

August 8, 2023

Mr. Jon Altshul, Township Manager Westtown Township 1039 Wilmington Pike West Chester, PA 19382

RE: Stokes Estate Conditional Use Review Westtown Township WTT-21-228

Dear Mr. Altshul:

This letter is in response to the June 30, 2023 Cedarville Engineering Group, LLC (CEG) review of the above referenced Plans by D.L. Howell and Associates, Inc.

Listed below are our responses to the concerns identified in their review of the plans. Also, enclosed for your review are copies of the updated plans. Where applicable, Howell Engineering has addressed each of these comments indicating what action has been taken to resolve the issues. **Any comments that are statements and do not require any action have been omitted in the list of responses or have been noted as "Addressed"**.

Zoning Comments

- 1. Addressed.
- 2. The following shall be addressed:
 - Prohibitive slopes exist directly to the north of Lot 22. A retaining wall is being proposed within Lot 22 and the adjacent open space to avoid Prohibitive Slope encroachment. The configuration of Lot 22 shall be revised so that the retaining wall is located completely within the Open Space, with ownership and maintenance being the responsibility of the Homeowners Association.

Howell Response: While our office disagrees that this is needed, the lot line for Lot 22 has been adjusted.

• A conveyance swale is proposed to the north of Lots 73-75, terminating at a proposed inlet and storm sewer located between Lots 72 and 73. Immediately downslope of this inlet, and upslope of a proposed swale to the north of Lots 70-72, an area of Prohibitive Slopes exists where no conveyance swale is proposed. The applicant shall address how conveyance of upslope flow to the rear of Lot 72 will be conveyed away from the Lot, without the need for encroaching on the Prohibitive Steep Slopes.

Howell Response: Grading has been updated to convey water into the inlet without encroaching on the prohibitive steep slopes.

Retaining walls have been proposed in the following locations: Along the rear of Lot 64 and 67 Along Lot 83, Lot 84, and the Open Space Along Lot 6, Lot 7, and the Open Space Along Lots 59-64 adjacent to the Open Space Along Lots 43-51 adjacent to the Open Space Along Lot 64, Lot 65, and Lot 67 adjacent to Road B's Right-of-Way

The following shall be addressed:

- Ownership and maintenance of the proposed retaining walls shall be addressed by the applicant and shall be the responsibility of the Homeowners Association.
- If the retaining walls are to be located within the proposed lots, easements shall be provided for, and shall be of sufficient width to encompass the wall and associated wall components (geogrid reinforcement/footings), to a minimum distance of five (5) feet to the edge of geogrid reinforcement or footing. If the walls are to be located within Homeowners Association open space, encroachment within individual lots shall be included in an easement for the applicable portion of the lot.
- Upon providing the required easement on the plan, the plans will be reviewed to determine restrictions to be imposed on individual lots as it pertains to potential future lot improvements.

Howell Response: Ownership and maintenance of retaining walls will be provided as part of the Land Development approval process. Any lot that encompasses a retaining wall or is directly adjacent to a wall will be provided with a blanket easement for necessary maintenance.

3. The applicant shall provide supporting information for the following lots, in tabular form, to demonstrate compliance with the above Ordinance criteria: Lot 16, Lot 22, Lot 27, Lot 65, Lot 71, Lot 72, Lot 73, Lot 74

Howell Response: Section 170-402.D.(3)(f) applies to existing natural resources, therefore it has been applied only to the overall lot. It does not apply to the post construction subdivision or the proposed individual lots. Calculations are provided on the cover sheet showing that the amount of precautionary slopes do not exceed 25% of the overall lot area.

The Zoning Officer shall provide confirmation that the transmission lines contained within the Buckeye/Laurel and Enterprise rights-of-way do not contain surface land uses.

Howell Response: Pursuant to our field survey, there are no compressor stations, pumping stations, regulator stations, launcher/receive or other surface pipeline appurtenances located on this property.

- 4. Addressed.
- 5. A Plan shall be provided, showing the proposed lot and improvements layout, with agriculturally suited soils (GdB, GdC) shaded.

Howell Response: The soils limits, including any agriculturally suited soils, are shown on both the existing conditions plan and grading utility plan. The soils listing on the plan notes any soils that

are agriculturally suited. Please note that single family residential development is a use permitted in this zoning district and on this property, and it is not possible to develop this use on this property without placing structures and paving within areas of agriculturally suited soils. Single family home lots are allowed by zoning and are not considered an agriculture use.

June 6, 2023 Comment: A Plan shall be provided, showing the proposed lot and improvements layout, with agriculturally suited soils (GdB, GdC) shaded.

Howell Response: Same response above is applicable. Agriculturally suited soils are shown, and the soils listing also notes any soils that are considered agriculturally suited. Nowhere in the ordinances does it require the soils to be shaded.

6. The Open Space Plan (sheet 6) shall be revised to clearly show improvements associated with active recreation areas, along with maintenance requirements associated with proposed passive open space areas.

<u>Current Comment:</u> Improvements associated with active recreation shall be provided if required by Westtown Township, per Section 170-907.A.(2) of the Westtown Township Zoning Ordinance. If Conditional Use approval is to be considered, and if development of the improvements is deemed required by Westtown Township, a condition shall be applied requiring development of improvements associated within the active recreation area to be the responsibility of the applicant, and that a plan for the proposed improvements be provided and approved by the Township as part of the Land Development Plan application.

Howell Response: An area suitable for active recreation is provided on the open space plan. Detailed improvements for the active recreation areas are not required under the Ordinance. Maintenance notes for the open space areas have been added to the plan.

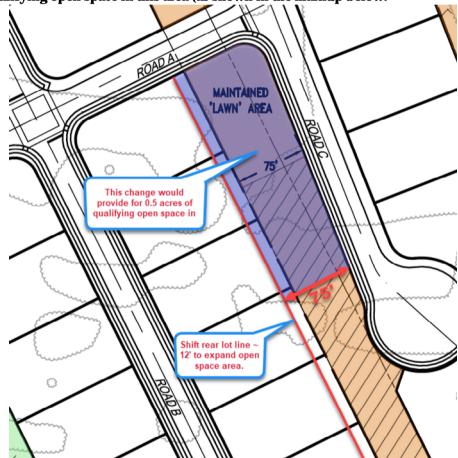
- 7. The following shall be addressed:
 - Supporting calculations shall be provided supporting that the proposed subsurface infiltration facility has been sized to comply with the volume and rate control criteria set forth in the Westtown Township Stormwater Management Ordinance, to satisfactorily demonstrate that the above ground portion of the facility is to be considered accessory to the infiltration facility. The Stormwater Management calculations currently indicate that the above ground storage associated with the facility is being used to comply with the criteria set forth in Section 144-308 of the Township's Stormwater Management Ordinance. As referenced in the above Ordinance section, the above ground portion of the stormwater management facility may be located within the Open Space, but the area associated with the facility shall be excluded from the required minimum provided Open Space.

Howell Response: The above ground portion of the stormwater facilities are accessory to the infiltration as they are necessary to detain stormwater prior to infiltration over the required period of time. Without the above ground portion of the stormwater facilities, the required amount of infiltration could not occur as the stormwater would sheet flow off of the property.

• Per the above referenced Ordinance section, qualifying Open Space shall consist of an area of ½ acre or more, and shall be contiguous to qualifying Open Space. The acreage of the area shown as "Maintained Lawn Area" and as qualifying open space, to the rear of Lots 32 and

33 shall be provided to demonstrate compliance with the referenced Ordinance requirement.

Howell Response: Zoning Ordinance Section 170-907.A.(7)(a) states: The following design standards, as deemed appropriate by the Board, shall apply to areas of common open space. Such areas shall be not less than 75 feet in width at any point and not less than 1/2 acre of contiguous area. Based on this language, we do not see a requirement for qualifying open space to be 1/2 acre of contiguous area, but rather that the qualifying open space be part of 1/2 acre of contiguous open space. The proposed qualifying open space in this location is less than 1/2 acre, but it is part of a contiguous open space area that exceed the minimum 1/2 acre in size, therefore we feel it meets the requirements and intent of the code. However, if the Township Engineer's interpretation is assumed to be correct, adjustments to the open space can be made in order to provide at least 0.5 acres of qualifying open space in this area (as shown in the markup below.



• Per the above referenced Ordinance section, qualifying Open Space shall be undivided by any crossing of public or private roads, except for proper circulation, and then only upon recommendation of the Township Engineer. While Open Space Areas 1 and 3 provide adequate area for usable passive/active recreation (19.21 acres, 6.17 acres respectively), Open Space Area 4 does not. Eligibility of this area may be considered, provided that the applicant develops this area for active recreation, to the satisfaction of the Township.

Howell Response: While our office feels that the road dividing Open Space Area 3 and 4 IS necessary for proper circulation through the development, therefore meeting the intent of that ordinance section, our office does feel that area can be used for active recreation as well. As part of

the Subdivision and Land development process, our office will provide active recreation in the form of a small playground or tot lot with possibly a gazebo and internal sidewalk connection within Open Space Area 4.

8. Bonus density calculations shall be revised to exclude the applicable areas as referenced in comment #8 above.

Howell Response: Based on the responses above, there is no need to adjust the bonus density calculations per the comments above.

- 9. The following shall be addressed:
 - All areas proposed to remain as woodlands in the proposed conditions (as shown on the "Change in Runoff Volume for 2-Yr Storm Event" worksheet on page 9 of 270 within the report) shall be clearly designated with hatching or shading on the Post-Developed Drainage Area Plan, to support the stormwater management facility size shown.
 - The extents on the Drainage Area Plans and total areas shown on the "Change in Runoff Volume for 2-Yr Storm Event" worksheet on page 9 of 270 within the report shall be revised to include all revised and new improvements shown on the updated Plans. This includes but is not limited to:
 - a. The proposed grading and stormwater conveyances for the Bypass for DP003 at underground bed 1
 - b. All grading for the upper and lower basin 1
 - c. All grading for the BMPs of DP003
 - d. Grading associated with the roadway at the wetland crossing.
 - e. Grading for Basin 2
 - f. The grading and retaining wall along lots 44-52.

Stormwater management volume calculations, both required capture volumes and proposed storage volumes, shall be confirmed based upon addressing the above.

Howell Response: Pursuant to Section § 170-2009B(3)(d), a Conditional Use application shall include sufficient information, e.g., preliminary site grading and road profiles, <u>preliminary stormwater management analysis</u>, etc., to preliminarily determine compliance with the Township natural feature, site analysis, conservation design process and density requirements. Detailed grading plans, <u>stormwater calculations</u>, profiles and similar engineering details <u>are not required to be submitted until a preliminary or final plan application</u> is made under Chap. 149, Subdivision and Land Development. The specific details are beyond the scope of the Conditional Use Application requirements and will be provided during Subdivision and Land development. Please note that any woodlands located outside the proposed limits of disturbance are and will remain as woodlands in the post-development condition. Additionally, the areas mentioned above in a. through f. have already been taken into consideration within DP002 or DP003 depending on where they are located on the site. However as stated above this will all be further detailed and analyzed as part of the Subdivision and Land Development application.

10. The plans shall clearly indicate if the applicant intends to phase the development. If phasing is to be proposed, the applicable phasing shall be shown on the plan.

Current Comment: The applicant has stated there is no intention to phase the development at this time. If Conditional Use approval is to be considered, a condition shall be applied indicating that no phasing of the development shall occur.

Howell Response: No response needed.

11. The Township Planning Commission and Board of Supervisors shall evaluate the need for sidewalks on both sides of Roads A, C, and D. Based upon the density and lot locations proposed, CEG recommends providing sidewalks on both sides of these roads.

Current Comment: This comment remains applicable. If Conditional Use approval is to be considered, and if installation of sidewalks on both sides of the proposed roadways is deemed required by Westtown Township, this requirement shall be applied as a condition.

Howell Response: No response needed.

12. The distance between the proposed dwelling on Lot 14 and the proposed pump station shall be dimensioned to demonstrate compliance with the above referenced Ordinance section.

Current Comment: The applicant has responded that the pump station proposed is to consist of a wet well, valve vault, backup generator, and an electric enclosure with control panel. The applicant shall provide supporting information to demonstrate, to the satisfaction of the Township Zoning Officer, that the referenced facilities are not to be considered structures, as defined in Section 170-201, below:

Structure – Any form or arrangement of building materials involving the necessity of providing proper support, bracing, anchorage or other protection. Such arrangement shall have a permanently fixed location in or on the ground. Structures include, but are no limited to, primary and accessory buildings, open sheds, and similar enclosures with less than four walls and/or a roof, signs, fences, or walls over six feet in height, detached aerials and antennas, decks, porches, platforms, recreation courts, swimming pools, tents, tanks, and towers. For floodplain management purposes, a structure is defined as walled and roofed building, including a gas or liquid storage tank that is principally aboveground, as well as a manufactured home.

Howell Response: To the point any of the above ground facilities associated with sewer pumping is located within 30 feet of the home on Lot 14, this additional information can be provided to the Zoning Officer during the Subdivision and Land Development phase.

- 13. Addressed.
- 14. Conveyance swales and storm sewer not located within right-of-way to be dedicated to Westtown Township will be the responsibility of the Homeowners Association. A minimum, twenty (20) foot wide easement or ten (10) feet to a single side shall be provided for the following conveyance swales:
 - Conveyance swale in the rear yards of Lots 1-12, conveying flow to Basin *1.
 - Conveyance swale in the rear of Lots 15-22, conveying flow to the inlet located on the property line of Lot 21 and 22.
 - Storm sewer run from the inlet on the Lot 21/22 property line to the right-of-way of Road A.
 - Storm sewer run along the Lot 13/14 property line.
 - Conveyance swale in the rear yards of Lots 23-27, conveying flow to Basin *2.
 - Storm sewer within the rear yard of Lots 23-26.
 - Conveyance swale in the rear yards of Lots 28-33.
 - Storm sewer run within Lot 58.
 - Storm sewer run along the Lot 37/38 property line.
 - Conveyance swale within the rear yard of Lots 58-64, conveying flow to the inlet within Lot 58.

- Conveyance swale within the rear yard of Lots 53-57.
- Conveyance swale within the rear yard of Lots 40-52, conveying flow to Basin *3.
- Storm sewer run within the rear yard of Lots 72-74 (lines shown, shall be labeled).
- Conveyance swale within the rear of Lots 68-76.
- Storm sewer run along the Lot 68/69 property line (line shown, shall be labeled).
- Storm sewer run along the Lot 68 property line abutting Open Space.

The following shall be addressed:

- Lot areas shall be revised to exclude the above referenced easements.
- The locations of the proposed dwellings shall be modified as applicable to not encroach within the referenced easements.

Current Comment: The following shall be addressed:

- Twenty (20) feet wide easements, centered upon the centerline of the swale/storm sewer shall be provided for all stormwater conveyance facilities, including but not limited to those listed above.
- Upon providing the required easements on the plan, the plans will be reviewed to determine restrictions to be imposed on individual lots as it pertains to potential future lot improvements.

Howell Response: This comment is not applicable to Conditional Use. Also, it is our opinion that since the definition of Lot area states, "For purposes of compliance with minimum lot area requirements, the following shall be excluded: C. Any area within a permanent drainage easement", this would not applicable to this subdivision since there are <u>no</u> minimum lot area requirements for single family detached dwellings required under the Flexible Development Procedure.

- 15. The following shall be addressed:
 - The length of the cul-de-sac, from the Road A intersection with Road B, to the end of the northern portion of Road C, shall be dimensioned to demonstrate compliance with the above referenced Ordinance requirement.
 - If it is the applicant's intent to provide a connection from the proposed northern cul-de- sac bulb of Road C to existing Shiloh Hill Road, the applicant shall provide supporting information demonstrating that the Shiloh Hill Road right-of-way currently extends to the northern tract boundary of the subject tract as previously required.
 - If the above can be adequately demonstrated, the applicant will be required to complete the roadway extension between Road C and Shiloh Road. Supporting information shall be provided to demonstrate that this connection complies with the horizontal and vertical geometry criteria set forth in Sections 149-905 and 149-906 of the Subdivision and Land Development Ordinance, subject to the review of the Township Traffic Engineer.

Howell Response: The dimensions were previously provided in the response letter and we are unaware as to why additional dimensioning needs to be provided considering stationing is provided along the centerline of the roadway on the plans. Regardless, this additional information can be provided during Land Development if needed. Please note, it is not the Applicant's intent to provide a connection to Shiloh Hill Road.

- 16. The following shall be addressed:
 - Dimensions shall be provided on the "Typical Single-Family Detached Lot" to demonstrate that the minimum parking stall dimensions set forth in Section 170-172 can be accommodated without a vehicle encroaching into the roadway right-of-way.

• The applicant shall address whether on-street parking is to be proposed and the limitation associated with on-street parking.

Current Comment: The applicant's proposal to provide parking on one side of the street shall be subject to review by the Township's Traffic Engineer.

Howell Response: Please note our previous response stated "on a 24' wide cartway, typically parking would be prohibited on-street, and would be posted as such." Our office is not proposing parking on either side of the street.

- 17. Addressed.
- 18. Addressed.
- 19. The applicant shall clearly note the areas proposed for active recreation and the improvements to be provided as part of these areas, subject to the approval of the Township Planning Commission and Board of Supervisors.

Howell Response: An area suitable for active recreation is provided on the open space plan. Detailed improvements for the active recreation areas are not required under the Ordinance. Maintenance notes for the open space areas have been added to the plan.

General Comments

- 20. Addressed.
- 21. The plans provided with the current submission are dated April 14, 2023, last revised June 15, 2023. The plans provided with the previous submission were dated March 17, 2023, no revision. The applicant shall address the discrepancy and confirm any applicable changes to the plans, other than plan revisions per Township consultant review letters.

Howell Response: Upon investigation, this was just a typographical error on the printed plan sets, and there are no discrepancies to note. If there are any additional changes needed to the conditional use plan set, we will continue with a plan date of April 14, 2023, and being revised at a future date.

I trust that all comments have been addressed adequately. Please do not hesitate to contact me at 610-918-9002 with any questions.

Sincerely, HOWELL ENGINEERING

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Denny L. Howell, PE President

David W. Gibbons, PE Senior Engineer