

ARTICLE 21 Landscaping and Buffering



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Section 21.00: Purpose

The purpose of this article is to promote the general public welfare by reducing the adverse impacts of non-compatible land uses, and through the reduction of nuisances such as noise pollution, air pollution, visual pollution, and artificial light glare by requiring buffering between non-compatible land uses and between residential and non-residential uses. In addition to promoting the general public welfare, these regulations are established to promote public convenience, comfort and prosperity by the development of a sustainable, and economically and physically desirable community by, in part, improving the appearance of vehicular use areas and property abutting public rights of way, and by protecting, preserving and promoting the aesthetic appeal, character and value of the surrounding neighborhoods. It is further the purpose of this article to promote the preservation and replacement of trees and significant vegetation removed in the course of land development to maintain the rural character of the area in accordance with the Vision Statement in the Jersey Township Comprehensive Plan 2030.

Section 21.01: Authority

Article 21: *Buffering and Landscaping* is hereby established in accordance with the authority derived from Section 519.02: *Board of Township Trustees May Regulate Location, Size, and Use of Buildings and Lands in Unincorporated Territory* of the Ohio Revised Code (ORC) (Effective 08-17-2006) and Section 519.171: *Architectural Review Board Authorized – Standards and Procedures* of the ORC (Effective 05-27-2005), existing as noted above and as they may be amended by the State of Ohio Legislature.

Section 21.01.A: ORC, Section 519.02: Board of Township Trustees May Regulate Location, Size, and Use of Buildings and lands in Unincorporated Territory

Section 519.02 of the ORC states: *“Except as otherwise provided in this section, in the interest of the public convenience, comfort, prosperity, or general welfare, the board (of trustees) by resolution, in accordance with a comprehensive plan, may regulate the location of, set back lines for, and the uses of buildings and other structures, including tents, cabins, and trailer coaches, and the uses of land for trade, industry, residence, recreation, or other purposes in the unincorporated territory of the township, and may establish reasonable landscaping standards and architectural standards excluding exterior building materials in the unincorporated territory of the township.”*

Section 21.01.B: ORC, Section 519.171: Architectural Review Board Authorized – Standards and Procedures

Section 519.171 of the ORC states in part: *“The board of township trustees may create an architectural review board to enforce compliance with any zoning standards it may adopt pertaining to landscaping or architectural elements. The board of township trustees shall adopt the standards and procedures for the architectural review board to use in reviewing zoning permit applications for compliance with those landscaping or architectural standards. If the board of township trustees does not create an architectural review board, it may delegate this enforcement authority to the zoning inspector or the zoning commission.”*

Section 21.02: Applicability

These regulations shall apply in the following instances:

Section 21.02.A: New Sites

No zoning permit shall be issued hereafter for any site development or the construction or improvement of any building, structure or vehicular use area, except where landscaping for such development, construction, or improvements has been approved as required by the provisions of this article.

Section 21.02.B: Existing Sites

The construction of an additional structure, the alteration or expansion of an existing structure, the addition of additional supporting infrastructure, and/or the alteration or expansion of additional supporting infrastructure, wherein the alteration or expansion is greater than twenty-five percent (25%) of the square footage of the existing principal structure and supporting infrastructure on the development site. {does not apply to existing uses if buildings sq.ft of less than 2500 sq.ft}

Section 21.02.B.1: Development Site as used in this article Defined

“Development Site” as used in this Article 21 may include one (1) or more parcels as identified by the Licking County Auditor’s Office (auditor parcel number) upon which development of commercial projects/multi-family dwellings (See Appendix A: Definitions) occurs.

Section 21.02.B.2: Supporting Infrastructure Defined

“Supporting Infrastructure” as used herein includes land area used for open space, parking, loading spaces, refuse spaces, storage yards, display lots, accessory buildings, and other purposes that support the principal use of the property.

Section 21.02.C: Exemptions

Uses that are except of the requirements of this article are as follows:

Section 21.02.C.1: Agriculture

Agricultural uses as defined in Appendix “A” of this resolution, and in Section 519.21 of the Ohio Revised Code are exempt from these requirements.

Section 21.02.C.2: Single Family Dwellings

Single family uses are except from these requirements.

Section 21.03: Buffer and Landscape Plan Submission Requirements

Whenever a development is subject to these regulations in accordance with Section 21.02: *Applicability* above, the property owner or developer shall prepare a buffer and landscape plan. Where such plans are part of an application for rezoning, variance, conditional use or other matters which must be approved by the Township Zoning Commission or Township Board of Zoning Appeals, such plans shall be submitted as part of the required application and other required plans. All other landscape plans shall be approved by the Township Zoning Commission.

Section 21.03.A: Application Content

The Township will provide application forms containing the following requested information:

- Development name
- Description of development, including any and all proposed uses, structures, parking areas, etc.
- Property owners name
- Developers name (If different from the property owner's name. If not the property owner the developer shall provide documentation [Signed and notarized letter, agreement, contract, or other legal documentation] that they have the right to make application and act on behalf of the property owner.)
- Date the application is filed.
- Property owners contact information including complete mailing address (Street/PO Box Number, City, State, and Zip Code), daytime phone number, mobile number (optional) and e-mail address.
- Developers contact information including complete mailing address (Street/PO Box Number, City, State, and Zip Code), daytime phone number, mobile number (optional) and e-mail address.
- If the plans are drawn by someone other than the property owner or developer, then the following shall be submitted.
 - Name
 - Title
 - Company
 - Complete mailing address (Street/PO Box Number, City, State, and Zip Code)
 - Daytime phone number
 - Mobile number (optional)
 - e-mail address
- Site Information
 - Street address
 - Licking County Auditor parcel number
- Tax map from the Licking County Engineer's Office showing entire parcel and owner information.
- Current deed (to verify ownership)
- Buffering and landscaping plan
- List of all application materials being submitted.

Section 21.03. B: Buffering and Landscape Plan Content

The contents of the buffering and landscaping plan shall include the following:

- Location map identifying the property location in relation to the rest of the Township. Include roads and road names on the location map.
- If the entire parcel is not being developed, the site plan shall have an exhibit, drawn to scale, showing the development area in relation to the recorded parcel.
- Site plan sheet, drawn to an easily readable scale no smaller than one inch equals twenty feet (1"=20') , showing and labeling by name and dimensions the following existing and proposed elements:
 - Property lines
 - Road Right-of-Way
 - Easements
 - Buildings and other structures on the parcel and on adjoining parcels (whether the same ownership or not)
 - Bodies of water (ponds, streams, rivers, etc.)
 - Drainage swales, retention/detention basins, storm water structures
 - Identify flow of surface drainage
 - Stands of trees
 - Existing trees and vegetation to be preserved

 - Vehicular use areas including parking stalls, driveways, service areas, display areas, etc.
 - Landscape materials, including botanical names and common names
 - Installation sizes, on-center planting dimensions where applicable and quantities for all plants used
 - Mature growth sizes and dimensions
 - Environmentally sensitive areas, including but not limited to wetlands, floodplains, and endangered species habitat
- Schedule of all plant material showing common name, whether it is deciduous or evergreen, mature height, mature width, planted height, planted width, and general characteristics of the plant material.
- Legend for all symbols and line types used on the plan.
- Typical elevations, cross sections, and details.
- Title block with:
 - Names and addresses of the property owner's, and person's drawing plan.
 - Scale of the plan,
 - Date (including any revision dates)
 - North arrow (The plan shall generally be oriented so that north is to the top of the plan)
 - Zoning district.

If prepared by a professional landscape architect, architect, engineer, or surveyor, said plans shall be signed and sealed by the professional creating the plans.

Section 21.03.C: Submission by Applicant to Township

A complete application and a buffer and landscape plan as detailed above shall be submitted along with all other required materials shall be submitted to the Township Zoning Inspector.

Section 21.03.D: Determination of Complete Application

Within five (5) business days from the date an application is received, the Township Zoning Inspector shall verify that the application is complete by verifying that the information required in Section 21.03.A and 21.03.B is contained within the materials submitted.

Section 21.03.E: Scheduling of Zoning Commission Meeting, Notice of Meeting, and Submission of Application, Buffer and Landscape Plan to the Zoning Commission.

Section 21.03.E.1: Zoning Clerk to Schedule Meeting

Within five (5) business days from the date of submission, and upon verifying that a complete application is received in accordance with Section 21.03.D: *Determination of Complete Application* above, the Zoning Clerk shall schedule a Zoning Commission meeting; provide proper notice to the Zoning Commission board members; and provide notice to the public in a paper of general circulation, on the township website, and at the Township Hall.

Section 21.03.E.2: Township Zoning Commission Meeting Date

Said township Zoning Commission meeting shall be held within twenty-one (21) days business days from the date of submission.

Section 21.03.E.3: Zoning Clerk Submission to the Township Zoning Commission

The application form, the buffering and landscape plan, along with any other submission materials shall be provided to the Zoning Commission Board during the scheduled meeting.

Section 21.04: Buffer and Landscape Plan Review

Section 21.04.A: Action by the Township Zoning Commission

The Township Zoning Commission shall review the landscape plan at the scheduled public meeting to determine compliance with Article 21: Buffering and Landscaping. The Zoning Commission may take one of four actions:

Section 21.04.A.1: Approve

Approve the application; or,

Section 21.04.A.2: Approve with Conditions

Approve the application with conditions that once complied with would allow the application to be in conformance with the adopted regulations; or,

Section 21.04.A.3: Deny

Deny the application if it is not in conformance with the adopted regulations; or,

Section 21.04.A.4: Continue the Public Meeting

Upon written agreement by the property owner or developer (with legal authority to act on behalf of the property owner as outlined in Section 21.03.A: *Application Content*), the

township Zoning Commission may continue the public meeting. The Zoning Commission during the meeting shall schedule a date, during which the meeting will be continued to review the amended application addressing the items herein identified. The scheduled continuation of the meeting shall be announced during the current meeting so that interested parties may attend. After announcing the future meeting date, the zoning commission shall adjourn the current meeting until the date identified.

Section 21.04.B: Letter to Applicant and to Zoning Inspector

Upon the conclusion of the meeting and within five (5) business days from the date of said meeting, the township zoning clerk shall provide a written response to the applicant and the Township Zoning Inspector as follows:

Section 21.04.B.1: Notice to Applicant and Zoning Inspector of Approval or Approval with Conditions

Upon a determination of approval or approval with conditions as outlined in Section 21.04.A.1: Approve or Section 21.04.A.2 Approve With Conditions above, provide written notice that the application (including the buffering and landscape plans) are in compliance with Article 21: Buffering and Landscaping, and a zoning permit may be issued; or,

Section 21.04.B.2: Notice of Denial

Provide written notice of denial that identifies aspects of the application and buffering and landscape plan that are not in compliance with the adopted regulations, the section numbers and standards that need to be complied with, and notice of the applicants right to appeal the boards determination or apply for a variance.

Section 21.04.B.3: Notice of Continuation of Meeting

If the applicant and the Zoning Commission agree to continue the meeting as outlined in Section 21.04.A.4: *Continue the Public Meeting* above, provide written comments that identify aspects of the application and buffering and landscape plan that are not in compliance with the adopted regulations, the section numbers and standards that need to be complied with. Include the date and time of the continued hearing and notice that the amended application (revised plan sheets and/or supporting documentation) needs to be submitted to the Zoning Inspector or in the absence thereof the Zoning Commission Clerk and the date said materials need to be submitted so that they may be presented to the Zoning Commission for consideration.

Section 21.04.C: Continued Public Meeting

Any meeting that is continued per Section 21.04.A.4: *Continue the Public Meeting*, shall be subject to the procedures and requirements as detailed in Section 21.03.D.3: *Zoning Clerk Submission to the Township Zoning Commission* and Section 21.04: *Buffer and Landscape Plan Review* (in its entirety).

Section 21.04.D: Action by Zoning Inspector

The Zoning Inspector may issue a zoning permit as follows:

Section 21.04.D.1: Action Based Upon Zoning Commission Approval

Once the Zoning Inspector receives written documentation from the Zoning Commission stating the application is approved, the Zoning Inspector may issue a zoning permit, and place a copy of the written notice from the Zoning Commission in the permit file.

Section 21.04.D.2: Action Based Upon Zoning Commission Conditional Approval

Once the Zoning Inspector receives written documentation from the Zoning Commission stating that the application is approved with conditions, along with a list of conditions, the zoning inspector shall verify that the conditions have been complied with. Upon verification that the conditions have been complied with, the zoning inspector may issue a zoning permit, and place a copy of the written notice from the Zoning Commission and the verification documentation in the permit file.

Section 21.04.D.2.a: Obtaining Verification

The verification identified above, may vary depending on the condition. This may include but is not limited to a subsequent letter from the Zoning Commission, documentation from the applicant, documentation from the professional designing the plans, or the zoning inspector reviewing the plans to ensure specified elements are included as outlined in the written notice from the Zoning Commission. If any condition from the zoning commission is unclear or disputed, the Zoning Inspector shall require the applicant to obtain a formal review from the Zoning Commission and a written response of approval from the Zoning Commission that the conditions of approval have been complied with.

Section 21.05: Location of Required Buffer(s) and Landscaping

Buffering and/or landscaping may be required in the following locations for the following purposes in addition to the purposes identified in Section 21.00: *Purpose*:

Section 21.05.A: Required Buffers

- Parcel Perimeter Buffer, the purpose of which is to provide a buffer from different and/or incompatible land uses.
- Vehicle Use Area Perimeter Buffer, the purpose of which is to provide a visual barrier of the parking lot and from the headlights of vehicles using the parking lot onto adjoining properties, drive lanes, and roadways. Additionally, it is to visually enhance the parking area.
- Roadway Landscape Buffer, the purpose of which is to provide a visual buffer between the roadway (public or private) and the rear of structures, side of structures, and/or outdoor storage areas.

Section 21.05.B: Required Landscaping

- Interior Landscape for Vehicle Use Areas, the purpose of which is to create visually appealing developments that improve the economic and physical desirability of a community along with protecting the aesthetic appeal, character, and value of surrounding properties.
- Interior Landscaping in the Yard Setbacks, the purpose of which is to create a visually appealing development that improves the economic and physical desirability of a

community along with protecting the aesthetic appeal, character, and value of surrounding properties.

- Service Area and Service Structures Buffer, the purpose of which is to provide a visual barrier of the service area and/or structure from adjoining parcels, development area, drive lanes, and/or roadways (public or private). For the purposes of this section, “Adjoining Development Area” shall mean, any development (see Appendix A: Definitions) of a principal structure and/or use on the same parcel as another principal use/or structure.
- Street Tree, the purpose of which is to create visually appealing developments that improve the economic and physical desirability of a community along with protecting the aesthetic appeal, character, and value of surrounding properties.

Section 21.06: Minimum Buffer and Landscaping Requirements

This section describes the minimum requirements that shall be met in regards to parcel perimeter landscape buffer, vehicle use area perimeter landscape buffer, service area and service structures landscape buffer, roadway landscape buffer, interior landscape for vehicle use areas, and street trees. The following schedule of buffer design standards shall apply as specified in column (C) of the tables within Section 21.06.A: Parcel Perimeter Buffer, Section:

Table 21.06: Schedule of Buffer Design Standards

OPTION	STANDARD
A ¹	Evergreen material planted in an equilateral triangular spacing pattern. The equilateral triangular spacing pattern is required in order to allow the landscape buffer to meet the opacity standards set within the regulations. However, other deciduous and evergreen material may be included to supplement the landscape buffer to create a more organic and visually appealing landscape instead of a rigid lineal landscape. The buffer yard shall be of sufficient size to accommodate all plant material at maturity with a minimum setback of two(2) feet from any property line or road right-of-way (public or private) of all mature plant material.
B ¹	A minimum six(6) foot high solid fence consisting of materials that <i>are authentic or</i> have an authentic appearance <i>of</i> natural materials including wood, stone, or brick. Said fence shall be located on the lot side of the property line and outside any road right-of-way (public or private).
C ¹	A mound with an elevation of six (6) feet in height with a two(2) foot crown and a maximum 3:1 slope. The toe of said mound shall be setback from any property line, or road right-of-way line a minimum of five (5) feet so as not to encroach on adjoining properties, to allow for maintenance and drainage. Additionally, it shall be setback from the inside easement line a minimum of two(2) feet to allow for construction and maintenance. A mound will require a minimum forty-five(45) foot buffer easement.
D ¹	A combination of Option A, B and/or C. Mounds shall meet the slope, crown and setback requirements of Option C, but may be reduced in height if used in conjunction with other materials. The buffer easement shall be proportionate to the area needed for the mature growth of the plant material, and the constructed area of any mound, or fence.

¹Any buffer shall not interfere with any sight-triangle as specified in Section 16.09: *Visibility at Intersections and Access Driveway*.

Section 21.06.A: Parcel Perimeter Buffer

Table 21.06.A (below) identifies the landscaping requirements for the districts within this resolution. To identify the requirement for the appropriate district, identify your district in column (A) and column (B) and then within the same row, follow the requirements in column (C).

Property Perimeter TABLE 21.06.A

	A	B	C
	When the following District :	Adjoins the following District (use) or vice versa:	Buffer Design Standards and Options:
1	C-1, RR, RR-3, R-1, R-2, or R-3 (single-family, one and two family, or multi-family residential)	Manufactured Home Park within an R-3 District or as otherwise permitted by Article 10: <i>Manufactured Home Parks.</i>	One (1) tree every forty (40) feet of lineal boundary, plus a continuous six (6) foot high buffer utilizing Option A, B, C, or D under Table 21.06: Schedule of Buffer Design Standards . Plant material shall be planted in an equilateral triangular spacing pattern in order to achieve the opacity standard. Other deciduous and evergreen material is encouraged to be included to supplement the landscape buffer in order to create a more organic and visually appealing landscape.
2	C-1, RR, RR-3, R-1, R-2, or R-3 (single-family, one and two family, or multi-family residential)	Planned Unit Development (PUD) under Section 14.00	See 1 above.
3	C-1, RR, RR-3, R-1, R-2, or R-3 (single-family, one and two family, or multi-family residential)	NB, GB-1, GB-2 and Mixed Use Office District (MUOD) under Section 14.02.	See 1 (C) above.
4	NB, GB-1, GB-2 and Mixed Use Office District (MUOD) under Section 14.02.	GB-3, M-1 and Planned Industrial Project (PIP) under Section 14.01.	See 1 (C) above.
5	Any zoning district except M-1, and Planned Industrial Project (PIP) under Section 14.01.	Utility sub-station, junk yards, landfills, sewage plants or similar uses	See 5 (D) above. See 1 (C) above

Property Perimeter TABLE 21.06.A – Continued

Property Perimeter TABLE 21.06.A – Continued		
A	B	C
When the following District :	Adjoins the following District (use) or vice versa:	Buffer Design Standards and Options:
6 C-1, RR, RR-3, R-1, R-2, or R-3 (single-family, one and two family, or multi-family residential)	GB-3, M-1 and Planned Industrial Project (PIP) under Section 14.01.	Deciduous trees planted in an equilateral triangular spacing pattern to provide a continuous canopy along the common boundary. The spacing shall be based on the mature growth of the specified deciduous plant material and shall be on the lot side behind the evergreen buffer below. The deciduous tree shall have a minimum 2.5” caliper measured at a height of 4.5’ from the root ball. Additionally, a continuous six (6) foot high buffer utilizing Option A, B, C, or D under Table 21.06: Schedule of Buffer Design Standards. The evergreen plant material shall be planted in an equilateral triangular spacing pattern in order to achieve the opacity standard. Other deciduous and evergreen material is encouraged to be included to supplement the landscape buffer in order to create a more organic and visually appealing landscape.
7 C-1, RR, RR-3, R-1, R-2, or R-3 (single-family, one and two family, or multi-family residential)	A freeway or arterial street	One (1) tree every thirty (30) feet of lineal boundary, plus a continuous a six (6) foot high buffer utilizing Option A, B, C, or D under Table 21.06: Schedule of Buffer Design Standards. The evergreen plant material shall be planted in an equilateral triangular spacing pattern in order to achieve the opacity standard. Other deciduous and evergreen material is encouraged to be included to supplement the landscape buffer in order to create a more organic and visually appealing landscape.
8 Any zoning district except M-1, and Planned Industrial Project (PIP) under Section 14.01.	Railroad (except spur tracks)	See 6 (C) above.

Section 21.06.B: Vehicular Use Area Perimeter Buffer Requirements

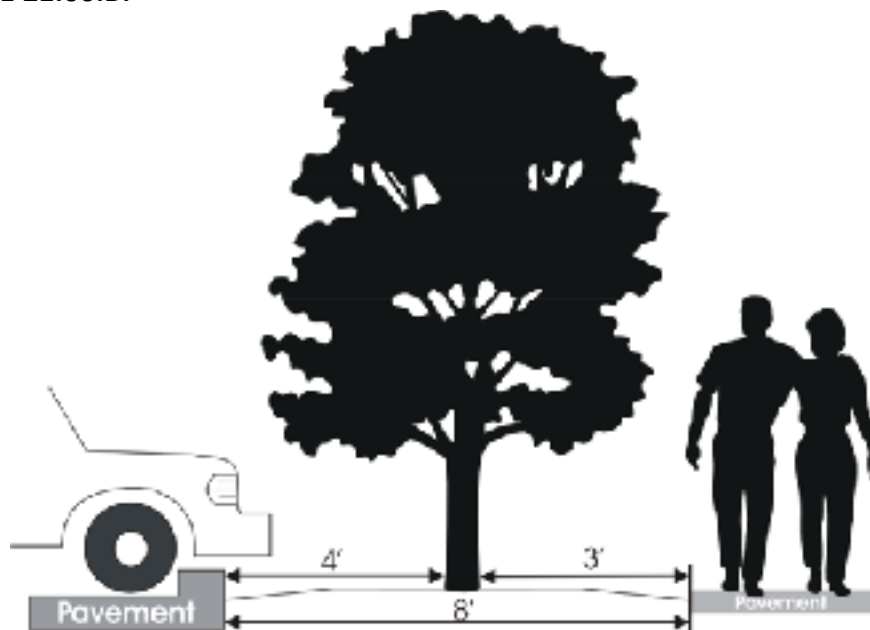
Section 21.06.B.1: Minimum Buffer Standards

All parking lots shall have a three (3) foot high continuous buffer utilizing Option A, B, C, or D under Table 21.06: Schedule of Buffer Design Standards. In addition to the general purposes identified in Section 21.00: Purpose, the purpose of this requirement is to provide a visual barrier of the parking lot to shield the adjoining parcels, roadways (public or private), including service roads from the headlights of vehicles, which may create a nuisance to the adjoining land uses and create a safety hazard to traveling motorist on the adjoining roadway.

Section 21.06.B.2: Minimum Buffer Yard Standards

The minimum buffer yard shall be four (4) feet minimum to all trees and one and one-half feet (1.5) feet to all shrubs or ornamental grasses from the edge of paving where vehicles overhang. Additionally, the minimum buffer yard shall be three (3) feet from any tree to any sidewalk or pedestrian path. See Figure 21.06.B

FIGURE 21.06.B.



Section 21.07: Interior landscape for Vehicular Use Areas

Any open vehicular use area (excluding loading and unloading and storage areas) in an industrial zone or business zone, and containing more than 90,000 square feet of area or 300 or more vehicular parking spaces, shall provide interior landscape in addition to the previously required perimeter landscape. Interior landscape may be peninsular or island types.

Section 21.07.A: Purpose

In addition to the general purposes in Section 21.00: *Purpose*, it is the purpose of this section to break up large areas of impervious surfaces in order to provide shade and heat abatement, and enhance the appearance of the community and retain its rural character.

Section 21.07.B: Landscape Area

For each one hundred (100) square feet or fraction thereof of vehicular use area, a minimum total of five square feet of landscaped area shall be provided.

Section 21.07.B.1: Minimum Area

The minimum landscape area permitted shall be 112 square feet with a minimum inside dimension width of eight (8) feet, and a three (3) feet minimum dimension to all trees from edge of pavement and a four-foot minimum dimension to all trees from edge of pavement where vehicles overhang. The overall width may vary depending on the mature diameter (measured at 4.5 feet from the planted ground elevation) of the species of tree used. The minimum inside dimension width of 8' may need to be increased if the average mature diameter (measured at 4.5 feet from the planted ground elevation) is greater than one (1) foot. For example, if the average mature width of a tree is three (3) feet, then the minimum inside dimension width would be ten (10) feet. (See Figure 21.06.B.)

Section 21.07.B.2: Maximum contiguous area

In order to encourage the required landscaped areas to be properly dispersed throughout, no individual landscape areas shall be larger than 1125 square feet in size. The least dimension of any required area shall be four (4) feet minimum dimension to all trees from the edge of pavement where vehicles overhang (8' x 8' square or 8' diameter). Individual landscape areas larger than above are permitted as long as the additional area is in excess of the required minimum total.

Section 21.07.B.3: Minimum Trees

The following minimums are required based upon total ground coverage of structures and vehicular use areas:

Section 21.07.B.3.a: Number of Trees

A minimum of one tree per 4,000 square feet of ground coverage and a total tree planting equal to two inches in caliber.

Section 21.07.B.3.b: Understory Plantings

Trees shall have a clear trunk of at least five feet above the ground, and the remaining area shall be landscaped with shrubs or ground cover not to exceed two feet in height.

Section 21.07.B.3.c: Vehicular Overhang

Parked vehicles may hang over the interior landscape area no more than two and one-half feet, as long as concrete or other wheel stops are provided to insure no greater overhang of the landscape area.

Section 21.08: Landscape for Services Structures

Any service structure accessory use shall be screened whenever located in any residential zone, commercial zone, or when located on property abutting any residential zone, freeway or arterial street prohibiting driveway access. Structures may be grouped together, however, screening height requirements shall be based upon the tallest of the structures.

Section 21.08.A Location of Screening

A continuous (having one hundred percent [100%] opacity) planting hedge fence or wall of earth (mound of dirt), which would enclose any service structure on all but one side, is required. The average height of the screening material shall be one (1) foot more than the height of the enclosed structure, but shall not be required to exceed ten(10) feet in height. Whenever a service structure is located next to a building wall, perimeter landscape material or vehicular use area landscape material, such walls or screening material may fulfill the screening requirements for that side of the service structure if that wall or screening material is of an average height sufficient to meet the height requirement set out in this section. Whenever service structures are screened by plant material, such material may count towards the fulfillment of required interior or perimeter landscape. No interior landscape shall be required within an area screened for service structures.

Section 21.08.B: Curbs to Protect Screening Material

Whenever screening material is placed around any trash unit or waste collection unit that is emptied or removed mechanically on a regularly occurring basis, a curb to contain the placement of the container shall be provided within the screening material on those sides where there is such material. The curbing shall be at least one foot from the material and shall be designed to prevent possible damage to the screening when the container is moved.

Section 21.09: Interior Landscape for All New Developments

All new developments, regardless of type and all alterations or expansions to existing developments, shall provide interior landscape in addition to the previously required perimeter landscape. Interior landscape shall consist primarily of new tree planting, or the preservation of existing trees or hedges within the development site.

Section 21.09.A: Preservation of Existing Trees

Existing trees shall be preserved as follows:

Section 21.09.A.1: Trees to be Preserved

All trees having trunk diameter of six (6) inches or greater as measured twenty-four (24) inches from ground level shall be preserved, Except as provided in Section 21.09.A.3: Exemptions.

Section 21.09.A.2: Preservation of Wooded Areas

It is encouraged that efforts be made to preserve natural wooded areas. Consideration shall be given to laying out streets, lots, structures and parking areas to avoid unnecessary destruction of heavily wooded areas or outstanding tree specimens. It is further encouraged that, whenever possible, heavily wooded areas be designated as park reserves.

Section 21.09.A.3 Exemptions

Trees that are exempted from Section 21.09.A: Preservation of Existing Trees are as follows:

Section 21.09.A.1: In Right-of-Way or Easement

Trees within public right-of-ways or utility easements or a temporary construction easement or easement of ingress/egress.

Section 21.09.A.2: In Location of Structure

Trees within the ground coverage of proposed structures or within twelve (12) feet of the perimeter of such structure or approved recreational area.

Section 21.09.A.3: In Driveway Locations, Parking, and Service Areas

Trees within the driveway access to parking or service areas, or proposed areas to service a single-family home.

Section 21.09.A.4: Damaged or Diseased

Trees that in the judgment of the township officials that are determined to be damaged, diseased, or over mature, or will interfere with utility lines or are an inappropriate or undesirable species in that specific location.

Section 21.09.A.5: Relocation of Removed Trees

It is encouraged that exempted trees that are healthy and subject to destruction be preserved by relocating and replanting of such trees.

Section 21.09.B: Landscaping in the Yard Setbacks

Trees and landscaping shall be provided in the front, side and rear yard, and within the yards between buildings.

Section 21.09.B.1: Required Plantings in the Yard Setbacks

For all new development, landscaping shall be provided in the yard setbacks as follows in Table 21.09.B.1: *New Development Landscape Requirements*.

Table 21.09.B.1: New Development Landscape Requirements

NEW DEVELOPMENT LANDSCAPE REQUIREMENTS	
<u>Use</u>	<u>Requirements</u>
Two, Three and Multi-Family Residential Uses	There shall be a minimum of one (1) tree planting equal to a 2.5 inch caliper* for every 200 square feet in building ground coverage or fraction thereof.
Business and Community	There shall be a minimum landscaped area(s) equal to 20 square feet for every 1,000 square feet of building ground coverage area or fraction thereof. Such landscape area shall contain trees, planting beds, hedges, fences, walls, earth mounds, benches or other material designed and located in a manner complementary to the overall architecture of the surrounding buildings.
Office – Institutional Uses	There shall be a minimum of one (1) tree planting equal to a 2.5 inch caliper* for every 1,500 square feet of building ground coverage or fraction thereof.
Industrial Uses	There shall be a minimum of one (1) tree planting equal to a 2.5 inch caliper measured for every 2,000 square feet of building ground coverage or fraction thereof.
* All tree plantings shall be equal to a 2.5 inch caliber measured according to American Standard for Nursery Stock.	

Said planting shall be incorporated around and between the buildings at a distance equal to or greater than the mature width of the tree within the yard setbacks for the individual structure(s).

Section 21.09.B.2: Exceptions

No new tree planting shall be required if existing trees and the total mass of trunk sizes of such trees meet or exceed the requirements as set forth in this Article, and providing that such trees are evenly distributed throughout the developed area and not confined either to out-of-the-way dense clusters or to the perimeter of the developed area. The minimum tree size for such tree plantings shall be no less than 1.5 inch in trunk diameter.

Section 21.10: Street Landscape Buffer Requirements

The landscape buffer zone and material required adjacent to any street under this Article shall be provided by the property owner/developer.

Section 21.10.A: When Required

When a development site has lot frontage along multiple road right-of-ways (public or private) and/or along service road(s), and the rear of the structure and rear yard faces a specified roadway, then the following shall apply along the entirety of the lot that fronts said road right-of-way or service road(s) the rear of the structure faces:

Section 21.10.A.1

May be placed on either adjoining lot, or astride the boundary, if both owned and being processed by the same owner; or

Section 21.10.A.2

Shall be placed on the property being developed, when adjoining lots have different owners; or

Section 21.10.A.3

Shall be placed on the property being developed when the adjoining property is already developed.

Section 21.10.B: Landscape at Driveway, and Street Intersections

No landscape buffer shall conflict with intersection or driveway visibility requirements specified in Section 16.09: *Visibility at Intersections and Access Driveway Locations*.

Section 21.11: Street Tree Requirements

The following are street tree planting requirements for all zoning districts:

Section 21.11.A: Requirements

Street trees are required within any planned residential, commercial or industrial district under Article 14: *Planned Unit Developments*; any residential, commercial or industrial development developed as a platted subdivision in accordance with Section 711.10: Platting in the Unincorporated Territory of the Ohio Revised Code (ORC); or a planned development wherein multiple structures and uses are to be established. It shall be required that all sub-dividers or developers plant trees along public streets of their developments in such a manner, type, quantity and location as approved by the appropriate township officials and as defined by the following conditions, and that any undeveloped street or existing street with undeveloped frontage shall conform to these requirements at the time of development. This section shall not apply to single-lot development for a single structure or use, unless it is a redevelopment or infill development within a development as previously identified herein.

Section 21.11.A.1: Preferred Tree List

With the exception of trees listed in Section 21.12.F.4: *Schedule D, Prohibited Street Trees*, those trees listed in Section 21.12.F: *Acceptable Trees Schedule* may be utilized as street trees.

Section 21.11.A.2: Spacing Between Trees

The spacing between trees shall be determined by the mature width of the tree species selected.

Section 21.11.A.3: Spacing of Trees from Intersections, Driveways, Fire Hydrants, and Utility Poles.

The tree location is to be at least 20 feet from street intersections, and 10 feet from driveways, fire hydrants or utility poles.

Section 21.11.A.4: Tree Selection for Plantings Under or Near Overhead Utility Wires

A small tree is to be used when planting under or within 10 lateral feet of overhead utility wires. A small or medium tree is to be used when planting within 10 to 20 lateral feet of overhead utility wires.

Section 21.11.A.5: Guarantee

The developer shall be required to maintain trees for one year after they are planted, and to replace any tree that dies within said one year guarantee period. Upon completion of a tree planting, the landscape contractor shall contact the Township Zoning Inspector for a preliminary inspection. The guarantee period shall begin after approval of the Zoning Inspector. A final inspection shall be made at the end of the guarantee period. All trees not exhibiting a healthy, vigorous growing condition, as determined by the Township Zoning Inspector, shall be promptly replaced at the expense of the developer.

Section 21.11.A.6: Minimum Size

The minimum trunk size measured at six (6) inches above the ground for all street trees shall be no less than 1.5 inches.

Section 21.11.A.7

Tree sizes, in height, are defined as:

Section 21.11.A.7.a

Large tree means any tree species that normally attains a full-grown height in excess of 50 feet.

Section 21.11.A.7.b

Medium tree means any tree species that normally attains a full-grown height between 25 and 50 feet.

Section 21.11.A.7.c

Small tree means any tree species that normally attains a full-grown height of under 25 feet.

Section 21.11.B: Tree Topping

No person shall, as a normal practice, top any tree within the public right-of-way. Topping is defined as the severe cutting back of limbs to stubs larger than three (3) inches in diameter within the tree's crown and/or to such a degree so as to remove the normal canopy and disfigure the tree. Trees severely damaged by storms or other causes, or trees under utility wires or other obstructions where other pruning practices are impractical are hereby exempted from this subsection.

Section 21.11.C: Height of Limbs Over the Sidewalks and Streets

Tree limbs extending over a sidewalk shall be trimmed to such an extent that no portion of the same shall be less than seven (7) feet above sidewalk. Tree limbs extending over streets shall be trimmed to such an extent that no portion of the same shall interfere with normal traffic flow.

Section 21.11.D: Tree Lawn

No person shall by any type of construction reduce the size of the tree lawn without first obtaining permission from the Board of Zoning Appeals.

Section 21.11.E: Violations

A person who removes, damages or causes to be removed a public tree from the tree lawn or other public place shall be required to replace the tree at his/her expense with a tree having the minimum diameter of 2.5 inches caliber size measured according to American Standard for Nursery Stock.

Section 21.12: General Provisions

Section 21.12.A: Planting Specifications

Section 21.12.A.1: Plant Hardiness

The species of plants selected shall be hardy for the particular climate zone in which the development is located and appropriate in terms of function and size.

Section 21.12.A.2: Consideration of Existing Plantings

Existing plants may count toward a required buffer if they meet certain criteria. See Section 21.12.E: *Existing Trees Proposed to Count Toward Required Buffer*.

Section 21.12.A.3: Size May Vary

Unless otherwise specified, the size of evergreens and deciduous trees may vary depending on setting and type of shrub.

Section 21.12.A.4: Planting Standards

All trees, shrubs, and ground covers shall be planted in good condition and according to American Standard for Nursery Stock (latest edition). The individual that creates the plans shall certify on the plan sheets that the planting specification noted on the plans comply with these standards.

Section 21.12.A.5: Size of Buffer Material

Buffering should be significant at the time of planting to provide an immediate effect of visual screening.

Section 21.12.A.6: Opacity Requirement

Unless otherwise specified, the buffer shall be at least 70% opaque during the winter months and 100% opaque during the summer months when the plants reach maturity.

Section 21.12.A.7: Guarantee

Plant material that is used to meet the standards herein, shall be guaranteed to remain alive for at least one (1) year after the time of planting.

Section 21.12.B: Requirement Conflicts

Whenever a portion of a lot falls under two or more of the standards listed within this Article, and it is impossible to meet both standards, the most stringent (greatest number of trees and opacity) requirements shall be enforced.

Section 21.12.C: Landscape and Buffer Conflict

The required landscape buffer zone may be combined with a utility or other easement provided all of the landscape requirements can be provided in addition to, and separate from, any other easement, and the utility does not lie under the edge of the tree canopy at maturity.

Section 21.12.D: Existing Landscape Material

Existing landscape material shall be shown on the required plan, and any material in satisfactory condition may be used to satisfy these requirements in whole or in part when, in the opinion of

the appropriate township zoning official, such material meets the requirements and achieves the objectives of this Article.

Section 21.12.E: Existing Trees Proposed to Count Toward Required Buffer

When permitted above, existing trees may count toward buffer requirements provided that a tree survey is completed and submitted as part of the landscape plans.

Section 21.12.E.1: Tree Survey

All tree surveys shall meet the following minimum standards and be accomplished by a landscape architect licensed in the state of Ohio or similar profession and include the following information:

Section 21.12.E.1.a:

The tree canopy drip line (of the furthest reaching branches) or root zone must be shown on the plans (specify which is being shown).

Section 21.12.E.1.b:

Root zones are calculated by allowing one (1) foot of radius for each inch of the trunk diameter at breast height (dbh)

Section 21.12.E.1.c:

Diameter at breast height (dbh) is the diameter of a tree measured at four and one-half feet (4 ½-feet) above the existing grade at the base of the tree.

Section 21.12.E.1.d:

Species of trees.

Section 21.12.E.1.e:

Current health of the trees.

Section 21.12.E.1.f:

Any pertinent notes on crown and root conditions.

Section 21.12.E.2: Plan Requirements

Trees to be protected must be designated as such on the landscape, erosion & sediment control plans, and any other plans that are deemed appropriate.

Section 21.12.E.3: Temporary Tree Protection

Temporary tree protection must be provided in the form of orange, 40 inch high plastic (polyethylene) web fencing secured to metal posts placed 6 feet on center and driven 18 inches, at a minimum. Temporary tree protection fencing shall be located at the tree canopy drip line(s), at a minimum. Provide a detail of fencing installation for tree protection with details for erosion & sediment control measures. Tree protection fencing shall be installed at the same time as erosion & sediment control measures.

Section 21.12.E.4: Criteria for Selecting Existing Plant Material to Protect

Criteria used in selecting existing plant material that will be protected shall include but not be limited to the following:

Section 21.12.E.4.a:

Life expectancy and present age.

Section 21.12.E.4.b:

Health and disease susceptibility.

Section 21.12.E.4.c:

Cleanliness (whether or not messy fruit, bark, twigs, foul odor, or thorns are present).

Section 21.12.E.4.d:

Aesthetic value (overall appearance and attractiveness of the specimen).

Section 21.12.E.4.e:

Adaptability to proposed development.

Section 21.12.E.4.f:

Survival needs of the tree.

Section 21.12.E.4.g:

Relationship to other trees (existing or proposed).

Section 21.12.E.5

No construction activity, including placement of underground or aboveground utilities may take place within areas designated for tree protection.

Section 21.12.E.6

Existing trees that are protected from construction must be guaranteed to remain alive for at least one (1) year after completion of construction. A warranty specifying the life expectancy of protected trees must be included on the plan set.

Section 21.12.F: ACCEPTABLE TREE SCHEDULE

The following tree schedule was obtained from The Regional Urban Forester with the Ohio Department of National Resources - Ohio Division of Forestry. Trees listed below are generally acceptable for planting throughout a site. Alternatives to those listed below may be acceptable pending recommendation by a Landscape Architect licensed in the State of Ohio or similar professional. Please note that these are generalized summaries, sizes and descriptions may vary depending on site placement and conditions. Section 21.12.F.1: Schedule A: SMALL TREES – Mature height under 30 feet, suitable under utility wires

Adams Crabapple – Malus ‘Adams’

Height: 25’; habit - dense rounded; fall color – orange-red; fruit – red, persistent.

Adirondack Crabapple – Malus ‘Adirondack’

Height: 10’; habit – V shaped upright; fruit – orange-red persistent; flowers – red buds, white flowers with red tinge.

Centurion Crabapple – Malus ‘Centurion’

Height: 20’ – 25’; fruit – cherry-red ½” ; habit - upright; fall foliage: green; flowers – rose-red.

Excalibur Crabapple – Malus ‘Excalibur’

Height: 8’; fruit – tiny golden yellow; habit – upright dwarf; flowers – red buds open to white.

Harvest Gold Crabapple – Malus ‘Harvest Gold’

Height: 20’ - 25’; fruit – golden, ½” ; habit – upright; flowers - white; fruit persists into spring.

Madonna Crabapple – Malus ‘Madonna’

Height: 16’ – 20’; fruit – red; habit – compact, upright; flowers – white, double.

Prairifire Crabapple – Malus ‘Prairifire’

Height: 20’; habit – upright spreading, foliage – reddish-green and yellow in the fall; flowers – coral red; fruit – dark red.

Red Jewel Crabapple – Malus ‘Red Jewel’

Height: 15’; habit- mounded spreading form; fruit – cherry red ½” persist to April, foliage – excellent dark green; flowers – white.

Corneliancherry Dogwood – Cornus mas

Height: 20’ - 30’; habit- rounded; flowers- yellow, March.

Thornless Cockspur Hawthorn – Crataegus crusgalli

Height: 15’– 20’; habit – globose , dense branches; flowers – white in clusters; fruit – ½” red persistent, used for wildlife; foliage gray green, purple/red in fall.

Winter King Green Hawthorn - Crataegus viridis ‘Winter King’

Height: 20' - 25'; habit – rounded, fall color – purple to red; flowers – white cluster; fruit – red and persisting.

Lavalle Hawthorn – *Crataegus x lavallei*

Height: 15' - 30', habit – oval to round; flowers – white clusters; fall color – bronzy to coppery red; fruit – red that persist into the winter.

Ohio Pioneer Dotted Hawthorn – *Crataegus punctata* var. *inermis* 'Ohio Pioneer'

Height: 20' - 25'; fruit; dark brick-red; habit - rounded; fall foliage – grayish/green; flowers - white clusters; thornless.

Vaughn Hawthorn – *Crataegus phaenopyrum* x *Crataegus crusgalli* 'Vaughn'

Height: 15' - 20'; fruit – glossy, orange-red, 3/8"; habit – rounded; fall foliage – grayish-green; flowers – white.

Washington Hawthorn – *Crataegus phaenopyrum*

Height: 25' - 30'; fruit – bright glossy red; shape – oval rounded; fall foliage – orange to scarlet to purplish, thorns.

Ivory Silk Tree Lilac - *Syringa reticulata* 'Ivory Silk'

Height: 20' – 30'; shape – rounded; fruit – clusters of capsules; fall foliage – green; flowers – 6-10" white panicles; attractive flowers in early July, flowers at a young age.

Amur Maackia – *Maackia amurensis*

Height: 20' - 30', shape- rounded, fruit – pod, flower – 4-6" white racemes June – July.

Amur Maple - *Acer ginnala*

Height: 15' – 20'; shape - globose to ovate; foliage – green to red/orange in fall.

Paperbark Maple – *Acer griseum*

Height: 20' - 30'; shape – upright oval to rounded; fall color – russet red to red; exfoliating bark makes this tree interesting.

Tartarian Maple – *Acer tataricum*

Height: 15' - 20' sometimes 30'; shape – rounded; fall color – yellow, red to reddish brown.

Serviceberry species – *Amelanchier* species

Height: 25' – 30'; fruit – red, birds love them; shape – oval, upright; foliage – orange/red in fall; flowers – white clusters.

Red Bud – *Cercis Canadensis*

Height: 20' – 25'; flowers – dark pink, early before foliage, fruit – small pod; shape - irregular; fall color – sometimes yellow.

'Alba' white flower selection. Naturally grows as an understory tree, site carefully.

Blackhaw Viburnum – *Viburnum prunifolium*

Height: 12' - 15'; shape – rounded; flowers – white clusters in May; fruit – blueish black and eatable.

Nannyberry Viburnum – *Viburnum lentago*

Height: 18' possibly 30'; shape – upright, open; flowers – white clusters in May; fruit – blueish black, winter food for birds

Section 21.12.F.2: Schedule B: MEDIUM TREES – Mature size being 30 to 60 feet

Black Alder – *Alnus glutinosa*

Height – 40' - 60'; shape – pyramidal when young then irregular; fruit – woody strobile; adaptable, does well in wet or dry sites, full sun or partial shade, nitrogen fixer.

Autumnalis Higan Cherry – *Prunus subhirtella* variety *Autumnalis*

Height: 20' - 40'; flowers – semi-double pink; habit – oval upright; Higan cherry are the most cold, heat and stress tolerant of the cherry group.

Jackii Crabapple – *Malus 'Jackii'*

Height: 30' - 40'; fruit – maroon ½"; shape - upright and rounded; foliage – glossy green, yellow in the fall.

Lacebark or Chinese Elm - *Ulmus parvifolia*

Height: 50'; fruit – whitish, winged ¼"; shape – rounded; fall foliage – yellow to wine.

Goldenraintree – *Koelreutaria paniculata*

Height: 25' - 40'; shape - globose; flower – yellow June-July; foliage – blue/green leaflets, yellow in fall; fruit – bladder like papery green capsules turning brown.

American Hornbeam – *Ostrya virginiana*

Height: 30' - 40'; shape conical to globose with age; foliage – green, yellow in fall; flowers – catkins; fruit nutlets in bunches, Prefers some protection, understory tree.

European Hornbeam – *Carpinus betulus*

Height: 35' - 40'; shape – conical becoming ovate, wide spreading; foliage – green-yellow in fall; flowers – catkins with bracts; fruit – leafy cluster with nutlets.

Upright European Hornbeam - *Carpinus betulus 'Fastigiata'*

Height: 30' – 40'; shape – upright oval dense; fall color – yellowish. Grown for its dense upright habit.

Red Horsechestnut – *Aesculus x carnea*

Height- 30' - 40'; shape – round to broad-rounded; flowers- rose red 6-8" panicles. 'Briotii' – flowers deeper red and larger.

Crimean Linden – *Tilia x euchlora*

Height – 40' - 60' and half that in spread; fall color – possibly yellow-green.

Legend American Linden – *Tilia americana 'Wendell'*

Height: 50'; shape – broadly conical; foliage – dark green; flowers – pale yellow, attracts bees; fruit – ½" nutlets.

Littleleaf Linden – *Tilia cordata*

Height: 45' – 65'; fruit – tan globes ¼"; shape – compact, pyramid; 'Corinthian', 'Greenspire', 'Glenleven'- cultivars.

Hedge Maple – *Acer campestre*

Height – 25' - 45'; shape – rounded; fall color – yellow; can tolerate alkaline soils. 'Queen Elizabeth'-cultivar

Celebration Maple – *Acer x freemanii* 'Celebration'

Height: 45'; fruit – seedless; shape – upright, oval; fall foliage - orange-red; flowers – greenish-yellow.

Norwegian Sunset Maple – *Acer truncatum* x *Acer platanoides* 'Norwegian Sunset'

Height; 35' – 45'; fruit – winged, 1 ½"; shape – upright oval; fall foliage – orange-red; flowers - greenish-yellow.

Pacific Sunset Maple – *Acer truncatum* x *Acer platanoides* 'Pacific Sunset'

Height: 30'- 40'; fruit – winged, 1 ½"; shape – upright, rounded; fall foliage – red; flowers – greenish yellow.

Sawtooth Oak – *Quercus acutissima*

Height: 40'- 50'; fruit – acorn; shape – rounded.

Hardy Rubber Tree – *Eucommia ulmoides*

Height: 40' – 60'; rounded to broad spreading; foliage – green-yellow/green in fall; flower dioecious - not showy; fruit – 1 ½" capsule; lustrous dark green foliage, slow grower.

Section 21.12.F.3: Schedule C: LARGE TREES – Mature size being over 60 feet

Baldcypress – *Taxodium distichum*

Height: 50' - 70'; habit – pyramidal; foliage – yellow-green in the spring, linear lanceolate, orange to pink to soft brown in the fall; a deciduous conifer that adapts well to wet or dry sites, landscape tree mostly, but also used as street trees.

River Birch - *Betula nigra*

Height: 40'- 70', habit – oval maturing to rounded; fall color – yellow and has handsome exfoliating bark.

Kentucky Coffeetree – *Gymnocladus dioicus*

Height: 55'– 75'; foliage – blue-green leaflets, yellow in fall; flowers – green or yellow-white clusters; fruit – 4" to 10" reddish brown pods on females.

American Elms - Improved - *Ulmus americana*: 'Valley Forge', 'Princeton', 'New Harmony'
Height: 60'- 80', medium to fast growing; shows tolerance to Dutch Elm disease.

Ginkgo (male only) - *Ginkgo biloba*

Height: 50' – 80'; shape – irregular; foliage – fan shaped yellow in fall; fruit – none on males; *wide* unless upright selection is chosen distinctive and historical interest. Male cultivars; 'Autumn Gold', 'Fairmont', 'Lakeview', 'Mayfield', 'Palo Alto', 'Princeton Sentry', 'Sinclair'

Honeylocust species (Thornless only) - *Gleditsia triacanthos* var. *inermis*

height: 40' – 70'; shape – ovate; foliage – green/yellow in fall; flowers – inconspicuous; fruit – long brown pods; lacy appearance, casts light shade easy to clean up in fall.

Horsechestnut – *Aesculus hippocastanum*

Height: 50'-75'+; shape – upright oval to rounded; flowers- yellowish 5-12" terminal panicles; foliage – early to leaf out, yellowish brown in fall; fruit – spiny dehiscent.

Silver Linden - *Tilia tomentosa*

Height: 50' – 70'; shape – conical to ovate; foliage – green with silver underside, yellow in the fall; flowers – yellowish-white, fragrant; fruit - 1/3" nutlet; attractive and tolerates heat and drought better than most lindens. 'Sterling' – cultivar

Cucumbertree Magnolia - *Magnolia acuminata*

Height: 50'- 80'; shape- broad rounded; flower- perfect, greenish yellow- May; native to Ohio.

Black Maple – *Acer nigrum*

Height: 60' - 75'; shape – ovate; fall color - yellow; flowers – yellow/green before leaves appear; fruit – 1" samara.

Sugar Maple species – *Acer saccharum*

Height: 60'- 75'+; fruit – winged, 1-1 3/4"; shape – oval to rounded; fall foliage – orange, red; flowers – yellow green. 'Commemoration', 'Green Mountain' – cultivars.

Bur Oak – *Quercus macrocarpa*

Height: 70' – 90'; shape – ovate; foliage - 5-8" fiddle shape rounded lobes, yellow brown in fall; flowers – inconspicuous; fruit acorns; durable wide range of soils, massive, more tolerant of city conditions than most Oaks.

Chinkapin Oak – *Quercus muehlenbergii*

Height: 50' - 70'+,; shape – open rounded crown, wide spreading with age, fall color- yellow to orangish brown; will grow in alkaline soils.

English Oak – *Quercus robur*

Height: 60' - 80'; shape ovate to globose; foliage 3- 5" lobes, brown in fall; flowers – inconspicuous; tolerant of drought and resistant to some limited root space, upright forms also available. 'Skymaster' – cultivar - height: 50' – 60'; shape – pyramidal; fall foliage – green.

Northern Red Oak – *Quercus rubra*

Height: 60' – 80'; fruit – acorn; shape – ovate, open; fall foliage – bright reddish, golden brown; flowers – inconspicuous.

Pin Oak – *Quercus palustris*

Height: 55' - 75'; shape – conical to ovate; foliage – 3 –6' lobes, bronze in fall; flowers – inconspicuous; fruit – acorns.

Scarlet Oak – *Quercus coccinea*

Height: 70' - 75' by 40' - 50' in width, fall color – scarlet to russet red. May develop chlorosis problems in certain sites.

Shingle Oak – *Quercus imbricaria*

Height: 40' – 60'; shape – conical to globose; foliage - 3' – 6" laurel like leaves, green, yellow/brown to russet red in fall; fruit acorns; attractive and tolerant to city conditions, leaves persist into winter and can be used for screening.

Shumard Oak – *Quercus shumardi*

Height: 60' – 80'; fruit – acorn; shape – broad, rounded; fall foliage – reddish-brown; flowers – inconspicuous.

Swamp White Oak - *Quercus bicolor*

Height: 60' – 80'; shape – ovate; foliage - 4" – 8" lobes, yellow brown in fall; flowers – inconspicuous.

Japanese Pagodatree – *Sophora japonica*

Height: 50' - 75'; shape – upright spreading; flowers – creamy white panicles July- August, fruit – pod, fall color – occasional yellow.

London Planetree – *Platanus x acerifolia*

Height: 70' - 100'; shape – pyramidal in youth, open wide spreading with age; bark – olive green to creamy, exfoliating.

Dawn Redwood – *Metasequoia glyptostroboides*

Height: 65' - 100'; shape - conical; foliage – deciduous needles, yellow to orange/brown in fall; flowers – inconspicuous; fruit – 1" pendulous cones.

Sweetgum – *Liquidambar styraciflua*

Height: 60' - 75'; fruit – horned balls, 1-1 ½"; shape - pyramidal; fall foliage – green, yellow, scarlet and purple; star shaped leaves, best if planted in the spring.

Tuliptree - *Liriodendron tulipifera*

Height: 70' - 90', shape – oval-rounded; foliage- golden yellow to yellow in fall; flowers- tulip like- greenish yellow petal with orangish interior- beautiful flower.

Black Tupelo or Black Gum – *Nyssa sylvatica*

Height: 40' – 70'; shape conical; foliage – glossy dark green, yellow/orange and scarlet in fall; flowers – inconspicuous; fruit – ½" blue, eaten by birds and mammals.

Section 21.12.F.4: Schedule D: Prohibited Street Trees

<u>Common Name</u>	<u>Scientific Name</u>
Box Elder	<i>Acer regundo</i>
Silver Maple	<i>Acer saccharinum</i>
Horsechestnut	<i>Aesculus hippocastanum</i>
Tree of Heaven	<i>Ailanthus altissima</i>
Shadblow Serviceberry	<i>Amelchier canadensis</i>
Sweet Birch	<i>Betula lenta</i>
Paper Birch	<i>Betula paperifera</i>
Northern Catalpa	<i>Catalpa speciose</i>
Russian Olive	<i>Elaeagnus angustifolia</i>
Cottonwood (Alder Buckthorn)	<i>Frangula almus</i>
White Ash	<i>Fraxinus americana</i>
European Ash	<i>Fraxinus excelsior</i>
Black Ash	<i>Fraxinus nigra</i>
Green Ash	<i>Fraxinus pennsylvanica</i>
Blue Ash	<i>Fraxinus quadrangulata</i>
Ginkgo (female only)	<i>Ginkgo biloba</i>
Kentucky Coffeetree	<i>Gymnocladus dioicus</i>
Common Walnut	<i>Juglans regia</i>
Black Walnut	<i>Juglans nigra</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Osage Orange	<i>Maclura pomifera</i>
White Mulberry	<i>Morus alba</i>
Black Mulberry	<i>Morus nigra</i>
Ironwood	<i>Ostrya virginiana</i>
London Planetree	<i>Platanus x acerifolia</i>
White Poplar	<i>Populas alba</i>
Black Poplar	<i>Populas nigra</i>
Purpleleaf Plum	<i>Prunus cerasifera</i>
Black Cherry	<i>Prunus serotina</i>
Callery Pear	<i>Pyrus calleryana</i>
Burr Oak	<i>Quercus macrocarpa</i>
Black Locust	<i>Robinia pseudoacacia</i>
Willow	<i>Salix alba</i>
Moline American Elm	<i>Ulmus americana</i>
Chinese Elm	<i>Ulmus parvifolia</i>
Siberian Elm	<i>Ulmus pumila</i>

Appendix A: Definitions to be added:

Development:

Any building, construction, renovation, mining, extraction, dredging, filling, excavation, or drilling activity or operation; any material change in the use of any structure or in the land itself; the division of land into parcels; any change in the intensity or use of land, such as an increase in the number of dwelling units in a structure or a change to a commercial or industrial use from a less intensive use; any activity that alters a river, stream, pond, woodland, wetland, endangered species habitat, aquifer, or other resource area.

Opaque:

Unable to see through; not transparent.

Infill Development:

Development of vacant, skipped-over parcels of land in otherwise built-up areas. May also include the redevelopment of a parcel with existing structures that is being developed as a new or different land use, within an area that is otherwise built up with the proposed use. For example a residential area that is transforming to commercial use, wherein on either side of a residential property a commercial use has been established. The infill development is the residential parcel between the two (2) commercial developments that is now being considered for development as a commercial use.