302. ZONING CODE: REQUIREMENTS AND PERFORMANCE STANDARDS

302.010. <u>LOT REQUIREMENTS</u>. All lots created after the date of enactment of this ordinance must conform to the following dimensions, utilizing only that land above the ordinary high water level of any lake, pond, or wetland.

1. Minimum lot size per dwelling unit:

Lots abutting lake or wetland: 15,000 sq. ft.

All other lots 12,000 sq. ft.

2. Minimum lot width at front building line and at the ordinary high water level of any lake or wetland:

Lots containing two dwelling units: 135 ft.

All other lots: 80 ft.

302.015. <u>UNDERSIZED LOTS</u>. Any lot of record as of January 1, 1975, which remains in its then-existing dimensions and which does not meet the requirements of this Code may nevertheless be utilized for single-family detached dwelling purposes provided the requirements of 302.010 are at least 60% of those as required.

"AMENDED BY ORDINANCE 2019-03-02; JUNE 11, 2019."

302.020. STRUCTURE LOCATION REQUIREMENTS

1. <u>GENERAL REQUIREMENTS</u>. All structures must be located so that minimum setback requirements are met or exceeded. All measurements (in feet) as set forth below shall be determined by measuring from the foundation of the appropriate structure perpendicular to the appropriate lot line.

Exceptions: Front, back, side street and other lot line setback requirements shall not apply to chimneys, flues, belt courses, sills, pilasters, lintels, ornamental features, cornices, eaves, gutters, and the like, provided they do not project more than two (2) feet into a required yard setback.

2. MINIMUM SETBACK REQUIREMENTS:

TYPE OF STRUCTURE

Lot line or Land Boundary	Fences and Landscaping Barriers	Driveways & Walkways	All Other Structures
Municipal Street and County Road Front, Back, and Side Lot Line	10 ft.	0	30 ft.
Municipal street or County Road Front, Back, And Side Lot Line for Non address side of Corner lot	10 ft.	0	25 ft.
Corner lot	10 11.	U	23 II.
Ordinary High Water Level of Lost Lake	75 ft.	75 ft.	75 ft.
Ordinary High Water Level of White Bear Lake, Hall's Marsh,			
and other wetlands	50 ft.	50 ft.	50 ft.
All Other Lot Lines	0 ft.	1 ft.	10 ft.

The ordinary high water levels of three water bodies have been established to be the following:

ORDINARY HIGH WATER LEVELS (Feet Above Mean Sea Level)

DNR ID #82-167	White Bear Lake	924.7 (NGVD, 1929)
DNR ID #82-134	Lost Lake	925.6 (NGVD, 1929)
DNR ID #82-480W	Hall's Marsh	924.7 (NGVD, 1929)

[&]quot;AMENDED BY ORDINANCE 2023-09-02 OCTOBER 10, 2023"

- 3. <u>ACCESSORY STRUCTURES</u>. No accessory building or structure, unless an integral part of the principal structure shall be erected, altered, or moved to, within five (5) feet of the principal structure except fences, driveways, walkways, and decks which may be as close as actually abutting the principal structure.
- 4. <u>SETBACK REQUIREMENTS EXCEPTIONS</u>.

- a. <u>Dock and Pier Setbacks</u>: Setback requirements from the ordinary high water levels shall not apply to piers and docks. Locations of piers and docks shall be controlled by applicable state and local regulations.
- b. <u>Retaining Wall Setbacks</u>: Front, back, side street and other lot line setback requirements shall not apply to retaining walls except that the ordinary high water level setback requirements shall apply to retaining walls.
- c. Nominal Structures: Front, back, side street and other lot line setback requirements shall not apply to nominal structures such as small arbors, moveable yard furniture, moveable docks, storage boxes, dog houses, mail boxes, library small boxes, lock boxes, flagpoles, lawn ornaments and other similar items, which shall be exempt from setback regulations, but not including decks, platforms, or shelters such as pergolas.

- 5. STRUCTURES IN WETLANDS. No structures are allowed within any wetlands.
- "AMENDED BY ORDINANCE 1997-2; AUGUST 12, 1997."

302.030. <u>HIGH WATER ELEVATIONS</u>. All buildings shall be located such that the lowest floor surface is at a level at least three (3) feet in elevation above the highest known water level of any lake, pond, or wetland adjoining the lot. For three water bodies the high known water levels are:

HIGHEST KNOWN WATER LEVELS (Feet Above Mean Sea Level)

DNR ID #82-167	White Bear Lake	926.7 (NGVD, 1929)
DNR ID #82-134	Lost Lake	927.0 (NGVD, 1929)
DNR ID #82-480W	Hall's Marsh	926.7 (NGVD, 1929)

302.040. STRUCTURE REQUIREMENTS.

- 1. Each dwelling unit must have a floor area of at least 900 square feet.
- 2. The maximum square footage of a storage shed is 144 square feet. No person shall place automobiles, vans, or trucks in a storage shed.

302.045 STRUCTURAL HEIGHT RESTRICTIONS

[&]quot;AMENDED BY ORDINANCE 2013-08-01; AUGUST 13, 2013."

[&]quot;AMENDED BY ORDINANCE 2021-01-01; FEBRUARY 9, 2021"

[&]quot;AMENDED BY ORDINANCE 2003-1; FEBRUARY 12, 2003."

- 1. The height of a structure shall not exceed the maximum structure height for its type in 302.045(2).
- 2. STRUCTURAL HEIGHT LIMITATION: The maximum height of a structure as calculated by Method A, B or C (see below) is as follows:

Structure type	Maximum Structur	<u>e Height</u>
Principal Structure/attached garage except	for flat roofs	30 feet
Principal Structure/attached garage for flat	roofs	32.5 feet
Detached garage		18 feet
Detached storage shed		12 feet

[&]quot;AMENDED JUNE 14, 2016"

METHOD A: (Applicable to principal structures and attached garages.) For flat and shed roofs, the height of a structure is the vertical distance measured between the average elevation of the grade plane and the highest point of the roof surface. For mansard roofs, the height of a structure is the vertical distance between the average elevation of the grade plane and the break line. For gable, gambrel and hip roofs, the height of a structure is the vertical distance between the eaves and the average elevation of the grade plane, plus 70% of the vertical distance between the eaves and the structure's highest roof ridge. For gable, gambrel and hip roofs with uneven eaves, the average of the heights of that roof's eaves is used to determine vertical distance. The grade plane shall be calculated based on the method shown in Exhibit A below. The height for gable, gambrel and hip roofs shall be calculated as shown in Exhibit B below. Elevation points at the ground level shall be evenly distributed along each façade.

METHOD B: (Applicable to detached 3-dimensional structures, e.g. detached garages and storage sheds): The height of a structure is the difference between the elevation of the highest point of the structure and the average elevation of the grade plane. The grade plane shall be calculated based on the method shown in Exhibit A below. Elevation points at the ground level shall be evenly distributed along each façade.

METHOD C: (Applicable to structures which are mainly 1- or 2-dimensional, e.g. towers and walls.) The height of a structure is the difference in elevation between any point on the structure and the ground directly below that point.

[&]quot;AMENDED DECEMBER 13, 2016"

[&]quot;AMENDED BY ORDINANCE 2023-07-01 NOVEMBER 14, 2023"

[&]quot;AMENDED JUNE 14, 2016"

[&]quot;AMENDED BY ORDINANCE 2023-07-01 NOVEMBER 14, 2023"

3. Grading/Fill Limitation

The grade of the property shall not be changed to comply with height restrictions.

- "AMENDED JUNE 14, 2016"
- "AMENDED BY ORDINANCE 2023-07-01 NOVEMBER 14, 2023"

4. Tallest Point Limitation

Regardless of the structure height limitations for principal structures specified in section 302.045 subsection 2 above, the vertical distance from the lowest level of where grade meets a structure to tallest point of that structure shall not exceed 35 feet. Also, the elevation of the tallest point of an attached garage shall not exceed the elevation of the tallest point of the principal structure.

5. Exceptions.

The maximum structure height and tallest point limitations established herein shall not apply to chimneys and flues, provided the footprint or horizontal area of the chimney or flue does not exceed 16 square feet and the top of the chimney or flue and does not extend more than three feet above the tallest point of the roof surface.

Exhibit A:

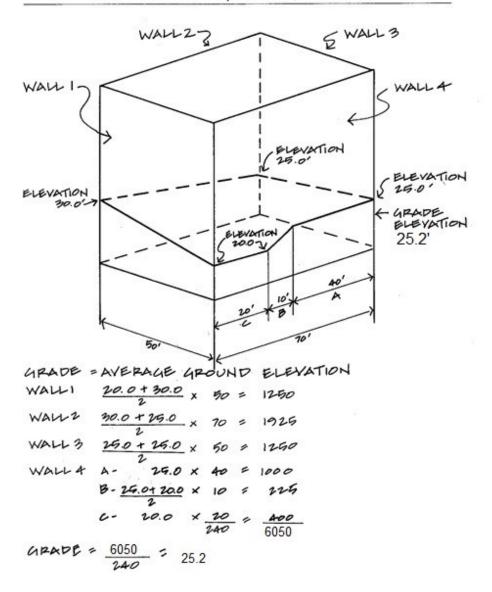
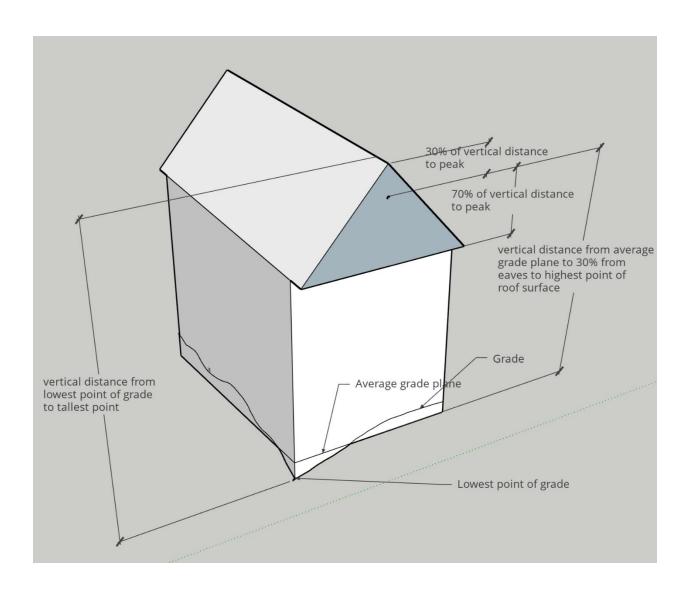


Exhibit B:



[&]quot;AMENDED BY ORDINANCE 2000-1; FEBRUARY 8, 2000"

[&]quot;AMENDED BY ORDINANCE 2003-1; FEBRUARY 12, 2003"

[&]quot;AMENDED BY ORDINANCE: JUNE 14, 2016."

[&]quot;AMENDED BY ORDINANCE: DECEMBER 13, 2016."

[&]quot;AMENDED BY ORDINANCE 2019-12-01; DECEMBER 10, 2019."

[&]quot;AMENDED BY ORDINANCE 2023-07-01 NOVEMBER 14, 2023"

302.050 IMPERVIOUS SURFACES AND LOT COVERAGE

- 1. Intent. High levels of impervious surface coverage on lots create excessive stormwater runoff, destroys animal habitat and reduces the natural character of the land. For these reasons, the Minnesota Department of Natural Resources (DNR) requires Cities with shoreland to regulate impervious surface. Stormwater runoff from properties pollutes public waters, erodes land, destroys natural vegetation and can create nuisances to other properties. In addition, the City of Birchwood Village has limited stormwater management facilities throughout the City. As a result, to reduce the unwanted harmful effects of stormwater, it is the policy of the City of Birchwood Village that each property within the City manage its own stormwater to limit runoff into streets, waterways, and neighboring properties. As one way of limiting the stormwater runoff from each property, the City seeks to reduce the impervious surface of properties in the City. Minimizing impervious surface causes more stormwater to be absorbed into the soil and less to flow off the property. This reduces erosion, pollution of public waters and damage to other properties within the City from stormwater.
- 2. **Definitions.** The following definitions are used in this section:
 - a. Impervious Surface is defined as a ground surface covered or compacted with material so as to substantially retard the entry of water into the soil, and to cause water to remain on the surface or to run off the surface in greater quantities or at an increased rate of flow than would occur if there was a natural soil surface. Impervious surfaces shall include improvements utilizing concrete, asphalt, gravel, or other non-porous materials. Examples of impervious surfaces include, but are not limited to, roads, driveways, parking areas, swimming pools, sidewalks, patios, rooftops, and covered decks. Impervious surfaces may also result from compacting unpaved or ungraveled driveways and parking areas. For purposes of this section, pervious pavement systems are not considered impervious surfaces. Open decks and walkways with open joints at least 1/4 inch wide per 8 inch wide board, and areas beneath overhangs less than 2 feet wide, if bare or vegetated soil is beneath the decks or walkways or overhangs is not considered impervious surfaces. Further, any surface approved by the City Engineer using applicable industry standards to be given credit as a "pervious surface" shall be calculated as the area of the surface, times the pervious fraction of the surface.
 - b. **Impervious Surface Coverage** is defined as the percentage of a lot covered by impervious surfaces.
 - c. **Retention Volume** is defined as the volume of 1.1 inches of stormwater from the post-construction impervious surfaces. For example, if the lot is 15,000 square feet and the post construction impervious surface coverage is 30%, the Retention Volume would be 30% of 15,000 or 4,500 sq feet * 1.1 inches or 412.5 cubic feet of water that would need to be infiltrated within 48 hours or less.
 - **d. Shore Impact Zone** is the land located between the ordinary high water level of a public water and a line parallel to it at a setback of 50 percent of the required

- structure setback. The required structure setback from the OHWL in the City of Birchwood Village is 50 feet, and the Shore Impact Zone is 25 feet.
- e. Stormwater management structures and best management practices include any surface water management system or practice that is designed, constructed, or implemented to control stormwater by collecting, conveying, storing, absorbing, inhibiting, treating, using, infiltrating, or reusing water. Example stormwater management structures include rain gardens, infiltration basins, and bioswales.
- 3. **Impervious Surface Limitation**. Impervious Surface Coverage shall not exceed twenty-five (25) percent of the lot area unless the provisions of either 302.050(4) or 302.050(5) are met.
- 4. Impervious Surface Coverage Permit. Projects that result in impervious surface coverage that exceeds twenty-five (25) percent but does not exceed thirty (30) percent shall be permitted if the property owner complies with, and demonstrates compliance with, the requirements of Section 302.050(6) to the satisfaction of the City Planner. Property Owners who are dissatisfied with the decision of the City Planner may seek a review of the decision in accordance with the requirements and procedures of section 310.
 - a. Property owners unable or unwilling to comply with 302.050(6) to the satisfaction of the City Planner are not entitled to a permit under this section, but instead may seek a variance according to subsection 302.050(5).
- 5. Variance. Projects that result in impervious surface coverage that exceeds thirty (30) percent, or those projects that result in impervious surface coverage that exceeds twenty-five (25) percent but does not meet the requirements of 302.050(6) may be permitted if the property owner obtains a variance. To apply for a variance, the property owner shall comply with, and demonstrate compliance with, the requirements of subsection 302.050(6), or shall explain how and why the property owner is unable or unwilling to comply with subsection 302.050(6). In addition to the requirements of subsection 302.050(6), the property owner must follow the procedures and meet the standards defined in Section 304 for obtaining a variance, including demonstrating to the satisfaction of the City Council that a practical difficulty exists.
 - a. Property owner unable to meet the requirements of 302.050(6). Any property owner unable or unwilling to meet the requirements of 302.050(6) may still apply for a variance and have the variance application heard according to section 304. In this case, property owner shall enumerate which requirements of section 302.050(6) the property owner does not comply with and explain why the property owner does not comply with each requirement. Additionally, the City Planner shall note in the City Planner's report that the property owner is unable or unwilling to comply with 302.050(6) and shall enumerate the reasons (if known) that the property owner is unable or unwilling to comply with 302.050(6). Property owners are strongly encouraged to comply with 302.050(6).
- 6. **Requirements.** The following are requirements for applying for a variance from the impervious surface coverage requirements, or for obtaining a permit under 302.050(4).

- a. **Stormwater Management Plan.** The property owner shall provide a stormwater management plan that:
 - i. Documents the proposed development including all impervious surfaces and direction of runoff.
 - ii. Includes calculations showing the Retention Volume.
 - iii. Documents proposed structures and/or best management practices that infiltrate the Retention Volume within a forty-eight (48) hour period or less and meet the requirements of 302.050(7).
 - iv. For variances, provides results from application of the most recent version of the Minnesota MIDS (Minimum Impact Design Standards) Calculator (available on the Minnesota Pollution Control Agency's website), the U.S. Environmental Protection Agency's National Stormwater Calculator, HydroCAD, or another similar stormwater design calculator approved by the City Planner that show that the proposed stormwater management practices meet the required infiltration standard.
 - v. For variances, documents that the rate and volume of stormwater runoff from the property from a hundred year storm is not increased after the proposed project has been completed.
- b. **Implementation and Maintenance Agreement.** The property owner shall include an implementation and maintenance agreement signed by the property owner or owners for the approved stormwater management practices and structures and for any riparian buffer required under section 6(c). The agreement must include the requirements of 302.050(8).
- c. Riparian Lots.
 - i. **Riparian Buffer Required.** Lots abutting a shoreline of White Bear Lake must install and maintain a riparian buffer zone within the Shore Impact Zone if one does not already exist.
 - a. The buffer shall consist of trees, shrubs, or low ground cover of native plants and understory consistent with natural cover shorelines in accordance with the Minnesota DNR's "Restore Your Shore" guidance.
 - b. The buffer shall cover eight (8) percent of the shore impact zone for every one (1) percent of impervious surface exceeding 25%.
 - c. property owners must provide a plan showing the proposed or existing location and size of the Riparian Buffer and the plantings required under (i)(a).
- d. **Requirement to Record.** The variance or permit shall not be valid unless and until the property owner properly records the variance, permit, and the maintenance agreement with the property records at the Washington County Recorder's Office and submits a copy of the recording to the City for verification.
- 7. Requirements of Structures and/or Best Management Practices. Structures and best management practices used to obtain a permit or variance shall be designed to infiltrate the Retention Volume within forty-eight hours or less. Said structures and best management practices must meet the following requirements:

- a. Comply, where applicable, with the Minnesota Pollution Control Agency's Minnesota Stormwater Manual, National Pollutant Discharge Elimination System (NPDES) stormwater standards, Interlocking Concrete Pavement Institute Manual, or with standards otherwise required by the City Planner.
- b. Provide a means to visually verify that all structures and best management practices are in working order as approved by the City Planner.
- c. The base of installed infiltration structures or practices must be a minimum of three feet above the established ground water table or the OHWL of White Bear Lake, whichever is higher.
- d. The site design must comply with section 302.055 and must minimize changes in ground cover, loss of natural vegetation, and grade change as much as possible.

8. Maintenance Agreements

- a. Requirements of Maintenance and Implementation Agreement for Stormwater Management Structures. Maintenance agreements required by section 302.050 must contain the following provisions, be signed by the property owner, be recorded as provided for in 302.050(6)(c) and be approved by the City.
 - i. An agreement to implement all stormwater management best practices and construct the stormwater management structures as identified in the stormwater management plan.
 - ii. An identification of the performance standards of the stormwater management structures or best management practices. The property owner will identify the proposed testing protocol and standards to determine how the performance of the structures or best management practices are to be judged.
- iii. An identification of the type of maintenance and the maintenance intervals.
- iv. An agreement to perform the identified maintenance and any other repairs, replacement, or other necessary work to maintain the stormwater management structures or stormwater best management practices in a condition consistent with the performance standards for which they were originally designed.
- v. An identification of the Responsible Party who is responsible for maintenance of the stormwater management best practices and structures. The property owner shall notify the City within 30 days of any changes to the responsible party.
- vi. An indication that this agreement runs with the land and shall bind future successors in title.
- vii. An agreement to allow the City and its representatives the right-of-entry on the property for the purposes of inspecting the stormwater management structures and best management practices.
- viii. An agreement that should any stormwater management structures or best management practices not be implemented, or fail to operate in a condition consistent with the performance standards for which they were originally designed or pose a threat to public safety, public health, or property as determined by the City Planner, the City may, after reasonable notice to the responsible party, perform any work necessary in order to implement, or bring the structures into a condition consistent with the performance standards for which they were originally designed or to eliminate any threat to public

- safety, public health, or property. The property owner agrees to pay the costs of any such work performed by the City.
- ix. An agreement to provide to the City, every five years, documentation that the maintenance required by this agreement was completed and to pay the required fee to the City.

b. Requirements for Maintenance and Implementation Agreement for Riparian Buffer

- i. An agreement to implement and preserve the riparian buffer in perpetuity or until the impervious surface coverage of the lot is reduced to 25% or less.
- ii. An identification of the type of maintenance and the maintenance intervals to preserve the riparian buffer.
- iii. An agreement to perform the identified maintenance and any other repairs, replacement, or other necessary work to maintain the riparian buffer in a condition consistent with the original design.
- iv. An identification of the Responsible Party who is responsible for maintenance of the riparian buffer. The property owner shall notify the City within 30 days of any changes to the responsible party.
- v. An agreement that this agreement runs with the land and shall bind future successors in title.
- vi. An agreement to allow the City and its representatives the right-of-entry on the property for the purposes of inspecting the riparian buffer.
- vii. An agreement that should the riparian buffer not be implemented, change character in a way that deviates substantially from the purpose of the original design, or pose a threat to public safety, public health, or property as determined by the City, the City may, after reasonable notice to the responsible party, perform any work necessary in order to implement, or bring the structures into a condition consistent with the original design or to eliminate any threat to public safety, public health, or property. The property owner agrees to pay the costs of any such work performed by the City.
- 9. Requirement to implement. Upon receiving the variance and/or permit under this section, the property owner must construct all proposed structures; all proposed best management practices in accordance with the stormwater management plan; and create all proposed riparian buffers. The proposed structures, implemented best management practices, and riparian buffers shall be constructed as approved by the City Council or City Planner and with any modifications directed by the City Council in granting any necessary variance. Failure to construct all proposed structures, riparian buffers, or to implement all best management practices will render the variance or permit invalid and any improvements constructed pursuant to said variance or permit will be illegal. The City may demolish and remove such improvements at the expense of the property owner. In the alternative, the City may construct the proposed improvements, implement the best management practices, or implement the riparian buffer, and charge the property owner costs for doing so. Such costs may be assessed to the property taxes of the property. This requirement shall run with the property and shall be binding upon all future property owners.

- 10. **Requirement to perform maintenance.** The property owner is required to perform, or cause to be performed all maintenance identified in the maintenance agreement, as well as any other additional work necessary to keep the stormwater management structures, best management practices, or riparian buffer in a condition consistent with the performance standards for which they were originally designed, including replacement of the structures, best management practices, or riparian buffer if necessary. The City may inspect the stormwater management structures, and/or records of best practices to ensure that the required maintenance is performed, and the City may inspect the riparian buffer to ensure that its condition is consistent with the original design. These requirements shall run with the property and shall be binding upon all future property owners.
- 11. City May Perform Maintenance or Replacement. Should any stormwater management structure or best management practice fail to operate in a condition consistent with the performance standards for which it was originally designed or pose a threat to public safety, public health, or property as determined by the City, or should the riparian buffer deteriorate into a condition inconsistent with the original design, the City may, after reasonable notice to the responsible party, perform any work necessary in order to bring the riparian buffer, stormwater management structure, or best management practice into a condition consistent with the performance standards for which they were originally designed or to eliminate any threat to public safety, public health, or property. The costs of any such work may be assessed to the property owner and may be certified to Washington County for assessment against the property taxes of the property.
- 12. **Reasonable Notice.** For purposes of this section, reasonable notice normally means 45 days. If, however, the City Planner provides a written opinion that the condition of the Storm Water Management Structure or Riparian Buffer is a danger to public safety, public health, or public or private property, and that 45 days' notice would not be in the best interests of public safety; public health; or the protection of public or private property; the City Administrator shall reduce or eliminate this notice to the extent necessary to protect the public safety; public health; or public or private property.
- 13. Certification Required, Maintenance Fee. Every five years, any property owner obtaining either a permit or a variance shall document that the conditions in the maintenance agreement have been met and shall pay a maintenance fee of an amount set by the Council in order to cover the administrative burden on the City in ensuring compliance with this section. This section applies to any maintenance agreement described in section 302.050.
- 14. **Remedy for Violations.** In addition to the remedies described above, such as in sections 302.050(9) and 302.050(11), violation of any portion this section, including the maintenance agreement provisions for both riparian buffers or stormwater management practices or structures, are also governed by Section 619.
- 15. **Severability.** If any section, subsection, sentence, clause, or phrase of this article is for any reason held to be invalid, such invalidity shall not affect the validity or enforceability of the remaining portions of this article. The City Council hereby

declares that it would have adopted this article in each section, subsection, sentence, or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared invalid.

"AMENDED BY ORDINANCE 2017-01-01; DECEMBER 12, 2017"

302.055. LAND DISTURBANCE ACTIVITY STANDARDS.

See Sections 301.070 and 306.030 for Conditional Use Permits for Land Disturbance Activities.

1. The following are <u>General Standards</u>:

- a. A combination of successive Best Management Practices may be used to achieve the standards and requirements of Section 302.055. Justification for the method(s) selected shall be provided by the applicant as part of the permit application.
- b. When possible, existing natural drainage ways and vegetated soil surfaces must be used to convey, store, filter, and retain storm water runoff before discharge to public waters and wetlands.
- c. Development must be planned and conducted in a manner that will minimize the extent of disturbed areas, runoff, velocities, erosion potential, and reduce and delay runoff volumes. Disturbed areas must be stabilized and protected as soon as possible and facilities or methods used to retain sediment on the site.
- d. When development density, topographic features, and soil and vegetation conditions are not sufficient to adequately handle storm water runoff using natural features and vegetation, various types of constructed facilities such as diversions, settling basins, skimming devices, dikes, waterways, and ponds may be used. Preference must be given to designs using surface drainage, vegetation, and infiltration rather than buried pipes and man-made materials and facilities.
- e. Grading and filing shall be such that the highest practical amount of runoff water is retained on the parcel of land that is altered both during and after such alteration.
- f. Fill or excavated material must not be placed in a manner that creates an unstable slope.

2. The following are **Specific Standards**:

a. <u>Land Use Standards</u>

[&]quot;AMENDED BY ORDINANCE 2023-05-01; SEPTEMBER 12, 2023"

- 1. No construction or alteration of new or existing structures or land topography shall be done so as to increase the rate of storm water runoff from the parcel as compared to the runoff rate before such construction or alteration unless:
 - (i) The City has a storm water drainage system which will accommodate this additional water flow without increasing the overall rate at which water leaves the City or enters public waters; and/or
 - (ii) Adequate storm water runoff measures and facilities are constructed to retain storm water on the lot and reduce the runoff rate such that the total rate from the lot is not increased; and/or
 - (iii) The construction or alteration results in a substantial reduction in storm water caused soil erosion on the lot, and the quantity of silt and/or other water borne pollutants leaving the lot is reduced.
- 2. Fill shall be stabilized to accepted engineering standards for erosion control in accordance with recommendations of the Washington County Soil and Water Conservation District.
- 3. Fill shall not be placed on areas lower in elevation than the ordinary high water level of any adjacent lake, pond or wetland; nor shall the final elevation of any excavation or grading be lower than the ordinary high water level.
- 4. No grading or filling shall be permitted within twenty (20) feet (measured horizontally) of the ordinary high water level of any lake, pond, or wetland.
- 5. No filled or excavated slopes shall be greater than thirty (30) percent.
- 6. Placement of natural rock riprap, including associated grading of the shoreline and placement of a filter blanket, is permitted if the finished slope does not exceed three (3) feet horizontal to one (1) foot vertical, the landward extent of the riprap is within ten (10) feet of the ordinary high water level, and the height of the riprap above the ordinary high water level does not exceed three (3) feet.

b. Storm Water Control Structure Standards

- 1. When constructed facilities are used for storm water management, they must be designed and installed consistent with the field office technical guide of the Washington County Soil and Water Conservation Districts, Rice Creek Watershed District, and the National Urban Runoff Program (NURP).
- 2. New constructed storm water outfalls to public waters or wetlands must provide for filtering or settling of suspended solids and skimming of surface debris before discharge.

3. Drain Leaders. All newly constructed and reconstructed buildings with gutters and downspouts must have drain leaders routed to pervious areas wherein the runoff water can be allowed to infiltrate. The flow rate of water exiting the leaders shall be controlled so that no soil erosion occurs.

c. Requirements and Standards During Construction

- 1. Best Management Practices to minimize and control stormwater runoff, prevent erosion, and trap sediment shall be employed during construction in accordance with the recommendations of Washington Conservation District and/or as specified by the Minnesota Pollution Control Agency (MPCA) in its publication "Protecting Water Quality in Urban Areas."
 - (i) <u>Site Dewatering</u>. Water pumped from the site shall be treated by temporary sedimentation basins, grit chambers, sand filters, upflow chambers, hydro-cyclones, swirl concentrators or other appropriate controls. Water may not be discharged in a manner that causes erosion or flooding of the site or receiving channels or a wetland.
 - (ii) <u>Waste and material disposal</u>. All waste and unused building materials (including garbage, debris, cleaning wastes, wastewater, toxic materials and hazardous materials) shall be properly disposed of off-site and not allowed to be carried by runoff into a receiving channel, wetland, public water, or storm sewer system.
 - (iii) <u>Tracking</u>. Each site shall have graveled roads, access drives and parking areas of sufficient width and length to prevent sediment from being tracked onto public or private roadways. Any sediment reaching a public road shall be removed by street cleaning (not by flushing) at the end of each work day.
 - (iv) <u>Drain inlet protection</u>. During construction until site erosion control measures are in place, all storm drain inlets shall be protected with straw bales, silt fences, or equivalent barriers.
 - (v) <u>Channeled runoff water</u> passing through the site from adjacent areas shall be diverted around disturbed areas if practical. Otherwise, the channel shall be protected as described below. Sheetflow runoff from adjacent areas greater than ten thousand (10,000) square feet in area shall also be diverted around disturbed areas. Diverted runoff shall be conveyed in a manner that will not erode the conveyance and receiving channels.
- 2. No more than one-third (1/3) of the surface area of a lot shall be devoid of vegetative ground cover at any time. All Activities on the site shall be conducted in a logical sequence to minimize the area of bare soil exposed at any one time.

- 3. <u>Temporary ground cover</u>, (mulch) shall be used within 2 weeks of finish and permanent vegetative cover, sod and plantings shall be provided as soon as possible but not exceeding 1 year after the completion of finish grading.
- 4. During and after grading, filling, and excavating, <u>stormwater runoff and erosion</u> from the entire disturbed area must be controlled. Silt fences, straw bales or equivalent control systems must be placed along all sideslope and downslope sides of the site. If a channel or area of concentrated runoff passes through the site, silt fences shall be placed along the channel edges to reduce the quantity of sediment reaching the channel.
- 5. Any soil or dirt <u>storage piles</u> of material shall not be located with a downslope drainage length of less than twenty-five (25) feet from the toe of the pile to any roadway or drainage channel, public water, wetland, or lake.

All soil or dirt storage piles remaining must be stabilized by mulching, vegetative cover, tarps, or other means within seven days. Erosion from piles which will be in existence for less than seven days shall be minimized by placing straw bales or silt fence barriers around the piles.

Any soil or dirt storage piles (including those for in-street utility repair) located within or closer than twenty-five (25) feet to a roadway or drainage channel must be covered with tarps or suitable alternative control to minimize erosion at all times when not in actual use.

All soil and dirt piles not to be used in the final landscape shall be removed from the lot within thirty (30) days of being excavated. Preferably such soil and dirt should be hauled off when excavated and not piled on the lot.

6. <u>Maintenance and inspection.</u> The use of stormwater runoff and erosion control measures shall include Best Management Practices maintenance. The City Building Official shall inspect for compliance with this ordinance in conjunction with each construction inspection and periodically as part of the scheduled Erosion Control Maintenance Program. The City Building Official shall keep a log of inspections, deficiencies and corrective actions and shall inform the applicant of deficiencies and corrective actions required.

d. VEGETATIVE ALTERATIONS

1. <u>Generally</u>. The purpose of this section is to preserve, protect and reduce the loss of trees and other vegetation. The removal of woody, non-noxious, vegetation in the City shall be carried out in accordance with the following criteria:

- 2. Clear cutting. Clear cutting of trees shall be prohibited except as necessary for placing public facilities and roads and private and public structures. Clear cutting of trees shall also be allowed on land within twenty (20) feet of buildings and five (5) feet of driveways.
- 3. Removal of Trees Replacement Required. Whenever significant trees, are to be removed, the following requirements shall apply.
 - a. Significant trees that are removed shall be replaced at a rate of one (1) tree replaced for each one (1) significant tree lost. Replacement trees shall be no less than two and one half (2 1/2) inches in diameter for deciduous trees and six (6) feet tall for coniferous trees. Replacement shall be completed within one (1) year of the removal of tree(s) or one (1) year of the conclusion of development or construction activities. For activities requiring permits, the City may require the applicant to provide the City with a cash deposit, surety bond or letter of credit to secure the applicant's obligation to replace lost trees in an amount necessary to cover the cost of replacement trees.
 - b. When Part 2 allows clear cutting that is within ten (10) feet of a side or rear property lot line, the property owner shall provide vegetative screening reasonably equivalent to the original vegetative screening within a reasonable time after completion of the clear cutting.
- 4. Removal of Trees No Replacement. On any parcel the removal of trees, limbs or branches, and other plants that are dead, diseased or pose safety hazards, and of all cottonwood, poplar family, box elder, green ash, silver maple, elm (Siberian and American), and buckthorn trees of any size, is permitted without replacement.
- 5. Buffer Strips. Existing vegetative buffer strips along any property lot lines shall be maintained, or made more dense, to provide vegetative screening. Replacement of vegetation type(s) is permitted as long as the resultant screening is reasonably equivalent to that provided by the original vegetation.
- 6. Sound Practices. All cutting, pruning and trimming of trees must be based on sound forest management practices for individual tree species. Upon request, the City will provide assistance in determining what practices are sound.

- 7. Vegetation Alterations on Lots Abutting Water. Limited removal or alteration of vegetation on lots abutting lakes, ponds, or wetlands, is allowed subject to the following standards:
 - a. Clear cutting or intensive clearing of vegetation is not allowed.
 - b. Limited clearing of trees, subject to 302.055.2.d.3 and 4, and shrubs, and cutting, pruning, and trimming of trees is allowed to provide a view to the water from the principal dwelling site and to accommodate the placement of buildings, stairways and landings, picnic areas, access paths, beach and watercraft access areas, and permitted water-oriented accessory structures or facilities, provided that:
 - (i) The screening of structures, vehicles, or other facilities as viewed from the water, assuming summer, leaf-on conditions, is not substantially reduced.
 - (ii) Vegetation which is removed must be replaced with other vegetation which is equally effective in retarding water runoff and preventing erosion.
 - (iii) A protective buffer strip of vegetation at least 16.5 feet back from the ordinary high water mark shall be maintained abutting the shorelines of all lakes and wetlands.
 - (iv) All applicable requirements of the Minnesota Department of Natural Resources or other state agency are met.
- 8. Conduct of Activities. Land Disturbance Activities shall be conducted on no more than one-third (1/3) of the surface area of a lot at any time. All activities on the site shall be conducted in a logical sequence to minimize the area of bare soil exposed at any one time. Mulch, fiber matting, or similar ground cover shall be applied during the conduct of the Land Disturbance Activities to control erosion. Permanent vegetative cover, sod, or plantings shall be provided as soon as possible but not exceeding six months after the completion of Land Disturbance Activities.

"AMENDED BY ORDINANCE 2016-11: MAY 10, 2016."

Any use which lacks reasonable screening of development on lots abutting lakes, ponds, or wetlands, or which does not provide for adequate erosion control on any property within the City, is a nonconformity. When a development or building permit is sought for property with nonconforming vegetative or erosion conditions, a recovery plan must be submitted by the permit applicant and approved prior to permit issuance. The recovery plan must provide for reasonable screening of shoreland

development, protection of soil from erosion, surface water shading and a schedule for implementation to meet the purposes of 302.055.2.d.

- "AMENDED BY ORDINANCE 2016-11: MAY 10, 2016."
- "AMENDED BY ORDINANCE 2022-02-04: MARCH 8, 2022."

302.060. <u>VEGETATIVE ALTERATIONS (REPEALED)</u>

"REPEALED BY ORDINANCE 2016-11: MAY 10, 2016."

302.070 CITY FENCE ORDINANCE.

- 1. <u>Zoning Permit</u>. A Zoning Permit (see Sections 301.080.1.b and 307) shall be obtained from the City before installing or constructing any fence for any purpose. A site drawing showing the location of the fence shall be submitted with the permit application.
- 2. <u>Notice to Neighbors</u>. Any applicant for a Zoning Permit to construct a fence shall notify all abutting property owners at least five (5) days prior to submitting the application for a Zoning Permit.
- 3. <u>Location</u>. All fences shall be located entirely upon the property of the fence owner.
- 4. <u>Height.</u> No fence shall exceed six feet six inches (78") in height above grade at any point. Posts shall not exceed 12 inches above the adjacent fence.
- 5. <u>Retaining Walls.</u> Solid walls in excess of four (4) feet high shall be prohibited unless they are part of a building.
- 6. <u>Materials.</u> Fences in excess of four (4) feet in height shall be at least thirty percent (30%) open through the entire surface area of the fence. All fences shall be constructed and maintained in a substantial manner and of material reasonably suited for the purpose for which the fence is proposed to be used. That side of the fence considered to be the face (or most attractive side of the fence) shall face toward abutting properties.
- "AMENDED BY ORDINANCE 1997-2; AUGUST 12, 1997."
 "AMENDED BY ORDINANCE: DECEMBER 13, 2016."
- 302.080. <u>STAIRS AND LIFTS TO LAKE OR WATER BODY STANDARDS.</u> A stairway or lift to enable access from land properties to White Bear Lake or pond or recreational body of water shall be constructed and maintained in compliance with the standards and requirements of Section 302.080 parts 2 and 3.
- 1. The applicant shall obtain a Zoning Permit before any construction takes place.
- 2. Standards and requirements for stairways are as follows:

- a. Stairways may not exceed 44 inches in width.
- b. Landings may be permitted at a minimum vertical interval of 20 feet.
- c. Landings may not exceed 32 square feet in area.
- d. Handrails are recommended, however they shall not unduly obstruct the view by neighboring properties.
- e. Canopies or roofs are not permitted on stairways or landings.
- f. Stairways shall be anchored and supported with pilings or footings.
- g. The applicant must submit a plan for the stairway to the City of Birchwood Village showing all necessary construction data including location, design, dimensions and construction materials before construction may begin.
- h. Steps must comply with all setback requirements except the setback from the high water mark.

3. Standards and requirements for lifts are as follows:

- a. The primary function of a lift shall be for the transportation of persons up and down the slope.
- b. No lift may be designed and used for the transport of boats or machinery on the hill face.
- c. The applicant must provide the City of Birchwood Village with a plan showing all necessary construction data including location of the lift, design, size and dimensions before construction may begin.
- d. The lift components shall be constructed and anchored in a manner that prevents it from shifting and from causing accelerated erosion.
- e. The car of any lift may not exceed four feet by six feet.
- f. The location of the transporting device and/or power source shall be screened.

"AMENDED BY ORDINANCE 2005-1; APRIL 12, 2005."

302.090. TEMPORARY FAMILY HEALTH CARE DWELLINGS.

1. OPT-OUT OF MINNESOTA STATUTES, SECTION 462.3593. Pursuant to authority granted by Minnesota Statutes, Section 462.3593, subdivision 9, the City of Birchwood opts-out of the requirements of Minnesota Statutes, Section 462.3593.

302.100. SOLAR ENERGY INSTALLATIONS

1. Definitions.

- a. <u>Building-integrated Solar Energy Systems</u>. A solar energy system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural component of the building. Building-integrated systems include, but are not limited to, photovoltaic or hot water solar energy systems that are contained within roofing materials, windows, skylights, and awnings.
- b. <u>Grid-intertie Solar Energy System.</u> A photovoltaic solar energy system that is connected to an electric circuit served by an electric utility company.
- c. <u>Ground-mount.</u> A solar energy system mounted on a rack or pole that rests or is attached to the ground.
- d. <u>Photovoltaic System.</u> A solar energy system that converts solar energy directly into electricity
- e. <u>Roof-mount.</u> A solar energy system mounted on a rack that is fastened to or ballasted on a structure roof. Roof-mount systems are accessory to the principal use.
- f. <u>Solar Collector</u>. The panel or device in a solar energy system that collects solar radiant energy and transforms it into thermal, mechanical, chemical, or electrical energy. The collector does not include frames, supports, or mounting hardware.
- g. <u>Solar Energy System.</u> A device, array of devices, or structural design feature, the purpose of which is to provide for generation or storage of electricity from sunlight, or the collection, storage and distribution of solar energy for space heating or cooling, daylight for interior lighting, or water heating.
- 2. <u>Intent.</u> Solar energy is an abundant, renewable, and nonpolluting energy resource and its conversion to electricity or heat is beneficial. The intent of this ordinance is to:
 - a. preserve the health, safety and welfare of the community by promoting the safe, effective and efficient use of solar energy systems; and
 - b. promote sustainable building design and management practices to serve current and future generations; and
 - c. implement the solar resource protection element required under the Metropolitan Land Planning Act; and

- d. reduce dependence on nonrenewable energy resources and decrease air and water pollution that results from the use of conventional energy sources; and
- e. enhance the reliability and power quality of the power grid and make more efficient use of electric distribution infrastructure.

3. Roof-Mounted and Building-Integrated Solar Energy Systems

- a. Roof-mounted solar energy systems and building-integrated solar energy systems are allowed so long as:
 - i.the collector surface and mounting devices for roof-mounted and building-integrated solar energy systems do not extend beyond the exterior perimeter of the building on which the system is mounted or built, unless the collector and mounting system has been explicitly engineered to safely extend beyond the edge and setback standards are not violated; and
 - ii.exterior piping for solar hot water systems does not extend beyond the perimeter of the building on a side-yard exposure; and
 - iii.the applicant complies with section (5).
- b. Roof-mounted solar energy systems are not to be considered for determining compliance with section 302.045 "Structural Height Restrictions" as long as the roof-mounted solar energy system is installed at a same angle to that of the roof and extends no more than ten inches vertically above the roof.

4. Ground-Mounted Solar Energy Systems

- a. Certain ground-mounted solar energy systems are allowed as a conditional use so long as:
 - i.the total lot coverage does not exceed 30% of the building footprint of the principal structure in total collector area; and
 - ii.the applicant shows that a ground-mount system can produce at least 100% of the average annual electric output of a full roof-mount solar installation; and
 - iii.the installation obtains a conditional use permit, pursuant to § 301.070 of the city code; and
 - iv.the applicant complies with sections (5).
- b. Ground-mounted solar energy systems are not counted toward accessory structure limitations.
- c. Ground-mounted solar energy systems are not counted as impervious surface if the surface under the collector is pervious. Impervious mounting hardware covering pervious surfaces such as concrete pads and steel posts are impervious surface.
- d. Ground-mounted solar energy system installations must not increase stormwater runoff from the property.

5. General Requirements

a. The applicant must obtain a building permit for any solar energy installation; and

- b. All building permit applications for solar energy systems shall provide a site plan for review, including to-scale horizontal and vertical (elevation) drawings. The drawings must show the location of the system on the building or on the property for a ground-mounted system, including the property lines; and
- c. Electric solar energy system components must have a UL or equivalent listing and solar hot water systems must have an SRCC rating; and
- d. All solar energy installations shall be consistent with the State of Minnesota Building Code and shall meet approval of local officials; and
- e. All photovoltaic systems shall comply with the Minnesota State Electric Code; and
- f. Solar thermal systems shall comply with applicable Minnesota State Plumbing Code requirements and with HVAC-related requirements of the Energy Code; and
- g. Grid-intertie solar energy systems shall conform to all electric utility requirements; and
- h. The electric utility shall be notified in advance of all grid-intertie solar energy system installations.
- 6. <u>Variances.</u> An applicant with inadequate access to direct sunlight for solar energy systems or another practical difficulty under the terms of § 302.100 may apply for a variance. The variance application shall meet the requirements for plan approval and shall also demonstrate why the requirements of the code cannot be met without practical difficulty.
- "AMENDED BY ORDINANCE 2016-08-16; AUGUST 17, 2016"
- "AMENDED BY ORDINANCE 1997-2; AUGUST 12, 1997."
- "AMENDED BY ORDINANCE 2000-1; FEBRUARY 8, 2000"
- "AMENDED BY ORDINANCE 2003-1; FEBRUARY 12, 2003"
- "AMENDED BY ORDINANCE 2005-1; APRIL 12, 2005."
- "AMENDED BY ORDINANCE 2013-08-01; AUGUST 13, 2013."
- "AMENDED BY ORDINANCE 2016-11: MAY 10, 2016."
- "AMENDED BY ORDINANCE: JUNE 14, 2016."
- "AMENDED BY ORDINANCE 2016-08-16; AUGUST 17, 2016"
- "AMENDED BY ORDINANCE: DECEMBER 13, 2016."
- "AMENDED BY ORDINANCE 2017-01-01; DECEMBER 12, 2017"
- "AMENDED BY ORDINANCE 2019-03-02; June 11, 2019."
- "AMENDED BY ORDINANCE 2019-12-01; DECEMBER 10, 2019."
- "AMENDED BY ORDINANCE 2023-06-01; NOVEMBER 22, 2023