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July 17, 2017

Mr. Michael Mrozinski  
Director of Community Development  
Lower Providence Township  
100 Parklane Drive  
Eagleville, PA 19403

RE: **Traffic Review #4 –Preliminary/Final Plans**  
Providence Place (Ridge Pike (SR 4031) and Pechins Mill Road)  
Lower Providence Township, Montgomery County  
McMahon Project No. 816714.11

Dear Mike:

As requested, on behalf of Lower Providence Township, McMahon Associates, Inc. has completed our fourth review of the transportation engineering elements for a proposed 160-unit (180 residents) Life Care Facility to be located on the former Collegeville Inn property on the southwest corner of the intersection of Ridge Pike (SR 4031) and Pechins Mill Road in Lower Providence Township, Montgomery County.

In addition to receiving the items below for review, we attended an April 26, 2017 meeting with Township staff and the developer's team, as well as the Township Planning Commission on the same date.

The following documents were reviewed and/or referenced in preparation of this traffic review:

1. Preliminary/Final Site Plans for Providence Place – Ridge Pike (SR 4031) and Pechins Mill Road, prepared by Edward B. Walsh & Associates, Inc., last revised June 4, 2017.
2. Plan of Highway Improvements for Providence Place, prepared by Edward B. Walsh & Associates, Inc., dated April 18, 2017.
3. Response to Comments Letter – Providence Place, prepared by Edward B. Walsh & Associates, Inc, dated June 16, 2017.

**It should be noted that the comments in this letter pertain to the documents listed above, and the applicant must still address our transportation impact assessment comments from our April 14, 2017 letter. The EB Walsh response letter mentions that traffic impact assessment comments will be addressed by the applicant's traffic engineer. These have not been received.**

Additionally, no signal plans have been received to date with the proposed addition of pedestrian crossings, and modified timings, as applicable. The applicant and their engineers are reminded that the signal control of their access and that of Germantown Pike/Ridge Pike intersection is part of a signalized system, so any timing modifications must be addressed at all intersections in the system and with the approving entities involved. Analyses and plans must be submitted for PennDOT and Township approvals.

Based on our review of the documents received at this time and listed above, we offer the comments below for Township review and action by the applicant and the applicant's engineer:

### Waiver Requests

1. A waiver request letter should be provided for review containing all waiver requests. The applicant' response letter says a list of waivers has been provided, but our office has not received this letter. The applicant should include an estimate for the Township Engineer and our office to review for the design and construction dollars for any requirement in which a waiver is requested in part or in full. McMahan will recommend that the Township condition any waiver approval upon an agreement that the design and construction dollars for these improvements are held in escrow and/or used for the Lower Providence West Ridge Pike Traffic Improvement Fund. The estimate will determine the amount of funds to be held in escrow.
2. Sheet 2 of the plan set requests a waiver from **Section 123-31.F** of the **Subdivision and Land Development Ordinance** which requires Pechins Mill road to be widened to 26 feet. Based on the physical constraints, grading, etc., the applicant has widened the re-aligned portion to 26 feet. The existing portion remains at 22 feet. McMahan has no objection to this width, in the limited area provided given the amount of traffic on this road.
3. Sheet 2 of the plan set requests a waiver from **Section 123-32** of the **Subdivision and Land Development Ordinance** which requires vertical curbing and drainage along Pechins Mill Road. Based on the physical constraints, grading, etc. and the roadway widening waiver request, McMahan has no objection to this request.
4. Sheet 2 of the plan set requests a waiver from **Section 123-33** of the **Subdivision and Land Development Ordinance** which requires sidewalk along Pechins Mill Road. A partial waiver should be requested on the plans, considering sidewalk has been provided along Pechins Mill Road. However, the sidewalk terminates at the driveway and is not carried into the site to access the trail. The applicant shall consider adding this missing connection of sidewalk.

5. Sheet 2 of the plan set requests a waiver from **Section 123-31.F** of the **Subdivision and Land Development Ordinance** to allow for the access drive along Ridge Pike to be greater than 24 feet to allow for turning movements from the driveway. Please provide turning templates at the access drive for review, as McMahon is likely not opposed to the waiver but want to be sure the driveway operates well at its designed width.
6. Sheet 2 of the plan set requests a waiver from **Section 123-35.B** of the **Subdivision and Land Development Ordinance** to not require a centerline radius of 150' and a 100 foot tangent section along the realignment Pechins Mill Road. Based on the physical constraints, grading, etc. and the roadway widening waiver request, McMahon has no objection to this request, with the plan revisions provided.

### **Preliminary/Final Plans**

7. Informational: We continue to note that this project is in the vicinity of a "Decade of Investment" PennDOT planned project that will eventually connect Germantown Pike to Ridge Pike (SR 4031), with a new connector road eventually leading to/from a second Perkiomen Creek bridge crossing, as discussed for years. The Township is in the process of conducting a TCDI planning study also for this area looking at multimodal connectivity, land use, and transportation infrastructure needs. The improvements associated with this area's roadway connectivity and second bridge crossing project must be taken into consideration with the design of this site. There has been discussion on potential modifications to the intersection of Germantown Pike and River Road (SR 4009) as part of a future PennDOT project that may affect the current intersection configuration by potential closure of Germantown Pike between Ridge Pike (SR 4031) and River Road (SR 4009), and thus affecting the Germantown Pike to River Road (SR 4009) configuration. The site access and circulation are to be designed to have near-term and long-term design considerations. The applicant's traffic engineer has evaluated the main access signalized intersection with Ridge Pike under three scenarios, and the applicant has been informed by both PennDOT Traffic Unit and the Township Traffic Engineer that the signalized site access at the Ridge Pike/Germantown Pike intersection may need to be modified and the signal removed sometime in the future when a connector road and 2<sup>nd</sup> bridge crossing are built provided that alternative safe access can be provided to/from this site via Pechins Mill Road and a new connector road intersection.
8. It is noted that as previously requested, an area has been shown for future highway purposes for a connector road that would lead to/from a new Perkiomen Bridge Crossing. The required documents to reserve this area for Township and agency use in the future must be coordinated with the Township Engineer.
9. As previously stated, the applicant's engineer has revised the proposed flood control retaining wall structure to avoid connection to the historic bridge abutment within the PennDOT Right-

of-Way. The design has been modified to end the wall immediately outside of and adjacent to the PennDOT Right-of-Way and within the Ultimate Right-of-Way Line. As stated in the meeting minutes, the PennDOT Bridge Unit must review the HOP submission of this package to ensure that the proposed floodwall does not have an adverse impact to the existing bridge structure, encroach within the right-of-way, or produce other adverse impacts as designed. The design of the floodwall must ultimately be reviewed/approved by various agencies (USACE, DEP, FEMA PennDOT, etc.). McMahon has not reviewed these structures or floodwater details.

10. As previously stated, the electronic plans, in addition to hard copies of the plans, submitted for review must be signed and sealed by a Professional Engineer registered to practice in the Commonwealth of Pennsylvania.
11. Per **Section 123-18.A(3)(e)** of the **Subdivision and Land Development Ordinance**, a centerline profile for each proposed driveway within the tract to be developed is required. Centerline profiles have been provided for the two proposed driveways and for the service road located behind the building. The following comments are offered:

Main Entrance Profile

- A proposed elevation appears to be missing at Station 0+50.

Drive Profile

- It appears that the existing ditch condition along Pechins Mill Road in this area will be eliminated and flow will be channelized at the edge of roadway. The applicant's engineer should evaluate the spread flow conditions in the vicinity of the proposed driveway.

12. As previously stated, additional information must be provided for the proposed roadway reconstruction on Pechins Mill Road between the proposed access and Ridge Pike. The provided grading information (contours) does not match the provided typical section (i.e. the overlay) for the length of Pechins Mill Road between the proposed access and the limits of reconstruction.
13. As previously requested, additional turning templates utilizing the appropriate emergency service vehicle as discussed with the Fire Marshall should be added to the plans. Turning plans have been provided with only a WB-50 truck. Furthermore, no templates have been provided depicting right-turn from Ridge Pike into the site at the signalized driveway.
14. For constructability purposes, provide the following information on the plans:
  - a) Spot elevations along the proposed driveway/roadway radii.
  - b) Station/offset call-outs for all geometry breaks in the proposed curblines.

15. As previously requested, utilize PennDOT Publication 236 sign designations and sizes in the call-outs for proposed signs. While one "One-Way" sign has been provided at the driveway along Pechins Mill Road, two (2) "One-Way" signs should be provided at each side of the proposed driveway. Furthermore, signage that notes only service vehicles are to utilize the driveway behind the building.
16. The existing inlets that fall within the driveway access to Ridge Pike should be clearly indicated as to be relocated to the curblines as type 'C' inlets.
17. All curb ramps and pedestrian routes (i.e., sidewalks, crosswalks, etc.) are to be constructed in accordance with the current Federal and PennDOT ADA standards. Construction of a portion of a trail along the Perkiomen Creek coming under Ridge Pike from the north and traversing the west side of the property should be examined in the design. McMahon has not reviewed any ramps internal to the site.
18. McMahon recommends that the sidewalk placement along Pechins Mill Road be revised and redesigned on the plans. The plans indicate a less-desirable, mid-block pedestrian crossing approximately 150' south of the intersection of Pechins Mill Road and Ridge Pike. Furthermore, the sidewalk on the east side of Pechins Mill Road does not connect to any existing sidewalk and does not provide any connectivity for pedestrians utilizing the sidewalk. The sidewalk along Pechins Mill Road should be provided on the west side of Pechins Mill Road (site side) and connect to the proposed sidewalk provided on the south side of Ridge Pike.
19. Detailed ADA construction plans should be provided for the proposed curb ramps located at the Pechins Mill Road driveway.
20. Please continue to copy the Township on all Highway Occupancy Permit (HOP) submissions and correspondence between the applicant and PennDOT. The Township must also be invited to any and all meetings between these parties.

### **Highway Improvement Plans**

21. Pechins Mill Road is spelled incorrectly on the Highway Occupancy Permit Plan set. Please revise.
22. A left turn arrow and "ONLY" marking and appropriate signage should be provided on the proposed westbound left turn lane on Ridge Pike (SR 4031) onto Pechins Mill Road.
23. Show and label the available and required proposed sight distances for the realigned Pechins Mill Road onto Ridge Pike. Include the sight distance looking ahead for a left turning vehicle.

24. As noted earlier in this review prior to the review comments, a signal plan for the intersection of Ridge Pike (S.R. 4031) and Germantown Pike/Site Access must be provided for review and approval due to the pedestrian accommodations to be added, as well as timing revisions needed for the site and the pedestrian phases. Since this intersection is on a signal system and interconnected with adjacent signals into Collegeville, the system plan and any signal also requiring changes to maintain the progression and coordination along these roads must be provided along with the according analyses. Coordination with PennDOT, and possibly Collegeville Borough, in addition to Lower Providence Township may be necessary.
  
25. All curb ramps and pedestrian routes (i.e., sidewalks, crosswalks, etc.) are to be constructed in accordance with the current Federal and PennDOT ADA standards. McMahon has not reviewed any ramps within the PennDOT legal right-of-way or internal to the site.

Based on our review, the applicant should address the aforementioned comments, and provide revised plans to the Township and our office for further review and approval recommendations. A response letter addressing our comments must accompany the resubmission.

We trust that this review letter responds to your request and satisfactorily addresses the traffic issues that are related to the proposed addition apparent to us at this time. If you or the Township have any questions, or require clarification, please contact me or Stephanie L. Butler, P.E.

Sincerely,



Casey A. Moore, P.E.

Vice President & Regional Manager – Mid-Atlantic

MEE/BMJ/CAM/lsw/smd

cc: Don Delamater, Township Manager  
John Rice, Esquire, Township Solicitor  
Timothy Woodrow, P.E., Township Engineer  
Frank Tavani, P.E., FTA  
Adam Brower, P.E., EB Walsh  
Fran Hanney, PennDOT District 6-0 (Drew Sirianni, P.E., PTOE – reviewer)