Radwick Lane Property, Preliminary Plan No. 120200150 & Site Plan No. 820200120

Troy Leftwich, Planner Coordinator, Mid-County Planning Division, Troy.Leftwich@montgomeryplanning.org, 301-495-4553
Parker Smith, Senior Planner, Mid-County Planning Division, Parker.Smith@montgomeryplanning.org, 301-495-1327
Patrick Butler, Supervisor, Mid-County Planning Division, Patrick.Butler@montgomeryplanning.org, 301-495-4561
Carrie Sanders, Chief, Area 2 Division, Carrie.Sanders@montgomeryplanning.org, 301-495-4653

Completed: 8/31/2020

Description

Request to subdivide and create ten (10) single-family detached lots, and associated stormwater management parcels and open space parcels.

Location: On Radwick Lane, 1,500 feet south of the intersection of Radwick Lane and Norbeck Road, Aspen Hill.
Zone: R-200.
Property Size: 5.81 acres.
Acceptance Date: January 7, 2020.
Applicant: Marcello Nucci.
Review Basis: Chapter 50, Subdivision Regulations and Chapter 59, Zoning Ordinance.

Summary

- Staff recommends approval with conditions.
- This project is proposed under Optional Method Cluster Development.
- The Preliminary Plan includes the Preliminary Forest Conservation Plan, while the Site Plan includes the Final Forest Conservation Plan.
SECTION 1: RECOMMENDATION AND CONDITIONS

Preliminary Plan No. 120200150

Staff recommends approval of Preliminary Plan No. 120200150, including the Preliminary Forest Conservation Plan. All site development elements shown on the latest electronic version of Preliminary Plan No. 120200150 submitted via ePlans as of the date of this Staff Report are binding:

General Approval

1. This Preliminary Plan is limited to ten (10) lots for ten (10) single-family detached dwelling units and associated stormwater management and open space parcels.

Adequate Public Facilities and Outside Agencies

2. The Adequate Public Facility (“APF”) review for the Preliminary Plan will remain valid for sixty (60) months from the date of mailing of this Planning Board Resolution.

Outside Agencies

3. The Planning Board has reviewed and accepts the recommendations of the Montgomery County Department of Transportation (“MCDOT”) in its letter dated July 17, 2020 and incorporates them as conditions of the Preliminary Plan approval. The Applicant must comply with each of the recommendations as set forth in the letter, which may be amended by MCDOT if the amendment does not conflict with any other conditions of the Preliminary Plan approval.

4. Before recording a plat for the Subject Property, the Applicant must satisfy MCDOT’s requirements for access and improvements.

5. The Planning Board has reviewed and accepts the recommendations of the Montgomery County Department of Permitting Services (“MCDPS”) – Water Resources Section in its stormwater management concept letter dated July 13, 2020 and incorporates them as conditions of the Preliminary Plan approval. The Applicant must comply with each of the recommendations as set forth in the letter, which may be amended by MCDPS – Water Resources Section if the amendment does not conflict with any other conditions of the Preliminary Plan approval.

6. The Planning Board has reviewed and accepts the recommendations of the Montgomery County Department of Permitting Services (“MCDPS”), Fire Department Access and Water Supply Section in its letter dated June 17, 2020 and incorporates them as conditions of approval. The Applicant must comply with each of the recommendations as set forth in the letter, which MCDPS may amend if the amendment does not conflict with other conditions of Preliminary Plan approval.

Concurrent Site Plan Approval

7. Before submitting a record plat application or any demolition, clearing or grading for the Subject Property, the Applicant must receive Staff certification of Site Plan No. 820200120. The number and location of site elements including but not limited to buildings, dwelling units, on-site parking, site circulation, and sidewalks is determined through site plan review and approval.
8. If an approved site plan amendment for the Subject Property substantially modifies the lot or right-of-way configuration or quantities shown on this Preliminary Plan, the Applicant must obtain approval of a Preliminary Plan amendment before certification of the site plan amendment.

Environment and Noise

Forest Conservation

9. The Applicant must comply with the following conditions of approval of Preliminary Forest Conservation Plan 120200150, approved as part of this Preliminary Plan.
   a) Before demolition, clearing, or grading on the Subject Property, the Applicant must record a Category I Conservation Easement among the Montgomery County Land Records by deed. The deed must be in a form approved by the M-NCPPC Office of the General Counsel, and the Liber and Folio for the easement must be referenced on the record plat.

Transportation

10. Prior to the recordation of plat(s), the Applicant must satisfy all necessary requirements of the MCDPS to construct a 5-foot wide sidewalk along the property frontage on Radwick Lane.

New Streets

11. The Applicant must dedicate the rights-of-way and ensure construction of all necessary road improvements for Radwick Lane and Street A, per Road Code Standard MC-2001.02, as modified and as shown on the Preliminary Plan.

12. Proposed Street A must be a closed-section road, per the MCDOT and MCDPS Right-of-Way Permitting approvals and as shown on the Certified Preliminary Plan, with final details to be determined at Certified Site Plan.

Record Plats

13. There shall be no clearing or grading of the site prior to recordation of plat(s).

Easements

14. The record plat must show necessary easements.

Notes and Labels

15. The record plat must reflect all areas under common ownership.

16. The record plat must include the following note: “The land contained hereon is within an approved cluster development and subdivision or resubdivision is not permitted after the property is developed.”

17. The record plat must reference the Common Open Space Covenant recorded among the Montgomery County Land Records at Liber 28045 Folio 578 (“Covenant”).
Certified Preliminary Plan

18. The Applicant must include the stormwater management concept approval letter and Preliminary Plan Resolution on the approval or cover sheet(s).

19. The certified Preliminary Plan must contain the following note:

Unless specifically noted on this plan drawing or in the Planning Board conditions of approval, the building footprints, building heights, on-site parking, site circulation, and sidewalks shown on the Preliminary Plan are illustrative. The final locations of buildings, structures and hardscape will be determined at the time of issuance of building permit(s) or site plan approval. Please refer to the zoning data table for development standards such as setbacks, building restriction lines, building height, and lot coverage for each lot.

20. Prior to submittal of the Certified Preliminary Plan, the Applicant must make the following changes:
   a. Show resolutions and approval letters on the certified set.

Site Plan No. 820200120
Staff recommends approval of Site Plan 820200120, including the Final Forest Conservation Plan. The development must comply with the conditions of approval for concurrent Preliminary Plan No. 120200150. All site development elements shown on the latest electronic version as of the date of this Staff Report submitted via ePlans to the M-NCPPC are required except as modified by the following conditions.¹

Density, Height & Housing

1. Density
   The Site Plan is limited to a maximum ten (10) single-family units and various stormwater management facilities and open spaces on the Subject Property.

2. Height
   The development is limited to a maximum height of 40 feet, as measured from the building height measuring point, as illustrated on the Certified Site Plan.

Open Space, Facilities and Amenities

3. Common Open Space, Facilities, and Amenities
   a. The Applicant must provide a minimum of 50,530 square feet of common open space (20% of net lot area) on-site.
   b. Prior to final inspection for the first single-family unit, the Applicant must construct the streetscape improvements, including the 5-foot sidewalk along Radwick Lane consistent with the streetscape standards determined by MCDOT.

¹ For the purposes of these conditions, the term “Applicant” shall also mean the developer, the owner or any successor (s) in interest to the terms of this approval.
c. Before the issuance of the first final inspection for a single-family unit for the residential development, all public use and amenity space areas on the Subject Property must be completed.

4. **Common Open Space Covenant**
The record plat must reference the Common Open Space Covenant recorded at Book 28045 Page 578 (Covenant).

5. **Maintenance of Public Amenities**
The Applicant is responsible for maintaining all publicly accessible amenities including, but not limited to common use spaces.

**Site Plan**

6. **Architectural Character**
   a) The exterior architectural character, proportion, materials, and articulation must be substantially similar to the schematic elevations shown on Sheet 8-10 of the submitted architectural drawings, as determined by M-NCPPC Staff.

**Environment**

7. **Forest Conservation**
The development must comply with the Final Forest Conservation Plan.
   a) The Applicant must record a Category I Conservation Easement over all areas of forest retention, forest planting and environmental buffers as specified on the Final Forest Conservation Plan. The Category I Conservation Easement must be approved by the M-NCPPC Office of the General Counsel and recorded in the Montgomery County Land Records by deed prior to the start of any demolition, clearing, or grading on the Subject Property, and the Liber Folio for the easement must be referenced on the record plat.
   b) The Applicant must install permanent Category I Conservation Easement signage along the perimeter of the conservation easements.
   c) The Final Sediment Control Plan must be consistent with the final limits of disturbance shown on the approved FFCP.
   d) The Applicant must comply with all tree protection and tree save measures shown on the approved FFCP. Tree save measures not specified on the FFCP may be required by the M-NCPPC forest conservation inspector at the pre-construction meeting.
   e) The Applicant must plant 16 three-inch caliper native shade trees within one year of construction completion.

8. **Fire and Rescue**
The Planning Board has reviewed and accepts the recommendations of the Montgomery County Department of Permitting Services (MCDPS), Fire Department Access and Water Supply Section in its letter dated June 17, 2020 and hereby incorporates them as conditions of approval. The Applicant must comply with each of the recommendations as set forth in the letter, which MCDPS may amend if the amendments do not conflict with other conditions of Site Plan approval.
9. **Site Plan Surety and Maintenance Agreement**
Prior to issuance of any building permit, sediment control permit, or Use and Occupancy Certificate, the Applicant must enter into a Site Plan Surety and Maintenance Agreement with the Planning Board in a form approved by the M-NCPPC Office of General Counsel that outlines the responsibilities of the Applicant. The Agreement must include a performance bond(s) or other form of surety in accordance with Section 59.7.3.4.K.4 of the Montgomery County Zoning Ordinance, with the following provisions:

a) A cost estimate of the materials and facilities, which, upon Staff approval, will establish the surety amount.
b) The cost estimate must include applicable Site Plan elements, including, but not limited to plant material, site furniture, fences, and associated infrastructure (sidewalks, private utilities, storm drainage facilities, and street trees). The surety must be posted before issuance of any building permit of development and will be tied to the development program.
c) The bond or surety must be tied to the development program, and completion of all improvements covered by the surety for each phase of development will be followed by a site plan completion inspection. The surety may be reduced based upon inspector recommendation and provided that the remaining surety is sufficient to cover completion of the remaining work.

10. **Development Program**
The Applicant must construct the development in accordance with a development program table that will be reviewed and approved prior to the approval of the Certified Site Plan.

11. **Certified Site Plan**
Before approval of the Certified Site Plan the following revisions must be made and/or information provided subject to Staff review and approval:

a) Include the stormwater management concept approval letter, development program, and Site Plan resolution and other applicable resolutions on the approval or cover sheet(s).
b) Add a note to the Site Plan stating that “M-NCPPC Staff must inspect all tree-save areas and protection devices before clearing and grading.”
c) Add a note stating that “Minor modifications to the limits of disturbance shown on the site plan within the public right-of-way for utility connections may be done during the review of the right-of-way permit drawings by the Department of Permitting Services.”
d) Modify data table to reflect development standards approved by the Planning Board.
e) Ensure consistency of all details and layout between Site and Landscape plans.
f) Principle building placement on the plans must reflect the 25-foot minimum setback requirement as specified in Chapter 59.4.4.7.C.
g) Proposed Street A must be a closed-section road, per the MCDOT and MCDPS Right-of-Way Permitting approvals and as shown on the Certified Site Plan.

**SECTION 2: SITE DESCRIPTION**

**Site Vicinity**

The Subject Property, outlined in yellow in Figure 1 below, is located at the end of Radwick Lane in Aspen Hill, about 1,500 square feet south of the intersection of Radwick Lane and Norbeck Road (Maryland Route 28). The Property is within a larger residential neighborhood that is bounded by the
Intercounty Connector (Maryland Route 200) to the south and west, Norbeck Road to the north and west, and Layhill Road (Maryland Route 182) to the east. Just south of the Subject Property, but not directly connected via the local roadway network, is the Intercounty Connector (Maryland Route 200), and to the west and southeast of the Subject Property are townhouse developments accessed from Wintergate Drive, which runs adjacent and parallel to the Intercounty Connector.

Figure 1: The Subject Property shown in yellow

Site Description

The Subject Property, which lies within the 1994 Aspen Hill Master Plan area, is currently improved with one single-family dwelling. Access to the house is provided via a gravel driveway that runs west from the house to Wintergate Drive. The existing house, as well as the gravel driveway, will be abandoned as part of this application. 4.53 acres of the 5.14 acre-property are forested, and the Property slopes sharply from a high point in the west to low points in the northeast and southeast corners.
SECTION 3: PROJECT DESCRIPTION

Proposal

The Applicant is proposing to subdivide the Subject Property into 10 single-family lots, 2 stormwater management parcels and 2 open space parcels. The 10 lots will be improved with detached single-family dwellings and will be serviced by a newly constructed public road, which runs west from Radwick Lane and forms a loop at the road’s western terminus. The single-family homes are oriented around the outside of this loop, and the interior of the loop contains common open space served by a bisecting sidewalk that also contains a pair of publicly accessible benches. This open space will not become a separate parcel and will instead be technically in the right-of-way. The future homeowner’s association for the project will be responsible for maintenance of this internal open space within the right-of-way.

The project will contain a safe an adequate system of sidewalks. A 5-foot sidewalk will be constructed on both sides of the proposed public street, and around the outside of the loop configuration at the street’s western terminus. Two crosswalks and a proposed sidewalk through the middle open space form a straight line.

As part of the project review process, Staff requested that the applicant explore making a pedestrian connection between the proposed sidewalks and Wintergate Drive. This would increase the connectivity of the property with the surrounding neighborhood, including a connection between the Subject Property and the bus stop that is located along Wintergate Drive. The Applicant pursued two different options for making this connection. One was through the subject property connecting to
Alpine Valley Court, the townhouse development to the southwest. The other was along the existing gravel driveway, through the northwest corner of the property then running south west to Wintergate Drive. In both cases, the Applicant made an effort to reach out to the adjacent property owners who would need to sign off on any proposed access. In both cases, the Applicant was unable to secure an agreement to allow a connection to or through the adjacent properties.

There is no sidewalk anywhere along Radwick Lane. The segment of road where Radwick Lane intersects with Norbeck Road is also devoid of a sidewalk. The closest sidewalk is at the intersection of Wintergate Drive and Norbeck Road, which is about 1,000 feet away in a straight line, but it is more than 3,000 feet away from the Property along the existing network of roads.

![Figure 3: Radwick Lane Annotated Site Plan](image)

Architecture and Site Design

Creating a spacious public open space where most of the proposed homes are facing into is a strong element of this development. The landscaped open space will serve as a gathering place for residents, a place to meet a neighbor or walk your dog. The proposed sidewalk and lead walk in front of each home will help creating a pedestrian friendly environment for future residents of this community. There are three major features of the proposed home architecture that are worth highlighting.

- **Recessed garage**: Having the garage massing set back from the main façade of the home is a critical component of a well-designed front-loaded single-family house. This strategy
helps create pedestrian friendly streets where the garage does not dominate the streetscape.

- **Front porch:** The application of a generous porch in front of each home is a critical element to make the main façade more prominent while providing a semi-public space in front of each home.

- **Lead walk:** Providing a lead walk to connect the porch to the sidewalk is an essential component to help creating pedestrian friendly street. This shifts the focus from the garage to the entryway of each home.

![Figure 4: Proposed Home Type Elevations](image)
Community Correspondence

The Applicant has met all proper signage, noticing and pre-submission meeting requirements for the submitted Applications. Staff has not received emails or community correspondence on this Application.

SECTION 4: PROJECT ANALYSIS AND FINDINGS

Preliminary Plan No. 120200150

Under Section 50.4.2.D, the Planning Board must make the following findings to approve a Preliminary Plan:

1. The layout of the subdivision, including size, width, shape, orientation and diversity of lots, and location and design of roads is appropriate for the subdivision given its location and the type of development or use contemplated and the applicable requirements of Chapter 59.

The lots have been reviewed for compliance with Section 50-29(a) of the Subdivision Regulations. Given the residential character of the surrounding neighborhood, the layout of the subdivision, including size, width, shape, and orientation, the proposed lots are appropriate for their location within the subdivision and meet all applicable requirements of the R-200 Zone, utilizing the Optional Method Cluster Development standards from Section 59.4.4.7.C.

a. The Preliminary Plan provides for required public sites and adequate open areas.

The Project provides a central open space in the center of the newly constructed public road loop. This central open space will provide a valuable amenity to be enjoyed by the residents of the new subdivision. The Project also provides 2.32 acres, or 40%, of the property as common open space, which is about double the minimum required.

b. The Lot(s) and Use comply with the basic requirements of Chapter 59.

The lots and parcels were reviewed for compliance with the dimensional requirements for the R-200 zone under cluster development as specified in the Zoning Ordinance. The lots and parcels as proposed will meet all the dimensional requirements for area, frontage, and width in that zone. The project will need to adjust the location of its houses as conditioned, to meet the 25-foot minimum setback requirement as specified in Chapter 59.4.4.7.C.

Division 4.4.7.C. R-200 Zone, Optional Method Cluster Development Standards

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Required</th>
<th>Provided</th>
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</thead>
<tbody>
<tr>
<td>Minimum usable area</td>
<td>5 acres</td>
<td>5.81 acres</td>
</tr>
<tr>
<td>Maximum density permitted</td>
<td>2 DUs/acre</td>
<td>1.72 DUs/acre</td>
</tr>
<tr>
<td>Common Open space required (%)</td>
<td>20%</td>
<td>40%</td>
</tr>
<tr>
<td>Common Open space required (acres)</td>
<td>1.16 acres</td>
<td>2.32 acres</td>
</tr>
<tr>
<td>Minimum lot area</td>
<td>9,000 sf</td>
<td>9,000 sf</td>
</tr>
<tr>
<td>Minimum setback from public street</td>
<td>25 feet</td>
<td>25 feet*</td>
</tr>
<tr>
<td>Minimum setback from private street</td>
<td>10 feet</td>
<td>N/A</td>
</tr>
<tr>
<td>Minimum rear setback</td>
<td>40 feet</td>
<td>40 feet</td>
</tr>
<tr>
<td>Maximum height</td>
<td>40 feet</td>
<td>40 feet</td>
</tr>
</tbody>
</table>
Maximum lot coverage | 25% | 25%

*Attachments reflect the correct building placement per Site Plan condition No. 12f

2. **The Preliminary Plan substantially conforms to the Sector Plan or Urban Renewal Plan**

The Property is located within the limits of the 1994 *Aspen Hill Master Plan* and is in an area which is zoned R-200. The Master Plan does not make specific recommendations for the Subject Property, other than to confirm the existing land use and zoning of the area. The plan also states that the Vision for the residential areas is to “Encourage and maintain a wide choice of housing types and neighborhoods for people of all incomes, ages, lifestyles and physical capabilities at appropriate densities and locations.” The Master Plan also lists “Protection of the existing residential communities is a main objective of the Plan, which is in accordance with the General Plan objective to maintain and enhance the quality of housing and neighborhoods.” The proposed subdivision is in conformance with the Master Plan.

3. **Public Facilities will be adequate to support and service the area of the subdivision**

The Property is already served by existing public facilities including roads, water, sewer, utilities, schools and emergency services. As outlined below, the addition of 10 new homes in this area makes sense from a public facility standpoint since all the necessary services are existing and available.

**Water and Sewer**

The Subject Property is in water category W-1 and sewer category S-3. There are existing water and sewer lines in the adjacent Radwick Lane right-of-way. The existing water and sewer lines will be extended within the right-of-way to serve the ten proposed houses.

**Transportation**

The ten lots will each have their own driveway access from proposed Street A. Proposed Street A’s intersection with Radwick Lane meets the County requirements for sight distance.

The proposed lot and street layout provide a safe pedestrian and vehicular circulation with the Road Code Standard MC-2001.02, as modified. Proposed Street A is a public street utilizing the Tertiary Street standards with sidewalks on both sides. In addition, the plan is proposing a sidewalk along the Radwick Lane frontage. The area inside the elongated cul-de-sac serves as a proposed open space area, with safe crossings provided for pedestrians.

Street A is proposed as a closed-section, curb-and-gutter road. The road is located in a Class IV watershed, which typically prohibits closed-section roadways per Chapter 49 of the county code. However, Chapter 49 includes the following provision that allows for the proposed closed-section roadway:

“**The Director of Permitting Services may allow a person to install curbs and gutters in a portion of a road located in an area listed in paragraph (1), after giving the Planning Board a reasonable opportunity to comment, if:**

(A) installing curbs and gutters will not significantly degrade water quality in the area;
(B) curbs and gutters are necessary for vehicular or pedestrian safety or the proper grading or maintenance of the road, or to reduce the environmental impact of the road on any park, forest, or wetland;”

Regarding the proposed Street A section, both findings A and B are satisfied, as the curb and gutters will not significantly degrade the water quality in the area and the curb and gutters are necessary to limit forest clearing and retention on the Property. Thus, 1.9 acres of existing forest are able to be placed in a Category I Conservation Easement.

**On-Site Vehicular Circulation**
The Applicant proposes a one-way, circular cul-de-sac extending from Radwick Lane, serving 10 single-family residential homes. The Applicant worked with the Planning Department and the Montgomery County Department of Transportation to refine the proposed concept, which allows for the creation of a central green space, maintains individual driveways for the single-family homes, and provides safe and adequate access for emergency vehicles.

**Master-Planned Roadways and Bikeway**
Radwick Lane is not classified by the *Master Plan of Highways and Transitways*. Connecting from Norbeck Road, Radwick Lane functions as a two-lane residential street with 20 feet currently paved, and no sidewalks.

The *Bicycle Master Plan* recommends a sidepath on the north side of Norbeck Road, but no bicycle recommendations are made for Radwick Lane. The Intercounty Connector Trail is proposed along Wintergate Drive, south of the site.

**Roadway Improvements**
The Applicant will pave a new circular cul-de-sac to support safe, efficient, and adequate access for the planned residential lots.

**Public Transit Service**
Ride On Route 51 operates along Wintergate Drive, south of the site. Route 51 operates service between the Norbeck Park & Ride and the Glenmont Metro Station every 30 minutes on weekdays, during the morning and evening peak periods. The nearest bus stop to the site is located at Wintergate Drive and Alpine Valley Court.

**Pedestrian and Bicycle Facilities**
Currently, Radwick Lane is an open section with no sidewalks. Along the circular cul-de-sac, the Applicant will construct a five-foot sidewalk and a five- to seven-foot landscape panel. The Applicant will also construct two crosswalks, including ADA accessible curb ramps, that connect to the central green. No bicycle facilities are recommended for Radwick Lane in the *Bicycle Master Plan*.

The Planning Department supported off-site pedestrian connections to Wintergate Drive or Norbeck Road, but both options were deemed nonviable.

**Local Area Transportation Review (LATR)**
The Institute of Transportation Engineers’ Trip Generation rates is used to calculate the peak-hour trips generated by the proposed 10 single-family homes. Based on this projection, nine trips are expected to be generated in the peak morning hour and 10 trips are expected to be generated in the
evening peak hour. The site will generate fewer than 50 total person trips, and per the 2017 Local Area Transportation Review Guidelines no traffic study is required.

**Schools**

**Overview and Applicable School Test**

Preliminary Plan No. 120200150 & Site Plan No. 820200120 - Radwick project is located on the north side of Radwick Lane approximately 1,300 feet from the intersection of Maryland Route 28. The application proposes the removal of one single-family detached house and construction of 10 new single-family detached houses. This project will be going before the Planning Board on September 10, 2020. Therefore, the FY21 Annual School Test, approved by the Planning Board on June 25, 2020 and effective July 1, 2020 is applicable.

**Calculation of Student Generation**

To calculate the number of students generated by the proposed development, the number of dwelling units is multiplied by the applicable regional student generation rate for each school level. Dwelling units are categorized by structure type: single family detached, single family attached (townhouse), low- to mid-rise multifamily unit, or high-rise multifamily unit. The subject property is located in the southwest region of the County.

**Per Unit Student Generation Rates – Southwest Region**

<table>
<thead>
<tr>
<th></th>
<th>Elementary School</th>
<th>Middle School</th>
<th>High School</th>
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<tbody>
<tr>
<td>SF Detached</td>
<td>0.186</td>
<td>0.109</td>
<td>0.151</td>
</tr>
<tr>
<td>SF Attached</td>
<td>0.167</td>
<td>0.085</td>
<td>0.111</td>
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<tr>
<td>MF Low-Rise</td>
<td>0.150</td>
<td>0.068</td>
<td>0.085</td>
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<tr>
<td>MF High-Rise</td>
<td>0.041</td>
<td>0.018</td>
<td>0.025</td>
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</tbody>
</table>

With a net of 9 single-family detached units, the proposed project is estimated to generate the following number of students:

<table>
<thead>
<tr>
<th>Type of Unit</th>
<th>Net Number of Units</th>
<th>ES Generation Rates</th>
<th>ES Students Generated</th>
<th>MS Generation Rates</th>
<th>MS Students Generated</th>
<th>HS Generation Rates</th>
<th>HS Students Generated</th>
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</thead>
<tbody>
<tr>
<td>Single Family Detached</td>
<td>-1</td>
<td>0.186</td>
<td>-0.186</td>
<td>0.109</td>
<td>-0.109</td>
<td>0.151</td>
<td>-0.151</td>
</tr>
<tr>
<td>Single Family Detached</td>
<td>10</td>
<td>0.186</td>
<td>1.860</td>
<td>0.109</td>
<td>1.090</td>
<td>0.151</td>
<td>1.510</td>
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<tr>
<td><strong>TOTALS</strong></td>
<td><strong>9</strong></td>
<td><strong>1</strong></td>
<td><strong>0</strong></td>
<td><strong>1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

On average, this project is estimated to generate 1 new elementary school student, no new middle school students, and 1 new high school student.

**Cluster Adequacy Test**

The project is located in the Rockville High School Cluster. The student enrollment and capacity projections from the FY21 Annual School Test for the cluster are noted in the following table:
The Moratorium Threshold identified in the table is the number of additional projected students that would cause the projected utilization to exceed the 120% utilization threshold and therefore trigger a cluster-wide residential development moratorium. As indicated in the last column, the estimated enrollment impacts of this application fall below the moratorium thresholds at all three school levels. Therefore, there is sufficient capacity at the elementary, middle and high school cluster levels to accommodate the estimated number of students generated by this project.

**Individual School Adequacy Test**

The applicable elementary and middle schools for this project are Flower Valley ES and Earle B. Wood MS, respectively. Based on the FY21 Annual School Test results, the student enrollment and capacity projections for these schools are noted in the following table:

<table>
<thead>
<tr>
<th>School</th>
<th>Projected School Totals, September 2025</th>
<th>Moratorium Threshold</th>
<th>Estimated Application Impact</th>
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<tr>
<td></td>
<td>Enrollment</td>
<td>Program Capacity</td>
<td>% Utilization</td>
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<tr>
<td>Flower Valley ES</td>
<td>474</td>
<td>416</td>
<td>113.9%</td>
</tr>
<tr>
<td>Earle B. Wood MS</td>
<td>1,001</td>
<td>944</td>
<td>106.0%</td>
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</tbody>
</table>

Under the individual school adequacy test, a school is deemed inadequate if the projected school utilization rate exceeds 120% and the school seat deficit meets or exceeds 110 seats for an elementary school or 180 seats for a middle school. If a school’s projected enrollment exceeds both thresholds, then the school service area is placed in a residential development moratorium.

The Moratorium Enrollment Thresholds identified in the table above are the numbers of additional projected students that would cause the projected utilization to exceed the 120% utilization threshold and the seat deficit threshold. As indicated in the last column, the estimated enrollment impacts of this application fall below the moratorium thresholds for both Flower Valley ES and Earle B. Wood MS. Therefore, there is sufficient anticipated school capacity to accommodate the estimated number of students generated by this project.

**Analysis Conclusion**

Based on the school cluster and individual school capacity analysis performed, using the FY2021 Annual School Test, there is adequate school capacity for the amount and type of development proposed by this application.

**Other Public Facilities and Services**

Other Public Facilities and Services Public facilities and services are available and will be adequate to serve the proposed development. The Property is proposed to be served by public water and public sewer. This application has been reviewed by the Montgomery County Fire and Rescue Service, who has determined that the Property will have appropriate access for fire and rescue vehicles. Other public facilities and services, such as police stations, firehouses and health services are operating within the standards set by the Subdivision Staging Policy resolution currently in effect and will be adequate to
serve the Property. Electrical, telecommunications, and gas services are also available to serve the Property.

4. **All Forest Conservation Law, Chapter 22A requirements are satisfied**

The Property has 4.53 acres of existing forest according to what is shown on the approved Natural Resources Inventory/Forest Stand Delineation Plan 420191420. All forest conservation requirements will be met on site. The Property falls under the High-Density Residential Land Use Category and requires a 20% conservation threshold. The Forest Conservation Plans show that 1.93 acres of existing forest will be retained, thereby meeting forest conservation requirements on-site, as is required when utilizing the cluster option. There are a number of large trees that are proposed to be removed. Saving all of the on-site large specimen trees is unavoidable. The applicant has applied for a variance to allow for the removal of these trees with the Final Forest Conservation Plan.

There are two stream buffers that are located on the site. The buffers are from streams that are located off-site. Except for a small area for the stormwater management facilities outfalls, this plan proposes to leave the on-site stream buffers as forested.

**Environmental Guidelines**

Staff approved a Natural Resource Inventory/Forest Stand Delineation (NRI/FSD No. 420191420) on June 10, 2019. The Property lies in the Northwest Branch watershed and contains 4.53 acres of high priority forest. There are two areas of forested stream valley buffer in the northeast and southeast corners of the Property. The two areas total 0.66 acres and protect off-site streams. The stream valley buffer will remain forested and protected by Category I Conservation Easements.

**Forest Conservation**

The Property is subject to the Montgomery County Forest Conservation Law (Chapter 22A of the County Code) and Final Forest Conservation Plan was submitted for approval. There is 4.53 acres of existing forest and the plan proposes to clear 2.60 acres of forest and to retain 1.93 acres of forest. The retained forest will be on homeowner’s association property and will be covered by a Category I Conservation Easement.

**Minimum Retention**

As per Sec. 22A-12(f)(2)(B) of Forest Conservation Law,

“In a planned development or a site developed using a cluster or other optional method in a one-family residential zone, on-site forest retention must be equal the applicable conservation threshold in subsection (a).

The Property is subject to the minimum retention provision because R-200 is a single-family zone and the Applicant is proposing to use the cluster development optional method of development. The conservation threshold for this property is 20%, or 1.25 acres. The Applicant is retaining 1.93 acres, which meets the minimum retention requirement for this Property.
Forest Conservation Variance
Section 22A-12(b)(3) of the Forest Conservation Law provides criteria that identify certain individual trees as high priority for retention and protection. Any impact to these trees, including removal or disturbance within the tree’s critical root zone (CRZ) requires a variance. The Applicant for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the County Forest Conservation Law. The law requires a variance to impact trees that: measure 30 inches or greater diameter at breast height (DBH); are part of a historic site or designated with a historic structure; are designated as national, State, or County champion trees; are at least 75 percent of the diameter of the current State champion tree of that species; or trees, shrubs, or plants that are designated as Federal or State rare, threatened, or endangered species.

Unwarranted Hardship for Variance Tree Impacts
Per Section 22A-21, a variance may only be granted if the Planning Board finds that leaving the requested trees in an undisturbed state will result in unwarranted hardship. The requested variance is necessary due to the site constraints of the existing development on all sides and the need to minimize forest and stream valley buffer impacts. The development is clustered to minimize disturbance and maximize forest retention. The Property could not be redeveloped without impacting the requested trees.
## Variance Tree Tables

### Removals

<table>
<thead>
<tr>
<th>ID</th>
<th>Species</th>
<th>Size</th>
<th>Condition</th>
<th>Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>#55</td>
<td>Oak</td>
<td>30”</td>
<td>Good</td>
<td>Impacts from proposed building construction and grading.</td>
</tr>
<tr>
<td>#56</td>
<td>Tulip Poplar</td>
<td>31”</td>
<td>Good</td>
<td>Impacts from proposed building construction and grading.</td>
</tr>
<tr>
<td>#57</td>
<td>Tulip Poplar</td>
<td>30”</td>
<td>Good</td>
<td>Impacts from proposed building construction.</td>
</tr>
<tr>
<td>#69</td>
<td>Tulip Poplar</td>
<td>31”</td>
<td>Good</td>
<td>Impacts from proposed building construction and grading.</td>
</tr>
<tr>
<td>#805</td>
<td>Tulip Poplar</td>
<td>34”</td>
<td>Good</td>
<td>Impacts from grading for the bioretention facilities.</td>
</tr>
<tr>
<td>#815</td>
<td>Oak</td>
<td>36”</td>
<td>Good</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#816</td>
<td>Tulip Poplar</td>
<td>39”</td>
<td>Good</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#817</td>
<td>Tulip Poplar</td>
<td>37”</td>
<td>Good</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#818</td>
<td>Tulip Poplar</td>
<td>32”</td>
<td>Good</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#819</td>
<td>Tulip Poplar</td>
<td>40”</td>
<td>Good</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#820</td>
<td>Tulip Poplar</td>
<td>31”</td>
<td>Good</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#823</td>
<td>Tulip Poplar</td>
<td>30”</td>
<td>Good</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#826</td>
<td>Tulip Poplar</td>
<td>32”</td>
<td>Good</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#827</td>
<td>Tulip Poplar</td>
<td>36”</td>
<td>Good</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#833</td>
<td>Tulip Poplar</td>
<td>31”</td>
<td>Fair</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#834</td>
<td>Tulip Poplar</td>
<td>30”</td>
<td>Good</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#835</td>
<td>Tulip Poplar</td>
<td>30”</td>
<td>Good</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#836</td>
<td>Tulip Poplar</td>
<td>30”</td>
<td>Fair</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#838</td>
<td>Tulip Poplar</td>
<td>30”</td>
<td>Fair</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#846</td>
<td>Tulip Poplar</td>
<td>33”</td>
<td>Good</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#847</td>
<td>Tulip Poplar</td>
<td>33”</td>
<td>Good</td>
<td>Impacts from construction of Road A.</td>
</tr>
<tr>
<td>#855</td>
<td>Tulip Poplar</td>
<td>31”</td>
<td>Good</td>
<td>Impacts from PUE and proposed utilities.</td>
</tr>
<tr>
<td>ID</td>
<td>Species</td>
<td>Size</td>
<td>Condition</td>
<td>Impacts</td>
</tr>
<tr>
<td>------</td>
<td>--------------</td>
<td>------</td>
<td>-----------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>#865</td>
<td>Tulip Poplar</td>
<td>31”</td>
<td>Good</td>
<td>Impacts from proposed building construction and grading.</td>
</tr>
<tr>
<td>#875</td>
<td>Tulip Poplar</td>
<td>35”</td>
<td>Good</td>
<td>Impacts from proposed building construction and grading.</td>
</tr>
<tr>
<td>#877</td>
<td>Tulip Poplar</td>
<td>30”</td>
<td>Good</td>
<td>Impacts from proposed building construction and grading.</td>
</tr>
<tr>
<td>#880</td>
<td>Tulip Poplar</td>
<td>33”</td>
<td>Poor</td>
<td>Impacts from proposed building construction and grading.</td>
</tr>
<tr>
<td>#881</td>
<td>Tulip Poplar</td>
<td>32”</td>
<td>Good</td>
<td>Impacts from proposed building construction and grading.</td>
</tr>
<tr>
<td>#882</td>
<td>Tulip Poplar</td>
<td>37”</td>
<td>Good</td>
<td>Impacts from proposed building construction and grading.</td>
</tr>
<tr>
<td>#898</td>
<td>Tulip Poplar</td>
<td>35”</td>
<td>Good</td>
<td>Impacts from proposed building construction and grading.</td>
</tr>
<tr>
<td>#899</td>
<td>Tulip Poplar</td>
<td>31”</td>
<td>Fair</td>
<td>Impacts from proposed building construction and grading.</td>
</tr>
</tbody>
</table>

### Impacts

<table>
<thead>
<tr>
<th>ID</th>
<th>Species</th>
<th>Size</th>
<th>Condition</th>
<th>% CRZ</th>
<th>Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>#67</td>
<td>Tulip Poplar</td>
<td>30”</td>
<td>Good</td>
<td>15%</td>
<td>Impacts from proposed building construction and grading.</td>
</tr>
<tr>
<td>#801</td>
<td>Tulip Poplar</td>
<td>35”</td>
<td>Good</td>
<td>8%</td>
<td>Impacts from stormwater management outfall.</td>
</tr>
<tr>
<td>#863</td>
<td>Tulip Poplar</td>
<td>39”</td>
<td>Good</td>
<td>37%</td>
<td>Impacts from proposed building construction and grading.</td>
</tr>
</tbody>
</table>

**Variance Findings**

Based on the review of the variance request and the proposed Preliminary Forest Conservation Plan, Staff finds:

1. **Granting the variance will not confer on the applicant a special privilege that would be denied to other applicants.**

   Granting this variance will not confer a special privilege on the Applicant as disturbance of the specific trees is a result of the need to avoid disturbance within the stream valley buffers and the need to maximize forest retention. The development is clustered to minimize disturbance, while meeting all relevant zoning requirements. Granting the variance will not confer a special privilege on the Applicant.

2. **The need for the variance is not based on conditions or circumstances which are the result of the actions by the applicant.**

   The requested variance is not based on conditions or circumstances that are the result of actions by the Applicant. The variance is necessary due to the constraints of the two locations of stream valley buffer and the need to retain existing forest.

3. **The need for the variance is not based on a condition relating to land or building use, either permitted or non-conforming, on a neighboring property.**
The requested variance is a result of the location of trees and the proposed development and not a result of land or building use on a neighboring property.

4. **Granting the variance will not violate State water quality standards or cause measurable degradation in water quality.**

The Applicant will plant 48” caliper inches of native shade trees to replace the form and function of the variance trees proposed for removal. In addition, the Property will be developed in accordance with the Maryland Department of the Environment criteria for stormwater management and the stream valley buffer planted.

**Mitigation for Trees Subject to the Variance Provisions**

The Applicant is requesting a variance to remove 30 trees and will mitigate for the six (6) trees located outside of forest that are being removed and accounted for on the worksheet. The six (6) trees will be mitigated at a rate of 1” caliper per 4” DBH removed, using a minimum 3-inch caliper native shade tree. The Applicant will provide 16 native shade trees, at a minimum 3-inch caliper size.

**County Arborist’s Recommendation of the Variance**

In accordance with Montgomery County Code Section 22A-21(c), the Planning Department is required to refer a copy of the variance request to the County Arborist in the Montgomery County Department of Environmental Protection for a recommendation prior to acting on the request. The variance request was sent to the arborist on September 3, 2019, and a response has not been provided as of the date of this report.

**Variance Recommendation**

Based on the analysis above, Staff recommends that the variance be granted.

5. **All stormwater management, water quality plan, and floodplain requirements of Chapter 19 are satisfied.**

The Applicant received approval of their stormwater management concept from the Montgomery County Department of Permitting Services, Water Resources Section on July 13, 2020. The concept meets required stormwater management goals using a combination of ESD approaches including drywells and microbioretention areas. The Property is not subject to a water quality plan, and there are no floodplain requirements. The requirements of Chapter 19 for stormwater management are satisfied.

**Site Plan No. 820200120 Findings**

Per Section 7.3.4 of the Zoning Ordinance,

1. When reviewing an application, the approval findings apply only to the site covered by the application.

2. To approve a site plan, the Planning Board must find that the proposed development:

   a. satisfies any previous approval that applies to the site;
This section is not applicable. There are no previous approvals for the subject property.

b. satisfies under Section 7.7.1.B.5 the binding elements of any development plan or schematic development plan in effect on October 29, 2014;

This section is not applicable.

c. satisfies under Section 7.7.1.B.5 any green area requirement in effect on October 29, 2014 for a property where the zoning classification on October 29, 2014 was the result of a Local Map Amendment;

This section is not applicable.

d. satisfies applicable use standards, development standards, and general requirements under this Chapter;

The proposed development is consistent with the requirements of the R-200 Zone, utilizing the Optional Method Cluster Development Section 59.4.4.7.C.

Division 4.4.7.C R-200 Zone, Optional Method Cluster Development Standards

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Required</th>
<th>Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum usable area</td>
<td>5 acres</td>
<td>5.81 acres</td>
</tr>
<tr>
<td>Maximum density permitted</td>
<td>2 DUs/acre</td>
<td>1.72 DUs/acre</td>
</tr>
<tr>
<td>Common Open space required (%)</td>
<td>20%</td>
<td>40%</td>
</tr>
<tr>
<td>Common Open space required (acres)</td>
<td>1.16 acres</td>
<td>2.32 acres</td>
</tr>
<tr>
<td>Minimum lot area</td>
<td>9,000 sf</td>
<td>9,000 sf</td>
</tr>
<tr>
<td>Minimum setback from public street</td>
<td>25 feet</td>
<td>25 feet*</td>
</tr>
<tr>
<td>Minimum setback from private street</td>
<td>10 feet</td>
<td>N/A</td>
</tr>
<tr>
<td>Minimum rear setback</td>
<td>40 feet</td>
<td>40 feet</td>
</tr>
<tr>
<td>Maximum height</td>
<td>40 feet</td>
<td>40 feet</td>
</tr>
<tr>
<td>Maximum lot coverage</td>
<td>25%</td>
<td>25%</td>
</tr>
</tbody>
</table>

*Attachments reflect the correct building placement per Site Plan condition No. 12f

e. satisfies the applicable requirements of:

i. Chapter 19, Erosion, Sediment Control, and Stormwater Management; and

As stated previously, this project meets all applicable requirements of Chapter 19.

ii. Chapter 22A, Forest Conservation.

As stated previously, this project meets all applicable requirements of Chapter 22A, Forest Conservation.

f. provides safe, well-integrated parking, circulation patterns, building massing and, where required, open spaces and site amenities;
Building Massing
The proposed homes are single family detached units with a maximum height of 40 feet. The building massing is consistent with other residential homes in the area.

Open Spaces and Site Amenities
The area inside the elongated cul-de-sac serves as a proposed open space area, which provides a central useable area for future residents and surrounding residential neighborhoods. The Project will provide a total of 40% open space (2.32 acres), which is double than the required 20% per Chapter 59. This includes 2 open space parcels.

g. substantially conforms with the recommendations of the applicable master plan and any guidelines approved by the Planning Board that implement the applicable plan;

As stated in Preliminary Finding no. 2, this project meets the requirements for the 1994 Aspen Hill Master Plan.

h. will be served by adequate public services and facilities including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage, and other public facilities. If an approved adequate public facilities test is currently valid and the impact of the development is equal to or less than what was approved, a new adequate public facilities test is not required. If an adequate public facilities test is required, the Planning Board must find that the proposed development will be served by adequate public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, and storm drainage;

As described in the Preliminary Plan section of this report, the Project will be served by adequate public services and facilities.

i. on a property in a Rural Residential or Residential zone, is compatible with the character of the residential neighborhood; and

The proposed single family lots developed under the R-200 cluster option are compatible with the adjacent properties. The lots serve as a transition from the existing R-200 single family lots to the existing townhome lots to the west. In addition, the forest conservation areas and the community open space serve as a buffer from the undeveloped R-200 lots to the east and south.

j. on a property in all other zones, is compatible with existing and approved or pending adjacent development.

Not applicable to this submission.

SECTION 5: CONCLUSION
The Preliminary Plan and Site Plan applications satisfy the findings under Section 50.4.2.D of the Subdivision Regulations and Section 59-7.3.4. of the Zoning Ordinance, and substantially conform to the recommendations of the 1994 Aspen Hill Master Plan. Therefore, Staff recommends approval of the Preliminary Plan and Site Plan with the conditions specified at the beginning of this report.
ATTACHMENTS
1. Preliminary Plan
2. Site Plan
3. Forest Conservation Plan
4. Approval Letters
July 13, 2020

Ms. Norma Suriel  
KIM Engineering, Inc.  
5901 Ammendale Road, Suite F  
Beltsville, MD 20705

Re: COMBINED STORMWATER MANAGEMENT CONCEPT/SITE DEVELOPMENT STORMWATER MANAGEMENT PLAN for Radwick Lane  
Preliminary Plan #: 1-2020150  
Site Plan #: 8-2020120  
SM#: 284990  
Tract Size/Zone: 6.23 ac / R-200  
Total Concept Area: 3.47 ac  
Parcel(s): 901 and 880, Flint Hill, to be Subdivided into 10 lots, 4 HOA parcels and Public right-of-way  
Watershed: Northwest Branch/ Class IV

Dear Ms. Suriel:

Based on a review by the Department of Permitting Services Review Staff, the stormwater management concept for the above-mentioned site is acceptable. The stormwater management concept proposes to meet required stormwater management goals via micro-bioretention and drywells.

The following items will need to be addressed during the detailed sediment control/stormwater management plan stage:

1. A detailed review of the stormwater management computations will occur at the time of detailed plan review.
2. An engineered sediment control plan must be submitted for this development.
3. All filtration media for manufactured best management practices, whether for new development or redevelopment, must consist of MDE approved material.
4. All facilities must be designed using latest available MCDPS guidance documents. The distance between the micro-bioretention facilities must be maximized.
5. The use of drywells on individual lots must be maximized.
6. Demonstrate non-erosive velocity and safe outfall of the ten-year event at all storm drain outfalls.

This list may not be all-inclusive and may change based on available information at the time.
Payment of a stormwater management contribution in accordance with Section 2 of the Stormwater Management Regulation 4-90 is not required.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. The concept approval is based on all stormwater management structures being located outside of the Public Utility Easement, the Public Improvement Easement, and the Public Right of Way unless specifically approved on the concept plan. Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

If you have any questions regarding these actions, please feel free to contact Mary Fertig at 240-777-6202 or at mary.fertig@montgomerycountymd.gov.

Sincerely,

Mark Etheridge
Manager, Water Resources Section
Division of Land Development Services

cc:  N. Braunstein
     SM File # 284990

Study Point A
ESD: Required/Provided 2,113 cf / 2,449 cf
PE: Target/Achieved:  1.2” / 1.2”
STRUCTURAL: N/A
WAIVED: N/A

Study Point B
ESD: Required/Provided 2,693 cf / 2,830 cf
PE: Target/Achieved:  1.2” / 1.2”
STRUCTURAL: N/A
WAIVED: N/A
January 6, 2020

Reviewer
MNCPPC
8787 Georgia Avenue
Silver Spring, MD 20910

Re: Radwick Lane Property
   Forest Conservation Plan-Variance Request
   Preliminary Plan No.:120200150
   Site Plan No.:820200120
   Kim No. 1214

Dear Reviewer:

On behalf of the property owner, Marcello Nucci, Kim Engineering, Inc. is requesting a variance for the impact to the critical root zone of 3 on site specimen trees and to remove 30 on site specimen trees, all 30 inches or greater in dbh, as required under Section 22A-21 of Montgomery County's Forest Conservation Law. The impact of these trees is necessary in association with the development of the above referred property, which is located in Silver Spring, MD.

The property is 5.81 acres and contains 4.53 acres of forest. The significant and specimen trees were identified and shown on the approved NRI/FSD. The site is bordered on the north, east and south by existing residential communities. The Forest Conservation plan shows that 1.93 acres of forest will be retained and that all forest conservation requirements will be met on site.

The specimen trees identified in this variance request for critical root zone impact or removal are shown on the FFCP. The trees and/or their critical root zones to be impacted are located within the limits of disturbance and have impacts to their critical root zone.

These trees are located throughout the property and immediately adjacent to existing Radwick Lane. The site design is constrained by the requirement to provide access by a public street in the location shown on the plan.

Efforts were made to protect the existing specimen trees whenever possible. The impacts to the stream valley buffer are limited to the stormwater management facility outfalls. The majority of the existing trees which are located in the stream valley buffer or in the forest conservation area will not have impacts to their critical root zones.

The following is a description of the specimen trees proposed to be saved, with impacts to their critical root zone areas.
Table 1, below, lists the specimen trees as they are identified on the Forest Conservation Plan and provides their impacts and proposed tree care methods.

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>COMMON NAME</th>
<th>SCIENTIFIC NAME</th>
<th>DBH (inches)</th>
<th>CONDITION</th>
<th>SPECIMEN TREE RECOMMENDATION</th>
<th>CRZ DISTURBED/%</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
<td>OAK</td>
<td>QUERCUS</td>
<td>30</td>
<td>GOOD</td>
<td>X</td>
<td>REMOVE</td>
</tr>
<tr>
<td>56</td>
<td>POPULAR</td>
<td>LIRIODENDRON TULIPIFERA</td>
<td>31</td>
<td>GOOD</td>
<td>X</td>
<td>REMOVE</td>
</tr>
<tr>
<td>57</td>
<td>POPULAR</td>
<td>LIRIODENDRON TULIPIFERA</td>
<td>30</td>
<td>GOOD</td>
<td>X</td>
<td>REMOVE</td>
</tr>
<tr>
<td>67</td>
<td>POPULAR</td>
<td>LIRIODENDRON TULIPIFERA</td>
<td>30</td>
<td>GOOD</td>
<td>X</td>
<td>SAVE, ROOT PRUNE</td>
</tr>
<tr>
<td>69</td>
<td>POPULAR</td>
<td>LIRIODENDRON TULIPIFERA</td>
<td>31</td>
<td>GOOD</td>
<td>X</td>
<td>REMOVE</td>
</tr>
<tr>
<td>801</td>
<td>POPULAR</td>
<td>LIRIODENDRON TULIPIFERA</td>
<td>35</td>
<td>GOOD</td>
<td>X</td>
<td>SAVE, ROOT PRUNE</td>
</tr>
<tr>
<td>805</td>
<td>POPULAR</td>
<td>LIRIODENDRON TULIPIFERA</td>
<td>34</td>
<td>GOOD</td>
<td>X</td>
<td>REMOVE</td>
</tr>
<tr>
<td>815</td>
<td>OAK</td>
<td>QUERCUS</td>
<td>36</td>
<td>GOOD</td>
<td>X</td>
<td>REMOVE</td>
</tr>
<tr>
<td>816</td>
<td>POPULAR</td>
<td>LIRIODENDRON TULIPIFERA</td>
<td>39</td>
<td>GOOD</td>
<td>X</td>
<td>REMOVE</td>
</tr>
<tr>
<td>817</td>
<td>POPULAR</td>
<td>LIRIODENDRON TULIPIFERA</td>
<td>37</td>
<td>GOOD</td>
<td>X</td>
<td>REMOVE</td>
</tr>
<tr>
<td>818</td>
<td>POPULAR</td>
<td>LIRIODENDRON TULIPIFERA</td>
<td>32</td>
<td>GOOD</td>
<td>X</td>
<td>REMOVE</td>
</tr>
<tr>
<td>819</td>
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<td>LIRIODENDRON TULIPIFERA</td>
<td>40</td>
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<tr>
<td>820</td>
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<td>30</td>
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<tr>
<td>826</td>
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<td>LIRIODENDRON TULIPIFERA</td>
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<tr>
<td>827</td>
<td>POPLAR</td>
<td>LIRIODENDRON TULIPIFERA</td>
<td>GOOD, SPLITS INTO TWO TRUNKS(15&quot; &amp; 24&quot;) 6 FT UP</td>
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<tr>
<td>833</td>
<td>POPLAR</td>
<td>LIRIODENDRON TULIPIFERA</td>
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<td>X REMOVE</td>
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<tr>
<td>836</td>
<td>POPLAR</td>
<td>LIRIODENDRON TULIPIFERA</td>
<td>FAIR, MANY BROKEN BRANCHES</td>
<td>X REMOVE</td>
<td>100%</td>
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<tr>
<td>838</td>
<td>POPLAR</td>
<td>LIRIODENDRON TULIPIFERA</td>
<td>FAIR, 8&quot; TRUNK IS DEAD</td>
<td>X REMOVE</td>
<td>100%</td>
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<tr>
<td>846</td>
<td>POPLAR</td>
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<td>GOOD, SPLITS INTO TWO TRUNKS(15&quot; &amp; 24&quot;) 6 FT UP</td>
<td>X REMOVE</td>
<td>100%</td>
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<tr>
<td>847</td>
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<tr>
<td>877</td>
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<tr>
<td>880</td>
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<td>POOR, MAIN TRUNK BROKEN OFF</td>
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<td>881</td>
<td>POPLAR</td>
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<tr>
<td>882</td>
<td>POPLAR</td>
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<td>70%</td>
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<tr>
<td>898</td>
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<td>X REMOVE</td>
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<tr>
<td>899</td>
<td>POPLAR</td>
<td>LIRIODENDRON TULIPIFERA</td>
<td>FAIR, BROKEN BRANCHES</td>
<td>X REMOVE</td>
<td>100%</td>
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</tr>
</tbody>
</table>
Tree 55
Trees 55 is located within proposed lot 9. This tree is a 30-inch Oak and is in good condition. The proposed house on Lot 9 is sited to minimize grading and impact to the critical root zone. The proposed dry wells are located within of the critical root zone. This lot and the proposed house cannot be adjusted in a meaningful way to further minimize impact to the critical root zone. The plan proposes 61% impact to the critical root zone of this tree. The impact is too large to save this tree.

Tree 56
Tree 56 is an existing 31-inch Poplar located on proposed Lot 9. This tree is in good condition. The proposed house on Lot 9 is sited to minimize grading and impact to the critical root zone. The proposed dry wells are located within of the critical root zone. This lot and the proposed house cannot be adjusted in a meaningful way to further minimize impact to the critical root zone. The plan proposes 100% impact to the critical root zone of this tree. The impact is too large to save this tree.

Tree 57
Tree 57 is a 30-inch Poplar in good condition which is located on Lot 9 in the area of the proposed house. The house location cannot be adjusted in a meaningful way to save the tree. 100% of the critical root zone will be impacted. The tree should be removed.

Tree 67
Tree 67 is a 30-inch Poplar in good condition located in the forest save area, adjacent to Lot 7 and will be retained. Approximately 15% of its critical root zone will be impacted. The 15% CRZ impact has been minimized. The proposed houses and the drywells located nearby, have been adjusted to minimize the critical root zone impacts to allow the tree to remain but a variance is required. Root pruning and the application of Mycorrhizal inoculant are proposed to offset these impacts, as permitted by the property owner.

Tree 69
Tree 69 is a 31-inch Poplar in good condition located at the edge of the forest save area, adjacent to Lot 7 and will be removed. Approximately 47% of its critical root zone will be impacted. The 47% CRZ impact has been minimized. The proposed houses and the drywells located nearby, have been adjusted to minimize the critical root zone impacts, however the impact is to great to save this tree.

Tree 801
Tree 801 is a 35-inch Poplar in good condition located in the forest save area, adjacent to microbioretention #2 and will be retained. Approximately 8% of its critical root zone will be impacted. The 8% CRZ impact has been minimized. The stormwater management outfall pipe located nearby, has been adjusted to minimize the critical root zone impacts to allow the trees to remain but a variance is required. Root pruning and the application of Mycorrhizal inoculant are proposed to offset these impacts, as permitted by the property owner.
Tree 805
Tree 805 is a 34-inch Poplar in good condition located in the area of proposed micro-bioretenion #2 and will need to be removed. The tree and 73% of its critical root zone will be impacted. Grading for the micro-bioretenion facility cannot be adjusted in a meaningful way to save this tree.

Trees 815-820 and 823, 826 & 827 and 846 & 847
Trees 815-820 and 823, 826, 827,846 and 847 are all Poplars ranging in size from 31-40-inches and are in good condition. These trees are all located within or adjacent to the proposed right of way of Street A, a public street. The street cannot be adjusted to save these trees. Street A is located to meet MCDOT sight distance requirements and to allow for the proposed lots to be located outside of the stream valley buffers. Trees 815-820 and 823, 826, 827846 and 847 are proposed to be removed.

Trees 833-836 and 838
Trees 833-836 and 838 are all Poplars ranging in size from 30-31-inches and are in good condition. These trees are all located within or adjacent to the proposed oval cul de sac right of way of Street A, a public street. The street cannot be adjusted to save these trees. Street A is proposed to end in an elongated cul de sac and is configured to meet, fire access requirements and to allow for the proposed lots to be located outside of the stream valley buffers. Trees 833-836 and 838 are proposed to be removed.

Tree 855
Tree 855 is a 31-inch Poplar in good condition located within the proposed public utility easement (PUE) for Radwick Lane. The PUE is a 10 feet wide and is required to be adjacent to the proposed right of way dedication for Radwick Lane. The PUE location cannot be adjusted and Tree 855 is proposed to be removed.

Tree 863
Tree 863 is a 39-inch Poplar in good condition located in the forest save area, adjacent to Lot 2 and will be retained. Approximately 37% of its critical root zone will be impacted. The 37% CRZ impact has been minimized. The proposed houses and the drywells located nearby, have been adjusted to minimize the critical root zone impacts to allow the trees to remain but a variance is required. Root pruning and the application of Mycorrhizal inoculant are proposed to offset these impacts, as permitted by the property owner.

Tree 865
Tree 865 is a 31-inch Poplar in good condition located at the rear of Lot 2. The tree is within the limits of disturbance and is proposed to be removed. The limits of grading cannot be adjusted in a meaningful way to save this tree. Tree 865 is proposed to be removed.

Tree 875
Tree 875 is a 35-inch Poplar in good condition located on Lot 3 in the area of the proposed house. The tree is within the limits of disturbance and is proposed to be removed. The limits of grading cannot be adjusted in a meaningful way to save this tree. Tree 875 is proposed to be removed.
**Tree 877**
Tree 877 is a 30-inch Poplar in good condition located on Lot 4 in the area of the proposed house. The tree is within the limits of disturbance and is proposed to be removed. The limits of grading cannot be adjusted in a meaningful way to save this tree. Tree 877 is proposed to be removed.

**Trees 880-882**
Trees 880-882 are all Poplars ranging in size from 32-37-inches and are in good condition. These trees are all located on Lot 4 within the limits of disturbance. The house cannot be adjusted in a meaningful way to save these trees. The house and lot are located to preserve the maximum amount of forest on the southern edge of the property to avoid bifurcation on the forest to the south. These trees, 880-882 are proposed to be removed.

**Trees 898 and 899**
Trees 898-899 are all Poplars ranging in size from 31-35-inches and are in good condition. These trees are all located on Lot 7 near the public street right of way within the limits of disturbance. The house cannot be adjusted in a meaningful way to save these trees. The house and lot are located to preserve the maximum amount of forest on the southern edge of the property to avoid bifurcation on the forest to the south. These trees, 898 and 899 are proposed to be removed.

Section 22A-21 (b) lists the criteria for granting of the variance requested herein. The following narrative explains how the requested variance is justified under the set of circumstances described above.

1. **Describe the special conditions peculiar to the property which would cause the unwarranted hardship.**
The subject property consists of two parcels with a gross area of 8.51 acres and is rectangular in shape. It is located on the north side Radwick Lane. The property is currently improved with one single family existing home. Leaving the property in an undisturbed state would result in an unwarranted hardship, denying the applicant reasonable and significant use of their property. The applicant is proposing to locate Street A in a location to meet sight distance requirements and allow for the ten proposed houses to front on proposed street A. this proposed layout minimizes stream buffer disturbance and allows for the forest conservation requirements to be met on site.

2. **Describe how enforcement of these rules will deprive the landowner of rights commonly enjoyed by others in similar areas.**
As described above, the property is zoned R-20, is in a suburban neighborhood and has one existing house which is proposed to be removed and replace with ten new homes. The inability to disturb any of the critical root zones of the existing trees would cause the property to be undevelopable as recommended by the master plan. Efforts have been undertaken during the design phase to limit the grading and disturbance within the critical root zone areas of the trees subject to the variance request. Considering the size and configuration of the property and the requirement to retain the undisturbed stream valley buffer and meet forest conservation requirements on-site, the proposed lots and home locations cannot be adjusted in a meaningful way to avoid impacts to the critical root zones. The same criteria has been applied to similar
projects where CRZ disturbance is unavoidable. Therefore, the potential inability to impact the critical root zones of the existing specimen trees would create a significant disadvantage for the applicant that deprives the applicant of the opportunities afforded to the neighboring or similar properties that have not experienced this unique review and approval process.

3. **Verify that State water quality standards will not be violated or that measurable degradation in water quality will not occur as a result of the granting of the variance.**
   The critical root zones of the specimen trees that are proposed to be impacted are not within a stream buffer, wetland or a special protection area. Kim Engineering has prepared a Stormwater Management Concept which is under review by the Montgomery County Department of Permitting Services. That concept proposes to address stormwater management requirements through Environmental Site Design, by providing dry wells and three micro-bioretenion facilities, therefore State water quality standards will not be violated or a measurable degradation in water quality will not occur as a result of the granting of the variance request.

4. **Provide any other information appropriate to support the variance.**
   Please note that the impact to the forest stream valley buffer has been limited to the stormwater management outfalls and that the forest conservation requirements are being met on site. Also note that the applicant is proposing to plan new trees on the property to offset the loss of the 30 specimen trees. These trees will provide shade and aesthetic benefit to the property and the community. These trees will also help to improve water quality at the site by reducing runoff and erosion, providing shade to reduce the temperature of the runoff and promote overland filtering, evapotranspiration and infiltration.

Thank you for your consideration of this Tree Variance request. In summary, we believe that the information provided in this letter justifies the variance to impact the critical root zone of five (3) specimen trees that are to be preserved and the removal of 30 specimen trees.

Sincerely,

Karen V. Carpenter, RLA
Senior Project Manager
Kim Engineering, Inc.

cc: Marcello Nucci
July 17, 2020

Mr. Parker Smith, Senior Planner
Area 2 Planning Division
The Maryland-National Capital
Park & Planning Commission
8787 Georgia Avenue
Silver Spring, MD 20910-3760

RE: Preliminary Plan & Design Exception Letter
Preliminary Plan No. 120200150
Radwick Lane Property

Dear Mr. Smith:

We have completed our review of the design exception waiver dated June 23, 2020 and the revised preliminary plan uploaded to eplans on July 1, 2020 and reviewed by the Development Review Committee at its March 3, 2020 meeting. We recommend approval of the plan subject to the following comments:

All Planning Board Opinions relating to this plan or any subsequent revision, project plans or site plans should be submitted to the Department of Permitting Services (DPS) in the package for record plats, storm drain, grading or paving plans, or application for access permit. Include this letter and all other correspondence from this department.

**Design Exception Waiver:**

1. **Applicant's request:**
   a) The design includes a public closed section roadway in a 50-foot public right-of-way conforming to MCDOT Tertiary Street Standard No. 2001.02. The proposed road ends in an oval shaped cul-de-sac with a green area in the center. This is a request modification to MCDOT Standard MC-222.01. This modification is being requested to provide a cul-de-sac that will meet fire and rescue emergency access requirements by providing the minimum curb radii for emergency access. The radii for the curb at the ends of the oval cul-de-sac are a 50-foot outside and 30-foot inside. These radii meet the Department of Fire and Rescue...
Emergency Access Requirements. The proposed oval cul de sac exceeds the minimum curb radii. The road will have 20-foot wide pavement with curb & gutter located within a public right-of-way with a one-way counterclockwise circulation pattern in the oval cul-de-sac.

**MCDOT Response:** We agree with the applicant’s request for the modification of MCDOT cul-de-sac Standard (MC-222.01) to an oval shaped cul-de-sac with green space in the center for the following reasons:

i. The turning movement for SU-30 provided by the applicant works within the proposed cul-de-sac. Based on DPS Fire and Rescue, the emergency access requirements are met.

ii. The line of sight for the proposed driveways should not be blocked by any proposed obstructions such as proposed trees or traffic signs. At the permit stage, the applicant should work with DPS to make the necessary modifications in order to meet the sight distance requirements for the proposed driveways.

iii. The proposed pavement is 20-foot wide with a one-way counterclockwise traffic circulation. At the permit stage the applicant shall provide the location of the necessary traffic signs for approval.

b) The inside of the oval will be covered by a Private Use and Maintenance Agreement and used for landscaping, open space and seating.

**MCDOT Response:** This does not qualify as a design exception request. We defer to DPS for the final decision on the maintenance and liability agreement for the landscape area in the center of the cul-de-sac at the permit stage.

2. **Applicant’s request:**

The applicant will be grading their half of Radwick Lane right-of-way to meet Montgomery County roadway standard 2002.04 for Secondary Open Section Roads. We are requesting a design exception to the shoulder width. The standard shoulder width is 2-feet paved with 5-feet grass at a slope of 5%. The proposed cross section meets the standard except for the shoulder width which will vary from 6-feet to 14-feet wide grass shoulder. The design exception is being requested because the existing Radwick Lane paving is offset from the center of the right-of-way. The modified shoulder width allows for a standard ditch cross section and alignment and allows the ditch to better align and drain to the exiting culvert. This modified section allows the proposed 5-foot walk to be held 2-feet off the right-of-way line as shown in the typical section. To comply with the standard would require the ditch be held within 7-feet of the edge of the existing paving.
The proposed ditch would then need to make a sharp turn to meet up with the entrance of the culvert. Additional rip rap would be required. The sharp turn would create a future erosion and maintenance problem.

**MCDOT Response:** We agree with the applicant’s request for the modified section for the existing Radwick Lane along the property frontage for the following reason:

i. Due to Radwick Lane being in a Class IV watershed, we recommend not to increase the impervious area by providing a 2-ft paved shoulder; thus, the applicant may maintain the existing 20-ft pavement with a variable grass shoulder as shown in roadway cross section.

ii. The applicant was able to grade a standard ditch with 2-foot bottom improving the drainage of the roadway.

**Significant Preliminary Pan Comments**

1. The final location of the proposed crosswalks shall be approved at the permit stage.

2. **Street ‘A’ Road Grade Plan:** The vertical curve at PVI Station 1+06 does not meet the minimum ‘k’-factor of 26 for a Design Speed of 25mph per AASHTO Table 3-37. At or before the approval of Road Grade Establishment Plan by DPS, the applicant should revise it to meet the AASHTO standard.

3. **Sight Distance:**
   i. Street ‘A’ at Radwick Lane: The sight distance study has been accepted. A copy of the accepted Sight Distances Evaluation certification form is enclosed for your information and reference.
   ii. Proposed Driveway Entrances along Street ‘A’: The line of sight for the proposed driveways should not be blocked by any proposed obstructions such as proposed trees, street light poles or traffic signs. At the permit stage, the applicant should work with DPS to make the necessary modifications to the locations of the items mentioned above in order to meet the sight distance requirements for the proposed driveways.

4. **Storm Drain Analysis:**
   a) Study point ‘A’: A portion of the site drains to an existing 24-inch culvert on Radwick Lane. Under post development conditions, the drainage area draining to the study point is reduced by one-acre and therefore reducing the 10-yr runoff, the applicant shall not be responsible for any downstream drainage improvements for this study point.
   b) **Study Point ‘B’:** A portion of the site drains to an existing stream and there is no public storm drain within 500-ft downstream from the study point, and therefore the applicant shall not be responsible for any downstream drainage related to existing storm drain
pipes or culvert improvements for this study point. The storm drain report states that there is an increase in flow under post development conditions, but the computations state a decrease. Since the drainage area draining to the study point is increased by one-acre, there should be an increase in 10-yr runoff. At the permit stage, please provide revised computations for review and approval by DPS and the applicant may be required to do the necessary improvements related to erosion at the proposed outfall locations.

**Standard Plan Review Comments**

1. No permanent structures are allowed in the public right-of-way.
2. Show 10-PUE along all street frontages.
3. The owner will be required to submit a recorded covenant for the operation and maintenance of private streets, storm drain systems, and/or open space areas prior to DPS approval of the record plat. The deed reference for this document is to be provided on the record plat.
4. Trees in the County rights of way – spacing and species to be in accordance with the applicable MCDOT standards. Tree planning within the public right of way must be coordinated with DPS Right-of-Way Plan Review Section.
5. Posting of the ROW permit bond is a prerequisite to DPS approval of the record plat. The right-of-way permit will include, but not necessarily be limited to, the following improvements:
   a. Street grading, paving, curbs and gutters, sidewalks and handicap ramps, storm drainage and appurtenances, and street trees along Street 'A'.
   b. Sidewalks and handicap ramps, drainage ditch, storm drainage and appurtenances and street trees along Radwick Lane.
   c. Enclosed storm drainage and/or engineered channel (in accordance with the MCDOT Storm Drain Design Criteria) within the County rights-of-way and all drainage easements.
   d. Permanent monuments and property line markers, as required by Section 50-24(e) of the Subdivision Regulations.
   e. Erosion and sediment control measures as required by Section 50-35(j) and on-site stormwater management where applicable shall be provided by the Developer (at no cost to the County) at such locations deemed necessary by MCDPS and will comply with their specifications. Erosion and sediment control measures are to be built prior to construction of streets, houses and/or site grading and are to remain in operation (including maintenance) as long as deemed necessary by MCDPS.
Thank you for the opportunity to review this preliminary plan. If you have any questions or comments regarding this letter, please contact Mr. Deepak Somarajan, our Development Review Engineer for this project at deepak.somarajan@montgomerycountymd.gov or at (240) 777-2194.

Sincerely,

Deepak Somarajan
Deepak Somarajan, Engineer III
Development Review Team
Office to Transportation Policy

Enclosures: Sight Distance Form

cc: Sharepoint Correspondence Folder

cc-e: Karen Carpenter KIM Engineering, Inc.
Atiq Panjshiri MCDPS RWPR
Sam Farhadi MCDPS RWPR
Mark Terry MCDOT DTEO
Mary Fertig MCDPS WR
Rebecca Torma MCDOT OTP
SIGHT DISTANCE EVALUATION

Facility/Subdivision Name: Radwick Lane
Preliminary Plan Number: 1-20200150

Street Name: Radwick Lane
Master Plan Road Classification: 

Posted Speed Limit: 30 mph

Street/Driveway #1 (Street )
- Right 80 (existing house) N/A
- Left 430 N/A

Street/Driveway #2 (Street/N/A)
- Right N/A
- Left N/A

Sight Distance (feet) OK? Sight Distance (feet) OK?
Right 80 (existing house) X X
Left 430 X X

Comments:
Existing house on a dead-end road to the right.

GUIDELINES

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<th>Classification or Posted Speed</th>
<th>Required Sight Distance in Each Direction*</th>
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<tbody>
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<tr>
<td>Secondary - 30</td>
<td>200'</td>
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<tr>
<td>Business - 30</td>
<td>200'</td>
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<tr>
<td>Primary - 35</td>
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<tr>
<td>Arterial - 40 (45)</td>
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<td>Major - 50 (55)</td>
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<tr>
<td></td>
<td>550'</td>
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</table>

*Source: AASHTO

Sight distance is measured from an eye height of 3.5' at a point on the centerline of the driveway (or side street) 6' back from the face of curb or edge of traveled way of the intersecting roadway where a point 2.75' above the road surface is visible. (See attached drawing)

ENGINEER/ SURVEYOR CERTIFICATE

I hereby certify that this information is accurate and was collected in accordance with these guidelines.

Signature: Michael E. Doan
Date: 7/16/20

PLS/P.E. MD Reg. No.: 30736

Montgomery County Review:

X Approved

Disapproved:
By: Despah Somanajan
Date: 7/17/2020
We have reviewed site and landscape plans files:

“07-SITE-820200120.001.pdf V4” uploaded on/ dated “7/1/2020”,
“08-LL-820200120.001.pdf V3” uploaded on/ dated “7/1/2020” and

Please address the following comments prior to the certification of site plan:

1. Please ensure the centerline of storm drain pipes is 15 feet minimum from any residential structure.
2. All plantings within the cul-de-sac island are subject to MCDOT distance requirements between the trees as well as streetlights and they shall not obstruct sight distance.
January 6, 2020

Ms. Carrie Sanders, Area 2 Chief
Montgomery County Planning Department
M-NCPPC
8787 Georgia Avenue
Silver Spring, MD 20910

Re: Radwick Lane
Preliminary Plan No. 1-20200150
Detailed Site Plan No. 8-202000120
Transportation Study Exemption Statement

Dear Ms. Sanders,

Plans for the subject property, which is within Policy Area 1 – Aspen Hill are being submitted for a Preliminary Subdivision and Detailed Site Plan review. As a part of this process, we are requesting a Local Area Transportation Review.

The property consists of 2 existing undeveloped parcels. The parcels are shown on the Montgomery County Tax Map HS62 as P 880 and P 901. The total area of the parcels is 5.81 acres. The property is zoned R-200 and a combined Preliminary/Site Plan is being submitted to develop ten (10) single family lots.

Attached, please find the Transportation impact Study Scope of Work Agreement. This project will generate 8.5 AM and 9.9 PM trips per current trip generation rates.

Based on a total trip generation of 49 or fewer, we are hereby requesting a Transportation Study Exemption.

Sincerely,

Raymond Norris, PE
Vice President

CC: Mr. Marcello Nucci
Ms. Rebecca Torma – Montgomery County Department of Transportation
Ms. Karen Carpenter – Kim Engineering
Ms. Norma Suriel – Kim Engineering
**Transportation Impact Study Scope of Work Agreement**

**Contact Information**

| Transportation Consultant (company, contact name, email, and phone number) | Kim Engineering, Inc.  
Raymond Norris, PE  
301-240-542-4238  
raynorris@kimeengineering.com |
<table>
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<tr>
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<tbody>
<tr>
<td>Name of Applicant / Developer</td>
<td>Marcello Nucci</td>
</tr>
</tbody>
</table>

**Project Information**

| Project Name (include plan no. if known) | Radwick Lane Property  
Preliminary Plan #1-20200150  
Site Plan #8-20200120 |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Location (include address if known)</td>
<td>Radwick Lane, 1500 Feet West of MD Route 28</td>
</tr>
</tbody>
</table>
| Policy Area(s) (subsection staging policy map) | #1-Aspen Hill  
Master Plan(s) / Sector Plan Area(s) | Aspen Hill |
| Application Type(s) | Preliminary Plan  
Site Plan  
Sketch/Concept/Pre-Preliminary (Optional)  
Amendment  
Conditional Use (formerly special exception)  
Local Map Amendment  
APF at Building Permit  
Other: |

**Project Description & Previous Approvals**

| Proposed land uses, zoning, no. of units, square footage, construction phasing, prior approvals and proposals, existing uses, site operations, year built, status of Adequate Public Facilities (APF), other relevant info | 10 Proposed Single Family Lots in an R-200 Cluster.  
NRI/PSD #4-20191420 Approved 6-10-2019 |

**1. Site Access**

| Proposed access location(s), existing/adjacent/opposite curb cuts, interparcel connections, access configurations and restrictions, internal circulation, private roads, parking/loading areas, other relevant info | Site Access via a new Public Street with Cul-de-Sac - West Side of Radwick Lane |

September 2017
## Transportation Analysis Requirement

- **Transportation Impact Study**
  - Generates 50 or more total weekday peak hour person trips (vehicular, transit, bicycle, and/or pedestrian) with no reductions other than a credit for existing developments over 12 years old, **AND** is outside of the White Flint and White Oak Policy Areas. Fill out remainder of this form and include in transportation impact study appendix.

- **Transportation Study Exemption Statement**
  - Generates 49 or fewer total weekday peak hour person trips (vehicular, transit, bicycle, and/or pedestrian) with no reductions other than a credit for existing developments over 12 years old, **OR** within White Flint and White Oak Policy Areas. Fill out PAR and trip generation sections below, and include with exemption statement.

### 3. Policy Area Review (PAR)

- **TPAR** (1/1/13 - 12/31/16)
  - 0, 25, 50%: ___
  - (TPAR = Transportation Policy Area Review)

- **PAMR** (11/15/07 - 12/31/12)
  - 0-50%: ___
  - (PAMR = Policy Area Mobility Review)

- **Exempt** (no square footage increase or fewer than 3 new trips)
  - **No PAR (7/1/03 - 11/14/07)**
  - **PATR (before 6/30/03)**
  - (PATR = Policy Area Transportation Review)

- **Amend Existing TMAg**

### 4. Transportation Mitigation Agreement (TMAg) Required?

- **No**

### 5. Established Transportation Management District (TMD)?

- **No**

## Transportation Impact Study Assumptions

**Include Tables/Graphics, As Needed**

### 6. Study Years / Phases

- **Existing Year:**
- **Phases / Build-out Year(s):**

### 7. Study Periods

- **AM**
- **PM**
- **Mid-day**
- **Saturday**
- **Sunday**
- **Other:**

### 8. Study Intersections

(For projects generating 50 or more person trips, list all signalized & significant unsignalized intersections, and site driveways traffic counts must be collected within 12-months of completed and accepted application)

- # of tiers of intersections to study (refer current LATR Guidelines):

  - 1)  
  - 2)  
  - 3)  
  - 4)  
  - 5)  
  - 6)  
  - 7)  
  - 8)  
  - 9)  
  - 10)  
  - 11)  
  - add more rows if necessary

### 9. Trip Generation

(clearly cite sources and methodology including use of average rates vs. equation; include trip generation for existing site, current approvals, proposed uses, and net changes)

- **Total Person Trips**
  - **18.4**

- **Vehicle Trips** *(Auto Driver)*

- **Transit Trips** *(non-motorized)*

- **Walking Trips** *(non-motorized + transit)*

- **Bicycling Trips** *(non-motorized)*

---

*Only required if total peak hour person trips are 50 or more in either the AM or PM peak hour. Sum of all vehicle, transit, and non-motorized trips shall be the equivalent of total person trips. Use table at the end of the form to show all calculations and assumptions for mode breakout.*
<table>
<thead>
<tr>
<th>10. Trip Reductions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(include justification and supporting documentation for internal capture, pass-by, diverted, Transportation Demand Management)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. Trip Distribution %</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(include a map of the proposed project in addition to a list or table)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12. Pipeline Developments to be considered as background traffic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(include name, plan #, land uses, and sizes for approved but unbuilt developments or concurrently pending applications; info can be obtained from the M-NCPPC Pipeline website; website is updated quarterly)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>13. Pipeline Transportation Projects to be considered as background condition</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(fully funded for construction in County Capital Improvement Program, State Consolidated Transportation Program, developer projects, etc. within the next 6 years)</td>
<td></td>
</tr>
</tbody>
</table>
| Preliminary Mitigation Analysis | *Refer to the LATR Guidelines for details on how to mitigate*
|--------------------------------|--------------------------------------------------|
| 14. Vehicular Analysis         | □ Vehicular Analysis Anticipated (Vehicular mitigation to be determined after study)  
- TEST: HCM Analysis is required to be provided for all intersections analyzed in studies for: 1) “Red & Orange” policy areas, and 2) intersections with a CLV of more than 1,350 in “Yellow & Green” policy areas. 3) CLV analysis required for all intersections regardless of policy area. CLV assessment and signal timing worksheets are to be included in the study appendix.  
- MITIGATION: Required if HCM delay analyses exceed policy area standard |  
| 15. Pedestrian Analysis        | □ Pedestrian Mitigation Anticipated  
- TEST: If the plan generates 50 or more pedestrian peak hour trips, mitigation of surrounding pedestrian conditions is required  
- MITIGATION: Required if ADA non-compliance issues within 500 foot radius of site boundary and if pedestrian crosswalk delay at LATR intersections within 500 feet of site boundary is lower than Level of Service (LOS) D |  
| 16. Bicycle Analysis           | □ Bicycle Mitigation Anticipated  
- TEST: If the plan generates 50 or more bicycle peak hour trips and is within 0.25 miles of an existing educational institution or existing/planned bikeshare station, mitigation of surrounding bicycle conditions is required  
- MITIGATION: Required to make improvements to provide a low Level of Traffic Stress to any existing similar facility within 750 feet of the site boundary; Alternatively, project may provide a master planned improvement that provides an equivalent improvement in the level of traffic stress for cyclists |  
| 17. Transit Analysis           | □ Transit Mitigation Anticipated  
- TEST: If the plan generates 50 or more transit peak hour trips and the peak load of bus routes at bus stops within 1,000 feet of site boundary exceeds (or is worse than) peak load of LOS D (1.25 transit riders per seat during the peak period in the peak direction), mitigation of transit conditions is required  
- MITIGATION: Required to provide or fund improvements that would mitigate the trips exceeding the standard that are attributable to the development |  
| Additional Analysis or Software Required | □ Queuing Analysis □ Signal Warrant Analysis □ Weaving/Merge Analysis □ Accident Analysis □ Synchro □ SIDRA □ Other |
## M-NCPPC Clarifications

- Transportation impact study will comply with all other requirements of the LATR Guidelines not listed on this form.
- If physical improvements are proposed as mitigation, the transportation impact study will demonstrate feasibility with regards to right-of-way and utility relocation (at a minimum).
- In the event that the development proposal significantly changes after this transportation impact study scope has been agreed to, the Applicant will work with M-NCPPC staff to amend the scope to accurately reflect the new proposal.
- A receipt from MCDOT showing that the transportation impact study review fee has been paid will be provided to M-NCPPC DARC at the time the development application is submitted.
- Minimum of seven paper copies (more if near the County line or an incorporated City) and two PDF copies of the transportation impact study and appendices will be provided.

## Additional Assumptions / Special Circumstances for Discussion
## Site Trip Generation Estimate Worksheet

<table>
<thead>
<tr>
<th>Step 1: Vehicle Trips</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE Land use Code</td>
<td>210</td>
</tr>
<tr>
<td>Development Size</td>
<td>10, 041</td>
</tr>
<tr>
<td>ITE trip generation estimate formula/rate* AM</td>
<td>0.85</td>
</tr>
<tr>
<td>ITE Trip generation estimate formula/rate* PM</td>
<td>0.99</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2: Policy Area Conversion</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Area # &amp; Name</td>
<td></td>
</tr>
<tr>
<td>Applied Policy Area Adjusted Value AM</td>
<td></td>
</tr>
<tr>
<td>Applied Policy Area Adjusted Value PM</td>
<td></td>
</tr>
<tr>
<td>Trip Adjustment Factor</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 3: Mode Split</th>
<th>AM</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Driver</td>
<td>%</td>
<td>Results</td>
</tr>
<tr>
<td>Auto Passenger</td>
<td>%</td>
<td>Results</td>
</tr>
<tr>
<td>Transit</td>
<td>%</td>
<td>Results</td>
</tr>
<tr>
<td>Walking (transit + non-motorized)</td>
<td>%</td>
<td>Results</td>
</tr>
<tr>
<td>Bicycling (non-motorized)</td>
<td>%</td>
<td>Results</td>
</tr>
</tbody>
</table>

*Complete one of these tables for EACH use included in the application. Enter results into "Transportation Impacts Analysis" section of the form.*