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DEPARTMENT OF TRANSPORTATION
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February 6, 2020

Ms. Kerry Ann Pehnke
Langan Engineering
989 Lenox Drive, Suite 124
Lawrenceville, NJ 08648

RE: A-35-C-16871-2018
S-35-C-16873-2018
Deal Road Ocean Commons
Ocean Township
Monmouth County

Dear Ms. Pehnke:

Reference is made to your letter dated November 7, 2019 concerning the above captioned access and street intersection applications. The Department has completed its review of the material submitted with the letter and we have the following comments. For concept approval to be obtained, the following comments must be addressed to the satisfaction of the Department. . Please note that this access application is for a 5405 sf. fast food restaurant with drive thru, 24,897 sf. of shopping center, 5585 sf. super convenience store with gas, 4754 sf. of general office, 114 room hotel, and 70 residential units located on Route 35 northbound at approximately milepost 25.6 in Ocean Township, Monmouth County.

The Department has the following comments concerning the submitted traffic impact study July 13, 2017 and revised thru October 15, 2019.

1. A review of the "Table 1-Future Trip Generation Estimates" revealed that some of the trip generation estimates for the proposed uses do not agree with the rates that are approved by the Department. For instance, for a 5405 sf. fast food restaurant with drive thru, Table 1 indicates that the trip generation would be 217 AM peak hour, 177 PM peak hour, and 297 in the weekend peak hour. However, utilizing the Department approved rates, the trip generation for a 5405 sf. fast food restaurant with drive thru is 275 AM peak hour, 277 peak hour, and 298 in the weekend peak hour. As a result, the trip generation utilized in the traffic impact study must agree with the rates approved by the Department. Therefore, please review all of the proposed uses and revise the trip generation accordingly (if necessary).

2. The methodology utilized to determine the internal capture in the traffic impact study is acceptable to the Department.

3. The pass by rates utilized in the traffic impact study are acceptable to the Department.

4. The methodology utilized to determine the trip distribution in the traffic impact study is acceptable to the Department.

5. The study area utilized in the traffic impact study within Department jurisdiction consisted of the following locations.
    a. Route 35 & Deal Road (This shall include all jughandles associated with this signalized intersection)
    b. Route 35 & Driveway #2 (Route 35 entrance of "urban jughandle")
    c. Deal Road & Driveway #3 (Deal Road exit of "urban jughandle")

    The Department is in agreement that the above are all study locations for this development. Please include an analyses of all jughandles which are part of the Route 35 & Deal Road signalized intersection.

6. An analyses of the proposed Route 35 egress only driveway shall be included in the traffic impact study.

7. According to "Figure 4-Total Site Generated Trips," the new trips along Route 35 will extend north and south of the proposed development in such a manner that there may be additional study locations as per Appendix F-1.4(d) of the New Jersey State Highway Access Management Code. Therefore, additional analyses/information is required to make a determination on additional study locations along the Route 35 corridor. Please provide the required information.

8. The "no-build" traffic volumes utilized in the traffic impact study were developed from one day manual counts. However, the manual counts must be supplemented by one week of machine counts and the manual counts must be factored as per Appendix F-1.7(a) of the New Jersey State Highway Access Management Code. This applies to **all** study locations identified for this project.

9. The submitted traffic impact study included the no-build scenario and the build with improvement scenario. For the revised traffic impact study, please include the "build without improvement" scenario.

10. In order to mitigate any traffic operational deficiencies, a Route 35 northbound reverse jughandle is being proposed to accommodate Route 35 northbound left turns and U-turns at the Route 35/Deal Road signalized intersection. When the application was originally submitted, a Route 35 northbound reverse jughandle was being proposed which was separate from any development traffic (Type C reverse jughandle as identified by the NJDOT Design Manual- Roadway). However, during this submission, a reverse jughandle which mixes highway traffic with development traffic identified as an "Urban Jughandle" is being proposed. This is a concept that is being endorsed by the Township of Ocean. Please be advised that the **preferred** concept of the Department would be the "Type C reverse jughandle" which separates highway traffic from development traffic. The "Type C reverse jughandle" travel time would certainly decrease travel times for motorists utilizing the jughandle (not destined for the proposed development) versus the "Urban Jughandle." However, an advantage of the "Urban Jughandle design is that it would allow the connection to Deal Road to be placed further from the Route 35/Deal Road signalized intersection which would allow traffic from the jughandle to flow more safely and efficiently onto Deal Road. Therefore, the queues on the Deal Road westbound approach need to be examined before all factors can be weighed on the "Type C jughandle" versus the "Urban Jughandle."

11. Please address the above comments and submit a revised traffic impact study which includes the following.
    a. The revised Synchro analyses (HCM 20100 shall include the AM, PM and Saturday peak hours under the "no-build" and "build" conditions. This shall include the site driveways and the Route 9/Route 147 signalized intersection. Summary tables shall be included in the report which reflect the delay for each movement under each condition.

b. SimTraffic reports shall be included in the revised traffic impact study with queue lengths, delay and network seeding. The SimTraffic reports are to be created using four 15 minute peak intervals, three without peak hour adjustment and one with peak hour adjustment (2nd or 3rd interval). Please submit a CD which includes the Synchro files.

For concept approval to be obtained, please submit three copies of the revised traffic impact study for further review. The Department will make a decision on the jughandle design once the traffic study is revised to our satisfaction.

The Department has the following **preliminary comments** on the submitted plans. These comments are being provided as a courtesy since the scheme presented on the plans ("Urban Jughandle") has yet to be approved by the Department.

The following preliminary comments are from the Office of Major Access Permits.

12. The following comments pertain to the **design** of the "Urban Jughandle."
    a. For the "Urban Jughandle" to operate safely and efficiently, the number of access points located on the "Urban Jughandle" shall be reduced. Specifically, the right-in only for the Super Convenience Store shall be eliminated since it may cause driver hesitation for motorists entering the "Urban Jughandle" from Route 35. In addition, the four way intersection closest to Deal Road shall be eliminated since that may cause driver hesitation for motorists entering and exiting the "Urban Jughandle" from Deal Road. Please redesign accordingly.
    b. The "Urban Jughandle" will have to be designed such that there is a free flow movement for non-development traffic. Therefore, left turn lanes will have to be provided along the "Urban Jughandle" for the movements into the development section where the hotel is located. In addition, the "Urban Jughandle" right turn movement where ("Road A" intersects "Road E") towards Deal Road must be a free flow movement. Please redesign accordingly.
    c. Since the "Urban Jughandle" will include public movements (drivers going from Route 35 to Deal Road), the Department will have to be responsible for "control" of the "Urban Jughandle." However, the Department will not accept maintenance of the "Urban Jughandle." This shall be the responsibility of the Township of Ocean or the Developer.

The following **preliminary** comments are from the Office of Traffic Engineering

This office has the following general comments.

13. Please provide improved signing (R-23, R3-24, R3-25, R3-26 series) at Sta. 679+00 to inform drivers Ramp L is only for right turning traffic and that left / U turning traffic needs to continue through the intersection. These sign changes shall be shown on the signing and striping plans as well.

14. The existing R3-23 sign, located 980' south of the intersection, may need to be revised due to the turning traffic needing to use two different ramps.

The following comments pertain to the submitted Electrical Plans.

15. Please provide a separate removal plan sheet or show removal items on the proposed electrical plans. Proposed geometric changes must be shown on the electrical plan sheet. Ensure the most current as-built plans are being used.

16. Proposed TSS-S located at STA. 683+76, R-60.3' must be revised to TSS-SC to accommodate the proposed luminaire.

17. Current as-built shows existing luminaires in the same locations where new ones are being proposed. The existing luminaires must be shown as to be removed (see comment #15).

18. Maximum tilt angle for mongoose is 18°. Please ensure the changes are reflected in both the plan sheet and the lighting analysis. Please use 1.8A for current since the power source is 120V, resubmit voltage drop calculations. Provide CD with a Visual file for lighting analysis.

19. In the To Be Constructed table, please increase the 10/C quantity by 5%.

20. Please ensure the call outs follow the proper format shown in NJDOT 2016 CADD Sample Plans.

21. Existing cables: K-10/C, L-10/C, M-5/C, N-2/C, and O-5/C should also be called out as removed in their respective conduit runs.

22. Note #2 on Sheet E-2 is not referred anywhere on the plan sheet and should be removed.

23. Additional minor comments are shown on the attached plan. Please revise accordingly.

The following preliminary comments are from the Office of Geometric Solutions.

24. On the typical sections for Route 35 northbound, please show the milling /paving of the right lane to provide the 13 foot wide auxiliary lane with new striping. Please show striping on all typical sections.

25. Signing and striping plan sheet #36 should show striping along the (Full) frontage of the property on 35 NB. Similar to that shown on construction plan sheet # 27.

26. 9/20/19 CRS (copy attached): Header shows mile point 25.6, kindly correct to show 26.69 as shown on plans.

27. The Route 35 northbound auxiliary lane taper length could not be verified as shown on the plans. Please show taper and dimensions on the signing and striping plan. Please be advised that the minimum taper is 300 feet.

The following preliminary comments are from the Office of Hydrology and Hydraulics.

28. Please be advised that the plans submitted for review need to be signed and sealed.

29. For proposed Basin 1 and Basin 2 along Route 35, the 100-year water surface elevation is higher than the proposed emergency spillway, which is toward Route 35. This will result in extra water discharging from the site to Route 35 under 100-year storm event. Please re-evaluate the extra discharge to Route 35 under proposed condition and confirm the compliance of water quantity criteria for this point of analysis under 100 year storm event.

30. It appears that the Route 35 in front of the site is being widened under the updated design layout, please provide the following information and calculation:
    a. Due to this proposal, the existing B inlet along the roadway is being exposed on the travel lane, please provide the appropriate drainage design to accommodate the widening.
    b. Please provide gutter spread analysis and confirm the proposed spread meet the criteria on NJDOT roadway design manual
    c. If any future drainage structures proposed along Route 35, please provide pipe capacity calculation for both proposed new pipes and the existing downstream pipe and confirm all the pipes have enough capacity to convey the peak flow under proposed condition.

31. The soil report provided indicated that the seasonal high water table elevation was determined from boring TP-101 to TP-109. However, those locations are all far from the proposed basin along Route 35. Please be advised that the boring or test pits need to be performed within the proposed basin area. Additionally, it appears that there are some more test pits shown on Sheet 8 close to the basin. Please provide appropriate soil information to demonstrate separation and infiltration rate used in the calculation.

32. The routing analysis provided within the report indicated Basin 1 is chamber storage. However, the plan shows Basin 1 as above ground bio-retention. Please clarify and revise as necessary. And please provide mounding analysis for Basin 1 if a bioretention basin is proposed.

33. Please provide drain time calculation and mounding analysis for the updated Basin 8A.

34. If any clarifications are required or if further questions should arise regarding these questions and comments, please contact Yan Duan at yan.duan@mbakerintl.com.

The following preliminary comments are from the Permits, Electrical & Claims Unit

35. Regarding Comment Response # 5 (vi) of Operation unit: *Note regarding the reconstruction comment is not observed added on the **plan sheets 5 or 6**, neither is it shown highlighted on the plans with appropriate hatching/legend.*

36. D*epth of the Asphalt of the **existing shoulder** along Route 35 property frontage should **also** be evaluated:* and if the depth of the asphalt of the existing shoulder is found to be less than 8" (inches), then this existing shoulder area should be included within the limits of full depth reconstruction;. Please show, label and highlight this area with **appropriate notes / hatching** on the plans. Please revise the hatching/legend to reflect the above.

37. Regarding Comment Response # 9 (i) of Operation unit: Proposed widening within the NJDOT right of way should be as per NJDOT standard specification.
    a. Clearly show the proposed pavement **widening on Deal road and Route 35 with appropriate hatching** and highlight full depth reconstruction of the widening area appropriately as per NJDOT standard specification.

b. All the proposed **Full Depth Reconstruction** pavement area within NJDOT Right of Way / Jurisdiction should be according to the latest NJDOT standard specifications. (i.e. [2" HMA surface course 12.5M64, 3" HMA intermediate course 19M64 & 5" HMA Base course 25M64, 6" DGA base course, 6" subbase]). Revise accordingly. (*Pavement Reconstruction -Text labeled/ details shown on Construction Plan sheet 27 of 40 & any other relevant plan sheets should be revised accordingly*).

38. Provide overhead utility clearance plan for the proposed signal relocation / improvement showing distance from overhead wires and signal/lightning equipment. Minimum required clearance must be provided between overhead wires and signal/lightning structures as per NJ Utility Accommodation code.

Preliminary comments from the Traffic Control Unit are attached in red. Please address and revise the plans accordingly.

Please submit three copies of the revised traffic impact study as per the above comments. If desire, please send 8 sets of the revised plans with the next submission. Also, please include a comment resolution letter addressing all of the above comments.

Please note that you have **90 calendar days** from the date of this correspondence to respond to the above items in their entirety. A partial response, which does not directly address the comments, will not be accepted. **If the response is not received by the office of Major Access Permits within that time, the application will be considered withdrawn without notification, N.J.A.C.16: 47-9.6 (d).**

If you have any questions, please don't hesitate to call me at (609) 963-1458 or your case manager Rajendra Desai at (609) 963-1199.

Sincerely,

Kenneth Spiegle
Project Engineer
Office of Major Access Permits