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Re: Belmont Park Redevelopment Civic and Land Use Improvement Project
Draft Environmental Impact Statement (DEIS)
Traffic Review Comments

Dear Messrs. Bambrick and Murphy:

As requested, NV5 has reviewed the Draft Environmental Impact Statement (DEIS) for the Belmont Park Redevelopment Civic and Land Use Improvement Project, prepared by AKRF, Inc. and VHB, dated December, 2018 as well as the supplemental electronic files provided by Empire State Development Group on January 9, 2019.

Transportation

NV5's review of the transportation section of the DEIS focused on trip generation, trip distribution, capacity analysis, mitigation, and parking. Our comments on each of the sections of the analysis within the DEIS are provided below:

Trip Generation

The DEIS identifies five potential peak periods for analysis: Weekday morning (8 AM-9 AM), Weekday pre-event (7 PM-8 PM), Saturday Midday (1 PM-2 PM), Saturday pre-event (6 PM-7 PM) and Saturday post event (9 PM-10PM). The DEIS, however, did not study the weekday evening commuter peak, i.e. 5 PM-6 PM. Consistent with any EIS study of a large retail development, an analysis of the typical evening commuter peak hour is necessary as that is when background traffic is the highest.

The largest proposed generator on the site is the proposed 18,000 seat Arena (up to 19,000 seats for non-sporting events). The DEIS assumes that approximately 25% of the patrons will arrive between 6 PM and 7 PM, 65% between 7 PM and 8 PM, and 10% between 8 PM and 9 PM, for a hockey game with an 8 PM start. (Appendix F, Parking Table 1). An analysis of the weekday evening commuter peak should address the 25% arriving prior to 7 PM. Furthermore, Islander hockey games typically have a start time of 7:00 PM instead of the 8:00 PM utilized in the EIS. The DEIS has not selected the correct weekday peak periods and has not analyzed the worst case scenario. These discrepancies must be addressed.

Trip Distribution

Based on the information provided in the DEIS, the access points to the site and the number of vehicles using each access point are not readily apparent. Additional information should be requested that indicating how many vehicles enter and exit each of the access points to the project for each of the studies peak hours, including which parking lot they are anticipated to park in.

Based on the limited information provided in the DEIS, it appears that only 3% to 5% of the total site traffic are anticipated to utilize local roadways to access the site, even though the Cross Island Parkway (CIP) is projected to be significantly over capacity. The local analysis must be revised to consider that trips will divert off the CIP to local streets to access the site due to the unmitigated congestion on the CIP. A travel demand model and available origin-destination data (such as Streetlight Data or another 'big data' source) should be used to identify the diversion routes that will be utilized when the CIP is congested.

To emphasize how little traffic the DEIS assigns to the local roadway network, NV5 reviewed the trip estimates for taxi/rideshare trips. As per Table 11-5, during the evening peak hour, 276 total taxi/rideshare trips are projected (138 in and 138 out). According to Figure 32A, a total of 212 vehicles access the site from local streets (157 vehicles in and 55 vehicles out). Based on this information, more taxi/rideshare trips access the site than all local trips during the evening peak hour. This is unrealistic; especially since most taxi/rideshare trips will come from local destinations, such as last mile connections from the local train stations.

Capacity Analysis

The DEIS does not include copies of the traffic counts conducted, including the dates and times of the counts nor the capacity analysis printouts for the studied locations and time periods. Without this information, it is not possible to review the actual analysis to determine if it was done appropriately or compare the counts collected for the DEIS to those conducted by NV5 and other sources. NV5 subsequently received copies of the traffic count data and associated analysis files, review of this information is provided in the traffic count and analysis review section below.

As discussed in the trip generation section above, the DEIS fails to look at the worst case time periods for total traffic on the roadway network. Even for the time periods that were studied, the analysis in the DEIS focuses on the Cross Island Parkway (CIP) and identifies sections of the CIP that are above capacity. Pages 11-77 and 11-80 of the DEIS indicate that 2,834 vehicles are unserved during the evening peak (~67% of total new trips) and 2,595 vehicles during the Saturday PM peak (~59% of the total new trips). The DEIS further states "...unserved vehicles...would be processed outside the peak hour and would result in additional congestion on the Cross Island Parkway." The DEIS does not propose improvements to the CIP to mitigate the additional congestion, nor does it consider that traffic associated with the site will divert to local roadways to avoid the congestion on the CIP. This is a major deficiency in the analysis provided.

Mitigation

The DEIS identifies locations in which mitigation is proposed throughout the study area. Almost all of this mitigation is minor timing changes to existing traffic signals. This mitigation is not credible as it is based on the assumption identified above that only 3% to 5% of the vehicles will access the site from the local street network. The mitigation plan will need to be revised once an appropriate amount of traffic is assigned to the local street network, including identifying where physical improvements are required.

The DEIS also discusses a Transportation Management Plan (TMP) as a way to mitigate potential impacts. TMPs typically include operational changes that are implemented when necessary, such as police traffic control of intersections, temporary one-way streets and temporary parking restrictions. A TMP is not, however, typically a method of providing physical roadway improvements. While this office agrees that a TMP is required for this project, the TMP discussion offers no specifics and fails to identify the adverse effects triggered by the proposed TMP strategies. For example, the TMP identifies advising “background traffic...to avoid using the Cross Island Parkway near Belmont Park” (page 17-4). This strategy promotes diverting traffic from the CIP to local streets in the area, but does not provide any substantial mitigation to address this diverted traffic.

The TMP discussion also identifies a traffic monitoring program which would be conducted after the project is constructed and occupied to identify potential impacts and address them accordingly. While continued monitoring of traffic conditions around the proposed project is beneficial, deferring identification and implementation of improvements until after the construction of the project is contrary to the purpose of the EIS process. Physical improvements can take years to progress through design, property acquisition, and construction, during which time the impacts go unmitigated. Impacts associated with the proposed development must be identified prior to the construction of the project and mitigation measures implemented prior to opening of the project.

The DEIS identified the use of the Belmont Train Station for major events, but did not consider full time use of the Belmont Train Station as a method to mitigate traffic impacts. This should be considered as it will not only reduce the number of vehicles accessing the site, but also minimize the need for ‘last mile’ connections from the adjacent train stations, such as Floral Park, which add to the traffic on local streets within the village. Full use of the Belmont Station may not even be sufficient, as travelers from eastern Long Island may use Floral Park or other stations instead of routing through Jamaica Station to use Belmont Station.

The DEIS identifies a number of locations which are above capacity and mitigation is considered infeasible. The DEIS fails to consider a mitigation alternative where the intensity of the development is reduced, such as reducing or eliminating components of the project.

Effect on Emergency Response Times

Page 11-72 of the DEIS discusses that “emergency vehicles...can maneuver around and through congested areas...because they are not bound by standard traffic controls.” Plainfield Avenue serves as a major response route for the Floral Park Fire Department. Since Plainfield Avenue is one lane in each direction with minimal shoulders, the amount of congestion on this route directly influences the ability of emergency response.

Parking

The project proposes a total of 8,252 spaces, including racetrack spaces to remain compared to 9,919 existing spaces (Table 11-38). This results in a net loss of 1,667 parking spaces. While this office recognizes that the majority of these spaces are only used on race days, the DEIS identifies that only 2,030 spaces are required for races, representing only 20% of the existing parking supply.

Table 11-38, note 2 states that 150 parking spaces will be designated ‘rideshare spaces’. Projected Taxi/rideshare trips indicate at most 135 taxis will be use. If only 135 taxis are anticipated (and not all 135 at the same time) 150 spaces should not be necessary. There is an apparent discrepancy between the numbers utilized in the parking calculations and the trip calculations.

Construction Impacts

The DEIS identifies minor construction impacts associated with the flow of construction workers to and from the site. Work is anticipated to start in 2019 and take approximately 28 months (page 15-1). The DEIS, however, does not discuss the LIRR 3rd Track construction, and the impacts it will have on Jericho Turnpike and the surrounding area, including the multiple detours required as part of the grade separation of the various existing crossings in the area.

Traffic Count & Capacity Analysis Review

The supplemental information provided to the Village on January 9th included electronic files of the traffic counts conducted for the DEIS and copies of the analysis files utilized to generate the levels of service and delays identified in the report. While this office maintains that the distribution of traffic utilized in the DEIS is flawed, as detailed above, a review of the provided technical analysis was performed with a focus on the locations within the Village of Floral Park.

It is also important to note that the DEIS utilized Synchro, version 9 which is based on the methodology in the 2010 Highway Capacity Manual. The current version of Synchro is version 10, which is based on the Highway Capacity Manual, 6th Edition.



NV5 has noted that at many study locations, a minimum peak hour factor of 0.80 or 0.81 was utilized in the analysis, whereas the traffic counts provided show significantly lower peak hour factors, such as 0.58. The peak hour factor is a measure of how spread out traffic is across the analyzed hour. Values closer to 1.0 represent traffic that is evenly spaced throughout the hour. Use of a minimum peak hour factor artificially reduces the delays reported by the analysis by assuming traffic is more spread out across the hour than it actually is. Thus, the use of a minimum peak hour factor results in an underestimation of the delays reported for the project.

Plainfield Avenue & Tulip Avenue

There is a discrepancy between the automatic traffic recorder (ATR) and intersection turning movement count data provided for this intersection. For example the ATR data shows an average of 500 vehicles approaching the intersection westbound during the weekday morning peak hour, whereas the analysis uses 375 vehicles. Similarly, the northbound ATR data shows an average of 426 vehicles during the morning peak hour, but only 254 are used in the analysis. This indicates that more vehicles approach the intersection than are being processed by the signal, and the DEIS does not account for this discrepancy.

Furthermore, the existing levels of service presented in the DEIS are not consistent with field observations conducted by NV5 in November 2018. NV5 staff observed approaches to the signal routinely queuing to where the intersection did not clear, i.e. vehicles were not able to pass through the intersection during the green phase of the signal due to congestion downstream. The additional delay caused by this situation is commonly referred to the d3 component of delay. The analysis provided in the DEIS does not appear to make any adjustments to the intersection volumes to account for 'd3' delay. This results in the calculated levels of service being better than actual conditions, and underestimates the impact of the proposed project on this intersection.

The November 5, 2018 Covert Avenue Crossing Construction Detour Plan prepared by Stantec Consulting Services, Inc also includes analysis of the intersection of Plainfield Avenue & Tulip Avenue, and further confirms this deficiency in the DEIS. The Stantec analysis shows an 'F' level of service for the southbound approach to the intersection during the existing condition evening peak hour whereas the DEIS indicates a 'D' level of service.

Plainfield Avenue & Magnolia Avenue

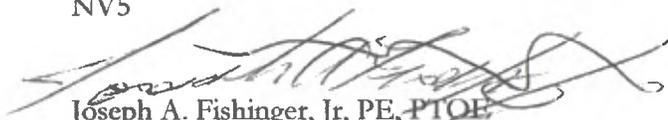
Similar to the intersection of Plainfield Avenue & Tulip Avenue identified above, the existing levels of service presented in the DEIS are not consistent with field observations conducted by NV5 in November 2018. The analysis provided in the DEIS does not appear to make any adjustments to the intersection volumes to account for 'd3' delay. This results in the calculated levels of service being better than actual conditions, and underestimates the impact of the proposed project on this intersection.

Plainfield Avenue & Carnation Avenue

NV5 noted significant discrepancies between the traffic counts and Synchro analysis at the intersection of Plainfield Avenue and Carnation Avenue. For instance, the westbound through movement during the existing condition AM peak, was counted at 287 vehicles, but 35 vehicles were entered into the analysis.

I trust that this information assists the Village as they review the DEIS for this project. As additional information becomes available, additional comments will be provided as appropriate. If you have any questions on this matter, please feel free to contact me at 973-946-5604 or via email at Joseph.Fishinger@NV5.com.

Sincerely,
NV5



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