

**Minutes of Meeting
Ladue Stormwater Sub-Committee
City of Ladue, St. Louis County, Missouri
Wednesday, June 8, 2016. 9:00am**

Chairman Potter called the meeting to order at 9:03am. The following members were present:

Ray Potter – Chairman
Ann Carter
Trae Meyr
Patrick Hensley
Robert Watt
Will Penney
Andrea Sukanek
Anne Lamitola (arrived about 10am)

No comments or corrections were given regarding the minutes from the previous meeting on May 9th, 2016.

Chairman Potter opened the meeting by stating that he thought the purpose of the Sub-Committee should be to come up with ideas and strategies for addressing stormwater issues, but to let staff write the ordinances. There was no disagreement with this statement.

Mr. Potter began the discussion of the items on the agenda by reading discussion item #1 regarding impervious surface limits. The city currently enforces a limit of 30% coverage on front and rear yards and 25% on side yards. Is this adequate? Should larger lots have impervious surface limits and water retention requirements?

The Sub-Committee then discussed how the City's stormwater requirements could be addressed with a single stormwater code, instead of having various yard requirements spread throughout the zoning ordinance. The code currently limits coverage of the front, side, and rear setbacks, but does not address total coverage. Also, it is unclear in the code whether the total coverage addresses all impervious surfaces, or is mainly meant to limit buildings.

Ms. Carter felt strongly that we should add a limit of total impervious coverage instead of only limiting the percent coverage of the various yards.

The Sub-Committee discussed whether the larger lots (over 1 acre) needed to have a total impervious coverage limit. It was suggested that maybe they would need to prepare a stormwater plan for their lots instead of having a coverage limit.

Mr. Hensley was concerned about the burden on those homeowners with large lots if they have smaller homes and have not maxed out their buildable area. Would they need to submit a full stormwater plan for their lots?

It was suggested that perhaps there should be some flexibility if they don't max out their buildable area. Perhaps they could have the option of having a total coverage limit or preparing a stormwater plan. Or perhaps staff could approve exemptions on a case by case basis.

Mr. Penney stated that even if we create a total impervious coverage limit, he would like to keep the individual yard maximums. This keeps the development balanced on the lot. He also stated that there is a rule that the total coverage of all accessory structures should not add up to more than the square footage of the house.

Ms. Carter pointed to the impervious coverage limits in Frontenac and Clayton and was in favor of adopting something similar in Ladue, especially for the smaller lots.

Mr. Meyr and Mr. Potter also agreed that we should develop a total impervious coverage limit for smaller lots.

Mr. Penney and Mr. Watt spoke favorably of the existing yard coverage requirements, but were both also in favor of developing a total impervious coverage limit.

Mr. Potter pointed out that even with the yard coverage limits, some of the small lots have a large amount of coverage.

Mr. Meyr agreed and stated that some lots seem to have nearly 80% coverage. Also, there is some flexibility in the code which allows one side yard to be entirely covered in E1 and he wondered whether this should be allowed.

Ms. Carter agreed that we need some alternate ideas for driveways and ways to control paving.

Ray Potter pointed out that homes with attached garages in the back require longer driveways than other configurations.

Mr. Penney stated that permits are required for paving and this makes coverage limits enforceable. It is possible that some of the lots that have a greater amount of coverage were previously existing when the yard coverage limits were created.

Mr. Penney brought up the option of requiring pervious pavers in some of these situations.

Mr. Hensley has some concerns about pervious pavement since they can be more expensive and difficult to maintain. This could make it more difficult to sell a house.

Mr. Penney pointed out that some types of pervious pavement are better than others.

The Sub-Committee discussed some of the potential problems with pervious pavement. More information is needed regarding this option. It was generally agreed that this is an option that could be explored, but it might require landowner education and follow up.

Overall, in terms of the total impervious coverage, it was suggested that we develop overall percentages while keeping the current yard coverage percentages in place. The Frontenac limits were viewed as a good starting point.

Mr. Potter introduced discussion item #2, regarding a proposal that tree service contractors should get a license from the City of Ladue before they could remove trees in Ladue.

Mr. Penney thought this might be a good way to educate the tree companies about the Ladue requirements and keep track of who was following the rules.

Ms. Carter thought it could be a hardship to make tree guys all get licenses and thought it might make more sense to enforce tree removal restrictions in conjunction with new construction or the sale of the property.

Mr. Meyr was concerned about how this would be enforced and stated that the onus should be on the homeowner instead of punishing the tree service company, since they are just following the instructions of the homeowner. He was in favor of developing measures that help homeowners to comply with the requirements instead of appearing punitive.

Mr. Hensley stated that the larger, more established companies will likely follow the rules with or without the license system, whereas the small contractors are more likely to not follow the rules, regardless of the license system.

Mr. Potter introduced discussion item #3, regarding maintenance of retention/detention basins and making sure it is clear who is responsible for maintenance.

Ms. Lamitola stated that retention/detention basins are required to have maintenance agreements and owners are required to file an annual report. The location of these existing basins can be shown on the City's GIS maps.

The detention basin at the library was discussed. This basin has been in existence since 1980 and the City has some information about this basin. The library is responsible for its maintenance, but a number of surrounding properties also drain to it. Additional follow up will be required for this basin.

The Sub-Committee determined that basins on private property must be maintained by the owner, but it needs to be determined how that should be enforced. Does MSD enforce maintenance of these basins and under what circumstances?

Mr. Potter introduced discussion item #4, regarding a proposal that sump pumps be required to connect directly to MSD storm sewers.

Mr. Hensley brought some information to the meeting regarding what it would take to drain a sump pump to a storm sewer. He stated that, based on his research, it would cost approximately \$3,000 to \$3,500 to construct the necessary pipes. Based on the work and the cost required, he thought this would be best for new construction.

Mr. Meyr and Ms. Carter both voiced concerns about dumping too much water into storm sewers and increasing the flow, which then dumps into streams. If more water could be absorbed on the individual lots, this would be preferable.

Mr. Penney stated that there is a requirement that gutters not let out into the setback area and this is something that is being enforced in new building permits.

Ms. Carter thought that having sump pumps drain to the sewer would be a good option for new construction on small lots that don't have the capacity to absorb much water.

Mr. Watt pointed out that not many of the lots have access to storm sewers so this would not likely affect many lots and, therefore, not have a huge effect on the existing storm sewers.

Mr. Hensley brought up the idea that more homes could have underground systems that could handle some of their water runoff. There are kits you can buy to create small underground detention basins. This would be an option for properties that do not have access to storm sewers.

Mr. Potter introduced discussion item #5, regarding how creeks could be better protected through ordinances and/or public relations.

Mr. Potter specifically expressed concerns about the people who dump logs, brush, and other yard waste into creeks.

The Sub-Committee discussed how these items were usually removed from creeks and streams. MSD doesn't usually clear logs or other items out of creeks unless the creek is entirely blocked, but it depends on the situation.

Ms. Lamitola stated that there is already an ordinance in place to protect streams and creeks from dumping. Also, MSD has door hangers with information for property owners about how to manage adjacent creeks and streams. She stated that an education program would likely be very helpful.

Mr. Potter introduced discussion item #6 – a suggestion that all driveways in the E1 district drain to the street.

The Sub-Committee asked whether it would make sense to include other zoning districts with smaller lots in this requirement – perhaps D zoning, as well.

Ms. Lamitola stated that the streets in many of the E1 districts are public and she did not have concerns about the driveways draining toward the street, but she pointed out that some driveways may not slope to the street and may naturally have topography that drains away from the street.

Because of the percent coverage in some of these areas, when driveways drain away from the street, this can cause flooding on adjacent properties. Pervious pavers could also be a solution to this drainage problem in some situations.

Ms. Carter is in support of the pervious pavement alternative and stated that, if people were educated and notified about the pervious pavement, they would be likely to maintain it properly. She wondered whether a maintenance agreement of some kind could be developed for pervious pavement.

The Sub-Committee agreed that there should be some flexibility in the requirement regarding driveways draining to the street. Perhaps the requirement should be that driveways should drain to the street when feasible. When this is not feasible, driveways should drain to an approved stormwater maintenance alternative, such as a raingarden, such that water drainage does not adversely affect adjacent property.

Mr. Potter introduced discussion item #7, which proposed a requirement that land disturbance should not affect the existing natural flow of storm water.

Mr. Potter was specifically concerned about situations when low points on properties are filled to elevate part of a property. This can often cause water to be blocked and can cause major drainage problems.

Mr. Penney pointed out that the Building Department looks at contours when approving permits and they try to prevent these types of problems.

Ms. Lamitola stated that an overall limit on impervious coverage would also help in solving these types of drainage problems.

This ended the specific list of discussion items suggested by Mr. Potter.

Ms. Sukanek suggested that the Sub-Committee adopt a goal of maintaining pre-development hydrology, according to an item copied from the Frontenac Stormwater Design Manual. This would be a requirement that stormwater designs should preserve the natural topography, drainage paths, vegetative cover, and open spaces, to the extent practical. The committee supported this idea.

The Sub-Committee then discussed the next steps and the overall plan for the next few meetings.

Ms. Lamitola and Mr. Watt would like to see the Sub-Committee develop a list of specific ideas and recommendations instead of putting together a technical manual. Perhaps a manual could be developed at a future date.

Mr. Watt suggested that the Sub-Committee should come up with a few (maybe 3) main ideas.

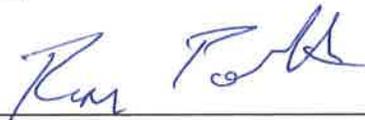
The Sub-Committee revisited the idea of the total impervious coverage limit as one of these three ideas to put forward. Several voiced support for copying some of the items in Frontenac's stormwater guide because of its clarity and ease of use.

The Sub-Committee did not determine the other important points at the meeting. Ms. Sukanek agreed to distribute notes and then help the sub-committee develop a memo to suggest a few key points to the main Stormwater Committee.

This was supported by the Sub-Committee.

The meeting adjourned at 10:55am.

Approved this 9 day of JULY 2016



Ray Potter, Committee Chair

Attest:



