
ALEXANDRIA TOWNSHIP

PLANNING COMMISSION

MEETING PACKET FOR
February 22, 2016



PRELIMINARY AGENDA
Alexandria Township Planning Commission
February 22, 2016
6:00 p.m. – Township Conference Room

Call to Order

Adopt Agenda

Approve Minutes

January 25, 2016

Public Hearing

1. Zoning Ordinance Amendment to Sections VII (Definitions) and addition of a new Section (V.X) to allow for up to 100% credit against impervious coverage for areas covered by pervious paver systems in non-shoreland areas as a conditional use.

Zoning Administrator's Report

Old Business:

New Business:

Adjournment

**NOTE: This is a preliminary agenda, subject to change at any time.

STAFF REPORT

Application: Zoning Ordinance Amendment to Sections VII (Definitions) and addition of a new Section (V.X) to allow for up to 100% credit against impervious coverage for areas covered by pervious paver systems in non-shoreland areas as a conditional use.

Agenda Item: Public Hearing - 1

Background Information: The Township has, at various points over the years, discussed whether it should grant a credit against impervious coverage for the use of “pervious paver” systems. A significant reason for this is because both the City of Alexandria and Douglas County allow for credits in certain circumstances. For example, Douglas County allows for up to 100% credit provided that the applicant goes through a conditional use permit process.

In 2007, when the Township began zoning ordinance administration, the Town Board had discussed whether to give credit and decided against it. This was due primarily to the relatively short timeframe in which pervious pavers had been used and a concern over their long-term viability without sufficient maintenance. There were also concerns about whether such systems would be installed correctly, as they require professional design and often professional installation in order to function properly.

“Pervious Paver” systems are usually concrete or stone paver blocks with open, permeable spaces between each block that allows water to infiltrate into the ground rather than running off the paved surface. They are intended to protect surface water quality by preventing pollutants and nutrients from entering a lake or stream.

The Town Board directed the Planning Commission to look at this issue back in June 2015. The Commission did so, after Staff talked with Douglas County Land & Resource staff to determine their experience with allowing credit for pervious pavers. Staff also contacted the City of Alexandria regarding their experience with pervious pavers.

The DNR was also contacted about their current policy/thoughts on the use of pervious pavers, since they have the authority to determine what kinds of credits could be allowed by local governments in shoreland areas. Staff received information from DNR staff in the St. Paul office (after the question was forwarded from the regional DNR contact), which cited a December 2014 DNR “Water Talk” newsletter as indicating that “Using a ‘credit’ system to allow the use of pervious pavement to exceed the 25% impervious surface limit is prohibited in the shoreland district. And in no case should any hard surface be placed in the shore impact zone (SIZ) or bluff impact zone (BIZ) unless needed for water access. Any project which proposes to exceed the impervious surface limit through the use of pervious pavement should be reviewed as a variance. The following conditions are suggested if a community finds such a variance acceptable. These conditions include guidance from the MN Stormwater Manual and DNR field experience:

1. The slope of the pervious pavement system should be 2% or less
2. There should be a 3 foot distance between the bottom of the pervious system (including its sub base) and bedrock or seasonally saturated soils.

3. The system should be designed to infiltrate the first inch of any storm from the pavement surface.
4. The system should be designed and installed by qualified individuals and not by the property owner.
5. The system should be set back from basements, septic system leach fields, steep slopes and wells.
6. The site should be inspected during construction for compliance
7. Instructions for maintenance, including a maintenance schedule, should be provided to the property owner and zoning administrator or building inspector. Salt and sand should not be applied to pervious pavement systems.

Given that the DNR does not allow for “credits” on the use of pervious pavers without a variance, the only option the Township would have to do so is outside of shoreland areas. There are a number of lots outside of shoreland where lot sizes are relatively small and homeowners may desire to make use of these paver systems.

The proposed ordinance would adopt language essentially the same as what Douglas County has adopted previously for shoreland areas (prior to the DNRs apparent ban on allowing credit for the use of pervious pavers against impervious coverage in shoreland areas). This language allows for credit up to 100% to be given provided a number of conditions are met – including that the system be designed by a qualified professional and installed as per that design. It also requires that the credit be granted only by conditional use.

ADDITIONAL NOTES:

1. The Township needs to take care that whatever it does is not considered less restrictive than Douglas County ordinances, due to requirements of state law. Douglas County’s ordinance currently allows for a 25% credit to be given to the installation of pervious paver systems via a conditional use permit provided:
 - a. The pervious pavement system shall be designed and certified by a registered engineer or landscape architect and installed by someone qualified in the particular system used, or the installation shall be overseen by a product representative to ensure its proper long-term function;
 - b. The pervious pavement designer shall include maintenance instructions to the property owner along with a maintenance schedule, with a copy to the Land & Resource Office to be filed along with the permit.

A 100% credit can be given by the County Ordinance if the pavers are used as part of an overall stormwater management plan that infiltrates and/or retains at least the two year 24 hour storm event in conjunction with buffer strips, vegetated swales, rainwater gardens or other similar methods.

The County also has other requirements when pervious paver systems are used, such as not allowing them within a bluff or shore impact zone and being setback from basements, septic systems and wells at least 10 feet.

2. Staff has discussed the issue of pervious pavers with Douglas County Land & Resource recently. The County has expressed an interest in considering the adoption of new ordinances that would allow landowners flexibility to use a variety of methods for stormwater management and possibly some that would allow for “credits” against impervious coverage. The Township has expressed an interest in working jointly with Douglas County in developing these ordinances. Land & Resource suggested that such an effort may be something that could be completed by Spring 2016 or soon after, although no decisions have yet been made to engage in that process.

The proposed language to amend the Alexandria Township ordinance, consistent with the above, is attached. Any further amendments that would come from joint project with Douglas County would be conducted separately and may or may not further change how credits against impervious coverage is allowed.

PROPOSED ORDINANCE AMENDMENT

SECTION VII: DEFINITIONS

IMPERVIOUS SURFACE - any surface ~~not able to absorb liquid. that retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development.~~ Examples of impervious surfaces include, but are not limited to, concrete, bituminous, tar, wood (including wood decking), plastic, compacted gravel, roof tops, and modular stone (including landscaping block and retaining walls), ~~areas~~ Areas underlain with ~~plastic or other liners (including~~ semi-permeable landscaping fabric shall not be considered impervious.). ~~Permeable or porous pavement systems or other materials designed to allow infiltration of water may not be considered pervious for the purposes of this ordinance.~~

SECTION V.X: CREDITS AGAINST IMPERVIOUS COVERAGE (new section)

If installed consistent with the following requirements, landowners in non-shoreland areas (see Section V.L.2 for regulations applicable in shoreland areas) may be given up to a 100% credit against their impervious surface coverage for the installation of pervious pavement systems, including modular pavers, pervious concrete, pervious asphalt and other constructed surfaces with a base and subbase of imported material that is designed to allow for the movement of stormwater through the surface and into the natural soil underneath. Such approval requires a conditional use permit and the Township may approve a lesser credit, or no credit at all, after taking into consideration site-specific factors such as the ability of natural soils to accept water from the pervious pavement system, depth to groundwater, and whether the property and/or surrounding area is already subject to flooding.

1. For the purposes of meeting impervious surface limits in non-shoreland areas, up to one hundred (100) percent of the total area covered by pervious pavement systems may be considered pervious by conditional use permit provided that:
 - a. The pervious pavement system shall be designed and certified by a registered engineer or landscape architect and installed by someone qualified in the particular system used, or the installation shall be overseen by a product representative to ensure its proper long-term function;

- (1) The pervious pavement designer shall include maintenance instructions to the property owner along with a maintenance schedule, with a copy to the Township to be filed along with the permit;
 - (2) The design of the pervious paver system shall include features or methods intended to direct stormwater runoff away from the system if such runoff would be likely to carry sediments or other debris that would plug the system.
- b. When constructed facilities are used for storm water management, documentation must be provided by a qualified individual that they are designed and installed consistent with the field office technical guide of the local soil and water conservation districts.
 - c. New constructed storm water outfalls to public waters must provide for filtering or settling of suspended solids and skimming of surface debris before discharge.
 - d. Impervious Surface Replacement.
 - (1) Purpose: The purpose of the regulations in this subsection is to prevent excessive amount of runoff that will be generated during a rainstorm by an enlarged impervious area. Such excessive runoff causes erosion and transport of pollutants to public waters thereby degrading water quality. Existing properties exceeding the standards for impervious surface coverage present a distinct management challenge from that of newly developed properties and there is a need to establish clear and consistent guidelines for how re-development of these lots may occur.
 - (2) Standards: Parcels that exceed the maximum allowed impervious surface may construct additional impervious surfaces without a variance or conditional use permit if the proposed new impervious surface meets all setback, height and other regulations of this ordinance and if one of the two following conditions are met:
 - (a) The applicant removes existing impervious surfaces at a ratio of one and one-half (1.5) square feet removed for every one (1) square foot added and restores these areas to a permeable surface.
 - (b) The applicant removes existing impervious surfaces at a 1:1 ratio and restores those areas to a permeable surface and in addition, submits a comprehensive stormwater management plan that emphasizes infiltration and onsite retention of stormwater for at least the two year 24-hour storm event through a combination of methods including buffer strips, swales, rainwater gardens, and other low impact development methods. The stormwater management plan must be designed by a registered engineer or landscape architect and installed as designed by a qualified professional.
 - e. Specific Requirements: The applicant must provide the following evidence, in conjunction with meeting one of the two standards listed in (d).ii. above:
 - (1) Sufficient evidence must be provided to indicate that the exceedance of the impervious surface coverage did not come about from unpermitted or disallowed actions at the time it was installed or constructed.
 - (2) A survey shall be submitted showing calculations of the exact dimensions of all existing impervious surfaces and of the lot before and after completion of the project.

This survey must be submitted and approved by the Zoning Administrator¹ before any work may begin on the project;

- (3) In replacing existing impervious surfaces with surfaces designed to be permeable or porous, the applicant must give priority to replacing those surfaces closest to wetlands/water bodies or those surfaces where the replacement is most likely to improve storm water management;
- (4) A pervious pavement system shall be designed and certified by a registered engineer or landscape architect and installed by someone qualified in the particular system used, or the installation shall be overseen by a product representative to ensure its proper long-term function;
- (5) A pervious pavement system shall be set back from structures having basements, septic system leach fields, steep slopes and wells at least 10 feet unless otherwise designed by a registered engineer so as to prevent impacting these features;
- (6) A pervious pavement design shall include maintenance instructions to the property owner along with a maintenance schedule, with a copy to the Township to be filed along with the permit;
- (7) All best management practices must be compatible with local stormwater management plans and NPDES Phase II stormwater permits, where required;
- (8) If, in the removal of existing impervious surfaces, the total lot coverage falls below the maximum coverage allowed by this ordinance, the applicant must thereafter conform to the standards of this ordinance.
- (9) The design of the pervious paver system shall include features or methods intended to direct stormwater runoff away from the system if such runoff would be likely to carry sediments or other debris that would plug the system.

NOTE: Text highlighted in grey represents language not included in Douglas County language. All other text matches that of Douglas County.

¹ Amended 12/17/2007 (Resolution #07-20)