

Vegetation Management Plan

Dixon Run Solar Project

Bloomfield Township, Jackson County, Ohio

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I. Goals and Objectives

Dixon Run Solar is a proposed up to 140-megawatt solar energy facility, owned by Dixon Run Solar, LLC, which will occupy approximately 2,080 acres within the Bloomfield Township in Jackson County, Ohio (the Facility). This Vegetation Management Plan (the Plan) is provided to guide site preparation, vegetation installation and establishment, and long-term management of vegetation on the Facility site, both inside and outside of the Facility fence line. The vegetation's establishment and sustainability will be improved through best management practices including the control of soil erosion and sedimentation, proper initial installation of plant material, and management of invasive species and noxious weeds. The Plan is provided to help ensure establishment and maintenance of stable vegetative cover that facilitates efficient Facility operation, provides ecological benefits, and complies with all Ohio Power Siting Board (OPSB) regulations and required permits.

This Plan is intended to provide guidelines for the management of on-site vegetation over the life of the Facility. Understanding that site characteristics and conditions can be variable, vegetation management will require evaluation and possible adjustment in response to the vegetation's health/growth and/or Facility management issues. Consequently, the recommendations included in this Plan should be revisited on a regular basis and adjusted as necessary to achieve the desired outcome.

II. Tree Clearing

Ohio Department of Natural Resources Division of Wildlife standards will be followed for clearing of trees over 3-inch DBH and will occur in the appropriate season (October 1 - March 31). In addition, clearing of trees will be limited to the greatest extent practicable. Cleared and cut vegetation will be chipped on site to further reduce impacts of development, unless site conditions present at the time of clearing require the materials to be removed and legally disposed of off-site.

III. Protection of Existing Vegetation

The infrastructure of the Facility has been located to minimize disturbance while maintaining existing vegetative buffers and reducing impacts to wildlife habitat. The areas surrounding an individual tree, group of trees, shrubs, or other vegetation proposed to remain on site will be protected throughout the duration of the Facility construction. Key vegetative buffers and select specimens (collectively referred to as protected trees) that are intended to remain to provide visual buffers from neighboring properties, as well as undisturbed buffers around environmentally sensitive areas such as wetlands and streams, will be identified by the Owner's representative. Prior to construction, a meeting with the contractor will be conducted to review methods and procedures for protection of this vegetation. Upon construction mobilization, all vegetation protection and erosion and sediment control devices will be installed per Ohio EPA - NPDES permit requirements and the project stormwater pollution prevention plan (SWPPP).

Clearing and removal of existing vegetation will only be conducted where necessary for installation and operation of the Facility infrastructure. Protected trees and limits of clearing will be marked by the

installation of 48-inch height, high-visibility orange construction fencing, and individual specimens flagged with 1-inch orange vinyl tape at a height of 5 feet above grade for visibility. Fencing will be installed at a minimum of 1.5 times the drip line diameter of protected trees to prevent damage to the vegetation and/or limit soil compaction within the root zones. If trenches for utilities are necessary within the root zone of a protected tree, root trimming and supplemental irrigation will be provided to limit root damage. Any damage to protected trees or roots resulting from the Facility construction will be repaired under the direction of a certified arborist. If damage is beyond repair, the tree(s) will be removed and replaced with a tree of comparable size and species. For trees over 4-inches Diameter at Breast Height (DBH), replacement will be done with multiple smaller trees no greater than 4". As an example, the removal of a 12-inch DBH tree would be replaced with three 4-inch DBH trees. Replacement trees shall be planted within the adjacent protected zone, but not in place of the removed tree.

IV. Vegetation/Seed Installation

The primary revegetation method to be used on site is seeding, which will follow the installation completion of all solar panels and associated Facility infrastructure. Additionally, in selected locations, shrubs will be installed for visual screening and ecological buffer restoration. Objectives for plant species selection, establishment, and maintenance include: 1) maintain at least 80% vegetation cover of the species seeded and planted, 2) improve ecological benefit by enhancing species diversity and encouraging the development of native plant species, 3) minimize the presence of common noxious weed and invasive plant species, and 4) meet the Facility operational criteria regarding limitation of mature vegetation height.

A. Vegetation/Seed Mix Selection

Species selection for site revegetation will be based on an evaluation of the natural and physical resources of the Facility site. Resources considered to guide species selection alternatives will include Level III Ohio Eco-Region mapping, United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS) soil survey data, site topographic survey and GIS mapping, and U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) mapping.

Vegetation/Seed Mix Type

The seed mix to be utilized will be compatible with the operational requirements of the solar panel arrays and other Facility infrastructure. Any proposed modifications or substitutions to the recommended seed mix shall be submitted by the Contractor in writing to the Owner. All exceptions must be authorized in writing by the Owner in accordance with Plan procedures prior to installation.

Seed Source and Certification

A reasonable effort will be made to procure seed stock of regionally local genetic provenance. Species shall be true to scientific name and in accordance with specified purity and germination requirements. The installer must provide seed manufacturer or supplier certification tags complying with state agriculture department labeling requirements. The installer must submit seed

certification tags and seed manufacturer's state agriculture department growers' certification to the Owners representative for review.

B. Soil Testing and Evaluation

Existing soils will be tested prior to seeding by a certified lab to determine nutrient levels and soil chemistry, and to produce recommendations for fertilization or soil amendment that would facilitate the establishment of naturalized vegetation.

It is anticipated that site construction operations will result in some degree of soil compaction on the Facility site. Following the completion of construction, in-place soil compaction measurements will be performed to assess the extent of soil density in areas designated for revegetation and to determine best practices for soil decompaction. Soil decompaction will occur in seeding and planting areas where the soil density compaction level exceeds 80% of maximum dry weight according to ASTM 1557.

C. Seed Installation

Installation Schedule

Seed installation timing is dependent on the date of construction completion in any given area. If construction is completed in the spring, seeding will occur during the time the soil is frost-free and workable, generally April 15 through June 15. The fall seeding period is August 15 through October 15. For spring or fall seeding, seed will be applied at the specified rate for the seed mix per acre of pure live seed (PLS) with a seasonally appropriate cover crop. Dormant fall seeding may also be used when construction is completed outside of the optimal fall seeding schedule. Seeding rates should follow the guidelines set forth in appendix A (Cover crop) seeding tables of the Ohio Field Office Technical Guide (FOTG) from the NRCS. Re-seeding of the mix and/or appropriate cover crop the following spring may be necessary to assure successful germination and establishment.

Soil Preparation

Soil decompaction, if found to be necessary, will be tailored to soil texture, soil moisture level, seasonal period, and specific site considerations such as avoidance of underground cables and utilities. Decompaction will be planned in coordination with seeding/planting activity required for establishment. Decompaction efforts will limit surface soil disturbance to the extent practicable, avoid damage to or homogenization of soil structure, and will be performed without causing further soil compaction.

Prior to seeding, surface soil or finished grade will be scarified, as necessary, to aerate and improve soil porosity for infiltration and to level uneven surfaces. The desired result is to roughen the soil surface to increase seed contact with the soil without disturbing soil structure or promoting germination of existing weed seeds in the soil. If seed will be installed through existing vegetation, that vegetation must be mown to the level of the root crown, assessed to determine a weed

pressure rating and potentially treated multiple times with an herbicide for two to three months to eliminate weeds and expose soil before the seeding operation.

Seeding

Seeding will be accomplished using a calibrated mechanical seed drill or broadcast seeding equipment capable of metering seed of various size and weight. Hydroseed method of application is generally incompatible with native or naturalized-type seed mixes and will not be used. A bulking agent may be used, as needed to create an even flow of seed.

D. Installation of Vegetative Buffers

Evergreen trees will be installed for the purpose of visually screening the Facility and restoring vegetative buffers around the Facility site. These materials will be planted in accordance with approved planting plans.

Evergreen Tree Planting

Proper establishment is critical to assuring the survival and long-term health of the vegetative buffers. At the time of installation all underground utilities will be marked prior to digging to assure safe installation and determine any areas where the presence of underground utilities may impact the intended landscape buffering layout. Any adjustments needed should be reviewed and approved by the owners representative, with efforts made to retain the intended mitigation strategy as constraints allow.

Trees will be planted during the fall season or in the cycle of dormancy. For conifers and broadleaf evergreen species, trees will be installed during the optimal planting period, early spring or early fall. In preparing for planting, each planting pit will be sized a minimum of 2.5 times the size of the root ball, but no deeper than the original planting depth; stem base flare must be visible at finished grade. To prevent unnecessary stress and damage to the shrubs, installers will be directed to maneuver the tree by the root ball or container only, and never by the stems. The root ball will be placed in the planting pit on undisturbed soil and installed plumb or straight from all viewpoints. The planting pit will be backfilled with native soil and amended as needed based on soil testing. Soil backfill will be applied gradually, gently compacted, and watered in to remove air pockets. Staking will be used when the site is exposed to high winds. Stakes are only beneficial for a short period of time and will be removed after one calendar year has elapsed.

Following tree planting, the disturbed surface of the planting pit will be mulched immediately to retain moisture and insulate roots from extreme temperatures. Acceptable mulch material may be leaf litter, clean straw, shredded bark, compost, or well-composted wood chips, spread evenly to a maximum depth of 3 inches. Mulching will be avoided within 3 inches of the root flare and piling mulch against the base or lower branches into a cone-shape will be avoided, as these practices cause decreased soil-gas exchange, bark tissue damage, and harbor pests and disease. Soil disturbance within the planting area that does not receive mulch will be seeded with the buffer

seed mix. Over time, native and/or beneficial plant species herbaceous vegetation growth will cover the mulched tree pits.

Watering is necessary at planting time and during the establishment period to ensure survival and to improve growth rates. Immediately following planting, trees will be irrigated with 2-3 gallons of water per foot of height of the tree. Water will be applied to the mulched areas over the root ball. Temporary drip-irrigation systems may be used during the establishment period. During the first month following installation, trees will receive the equivalent of one inch of rain per week by natural precipitation or by artificial irrigation. Generally, during the first year or establishment period, new shrubs will require up to 10 gallons of total water per week. Supplemental watering may be required during prolonged periods of heat or drought conditions. Watering schedules will be adjusted to account for current environmental conditions such as recent rainfall, humidity, high winds, and cloud cover. Watering will occur early in the morning or after sundown to limit evaporation, sun scorch, and transplant shock.

Establishment Pruning

Pruning will be performed only to remove faults such as dead, diseased or damaged branches, or to improve structure where the interest of public safety is affected.

V. Vegetation Management

Vegetation management is necessary to assure that the goals of site revegetation and screening are met. Initial management will be more intensive to assure development and establishment of the preferred vegetation community. Subsequent management will focus on vegetation community maintenance, with regular inspection and evaluation. The following section outlines the anticipated cycle of vegetation management on the Facility site.

A. Vegetation Assessment Criteria

Criteria used to describe the essential vegetation conditions include absolute cover and relative cover of species seeded and planted. Absolute cover describes the percentage of total vegetation coverage of the ground surface by any plant species, based on visual assessment within sample plots. Relative cover is the percentage of seeded and planted species' coverage relative to all species within the same plot. Vegetation coverage goals are discussed at subsection V. A. Basis and Goals for Vegetation Coverage. It is anticipated that the site will achieve 95% uniform vegetative cover at full establishment.

B. Establishment Period

Initial vegetation management is critical in establishing the desired plant community. Properly establishing vegetation on site will reduce the future intensity of management needed to maintain the community and keep invasive species at bay.

Early Establishment Period – Installation through Year 1

Primary goals of the early establishment period are to cultivate healthy vegetation coverage and to limit weed growth or weed migration from other sites. Once the designated seed cover crop and/or seed mix has germinated, periodic monitoring combined with mowing and proactive weed control methods will be used to ensure successful establishment of desired plants. Monitoring will be performed to identify and document where the removal of undesirable plants is needed and to evaluate where reseeding may be used to improve desirable species coverage. Methods used for controlling undesirable species growth and migration during the establishment period will include mowing and targeted herbicide use, per manufacturer instructions and in compliance with Ohio EPA regulations. Successful practices will be monitored and documented for use in guiding future management actions both during and following the establishment period. This documentation will also inform future refinement of the management plan.

Mowing timing and frequency will be guided by environmental factors, such as temperature and rainfall amounts, and ground cover growth rates. However, the first mowing will occur prior to April 15, to prevent ground-nesting birds from using areas likely to be mowed. The first mowing is intended to provide initial weed-suppression, and will be scheduled prior to new vegetation seed production, typically in June. This initial mowing will be performed to a height of 6 inches to 8 inches by a flail-type mower to mulch and retain vegetation debris. Vegetation may be removed as needed after cutting to prevent excessive buildup of thatch in selective areas where debris buildup may suppress plant establishment or interfere with the Facility operation. In the first growing season a second mowing will be required in the fall, after native and/or beneficial plants have bloomed and gone to seed. This mowing will be performed to a height of 6 inches. Specialized mowing equipment will be used in array areas and similar limited spaces that are inaccessible with standard large-scale mowing equipment. Equipment types may include closed mowing deck, side-mount or front-mount mowing decks, low-profile zero-turn mowers, and fully automated utility-scale autonomous mowing systems. Mowing equipment will be cleaned prior to and between uses to prevent the spread of undesirable seeds. Based on the results of monitoring during the establishment period, mowing and herbicide use may be employed more frequently during the first year to control undesirable plants.

Continued Establishment Period – Year 1 through Year 2

The goals of the continued establishment period are to cultivate a mature stand of vegetation that meets the seed mix species diversity and minimizes weed competition. Continued periodic monitoring will guide maintenance practices and control measures. During the second growing season (April) if possible, the site will be mown to a minimum height of 6 inches to cut back previous season's growth and to stimulate new growth for preferred species. Four weeks after the initial mowing the site will be evaluated to identify and document species for removal, bare areas in need of reseeding, and the status of species diversity development. Areas of dense undesirable vegetation found to cover a substantial portion of the new vegetation stand will be mown to a height of 4 inches or less to discourage the growth of such species.

Vegetation management practices will become more targeted and precise during this period to support maturing vegetation and to significantly reduce weed and invasive species occurrences. Reseeding will be conducted in bare ground areas and in sparse plant coverage areas to promote vegetation establishment. Bare ground areas will be lightly raked to remove thatch build up, overseeded by broadcast methods, and lightly tamped, raked or rolled to ensure seed contact with soil. Seeded areas will be mulched with weed free straw (rate), meadow-hay cut from the site(rate), or a biodegradable blanket (weight) to retain moisture on the soil surface and to facilitate germination. Noxious weeds or invasive species found to persist after mowing will be spot-treated with herbicide. Protective measures may be required to prevent herbicide from drifting onto desired plants. Cut materials will be removed prior to applying herbicides to an area.

Post Establishment Period – Year 3 and Long-Term Maintenance

By year three it is anticipated that vegetation will be well established with spot mowing and herbicide treatment used for control of noxious weeds or invasive species. Mowing will likely occur at a minimum of twice per year, performed typically early spring and late fall. Periodic monitoring and evaluation will continue as a means of guiding maintenance practices and for future modifications to the management plan.

C. Controlling Invasive Species

Management of invasive species will be conducted as necessary in response to changing conditions on the site. Monitoring once per month over the course of the growing season (April-September) during the first two years will be conducted to inform decisions on appropriate mowing or herbicide specifications. The presence of weeds is expected to diminish as the preferred vegetative community becomes established.

A record will be kept of weeds or invasive species treated, areas of site treated with herbicide, the method and amount of product used, and the dates of application. Herbicide and pesticide use must be performed by qualified, commercially-licensed applicators in compliance with state and federal requirements governing use, distribution, and record-keeping for all phases of vegetation management. This record-keeping will also allow the contractor and/or Owners representative to evaluate the success of treatment and improve the effectiveness of future applications.

D. Controlling Competing Native Vegetation

Seeds and root stock from many different species exist within the soil on site. Other species can also migrate into the site via seed dispersal by wind, animals, water flow, or by vegetative runners. Undesired vegetation will be removed via mowing, herbicide treatment, or hand pulling. A qualified contractor must be engaged to perform selective species control and removal work. Minimum contractor qualifications must include documented experience of similar work and trade or professional certifications specific to plant and vegetation management (e.g., certified pesticide applicator).

E. Controlling Woody Growth

Woody vegetation is generally capable of growing to heights that can create shade, which will not only interfere with the function of the solar panels, but also shade out the desired plant community. Except where established for screening purposes, woody vegetation will be removed, and herbicide applied. Where trunk size exceeds 0.5 inch in diameter, trunks will be cut 1 inch from grade and the stump will be treated with a systemic herbicide basal application.

F. Ongoing Maintenance Standards and Practices

The site will continue to require annual evaluation after establishment of desired vegetation is complete. To maintain the desired herbaceous vegetation community, the site must continue to be managed regularly. Mowing will be performed as needed to prevent shading of panels and provide access to Facility driveways and supporting project infrastructure. The first mowing should take place before April 15, when most birds are expected to nest, to prevent ground-nesting birds from using areas likely to be mowed. At a minimum, unless site conditions require otherwise, mowing will occur every other year in late fall or early spring. Mulching-type mow equipment will be used to limit thatch buildup that is detrimental to plant growth. Mulcher-shredder machines may be employed as needed to periodically cut, collect, and remove excess plant debris. These operations will be performed in late winter or early spring to allow recently dropped seeds to germinate more readily.

The mowing schedule should be cycled so the entire site is not mowed at one time. This maintains general flora and fauna habitat. Mowing will be staggered by a minimum of two weeks and limited to one-half of the site area in order to leave vegetation standing for fauna food and shelter during the growing season.

Scheduled periodic haying may be pursued as an optional supplement to maintenance practices. A single harvest will occur per calendar year after plants have matured and produced seed to allow the seeds to be dispersed on site for regermination. This may occur as early as July, or as late as the fall following the growing season when plants are in dormancy. Harvest for hay will require mowing to a height of 6 inches with material left in place to wilt for 2-3 days. Once wilted, the cut vegetation will be turned 2-3 times to allow the material to thoroughly dry and drop/disperse seed. The hay will be raked at 30-40% moisture content and baled once field-cured to a moisture content of 15-20%.

Property outside of the facilities fence line and vegetative buffers can be or continue to be farmed for agricultural purposes so long as crops do not interfere with the function of the solar panels.

G. Maintenance for Visual Mitigation Vegetation

In addition to proper maintenance within the fence line of the PV panel arrays, maintenance will also be required for plant materials installed for the purpose of visual mitigation along the periphery

of the arrays. Herbaceous vegetation will be managed similarly to areas inside the fence line, as described above. Woody vegetation, shrubs will require an independent maintenance schedule to ensure that the plantings become established and reach their intended size and form to meet the Facility screening requirements.

Monitoring for Pests and Disease

Plantings will be inspected seasonally for physical damage, insect infestation, fungus, or disease. Treatment plans will extend through the growing season. If pests or disease are observed to be present, a certified arborist will be engaged as necessary to develop a strategy to restore the health of the affected shrubs. Diseased or damaged shrubs will be evaluated and treated to alleviate the identified problem or removed and replaced when treatment is not a viable option. Adjacent vegetation will be monitored throughout treatment to ensure the identified problem is contained. Documentation will be kept of all treatments administered, including strategy, timing, and follow up needs. Replacement plantings for dead shrubs will be made during the next growing season or the period optimal for survival of each species.

Fertilization, Pruning, and Replacement Protocol

Regular monitoring and maintenance will improve the longevity of planted shrubs and allow proper establishment of the natural vegetative buffers. Following the first year, fertilization will be conducted twice annually for two years with a slow-release fertilizer applied to the mulch area over the root ball. Regular pruning will be used to manage plant health, develop structure, reduce risk, and provide clearance to structures. Pruning for form will be consistent with each species' natural growth habit and be performed on an as-needed basis under the direction of a certified arborist. Shrubs with greater than fifty percent crown die-back will be evaluated for removal and replacement. When replacing shrubs, they will be replaced with the same or functionally similar species of the same size as initially installed to maintain the effectiveness of the visual screening.

VI. Vegetation Quality Targets

On-going evaluation is an important step in the maintenance of the site's vegetation. Because each planting area has a unique ecology and each plant species has different requirements, it is important to review and document which species are thriving, or even dominating, and which are not. Evaluation also identifies which prescribed maintenance techniques have been most successful. Results of this evaluation will be used to help inform future management and assure a healthy and diverse, desirable plant community.

A. Basis and Goals for Vegetation Coverage

In compliance with Ohio EPA - NPDES permit requirements and the project SWPPP, all disturbed soil areas will be stabilized with at least 70% uniform perennial (permanent) vegetative coverage to achieve stabilization. The scheduled target for the installation contractor will be to achieve 80% vegetation coverage by the end of the first growing season. Once permanent vegetation is fully

established, approximately 36 months post installation, the goal is for the site to achieve 95% uniform vegetative cover.

B. Management Goals for Weeds, Invasive Plants and Nuisance Insects

Noxious weeds and invasive plant species regulated by the State of Ohio (Appendices 1 & 2) and noxious weeds designated by the USDA NRCS will be controlled by implementing a management and monitoring plan with the goal of fully eradicating species on the site. Prescribed treatment will occur at a frequency sufficient to prevent seed development or vegetative migration. Assessment and treatment of invasive species, including weed infestations, will be achieved through an integrated pest management plan developed during the establishment period.

VII. References

Ohio Department of Agriculture: <https://agri.ohio.gov/wps/portal/gov/oda/divisions/plant-health/invasive-pests/invasive-plants>

Ohio Laws and Rules: Invasive Species List <http://codes.ohio.gov/oac/901%3A5-30>

Ohio Laws and Rules: Prohibited Noxious Weeds <http://codes.ohio.gov/oac/901%3A5-37>

Ohio Department of Transportation:
https://www.davey.com/media/1619374/1_odot_statewide_roadside_pollinator_habitat_restoration_guide.pdf

Ohio Pollinator Habitat Initiative: <http://www.ophi.info/home.html>

USDA Natural Resource Conservation Service: Ohio <https://www.nrcs.usda.gov/wps/portal/nrcs/oh/home/>

USDA Web Soil Survey <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

United States Environmental Protection Agency: Level III Ecoregion of Ohio <https://www.epa.gov/eco-research/ecoregion-download-files-state-region-5>

US Fish and Wildlife Service: National Wetlands Inventory
<https://www.fws.gov/wetlands/data/mapper.html>

Xerces Society: https://www.xerces.org/sites/default/files/2018-05/15-025_02_XercesSoc_HabitatInstallGuide_Pennsylvania_ConservationCover327_web.pdf

APPENDIX I

Ohio Invasive Plant Species

Identified by Ohio Administrative Code and effective 2021. For a current list please use site referenced in Section VI References, for Ohio Laws and Rules.

- (1) *Ailanthus altissima*, tree-of-heaven
- (2) *Alliaria petiolata*, garlic mustard
- (3) *Berberis vulgaris*, common barberry
- (4) *Butomus umbellatus*, flowering rush
- (5) *Celastrus orbiculatus*, oriental bittersweet
- (6) *Centaurea stoebe* ssp. *Micranthos*, spotted knapweed
- (7) *Dipsacus fullonum*, common teasel
- (8) *Dipsacus laciniatus*, cutleaf teasel
- (9) *Egeria densa* Brazilian, elodea
- (10) *Elaeagnus angustifolia*, Russian olive
- (11) *Elaeagnus umbellata*, autumn olive
- (12) *Epilobium hirsutum*; hairy willow herb
- (13) *Frangula alnus*, glossy buckthorn
- (14) *Heracleum mantegazzianum*, giant hogweed
- (15) *Hesperis matronlis*, dame's rocket
- (16) *Hydrilla verticillata*, hydrilla
- (17) *Hydrocharis morsus-ranae*, European frog-bit
- (18) *Lonicera japonica*, lapanese honeysuckle
- (19) *Lonicera maackii*, amur honeysuckle
- (20) *Lonicera morrowii*, Morrow's honeysuckle
- (21) *Lonicera tatarica*, tatarian honeysuckle
- (22) *Lythrum salicaria*, purple loosestrife
- (23) *Lythrum virgatum*, European wand loosestrife
- (24) *Microstegium vimineum*, Japanese stiltgrass
- (25) *Myriophyllum aquaticum*, parrotfeather
- (26) *Myriophyllum spicatum*, Eurasian water-milfoil
- (27) *Nymphoides peltata*, yellow floating heart
- (28) *Phragmites australis*, common reed
- (29) *Potamogeton crispus*, curly-leaved pondweed
- (30) *Pueraria montana* var. *lobata*, kudzu
- (31) *Ranunculus ficaria*, fig buttercup/lesser celandine
- (32) *Rhamnus cathartica*, European buckthorn
- (33) *Rosa multiflora*; multiflora rose
- (34) *Trapa natans*, water chestnut
- (35) *Typha angustifolia*, narrow-leaved cattail
- (36) *Typha x glauca*, hybrid cattail
- (37) *Vincetoxicum nigrum*, black dog-strangling vine, black swallowwort.

APPENDIX II

Prohibited Invasive Weeds

Identified by Ohio Administrative Code and effective 2021. For a current list please use site referenced in Section VI References, for Ohio Laws and Rules.

- (A) Shatter cane, *Sorghum bicolor*
- (B) Russian thistle, *Salsola kali* var. *tenuifolia*
- (C) Johnsongrass, *Sorghum halepense*
- (D) Wild parsnip, *Pastinaca sativa*
- (E) Grapevines, *Vitis* spp., when growing in groups of one hundred or more and not pruned, sprayed, cultivated, or otherwise maintained for two consecutive years
- (F) Canada thistle, *Cirsium arvense*
- (G) Poison hemlock, *Conium maculatum*.
- (H) Cressleaf groundsel, *Senecio glabellus*
- (I) Musk thistle, *Carduus nutans*
- (J) Purple loosestrife, *Lythrum salicaria*
- (K) Mile-A-Minute, Weed *Polygonum perfoliatum*
- (L) Giant Hogweed, *Heracleum mantegazzianum*
- (M) Apple of Peru, *Nicandra physalodes*
- (N) Marestalk, *Conyza canadensis*
- (O) Kochia, *Bassia scoparia*
- (P) Palmer amaranth, *Amaranthus palmeri*
- (Q) Kudzu, *Pueraria montana* var. *lobata*
- (R) Japanese knotweed, *Polygonum cuspidatum*
- (S) Yellow Groove Bamboo, *Phyllostachys aureasculata*, when the plant has spread from its original premise of planting and is not being maintained
- (T) Field bindweed, *Convolvulus arvensis*
- (U) Heart-podded hoary cress, *Lepidium draba* sub. *draba*
- (V) Hairy whitetop or ballcress, *Lepidium appelianum*
- (W) Perennial sowthistle, *Sonchus arvensis*
- (X) Russian knapweed, *Acroptilon repens*
- (Y) Leafy spurge, *Euphorbia esula*
- (Z) Hedge bindweed, *Calystegia sepium*
- (AA) Serrated tussock, *Nassella trichotoma*
- (BB) Columbus grass, *Sorghum x almum*
- (CC) Musk thistle, *Carduus nutans*
- (DD) Forage Kochia, *Bassia prostrata*
- (EE) Water Hemp, *Amaranthus tuberculatus*