SITE ENGINEERING CONCEPTS, LLC

Consulting Engineering and Land Development Services

January 31, 2024

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

Re: 204 & 228 Strafford Avenue & 18 Forest Lane ("Property")
Hamilton Trust Conditional Use application
Supplemental Response to 8-01-2023 Gannett Fleming Conditional Use
Application Review Letter

Dear Mr. Norcini:

On August 5, 2023 the Applicant was provided with a copy of a letter dated 8-01-2023 from Roger Phillips, P.E of Gannett Fleming, the Township's consulting civil engineer in review of Applicant's conditional use application ("Application"). That review letter was broken down into various topics identified by headings (i.e. Sewage Facilities Planning, Zoning, Subdivision and Land Development, Erosion and Sedimentation Controls, Stormwater, Sanitary Sewer, and General).

On September 18, 2023 we submitted revised conditional use plans, and a response letter responding to all of the Zoning comments, as the well as the Sewage Facilities Planning comment. Responses were also provided to various Subdivision and Land Development comments, including noting "will comply" or "acknowledged" for some of the comments. Similarly, responses were provided to the review comments under the headings of Erosion and Sedimentation Controls, Stormwater, Sanitary Sewer, and General, mostly "will comply" and "acknowledged". Sewage Facilities Planning, Subdivision and Land Development, Erosion and Sedimentation Controls, Stormwater, Sanitary Sewer, and General review comments would generally be applicable to the land development, permitting, and/or outside agency review processes which are separate from the conditional use review process. No additional feedback or reviews have been received since our September 18, 2023 submission, except the January 3, 2024 Radnor Township Planning Commission, where limited feedback was provided regarding the issue of whether a rear yard setback should be provided for the Property; the length of the driveways leading to individual units from the internal access drive so as to afford the ability of a parked car to not partially overhang the internal sidewalk; and the general issue as to the characteristics of the internal access drive connecting to Strafford Avenue (e.g. width, truck turning templates, legal classification as a street etc.)

We are now submitting further revised conditional use plans, revised stormwater management report and this supplemental response letter further addressing some of the Zoning, Subdivision and Land Development, Erosion and Sedimentation Controls, Stormwater, Sanitary Sewer, and General comments. The original comments are copied below in *italics text* with a compiled supplemental response from the project team in **bold text**.

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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.

Response previously submitted. (9/18/2023 response letter).

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.

Response previously submitted. (9/18/2023 response letter).

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.

Response previously submitted. (9/18/2023 response letter).

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.

Response previously submitted. (9/18/2023 response letter).

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.

Response previously submitted. (9/18/2023 response letter). The prior response walked through the Code provisions, particularly Code section 280-97.D applicable to a Planned Community providing that those requirements are in lieu of the setback requirements of Code section 280-97.B. It is also noted that Code section 280-92.A(4) provides for a 40 feet setback from existing street rights-of-way, and a 25 feet setback from adjoining property lines. This issue was discussed further at the January 3, 2024 Radnor Township

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Planning Commission meeting. Mr. Phillips indicated that he believed that Code 280-97.D excepts the individual townhomes and building groups from the setback requirements of Code section 280-97.B, but that one rear yard setback of 30 feet should be provided for the overall Property. Mr. Phillips indicated that the applicant could choose which adjoining property line would have the 30 feet rear yard setback. Although the applicant does not believe a rear yard setback should be required, the plans have been revised to provide the requested 30 feet rear yard setback along the property line that adjoins the rear of the adjoining Grant Lane properties.

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" × 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.

Response previously submitted. (9/18/2023 response letter). That response explained that the Code required parking spaces were provided in the garages of the dwelling units as is permitted. However, based on some discussion at the January 3, 2024 Radnor Township Planning Commission meeting, the plans have been further revised to provide a minimum depth of 20 feet for the individual unit driveways to avoid cars parked in the driveway from partially overhanging the internal sidewalk.

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.

Response previously submitted. (9/18/2023 response letter).

2. \$\int 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.

Response previously submitted. (9/18/2023 response letter).

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.

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Response previously submitted. (9/18/2023 response letter). The revised plans depict a 30 foot half-width right-of-way for Eagle Road and awaits input from the Board of Commissioners if additional Right-of-Way will be requested.

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.

Response previously submitted. . (9/18/2023 response letter).

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

A five-foot radius is now shown at the curvature for the curblines.

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.

Response previously submitted. (9/18/2023 response letter).

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

20-foot wide easements are shown on all sanitary sewer mains.

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.

The plans are revised so that no plantings are within 10 feet of the sanitary sewer lines.

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.

The plans are revised per conversations with the Township arborist. The area between driveways is increased.

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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.

The Landscape plans are revised.

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.

The Landscape plans are revised to list the plantings in the required 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).

Acknowledged. (9/18/2023 response letter).

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.

Response previously submitted. (9/18/2023 response letter).

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.

The drawings schedule on sheet 1 is revised.

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

A soil stockpile is shown on sheet 6.

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

A rock construction entrance is shown for units 1 and 2 on sheet 6.

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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.

The construction staging is updated on sheet 6.

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

Concrete washout symbol added to the E&S legend on sheet 6.

- 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.

The Tree Protection Detail is updated on sheet 8.

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.

The Bituminous pavement sections are updated on sheet 8.

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.

The concrete pavement detail is updated on sheet 8.

- 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.

The Compost Filter Sock Detail is updated on sheet 9.

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.

The Concrete Washout Detail is updated on sheet 9.

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.

The E&S Notes are updated on sheet 9.

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

The Clean Fill Notes are updated on sheet 9.

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.

Appendix C is updated on sheet 9.

f. Please include a topsoil stockpile detail.

A topsoil stockpile detail is now shown on sheet 9.

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.

Erosion Control Blanket is shown on Sheet 6.

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

The Drawing Scheule is updated on sheet 1.

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

Additional stormwater management detail is added to the plan set.

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.

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Top of grate, inverts pipe type, size and slope are now shown for all storm sewer piping.

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

The manhole detail is shown on sheet 8.

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

The infiltration testing locations are now shown on Sheet 5.

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.

The Engineer's statement block is added to sheet 4.

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

The Applicant's statement block is added to sheet 4.

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.

Top of grates and inverts are shown on sheet 7 listing if a sump is necessary. Notation for watertight pipe connection and inlet size.

- 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.

Notation for watertight connection is added to the detail on sheet 7.

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

The pipe diameters are shown on the plans.

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

The outlet structures are noted to be HS-20 and noted on sheet 7.

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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?

The material and thickness to be used is listed on sheet 7.

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.

The pipe storage are proposed to HDPE, Note # 6 is removed.

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.

The detail on sheet 7 is updated to list pipe size and material.

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.

The note is updated to list the correct number of beds.

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.

Acknowledged.

- 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.

The detail is revised on sheet 8 per the comment.

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

The manhole detail on sheet 8 is updated.

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

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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.

The Landscape plans are updated.

- 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.

Dewatering calculations are included in the Storm water Report.

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

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.

The plans are revised that the existing dwelling on parcel 36-11-340 (18 Forest Lane) will be removed and used for the underground sanitary sewer connection and additional underground stormwater management. This parcel will remain vacant and be incorporated into the common elements of the Planned Community.

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

Additional information is currently shown on the plans and additional design will be provided during the Land Development, permitting, and/or the outside agency review processes as applicable.

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.

The cleanout detail on sheet 8 is updated per the comment.

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General

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

The Township block is revised.

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.

The Tree Protection Detail on sheet 8 is updated to new Township standards.

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

Additional notation is added to sheet 4.

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 the prior responses submitted on September 18, 2023, the further revised plans, and these supplemental responses satisfactorily address the review comments. Should you or the Township engineering consultants have any questions and/or comments, or if you/they believe these responses and/or plan revisions do not satisfactorily address the comments, please provide us with a detailed response, so that we may have the opportunity to continue to address open issues.

Sincerely,

Robert M. Lambert, P.E.