December 14, 2023

RE: Disposition of Comments for Bexley Trinity Development TIS submittal dated 11/22/23

The Bexley Trinity Development TIS was submitted on November 22, 2023. The City of Bexley's consulting engineer (OHM) provided comments on November 29, 2023. The comments are provided below, followed by the Carpenter Marty Transportation (CM) response in red.

1) The trip generations look good given the information that we have available on the development. Regarding the internal capture calculations, the PM seems a little high (accounting for approximately 39% of the total trips as compared to 19% for the AM) for a development of this size.
   CM Response: The internal capture rates utilized are ITE standards based on the uses identified in the trip generation analysis.
2) The way the initial capacity analysis was conducted utilized the true peak hour volumes for each of the intersections, independently of the system peak. Typically I'd prefer to see the system peak to be taken which would provide more balanced volumes through the study area. In this situation, the analysis would likely represent a more conservative approach as a whole, but not necessarily a "true" representation of the peaks.
   CM Response: The analysis has been updated to utilize the system peak hour volumes.
3) The existing SBRT volumes for the Main St/College Ave intersection shown in the plates to not match the count volumes. Please confirm the reason for this. I'm anticipating that it has something to do with the slip right located there, but just want to make sure.
   CM Response: The SB slip right data collection had to be processed separately from the Main St/College Ave intersection, so there is a separate count volume for that movement. That said, in our volume plates, the SB right turning movements at the signal and at the slip right are combined together because of the removal of the slip right as a part of the proposed development.
4) Calculations regarding the NBLT at Main St/College Ace were omitted though it appears an existing turn lane is present.
   CM Response: The NB left turn at Main St/College Ave is a shared left/thru turn lane. Turn lane length calculations do not account for shared lanes, therefore a turn lane length calculation was not performed for this lane.
5) The PHFs do appear to be on the higher side but given the nature of the anticipated congestion along the roadway they are still within a reasonable range.
   CM Response: The PHFs are calculated from the count data, except for the Site Access 2 intersection, which assumes a PHF of 0.92, per OATS standards.

6) The cycle lengths utilized in the turn lane length calculations for Main St/Parkview Ave utilize 60s, the Synchro outputs however are based on 90s. Please confirm this does not have an impact on the recommended turn lane lengths.
   CM Response: Turn lane analysis has been updated to reflect a 90 second cycle length.
7) Were existing signal timings obtained as part of this study? The delay appears to be somewhat unbalanced, particularly at the Main St/Parkview Ave intersection. Should signal optimization be included as part of the recommendations?
   CM Response: Existing signal timings were not obtained as part of this study. An MOU was submitted prior to commencement of the TIS with a request for signal timings. However, no response was received. Field signal timing optimization can be considered. It is anticipated that this would be a No Build improvement as capacity analysis shows acceptable LOS for both No Build and Build conditions in the TIS. The TIS optimizes timing splits for all analysis scenarios.
8) Parking restrictions present on the roadway (from google earth) appear to be limited to 9 AM-6 PM for WB and 8 AM-4 PM for EB. The Synchro analysis indicates two (2) THRU lanes for each peak hour which conflicts with this. Though parking is not permitted in areas immediately adjacent to the Main St and Parkview Ave/College Ave intersections, during these periods the lanes would effectively operate as a single THRU and RT, please confirm this was considered as part of the analysis.
   CM Response: Allowable and restricted parking was added to the analysis. Per Google Streetview, the eastbound travel lanes do not allow parking through the study area until approximately Sheridan Ave. East of Sheridan Ave, on-street parking is allowed from 8AM to 4PM for 2-hour increments and is restricted from 4PM to 6PM. Based on the location of the parking restriction sign, a 50' eastbound right turn lane was assumed at the Main St & College Ave intersection during the AM peak in place of the thru/right. The thru/right was maintained during the PM peak due to the parking restriction. Westbound travel lanes allow on-street parking from west of the study area until Parkview Ave with no parking allowed from 7AM to 9AM and time restricted parking from 9AM to 6PM. As a result, a 90' westbound right turn lane at College Ave and a 75' westbound right turn lane at Parkview Ave was assumed for the PM peak analysis. The AM peak analysis was assumed to maintain the thru/right lane.