



SUBDIVISION WAIVER REQUESTS IN SUPPORT OF PRELIMINARY PLAN 120170150, BLOOM MV

SIDEWALKS ON ONE SIDE OF THE STREET

NON-THROUGH ROADS OVER 500 FEET IN LENGTH

INTERSECTION SPACING

HORIZONTAL ALIGNMENT OF CURVES AND TANGENTS

Under Section 50.9.1, “The Board may grant a waiver from a requirement of this Chapter after making the required findings.” We request three waivers under this provision from:

1. Section 4.3.E.2.b. *New roads, sidewalks, etc.*
2. Section 4.3.E.2.e. *Non-through roads*
3. Section 4.2.E.2.f. *Intersections*
4. Section 4.3.E.2.g. *Horizontal alignment*

The required findings for each waiver are detailed below and address the following elements for each request:

1. The practical difficulties or unusual circumstances of the plan and demonstration that the specific requirements are not needed to ensure public health, safety, and general welfare
2. How the intent of the requirements are still met
3. That the waivers requested are the minimum necessary and consistent with the purposes and objectives of the General Plan

**Section 4.3.E.2.b. *New roads, sidewalks, etc.***

Section 4.3.E.2.b. *New roads, sidewalks, etc.* requires that “The subdivider must design and construct the roads, alleys, bicycle facilities, sidewalks, and pedestrian ways with drainage, street trees, and other integral facilities in each new subdivision as required by the appropriate transportation or permitting agency.”

In several cases, private roads within the proposed subdivision have units and amenities on only one side of the street. This is primarily due to environmental and compatibility restraints. In many cases, for example where the

development parcel is narrow and existing homes back onto the proposed development, units have only been placed on the far side from the existing development (e.g., Areas 3 & 4). In other cases, there are steep slopes and width restriction that are being protected by “single-loading” development on one side of the proposed roads (e.g., Area 5). Finally, where long strings of front-load units are provided and roads do not go through, we have placed the sidewalk only on one-side of the street to minimize conflicts with driveways (e.g., Area 6A).

In these particular cases, sidewalks are proposed on only one side of the road, which may be summarized by the following objectives:

1. To protect environmentally sensitive areas, such as steep slopes, existing vegetation, floodplains, and stream buffers
2. To minimize activity near existing communities to enhance compatibility and maintain quiet residential neighborhoods
3. To reduce the need for pedestrian lighting adjacent to existing communities
4. To provide necessary connectivity between lots, amenity areas, and adjacent sidewalks and paths while minimizing imperviousness, which reduces stormwater runoff and increases infiltration
5. To minimize pedestrian conflicts along long stretches of front-loaded units

For the above reasons and to meet these stated objectives, we submit that a waiver is justified and the Planning Board can make the necessary findings.

1. There are several practical difficulties and unusual circumstances that include adjacency to the existing, established community, with whom the Applicant has worked for several years to maintain compatibility, and the numerous environmental constraints. Public health, safety, and general welfare are maintained despite this waiver because connectivity is still provided via sidewalks, paths, and trails from each lot to each amenity space and adjacent sidewalks. All of these sidewalks will be built to the necessary standards to maintain safety and there are no “gaps” in the connectivity network caused by this waiver. Thus, public health and general welfare are maintained through a robust pedestrian system that promotes walking.
2. The intent of this requirement – to provide facilities necessary for multi-modal connectivity and green streets – is still met. All roads will have street trees on each side and stormwater management is being provided for most of the streets in line with MD environmental site design strategies. And as noted above, the multi-modal network of streets, sidewalks, paths, and trails maintains connectivity.
3. We have minimized the requested waiver to only those areas that do not have lots or amenities fronting onto the subject roads. The General Plan is silent on such details of street design, but we believe the intent to provide connectivity, while respecting environmental and compatibility objectives is met.



#### **Section 4.3.E.2.e. *Non-through roads***

Section 4.3.E.2.e. *Non-through roads* has several provisions, most of which are met by this application. This waiver applies to Areas 3 and 6A. The section in full reads:

“The Board must not approve any road that does not connect to another road at its beginning and end, unless a determination is made that:

- i. a through road is infeasible due to a property’s unusual shape, size, topography, environmentally sensitive areas, or the characteristics of abutting property;
- ii. the road provides access to no more than 75 dwelling units;
- iii. the road is properly terminated in a cul-de-sac or other turnaround; and
- iv. the road is less than 500 feet in length, measured along its centerline to the nearest through street, unless the Board determines that a longer length is necessary because of the unusual shape, size, topography, or environmentally sensitive areas of the subdivision.

Regarding the first point, there are obvious circumstances creating unusual shape, size, topography, environmentally sensitive areas, and characteristics of the abutting property. These have been outlined in the previous discussion. Regarding the second and third points, each non-through road serves fewer than 75 dwelling units and is properly terminated in a *cul-de-sac* that meets fire access requirements.

The final point is the only one in question and we believe that Planning Board can make the determination that lengths over 500 feet are necessary for several reasons:

1. The shape of the parcels is unusual, if not unique, following long narrow areas that were former golf fairways between existing communities and the Cabin Branch stream and tributaries.
2. The size of the property is not unusual, but the usable areas are linear and looping, intersecting streets are infeasible.
3. Topography is severely constrained by the floodplain and stream valley buffer allowing for new development – in line with the Master Plan zoning and concept plan depicted therein – to be built in narrow corridors terraced into the hillsides above the floodplain.
4. There are numerous environmentally sensitive areas, namely the stream valley buffers, floodplains, tree stands, and slopes that we are avoiding as much as possible to conform to the environmental regulations. This trade-off, however, requires a waiver of the subject section on road length.

Given these circumstances, we submit that a waiver is justified and the Planning Board can make the necessary findings.

1. There are several practical difficulties and unusual circumstances that include adjacency to the existing, established community, with whom the Applicant has worked for several years to maintain compatibility,



and the numerous environmental constraints. Public health, safety, and general welfare are maintained despite this waiver because access is still provided for emergency vehicles and many fewer than the allowed number of dwelling units are proposed on these “over-length” non-through roads.

2. The intent of this requirement – to ensure connectivity for residents, guests, and emergency access – is met because of the adequate size and standards of the roads that will be constructed to ensure access and two-way movement and because of the minimal number of units being served compared to the code standard (only 65% of that allowed).
3. We have minimized the requested waiver to only those areas that have significant compatibility and environmental constraints that make through-connections impossible. Again, the General Plan is silent on such details of street design, but we believe the intent to provide connectivity, while respecting environmental and compatibility objectives is met.

**Section 4.3.E.2.f. Intersections**

Section 4.3.E.2.f.ii. requires that “Proposed road intersections, excluding alleys and driveways, must be spaced as shown in the table below, as measured from the centerline of the intersections. When the Board finds that a greater or lesser spacing is appropriate, the Board may specify a greater or lesser spacing than otherwise required after considering the recommendation of the transportation agency responsible for maintaining the road.” Because of frontage restrictions and other constraints, we are requesting a waiver from this standard as is expressly allowed under this section.

Montgomery Village Avenue is classified as a Major Highway (M-24) by the Montgomery Village Master Plan and is a divided highway with a median along the subject property’s frontage; as such, the typical minimum distance between intersections is 300 feet in urban areas, 800 feet in suburban areas, and 1,000 feet in rural areas – median breaks must be no closer than 600 feet. This applicant is not proposing any new median breaks.

The following table lists the intersection conditions for proposed Stewartown Road and each Area access Road.

Proposed Stewartown Road	West: aligns with Crested Iris Drive East: aligns with existing Stewartown Road
Area I South Road	Median condition, right-in/right-out only Approx. 230’ south of opposing Brassie Place
Area I North Road	Aligned with Brassie Place Approx. 320’ south of opposing Area VI Road
Area II	No roads along Proposed Stewartown Road, only drive aisles, drives, and alleys
Area III South Road	Aligned with Area IV South Road Approx. 330’ south of Duffer Way
Area III North Road	Median condition, right-in/right-out only Approx. 180’ south of Meadowcroft Lane and 295’ north of Duffer Way



Area IV North Road	Aligned with Meadowcroft Way Approx. 500' north of Duffer Way
Area IV South Road	Median condition, right-in/right-out only Approx. 340' south of Duffer Way
Area V	No access from Montgomery Village Access to Area IV Road and existing Stewartown Road is >500' from Montgomery Village Ave
Area VI Road	Median condition, right-in/right-out only Approx. 320' north of Brassie Place



Montgomery Village Avenue has planted median and a posted speed of 35mph throughout the village area, much less than a typical Major Highway; there are also several speed cameras. This reduced speed makes closer intersection spacing safer as does the restrictions on full-movements from several of the proposed roads. The following points address the conditions at each area.





- Stewartown Road: this location is set by the Master Plan to align with existing Stewartown Road and Crested Iris Drive.
- Area 1: the north road is appropriately aligned with Brassie Place with a full movement and there is no real alternative for a better location – any shifts would offset this alignment and proscribe full movement. The south road is set as far to the edge as possible, but is required as a second access point for emergency vehicles because of the number of units in this area. There is no opportunity to move the second road to the north because this area is being conveyed to the Department of Parks and is covered by the floodplain.
- Area 2: There are no road intersections.
- Area 3: The south road in Area 3 serves a small townhouse neighborhood and road access is restricted by a median. This location is only practical access point because of the slopes and Pepco right-of-way further south. It also aligns visually with the southern road access for Area IV. The northern portion of the site houses several detached homes and has significantly restricted frontage of approximately 150 feet. This access point is restricted by the median as a right-in/right-out condition and is set as far away from Meadowcroft Lane as possible while allowing for grading of the road.
- Area 4: The northern road is appropriately aligned with Meadowcroft Lane and approximately 500 feet from Duffer Way. A shift any further from Duffer Way would offset the alignment with Meadowcroft Lane and create a more dangerous condition. The southern road is set along a restricted frontage and approaches Montgomery Village Avenue at an angle. To provide for as close to a 90-degree intersection as possible along this narrow frontage, the Road must be placed as shown, which is approximately 340 feet from Duffer Way. If located further from Duffer Way the angle of intersection will be decreased, but because this is a right-in/right-out condition, the shift is not necessary.
- Area 5: There are no road intersections requiring a waiver.
- Area 6: This road connection is proposed as far from Brassie Place as possible at approximately 320 feet. It cannot shift further north because the area is within the floodplain and stream valley buffer and the property is being conveyed to the Department of Parks.

As described by the existing and proposed conditions, this waiver is warranted and justified and the Planning Board can make the necessary findings.

1. There are several practical difficulties and unusual circumstances that include the character of Montgomery Village Avenue, including the posted speeds and median; the environmental constraints, and the traffic calming objectives expressed in the Master Plan. Public health, safety, and general welfare are maintained despite this waiver because adequate sight distances are provided and the restrictions on full movements in several cases reduces conflict points typically associated with intersections.



2. The intent of this requirement – safe, adequate, and efficient vehicular travel – is met because the road has slower speeds and traffic calming measures, will meet necessary sight distance requirements, radii, and dimensions, and provides for access to the sites at the most appropriate locations with the fewest environmental impacts.
3. We have minimized the requested waiver to only those areas that have significant property dimension and environmental constraints and where median conditions will alleviate potential conflicts as much as practicable. As before, the General Plan is silent on such details of street design, but we believe the intent to provide connectivity, while respecting environmental and compatibility objectives is met.

#### **Section 4.3.E.2.g. *Horizontal alignment***

Section 4.3.E.2.g. *Horizontal alignment* requires a minimum centerline radius of 300 feet and a tangent of at least 100 feet between reverse curves, except in a secondary or tertiary residential street. While Stewartown Road is a minor arterial, the look and feel of it is recognized by the Master Plan as having more in common with a secondary residential street. In fact, we are implementing several non-standard items to decrease speeds in line with a Secondary Residential street, such as MC-2002.01, which has a target speed of 25 miles per hour.

A key element of this traffic calming is the horizontal alignment and, to that effect, we have proposed a minimum centerline radius of 250 feet and a tangent of approximately 43 feet between reverse curves. As noted, this is similar to a secondary street where a centerline radius of 150 feet is allowed and there is no minimum tangent length between reverse curves.

This waiver is requested for a few reasons: first, we are attempting to reduce speeds along this road to 25 miles per hour and drivers are more apt to drive slower along roads with tighter curves. Second, the proposed design is more in character with existing neighborhood roads. Third, we are using tighter curves to avoid environmentally sensitive areas as much as possible, while still keeping safe intersection alignments and sight distances.

Page 71 of the Master Plan notes that several design modifications may be made to Stewartown Road given the “unique environmental constraints and the particular character of the existing and proposed residential neighborhoods”:

- Reduced horizontal baseline radius
- Reduced horizontal distance between curve tangents
- Reduced monumental entrance lengths
- Increased maximum vertical slope (up to 10% grade maximum)
- Allowance of median islands
- Enhanced pedestrian and bicyclist circulation
- Reduced planting strip width.



For these reasons, we submit that a waiver is justified and the Planning Board can make the necessary findings.

4. There are several practical difficulties and unusual circumstances that include the existing neighborhood character and typical road layouts, the environmental constraints, and the traffic calming objectives expressed in the Master Plan. Public health, safety, and general welfare are maintained despite this waiver because the road exceeds the standards for the target 25mph speed limit.
5. The intent of this requirement – to safe, adequate, and efficient vehicular travel – is met because the road will be built to accommodate both through and local traffic, but at more appropriate speeds and in conjunction with environmental benefits.
6. We have minimized the requested waiver to only those areas that have significant environmental constraints and where traffic calming will be most beneficial. As before, the General Plan is silent on such details of street design, but we believe the intent to provide connectivity, while respecting environmental and compatibility objectives is met.

