

Estimated
LOS
Level of Service
What about High School
3 other schools
plus the
Montessori



FUSS & O'NEILL

Matthew Davis
June 2, 2022
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Site of Development

The site is comprised of 26 acres with South Street to the north, Interstate 91 to the east, Post Office Road to the south and Route 5 (Enfield Street) to the west. The existing site is currently occupied by the Felician Sisters and contains the Felician Sisters Convent, Enfield Montessori School and the St. Francis Senior Living Residence. The parcel is bordered by residential properties to the south, a church to the north, Enfield Street Elementary School to the west, and Interstate 91 to the east.

Proposed Development

The Community Builders, Inc. proposes to construct 108 units of family housing and 142 units of senior housing on the south side of South Road in Enfield, Connecticut. Site access will be consolidated to three full access driveways on the south side of South Road with the westerly access drive proposed to be shared with the existing Montessori School and the easterly driveway to be constructed as part the full build conditions. The existing development currently provides 158 existing parking spaces and will be increased to a total of 364 parking spaces. Of the total amount of proposed parking spaces, 154 parking spaces (including six accessible spaces) will be provided for family housing, 149 parking spaces (including 13 accessible spaces) will be provided for senior housing, and 61 parking spaces (including 3 accessible spaces) will be provided for the Enfield Montessori School. For the purposes of this analysis, the full master plan buildout was assumed to be completed by 2031.

Traffic Volumes and Counts

The greatest potential for traffic impact on the roadway network by the proposed development will occur during the weekday morning and afternoon peak hours, the periods when the commuter related trips are at their highest levels. Through consultation with the CTDOT Planning Division, Fuss & O'Neill, Inc. utilized the approved 2016 build condition traffic volumes from the Montessori School Traffic Impact Study as shown in Figure No. 2 of Appendix A and grew them to obtain the 2031 background traffic volumes. This was done by utilizing an 0.6 percent per year peak hour growth factor to account for normal traffic growth in the study area. These 2031 background traffic volumes are depicted in Figure No. 3 of Appendix A. Existing site driveway traffic at the four site driveways in operation at the time of the 2016 study was then redistributed to the three consolidated site driveways proposed to be in operation at the completion of this residential master plan. The redistributed site driveway traffic volumes are depicted in Figure No. 4 of Appendix A.





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Other Developments:

Fuss & O'Neill contacted the CTDOT Bureau of Policy and Planning and the Town of Enfield to identify any other pending or approved developments having site related traffic in the study area. No other developments were identified.

Trip Distribution

The distribution of residential traffic entering and exiting the proposed Felician Sisters site was applied to the road network based on the existing regional traffic distributions and the layout of the adjacent roadway network. During the peak hours, the following arrival distributions of traffic are anticipated:

- 45% from Route 5 to the north
- 30% from Route 5 to the south
- 25% from South Road to the east

A regional arrival/departure distribution for the new site generated traffic traveling to and from the project site is shown in *Figure No. 5 of Appendix A*.

Trip Generation

The expected site generated traffic for the proposed 250 residential units was calculated using existing empirical data from the Institute of Transportation Engineers (ITE) publication *Trip Generation*, 11th edition, 2021. This publication is an industry-accepted resource for determining trip generation. Trip generation for the morning and afternoon peak hour was calculated using the ITE land use code 221 "Mid-Rise Multifamily Housing" and land use code 251 "Single-Family Senior Adult Housing."

The ITE manual indicates that the proposed development consisting of 108 units of multi-family housing is expected to generate a total of 40 vehicle trips (9 entering, 31 exiting) during the morning peak hour, and a total of 42 vehicle trips (26 entering, 16 exiting) during the afternoon peak hour.

For the senior adult housing units, 22 units are existing and therefore accounted for in the background traffic volumes. New vehicle trips were calculated for the proposed 120 additional units. The ITE manual indicates that 120 units of senior adult housing is expected to generate a total of 45 vehicle trips (15 entering, 30 exiting) during the morning peak hour, and a total of 51 vehicle trips (31 entering, 20 exiting) during the afternoon peak hour.

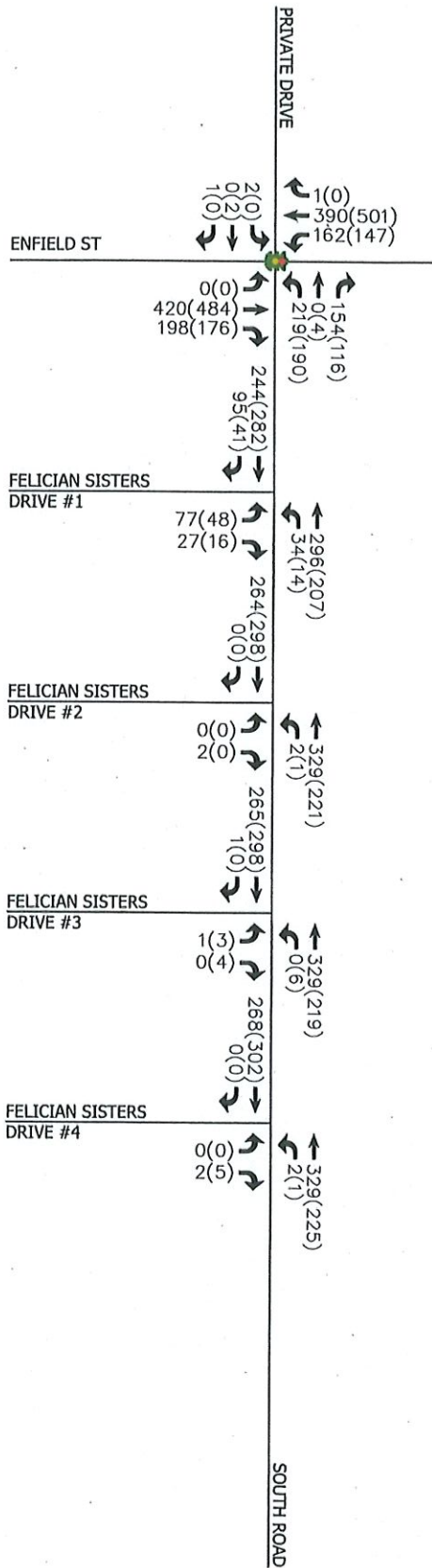


FIGURE 2. MONTESSORI SCHOOL 2016 BUILD CONDITION
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 FELICIAN SISTERS CAMPUS MASTER PLAN - ENFIELD
 JUNE 2022

XX(XX) = WEEKDAY MORNING PEAK HOUR (WEEKDAY PM PEAK HOUR)

