

November 8, 2006

Mr. Glenn Rowe, P.E.  
Pennsylvania Department of Transportation  
Bureau of Highway Safety and Traffic Engineering  
Commonwealth Keystone Building  
400 North Street, 6<sup>th</sup> Floor  
Harrisburg, PA 17105

RE: Pittsburgh First Master Plan Traffic and Parking Study  
(a.k.a., Isle of Capri Pittsburgh)  
Detailed Traffic Impact Study Review

Dear Mr. Rowe:

McCormick Taylor, Inc. has completed its detailed review of the traffic study submitted for the proposed Pittsburgh First Master Plan, located in the City of Pittsburgh. The material reviewed consisted of the following:

- Pittsburgh First Master Plan Traffic and Parking Study, prepared by Trans Associates, Inc., dated December 13, 2005.
- Supplements A & B to the Pittsburgh First Master Plan Traffic and Parking Study, prepared by Trans Associates, Inc., dated March 2006.

This detailed review builds upon our initial review, dated September 7, 2006. Consistent with our approved scope of work McCormick Taylor conducted a project site visit; evaluated the technical elements of the traffic analysis; assessed the feasibility of constructing the various transportation improvements proposed in the study; and contacted the PennDOT District office and municipal representatives.

### **Project Summary**

The project site is located on the eastern edge of the Pittsburgh Central Business District, just east of Crosstown Expressway (Interstate 579) between Bedford Avenue and Fifth Avenue. Crawford Street marks the eastern boundary of the site. Access to the site is to be provided via multiple new connections to the existing street system. The casino that is proposed as a part of the Master Plan will be developed as a Class II gaming facility, inside the Pittsburgh urban boundary within PennDOT District 11-0.

The study considered the multi-use redevelopment to be known as Pittsburgh First Master Plan, which would include the following:

- 5,000 slot machines
- Restaurants and bar facilities

- 400 room hotel
- 18,200 seat arena
- 1,707 residential units
- 71,200 square feet of retail space
- 200,000 square feet of office space
- 9,801 new parking spaces in 8 parking garages

The following existing uses would be removed from the site:

- 17,000 seat arena,
- Hospital building and associated parking garage,
- Several surface parking lots, and
- Various other on-site buildings.

Following are our comments and findings for the detailed review of the above-referenced submission:

### **PennDOT and Municipal Coordination**

McCormick Taylor contacted Cheryl Moon-Sirianni, PennDOT District 11-0 Assistant District Engineer for Design. Ms. Moon-Sirianni indicated that while PennDOT was very interested in the gaming projects no formal submissions had been made to the District. Further conversations with Jeff Karr ADE Maintenance and Bill Lester Permits Manager indicated that initial conversations had taken place with the applicant but only with regards to traffic impact requirements.

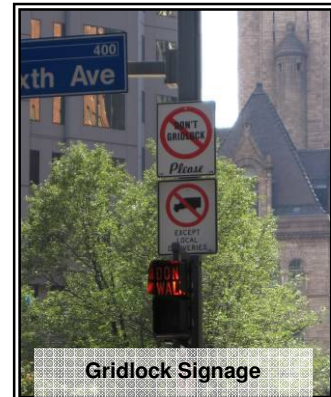
McCormick Taylor contacted Sidney Kaikai, Transportation Planner at Pittsburgh's Department of City Planning. Mr. Kaikai indicated that the Department had completed an in-house review, available for download on the Department's website, of the proposals for all three gaming sites in Pittsburgh. Mr. Kaikai also noted the following specific items regarding the Isle of Capri plan:

- The traffic evaluation was the most thorough of the three Pittsburgh studies.
- The site has good regional access but local street traffic issues remain troublesome.
- The review conducted by the department did not consider the impacts of the "Phase 2" residential, office, and retail development.
- The loading area access on Fifth Avenue is problematic.
- The impact of traffic on local neighborhoods and Duquesne University are concerns.
- The preliminary alignment of the Hi-Speed Maglev track would impact the "Phase 2" development.

## Site Visit

McCormick Taylor visited the location of the proposed gaming facility and the study area addressed within the applicant's impact study. The following observations were made as part of the site visit:

- A significant portion of the traffic signal equipment within the vicinity of Mellon Arena and Duquesne University appears to be older hardware, including outdated pedestrian signal heads.
- Sidewalks and pedestrian accommodations are generally present and in fair condition through the majority of the study area.
- There are numerous locations where limited building setbacks preclude extensive road widening.
- Several streets within the North and South sections of the Central Business District appear to have been recently streetscaped, including the upgrading of the traffic signal equipment.
- Pedestrian activity was observed throughout the study area, including within the vicinity of Bigelow Boulevard and Ross Street.
- "Don't Gridlock" signs were posted at numerous intersections throughout the CBD north area.
- The Ross Street/2nd Avenue and Ross Street/Court Place intersections are located beneath bridge structures.
- Insufficient information was available to adequately assess the potential impacts of proposed improvements to existing utilities; however transportation improvements within urban locations such as the proposed site typically require extensive utility coordination and relocation.



## Technical Review of the Traffic Study

The applicant provided limited materials in response to the initial September 7, 2006 review. As such, the previous comments are generally considered outstanding. It should be noted that the applicant's most current submission (Supplements A & B to the Pittsburgh First Master Plan Traffic and Parking Study, dated March 2006) was prepared for submission to the Pittsburgh Department of City Planning. The following comments have not been addressed:

### Approach

1. It would be appropriate for the engineer preparing this analysis to have stamped and signed the report.

2. The study did not include evaluations of the new intersections internal to the site (e.g., Wylie Avenue and Mario Lemieux Place). An evaluation of these intersections is considered appropriate.
3. Summary reports for the 2008 Saturday Casino Peak conditions capacity analysis was omitted from the technical appendix for numerous intersections, including but not limited to:
  - Centre Avenue/Casino Exit
  - Fifth Avenue/Washington Place/Chatham Street
  - Forbes Avenue/Armstrong Tunnels
  - Grant Street/Boulevard of the Allies
  - Grant Street/Fort Pitt Boulevard EB/I-376 Off-Ramp
  - Second Street/Court Street/Ross Street

#### Data Collection

4. Numerous intersection counts were completed over the Thanksgiving Holiday weekend. Generally data is not collected during holidays due to the atypical traffic patterns.
5. The study does not indicate if seasonal or other adjustments were applied.

#### Trip Generation

6. Due to the lack of available data in ITE Trip Generation regarding gaming facilities, the trip generation estimates for the gaming facility were based upon patronage data as well as assumptions regarding mode split and vehicle occupancy provided by the Isle of Capri for a “similar” urban casino facility located in Kansas City, Missouri.
7. The study does not clearly indicate if additional traffic was generated for the new Arena or if future Arena traffic is simulated by existing Arena traffic captured during the existing counts.
8. When comparing trip generation estimates for the gaming component of the three Pittsburgh gaming sites, the trip generation for Pittsburgh First is consistent with projections for Majestic Star Casino and higher than Station Square.

#### Analytical Approach

9. The 2008 Combined traffic volumes do not account for the effect of restricting the eastbound I-579 Off-Ramp left-turns at the intersection of Centre Avenue/Washington Place/I-579 Off-Ramp.
10. This study does not include an evaluation of future conditions 10 years after the project build out, which is typically required by PennDOT.
11. The report identifies extensive queuing during the existing weekday evening peak hour period but does not provide an evaluation of vehicle queuing and the adequacy of existing and proposed turning bays at the study area intersections.

12. The capacity analysis did not address the effect of existing on-street parking or bus stops. Accounting for these items would be expected to reduce the capacity of study intersections resulting in less desirable operations.



13. There are numerous inconsistencies between the traffic volumes presented in the exhibits and the volumes used for 2008 Build Conditions analysis, including but not limited to:

- The southbound right-turn volumes at Washington Place/Bedford Avenue during the morning peak.
- The northbound right-turn volumes at Grant Street/Sixth Avenue during the evening peak.
- The volumes for several movements at Sixth Avenue/Ross Street/Bigelow Boulevard during the evening peak.
- The eastbound left-turn volumes at Washington Place/Bedford Avenue during the evening peak.
- The eastbound through volume at Washington Place/Centre Avenue/I-579 Off-Ramp during the evening peak.
- The eastbound through volume at Forbes Avenue/Armstrong Tunnel during the evening peak.

14. The analysis of 2008 Build Conditions analyses did not consistently assume the use of actuated traffic signals. This assumption should be verified with the City of Pittsburgh and PennDOT.

15. The analysis of 2008 Build Conditions included permissive "Right turn on Red" movements at locations (i.e. Centre Avenue Casino Access) where pedestrian activity may preclude these movements.

16. The analysis of Sixth Avenue/Ross Street/Bigelow Boulevard excluded the channelized southbound right turn movements. Including these movements is considered appropriate due to several factors, including the high volume of observed pedestrian activity and the lack of a dedicated receiving lane.

17. The location and operational interaction of the casino accesses to Centre Avenue may result in increased congestion, particularly if vehicles stopped at the egress queue past the entrance and possibly Logan Street. An analysis of vehicle queuing at the casino entrance and exit should be provided.

18. The proposed mitigations for several locations are based on the "optimization" of traffic signal timings; however it does not appear as if the pre-development signal timings were optimized, which would be considered appropriate when assessing project impacts.

### **Evaluation of the Recommended Improvements**

McCormick Taylor evaluated the recommended roadway improvements identified in the Harrah's Station Square Casino Transportation Analysis. The mitigations measures proposed were reviewed for completeness and adequacy in serving the anticipated additional traffic volumes.

19. The report recommends the installation of traffic signals at several intersections; however, signal warrant analyses are not provided.
20. The traffic impact for the majority of the study area intersections is either inconsequential or successfully mitigated by the proposed transportation improvement program. However the following intersections are projected to operate with deficient levels of service during at least two or more of the peak periods evaluated:
  - Liberty Avenue/Eleventh Street
  - Washington Place/Bedford Avenue
  - Washington Place/Centre Avenue/I-579 Off-Ramp
  - Grant Street/Fort Pitt Boulevard EB/I-376 Off-Ramp
  - Second Avenue/Court Place/Ross Street
  - Grant Street/Sixth Avenue
  - Centre Avenue/Mario Lemieux Place
21. Except as noted above, it appears that the proposed improvements adequately mitigate the project impacts based on the results presented in the analysis. It should be noted that the omissions in the capacity analysis (as noted above) may be influencing the reported results and the analyzed operation of the intersection. Additionally the inclusion of the evaluation of the 2018 design year may identify additional deficiencies requiring mitigation.

### **Highway Occupancy Permit Issues**

McCormick Taylor evaluated issues that may impede the issuance of a PennDOT Highway Occupancy Permit (HOP). This investigation included preliminary assessments of apparent issues associated with right-of-way, existing structures, utility conflicts, and the constructability of the roadway improvements suggested in the study. It should be noted that PennDOT District 11-0, without have been provided any materials submitted by the applicant, was unable to provide comments regarding potential permitting issues.

- The project does not access a state highway; therefore an HOP is not required for the site driveways. Improvements proposed to mitigate project impacts do include modifications to state facilities, which would require an HOP. Additionally PennDOT approval is typically required for the installation and/or modification of traffic signals and/or regional guide signs.

- The convergence of numerous regional routes and significant destinations within the vicinity of the Pittsburgh First site may present additional challenges to providing adequate destination signing for the proposed gaming facility.
- This study does not include an evaluation of future conditions 10 years after the project build-out date, which is typically required by PennDOT for a highway occupancy permit (HOP) submission.
- Insufficient information was available to adequately assess the potential impacts of proposed improvements to existing utilities. However, transportation improvements within urban locations such as the proposed site typically require extensive utility coordination and relocation.



## **Conclusions**

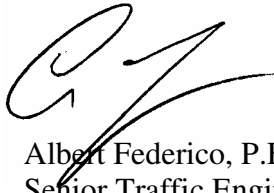
Based on our review there are still issues that have not been addressed by the information submitted by the applicant. Further consideration of the project impacts would benefit from the applicant:

- Working with the City and PennDOT District to better integrate the proposed accesses to the gaming facility with the overall grid system serving the remainder of the development.
- Ensuring that the proposed improvements and accesses adequately accommodate pedestrian traffic.
- Developing a coordinated traffic signal timing plan for Center Avenue that includes provisions to minimize queuing at site accesses.
- Developing a regional plan for wayfinding signage compatible with the existing regional routes and nearby destinations.
- Coordinating with utility providers to assess potential relocation impacts associated with roadway improvements.
- Coordinating with transit service providers to ensure the provision of integrated service to the proposed facility consistent with the anticipated hours of operation.

I trust that this review will assist PennDOT and the Pennsylvania Gaming Control Board in their evaluation of this application. I am available if you have any questions regarding this review.

Very truly yours,

McCORMICK TAYLOR, INC.



Albert Federico, P.E., PTOE  
Senior Traffic Engineer

cc: Paul Resch, PA Gaming Control Board  
Paul Archibald, McCormick Taylor