



**DUPAGE
COUNTY**

Watershed
Management

Water
Quality

Floodplain
Mapping

Regulatory
Services

Flood Operations
& Maintenance

Shared
Services



STORMWATER MANAGEMENT

MEMORANDUM

Date: May 7, 2024

To: Stormwater Management Committee

From: Clayton Heffter, Stormwater Permitting Manager

Re: Rivers Edge Online Detention Variance
Incorporated Woodridge

COMMITTEE ACTION REQUESTED: A motion by Committee to not object to a variance request by Pulte Home Company, LLC, to allow construction of a site runoff storage facility that does not comply with the release rate provision of Section 15-74.C of the DuPage County Countywide Stormwater And Flood Plain Ordinance, with the condition that Woodridge certifies the application and approves the watershed modeling demonstrating that the proposed project has no adverse impacts to upstream or downstream properties and provides a watershed benefit.

Staff has received a Petition for Variance concerning an online site runoff storage facility, commonly known as a detention basin, associated with the Rivers Edge development in Woodridge, Illinois. This petition seeks relief from Section 15-74.C (detention release rates in the floodplain) of the DuPage County Countywide Stormwater and Flood Plain Ordinance (CSFPO). Woodridge, being a complete waiver community under the CSFPO, will undertake the review and certification of the Pulte stormwater application.

The petitioner requests relief from Section 15-74.C due to their proposal to integrate detention storage within the floodplain, known as the on-line detention hybrid method. A variance is necessary for on-line detention because combining detention and compensatory storage in the floodplain makes it impossible to demonstrate that the release rate aligns with CSFPO requirements. The petitioner asserts that watershed modeling shows no adverse impacts upstream or downstream of the project site and anticipates a watershed benefit.

The petitioner notes the following items are relevant to their request:

1. The proposed development site (the property) is situated adjacent to the East Branch DuPage River and Prentiss Creek. The property was originally developed with a large-scale corporate training center. While the original corporate training center building has since been demolished, associated structures (i.e., parking, landscaping, recreational amenities) remain but are not actively maintained.



DUPAGE COUNTY

Watershed
Management

Water
Quality

Floodplain
Mapping

Regulatory
Services

Flood Operations
& Maintenance

Shared
Services



STORMWATER MANAGEMENT

2. The property consists of approximately 45 acres. Approximately 22.6 acres of the property is mapped floodplain. Of those 22.6 acres, 5.8 acres are existing wetlands that will remain. With approximately 50% of the property being in a special management area the percentage of the property impacted is unusually high compared to a typical development site. With the floodplain encumbrance the remaining acreage for residential use is diminished. To strictly comply with the provisions of the Ordinance, all development and detention would have to occur outside the existing floodplain which would result in an extreme limitation of the developable land.
3. The DuPage County Countywide Stormwater and Floodplain Ordinance does allow for detention in the floodplain and combined detention/floodplain function when it can be verified through technical analysis that there is no adverse impact to the receiving waterway and adjacent properties. Given the potential influence of the floodplain on the detention basin, it is not possible to demonstrate that the detention basin discharge will always meet the allowable release rate requirement of the Ordinance when the river is at or near its peak flood stage.
4. CEMCON, Ltd has performed an FEQ analysis to evaluate the impact of the floodplain on the release rate from the proposed detention facility. The FEQ analysis showed that the proposed detention facility would comply with ordinance requirements for 148 of 157 storm events in the FEQ analysis. Because the river will overtop the detention facility in a limited number of events, the release rate for those events could not be definitely proven. This does not change the volume of detention being provided. Additionally, additional volume is being accommodated earlier in the FEQ analysis, thereby providing material benefit to the regional watershed.
5. The proposed project detention volume is more than required by Ordinance. In addition, compensatory floodplain volume provided is more than required by Ordinance. Overall, the project provides approximately 66% more total stormwater/floodplain volume than required by Ordinance. This will provide a net watershed benefit to surrounding properties.
6. With the exception of the specific variance request item, the project has been designed to comply with all Ordinance requirements.
7. The project provides for a naturalized detention/compensatory storage facility which will improve water quality compared to existing conditions. This is an additional watershed benefit afforded by the project.
8. In the existing condition the property is all privately owned and there is no public access. With the development, public access will be provided following a significant dedication of river frontage to the Lisle Park district. With the development of the property the existing 5.8 acres of wetlands will remain and the floodplain will be improved as 4.8 acres of naturalized stormwater basins, incorporating plants that will reduce erosion and improve water quality will be created.



**DUPAGE
COUNTY**

Watershed
Management

Water
Quality

Floodplain
Mapping

Regulatory
Services

Flood Operations
& Maintenance

Shared
Services



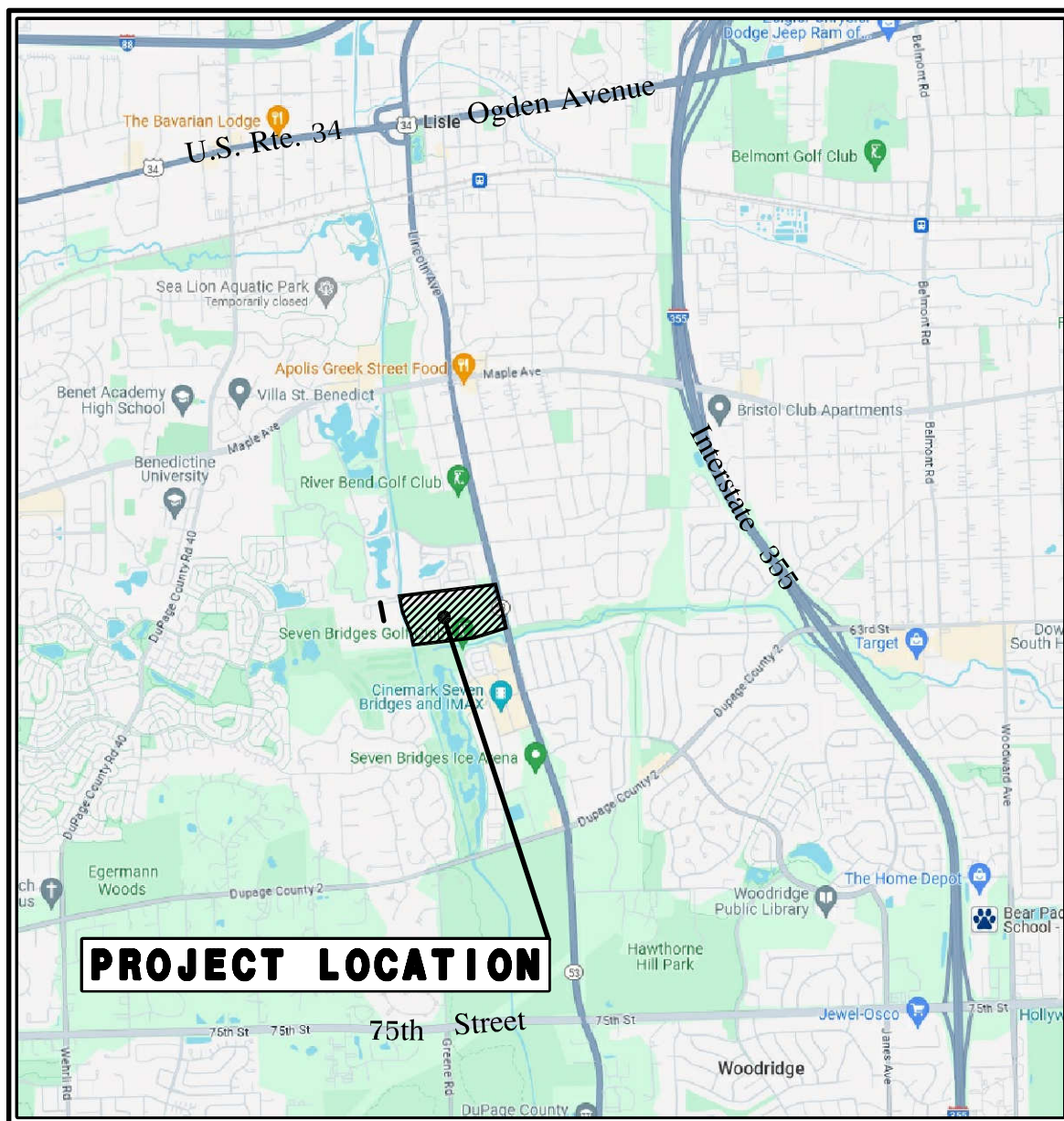
STORMWATER MANAGEMENT

9. In addition, with the development of the property, a blight on the Village's important Route 53 commercial corridor will be replaced with productive commercial uses that will expand the tax base. Absent the proposed stormwater variance, none of these benefits can be realized because development would not be viable.
10. The proposed mixed-use project transforms a distressed, blighted and vacant property, consisting of approximately 50% floodplain/wetlands, into an asset consistent with the Village's vision for mixed-use development that will diversify its tax base. The required commercial land use along IL Rt. 53 will provide needed tax revenue for the municipality. The planned residential use provides multiple housing needs on the same site with direct access to the Seven Bridges commercial center. The addition of significant stormwater/floodplain storage volume with improved naturalize plantings, provides a watershed benefit for surrounding properties while the proposed regional trail connections and park district improvements provide a needed benefit for the community.

Staff notes that upon Woodridge's certification of the application and approval of the watershed modeling, the proposed project will be documented to have no adverse impacts on surrounding properties and will offer a watershed benefit. Therefore, staff does not oppose the variance request. Staff also notes that this variance request aligns with past requests that the Committee did not oppose and recommends the Committee not object to this variance request.




RIVERS EDGE - WOODRIDGE, IL SEC. 15, T38N, R10E



RIVERS EDGE - WOODRIDGE, IL

SEC. 15, T38N, R10E



 CEMCON, Ltd.	PROJECT / CLIENT: PULTE HOME COMPANY, LLC 1900 E. Golf RD., SUITE 300 SCHAUMBURG, IL 60195 (847) 230-5281	DRAWN BY:	JMH	04-03-'23
		CHECKED BY:		
		APPROVED:		
		SCALE: N.T.S.		

Rivers Edge-Variance Petition

In accordance with the requirements outlined in Article XVI Sections 15-117.G and 15-117.F of the DuPage County Countywide Stormwater and Floodplain Ordinance, the following requisite information is provided to the Waiver Community (Village of Woodridge) in support of the variance petition for the above referenced project.

15-117.G.1 The owner's or developer's signed consent to the filing of the petition.

Developer: Pulte Home Company, LLC.
1900 E. Golf Road
Suite 300
Schaumburg, IL 60195

Signed Consent:

I hereby consent to the filing of this petition for a variance from the provisions of the DuPage Countywide Stormwater and Floodplain Ordinance as indicated below.

X  **-Ty Morris, Pulte Home Company, LLC**
Applicant

Vice President of Land Development
Applicant Title

15-117.G.2 The names and addresses of all professional consultants, if any, advising the petitioner with respect to the petition.

CEMCON, Ltd.
2280 White Oak Circle, Suite 100
Aurora, IL 60502

15-117.G.3 The name and address and the nature and extent of any economic or family interest of any officer or employee of the County in Non-Waiver Communities, or the local municipality in a Waiver Community, as to: the owner, the petitioner, or the subject property or Development.

None

15-117.G.4 The addresses and legal description of the subject property or Development.

Address: 6S700 Route 53 Lisle, IL

ANNEXATION PARCEL DESCRIPTIONS

PARCEL 1:
THAT PART OF LOT 1 LYING EAST OF THE CENTER LINE OF THE EAST
BRANCH OF THE DUPAGE RIVER OF WOODLANE ASSESSMENT PLAT

NUMBER 2 OF PART OF THE SOUTHWEST 1/4 OF SECTION 14 AND PART OF THE SOUTHEAST 1/4 OF SECTION 15 AND PART OF THE NORTHEAST 1/4 OF SECTION 22, ALL IN TOWNSHIP 38 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 28, 1982 AS DOCUMENT NO. R82-49575 IN DUPAGE COUNTY, ILLINOIS.

PARCEL 2:

LOTS 2, 3 AND 4 OF WOODLANE ASSESSMENT PLAT NUMBER 2 OF PART OF THE SOUTHWEST 1/4 OF SECTION 14 AND PART OF THE SOUTHEAST 1/4 OF SECTION 15 AND PART OF THE NORTHEAST 1/4 OF SECTION 22, ALL IN TOWNSHIP 38 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 28, 1982 AS DOCUMENT NO. R82-49575 IN DUPAGE COUNTY, ILLINOIS.

- 15-117.G.5 The specific feature or features of the proposed construction or Development that require a variance.

Section 15-74 of the DuPage County Countywide Stormwater & Floodplain Ordinance (the "Ordinance") permits the Storage facilities to be located in the Regulatory Floodplain upon satisfaction of certain conditions. The proposed development site (the "Property") is situated adjacent to the East Branch DuPage River and Prentiss Creek. The Property was originally developed with a large-scale corporate training center. While the original corporate training center building has since been demolished, associated structures (i.e. parking, landscaping, recreational amenities) remain but are not actively maintained.

The Property consists of approximately 45 acres. Approximately 22.6 acres of the Property is mapped floodplain. Of those 22.6 acres, 5.8 acres are existing wetlands that will remain. With approximately 50% of the Property being in a special management area, the percentage of the Property impacted is unusually high compared to a typical development site. With the floodplain encumbrance the remaining acreage for residential use is diminished. To strictly comply with the provisions of the Ordinance, all development and detention would have to occur outside the existing floodplain which would result in an extreme limitation of the developable land.

The DuPage County Countywide Stormwater and Floodplain Ordinance (Ordinance) does allow for detention in the floodplain and combined detention/floodplain function when it can be verified through technical analysis that there is no adverse impact to the receiving waterway and adjacent properties. Given the potential influence of the floodplain on the detention basin, it is not possible to demonstrate that the detention basin discharge will always meet the allowable release rate requirement of the Ordinance when the river is at or near its peak flood stage. For this reason, DuPage County requires a variance petition for Ordinance Article IX Section 15-74.C "Not allow design release rates to be exceeded under any stream elevation less than the Base Flood Elevation".

- 15-117.G.6 The specific provision of this Ordinance or the Waiver Community Ordinance from which a Variance is sought and the precise variation there from being sought.

Ordinance Article IX Section 15-74.C. The Applicant proposes to construct a detention facility at the edge of the floodplain limit and utilize said facility for combined stormwater management and compensatory storage. CEMCON, Ltd has performed an FEQ analysis to evaluate the impact of the floodplain on the release rate from the proposed detention facility. The FEQ Analysis showed that the proposed detention facility would comply with ordinance requirements for 148 of 157 storm events in the FEQ analysis. Because the river will overtop the detention facility in a limited number of events, the release rate for those events could not be definitely proven. This does not change the volume of detention being provided. Additionally, additional volume is being accommodated earlier in the FEQ Analysis, thereby providing material benefit to the regional watershed. Accordingly, while the release rate cannot be proven for a limited number of modeled events as required under Section 15-74.C, the proposed detention facility meets the underlying intent of the Ordinance.

- 15-117.G.7 A statement of the characteristics of the subject property or Development that prevent compliance with the provisions of this Ordinance or the Waiver Community Ordinance.

As outlined above, the Property is situated adjacent to the East Branch DuPage River and Prentiss Creek. Approximately 50% of the Property is encumbered by mapped floodplain and wetlands. The percentage of floodplain and wetland encumbrance is unusually high compared to a typical development site.

To strictly comply with the Ordinance, all development and detention would have to occur outside the existing floodplain. Given that the proposed detention facility does meet the intent of the ordinance, alternative configuration which removes the detention facility from the floodplain undermine the purpose and intent of the development, causing the Property to remain vacant.

- 15-117.G.8 A statement of the minimum Variance of the provisions of this Ordinance or the Waiver Community Ordinance that would be necessary to Certify the proposed construction or Development.

Applicant seeks a variance from Article IX Section 15-74.C of the Ordinance. This Section requires that design release rates not be exceeded under any stream elevation less than the base flood elevation. Here, Applicant proposes combined detention and compensatory storage as permitted under Section 15-177.G.5. Applicant has submitted a Stormwater Report with associated FEQ modeling for the combined detention & compensatory storage facility. The design meets the requirements in 148 of 157 modeled storm events. In the 9 modeled storm events where the design does not satisfy requirements, the river will overtop the detention facility so the release rate cannot be definitively proven. This does not change the fact that substantial volume is being accommodated earlier in the FEQ analysis, thereby providing material benefit to the regional watershed and meeting the underlying intent of the Ordinance. The proposed project detention volume is more than required by Ordinance. In addition, compensatory floodplain volume provided is more than required by Ordinance. Overall, the project provides approximately 66% more total stormwater/floodplain volume than required by Ordinance. This will provide a

net watershed benefit to surrounding properties. The design reflected in these studies reflects the minimum variance from the County Ordinance necessary to certify the proposed development.

15-117.G.9 A statement of how the Variance sought satisfies the standards set forth in Section 15-27 of this Ordinance.

15-27.A.1 A detailed FEQ analysis was completed and provided to the Waiver Community for review. The analysis verifies that the Project poses no adverse impacts to the receiving waterway(s) or any adjacent properties. In fact, the Project provides a watershed benefit due to the additional floodplain storage volume afforded by the Project. The Project detention/compensatory storage facility is located at the edge to the floodplain limit within a larger floodplain storage area that encompasses the westerly half of the site and will have no adverse impacts to environmental stream uses and functions.

15-27.A.2 A detailed FEQ analysis of peak water surface elevations was completed and provided to the Waiver Community for review. The FEQ analysis for 157 historical storm events (some of which exceed the traditional 100-Year event rainfall amount) shows no increase in peak water surface elevation at the Project discharge location or upstream of the Project, and therefore verifies that the Project poses no adverse impacts (i.e. peak WSEL increases greater than 0.04 feet) to the receiving waterway(s) or any adjacent properties. In fact, the Project provides a watershed benefit with the additional floodplain storage volume afforded by the Project. The Project detention/compensatory storage facility is located at the edge to the floodplain limit within a larger floodplain storage area that encompasses the westerly half of the site and will have no adverse impacts to environmental stream uses and functions.

15-27.A.3 As stated above, the Project poses no adverse impacts to the receiving stream and no unreasonable additional increase in flood velocity.

15-27.A.4 With the exception of the specific variance request item, the Project has been designed to comply with all Ordinance requirements.

15-27.A.5 The Project provides for a naturalized detention/compensatory storage facility which will improve water quality compared to existing conditions. This is an additional watershed benefit afforded by the Project.

15-27.B As stated above, the Project poses no increase in peak water surface elevation at the Project discharge location or upstream and downstream of the Project, and therefore verifies that the Project poses no adverse impacts (i.e. peak WSEL increases greater than 0.04 feet) to the receiving waterway(s) or any adjacent properties.

15-27.C.1 The proposed detention/compensatory storage facility analysis and design are based on the Ordinance requirements which follow the DuPage County Stormwater Management Plan (Plan).

15-27.C.2 The proposed detention/compensatory storage facility configuration and techniques are based on the Ordinance requirements which follow the DuPage County Stormwater Management Plan (Plan).

15-27.C.3 The proposed detention/compensatory storage facility will be constructed concurrent with the other site improvements and will be functional prior to or concurrent with any building construction that increase the total impervious area of the subject site.

- 15-117.J.1 A statement or documentation demonstrating that granting the Variance shall not alter the essential character of the area involved, including existing stream uses.

The Project detention/compensatory storage facility is located at the edge of the floodplain limit within a larger floodplain storage area that encompasses the westerly half of the site and will not alter the essential character of the area involved or existing stream uses. The proposed facility is not on-line with the receiving stream. In its present configuration, the property does not allow public access to the river. With the proposed development, approximately 10.7 acres of property along the east side of the river will be converted from private property to public property via dedication of land to the Lisle Park District.

- 15-117.J.2 A statement or documentation confirming that carrying out the strict letter of the provisions of this Ordinance or the Waiver Community Ordinance would create an undue or particular hardship or difficulty on a specific developer or owner.

As outlined above, the subject property is situated adjacent to the East Branch DuPage River and Prentiss Creek and is nearly 50% encumbered by mapped floodplain and wetlands. The percent floodplain/wetland encumbrance is unusually high compared to a typical development site. The proposed stormwater configuration may not comply with the strict letter of the ordinance, but it meets the spirit and intent of the ordinance and will provide net improvements over existing conditions. In the existing condition the property is all privately owned and there is no public access. With the Development, public access will be provided following a significant dedication of river frontage to the Lisle Park District. With the development of the Property the existing 5.8 of wetlands will remain and the floodplain will be improved as 4.8 acres of naturalized stormwater basins, incorporating plants that will reduce erosion and improve water quality will be created. With the development of the Property, significantly more stormwater volume than required by Ordinance will be provided within the floodplain, thereby minimizing impacts on downstream properties in smaller storm events. In addition, with the development of the Property, a blight on the Village's important Route 53 commercial corridor will be replaced with productive commercial uses that will expand the tax base. Absent the proposed stormwater variance, none of these benefits can be realized because development would not be viable.

- 15-117.J.3 A statement or documentation confirming that the relief requested is the minimum necessary and there are no means other than the requested Variance by which the alleged hardship can be avoided or remedied to a degree sufficient to permit the reasonable continuation of the Development.

The relief hereby requested from Ordinance Article IX Section 15-74.C represents the minimum necessary given the site encumbrances outlined above. Development of the Property with a legally permissible use is not feasible absent the proposed variance. There are no other viable options to

relocate detention facility outside of the floodplain and realize the underlying purpose and intent of the development.

- 15-117.J.4 A statement or documentation indicating that the Applicant's circumstances are unique and do not represent a general condition or problem.

As outlined above in 15-117.J.2, the unusually high percentage of floodplain/wetland encumbrance on the subject site is unique condition of the Property (much higher than a typical development site) and therefore does not represent a general condition that would be experienced on most other development sites.

- 15-117.J.5 A statement or documentation demonstrating that the subject Development is exceptional as compared to other Developments subject to the same provision.

The proposed mixed-use project transforms a distressed, blighted and vacant property, consisting of approximately 50% floodplain/wetlands, into an asset consistent with the Village's vision for mixed-use development that will diversify its tax base. The required commercial land use along IL RT. 53 will provide needed tax revenue for the municipality. The planned residential use provides multiple housing needs on the same site with direct access to the Seven Bridges commercial center. The addition of significant stormwater/floodplain storage volume with improved naturalize plantings, provides a watershed benefit for surrounding properties while the proposed regional trail connections and park district improvements provide a needed benefit for the community.

- 15-117.J.6 A statement or documentation confirming that when the Variance request involves the standards for Wetlands and Floodplains, the Development proposed for a wetland or floodplain could not be constructed if it were limited to areas outside the wetland or floodplain.

The variance request does not involve the standards for wetlands and floodplains. The proposed Project design elements are in conformance with the Ordinance requirements concerning wetlands and floodplains.