



VILLAGE OF DOWNERS GROVE
Stormwater and Flood Plain Oversight Committee Meeting
August 11, 2016, 7:00 p.m.

Downers Grove Public Works Facility
5101 Walnut Avenue, Downers Grove, Illinois

I. CALL to ORDER

Chair Gorman called the meeting to order at 7:01 p.m. A roll call followed, and a quorum was established.

II. ROLL CALL

Members Present: Chair Gorman, Mr. Crilly, Mr. Ruyle, Mr. Schoenberg, Mr. Wicklander

Members Absent: Mr. Scacco, Mr. Civito

Staff Present: Nan Newlon, Director of Public Works
Julie Lomax, Development Engineer
Kerry Behr, Development Engineer

Public Present: Mr. Don Rickard, 4735 Main Street, Downers Grove

III. APPROVAL of July 20, 2016 Minutes

Mr. Wicklander made a motion, seconded by Mr. Crilly, to approve the June 23, 2016, minutes. **Motion carried by a voice vote 5-0.**

IV. PUBLIC COMMENTS

None – Mr. Don Rickard introduced himself.

V. NEW BUSINESS

None

VI. STAFF REPORT

None

VII. OLD BUSINESS

Staff and committee talked about the potential code changes to be considered to address stormwater issues in the Village. The SW&FPOC reviewed the previous discussions on each item. Then each item was voted on as either “Recommend” or “Not Recommend” as a potential code change for consideration of the Village Council. Bullets as to why or why not

this item was recommended based upon information from this meeting and the June 23, 2016 meeting are included.

1. Increase the Minimum Required Side Yard Setback in the R-4 District

Staff read current requirements which state, the minimum required side yard setback in the R-4 District is five feet (5') or 10% of the lot width, whichever is greater. Many new single family houses and additions to existing houses are constructed on 50-foot wide lots, resulting in a five foot (5') side yard setback. In some cases, the five foot (5') side yard does not provide ample room for stormwater drainage improvements and negatively impacts adjacent properties.

Mr. Schoenberg wanted to know what the allowable encroachment into the sideyard setbacks would be, because if we increase the side yard, but then allow a larger encroachment, we wouldn't be gaining much in terms of conveyance. Mr. Ruyle expressed concerns with corner lots. This may result in a less than allowable building space.

Motion to **Recommend** the Minimum side yard setback be increased in the R-4 District to six feet (6') or 10% of the lot width, whichever is greater, with special consideration given to corner lots, was made by Mr. Schoenberg and seconded by Mr. Ruyle. **Motion passed with a 3-1 vote with one person abstaining from voting.**

Discussion Points/Reasons for recommendation:

- Increased space for overland flow path/drainage between homes
- Increased green space between residences

Considerations:

- Special considerations be given to corner side yards as the increase would reduce the buildable area for the structure.

2. Maximum Impervious Area / Open Space Requirements

It was decided to discuss this item at the end of the meeting.

3. Require Sump Pumps to Connect to a Minor Stormwater System or PCBMP

Staff explained that under the current code, sump pumps are required to discharge onto yards with a minimum setback of 20 feet from downstream lot lines. Staff finds sump pumps are often very active after new construction. In many cases, sump pumps meeting code requirements still discharge significant amounts of water which negatively affects adjacent properties. In these cases, the Village policy is to require the sump pump to discharge into a PCBMP. When feasible, these systems overflow to a minor stormwater system. Staff explained how the additional BMP is sized. Chair Gorman and Mr. Schoenberg, suggested that any additional BMP be placed outside of easements, outside of overland flow paths. Mr. Ruyle likes making these known costs up front and keeping it black and white. He advises that the wording of the motion needs to be re-worded so it's not a choice of connection, but a requirement to construct the infiltration practice with an

optional connection to a minor stormwater system. These should be required for all development projects that install a sump pump.

Mr. Ruyle expressed concerns that developments may try to avoid installing a sump pump, in order to avoid the requirement to install an infiltration practice. Staff stated they would investigate and confirm that sump pumps are required.

Motion to **Recommend** the Requirement of an Infiltration practice for all sump pump discharges with an option to connect an overflow to an established minor drainage system was made by Mr. Ruyle and seconded by Mr. Schoenberg. **Motion passed with a 5-0 vote.**

Discussion Points/Reasons for recommendation:

- Reduction in sump pump discharge on adjacent properties
- Require it up front so it's a known cost to builders instead of a last minute add on

Considerations:

- Not all areas in the Village have storm sewer or ditch for the overflow to be connected; in some cases it may overflow towards the neighbor's
- Must be placed outside of easements
- Must be placed outside of overland flow paths

4. Increase the Site Runoff Storage Fee

Staff explained that under the current code the Village collects a fee for added impervious for all construction projects that do not provide detention. Revenues from these fees are placed in the Stormwater Fund. The current fee ranges between \$0.565 per square foot to \$0.71 per square foot of impervious area, depending on the watershed in which the project is located. The typical fee for a new single family house is \$800. In 2015, a total of \$113,157.25 in stormwater runoff fees were paid. The purpose of this fee is to provide revenue to construct regional storage for runoff and it includes costs for engineering, land acquisition, construction and operations and maintenance. The Village may consider increasing the fee to account for increases in the cost of land acquisition and construction, as well as potential conveyance infrastructure to convey runoff from new construction to regional storage facilities.

Committee felt this concept was similar to an impact fee. Mr. Ruyle was concerned about those sites that do not discharge into any Village system, and hold their stormwater on site due to poor drainage. Staff explained these fees were determined over 10 years ago and based upon detention costs for each watershed, and are currently collected.

Motion to **Recommend** the Site Runoff Storage Fee be adjusted to account for increases in the cost of land acquisition and construction on a regularly occurring basis was made by Mr. Schoenberg and seconded by Mr. Crilly. **Motion passed with a 5-0 vote.**

Discussion Points/Reasons for recommendation:

- Funds generated could be used to expand the cost share program and/or fund neighborhood stormwater projects
- Incentive to construct less impervious
- Should be re-evaluated every five (5) years

5. Increase the Post Construction Best Management Practice (PCBMP) Fee in Lieu

Staff explained that the current code allows the Village to grant a fee in lieu to applicants that demonstrate they are unable to provide the required PCBMPs on-site. The Village has only granted one such variance in the past. Current funds collected are given to the County to construct improvements. Staff has found the fees collected are significantly lower than actual construction costs. The Village may consider modifications to the current fee in lieu structure to increase funds collected and allow these funds to remain in the Village.

Staff explained that all sites have found a way to store the required volume and treat the pollutants of concern, with the exception of the one site. Staff explained that currently when someone constructs a BMP, they are required to determine the Estimated Seasonal High Water Level (ESHWL) and ensure that the BMP is constructed above that point so as to be effective. If the Village elected to modify the structure of the fee in lieu and collect the money, those funds would need to be used by the Village within the watershed and would not necessarily be adjacent to the new development.

Mr. Wicklander felt the fee should be in line with actual construction costs. Mr. Crilly was concerned that granting the fee-in-lieu doesn't provide any immediate relief to adjacent owners.

Motion to **Recommend** the Increase the Post Construction Best Management Practice (PCBMP) Fee in Lieu to reflect the actual cost of construction and land acquisition and modify the code to allow funds to remain within the Village for future use was made by Mr. Ruyle and seconded by Mr. Crilly. **Motion passed with a 5-0 vote.**

Discussion Points/Reasons for recommendation:

- PCBMPs have limited effectiveness in some instances due to high ground water tables and existing drainage patterns. In those cases, granting a fee in lieu may be considered.
- Align fees with actual construction costs.
- Modify code so funds collected stay within the Village
- Maintain the currently policy that PCBMPs must be provided whenever possible.

Considerations:

- Projects constructed from fee-in-lieu may not be constructed immediately or even adjacent to the new construction, so no benefit would be seen by adjacent property owners.

6. Require Additional PCBMPs for Basements Deeper than Nine Feet (9')

Staff stated that new houses often has deeper basements than existing homes, and thus more active sump pumps. The current code does not regulate the depth of basements. New houses are often constructed with deeper basements than older houses and can require multiple or extensive sump pump systems to manage groundwater. In some cases sump pumps may run continuously, even during drier periods, and volume will increase during periods of rain. This often creates a condition where low lying areas stay continually wet from constant discharge.

Mr. Schoenberg stated with the proposed change to sump pump discharge above (requiring PCBMPs for sump discharge), there is no need for this new code amendment. Mr. Ruyle, asked if staff can quantify how much additional water is generated from deeper basements. Staff said as it's groundwater we are unable to quantify. Mr. Wicklander felt not enough information and statics are available to make this recommendation.

Motion to **Not Recommend** Additional PCBMP's for deeper basements was made by Mr. Ruyle and seconded by Mr. Wicklander. **Motion passed with a 5-0 vote.**

Discussion Points/Reasons for not recommending:

- Infiltration practices are being recommended for all sump pumps based upon item #2above.
- Not enough data exists to quantify a required additional storage volume for deeper basements.

7. Require Foundation and Finished Grade Elevations to be Aligned with the Properties Located on Either Side of the Site

Staff explained that the current Village code does not include regulations regarding the elevation of the tops of foundations for new houses and additions. In some cases, the foundations and adjacent grades are constructed at elevations significantly higher than those of adjacent houses and overall building height is measured from the proposed grades.

Previous discussions by committee indicated such a requirement would not allow the design engineer to effectively design a new home to provide positive pitch away from both the new and existing homes.

Motion to **Not Recommend** Requiring Foundation and Finished Grade Elevations to be Aligned with the Properties Located on Either Side of the Site was made by Mr. Schoenberg and seconded by Mr. Crilly. **Motion passed with a 5-0 vote.**

Discussion Points/Reasons for not recommending:

- Limited effectiveness in areas with variable topography
- Overall grading must take into account conveyance (occasionally top of foundation must be raised to provide positive drainage away from existing and proposed structures)

8. Require On-site Stormwater Detention for New Residential Development

Staff explained that under the current Village code, stormwater detention must be provided for new construction with 25,000 square feet or more of net new impervious area. Proposed changes would require on-site detention for all single family homes. Staff summarized some of the costs and site planning issues to SWFPOC.

Cost for the system would vary between \$11,000 and \$22,000, that cost does not include a conveyance system. A typical single family home would require a detention vault 20' x 20' x 4.5' deep. Easements would be required over the system and the outlet. Homeowner's would be required to do maintenance to keep the system operating and the outlets will be prone to clogging due to small restrictor size, comparable to a pencil in diameter. Village staff would need to regularly inspect the system.

Motion to **Not Recommend** Requiring On-site Stormwater Detention for New Residential Development was made by Mr. Wicklander and seconded by Mr. Schoenberg. **Motion passed with a 5-0 vote.**

Discussion Points/Reasons for not recommending:

- High construction costs
- Lack of infrastructure throughout the Village for the detention system to outlet
- Significant maintenance for homeowner to ensure system remains functional.
- Numerous inspections from Village staff needed during construction and after
- Easements will be required for the detention and the connection/conveyance which may cover a large portion of a property

9. Remove Local PCBMP Requirements

Staff stated that in 2015, the Village adopted a revision to its stormwater ordinance which requires all developments that result in new impervious area of greater than 700 square feet to install PCBMPs. Examples of these include dry wells, rain gardens or permeable pavers with added base. These regulations are intended to improve water quality, to mitigate the stormwater impacts of new development on neighboring properties, and to reduce the amount of water entering the public portion of the stormwater management system.

Mr. Schoenberg stated he felt that keeping the requirement doesn't seem like a good use of staff time. Feels it's not an effective drainage facility. He suggest modifying it to 2,500sf. To require the BMP for 700sf, is over kill. Chair Gorman felt it does provide some benefit to the local drainage system. Mr. Wicklander stated we made the change to the code, to collectively make an impact to the Village and the BMP requirement should stay in place. It will help the Village in the future. Mr. Schoenberg felt that staff gets most of the calls based upon water quantity, not water quality. Chair Gorman felt the local requirement is a good incentive for people to keep the new development under 700sf.

Motion to **Not Recommend** repeal the requirements of the local PCBMP Ordinance was made by Mr. Crilly and seconded by Mr. Ruyle. **Motion passed with a 4-1 vote.**

Discussion Points/Reasons for not recommending:

- PCBMP provide storage and water quality
- Benefits downstream properties

Considerations

- Some homeowners are un-happy with performance of their PCBMPs
- Some adjacent property owners are un-happy with outlets of neighbor's PCBMPs

10. Eliminate the Building Coverage Exception for Detached Garages and Front Porches

Staff summarized that the current code regulates building coverage only. In some cases it does not include detached garages in the rear yard and rear-loading attached garages with a building footprint of 500 square feet. Front porches with a total footprint of 250 square feet or less are also not counted towards overall building coverage as well. However, it does not impact how stormwater runoff fee is computed.

Mr. Ruyle felt this encourages a longer driveway with more pavement and that we should discuss this as part of lot coverage. Staff explained that we will regulate that for stormwater requirements. Mr. Wicklander stated we should not be voting on it, as it doesn't impact stormwater. Mr. Ruyle felt this encourages an increase in runoff.

Motion to **Not Recommend (No Opinion)** Eliminate the Building Coverage Exception for Detached Garages and Front Porches was made by Mr. Schoenberg and seconded by Mr. Ruyle with the condition other Committees concerned about incentivizing additional impervious surfaces be looked at by Plan Commission. **Motion passed with a 5-0 vote.**

Discussion Points/Reasons for not recommending:

- Consensus of the Committee was that this was an item that should be considered in conjunction with zoning and planning issues.
- This should be looked at as part of lot coverage/open space requirements.
- Committee felt Plan Commission should review this code as it incentivizes an increase in impervious.

11. Reduce Minimum Foundation Drain Tile Size Requirement

Under the current code, the minimum size of the foundation drain tile is six inches. This is a local code amendment. The International Building Code requires a minimum size of four inches. The six-inch drain tile carries substantially more water than a four-inch drain tile and increases the amount of water flowing through the sump pump discharge.

Committee asked if this has an impact to stormwater. Staff stated they are unsure as it's groundwater; however, a larger pipe may bring in more water to the sump pump. Chair Gorman stated he talked with Lombard's building inspection staff, who stated 4" is typical and sufficient.

Motion to **Recommend** Reducing the required foundation drain from 6” to 4” as it has no discernable performance difference was made by Mr. Schoenberg and seconded by Mr. Ruyle. **Motion passed with a 4-0 vote with one member obtaining.**

Discussion Points/Reasons for recommendation:

- Committee felt 4” was sufficient and typical

12. Maximum Impervious Area / Open Space Requirements

Staff explained that currently the Village regulates the maximum building coverage in the Zoning Ordinance - 32% of the lot area. Building coverage is measured as the area of the lot occupied by principal and accessory buildings and by structures with a surface area of more than four (4) square feet and a height of 18 inches or more. Driveways, patios, and some decks are not included in this calculation, which can add significantly to the amount of stormwater runoff from a property. The Village does not currently have Open Space Requirements. If someone wanted to pave the entire backyard and meet setbacks, this can currently be done.

Chair Gorman stated this can either be an open space requirement or maximum impervious. Staff read some of the adjacent communities open space/lot coverage standards. Chair Gorman stated that even if PCBMP’s are put in, you can still have impacts to neighbors. Overall the developments have cumulative impacts. Within 50 or 100 years Downers Grove will be built out and redeveloped and we need to consider regulations now.

Mr. Schoenberg stated each community defines impervious differently in terms of what’s included. We will have to look at small lots differently than large lots because each lot needs to have a driveway and a sidewalk to front door.

Staff explained that Council would like to act on these recommendations in September and passed out information about current lot coverage on various zoning districts for both the entire Village and for recent new single family homes. Chair Gorman stated if a threshold wasn’t put in place, for each 10% increase in impervious, a 6% increase in runoff and volume would be seen. This is per a study done for Downers Grove about ten years ago and the subject of a Stormwater Magazine article. Reasonable limits need to be established and we can start with what adjacent communities do. Existing properties would be grandfathered in.

For the next meeting Committee asked that staff bring lot sizes for each zoning district for discussion. Committee feels that lot coverage is important, but further research must be done to establish those limits.

Motion to **Recommend** the concept of establishing a maximum lot coverage and/or open space regulation for residential property within the Village that varies based upon lot size, considerations must be given to the definition of open space and pervious/impervious areas and how existing properties will be handled was made by Mr. Ruyle and seconded by Mr. Crilly. **Motion passed with a 5-0 vote with one member abstaining.**

Discussion Points/Reasons for recommendation:

- Definition of impervious must be established
- Definition of open space be established
- Majority of all existing residential development is between 20% and 50% impervious coverage
- Only 17% of residential development has impervious coverage of 50% or more
- Less than 3% of the 142 new homes completed since 2013 have impervious coverage of 50% or more

Considerations

- Definition of impervious must be established (does this include permeable pavers, etc.)
- Definition of open space be established
- Thresholds for each zoning district must be established for open space/maximum impervious
- Regulating existing non-conforming properties

Mr. Wicklander made a motion, seconded by Mr. Crilly to adjourn the meeting at 8:54 p.m.

Motion carried by voice vote of 5-0.