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Invasive Plant Species Management Plan

for

North Central Baptist Church

8001 NW 23 Ave, Gainesville, FL 32606

Prepared for:
North Central Baptist Church of Gainesville, Florida, Inc.
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Site Overview

Field visit identified coral ardisia, an invasive plant species present at the subject property. This report details a management plan for the control, monitoring, and removal (where appropriate) of invasive plant species in accordance with the ULDC Sec. 406.12(a)(1), Sec. 406.104(b)(1). This management serves to provide the property owner with direction on the treatment and control of existing invasive nonnative plant material within the subject area as well as monitoring guidelines for three years following an initial treatment phase. Native vegetation shall be retained. This management plan includes general invasive plant control information, description of species and specific control methods, evaluation timeline and success criteria, and pesticide contractor requirements for plant removal. The initial treatment phase of this management plan shall be completed prior to issuance of the certificate of occupancy. The invasive species treatment program will be considered successful if after monitoring the subject area for two years has shown that the presence of invasives have been reduced to 5% or less of the habitat area (forested area of the property).

Methods for Treatment and Control

There are three main control methods for the removal of invasive plant species, manual, mechanical, and chemical. In the case of air potato, present at the site, biological control methods have been deployed in the form of beetles however, growth continues to persist in some locations. Manual removal is the use of hand labor and hand tools to pull seedlings and/or fully developed specimens. The use of heavy equipment is not allowed as a method of mechanical control and it is prohibited in the CMA since this may damage native vegetation. Hand tools are the sole means of mechanical control. Chemical control is using properly-applied herbicides to kill the target plant at the immediate site of occurrence.

The advantage with manual labor is that non-target damage is minor due to the ability to take a selective approach. In the case of areas with a high chance of erosion or soil disturbance, as is the case with this subject area, manual controls can be deployed with minimal negative impacts to surrounding natural features. The disadvantage of manual controls is the high cost of labor relative to the size of the affected area and possible re-sprouting of roots or seeds. Mechanical controls in the form of hand tools only can be more cost effective. Damage to non-target plants are to be minimized and as such any use of heavy equipment is prohibited. The advantage of chemical herbicide control is low cost with a high success rate. However, there is potential to damage to non-target native plants and care must be taken to prevent over-spraying or contamination of natural environmental features such as surface waters. Particular care must be taken in the case of the subject area due to the proximity to the stormwater pond, wetlands, as well as sinkholes with steep side slopes. When removal of whole plants and/or root structures is appropriate, erosion control and contamination devices such as silt fences must be used.

The best method of controlling the spread of invasives is preventing them from entering the subject area. During the initial construction and treatment phase, heavy equipment, including trucks, should be inspected for plant material or obvious seed. This should also be done for any new fill or plant material that comes onto the property. Care must also be taken to not relocate the existing invasive plants within the project site. This can be avoided through careful cleaning of equipment, especially backhoes and bulldozers, after use in areas where invasives are present.

Monitoring

Treatment of invasive nonnative plants is a process often involves multiple treatments and applications of control measures. Typically, depending on the time of year, a follow-up treatment should be conducted every 60-90 days. Successful completion of the initial treatment, per the Alachua County Land Development Code, is defined as having reduced the continued occurrence of invasives to less than 10% of the coverage area of the original population. The plant treatment process should be started concurrent to site development to ensure that success is achieved with minimal treatment activities and site disturbance. If the initial treatment process includes mechanical removal, the plant debris shall be tracked and documented as disposed of in a C&D landfill or burned.

The owner is responsible for yearly re-inspections of the premises by a qualified professional and any subsequent treatments following the completion of construction. This will be undertaken until there are at least 2 growing seasons exhibiting 5% cover or less by the invasives of the habitat area (forested area of the property). Re-inspection of the premises and treatment can terminate once successful control has been maintained for at least two growing seasons.

After original populations have been controlled the owner should transmit to couty staff, monitoring reports certified by an environmental scientist or specialist, biologist, registered engineer, or registered landscape architect every 12 months for at least three years. These monitoring reports should update locations of persistent occurrences, any new species of listed invasive nonnative plants, and the associated coverages. The owner should use these monitoring reports as a guide for additional follow-up treatments in the spring, summer and fall of each year.

Implementation Timeline

Initial Treatment

As directed by the owner, or during site preparation and construction, all plants listed in this report shall be treated. Treatment shall be conducted as necessary to achieve 5% cover or less by the invasives of the habitat area (forested area of the property) by the end of construction.

Year 2

Site shall be inspected by a qualified professional and a report should be submitted to Alachua County. If exotic invasive plant cover exceeds 5%, then re-treatment of the site will be required until 5% cover or less by the invasives of the habitat area (forested area of the property) is achieved.

Year 3

If inspection of the subject area for the previous two years (year 2 & 3) shows 5% cover or less by the invasives of the habitat area (forested area of the property), then continued inspection, monitoring, and treatment can terminate. If this is not the case continued yearly inspections and treatments should be conducted until two growing seasons occur with results of less than 5%.

Pesticide Contractor Requirements

The property owner or developer shall hire a qualified pesticide contractor to control the invasive non-native plants. The pesticide contractor shall have a State of Florida Commercial Pesticide Applicators License with a Natural Areas Certification and be able to identify the plants listed in this plan as well as any new plants listed in the monitoring reports.

Herbicides shall be used in a safe manner consistent with all labeling. The Material Safety Data Sheets (MSDS) should be read and followed as well as any other labeling on the containers. All of the herbicides that are recommended in this report have low potential to move through the soil into groundwater. Any herbicides used near or in water must be labeled for use in aquatic habitats.

Individual species descriptions and control recommendations

Coral ardisia, coral berry, spice berry, scratchthroat *(ardisia crenata)*

Description: An evergreen, sub-shrub that reaches heights of 1.5 to 6 feet. It tends to grow in multi-stemmed clumps. The alternate, waxy leaves are about 8 inches long, and they are dark green above. They are also hairless, with scalloped margins and calluses in the margin notches (Figure 2). Flowers are typically pink to white in stalked axillary clusters, usually drooping below the foliage (Figure 3). The fruit is bright red, globular, and one-seeded, measuring about 0.25 inches in diameter (Figure 4). Berries tend to persist on the plant nearly year-round, and white-berried populations also exist.

Control recommendations: Can be suppressed by using foliar applications of 2.25% v/v (volume to volume) solution of triclopyr ester-containing products (Garlon 4 Ultra, Remedy Ultra, others), 3% triclopyr amine-containing products (Garlon 3A, others), or 1% imazapic-containing products (Impose, Panoramic, Plateau) (Table 1). Basal bark applications with an 18% v/v solution of Garlon 4 or Remedy Ultra in an oil carrier can also control the plant. Complete coverage is essential when using foliar applications. Do not apply more than 8 quarts of Remedy or Garlon 4 per acre. If applying greater than 2 quarts, then treat no more than 10% of the total grazed area. Since formulations can evaporate when temperatures exceed 85°F, use care when applying high rates of these herbicides. The herbicide imazapic has been shown to reduce seedling germination within 12 months after application. Regardless of the application method, retreatment will be necessary for complete control as there will typically be a new flush of seedlings following most treatments.