitigation for impacts to the 25' Buffer Zone, which total 16,553sf, and impacts to Isolated Vegetated Wetlands, which total 2,680sf. The area proposed for invasive species management is partially within the easement area located at the west of the project site, as shown on the attached graphic, and totals 46,374sf. Because the easement area is mowed semiregularly by Franklin DPW, planting of woody vegetation is proposed only in areas outside of the mowed easement access. This area totals approximately 33,000 square feet.

The primary invasive species on the site consist of oriental bittersweet (*Celastrus orbiculatus*), multiflora rose (*Rosa multiflora*), purple loosestrife (*Lythrum salicaria*), common reed (*Phragmites australis*), and honeysuckle (*Lonicera spp.*) These species are known to outcompete native plant species that are important to native wildlife for food and habitat. Management of these species will allow native vegetation present in the area to thrive. It is Goddard's opinion that the proposed mitigation will result in a net improvement of habitat value in the area.



Figure 1: View of invasive plant species in proposed invasive species management area.



Figure 2: View of invasive Phragmites reeds to be treated.

## **2.0 SUPERVISION AND METHODS**

All activities in the invasive species management area (ISMA) will be supervised by a qualified wetland scientist with experience in invasive species management. Before work begins, the wetland scientist will coordinate with the selected contractor to flag or otherwise clearly identify the limits of work for the entirety of the invasive species management area. All proposed invasive species management activities will be conducted by hand only. The use of machines in this area is likely to result in increased impacts. Grubbing and cut-stem herbicide treatments as described below will be conducted by hand.

### **2.1 MANUAL REMOVAL**

Grubbing is the simplest invasive species management technique. This technique is most effective on species that do not have expansive root systems. Species proposed to be managed with this approach include honeysuckle shrubs and multiflora rose. Simply digging out the plant and the majority of its root system with hand tools is effective in achieving long-term control. Repeated cutting of the above-ground portions of the plant is also an effective method to achieve control. Any invasive species present onsite that are not explicitly addressed in this plan will be managed with manual removal techniques.

### **2.2 CUT-STEM TREATMENT**

A cut stem herbicide treatment is proposed for the remaining species that are not adequately addressed with manual grubbing. These species include Phragmites, purple loosestrife, and oriental bittersweet. These species have extensive root systems, and root material not physically removed is likely to resprout, resulting in ineffective control. The herbicide product to be used is EPA-approved for aquatic use – RoundUp Custom (EPA Reg. No. 524-343). This is a simple method that consists of cutting the target plant to the ground and applying a 50% diluted RoundUp formulation to the cut stem. The herbicide will be absorbed by the plant and transported throughout the plant tissue, effectively killing the plant from the inside. This method is exceptionally effective and rarely requires substantial follow-up treatments. All herbicide use will be overseen by a MA Licensed Pesticide Applicator. All stipulations of the product's label will be followed at all times.

Herbicide application shall not occur during rain events, to ensure effective treatments and reduce any potential for the herbicide to travel offsite. As mentioned above, the method of application will consist of only targeted cut-stem treatments. This method enables the use of a very minimal amount of active herbicide ingredient and allows for precise application with very little potential for off-target impacts. No broadcast herbicide application will be used, as this method has a strong potential for off-target impacts and overspray.

### **2.3 DISPOSAL**

All cut plant material will be exported from the site and disposed of appropriately. In order to minimize the spread of invasive plant seeds or roots, cut plant material will be moved to an impervious surface as soon as possible (i.e., by the end of the workday). No soils originating from areas known to support invasive plant species will be moved elsewhere on site.

### **2.4 REVEGETATION**

All upland areas within the ISMA will be seeded with the New England Conservation/Wildlife Mix from New England Wetland Plants at the recommended rate of 1lb/1750sf. All wetland areas within the ISMA will be seeded with the New England Wetmix from New England Wetland Plants at the recommended rate of 1lb/2500sf. The seed

will be spread after the initial invasive removal effort and raked into the soil. This will establish high-quality herbaceous vegetation that will aid in preventing the spread of invasive species.

Because the ISMA does have areas with quality native vegetation present, precise quantities of trees and shrubs to be replanted have not been determined at this point. However, the entire ISMA outside of the mowed easement area will be revegetated with appropriate native woody vegetation. The area outside of the mowed easement area to be replanted measures approximately 32,000sf. Planting quantities and species selection will be determined by a qualified wetland scientist to ensure appropriate placement and achieve the revegetation criteria described in section 2.5 of this report as described below. There will be no less than 6 different species chosen for planting to ensure appropriate species diversity. Plantings for these areas will be selected from the following list:

Upland Planting Areas	Wetland Planting Areas
White pine ( <i>Pinus strobus</i> )	Red maple ( <i>Acer rubrum</i> )
Black cherry ( <i>Prunus serotina</i> )	Tupelo ( <i>Nyssa sylvatica</i> )
Serviceberry ( <i>Amalanchier canadensis</i> )	Highbush blueberry ( <i>Vaccinium corymbosum</i> )
Black chokeberry ( <i>Aronia melanocarpa</i> )	Winterberry ( <i>Ilex verticillata</i> )
Lowbush blueberry ( <i>Vaccinium angustifolium</i> )	Buttonbush ( <i>Cephalanthus occidentalis</i> )
*Depending on nursery availability, other appropriate species not listed here may be selected for planting with Conservation Agent approval.	

## 2.5 MONITORING AND REPORTING

As described above, the ISMP areas will be inspected for invasive species during the spring and fall growing seasons during each year of implementation. Monitoring reports shall be prepared for the ISMP by a qualified wetland scientist once a year with the results of the spring and fall inspections. If the report has deemed the management successful, treatment may cease. If the management has been unsuccessful, adjusted spring and fall treatments will be scheduled and the qualified wetland scientist will inspect the site the following spring.

Monitoring reports will include photographs and details about the vitality of the success of the invasive species management in the area and shall be submitted to the issuing authority by December of each monitoring year. Monitoring reports shall describe, using narratives, plans, and color photographs, the physical characteristics of the management area. Any invasive species present will be noted, flagged, and removed or treated.

For this ISMP to be deemed successful, 75% of the present invasive species cover must be removed, with the regeneration of native plant species in their place. If these terms are not met, the applicant shall submit a remediation plan to the issuing authority for approval that will achieve management/restoration goals under the supervision of a

wetland specialist. This plan must include an analysis of why the areas have not successfully re-vegetated with native species and how the Applicant intends to resolve the problem.

This ISMP is for the removal of invasive plants in the area identified on the attached map within the subject parcel, with a goal of establishing a primarily native plant community and improving wildlife habitat adjacent to the soon to be developed portions of the site. To achieve these goals, this plan has proposed an approach consisting of physical and chemical management methods.

It is our professional opinion that the distinction in removal methods specified previously in this report will allow for the efficient removal of invasive species from the area while affording maximum protection to wetland resource areas, and that the proposed plantings will allow for appropriate revegetation to provide ideal forage and habitat value for wildlife. We therefore respectfully request that the Commission approve this ISMP in conjunction with Notice of Intent for the project at 15 Liberty Way in Franklin, MA.

If there are any questions concerning this ISMP, please do not hesitate to contact us.






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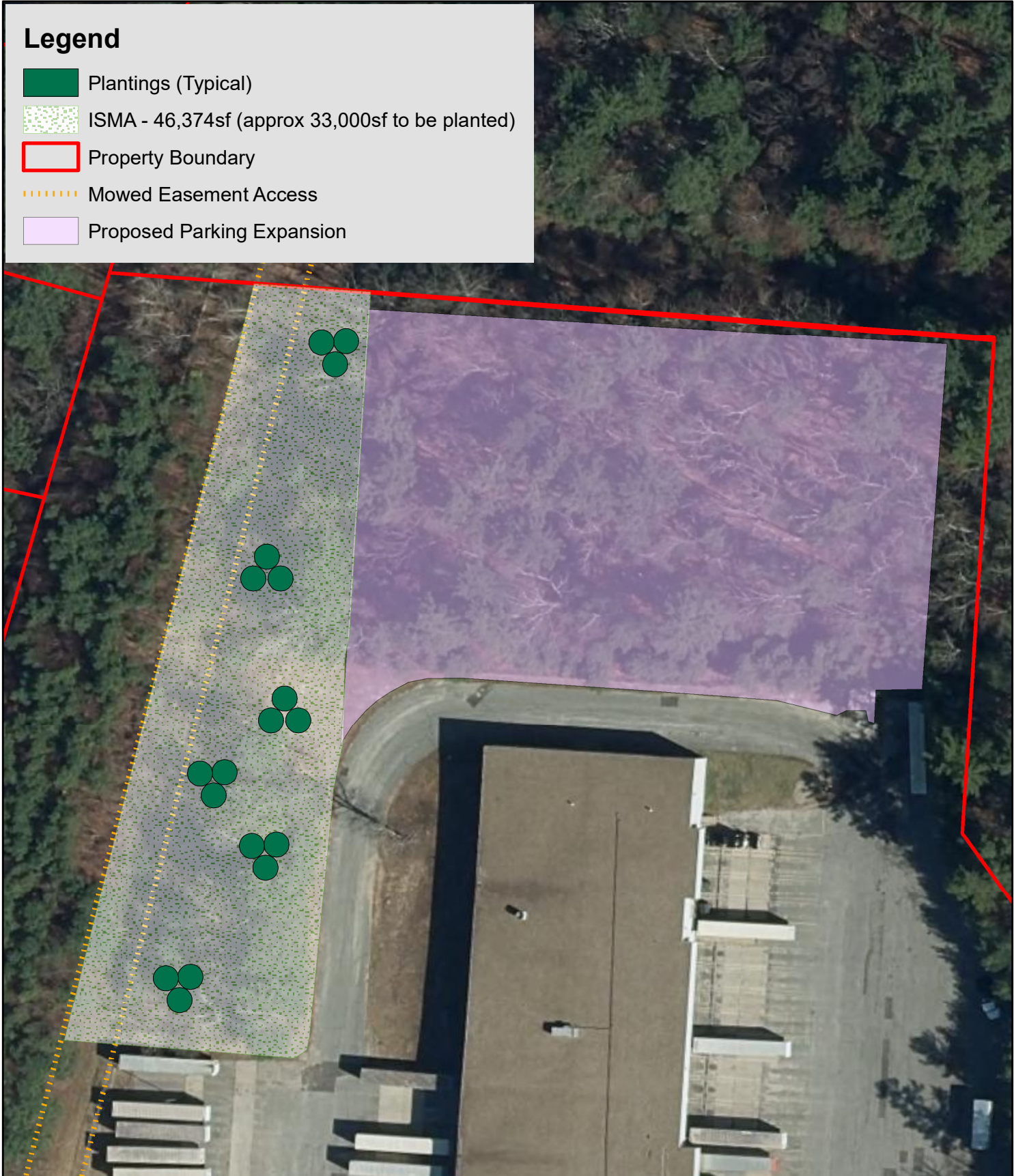
Goddard Consulting LLC



**Chris Frattaroli**  
*Wetland Scientist*

# Legend

-  Plantings (Typical)
-  ISMA - 46,374sf (approx 33,000sf to be planted)
-  Property Boundary
-  Mowed Easement Access
-  Proposed Parking Expansion



Date: 11/14/2023

GC Job Number:  
101-082

## Invasive Species Management Area

15 Liberty Way  
Franklin MA

0 37.5 75  
Feet

1 in = 75 ft

Map: 320, Lot: 4

