
MEMORANDUM



1700 Kraft Drive, Suite 2350 Blacksburg, Virginia 24060 540.617.0870 tel.

TO: Kinsey O'Shea, AICP

FROM: Michael Formica, PE

DATE: February 1, 2024

**RE: Glade Spring Crossing Preliminary Plat
Submission for Major Subdivision Review**

This memo is provided to initiate the major subdivision public hearing review of the Glade Spring Crossing Subdivision project as part of the process described in Exhibit A of the Development Agreement between Glade Spring Crossing, LLC and the Town of Blacksburg dated May 9th, 2023. Please find enclosed in this submission the following documents for review:

1. "Preliminary Plat for Glade Spring Crossing Subdivision" dated 02/01/2024
2. "Glade Spring Crossing Subdivision Preliminary Plat Submission: Floodplain Calculations" dated 02/01/2024
3. "Glade Spring Crossing Subdivision Preliminary Plat Stormwater Management Plan" dated 02/01/2024
4. A letter dated 02/01/2024 requesting consideration of two variances
5. A letter dated 02/01/2024 providing a response to the Staff comments issued on 01/11/2024
6. Signed "Property Owner Consent and Authorization" form with Glade Spring Crossing, LLC Articles of Organization

Should you have any questions regarding the submission, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads 'Michael D. Formica'.

Michael Formica, PE
Project Engineer
WK Dickson & Company

PROPERTY OWNER CONSENT AND AUTHORIZATION

This consent is required for all Planning, Building, and Engineering applications. A completed copy must be included with every application, if the applicant is not the property owner.

If the Property Owner is a corporation/other legal entity, then the corporation/other legal entity should be listed as the owner. In such cases, proof of signature authority must be attached as well. If the Property is owned by multiple entities (as in a family trust, or otherwise co-owners), a signed consent form is required to be completed by each individual.

The Property Owner may designate a representative for the application review process.

- The Owner or Representative is solely responsible for the accuracy of the application documentation (electronic and paper forms/drawings/exhibits/narratives, etc.).
- The Owner or Representative is solely responsible for the accuracy and coordination of the submitted application documentation (electronic and paper forms/drawings/exhibits/narratives, etc.) to the Town or other jurisdictions requiring permit approval.
- The Owner or Representative is solely responsible for scheduling any required inspections and approvals prior to the commencement of the use and/or the completion of improvements to the property.

AUTHORIZATION BY PROPERTY OWNER(S)

I, Glade Spring Crossing, LLC (Cary Hopper, Managing Member), or the authorized representative(s) listed below, are submitting this Application, and am solely responsible for its accuracy and completeness. I understand that incomplete or inaccurate applications can lead to a delay in review and processing. I further confirm that I am the owner of the property at 1906 Shadow Lake Road, (Parcel IDs (011232, 015305, & 011210)), that is/are the subject of this application. I further confirm that I am fully aware of the Town's application fee(s) and procedural requirements, and *I hereby consent to this application.*

Cary Hopper, man, mem. 65C LLC 1-29-24
Property Owner Signature Date

AUTHORIZED REPRESENTATIVE INFORMATION*

I, Michael Formica, confirm that I am the authorized representative for this Application and understand the requirements as noted above,

Michael D. Formica 01/29/24
Authorized Representative Signature Date

**Only used when someone other than the property owner is submitting the application.*

Limited Liability Company - Articles of Organization

Entity Information

Entity Name: Glade Spring Crossing, LLC Entity Type: Limited Liability Company

Business Type

Industry Code: 0 - General

Duration

Perpetual(forever)

Registered Agent Information

RA Type: An Individual who is a resident of Virginia Locality: MONTGOMERY COUNTY

RA Qualification: Member or Manager of the Limited Liability Company

Name: Cary Woods Hopper Email Address: cayhopper@msn.com

The company's initial registered office address, including the street and number, if any, which is identical to the business office of the initial registered agent, is:

Registered Office Address: 707 S Main St, BLACKSBURG, VA, 24060 - 5201, USA Contact Number: N/A

Principal Office Address

Address: Cary Hopper, 707 S MAIN ST, Blacksburg, VA, 24060, USA

Principal Information

Management Structure: Manager-Managed

Signature Information

Date Signed: 07/27/2022

Executed in the name of the limited liability company by:

Entity Name	Entity Type	Printed Name	Signature	Title
Glade Spring Crossing, LLC	Limited Liability Company	Cary Woods Hopper	Cary Woods Hopper	Organizer
Glade Spring Crossing, LLC	Limited Liability Company	Cary Woods Hopper	Cary Woods Hopper	Organizer

February 1, 2024

Kinsey O'Shea
Town of Blacksburg
400 South Main Street
Blacksburg, VA 24060

**RE: Plat-23-20; Glade Spring Crossing; 1906 Shadow Lake Rd
20230467.04.CL**

Dear Town Staff:

Thank you for the comments received on January 11, 2024. Please see the responses provided below.

General Comments and Notes

1. Repeat Comment: All sheets must have an approval block for Town Engineer and Town Planner with date. Please revise. Follow-up: Survey sheets 1-10 (pgs 71-80) do not have approval blocks included.
 - RESPONSE: Addressed.
2. Please update the sheet index. It is not consistent with sheet numbering.
 - RESPONSE: Addressed. The topographic and boundary survey "sheet no." has been updated. Note that for these sheets, this refers to the page number within the overall document. This was included to make it easier to navigate directly to the survey. The "sheet ID" is consistent with the numbering located within the survey title block.
3. Please remove the hatching style Proposed Stormwater Management Easement (SWMW) to Town of Blacksburg. Per prior comments, this easement type is not necessary.
 - RESPONSE: Addressed. See sheet C10. Private easements are shown over all stormwater facilities.
4. Please add a north arrow to sheet C29, C34, C36, and C37.
 - RESPONSE: Addressed. See above referenced sheets.

GIS & Addressing

No further comments for GIS on review for 12-22-2023 submission. Eligible street names based on Review 1 comments may be included on future submissions if they have been decided.

- RESPONSE: Noted. The following street names have been selected and are reflected in the plat:
 - Glade Spring Drive (formerly Street A)
 - Maypole Court (formerly Street B)
 - Azure Court (formerly Street C)
 - Prism Court (formerly Street D)
 - Wellspring Court (formerly Street E)

Erosion & Sediment Control

Floodplain Management §5-101:

1. Repeat Comment: Update all floodplain cross-sections to reflect post-development grading. The location of the proposed trail grading is not clearly identified on the cross-sections. A call-out will be necessary. Also call- out the pump station.
 - RESPONSE: Addressed. Callouts have been added to all post-development cross sections.
2. Repeat Comment: Provide a cross-section at all locations of significant grade changes. Cross-section SL-8 shows a culvert in the floodplain that is not represented in the calculations.
 - REPONSE: Addressed. A new cross section has been sampled immediately upstream of the culvert entrance (station 9+35). The station 9+00 cross section samples the area immediately downstream of the culvert outfall. These two cross sections are utilized by HEC-RAS as boundaries for the culvert. Secondary cross sections are generated at these two locations with the water surface resulting from the constriction associated with culvert. The water surface is shown not to rise at these locations.

Stormwater Management

Existing and Proposed Storm Sewer Facilities §4-200(c)(26)

1. Repeat Comment: Provide structure detail for D2.
 - RESPONSE: Addressed. See sheet C57.
2. Repeat Comment: For storm drain MHs and pipes deeper than 8-ft, a larger 20-ft easement will need to be dedicated.
 - RESPONSE: Addressed. Drainage easements have been widened where applicable. A number of variable width easements have been added where pipes run parallel to the ROW. For example, see sheet C7, where new easement area has been added on lots 107-109 (where a 15' easement would not extend outside the ROW, but a 20' does).

3. Repeat Comment: No information has been provided documenting the illustrated storm drain network is sufficient to convey the necessary flows. Sizing, location and capacity cannot be confirmed.
 - RESPONSE: Addressed. See pages 220-235 of stormwater concept plan document.
4. Repeat Comment: Clarify where ditch vs roll curb is planned.
 - RESPONSE: Addressed. Roll curb is proposed on all streets in the subdivision. CG-6 is proposed on the Glade Road turn lane, which then transitions into roll curb. No roadside ditches are proposed. See note #2 and callouts on sheets C18-C27.

Provisions for Stormwater Management §4-200(c)(35)

1. Repeat Comment: Identify a Private Stormwater Easement for all stormwater management facilities. (Remove any notes to the Public Stormwater Easement). All Private Stormwater Easements are dedicated to the Homeowners Association and are subject to the Agreement for a Regional Stormwater Management System between the Town of Blacksburg and Glade Spring Crossing, LLC dated May 23, 2023.
 - RESPONSE: Addressed. See the "Private Stormwater Management and Drainage" easements over the three ponds on sheets C7, C8, C10, C11, and C14.
2. Access to the existing Village of Toms Creek Stormwater facility has been impacted. The current access spot from the ROW is at a much more navigable slope than what is being provided with the Emergency Access Trail.
 - RESPONSE: Addressed. The grading adjacent to the access path has been revised to provide a gentler transition over a larger area to facilitate movement of maintenance equipment to the facility. See sheet C25. In the existing condition, vehicles must traverse approximately 60 LF of eroded gravel path at slopes ranging from 15% to 19%. This section of the existing path is proposed to be replaced by the paved emergency access at a slope of 15%. The revised grading around the pull-off does not reflect a significantly less traversable slope than the existing condition.

Grading

No further comments for Grading on review for 12-22-2023 submission.

- RESPONSE: Noted.

Sanitary Sewer Service

The plan on Inset A on Sheet C18 and the profile on Sheet C44 adequately addresses the comment requesting a plan and profile for the proposed force main to the point of connection with the new 8" force main that will be installed under a cost share agreement with the Town. However, the tee connection shown at the point where the Karr Heights and Glade Spring Crossing force main connect is unacceptable. Instead, it is recommended that the Karr Heights and Glade Spring Crossing force mains connect to the proposed new 8-inch force main at a 6"x8"x8" wye, where the 6" force main from Karr heights enters the wye through the 6" branch and the proposed 6" force main from Glade Spring Crossing connects to the 8" run of wye via a 6"x8" reducer.

- RESPONSE: Addressed. See sheet C18. The final configuration of the connection will be depicted on the subdivision site plan.

9VAC25-790-440 (A) (2) requires that "air relief valves shall be placed at the high points in the force main to relieve air locking". The Town Sanitary Sewer Standards & Specifications further require that "the number of [air release] valves shall be minimized and shall be installed only in the event that the force main cannot be installed in an alternative manner to eliminate the high point and therefore eliminate the need for the air and/or vacuum release valve system". High points in the force main are shown to exist at approximate station 8+30 (Sheet C43) and 25+00 (Sheet C44) with no air/vacuum relief valves. The force main plan/profiles at these locations should be modified to eliminate these high points if possible. Alternatively, an ARV valve and vault should be shown at these locations.

- RESPONSE: Addressed. The force main profile has been revised near station 8+30 to eliminate the high point (Sheet C43). In order to minimize the depth of trenches adjacent to Glade Road, an ARV is shown near station 25+00.

The provision of odor control facilities at the proposed pump station is acceptable in lieu restricting construction within a 100-foot radius of the pump station. However, the distance between the pump station and proposed dwelling units should be maximized and details for the proposed odor control facilities should be included in the final PER that is to be submitted with the site plans.

- RESPONSE: Noted.

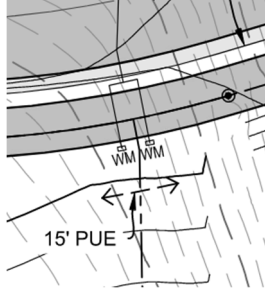
The plan review comments relating to private laterals crossing intervening properties have been adequately addressed.

- RESPONSE: Noted.

Engineer's acknowledgment: Staff has verbally relayed the desire for an alternate force main alignment approximately between stations 21+50 and 24+00 (near the Glade Spring Drive-Glade Road intersection). This plan set does not address those verbal requests, however, if it becomes a formal comment, it can be evaluated at the site plan stage.

Water Utility Service

- 1) Please show waterline easement for fire hydrant on Lots 23 and 163. Response indicated labels had been added to clarify easements; however, I could not locate labels.
 - a) RESPONSE: Addressed. See sheets C7 (Lots 23 and 63) and C13 (Lot 163).
- 2) Show existing 12" water main running parallel to 460 on Sheet C20, to verify there is no conflict with proposed sanitary sewer line and manholes.
 - a) RESPONSE: Addressed. See sheet C21. A surveyor has been contacted to locate the line. Record documents and GIS have been utilized to illustrate the approximate location of the waterline. Sanitary sewer structures S123-S124 have been relocated westward to provide 10' of horizontal separation to the 12" waterline. Should the field verified location not permit the 10' separation, the sewer line shall be constructed and tested in accordance with Town sanitary sewer standard 1.44.h.1. Structures are anticipated to be located a minimum of 25' from the location shown on the preliminary plat. In the unlikely case the waterline interferes with the foundations, reconstruction of the waterline will be evaluated.
- 3) Public water lateral and water meter comments:
 - a) Water Meters/laterals should be extended to property lines (like Lots 97 and 98).
 - i) RESPONSE: Addressed. See sheets C18-C27.
 - b) Where property line is located in a sidewalk or trail, the lateral/meter should be extended past the sidewalk or trail. Confirm lateral/meter is still in or at the edge of PUE
 - i) RESPONSE: Addressed. In locations where the water meter is set behind the trail, segments of the 15' PUE are shown to demonstrate no additional easement width is needed.
 - c) Lot 49 lateral and meter are unclear.
 - i) RESPONSE: Addressed. See sheet C19.
 - d) Lot 133, please relocate lateral past property line (out of pavement) and confirm located in PUE with water meter at edge of PUE.
 - i) RESPONSE: Addressed. In locations where the water meter is set behind the trail, segments of the 15' PUE are shown to demonstrate no additional easement width is needed.



- 4) Waterline profile sheets: Please label connections (ex. Waterline A), and fire hydrants (FH).
 - a) RESPONSE: Addressed. Labels of tees now reference the intersecting line or hydrant stub in parentheses. See sheets C39-C42.
- 5) Please provide a callout for air release valves on Utility Sheets.
 - a) RESPONSE: Addressed. See 1" ARV labels on Waterlines E and F on sheets C27 and C19 respectively.
- 6) Waterline D- Please provide a callout for two lengths of pipe past valve on dead-end, meeting Water Standard 1.34.
 - a) RESPONSE: Addressed. See sheet C21.

Transportation

1. Concerning original Comment Number 9: After considering the response, Staff would concur that while this emergency access connection is constructed more for vehicular access, it will function more as a bicycle/pedestrian connection. Therefore, it should be designed to meet the town's trail standards. However, Staff would prefer that the design not exceed a grade of 15 percent. Using that maximum grade will not allow for two 15 foot long landings at no greater than 2 percent. Therefore, Staff is in agreement with designing the connection with the 5 percent landings shown. This will require that the developer submit a variance request to Section 5-503 (e) of the Subdivision Ordinance to allow for a steeper grade on the landings, when the plat is submitted for preliminary plat review for Planning Commission consideration.
 - RESPONSE: Noted. A letter formally requesting a variance to Section 5-503 (e) is included in this submission.
2. Concerning original Comment Number 10: After considering the response, Staff's comment is that in addition to the on-street parking helping to reduce traveling speeds, the developer shall install MUTCD- compliant crosswalk ahead signage at the proposed crosswalks along Street A. This signage should also assist in reducing traveling speeds.
 - RESPONSE: Addressed. See note 3 on sheets C18-C27.

3. The first submittal of Glade Spring Crossing stated that there would be a TIA submitted in January. Please either submit a TIA or provide a response to why one is not needed.
 - RESPONSE: The OpenGov portal did not allow the project to be submitted without uploading a document for the TIA. A placeholder document was uploaded stating that one would be submitted in the future. As the project is fundamentally unchanged from the rezoning process (i.e. no change in unit count or site access), no changes have been made to the TIA for the major subdivision review. The final TIA from the rezoning process still applies to the major subdivision review.

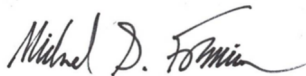
Planning

1. Please show how access to the cemetery is maintained.
 - RESPONSE: Addressed. A 20' private access easement is shown on sheet C11. The easement connects to the Glade Spring Drive right of way in the same location as the anticipated SWM access path, which provides space for a vehicle to pull off the street.
2. Lots 169-175 show a proposed retaining wall in the proposed PUE. Per discussions on 12/12/23, staff recommends that a variance be requested to allow limited walls in these PUE areas provided that conduit is installed for future utilities. This variance request should be submitted with the preliminary plat review for Planning Commission consideration.
 - RESPONSE: Addressed. A letter formally requesting a variance to Section 5-901 is included in this submission.

Thank you for the expedient review. Please do not hesitate to contact me during review with any questions.

Sincerely,

W.K. Dickson & Co., Inc.



Michael Formica, PE
Project Engineer

February 1, 2024

Kinsey O'Shea
Town of Blacksburg
400 South Main Street
Blacksburg, VA 24060

**RE: Plat-23-20; Glade Spring Crossing Variance Requests
20230467.04.CL**

Dear Kinsey,

Over the course of the administrative review process of the Glade Spring Crossing subdivision preliminary plat, a need for additional variances has been identified. Please accept this letter formally requesting the variances listed below in addition to the ones listed in the approved rezoning application.

1. Variance to Division 5 - Bikeways Section 5-503 (e) – Construction and design standards.
 - a. Original text of the above section: “Landings at road crossings shall be not more than 2% grade for a distance of fifteen (15) feet measured from the edge of the street pavement.”
 - b. Request: To permit landings of no greater than 5% grade, rather than 2%, on the emergency access connection from Glade Spring Drive and Village Way South.
 - c. Reason for request: The emergency access path connecting Glade Spring Drive to Village Way South is designed for vehicular access; however, Staff has concluded that it may function as a pedestrian/bicycle connection. For this reason, Staff desire that the access path be designed to the bikeway standard to the maximum extent practicable. Given the topographic and right of way constraints and the desire for the path grade to not exceed 15%, the landings described in Section 5-503 (e) cannot be achieved.
2. Variance to Division 9 – Other Utilities Section 5-901 – Public utility easements
 - a. Original text of the above section: “The subdivider shall convey a 15 foot wide common or shared public utility easement centered on all interior lot lines and interior to all perimeter lot lines, to franchised cable television operators furnishing cable television and public service corporations furnishing cable television, gas, telephone, and electric service to the subdivision. Such easements may be conveyed by reference

on the final plat to a declaration of the terms and conditions of such common easements and recorded in the Montgomery County land records. The agent may require a wider easement where necessary to provide adequate separation between water, sewer, and/or stormwater management facilities.”

- b. Request: To permit construction of a retaining wall on lots 169-175 within the side public utility easements (PUE).
- c. Reason for request: Construction of a retaining wall in the rear of these lots minimizes the severity of the slope to the rear lot lines. This minimizes the potential for erosion on the slope and reduces on going maintenance costs by ensuring the area can be more easily mowed. Conduit shall be installed in areas where the wall crosses the PUE, which will enable utility providers to install service without disturbing the proposed wall. Additionally, the proposed wall is designed to be approximately 2.5' in height (measured vertically along the exposed face of the wall). Should the need arise to deconstruct a given section of wall, the height in combination with “block” construction materials means it may be disassembled with only minor impacts to the surrounding areas.

Thank you for considering the variances requested above. Please do not hesitate to contact me during review with any questions.

Sincerely,

W.K. Dickson & Co., Inc.



Michael Formica, PE
Project Engineer