SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

September 18, 2023

Steve Norcini, PE Radnor Township 301 Iven Avenue Wayne, PA 19087-5297

Re: 204 & 228 Strafford Avenue ("Property")

Hamilton Trust

Response to 8-01-2023 Gannett Fleming Conditional Use Plan Review Letter

Dear Mr. Norcini:

This letter is in response to the review of the above-referenced Conditional Use plan by the Radnor Township Engineering consultant, Roger Phillips, P.E. of Gannett Fleming as set forth in his letter dated August 1, 2023. This letter was received by the applicant's representatives on August 5, 2023. The original comments are copied below in *italics text* with a response following in **bold text**. In addition, revised plans and related materials addressing the applicable comments are being submitted.

Sewage Facilities Planning

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

This comment refers to an outside agency approval being obtained before unconditional final land development approval is granted and will be addressed at the final land development plan. A sewage planning module narrative was submitted with the Conditional Use application.

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.

The zoning table is updated to list the existing and proposed setback requirements. The proposed minimum building setbacks from the existing ROW (right-of-way) along Strafford Avenue and Eagle Road has been shown.

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

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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.

The stormwater management is reconfigured to remove a portion of it from underneath the common open space, so that the stormwater management is underneath no more than 10% of 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.

The stormwater management is reconfigured to remove a portion of it from underneath the common open space, so that the stormwater management is underneath no more than 10% of the common open space. If the stormwater management underneath a portion of the common open space is being considered by the Township as being within the common open space¹, up to 10% of the common open space may be used for stormwater management under Code §280-91.A

4. $\int 280-97.B(3) -$ 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.

Code §280-97.B(3) referenced in this comment is only one provision in the Density Modification provisions addressing setbacks. Applicant believes that this provision is not applicable. Code §280-92 (4) specifically addresses Density Modification in the R-4 District in which the Property is located and provides that "There shall be no buildings within 40 feet of an existing street right-of-way line and 25 feet from any adjacent property line". Code §280-97 addresses "yards" in Density Modification, and provides specific regulations for development of townhomes in a Planned Community in §280-97.D. This section specifically provides that "in lieu of the foregoing yard requirements" [i.e. §280-97.B)(3)] there is a 30 feet separation distance between groups of townhomes. The conditional use plans comply with these provisions in that there is a minimum 40 feet setback from the existing right-of-ways for Strafford Avenue and Eagle Road; there is a minimum setback of 25 feet from all adjacent property lines; and the groups of townhomes are separated by at least 30 feet.

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.

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¹ The applicant does not agree that a stormwater management system underneath the common open space is within the common open space.

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Each townhouse has a 2-car garage. Each garage parking space meets the 9'6" x 20' parking space requirement. The driveway apron is providing access to the garage, and is not counted as parking spaces. It is also noted that Code § 255-29.A.(20) addressing attached dwellings, such as the townhomes proposed here, confirms that garages or driveways can be used to meet the parking requirements. This provision also provides that in addition to these parking spaces there shall be one parking space per four dwelling units of "overflow" off-street parking. The plans show 14, 9'6" x 20' "overflow" parking spaces in compliance with these requirements.

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.

The Cover Sheet includes an aerial map showing physical features within 500' of the property line, including properties across the streets. It is also noted that that Township has recently approved two subdivision/land developments plans for the properties across Strafford Road form the Property, so the Township has on file extensive plans for those sites.

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.

As noted on the conditional use plans an internal driveway is proposed, not a private street. Code §255-40 provides specific regulations for attached-dwelling residential development, such as the townhomes proposed here. Code §255-40.C addresses access and circulation, and Code §255-40.E addresses the required internal driveways. The conditional use plans meet the applicable requirements of these provisions.

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.

The plan now identifies a 40' half right-of-way width along the for Eagle Road Property frontage should the Commissioners require it. This is subject to the applicant's rights under applicable law regarding just compensation etc.

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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.

As noted on the conditional use plans an internal driveway is proposed, not a private street. Code \$255-40 provides specific regulations for attached-dwelling residential development, such as the townhomes proposed here. Code \$255-40.C addresses access and circulation, and Code \$255-40.E addresses the required internal driveways. The conditional use plans meet the applicable requirements of these provisions. The minimum curb radii for the internal driveways are now shown on the conditional use plans.

5. $\int 255.29 A(14) - \text{No less than a five-foot radius of curvature shall be permitted for all curblines in parking areas.}$

Will Comply.

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.

Acknowledged. The conditional use plans meet these requirements.

7. $\int 255.35.A - E$ as ements with a minimum width of 20 feet shall be provided as necessary for utilities.

Will Comply.

8. $\int 255.35.C - No$ 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.

Will Comply.

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.

Will Comply as applicable. It is noted that the conditional use plans include a landscape plan set.

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10. $\int 255-38.H - All$ shade trees provided must be in conformance with the approved trees listing. Upon approval of the Board of Commissioners, other species may be utilized.

Will Comply. It is noted that the conditional use plans include a landscape plan set.

11. $\int 255-42.H - A$ buffer is being provided as required by $\int 280-91.G$. The applicant must provide a breakdown of what is provided within that buffer area.

It is noted that the conditional use plans include a landscape plan set. Will comply if there is required buffer detail to be provided.

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).

Acknowledged.

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.

Acknowledged. This will be addressed at the land development and/or permitting stages. It is noted that the Property and the surrounding area is already served by public water, so no issues are anticipated.

Erosion and Sedimentation Controls

Erosion and sedimentation details are typically addressed at the land development and/or permitting phases, and these comments will be addressed as part of those phases.

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.

Will Comply.

- 2. On Sheet 6 we have the following comments:
- a. Please include the location of the soil stockpile(s).

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b. Please include a rock construction entrance for Units 1 & 2.

Will Comply.

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.

Will Comply.

d. Please add the symbol for the concrete washout to the Erosion and Sedimentation Control Legend.

Will Comply.

- 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.

Will Comply.

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.

Will Comply.

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.

Will Comply.

- 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 lefthand side of the compost sock and the words "Undisturbed Area" to the right-hand side of the compost sock.

Will Comply.

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.

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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.

Will Comply.

d. In the Clean Fill Notes, in the first sentence please change the reference for Bryn Mawr College to "The Contractor".

Will Comply.

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.

Will Comply.

f. Please include a topsoil stockpile detail.

Will Comply.

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.

Will Comply.

5. On Sheet 10, please revise the title of the drawing to "Tree Removal Inventory" to match the Drawing Schedule listed on Sheet 1.

Will Comply.

Stormwater

Stormwater design details are typically addressed at the land development and permitting phases, and these comments will be addressed as part of those phases.

- 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

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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.

Will Comply.

c. Please indicate on the drawing the diameter of the proposed storm water manholes.

Will Comply.

d. Please show the locations of the infiltration testing on the plan.

The infiltration testing locations are now shown on the conditional use plans.

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.

Will Comply.

f. Per Section 245-26.B(23) of the Code, please add the required language for the Applicant's acknowledgement statement.

Will Comply.

g. While not an E&S Comment, please note that the proposed water service location is not shown for Unit #1.

Proposed water service is added to 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.

Will Comply.

- 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.

Will Comply.

ii. Please also identify the diameter of the inlet pipe.

Will Comply.

iii. Will Outlet Structure No. 1 be designed for HS-20 loading since it is shown located in the roadway?

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Will Comply.

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?

Will Comply.

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.

Will Comply.

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.

Will Comply.

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.

Will Comply.

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.

Will Comply.

- 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.

Will Comply.

b. In the manhole detail, please provide details for the type of manhole frame and cover to be provided.

Will Comply.

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

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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.

Will Comply.

- 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.

Will Comply.

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.

POI A & B are shown on the plans.

Sanitary Sewer

Sanitary sewer design details are typically addressed at the land development and permitting phases, and these comments will be addressed as part of those phases.

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.

Will Comply.

2. Additional information must be provided regarding the sanitary sewer proposed for this development before a detailed sanitary sewer review can be completed.

Will Comply.

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.

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General

1. The Radnor Township signature block must be revised to indicate Commissioners and not Supervisors.

Will Comply.

2. The Recorder of Deeds signature block indicates both Media and Chester. This must be revised.

The Recorder of Deeds signature block is revised to indicate Media.

3. The tree protection detail located in the plan set must be replaced with the Radnor Township standard.

Will Comply.

4. The applicant must provide information regarding trash removal, snow removal, etc.

Will Comply.

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.

The plans are revised to indicate 204 & 228 Stafford Avenue.

I believe these comments satisfactorily address the comments. Should you have any questions and/or comments, please contact me.

Sincerely,

David J. Sanders, P.E.