



June 15, 2023

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

**RE: Stokes Estate (Fox Clearing, LLC)
Conditional Use - Traffic Review
Westtown Township, Chester County**

Dear Mr. Altshul:

This letter is in response to the June 7, 2023 Albert Federico Consulting, LLC (AFC) review of the above referenced conditional use application.

Listed below are our responses to the concerns identified in their review of the conditional use application. 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.**

Conditional Use Plans

1.
 - a. Includes a centerline profile of Shiloh Road and evaluate the available sight distance for vehicles turning left from Shiloh Road into the proposed development.

Howell Response: Our office realizes that the previously provided plan sheet titled Shiloh Road Sight Distance Analysis mistakenly had specific sight distance layers turned off. These layers are now turned back on and provide the required and available safe sight stopping distance, and sight distance for vehicles making left hand turn into the development off Shiloh Road

- b. Provide a speed study supporting the assumed travel speeds.

Howell Response: Please note there is no speed study required by the Township for sight distance purposes, however the Applicant's Traffic Engineer was conservative in the analysis utilizing a speed of 10 mph over the posted speed limit.

- c. Ensure that the assumed grades are measured at the beginning of the braking distance.

Howell Response: While our office believes the grades utilized are consistent with the grades at the beginning of the braking distance, we also note that the grade at a point is valid for that one point only. Using the grade over the entire braking area is more realistic as the vehicle is continuously braking as the grade may change. In this instance however the grade through the braking area is fairly consistent.

2.

- a. As submitted, Road "A", "B", "C" and "D" do not provide a continuous collector street.

Howell Response: The property is not adjacent to two collector streets such that there can be a continuous collector street as per the Ordinance. The proposed local road extension to service the proposed development is of the same roadway classification as the other roadways (e.g. Hunt Dr/Carolyn Dr; Hummingbird La; Tyson Dr; Sage Rd) in the residential area.

- b. The site is proximate to several proposed trails and a recommended bike route. The Alternative Site Plans (sheets C1.01A and C1.01B) included with the submitted materials illustrate several potential trails and connections. It is recommended that the Board considers requiring easements to provide a future connection to proposed trails to the east and south of the property as illustrated in the Trails and Bikeways Map of the Township Comprehensive Plan.

Howell Response: The applicant is willing to further discuss trail connections.

3.

- a. Shiloh Road is classified as a Collector; the Board may require dedication of an additional five feet of right of way along the site frontage. {§149-903C.1}

Howell Response: No plan revision necessary.

- b. Road "C" should be revised to provide the required level areas approaching the intersection of Road "A". {§149-907E}

Howell Response: This does not apply to through streets. It is standard engineering practice to provide a leveling area when the vehicle will be coming to a stop.

- c. Road "A", between "B" and "C", and Road "B", between "A" and "D", do not meet the minimum block length. {§149-913B}

Howell Response: Pursuant to the definition of Block in the Subdivision and Land Development Ordinance, the lots between Road B and C do not form a block as they are not entirely bounded by streets, therefore this ordinance section is not applicable.

Block -A tract of land bounded entirely by streets; by streets and a watercourse; by streets and a railroad; by streets and the corporate boundaries of the Township; or by streets and public land, or any combination of the above.

- d. Sharp horizontal curvature should not be introduced near the bottom of a steep grade approaching or near the low point of a pronounced sag vertical curve. Road "A" (STA 8+98 to 15+30) and Road "D" (STA 8+73 to 12+33) should be revised to eliminate the overlapping curves using the minimum (150') horizontal radius and rate of curvature.

Howell Response: The roadways have been designed to meet Township Standards.

- e. Consistent with A Policy on Geometric Design of Highways and Streets, Table 3-36 (Design Controls for Sag Vertical Curves) the minimum Design Rate of Vertical Curvature is 37.0.

Howell Response: The vertical curves have been revised to meet the required sight distance with a K value for sag curves of 0.37 or greater. Calculations for sight distance are provided on the profile sheets.

- f. As presented, the northern edge of cul-de-sac "C" is ~5' higher than the existing grade. Provide additional information demonstrating that the adjacent retaining wall along the northern edge of the cul-de-sac can be constructed without encroaching into the adjacent property (Vanscovich - Parcel 67-20-20.6).

Howell Response: As noted by the reviewer this comment will be addressed during land development.

Traffic Impact Study

4. The future condition analyses assume that the traffic signal at Shiloh Road/Westtown-Thornton Road and Street Road is re-timed, reducing green times along Street Road (a PennDOT designated Critical Corridor) in favor of minor approaches. It is recommended that the Board consider a condition requiring the Applicant to contribute to the re-timing of the signal as assumed in the Study.

Howell Response: No plan revision necessary.

5. Traffic counts must be completed between April and November. {§149-804A(3)g} There is no objection to the Applicant requesting a Waiver as part of the Land Development application.

Howell Response: No plan revision necessary. The applicant will seek a waiver.

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

Sincerely,
D.L. HOWELL & ASSOCIATES, INC.



Denny L. Howell, PE
President



David W. Gibbons, PE
Senior Engineer