

MEMORANDUM

Date: November 30, 2020

To: Steve Norcini, P.E.

Radnor Township Engineer

From: Damon Drummond, P.E., PTOE

Senior Transportation Engineer

cc: Roger Phillips, P.E., Senior Project Manager, Gannett Fleming, Inc.

Leslie Salsbury, P.E., Gilmore & Associates, Inc.

Reference: 200 S. Ithan Avenue

Land Development Plan Review

Radnor Township, Delaware County, PA

G&A #20-08063

Gilmore & Associates, Inc. (G&A) has completed a transportation review for the above referenced project and offers the following transportation comments for Radnor Township consideration:

A. BACKGROUND

The subject parcel located at 200 South Ithan Avenue is situated in the R-2/D-M Zoning District within Radnor Township, Delaware County. The applicant intends to develop the parcel in order to construct nine (9) single family homes with driveway access to a new culde-sac street located between Chalous Lane and Gramont Lane.

B. DOCUMENTS REVIEWED

- 1. Land Development Plans for 200 South Ithan Avenue, prepared by Momenee, Inc., prepared for GPX Realty Partners, consisting of 9 sheets, dated October 2, 2020 and last revised November 17, 2020.
- 2. Submission letter prepared by Momenee, Inc., prepared for Radnor Township, dated November 17, 2020.

C. SUBDIVISION AND LAND DEVELOPMENT COMMENTS

 §255-27.C, §255-37, & §255-51 – Installation of sidewalk along the site frontage for Ithan Avenue is required unless, in the opinion of the Board of Commissioners, it is unnecessary for public safety and convenience. There are some worn paths in the area of Ithan Avenue indicating pedestrian usage. The applicant has requested a

waiver from §255-27.C, §255-51. The applicant is also offering a fee in lieu of some of the sidewalk requested along Ithan Avenue.

- 2. §255-27.F.(2) Provide horizontal alignment data for the proposed street to ensure compliance. The minimum center-line radii for horizontal curves is to be 150 feet. The applicant indicates a 290 foot radius is proposed but it unclear where this is indicated on the plans.
- 3. §255-27.G Where the grade of any street at the approach to an intersection exceeds 7%, a leveling area of 4% grade or less shall be provided for a minimum distance of 100 feet for local streets. The Applicant is requesting a waiver from this requirement and providing a grade of 5% for a length of 70 feet.
- 4. §255-27.H(1) The street shall be laid out to intersect as nearly as possible at right angles. Determine if the new street can be aligned to intersect South Ithan Avenue closer to a 90-degree angle. The applicant's plans are unclear as they indicate a 70° and 80° angle to the intersection. To provide better visibility for drivers exiting the culde-sac and easier turning movements, a 90-degree angle is recommended for this new intersection. If a 90-degree angle cannot be provided for the intersection, the applicant should provide justification.
- 5. §255-27.D(3) Grades across cul-de-sacs shall not exceed 3%. Label the proposed grades to ensure compliance with this requirement.
- 6. §255-27.H(3) In all districts, no structure, no fence, planting or other structure shall be maintained between a plane two feet above curb level and a plane seven feet above curb level so as to interfere with traffic visibility across the corner within that part of the required front, side or rear yard which is within the clear sight triangle. Provide 30-foot clear sight triangles on the landscaping plan per §255, Attachment 255a (page 1:1). The landscaping plan was not provided with this submission.
- 7. §255-28 Provide the available and required sight distance at the proposed intersection in accordance with this section. If the applicant is providing sight distance in accordance with other industry and engineering standards, justification is to be provided. The available sight distance noted on the plans does not meet the standards per this section.
- 8. §255-37.D Curb ramps shall be provided at the intersection in accordance with ADA standards. Provide 5-scale details including dimensions, spot elevations and grades in order to verify constructability. Provide a six-foot crossing at a 2% maximum grade for the pedestrian crossing between the ramps.

D. GENERAL COMMENTS

- 1. On Sheet 7, the call-out for the 24" wide stopbar is pointing to the wrong location. Provide a proposed 24-inch stop bar on the cul-de-sac approach.
- 2. Label the Ithan Avenue centerline on the driveway profile.
- 3. Show the proposed roadway stationing on the plan view to correspond with the profile on Sheet 7.
- 4. On Sheet 8, show the double yellow centerline on Ithan Avenue. Minimize any encroachment on the centerline.

5. The cul-de-sac approach may lead to vehicles shining headlights into the house across Ithan Avenue opposite of the approach. The applicant should evaluate if the existing screening is adequate or if additional screening is needed.

If you have any questions regarding the above, please contact this office.