

October 17, 2014

Mr. Francis J. Hanney
District Traffic Service Manager
Engineering District 6-0
7000 Geerdes Boulevard
King of Prussia PA, 19406

Re: **Response to PennDOT's TIS Comments**
Ardrossan Farm
Radnor Township, Delaware County, PA
TPD# ESII.A.00001
PennDOT Log No.: D14-028XP

Dear Fran:

Traffic Planning & Design, Inc. (TPD) has completed its responses to Transportation Impact Study (TIS) comments provided by PennDOT (dated August 12, 2014). For the discussion below, the PennDOT comments are shown in regular type, and the corresponding response is shown in **bold** type.

1. The PennDOT project number, D14-028XP, for this preliminary review must be reference when the formal HOP application is submitted.

Response: So noted.

2. Revise the site layout to:
 - a. Eliminate the westernmost Phase I access to S.R. 1021
 - b. Enhance the connectivity between Phases I and II development
 - c. Provide access from Phases III and IV development to S.R. 1015. Phase III development can be connected to Phase V development access onto SR 1015.

Response: As discussed at the 9/16/14 meeting with PennDOT and the Township, internal connectivity is limited due to phasing of the development and preservation of the site. In addition, it was agreed by all parties that the Phase I access to SR 1021 will remain. The meeting minutes are attached.

3. Future submissions should include electronic files of the Synchro models and SimTraffic output.

Response: So noted.

4. Verify the volumes are consistent between the figures, volume development tables and capacity analyses.

Response: The volumes figures have been revised accordingly. Please note the volumes were verified and there were no revisions necessary to the volume development tables and the capacity analyses.

5. Provide additional details regarding the collisions (2011-2013) at S.R. 1019 (Conestoga Road) and S.R. 1021 (Radnor Chester Road), including a collision diagram.

Response: A table and discussion has been provided in the revised TIS to include details about the crash types at Conestoga Road/Radnor Chester Road intersection.

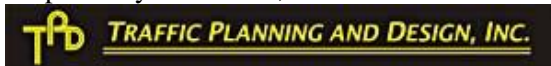
6. Per PennDOT Transportation Impact Study Guidelines the study should include photos for the proposed accesses.

Response: Photos of the proposed accesses have been provided in the TIS appendix.

7. The consideration of All-Way Stop Control should include the evaluation of sight distance, collision and volumes.

Response: As discussed at the 9/16/14 meeting, the Township may pursue a multi-way stop sign installation at the Newtown Road/Darby-Paoli Road intersection prior to the construction of any homes. In addition, the above comment has been addressed as shown in the revised TIS at the Darby-Paoli Road intersections with Godfrey Road and Brooke Road.

Respectfully Submitted,



A handwritten signature in blue ink, appearing to read 'Guido W. DiMartino', is written over a white background.

Guido W. DiMartino, P.E
Project Manager

Attachment: 8/12/14 PennDOT TIS review letter
9/16/14 PennDOT Meeting Minutes



August 12, 2014

DELAWARE COUNTY, RADNOR TOWNSHIP
S.R. 1015 (NEWTOWN ROAD) AND S.R. 1021 (RADNOR-CHESTER ROAD)
HIGHWAY OCCUPANCY PERMIT APPLICATION NO. pre1084
ARDROSSAN FARM
TRAFFIC LOG NO.: D14-028XP
PRELIMINARY REVIEW

Guy DiMartino, P.E.
Traffic Planning and Design, Inc.
2500 East High Street, Suite 650
Pottstown, PA 19464

Dear Mr. DiMartino:

The Department has reviewed the preliminary submission for compliance with applicable Department Regulations. This review has identified deficiencies that must be addressed in order for your application submission to be processed as efficiently as possible.

The Department understands that the provided analysis is preliminary in nature. As such, the Department reserves the right to make future additional comments based on the formal submission of a complete Transportation Impact Study.

Our comments on your preliminary submission are as follows:

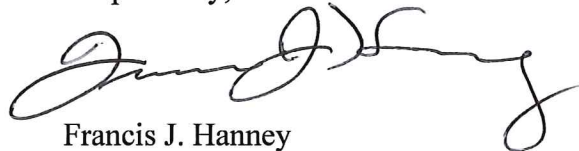
PRELIMINARY COMMENTS

1. The PennDOT project number, D14-028XP, for this preliminary review must be referenced when the formal HOP application is submitted.
2. Revise the site layout to:
 - a. Eliminate the westernmost Phase I access to S.R. 1021.
 - b. Enhance the connectivity between Phases I and II development.
 - c. Provide access from Phases III and IV development to S.R. 1015. Phase III development can be connected to the Phase V development access onto SR 1015.
3. Future submissions should include electronic files of the Synchro models and SimTraffic output.
4. Verify that volumes are consistent between the figures, volume development tables and capacity analyses.

5. Provide additional details regarding the collisions (2011-2013) at S.R. 1019 (Conestoga Road) and S.R. 1021 (Radnor-Chester Road), including a collision diagram.
6. Per PennDOT Transportation Impact Study guidelines the study should include photos for the proposed accesses.
7. The consideration of All-Way Stop Control should include the evaluation of sight distance, collision and volumes.

The Department has performed this preliminary review based only on the limited information provided. We reserve the right to make future, additional, detailed comments based on the formal submission and application for a Highway Occupancy Permit. If you have any questions pertaining to the technical aspects of this review, please contact Albert Federico, P.E., PTOE of McCormick Taylor, Inc. at 215.592.4200 or apfederico@mtmail.biz.

Respectfully,



Francis J. Hanney
District Traffic Services Manager
Engineering District 6-0

cc: M. Miele
L.R. Belmonte
Traffic Services File
Radnor Township
Delaware County Planning Commission

MEETING MINUTES

Project: **Ardrossan
Newtown Road (SR 1021) and Darby-Paoli Road (SR 1015)
PennDOT Log# D14-028XP
Radnor Township, Delaware County, PA**

TPD Project No.: ESII.A.00001

Meeting Date: Thursday, September 16, 2014

Location: Radnor Township Municipal Building

Attendees: Fran Hanney (FH) – PennDOT District 6-0 – Traffic
Susan LaPenta (SL) – PennDOT District 6-0 - Traffic
Al Federico (AF) – McCormick Taylor Assoc. (on behalf of PennDOT)
Amy Kaminski (AK) – Gilmore Assoc. (on behalf of Radnor Twp.)
Steve Norcini (SN) – Radnor Township
Steve Gabriel (SG) – Rettew Associates (on behalf of Radnor Twp.)
Edgar Scott (ES) – Applicant
John Snyder (JS) – Saul Ewing (on behalf of the Applicant)
Dave Fiorello (DF) – Momenee and Associates (on behalf of the Applicant)
Greg Richardson (GR) – Traffic Planning & Design, Inc. (TPD) (on behalf of the Applicant)

Minutes Prepared By: Greg Richardson

Copies To: All attendees (via e-mail)

This meeting was requested to discuss the proposed residential development along Newtown Road (SR 1021) and Darby-Paoli Road (SR 1015) located in Radnor Township, Delaware County, PA. The discussion with the attendees occurred as follows:

- John Snyder (JS) gave a brief overview of the proposed residential development. 60 new homes will be constructed in addition to the existing 10 homes that presently occupy the property.
- JS explained that the development is designed to provide eleven (11) driveways:
 - Seven (7) existing minimum uses driveways (5 on Darby-Paoli Road and 2 on Newtown Road).

- Four (4) low volume driveways on Newtown Road. Two (2) of these driveways are the existing driveways that presently serve the mansion and individual homes on the estate and are tied together with an internal loop road. The remaining two (2) driveways will be new access points.
 - The existing western driveway to the estate is proposed be re-configured to be ingress-only.
- JS – The loop road will be 18 feet wide. This maximum width is necessary to maintain the mature trees that exist along the loop road.
- Fran Hanney (FH) stated that the 18-foot width is acceptable internally but the full-access driveway that aligns with Abrahams Lane must provide a minimum width of 24 feet for a minimum of 50 feet from Newtown Road (with minimum 15-foot radii).
- FH – Inquired about the large empty lots shown on the phased site plan. JS explained that these lots are developable, but the chance of that happening is very unlikely. These lots have been indicated on the plans as shown as part of a conservation easement and for tax purposes. Moreover, each of these lots would have to go through an individual conditional use process with the Township, making it difficult to develop.
- The sight distance for each driveway was discussed. Dave Fiorello (DF) explained that in order to provide adequate sight distance for the Newtown Road driveways, portions of the estate’s stone wall will be removed/re-located.
- Al Federico (AF) and FH inquired as to potential new vehicular access to Darby-Paoli Road. Amy Kaminski (AK) and Steve Norcini (SN) stated that the Township does not desire to have any new access points on this section of Darby-Paoli Road due to the existing difficult vertical and horizontal curvature, steep grades and limited driver’s sight distance.
- AF – Will there be any emergency access to Darby-Paoli Road? GR explained no. AK and SN each agreed that the Township had expressed the same concerns during staff review but the internal circulation has since been vetted.
- FH/SL/AF – Internal connectivity is very important so as to reduce external trips on the public highways. There was consensus with the group, but due to the nature of the development in terms of phasing and preservation, the connectivity is limited.
- AF – Are the number of existing and proposed driveways acceptable to Department? FH stated the Department is okay with the proposed number and location, but a thorough review upon formal submission will be required.
- GR –Inquired about the number of applications due to the number of minimum use driveways and phasing of the development. FH stated that Department will determine how each driveway will be permitted (individually, as groups, by phase, etc.) and respond to the Applicant and Township.

- A discussion was undertaken regarding the intersection of Newtown Road and Darby-Paoli Road.
 - Presently, the intersection is STOP-controlled with some movements free flow, which has raised questions by the Township as to if there is an alternative to reduce driver confusion.
 - Ideas such as a Multi-Way Stop (with all movements stopped), signalization and a roundabout were ideas offered by the group.
 - SN stated that the Township did not wish for a signal or a roundabout to be installed.
 - AK recommended that the Township pursue the Multi-Way Stop option prior to construction of any homes. The Township would utilize the information contained in the Applicant's Traffic Impact Study and supplement where necessary.
- Steve Gabriel (SG) introduced the subject of pedestrian access and the Township's vision for a trail system for this portion of the Township. The Township has a trail to north on Newtown Road at the Atterbury development and would like to connect it to a planned trail along Darby-Paoli Road.
 - FH – Agreed that pedestrian access and trails are very important, especially for residential developments.
 - FH – A pedestrian study will be required by the Department, namely in the area of the driveway intersection on Newtown Road at Abrahams lane.
 - SN – The Township Board of commissioners has expressed the desire for a trail along Newtown Road, between the historic site wall and the roadway.
 - FH – Any trail within the Department's right-of-way must be ADA-compliant, must be located a minimum of 4 feet from the travel way (in uncurbed areas), and must be composed of a "firm, stable, and slip-resistant surface" surface.
 - FH – If the trail is in the legal right-of-way, the permit should be in the Township's name.
 - JS – The Applicant and the Township are looking at the feasibility of the trail. However, an early investigation has revealed that it may be not be feasible due to steep grades and existing wall separation distance from Newtown Road. The Applicant has agreed with the Township Commissioners that if the trail cannot be constructed, a contribution will be made that would cover the cost of the construction.

The meeting was adjourned.

The writer believes these minutes are an accurate representation of the discussion, decisions, and conclusions. If any attendee has a different understanding, please provide comments or clarifications within ten (10) days of receipt. If no comments are received, these minutes will be considered proper and representative of what transpired.

ARDROSSAN FARM

9/16/14

<u>NAME</u>	<u>ORGANIZATION</u>	<u>PHONE #</u>	<u>EMAIL</u>
Greg Richardson	TPD (Applicant)	610-326-3100	grichardson@trafficpd.com
Eddie Scott	Arrossan Farms	610-246-6666	ecscott@hotmail.com
John Snyder	Saw Ewing	610-251-5079	jsnyder@saw.com
DAVE FIORELLA	MONROE ASSOC	605-27-3030	DFIORELLA@MONROE.com
AMY KAMINSKI	GILMORE/RTTE	215-345-4330	Akaminski@gilmore-assoc.com
Steve Norcini	Radnor Township	610-688-5600	snorcini@radnor.org
FRAN HAMNEY	PENNDOT-TRAFFIC	610-205-6560	FHAMNEY@PA.GOV
Susan LaPenta	"	610-205-6595	slapenta@pa.gov
AL FEDERICO	McCormick Taylor	215-592-4200	alfedericoentmail.biz
Steve Gabriel	RETTEW	717-394-3721	sgabriel@rettew.com