

March 18, 2020

Mr. Thomas Harrigan
Zoning and Planning Administrator
Village of Elm Grove
13600 Juneau Boulevard
Elm Grove, WI 53122-0906

Re: 13405 Elmhurst Parkway
Revised Demolition and Redevelopment Plan Review

Dear Mr. Harrigan:

As requested, we have reviewed the revised documents submitted to the Village for an application to demolish and redevelop an existing single-family residential home at 13405 Elmhurst Parkway. The documents were received on March 13, 2020. The findings and recommendations related to the revised demolition and redevelopment plan are as follows:

1. Wetlands: Mapping from the Wisconsin Department of Natural Resources (DNR) Water Surface Data Viewer website shows wetland indicators exist on the property. The applicant will need to conduct a wetland investigation to determine if wetlands exist. Wetlands cannot be impacted unless approved by DNR and US Army Corps of Engineers. The transmittal of the revised information indicated a wetland investigation will be conducted by Wetland and Waterway Consulting in the next several weeks.
2. Floodplain: The effective FEMA floodplain map shows the property is located outside of a regulatory floodplain.
3. Plat of Survey:
 - a. House Setback: The property is zoned RS-1. The Plat of Survey shows the proposed new house structure will meet setback requirements in the Village Code for RS-1 zoning.
 - b. Impervious Area Calculations:
 - i. The Plat of Survey shows the proposed building footprint area to be 2,896 square feet (14.16% of the gross parcel area). The calculations provided show the proposed house plan meets the building footprint coverage limitation (20% Max. per Section 335-17.G of the Village Code for RS-1 Zoning).
 - ii. The Plat of Survey shows the total proposed impervious surfacing to be 5,666 square feet (27.70% of the gross parcel area). The calculations provided show the total proposed impervious area meets the total coverage limitation (30% Max. per Section 335-17.H of the Village Code for RS-1 Zoning).
4. Grading Plan:
 - a. The following items need to be added:
 - i. Additional erosion control measures for any disturbance in the public right-of-way. We recommend using temporary manufactured erosion logs since silt fencing is not allowed in the public right-of-way.
 - ii. If there is a delay between demolition and construction for redevelopment, then a barrier fence with warning signs should be installed around any open excavation.

- b. Sanitary Lateral:
 - i. The Grading Plan shows the existing lateral in the public right-of-way will be reused and a new lateral will be installed from the front lot line to the new house.
 - ii. The length of existing lateral proposed to be reused must be televised to determine its structural condition. Per Section 232.8 of the Village Code, if it is of PVC construction and is free of defects and water tight as evidenced by a televised inspection video and report, it may be reused. If it is leaking or not PVC, it must be lined or re-laid with proof that the improvements are water tight with a subsequent televised inspection video and report.
 - iii. If the existing sanitary lateral in the public right-of-way is abandoned, then per Section 232-8 of the Village Code, the existing sanitary lateral will need to be severed from the main and a watertight seal placed at the main connection. The abandonment will need to be inspected and tested to the satisfaction of the Director of Public Works. A new lateral connection may be made at the existing connection point or anywhere along the sewer main except the new lateral may not be directly connected to the sewer manhole or within 5 feet of the manhole structure. The connection of the new lateral to the existing sanitary sewer will need to be watertight.
 - iv. Cement slurry backfill will be required for excavations under the road pavement with pavement replacement in kind.

- c. Water Service:
 - i. The property is currently served by a private water distribution system. Records we have do not show the size of the water main along Elmhurst Parkway.
 - ii. The Grading Plan shows the existing water service in the public right-of-way will be reused and a new service will be installed from the front lot line to the new house.

- d. Driveway and Driveway Culvert:
 - i. The existing driveway culvert needs to be replaced according to our discussion during the site visit on February 10, 2020.
 - ii. Details of the new culvert (size, length and elevation) and any associated ditch grading will be provided by the Village Department of Public Works.
 - iii. Culvert and ditch grading details should be shown on the redevelopment plan drawings if they are available before the drawings are submitted for review. If the details are not available, then a note needs to be placed on the drawings indicating the culvert will be replaced and details for the culvert and associated ditch grading will be determined at a later date.
 - iv. The new culvert and associated ditch grading will need to be constructed by the applicant's contractor as part of the overall redevelopment plan.
 - v. The applicant will need to stake the culvert locations in the field and then schedule a pre-installation meeting with the Village Director of Public Works. The representative will need to verify the stakes are correct before the culvert pipe is installed.
 - vi. A Village Department of Public Works representative will also need to inspect the culvert pipe after it is placed on proper bedding and before backfilling can commence.
 - vii. All driveway approaches must be asphaltic concrete.

- e. House Grade:
 - i. A letter from Butler Engineering, Inc. dated February 26, 2020 for the analysis of basement depth and risk of basement wetness was included with the revised development plan. Their letter indicates the basement floor elevation of 743.1 would have a very low risk of a wet basement. The letter also recommends some additional steps that can be taken to ensure a dry basement. It appears the recommendation for finish grading around the perimeter of the house will be implemented. However, it is unknown if any of the remaining additional steps are being implemented in the revised development plan.
 - ii. The proposed first floor elevation is 753.0.
 - iii. The Proposed first floor is approximately 4.3 feet higher than the abutting house to the west.
 - iv. The Proposed first floor is approximately 0.2 feet higher than the abutting house to the east.
 - v. The Proposed first floor is approximately 2.8 feet higher than the abutting house to the south.
 - vi. Based on the above, the first floor elevation as currently proposed appears to be reasonable for this lot

 - f. Lot Grading:
 - i. The existing topography generally slopes toward the south and west.
 - ii. The property owner to the southwest of the lot reported storm water flooding from the large storm event that occurred in 1998.
 - iii. The proposed development plan includes an increase of impervious area on the lot which will likely have an adverse impact on existing drainage concerns.
 - iv. Because of the previous flooding reports and proposed increased impervious area, our original review letter recommended the applicant take steps to avoid worsening drainage conditions on the neighboring properties. These steps include reducing runoff onto adjacent properties by detention, infiltration or redirecting runoff toward the public right-of-way of Elmhurst Parkway.
 - v. The proposed contours on the revised development plan show a swale along the west side of the house that will intercept some of the runoff and discharge it to the ditch along Elmhurst Parkway. The longitudinal slope of the swale is approximately 0.86%, which is relatively flat for a grass lined swale. The contractor will need to take care when constructing the swale to make sure that positive slope will be maintained.
 - vi. The proposed contours on the revised grading plan show slopes that are as much as 3:1 on the west side of the house and steeper than 3:1 in the vicinity of the patio on the south side of the house. The Landscape Plan provided with the original development plan submittal indicated there was a step down from one part of the patio to another part. However, we typically recommend vegetated slopes have a slope that is 4:1 or flatter when possible to make initial restoration and future maintenance easier for the home owner.
5. Landscape and Tree Removal Plans were not included with the revised development plan.

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We recommend the items listed above be addressed to the Village's satisfaction prior to approval. Please contact our office with any questions regarding this matter. Thank you for allowing us to be of service to the Village of Elm Grove.

Respectfully,

RUEKERT & MIELKE, INC.



Anthony D. Petersen, P.E. (WI, IA)

Senior Project Manager

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ADP:adp

cc: David De Angelis, Village of Elm Grove

Richard Paul, Jr., Village of Elm Grove

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