



FAIRFAX COUNTY

EXCEPTION APPLICATION FILED: 12/11/2023

EXCEPTION REVIEW COMMITTEE: 3/6/2024

V I R G I N I A

February 14, 2024

LAND DEVELOPMENT SERVICES (LDS)

SITE DEVELOPMENT AND INSPECTIONS DIVISION (SDID)

STAFF REPORT

RESOURCE PROTECTION AREA (RPA)
ENCROACHMENT EXCEPTION #WAIV-2023-00514 &
WATER QUALITY IMPACT ASSESSMENT #009820-WQ-003-1

APPLICANT NAME: Mr. Andrew Rieger

PROJECT LOCATION: 12917 Percheron Lane, Herndon, VA 20171

TAX MAP REFERENCE: 0353-26-0027

DISTRICT: Sully District

DATE APPLICATION ACCEPTED: January 4, 2024

WATERSHED NAME: Cub Run

CBPO PROVISION: Section 118-6-9. General RPA Encroachment Request

- 100-YEAR FLOODPLAIN PRESENT
- PROPOSES ENCROACHMENT INTO THE SEAWARD 50 FEET

LOT RECORDATION DATE:

- PRIOR TO NOVEMBER 18, 2003
- AFTER NOVEMBER 18, 2003
- BETWEEN JULY 1, 1993 AND NOVEMBER 18, 2003
- PRIOR TO JULY 1, 1993
- PRIOR TO OCTOBER 1, 1989

STAFF RECOMMENDATION:

- APPROVAL
- DENIAL
- APPROVAL WITH CONDITIONS

DESCRIPTION OF EXCEPTION REQUEST:

This application seeks resolution for a violation concerning the presence of a sport court within the RPA and its permission to remain. The dimensions of the sport court measure 40 feet by 20 feet, totaling 800 square feet, situated within 50 feet of the seaward boundary of the RPA (refer to Attachment B3). The WQ application package was accepted with the RPA boundary line not matching the approved RPA delineation study, and the sport court outside the 50-foot seaward limit per Attachment B2. However, such errors were corrected upon reviewing the submission package, as shown in Attachment B3.

As per the stipulations outlined in Chapter 101 of the County Code, specifically Sections 101-2-2 and 101-2-3, pertinent notes were inscribed on the subdivision plat (see notes 9 and 10 in Attachment C8-4), mandating the preservation of the RPA in its undisturbed and vegetated state, aligning with the specifications delineated in section 118-3-3(f) of Chapter 118 of the County Code.

Compliance with the County code dictates that for the sport court to remain within the RPA, an exception must be granted by the Exception Review Committee (see Attachments C9-1 through C9-5).

Given that the RPA designation was assigned to the property on November 18, 2003, and the lot was established on October 7, 2004, an exception for an accessory structure cannot be processed under Section 118-6-8. Consequently, the applicant has formally submitted a request for an exception pursuant to Section 118-6-9.

STAFF RECOMMENDATIONS:

Staff recommend denial of the application. As presented, the proposed application does not meet the following finding:

- Section 118-6-6.d: The request is self-created and self-imposed.
 - The proposed imperviousness associated with accessory use is substantial and does not meet the finding of this section.

BACKGROUND:

Timeline

- 11/18/2003 RPA designated on the lot by Fairfax County.
- 09/03/2003 Floodplain Study approved for Thompson Road Property; 9820-FP-002-1; (Attachment C8-1)
- 11/20/2003 RPA Delineation Study Approved for Thompson Road Property; 9820-RPA-001-1 (Attachment C8-2)
- 03/04/2004 Water Quality Impact Assessment (WQIA) Approved for the construction of storm-sewer outfall (on the other part of the subdivision see Attachment C8-3)
- 06/17/2004 Record Plat for Final Subdivision Plan Approved; 9820-RP-001-1, (Attachment C8-4)
- 06/25/2004 Final Approval of the subdivision Plan (Bonding); 9820-SD-002-2 (Attachment C8-5)
- 07/15/2004 Bonded Grading Plan for Lots 2 through 31 Approved; 9820-SDGP-002-000022 (Attachment C8-6)
- 08/31/2004 WQIA for Removal of Farm Pond and establishment of Vegetative Buffer Approved; 009820-WQ-002-2 (on the other part of the subdivision see Attachment C8-7)
- 10/07/2004 Lot 27 is recorded Deed Book 16579, Page Number 1676 (Attachment C8-8)
- 02/03/2006 Winchester Homes, Inc. (Developer) sold the property to Thomas S. Howland (1st homeowner) per Deed Book 18193 & Page Number 0321
- 08/03/2010 Mr. and Mrs. Rieger purchased the property per Deed Book 21168 and Page Number 1311
- 02/10/2022 Notice of Violation (NOV) (Attachment C8-9)
- 03/01/2022 Conservation Plan Approved for the construction of a Deck Patio and Swimming pool outside of the County-mapped RPA; 009820-CON-002-2 (Attachment C8-10)
- 10/22/2023 WQIA deemed complete; 009820-WQ-003-1 (Attachment B2)
- 01/04/2024 Exception request accepted for public hearing; WAIV-2023-00514 (Attachment B1 and B2)

Upon examination of the aerial images (refer to Attachments C2-8 & C2-9), it is evident that the sport court was built within the timeframe spanning from 2017 to 2019. Notably, the construction of the sport court occurred on the identical footprint previously occupied by a swing set, which had been erected by the former property owner. Based on the aerial image records, the swing set was installed sometime between 2005 and 2007.

In February 2022, LDS became aware of the violation. Following this discovery, the property underwent inspection on February 3, 2022, leading to the issuance of a formal notice of violation on February 10, 2022.

Concurrently, the applicant submitted a conservation plan on February 24, 2022, outlining their intentions to construct a deck, patio, and swimming pool. This conservation plan underwent review and received approval from staff on March 1st, 2023, as documented in Attachment C8-10.

It's important to note that the RPA designation depicted on the approved conservation plan corresponds to the County's mapped RPA. The conservation plan shows that both the swimming pool and the patio are situated outside the County's mapped RPA. This RPA boundary was re-delineated with the subject WQIA after approval of the pool and patio Conservation Plan

Given that the conservation plan has been both approved and executed, with the swimming pool and patio positioned outside the RPA boundaries as per the plan, they are not considered part of the current application under review.

STAFF ANALYSIS OF THE REQUIRED FINDINGS:

See the Virginia Department of Conservation and Recreation (DCR) guidance (Attachment C4).

Section 118-6-6.a: *The requested exception to the criteria is the minimum necessary to afford relief.*

DCR Guidance:

The term "minimum necessary to afford relief" is inherently subjective. The guidance advises evaluating the placement of structures relative to the size, layout, and location of the lot or parcel. Additionally, it suggests considering whether an alternative location, size, or orientation could eliminate the need for an exception. If an alternative location is feasible, the determination of "minimum necessary to afford relief" would not apply (see Attachment C-4).

Staff:

Considering that the sport court now occupies the same area previously disturbed by the swing set, and upon conducting an onsite inspection where it became apparent that the backyard slopes steeply towards the creek (refer to attachments C1-1 to C1-12), it is clear that the current location stands as the sole viable option for the sport court.

Exploring alternative locations outside the RPA proves unfeasible due to zoning restrictions and space limitations. Therefore, relocating the sport court elsewhere on the property while complying with regulations and addressing practical concerns remains unattainable.

Finding: The request is the minimum necessary to afford relief.

Section 118-6-6.b: *Granting the exception will not confer upon the applicant any special privileges that are denied by this part to other property owners who are subject to its provisions and who are similarly situated.*

DCR Guidance:

This finding is intended to make sure that an exception request would not give the applicant something that has been denied to others in similar situations, and gets to the equity, fairness, and arbitrary and capricious aspects of any exception request and decision (see Attachment C-4).

Staff:

Attachment C6.1 furnishes an inventory of previous cases dating back to the establishment of the ERC committee, spanning from June 2004 to November 2023. These records are meticulously updated. Additionally, Attachments C6.2 offer a concise summary of past cases deliberated during public hearings for exceptions. A thorough examination of these records reveals that the Exception Review Committee (ERC) has adjudicated a total of 36 cases. Among these, 10 cases were processed under the loss of buildable area provision (Section 118-6-7), 12 cases under accessory uses within the RPA (Section 118-6-8), and 14 cases under general encroachment requests (Section 118-6-9). Out of the 36 cases, 29 were approved, while 7 were denied.

To provide a benchmark for comparison with similarly situated cases, specific criteria have been established, focusing on situations where existing accessory uses are requested to remain within the RPA. Notably, among these cases, four were identified as being of similar nature. Attachment C6.3 offers a comprehensive comparison between the subject case and the four identified similarly situated cases. Intriguingly, three out of the four cases used for comparison were approved, while one was denied. Each decision was contingent upon the unique details and circumstances of the individual cases.

Finding: Granting approval in the current case would not result in the applicant receiving preferential treatment over others.

Section 118-6-6.c: *The exception is in harmony with the purpose and intent of this Chapter and is not of substantial detriment to water quality.*

DCR Guidance:

The purpose of the regulation is to protect water quality. The WQIA is the best way to determine water quality will be adequately protected should a given request be approved.

Staff:

The submitted WQIA outlines two mitigation measures detailed in Attachment B2. These measures include establishing a 1200 square foot vegetative buffer and disconnecting 800 square feet of impervious area into 465 square feet of Compost soil amendment. These initiatives aim to enhance runoff reduction and infiltration. The Virginia Runoff Reduction Method (VRRM) computations, provided as part of the WQIA, demonstrate that these proposed measures are sufficient to achieve the desired pollutant load reduction of 0.09 pounds per year.

The proposed vegetative buffer, which is intended to offset the 800 square feet of impervious surface, consists of planting that is 1.5 times the size of the sport court, as detailed in Attachment B3. This planting plan includes 5 overstory trees, 6 understory trees, and 18 shrubs, with planting density consistent with Section 118-3-3(f) of the CBPO and the PFM Table 12.13B. The landscaping plan has been reviewed by the Urban Forestry Management (UFM) Branch. Forestry comments, provided in Attachment C5-3, suggest relocating the proposed planting to an existing turf area on the outer part of the RPA, away from the existing forested open space area.

Upon scrutiny of the applicant's computations (refer to Attachment B2, pages 4 to 6), it is evident that the entire site has been categorized as a disturbed area, with the breakdown of land uses limited to turf and impervious areas, overlooking the existing forested area beyond the fence. Furthermore, the conversion of 1200 square feet of vegetative buffer area has not been factored in. In response to these observations, staff have recalculated the VRRM computations to ensure that the proposed mitigation measures adequately meet the desired pollutant load reduction requirements. Staff confirm that the proposed mitigation measures demonstrate no detriments to water quality.

Staff examined two scenarios, as illustrated in Attachments C5-1 and C5-2. The first scenario portrays existing conditions (Attachment C5-1), outlining the determinants in water quality and the required reduction in pollutant load resulting from the conversion of 800 square feet of turf area into a concrete pad associated with the construction of the sport court. This scenario indicates a requisite pollutant load reduction of 0.10 pounds per year of phosphorus load.

The second scenario reflects proposed conditions post-implementation of a 1200-square-foot vegetative buffer area, as depicted on page 3 of Attachment B2, and subsequent implementation of compost soil amendments with a surface area of 465 square feet, capturing 0.08 acres of impervious area (page 6 of Attachment B2). The results on the Site Compliance Tab of Attachment C5-2 indicate a total

load reduction of 0.09 pounds per year achieved, sufficiently mitigating the revised pollutant load requirements of 0.09 pounds per year.

Finding: The exception is in harmony with the purpose and intent of this Chapter and is not of substantial detriment to water quality.

Section 118-6-6.d: *The exception request is not based upon conditions or circumstances that are self-created or self-imposed.*

DCR Guidance:

This finding focuses more on the actions of the property owner. For instance, if a lot area is 10,000 square feet, and encumbered by the RPA, then a property owner's desire to place a 7,000 square foot house on the lot would essentially be a self-imposed condition, in that a smaller house would be more suitable for the lot size. This finding relates, in most cases, to a property owner's failure to realize that their property is not suited for their intended use. When the circumstance for the request is "self-created," the request should be denied by the local body, board or commission.

Staff:

A thorough analysis of impervious surfaces has been undertaken to assess the impact of proposed land use relative to neighboring properties. This examination involves comparing the footprint of intended uses on the subject lot with that of existing houses within a 500-foot radius from the lot's boundary. The detailed findings are outlined in Attachment C3.

Attachment C3.1 presents a comparison of total impervious area, revealing that among the 25 lots examined, 7 exhibit greater impervious surface coverage than the subject lot. Notably, Lot 27 stands out with a percentage exceedance of 32%, indicating that 32% of neighboring lots have a larger total impervious area.

Further examination of house footprint sizes in the neighborhood, as depicted in Attachment C3.2, shows that Lot 27 has a percentage exceedance of 72%, suggesting that 72% of the lots have larger house sizes compared to the subject lot. However, an analysis of impervious areas associated with accessory uses (Attachment C3.3) places the subject lot in fourth greatest position, with only a 16% exceedance. The top ranked three lots where accessory uses are higher than the subject were further investigated and none of these accessory uses are encroaching into the RPA. This indicates that the size of accessory structures on the subject lot is relatively substantial compared to neighboring lots.

These comparisons, detailed in Attachments C3.1 to C3.3, were based on absolute impervious area values in square feet without considering lot size. Attachment C3.4 provides a percentage imperviousness analysis, taking lot size into account. Notably, Lot 27 ranks ninth with a 36% exceedance. When comparing against the median lot impervious area, it becomes apparent that the subject lot falls towards

the higher end of the spectrum in total impervious area, while its house footprint size remains below average.

It's important to note that the subject lot resulted from a subdivision, with construction occurring after the designation of the RPA on the property.

Finding: The exception request is not meeting this finding.

Section 118-6-6.e: *Reasonable and appropriate conditions are imposed, as warranted, that will prevent the allowed activity from causing a degradation of water quality.*

DCR Guidance:

Conditions should be imposed to ensure, among other things, that water quality is protected, and that the function of the undisturbed RPA remains. Conditions should be based, in part, upon the findings of the WQIA, as well as the specific situation of the lot or parcel on which the exception request was permitted. In addition to possible stormwater management BMP requirements to help compensate for the loss of the pollutant removal aspect of the RPA, a locality should investigate opportunities to require additional vegetative plantings elsewhere on the lot or parcel, to boost the functions of the undisturbed RPA. Also, a locality could require additional vegetation to be installed in the remaining portion of the RPA (including the buffer component).

Staff:

Based on staff assessments, it has been determined that allocating 1,200 square feet of vegetative buffer area and disconnecting 0.08 acres of impervious surface, redirecting them towards compost soil amendment, would effectively mitigate the impact of the newly introduced impervious areas within the RPA.

The proposed request aligns with this essential requirement. However, as a condition of approval, a comprehensive restoration and landscaping plan must be submitted. This plan will be supervised by a certified arborist to ensure the effective implementation of proposed restoration measures. This step aims to ensure that the mitigation efforts are carried out successfully and that the ecological balance within the RPA is preserved or enhanced.

Staff estimates suggest that providing 1,200 square feet of vegetative buffer area, along with disconnecting 0.08 acres of impervious area for compost soil amendment, could offer adequate mitigation for the introduced impervious areas within the RPA.

Finding: Reasonable and appropriate conditions are imposed, that will prevent the activity from causing a degradation of water quality.

Section 118-6-9: *The water quality benefits must exceed the detriments.*

Staff:

The VRRM computations detailed in Attachments C5-1 and C5-2 adhere to the water quality design criteria outlined in Section 124-4-2 of the County stormwater management ordinance. This section mandates that for regulated land-disturbing activities resulting in a net increase in impervious areas over pre-developed conditions, the total phosphorus load must be reduced by at least 10% below the pre-developed total phosphorus load. The VRRM computations demonstrate compliance with this section, indicating that the water quality benefit exceeds the requirement by at least 10%.

Finding: The water quality benefits exceed the detriments.

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