



Valley Forge Corporate Center
1010 Adams Avenue
Audubon, PA 19403
P 610.650.8101 | F 610.650.8190

gannettfleming.com

August 1, 2023

To: Steve Norcini, PE Township Engineer

From: Roger Phillips, PE

cc: Kevin W. Kochanski, RLA, CZO – Director of Community Development
John Rice, Esq. – Grim, Biehn, and Thatcher
Mary Eberle, Esq. – Grim, Biehn, and Thatcher
Damon Drummond, PE – Gilmore & Associates, Inc.
Patricia Sherwin – Radnor Township Engineering Department

RE: Hamilton Estate Strafford Ave and Forrest Lane – Conditional Use Review

Gannett Fleming, Inc. has completed our review of the Conditional Use Application for 204 & 228 Strafford Avenue and 18 Forrest Lane Conditional Use Plans for compliance with the Radnor Township Code.

The applicant has filed a conditional use application as outlined in Article XXIII – Conditional Uses, of the Township Code, and is requesting conditional use under §280-90 (Density Modification) of the Township Zoning Code to allow the development of the property to be consolidated from 4 lots to 1 lot with the construction of 38 townhomes.

The tract presently consists of several parcels with a combined lot area of approximately 7.5 acres, containing a total of six dwelling units and related improvements. The tract has frontage on Eagle Road and Strafford Avenue, with the rear boundary adjacent to the Eagle Village Shops.

The applicant intends to develop the 7.5 acres into 38 townhomes under the Pennsylvania Uniform Planned Community Act. The plan is in conformance with the required open space under §280-91. The Plan proposed 89,208 square feet of open space (28%) of the total adjusted tract area in accordance with the Density Modification Provisions that will be available for the use of the residents of the new homes.

Conditional Use Plan – 204 & 228 Strafford Avenue

Plans Prepared By: Site Engineering Concepts, LLC
Dated: May 18, 2023

Sewage Facilities Planning

Final plan approval will not be granted until Planning Approval or a Planning Exemption is received from the PA DEP.

Zoning

1. The Zoning Table must be revised to indicate the existing and proposed setback requirements. Additionally, the Zoning Table must be revised to indicate that the proposed minimum building setback from the ROW is 40 feet.
2. §280-91.A – Not less than 25% of the tract area shall be designated in the subdivision or development plan as common open space. Common open space may not include required buffer yards, floodplain or wetlands. No more than 10% of the required common open space may be used to meet the plan’s stormwater management requirements, and all required common open space shall be contiguous unless the Board of Commissioners indicates otherwise. The maximum allowable stormwater management facilities permitted in the common open space is 7,946 SF. The plan indicates approximately 12,247 SF of stormwater management facilities located in the common open space.
3. §280-91.D – Consideration shall be given to the arrangement and location of common open space to take advantage of the physical characteristics of the site and to preserve common open space within easy access and view of dwelling units, at the same time preserving and enhancing natural features. Areas set aside for common open space shall contain no structure other than a structure related to outdoor recreational use. Stormwater structures are proposed to be located in the common open space.
4. §280-97.B(3) – In Density Modification, the rear yard shall be 30 feet in all districts. The plan indicates a 25-foot setback for both the side and rear yards.
5. §280-103.B(1) – Two parking spaces per dwelling unit are required. Each parking space is required to be a minimum of 9’6” x 20’. The required parking spaces must be dimensioned on the plans. Additionally, cars in driveways are not permitted to overhand onto sidewalks. The applicant must clearly indicate this on the plans.

Subdivision and Land Development

1. §255-20.B(1)(n) – Existing principal buildings (and their respective uses) and driveways on the adjacent peripheral strip. Sewer lines, storm drains, culverts, bridges, utility easements, quarries, railroads and other significant man-made features within 500 feet of and within the site (this includes properties across streets) must be shown on the plans.

2. §255-27.E(2) – The private street shall have a right-of-way width and a horizontal and vertical alignment consistent with the requirements for public streets. The plans indicate that this will be an internal drive with parking areas.
3. §255.27.C(4) – When a subdivision abuts or contains an existing street of inadequate right-of-way width, the Board of Commissioners may require the reservation or dedication of rights-of-way to conform with the required standards. The applicant is provided a 30’ half width for Eagle and Strafford Avenue. Eagle Road is considered a major collector road and a 80 foot right of way width is required.
4. §255.27.H(6)– Minimum curb radii at street intersections shall be 25 feet for local streets; 30 feet for collectors; 35 feet for arterials; and 10 feet for driveways. This must be shown on the plans.
5. §255.29.A(14) – No less than a five-foot radius of curvature shall be permitted for all curblines in parking areas.
6. §255.29.A(20) – Where semi-attached, attached or multiple dwellings are proposed and where private garages or driveways are proposed to be used to meet the off-street parking requirements, one parking space per four dwelling units of overflow off-street parking shall be provided. Such parking may be located either in a public parking facility or on individual lots. The applicant has shown 14 overflow parking spaces on the plans.
7. §255.35.A – Easements with a minimum width of 20 feet shall be provided as necessary for utilities.
8. §255.35.C – No structure requiring a building permit or plantings, except for lawn and/or paving shall be set or put within the area of a utility easement. There shall be no plantings within 10 feet of the sanitary sewer.
9. §255-38.B – Street trees 2 1/2 inches dbh at intervals of not more than 30 feet along both sides of new streets and along one or both sides of an existing street within the proposed subdivision or land development. An equivalent number may be planted in an informal arrangement, subject to the approval of the Board of Commissioners. The applicant is proposing to plant trees between the driveways.
10. §255-38.H – All shade trees provided must be in conformance with the approved trees listing. Upon approval of the Board of Commissioners, other species may be utilized.
11. §255-42.H – A buffer is being provided as required by §280-91.G. The applicant must provide a breakdown of what is provided within that buffer area.
12. §255-43.1.B(1) – For all residential subdivisions or land developments involving a total of four or more lots and/or dwelling units, a minimum of 1,440 square feet or suitable park

and recreation land shall be provided per dwelling unit within such subdivision/land development, unless the developer agrees to a fee in lieu of \$3,307 per dwelling unit (existing or proposed).

13. §255-54.B – The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided.

Erosion and Sedimentation Controls

1. On Sheet 1 in the Drawing Schedule, please revise the title of Sheet 6 to “Erosion and Sedimentation Control Plan” to match the title on that sheet.
2. On Sheet 6 we have the following comments:
 - a. Please include the location of the soil stockpile(s).
 - b. Please include a rock construction entrance for Units 1 & 2.
 - c. In the Construction Staging notes, please revise the note for Stage 8 to indicate that there are multiple infiltration basins/seepage beds. Only the singular is used.
 - d. Please add the symbol for the concrete washout to the Erosion and Sedimentation Control Legend.
3. On Sheet 8 we have the following comments:
 - a. For the Protective Tree Preservation Fence Detail, please revise the note for the 2” posts to indicate that they are to be 2” diameter steel posts and that the 2” mesh is to be #9 gauge. Please also add the plan view part of the Township’s standard detail for the tree protection fence with the associated notes.
 - b. In the Required Bituminous Pavement Section detail there is a reference to the “Base” course that does not appear intended to be installed as part of the project from the review of the associated tables below the detail where only a Wearing Course and Binder Course is specified. Please review and revise the detail and/or tables to eliminate any discrepancies for the required paving restoration.
 - c. In the Concrete Pavement (Walkway) detail, please change the reference for Tredyffrin Township to Radnor Township and ensure the detail matches the current Radnor Township standard.

4. On Sheet 9 we have the following comments:
 - a. In the Compost Filter Sock Detail, in the section view please add the words “Disturbed Area” to the left-hand side of the compost sock and the words “Undisturbed Area” to the right-hand side of the compost sock.
 - b. In the Concrete Washout Detail, in the Installation Notes there is a reference to an impervious geomembrane membrane to be installed under the compost sock that is not shown on the detail. Please revise the detail to show the geomembrane.
 - c. In the Erosion & Sedimentation Control Notes, in Note #s 11 and 15 please change the reference for Montgomery County Conservation District to Delaware County Conservation District.
 - d. In the Clean Fill Notes, in the first sentence please change the reference for Bryn Mawr College to “The Contractor”.
 - e. In the Appendix C – Standard E&S Plan Notes, please revise Note #17 to state that sediment tracked onto any public roadway or sidewalk shall be immediately returned to the construction site and disposed in the manner described in the plan.
 - f. Please include a topsoil stockpile detail.
 - g. A detail for installation of an erosion control blanket is shown, but it is not clear from the plan view drawing on Sheet 6 where the erosion control blanket is to be installed. Please provide additional guidance for the installation locations for the erosion control blanket.
5. On Sheet 10, please revise the title of the drawing to “Tree Removal Inventory” to match the Drawing Schedule listed on Sheet 1.

Stormwater

1. On Sheet 5 we have the following comments:
 - a. It is not clear from the drawing how stormwater runoff from all of the proposed units will drain into the stormwater management system. Please revise the drawing to show how the following units will be connected into the storm sewer system.
 - i. Unit #s 5, 6, 7 & 8
 - ii. Unit #s 13, 14 & 15
 - iii. Unit #s 21, 22, 23 & 24
 - iv. Unit #s 25, 26, 27 & 28
 - v. Unit #s 36, 37 & 38

- b. Please revise the drawing to show the invert elevations for the stormwater inlets and manholes that will be part of the storm sewer system. Please also identify the pipe type and diameter of the proposed storm water piping.
 - c. Please indicate on the drawing the diameter of the proposed storm water manholes.
 - d. Please show the locations of the infiltration testing on the plan.
 - e. Per the requirements of Section 245-26.B(24) of the Code, please add the required language for the Engineer's statement and signature.
 - f. Per Section 245-26.B(23) of the Code, please add the required language for the Applicant's acknowledgement statement.
 - g. While not an E&S Comment, please note that the proposed water service location is not shown for Unit #1.
2. On Sheet 7 we have the following comments:
- a. In the Inlets detail, it is not clear if a sump will be provided, how watertight pipe connections will be made, the dimensions of the Type M Inlet, and where the two styles of inlets are to be installed. Please clarify.
 - b. In the Outlet Structure Detail we have the following comments:
 - i. It is not clear how a watertight connection will be made between outlet structure and the inlet and outlet pipe.
 - ii. Please also identify the diameter of the inlet pipe.
 - iii. Will Outlet Structure No. 1 be designed for HS-20 loading since it is shown located in the roadway?
 - iv. Please identify the material for the weir and its thickness. How will it be installed and sealed in the outlet structure, and how will it be made to be corrosion resistant?
 - c. In the Infiltration Bed Notes, Note #6 states that all CMP shall be aluminized steel. It is not clear where the CMP will be installed. Please clarify.
 - d. In the detail labeled "Provide Overflow Pipe at Downspouts Draining to Infiltration Bed" please identify the pipe type and diameter for the roof drain to infiltration bed.
 - e. In the Stormwater Pipe Storage Notes, Note #1 refers to "Beds 1-6", but it appears that only four (4) beds are to be installed. Please revise as is appropriate.

- f. The Stormwater Infiltration Bed Detail is generic in nature and not specific for the four (4) infiltration Beds to be installed. For the submission of the Preliminary/Final Land Development Plan all details for each of the infiltration beds shall be shown in detail with all relevant dimensions and elevations included.
3. On Sheet 8, we have the following comments:
 - a. In the manhole detail shown, it is not clear if the detail applies equally to both the construction of the sanitary sewer manholes and storm sewer manholes. Please clarify. Additionally, it is not shown how watertight connections will be made between the pipes and manholes. Note #2 in the Standard Manhole – Type “A” Notes says to see the Project Manual on this point. Please also note on the detail how the watertight piping connections will be made.
 - b. In the manhole detail, please provide details for the type of manhole frame and cover to be provided.
 - c. On Sheet LP-1, there appear to be many trees proposed for planting adjacent to the infiltration basins that would be located within the required stormwater access easement area. Section 245-17.B of the Township Code states that “No person shall place any structure, fill, landscaping, or vegetation into a stormwater control or BMP or within a drainage easement that would limit or alter the functioning of the stormwater control or BMP without the written approval of the Township.” Section 245-26.B(19) requires a fifteen-foot wide access easement around all stormwater controls and BMPs that would provide ingress to and egress from a public right-of-way. Please revise the drawing to ensure that there are no proposed trees will be located within the required fifteen-foot access easement around the infiltration beds.
 4. In the Post Construction Stormwater Management Analysis, we have the following comments:
 - a. Section 245-18.C(1)(c) of the Township Code requires that the infiltration facility shall be capable of completely draining the retention (infiltration) volume with three days (72 hours) from the end of the design storm. Please revise the submission to include a calculation to show that this requirement will be met based on the measured infiltration rates at the proposed locations.
 - b. It was not clear from the Pre-Developed and Post Developed Drainage Plans where POI A and POI B are located. Please revise the submission to provide better clarity on this point.

Sanitary Sewer

1. It appears that the proposed sanitary sewer will be 3 feet from the existing building on parcel 36-11-340. There must be a minimum distance of 10 feet on each side of the sanitary sewer to allow for a 20-foot easement.
2. Additional information must be provided regarding the sanitary sewer proposed for this development before a detailed sanitary sewer review can be completed.
3. On Sheet 8 in the Cleanout-Paved Area detail, please indicate that the 45-degree bend and wye fitting are also to be cast iron to resist damage from vehicle loading. Please also identify the material of the watertight plug and adapter to be installed in paved areas.

General

1. The Radnor Township signature block must be revised to indicate Commissioners and not Supervisors.
2. The Recorder of Deeds signature block indicates both Media and Chester. This must be revised.
3. The tree protection detail located in the plan set must be replaced with the Radnor Township standard.
4. The applicant must provide information regarding trash removal, snow removal, etc.
5. The Conditional use application indicates 204 & 228 Strafford Avenue, and the plans indicate 208 & 228 Strafford Avenue. This must be revised to be consistent.

If you have any questions or require any additional information, please contact me.

Very truly yours,

GANNETT FLEMING, INC.



Roger A. Phillips, P.E.
Senior Project Manager