

TRAFFIC PLANNING AND DESIGN, INC.

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November 20, 2006

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Mr. Frank T. Donaghue Chief Legal Counsel Pennsylvania Gaming Control Board P.O. Box 69060 Harrisburg, PA 17106

Re: Mount Airy #1, LLC

Paradise Township, Monroe County, PA

Response to McCormick Taylor

Detailed Traffic Impact Study Review Letter

TPD# CECO.B.00008

Dear Mr. Donaghue:

Traffic Planning & Design, Inc. (TPD) has reviewed the November 15, 2006 McCormick Taylor review letter regarding the Traffic Impact Study (TIS) (dated August 16, 2005, last revised September 28, 2006) for the Mount Airy #1, LLC development in Paradise Township, Monroe County, PA. TPD's responses to the comments are provided on a point-by-point basis, as described below. The McCormick Taylor Review Letter is attached for reference.

Project Summary

It should be noted that Woodland Road (T-700) is no longer state-maintained roadway, and therefore is no longer designated as SR 1013.

PennDOT and Municipal Coordination

Mount Airy #1, LLC has made three (3) preliminary submissions of material to PennDOT District 5-0, attended a Traffic Impact Study Scoping meeting, and made one (1) formal HOP submission. The details of these submissions are outlined below, and relevant submission letters, meeting minutes, PennDOT District 5-0 review letters, and Mount Airy #1, LLC response letters are attached for reference.

- May 26, 2005 Information for Introductory Meeting on June 3, 2005 preliminary submission package to Mr. Dennis R. Toomey, P.E., PennDOT District 5-0. (Attached)
- June 8, 2005 Minutes from June 3, 2005 meeting with PennDOT 5-0 to introduce project and discuss the Traffic Impact Study scope. Attendees from PennDOT were Amar Bhajandas, Gerald Fry, Dennis Toomey, Brian Boyer, and Donald Lerch. (Attached)
- August 23, 2005 Preliminary submission to Mr. Dennis R. Toomey, P.E at PennDOT of Traffic Impact Study (August 16, 2005) and Preliminary Roadway Improvement Plan for Woodland Road (Letter of Transmittal Attached).

Pottstown, PA Harrisburg, PA Lehigh Valley, PA Camden, NJ

- September 22, 2005 Review letter from Brian J. Boyer at PennDOT regarding the August 23, 2005 Preliminary Submission. (Attached)
- April 27, 2006 Resubmission to Mr. Brian J. Boyer at PennDOT of Traffic Impact Study (Revised April 26, 2006), Woodland Road Improvement Plans (4/7/06), Preliminary Roadway Improvement Plans (4/7/06) for Route 611 and Woodland Road, Route 611 and Route 314 (West), Woodland Road and Carlton Road (SR 1011), and Route 940 and Carlton Road (SR 1011), and responses to PennDOT 9/22/06 comment letter (April 26, 2006). (Letter and Responses Attached)
- June 13, 2006 Review letter from Brian J. Boyer at PennDOT regarding the April 27, 2006
 Preliminary Submission. (Attached)
- November 7, 2006 Formal HOP and Signal Design and revised Traffic Impact Study (9/28/08) submission (including responses to the 6/13/06 PennDOT Review Letter) to PennDOT District 5-0 (via Monroe County Permits office). (Letter and Responses Attached)

There were several factors related to Applicant and Paradise Township's desire to turnback Woodland Road from PennDOT to Paradise Township. As such, the design of the roadway was closely coordinated with Paradise Township and it's consultants to ensure that it meets Township and AASHTO standards. Based on Township's desire to reduce speeds along Woodland Road, one of the major objectives of designing the improved roadway was to reduce speeds along Woodland Road, and design the roadway properly for a reduced speed limit (where applicable) that would coincide with the horizontal and vertical constraints that exist for the roadway. As such, the section of Woodland Road from Route 611 to just east of the proposed site was designed for a 35 m.p.h. speed limit (40 m.p.h. design speed) with curb (which is acceptable for a 35 m.p.h. posted speed limit). This design was found to be acceptable by the Township Traffic Engineer. If the roadway was to remain a PennDOT road, PennDOT was requiring the installation of an 8-foot shoulder along Woodland Road in lieu of the proposed curb, and the roadway would have been required to continue to be posted at 40 m.p.h. which was both were not desirable to either the Township or the Applicant. It should be noted that the roadway will be constructed to PennDOT Specifications as outlined in PennDOT Publication 408.

The Applicant has entered into a development agreement with Paradise Township, which states that the Applicant is responsible for the general maintenance of the roadway (snow plowing and salting), which the Applicant feels it can do better than any other entity, in an effort to ensure the operation of the roadway and the proposed resort.

As noted, the project has received final land development approval from the Township, which includes the final roadway improvement plans for Woodland Road. The Woodland Road roadway improvement project is currently out to bid, with construction slated to begin later this year. Also, through the land development process, the Applicant agreed to provide a pedestrian bridge crossing Woodland Road from the parking field on the north side of the roadway to the resort.

Site Visit

No response necessary.

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Technical Review of the Traffic Study

Approach

1. The scope of the Traffic Impact Study was based on PennDOT and Municipal input/review, as well as PennDOT review of two Traffic Impact Studies (August 16, 2005, April 26, 2006) prepared for the project, as detailed in the response under the "PennDOT and Municipal Coordination" section of this letter, and in the attachments to this response. Based on that review and input, the scope of the study was expanded to the north to the "Five Points" intersection in Mount Pocono Borough, and to the south to the I-80/PA Route 611 Interchange (Scot Run, Interchange 298). Furthermore, based on the traffic impact study scoping meeting with PennDOT, it was determined that the study area would not have to extend past an interstate highway interchange (see attached meeting minutes). The intersections of PA Route 611 and PA Route 715, and the intersection of PA Route 715 and the I-80 ramps (Interchange 299) are located past/south of the I-80/PA Route 611 Interchange (Scot Run, Interchange 298), and therefore were not included in the study area.

As detailed in our October 12, 2006 response, given the relatively low traffic volumes projected for Upper Swiftwater Road and Bowman Road intersection, it is our opinion that adequate capacity will exist for the additional traffic generated by the proposed Mount Airy Lodge. However, if it is desired by the PA Gaming Board to expand the study area to include the intersection of Bowman Road and Upper Swiftwater Road, Mount Airy #1, LLC will conduct manual traffic counts, and will submit a supplement for review.

2. As discussed on our October 12, 2006 response, the proposed development will not be accessed by public transportation. The proposed development will have its own shuttle service to move patrons on-site, and will accommodate tour buses for day trip patrons.

Trip Generation

- 3. No response necessary.
- 4. The studied site (Dover Downs) has a similar number of slot machines (2,500 vs. 3,000), hotel rooms (232 vs. 200 in the initial phases), and support amenities when compared to the proposed Mount Airy Lodge. The support amenities at the Dover Downs include a gourmet restaurant; a buffet; three (3) other eating places including a café, deli, and snack bar; coffee shop; four (4) bars; pool and exercise club; and a six corporate meeting rooms. The proposed Mount Airy Lodge facility amenities will include two (2) gourmet restaurants; a buffet; coffee shop; three (3) bars/nightclubs, spa and fitness center; convenience store, sundries shop, and a jewelry store; and a golf course. The major difference in amenities between the two facilities is the golf course. As detailed in our October 12, 2006 response, the golf course was open when the counts were conducted, and continues to be open during construction. As such, it is TPD's opinion that the traffic resulting exclusively from the golf course as an independent use is accounted for in the traffic study based on the existing traffic counts. It was assumed that the majority of the additional patronage that the golf course could/would experience would be the result of guests of the hotel and casino.
- 5. As detailed above and in our October 12, 2006 response, the trip generation analysis was conducted based on <u>actual field traffic counts</u> at a similar facility. Furthermore, there exists another gaming facility (Mohegan Sun at Pocono Downs) in Plains Township, which is

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located within one (1) hour of the proposed Mount Airy Lodge, which will have an effect on the trip generation for the proposed facility.

It should be noted that in PennDOT's September 22, 2005 review letter, PennDOT noted that "Due to the limited trip generation data available for casino resort developments in Pennsylvania, there is a concern relative to the uncertainty of the estimates. As a result, the Department will require an after study be performed once the development becomes fully operational and regular traffic patterns have been established." The applicant has already complied with this comment and will perform the necessary after study. It should further be noted that Paradise Township is also requiring that traffic studies be performed by Mount Airy #1, LLC every three (3) years after the opening of the facility.

It is our opinion that the trip generation assumptions are reasonable for the reasons outlined in this letter, our October 12, 2006 response, and the Traffic Impact Study.

Analytical Approach

- 6. The eighteen (18) background "other" developments assumed in the traffic impact study resulted from the scoping process with Paradise Township and PennDOT. Of the eighteen (18) background developments, the traffic generated by thirteen (13) were specifically included, and traffic generated by the other five (5) were considered to be part of the 2.2% per year background traffic growth rate. The total of the 13 developments specifically included added 635 Friday P.M. peak hour trips and 696 Saturday P.M. peak hour trips to the intersection of Route 611 and Woodland Road, respectively. This in our opinion is not considered marginal. The total background traffic assumed between the 2005 and the Opening Year of 2007 (without development of the Mount Airy Lodge) was 706 additional Friday P.M. peak hour trips and 759 additional Saturday P.M. peak hour trips to the intersection of Route 611 and Woodland Road, respectively. The represents a 44% increase in traffic volumes at the intersection during the Friday P.M. peak hour, and a 54% increase in traffic volumes at the intersection during the Saturday P.M. peak hour from Year 2005 to the Opening Year of 2007 without the development of the Mount Airy Lodge.
- 7. The Route 611/Route 940/Route 196 traffic analysis was submitted to Mount Pocono Borough. A meeting is scheduled with the Borough for December 11, 2006 to discuss the study. The purpose of the traffic study was to identify the incremental impact on the intersection resulting from the development to serve as a basis for discussion with the Borough to identify appropriate participation by Mount Airy #1, LLC in the overall planned improvements to the intersection. Mount Airy #1, LLC is required by PennDOT to work with Mount Pocono Borough on appropriate mitigation at this intersection, and submit the Borough's acceptance/concurrence of the proposed mitigation (See PennDOT 5-0 July 13, 2006 review letter, comment #1).
- 8. With respect to the peak hour factor adjustments, we note the following:

-For the PA Route 314 (Eastern Leg)/Route 611 intersection, the peak hour factor on the westbound approach to Route 611 was increased from 0.78 (existing) to 0.83 (base and projected conditions) during the Friday P.M. peak hour to account for background development. No other peak hour factors were modified at this intersection. It should be

noted that traffic signal timing modifications are proposed for this intersection in conjunction with the proposed signalization of the intersection of Route 611 and Route 314 (Western leg) to coordinate the traffic signals.

-For PA Route 611/Grange Road/Green Springs Driveway, the eastbound approach, the westbound through movement, the northbound left turn movement, and the southbound right turn movement peak hour factors were set to the default value of 0.90 since these movements will facilitate turning movements to the Green Springs Driveway, which is proposed to serve a 436-unit residential development. The driveway, and subsequently the movements do not exist today. No other peak hour factors were modified at this intersection.

-Eastern and Western Driveways at Woodland Road – These driveways do not exist today. As such, the peak hour factors for the <u>turning movements only</u> to/from the driveways were set to the default value of 0.90.

-There was one other peak hour factor that was modified. This was at the intersection of Woodland Road and Bowman Road during the Friday P.M. peak, which under existing conditions had only one (1) vehicle on the northbound Bowman Road approach. Since only one vehicle was recorded, the calculated peak hour factor is 0.25. With the additional traffic generated by the background development and the Mount Airy Lodge, and the fact that only 1 vehicle was counted at this intersection during the Friday P.M. peak period, this peak hour factor was adjusted upward for Projected Conditions to the default value of 0.90 with the increase in traffic volumes. The peak hour modification should also have been made under Base Conditions to account for background development, which it was not. The next version of the report will include a 0.90 peak hour factor for Base Conditions. It should be noted that 2017 Projected Conditions during the Friday P.M. peak hour, the intersection is anticipated to operate at LOS C or better.

There were no other peak hour factor adjustments made in this traffic impact study.

9. Future versions of the Traffic Impact Study will analyze the turning movements to/from this parking lot. The September 28, 2006 Traffic Impact Study has been submitted to PennDOT District 5-0 with the formal HOP/Signal submission, and upon receipt of comments from PennDOT, the study will be revised to address those future comments and to conduct this analysis.

Evaluation of Recommended Improvements

10. The applicant is committed to signalize this intersection of Route 611 and Route 314 (Western leg) with or without the left turn restriction, if permitted by PennDOT and Pocono Township. The updated Traffic Impact Study (September 28, 2006) contained an analysis of both alternatives, as directed by PennDOT District 5-0 (Comment 6) in their June 13, 2006 review letter. Tables 12 and 13 of the Traffic Impact Study (Page 23) contain the level of service information, and Appendix G contains the traffic volumes and capacity analyses for the signalized scenarios. Once the type of traffic signal to be installed is determined, the study will be updated. We will await PennDOT District 5-0 review on the two alternatives.

The realignment of Route 314 (Western Leg) to intersect Route 611 at Woodland Road would have to cross the Swiftwater Creek, and would require significant property acquisition,

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as the path of the roadway would cross through private property. It should be noted that Woodland Road is located approximately 0.5 miles north of Route 314. For these reasons, the applicant is not proposing to realign Route 314.

- 11. See Response #7.
- 12. There exists physical constraints (tight curb lines north and south of the ramp, off-street parking from nearby commercial properties, location of nearby left turn lanes, a structure) on Route 611 at the I-80/Route 611 interchange (located approximately 4 miles from the proposed site) to accept the dual left turn lanes from the off-ramp in a different manner. The Applicant will work with PennDOT District 5-0 on possible alternatives to this proposal. It should be noted that it is our understanding that an earmark has been secured for improvements to Interstate 80 in Monroe County, and that improvements to the interchange are likely forthcoming in the future.
- 13. No response necessary.
- 14. No response necessary.
- 15. It is our opinion that the proposed improvements adequately mitigate the project impacts. With respect to the trip generation, see Response #5. To summarize, the following improvements are proposed:

Woodland Road

Widen Woodland Road from Route 611 to Carlton Road (approximately 2 miles) as follows:

- Widen Woodland Road from a two-lane (20-22 foot wide roadway) to a three-lane, 40-foot wide curbed roadway from Route 611 to 500 feet east of the proposed eastern Mount Airy Lodge site drive. The third lane will be striped as a center left turn lane resulting in left turn lanes on Woodland Road at its intersections with the Pocono Mountain School District Driveway, Bowman Road, Meadowside Road, and two Mount Airy Lodge site driveways.
- ➤ Widen Woodland Road to provide 250-foot long right turn deceleration lanes with 180-foot long tapers on Woodland Road at its intersections with the Pocono Mountain School District Driveway, Bowman Road, Meadowside Road, and two Mount Airy Lodge site driveways.
- ➤ Widen Woodland Road from 500 feet east of the proposed eastern Mount Airy Lodge site drive to Carlton Road to provide 11-foot wide travel lanes and 5-foot shoulders. This section of Woodland Road will remain two lanes wide.
- ➤ Horizontal and vertical geometric and alignment improvements along sections of Woodland Road including realignment in some sections, and superelevation.
- It is recommended that the speed limit for Woodland Road be reduced from 40 mph to 35 mph from Route 611 to 500 feet east of the proposed eastern Mount Airy Lodge site drive as a result of the horizontal geometry and curbing proposed for the roadway. It is further recommended that advisory 25 mph speed limit signs be placed for the three horizontal curves between Bowman Road and Meadowside Road.
- ➤ Based on the Township's recommendation, realign the eastbound Woodland Road approach to Carlton Road within the existing Right-of-Way to allow Woodland Road to intersect Carlton Road at a 90° angle.

Route 611 and Woodland Road/ Strickland's Road/Big Daddy's Driveway

- Construct a separate 250-foot long left-turn lane, with a 100-foot long taper on the westbound Woodland Road approach to Route 611.
- Construct a 250-foot long right-turn lane, with a 180-foot long taper on the westbound Woodland Road approach to Route 611.
- Re-designate the existing westbound Woodland Road approach to Route 611 in order to provide a shared left/through travel lane.
- Construct a separate 350-foot long right-turn lane, with a 210-foot long taper on the northbound Route 611 approach to Woodland Road.
- ➤ Close the Strickland's Road approach to the Route 611/Woodland Road/Big Daddy's intersection, thus eliminating the 5-leg intersection.
- Install new traffic signal equipment (controller, mast arms, signal heads) at the intersection of Route 611 and Woodland Road/Big Daddy's Driveway in order to accommodate the proposed traffic signal phasing.

Route 940 and Carlton Road

Construct separate 100-foot long left-turn lanes, with 100-foot long tapers on the Route 940 approaches to Carlton Road/Caesar's Resort Drive.

Route 611 and Route 314 (Eastern Leg)

➤ Coordinate the existing traffic signal with the proposed traffic signal at the intersection of Route 611 and Route 314 (Western Leg).

Route 611 and Route 314 (Western Leg)

Install a traffic signal at the intersection of Route 611 and Route 314 (Western Leg). Coordinate the traffic signal with the existing traffic signal at the intersection of Route 611 and Route 314 (Eastern Leg). Based upon the analyses performed, it is TPD's opinion that the signalized scenario in which the eastbound left-turn movement from Route 314 to Route 611 would be eliminated, thus creating a "Half Signal" under which the northbound Route 611 through traffic would never stop is the preferred scenario from a level of service standpoint.

Route 611 and I-80 (Interchange #298)

Due to the fact that an earmark has been secured for improvements to Interstate-80 in Monroe County, and improvements to the interchange are likely forthcoming, it is recommended in the interim to widen/reconfigure/re-stripe the WB I-80 off-ramp at its intersection with Route 611 to provide dual left-turns and a shared right-turn. Providing the dual left-turns from the I-80 off-ramp will require northbound Route 611 to be restriped in order to provide two through travel lanes. The two through travel lanes will be provided utilizing the two-way center left-turn lane which currently exists on Route 611.

Highway Occupancy Permit Issues

- -With respect to PennDOT District 5-0 comments, please see the attached review letters from PennDOT District 5-0 (September 22, 2005, June 13, 2006) that dealt with the Traffic Impact Study, Woodland Road improvement plans, and conceptual improvement plans for Route 611 and Woodland Road, Route 611 and Route 314 (West), Woodland Road and Carlton Road (SR 1011), and Route 940 and Carlton Road (SR 1011).
- Formal HOP and Signal Design plans and the revised Traffic Impact Study (9/28/08) (including responses to the 6/13/06 PennDOT Review Letter) were submitted to PennDOT District 5-0 (via Monroe County Permits office) on November 7, 2006. Included in this submission were HOP and Signal design plans for the intersection of Route 611 and

Woodland Road and Route 940 and Carlton Road (SR 1011), and HOP plans for the intersection of Woodland Road and Carlton Road (SR1011). In addition, as requested by Paradise Township and the Pocono Mountain School District, a pedestrian flasher plan was prepared and submitted to PennDOT District 5-0 for the intersection of Woodland Road and the Pocono Mountain School District driveway.

- -Traffic Signal Plans will be prepared and submitted to PennDOT for Route 611 and Route 314 (West) once the type of signal to be installed is determined. Consideration will be given to the limited sight distance as part of the design of the traffic signal. In conjunction with the Route 611/Route 314 (West) traffic signal, revised traffic signal plans will be prepared and submitted for the intersection of Route 611/Route 314 (East) for modifications related to coordinating the two signals.
- -The relocation of the above-ground utilities on Woodland Road has been approved by PP&L. The Woodland Road roadway improvement project is currently out to bid, with construction slated to begin later this year.
- -Strickland's Road is planned to be closed/vacated by Paradise Township. This process is currently underway, but has not been finalized. Strickland's Pocono Resort is being demolished. Strickland's Road also intersects Route 611 north of Woodland Road. Strickland's Road at this location will remain open.

Conclusions

- -As indicated in Response #1, if desired by the PA Gaming Board to expand the study area to include the intersection of Bowman Road and Upper Swiftwater Road, Mount Airy #1, LLC will conduct manual traffic counts, and will submit a supplement for review.
- -The intersection of Route 611 and PA Route 715, and the intersection of PA Route 715 and the I-80 ramps (Interchange 299) are located past an interstate highway interchange (over 4 miles from the proposed Mount Airy Lodge), and therefore the Applicant is not proposing to expand the study to those intersections.
- -With respect to the trip generation, is our opinion that the trip generation assumptions are reasonable for the reasons outlined in this letter (Responses 4 and 5), our October 12, 2006 response, and the Traffic Impact Study. If there are specific trip generation rates that McCormick Taylor would like the Applicant to consider using in the traffic study, please provide to us for review for consideration. Again, the proposed trip generation was based on actual field counts at a similar facility.
- -The Applicant will work with PennDOT District 5-0 on possible alternatives to the proposed improvements to the Route 611/I-80 Interchange. Again there exist physical constraints (See Response #12) on Route 611 at the I-80/Route 611 interchange to accept dual left turn lanes from the I-80 off-ramp.
- -With respect to the intersection of Route 611 and Route 314 (Western Leg), the Applicant is committed to signalize this intersection with or without the left turn restriction, if permitted by PennDOT and Pocono Township. Once the type of traffic signal to be installed is determined based on PennDOT's review of the latest Traffic Impact Study (September 28, 2006), the study will be updated, and Traffic Signal Plans will be prepared and submitted.

- -With respect to advancing the design of the proposed intersection improvements, formal HOP and Signal Design plans and a revised Traffic Impact Study (9/28/08) were prepared and submitted (including responses to the 6/13/06 PennDOT Review Letter) to PennDOT District 5-0 (via Monroe County Permits office) on November 7, 2006. The HOP and signal plans included the intersections of Route 611/Woodland Road, Woodland Road/Carlton Road, and Route 940/Carltion Road, and a pedestrian flasher on Woodland Road at the Pocono Mountain School District driveway.
- -The Woodland Road improvement plans have been approved by Paradise Township, with construction slated to begin later this year.
- -For the Woodland Road improvements, the local utility agencies have been consulted, and the relocations of the utility poles on Woodland Road are approved. For the off-site intersection improvements, PA One Call was contacted through the design process, and any utility relocations will be closely coordinated with the local utility companies.
- Future versions of the Traffic Impact Study will analyze the turning movements to/from the parking lot on the opposite side of Woodland Road. With respect to pedestrian accommodation, Applicant proposed to provide a pedestrian bridge crossing Woodland Road from the parking field on the north side of the roadway to the resort, as well as provide shuttle service between the lots.

Thank you for your continuing review, and please call if there is any further information you require with regards to these responses.

Sincerely,

TRAFFIC PLANNING AND DESIGN, INC.

John M. Pyne, P.E.

John hr. Pre

Principal

Attachments: McCormick Taylor Review Letter (November 15, 2006)

PennDOT Correspondence (2005-Present)

cc: Albert J. Magnotta, P.E., P.L.S, CECO Associates John J. Pocius, P.E., P.L.S., CECO Associates