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May 24, 2004

Mr. Kumar Neppalli
 Town of Chapel Hill
 Traffic Engineer
 306 North Columbia Street
 Chapel Hill, NC 27516

Dear Mr. Neppalli,

This memorandum is being written to respond to a May 14, 2004 Letter from Mr. Michael Ortiz from the law firm of Faison & Gillespie to Mr. Cal Horton, Town Manager of Chapel Hill. Specifically, the information in this document responds to the assertions of "critical flaws" in the Village Plaza Theaters traffic impact study submitted by HNTB to the Town in April 2004. Answers/clarifications will be provided to each point listed in the letter from Mr. Ortiz.

1. *"Neither RS&H or HNTB ever actually counted the traffic entering or leaving Driveways C and D. Given the focus that Driveway D has received, I find this omission incredible."*

HNTB has contacted Post, Buckley, Schuh & Jernigan (PBS&J) and obtained their Saturday evening traffic counts for Driveways C and D. HNTB will use this data and compare it to HNTB upstream and downstream counts along Elliott Road to derive suitable ratios of Friday and Saturday evening traffic flows. HNTB will then apply those ratios to Saturday evening turning movement counts at Driveways C and D to estimate Friday evening counts. Initially, the project was scoped to include and update the RS&H traffic data to estimate a 2004 scenario with a five seat theater still in operation and redistribute traffic beyond Driveways C and D. That process has been discarded due to the fact that the RS&H study did not provide actual traffic volume count data for these driveways and the 2004 count data was provided by PBS&J.

2. *"By not actually surveying and counting the traffic leaving Driveways C and D, HNTB has made the wrong assumption as to traffic movements leaving Driveway D. HNTB assumes that the majority of traffic leaving Driveway D will make a right hand turn. The actual traffic counts show the exact opposite to be true. This flaw is critical in that a left-hand traffic*

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movement, by its very nature, is more difficult and creates further delays which in turn lowers the level of service."

By using PBS&J counts and assuming that, on a typical weekend, traffic movements would be similar on a Friday and Saturday evening, HNTB believes that the method described above to estimate Friday evening traffic is valid. Saturday evening traffic analysis will use the actual PBS&J counts. Thus, appropriate turning movement distributions will be analyzed. It is important to always note that intermittent driveway traffic (as is currently found on Driveways C and D) may experience a high degree of variation when comparing one day from week to week and month to month.

- 3. "Approximately 80 percent of the traffic generated by the theater is erroneously omitted from HNTB's calculation of the level of service. In determining the level of service, HNTB only looked at the increase in traffic generated by the redeveloped theaters. The base calculation did not include the old theater traffic counts. Thus, adding the so-called "increase" to the traffic counts that did not initially include the theater traffic count seriously understated the traffic counts and level of service. Thus, in determining the level of service for key entry points into Village Plaza, HNTB has essentially ignored about 80% of traffic that would be generated by the theaters."*

Upon further review, HNTB's original analysis on net theater trips was incorrect. The correct analysis, given existing conditions and traffic count information, would be to generate trips from a 10 screen theater using appropriate ITE trip generation methods. This has been reanalyzed.

- 4. "Finally, the HNTB report analyzes the peak traffic generated by the theater; however, this is only half of the equation, and only focuses on half of the problem. HNTB failed to factor in the peak traffic on the adjacent roads. By failing to address the peak traffic times of the adjacent street (i.e., Elliott Road), HNTB's overall traffic analysis is flawed yet again. In particular, the peak traffic on Elliott Road on Friday is 4-6 p.m., and when combined with the theater traffic at this time (albeit not the theater's peak traffic time), ends up making the 4-6 p.m. time frame the overall peak traffic period when the full picture is analyzed. Yet, this time period was not even addressed in the HNTB report."*

The appropriate analysis period was agreed upon between HNTB and the Town of Chapel Hill as being Friday and Saturday evenings. Data for these time periods was available in the ITE Trip Generation Manual, Volume 7 and showed generation rates over three times higher during the peak hour of the theater generator (evening) than the adjacent street peak hour (4-6 p.m. on Friday or midday on Saturday). The evening peaks would cause the most

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site-related impacts at each driveway for exiting vehicles in terms of delay, level of service degradation, and queuing.

Application of actual 2004 traffic counts at Driveways C and D on Saturday evening and the resulting synthesis of comparable Friday evening volumes have been completed by HNTB in a reanalysis of study area conditions. In addition, full 10 screen theater build-out trip generation estimates have been applied to the 2007 No-Build scenario. Resulting LOS and delay computations show that no driveway will require additional mitigation due to site traffic impacts.

Inspection of the analysis summary provided by PBS&J shows that only two driveways exhibit deficient LOS F for their peak hour analyses. Driveway A is listed as degrading from LOS E to F for the 2007 Build condition and Driveway F fails for both the Build and No-Build 2007 conditions in the Friday afternoon and Saturday noon peak hours. Driveway F likely fails for the 2004 existing condition, but that information is not listed. In no case, does the PBS&J analysis show any driveway to have deficient operations in the Saturday evening peak condition. In addition, in no circumstance does Driveway D exhibit LOS F in the tables, so no off-site improvements would be necessary according to these results.

Please don't hesitate to contact me if you require any additional information. Thank you!

Yours truly,



Craig Scheffler, P.E.
HNTB North Carolina, PC