Tree Care and Planting Plan for the City of Bexley Ohio

Pursuant to its responsibilities under Bexley Ordinance 288.03(a), the Tree and Public Gardens Commission adopts the following Tree Care and Planting Plan this __ date of _____, 2025.

I. Introduction and scope

This Tree Care and Planting Plan is intended to establish clear and consistent standards regarding the city's treatment of trees planted in the tree lawn as defined in Bexley Ordinance 1026.01(r) and in the public streets (1026.01(m)) and public places (1026.01(n)). Apart from the provisions regarding education, it does not apply to a private property owners' treatment of trees located on their private property. However, the city's care and planting of trees should provide a model for all Bexley residents in the best practices with respect to the treatment of their own trees.

II. Prohibitions on Plantings in the Tree Lawn and the T&PGC's Authority regarding Unauthorized Plantings

Pursuant to Bexley Ordinance 288.03(a), the Tree and Public Gardens Commission shall have control over the planting of all trees in the tree lawn as defined in Bexley Ordinance 1026.01(r) and in the public streets (1026.01(m)) and public places (1026.01(n)). This responsibility is exercised by the adoption of the following determinations pending review of the existing ordinances by the Tree and Public Gardens Commission and City Council:

- No tree may be planted in the tree lawn, on public streets, or in public places without the
 approval of the Tree and Public Gardens Commission with the exception of tree(s) planted by
 the City that have been previously approved as part of the list of recommended street trees
 for the location in question.
- Any request by an adjacent resident to plant a tree in in the tree lawn on the interior side of the sidewalk for the following sections of streets must receive prior approval from the Tree and Public Gardens Commission before planting occurs:
 - Ardmore Road from 250 FT north of Elm to Broad and north from the first alley north of Broad to Ruhl;
 - Ashbourne Place;
 - Ashbourne Road;
 - Bexford Place;
 - o Boston between Parkview and Drexel;
 - o Bullit Park
 - o Bryden Road between Parkview and Drexel;
 - Cassady from Main to Broad (both sides), from Maryland to Allegheny (east side), and from Maryland to Delmar (west side);
 - Cassingham from 250 north of Elm to Broad and from the first alley north of Broad to Ruhl;
 - o Charles from Sheridan to College;
 - o Columbia:
 - o Dale from Parkview to Cassingham;

- Dawson from Fair to Broad;
- o Delmar;
- o Denver from Stanberry to Ashbourne;
- Drexel from Main to Caroline;
- Elm from Dawson to Cassady;
- o Maryland from Parkview to Stanwood;
- o Parkview from Main to Caroline;
- o Pleasant Ridge from 845 Pleasant Ridge to Francis;
- o Plymouth from Cassady to Dawson
- o Remington from 200 ft. north of Elm to 200 ft. south of Broad and from 200 ft. north of Broad to Ruhl:
- o Roosevelt from Main to Fair and from Elm to 400 ft. north of Denver;
- o Ruhl from Northview to Cassady; and
- o Stanberry from Broad to Maryland.
- No individual or entity, other than the City, may plant a tree or shrub in the tree lawn on the street side of the sidewalk, on a public street, or in public places.
- No prohibited species should be planted in the tree lawn, public streets, or public places.
- Removal or damage to any tree planted in the tree lawn, public streets, or public places by any person shall be reported to the City for enforcement under the provisions of Bexley Ordinance Section 1026.

III. Targets for tree replacement

The goal of the City of Bexley is to plant 100% of the available spaces in the tree lawns, public streets, and public places, and to replace trees removed from such locations as quickly as feasible consistent with good planting practices and the economic resources of the city. When the term "public tree" is used in this section, it is referring to trees located in the tree lawn, in a public street, or in a public place. During the time the current ordinances are being reviewed, new trees will be planted behind the sidewalk if the adjacent resident approves.

A. Stump removal

When a public tree is removed, the stump shall be groundan attempt shall be made to grind the stumpt to a depth of _____10-12 inches, ideally within _____ days of the next planting season after the removal. Remnants A majority of the remnants of the stump, including wood chips and saw dust, shall be removed and replaced by [describe] soil at the time of removal and planted with grass seed.

B. Replanting

A new public tree shall be planted in the next appropriate planting season for the species and cultivar of any public tree that is removed, unless the Tree and Public Gardens Commission determines that conditions are not appropriate for replacement of the public tree removed. Bexley Ordinance 1026.04(a)-(b).

C. Gap filling

Contemporaneous with the replanting of public trees removed after the date of this plan, it is a priority of the Tree and Public Gardens Commission to fill all spaces in the public tree lawn, public streets, and public spaces in which a tree may feasibly be planted within the city no later than the Fall of 2029203-, to the extent the resources exist to do so. The City Forester is requested to prepare a schedule, by street, for the completion of such plantings and present it for approval to the Tree and Public Gardens Commission. The Commission will review the progress made to fulfill this goal annually.

D. Plantings per year/canopy cover/other measures

Consistent with the previous section, it is the objective aspirational goal of the Tree and Public Gardens Commission to infill at least 20% of available locations in the tree lawn, public streets, and public spaces in which a tree may feasibly be planted each year. The Tree and Public Gardens Commission shall report to City Council before the end of each calendar year whether this objective has been accomplished for that calendar year. If it has not been accomplished, the Tree and Public Gardens Commission shall report to City Council the reasons this objective was not accomplished, together with any recommendations for additional resources from the city or elsewhere to accomplish that objective in the next calendar year. The City Forester will provide an annual report on the state of the urban forest.

E. Opportunities for efficiencies

The City Arborist shall report to the Tree and Public Gardens Commission his or her recommendations each year to improve the efficiency and effectiveness of tree replacement and infilling. This plan may be modified based on those recommendations.

IV. Species selection and climate change

Pursuant to Bexley Ordinance 288.03(b), the Tree and Public Gardens Commission is responsible for establishing the recommended species and varieties of trees and major landscaping to be planted in the tree lawns and in Public Gardens. The Tree and Public Gardens Commission shall review these recommendations at least every three years following the criteria below. The current species designations are attached hereto as Appendix A.

A. Species selection

The Tree and Public Gardens Commission at <u>lease least</u> every 48 months shall review the list of recommended street trees to determine whether it should be revised. In making any revisions, the following factors should be considered in identifying replacement trees for those on the list:

1. Monoculture on streets – The Tree and Public Gardens Commission will select a specific street to test planting more than one species of tree in order to test

the environmental and aesthetic impact of departing from the traditional practice of limited plantings in the right of way to a single species.

- **2. Canopy elevation** Canopy structure is an important feature ecologically, aesthetically, and from a maintenance perspective. Canopies can be *even* (comprised of the same species and same age) or *uneven* (comprised of many species and multiple age cohorts) and can be maintained or promoted through active management. Typically, older systems with taller trees and increased diversity (both in species and age) offer more unique habitats and thus support more wildlife compared to even systems. It should be acknowledged that forests with taller canopies generally have larger stems which may be costly to maintain and necessitate specialized equipment.
- **3. Spread** In selecting species, canopy spread shall be a factor to be considered, both with respect to aesthetic appeal and potential interference with utilities.
- **4. Carbon sequestration** In selecting species, carbon sequestration capacity of the species shall be a relevant factor.
- **5. Stormwater run-off** Urban forests are critical to absorbing stormwater during heavy rains. Maintaining existing levels of forest in the city can help alleviate the City's aging infrastructure.

V. Tree planting standards

Trees shall be planted following the landscape plan or design as well as adhering to current recognized Best Management Practices as outlined by the International Society of Arboriculture and the current edition of the American National Standards Institute (ANSI) A300 part 6.

Planting Balled and Burlapped Trees:

- 1. Locate the root collar by removing twine, burlap, and excess soil from the top of the root ball.
- 2. When practical, dig a planting hole 2-3 times wider than the diameter of the root ball or a minimum of 20-24" wider than the diameter of the root ball. Slope the sides to an unexcavated or firm base. Dig the hole to a depth so the root collar at the first order lateral root is at or within 2 inches above the surrounding, undisturbed finished grade.
- 3. When using an auger or spade, make sure the sides are not glazed or excessively compacted.
 - 4. Tip the tree on the side to remove the bottom wire basket with bolt cutters.

- 5. Lifting from the bottom of the root ball or sides of the remaining wire basket, position the tree on the firm base of the planting hole so that the tree is straight, and the top of the root collar is level with or within 2 inches above the surrounding soil.
- 6. Remove and discard the remainder of the wire basket. Remove the burlap to the bottom of the root ball. Preferably all burlap will be removed from the root ball and planting hole. If a contractor determines it is impractical to remove all burlap and/or the wire basket at planting, it shall report that fact toe the City Forester, and provide pictorial evidence showing why the full removal of burlap and/or the wire basket is impractical.
- 7. Inspect the root ball to ensure the tree has not been wrapped with another layer of burlap and that the roots are healthy and properly formed.

Planting Container Trees:

- 1. Locate the root collar. Remove all excess soil to expose the root collar.
- 2. Dig the planting hole at least three times wider than the root ball with sloping sides. Dig the hole to a depth so the located root collar, at the first order lateral root, is at or within 2 inches above the surrounding, undisturbed finished grade.
 - 3. Tamp bottom of the planting hole.
 - 4. Remove the tree from the container or grow bag and select from the option below.
- i. Create a firm soil mound at the bottom of the planting hole. Completely tease apart the root system, repositioning any stem girdling, potentially stem girdling, and encircling roots.
- ii. Place in planting hole so that root collar is at or within two inches (2") above finished grade and the tree is straight. With a sharp saw, shave off the entire outer 1 inch (1") of the root ball.
- iii. If grow bag is designed to tear off encircling roots, place it in the planting hole so that the root collar is at or within two inches (2") above the finished grade and the tree is straight.

Finishing:

- 1. With disinfected, sharp pruning tools, prune off any secondary/adventitious, stem girdling, and potential stem girdling roots.
- 2. Before backfilling, ensure the tree is in an upright position avoiding the appearance of leaning.
 - 3. Backfill the planting hole with existing unamended soil.
 - i. If soil is compacted or damaged, the equivalent of two inches (2") of EPA Rated Class IV compost or aged leaf litter may be mixed into the top twelve inches (12") of the existing soil.

- ii. If soil is compacted or damaged, top-dress the entire planting hole with one inch (1") (50 ft) of EPA Rated Class IV Compost or aged leaf litter to at least an eightfoot (8') diameter around the tree.
- 4. Mulch the entire planting surface (ideally at least an 8 ft diameter around the tree) with composted bark applied no less than two inches (2") deep and no more than three inches (3") deep, leaving three inches (3") adjacent to the tree trunk free of mulch.
 - 5. Water tree with five (5) gallons per caliper inch plus five (5) gallons.

A. Caliper (maximum and minimum)

All newly planted public trees shall have a minimum two-inch caliper. "Caliper" is the thickness of trees measured in inches. A caliper measurement shall be measured twelve (12) inches above the soil line.

B. Tag Removal

All tags shall be removed from the tree before planting.

C. Staking

New plantings shall be staked unless the City Forester determines staking is unnecessary.

D. Planting depth

The root collar is the transition zone between the roots and trunk often identified by an abrupt swelling or flare between the two areas.

- 1. The root collar shall always be slightly above the surface of the surrounding soil and free of soil, compost, mulch, stone, and other media.
- 2. If the root collar is not visible or buried, remove soil or media from around the tree until the root collar is at or within two inches (2") above the surrounding, undisturbed finished grade.

E. Deer protection

All new public trees planted within three blocks of Alum Creek shall be planted with deer protection, which shall be kept in place and maintained for a least the first three years after planting.

F. Watering plan

The City should seek the adjacent homeowner's agreement to a watering plan for all newly planted street trees for a period of two years. If the homeowner is unwilling or unable to agree to such a plan, the City should arrange to water newly planted trees for two years as follows:

- 1. All recently planted trees shall be watered weekly from [April 1 October 31 or adjusted as needed based on prevailing weather conditions such as late-season droughts.]
 - 2. Deep soaks through mulch ring only
 - i. Water shall not be sprayed onto the trunk or leaves.

3. Watering Rates

- i. Five (5) gallons per caliper inch plus five (5) gallons.
- ii. Taper off five (5) gallons after two (2) growing seasons.
- iii. Continue to taper off five (5) gallons for each growing season until the tree is acclimated to the site.

G. Nursery standards

All plant material complies with American Standard for Nursery Stock Z60.1. All plant material has been selected based on site conditions and constraints.

- 1. Trees shall be freshly dug and properly stored prior to planting. Trees determined to have inferior root systems or poor-quality health shall be refused by [client name.]
- 2. Each tree shall be labeled with a Latin name with varietal or cultivar names and a common name. All unlabeled or mislabeled trees shall be refused by [client name.]
- 3. Tree stock shall be protected from excessive vibration; avoiding being thrown or bounced off mobile equipment to the ground. Trees shall not be dragged, lifted, or pulled by the trunk or foliage parts in a manner that damages or loosens the roots from the soil in the root ball. Trees damaged and mishandled before and upon delivery shall be refused by the
- 4. To avoid damage when setting a tree in the hole, straps or rope may be necessary to lift the root ball. Lifting trees by their trunk is prohibited.
 - 5 Special strapping mechanisms shall be constructed to carefully lift trees out of large containers.

VI. Pruning

A. Newly planted (by tree species)

Each newly planted public tree shall be pruned in accordance with the schedule set forth for pruning of new trees in Appendix B.

B. Maintenance schedule

All public tree shall receive maintenance pruning in accordance with the schedule set forth for maintenance pruning in Appendix B.

C. Circumstantial Maintenance

The City Forestry Department shall inspect all public trees at least annually and provide any maintenance or pruning circumstances require.

VII. Resource assessment

A. Completing and maintaining tree inventory

The City should maintain a current inventory of tree plantings planted in the tree lawns and in Public Gardens.

B. Benchmarking

The City should benchmark the resources devoted to this planting and maintenance plan against similar communities and report this results to the Tree and Public Gardens Commission and City Council at least every three years. Such benchmarking should include:

- 1. Staff needed per tree, including the number of certified arborists
- 2. Types of staff (arborist, maintenance, volunteer, part time, interns, partnerships)
- 3. Percentage of city budget to tree planting and maintenance
- 4. Equipment
 - *a) Identification of types*
 - b) Capital/replacement budget
 - c) Grapple truck
 - d) Stump grinder
- 5. Enforcement resources
- 6. Penalties for violations of tree protection requirements

C. Opportunities to add resources

The City should identify the staff members who will assist the Tree and Public Gardens Commission in increasing the resources available to support the planning and maintenance of City trees, including:

- 1. Private dollars
- 2. Government grants
- 3. Community Foundation support
- 4. Other grants

VIII. Public education

The Tree and Public Gardens Commission and City Staff should annually adopt a public education plan that includes efforts to education the public regarding the following issues:

- Mulch volcanoes
- B. Planting and removal

- C. Right of way rights and responsibilities
- D. Watering
- E. The importance of trees to the sustainability and aesthetics of Bexley.

This plan should include steps regarding maintenance and improvement of the Arboretum Website.