FUSS & O'NEILL

August 31, 2021

Mr. Steven Kleppin
Director of Planning and Zoning
City of Norwalk
125 East Avenue, Room 129
Norwalk, CT 06856

Re: Supplemental Shared Parking Analysis
Workforce Training Center
25 Van Zant Street
Norwalk, Connecticut

As requested, Fuss & O'Neill has performed a supplemental shared parking analysis to confirm that adequate parking supply is available at the 25 Van Zan Street mixed-use development assuming that all leasable area in the building is occupied. The existing development consists of a total of 256,000 square feet of gross floor area, however only 229,000 square feet of the building is leasable area. Based on the information provided by the property owner and the City Zoning Regulations, a supplemental shared parking analysis was performed for 229,000 square feet of leasable building space including the following specific land uses: 150,000 square feet of workforce training center space (300 students and staff), 44,000 square feet of office space, 26,700 square feet of mini-warehouse/storage space, and 8,000 square feet of daycare space.

The analysis included in this supplemental parking letter accounts for two updates to the analysis provided in the original Fuss & O'Neill April 2021 Traffic and Parking Study: a 24,000 square foot increase in the assumed leasable building space for a total of 229,000 square feet and an increase in the available parking supply to 390 spaces after accounting for the off-site parking available at 22 and 28 Van Zant Street. The following summarizes the results of the updated shared parking analysis.

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Parking Requirements

General parking requirements for the City of Norwalk are found in Article 120 of the City Building Zone Regulations. The parking required for the proposed land uses was determined using the parking rates listed in Article 120 and summarized in *Table 1 on the next page*. As specified in Article 120, parking requirements for the various uses on site are as follows:

- 1 parking space per 334 square feet of gross floor area; except for offices in development parks, 1 parking space per 370 square feet of gross floor area and, except for banks in the

SSDD, 1 parking space per 1,000 square feet of active commercial floor area for banks and other offices.

- 1 parking space per worker employed at any one time, plus one space per 5,000 square feet of floor area or fraction thereof; where the number of workers cannot be determined, 1 parking space per 500 square feet of active floor area for mini-warehouse space.
- 5 parking spaces, plus 1 parking space per every 2 workers employed at any one time for a nursery or child daycare center.

No parking requirements were specified for a work force training center, however, as a conservative analysis, 1 space per student and employee was assumed, before factoring in a Transit Oriented Development (TOD) credit. Additionally, it should be noted that shared parking is explicitly permitted in section 118-1220 subsection E.

Table 1
25 Van Zant Parking Required by Zoning Regulations

Proposed Use	Size	Unit	Rate	Total Required Spaces
Office	44,000	SF	1 space per 334 square feet of gross floor area; 1 parking space per 1,000 square feet of active commercial floor area.	132
Work Force Training Center	300	Workers/Students	1 space per student/employee	300
Mini-Warehouse	26,700	SF	1 parking space per worker employed at any one time, plus one space per 5,000 square feet of floor area or fraction thereof; where the number of workers cannot be determined, 1 parking space per 500 square feet of active floor area	6*
Day Care	8,000	Workers	5 parking spaces + 1 parking space per every 2 workers employed at any one time.	10**
			Total	**448**

* - Number of employees based on information provided by property owner.
**- Number of employees assumed to be a maximum of ten.

Parking Supply

The existing development site accommodates 300 striped on site surface parking spaces. 90 additional off-site surface parking spaces, located at 22 and 28 Van Zant, are also available and shared between the various land uses in the 25 Van Zan Street building. It should be noted that off-site parking spaces are permitted to be included in the site parking count in business and industrial zones if they are located within 600 feet of the development. Thus, a total of 390 parking spaces are available for the 25 Van Zant Street development.

Parking Demand

A fundamental tenet of mixed-use development is that different land uses contribute to possible activity around the clock, with different hours of each day producing varying parking demand rates for each use. Given that the variety of land uses and tenants on site do not generate parking demand at the exact same time, a shared parking analysis was conducted to determine the maximum shared parking demand on the site throughout the course of a typical day.

Table 2 on Page 5 shows the results of the shared parking demand for weekdays, when the demand of all land uses occurs simultaneously. Parking ratios were based on the existing zoning requirements as documented in Table 1, as well as the Urban Land Institute (ULI) Recommended Time-of-Day Factors that are specified in Tables 2-5 of the *Shared Parking*, Second Edition text. Extreme variations in monthly parking demand for the uses in Table 2 are not expected due to the steady nature of office, work force training center, mini-warehouse, and day care trip generation patterns; therefore monthly factors were not applied.

Table 3 on page 6 shows the results of the shared parking demand for weekdays based on rates obtained from the ITE *Parking Generation Manual*, 5th Edition. Percent of peak parking demands were obtained from ITE for land use code 710 (General Office Building) and 151 (Mini-Warehouse).

It is important to note that ITE and ULI do not have percent of peak parking demand or time-of-day factors for daycare center and workforce training center and therefore these land uses were approximated based on assumed typical operations and development plans obtained from the property owner.

As illustrated in *Table 2 on Page 5*, ULI methodology indicates the combined shared parking demand for the proposed uses on the 25 Van Zant site during the weekday is 432 spaces. It should be noted that the location of 25 Van Zant provides excellent access to Metro North and public transit which encourages alternate modes of travel, therefore a transit oriented development (TOD) credit of 20 percent was applied to these parking demand numbers per consultation with the CTDOT

Planning Division. Factoring in the TOD credit of 20 percent, the combined shared parking demand for the site is 346 spaces. Peak demand occurs in the midday, around 12:00 pm, when most office employees are working and workforce training classes are in session.

As illustrated in *Table 3 on page 6*, ITE methodology indicates the combined shared parking demand for the proposed uses on the site during the weekday is slightly higher at 448 spaces. After factoring in the TOD credit of 20 percent, ITE indicates a combined shared parking demand of 358 spaces. Peak demand occurs in the midday, around 11:00 am.

When factoring in the 20 percent TOD credit, the peak shared parking demand of 346 spaces based on ULI methodology and 358 spaces based on the ITE methodology is significantly lower than the combined parking requirements per Zoning Regulations for each individual land use which would yield the need for 451 spaces. Thus, based on our review of the ULI and ITE peak shared parking demand calculations, the 390 parking spaces provided for this development would satisfy the most conservative parking demand projection and provide a parking surplus of 32 or more spaces.

Table 2
Weekday Shared Parking Calculations for 25 Van Zant Street
(ULI Time of Day Factors)

Use	**Office Space**		**Work Force Training Center**		**Mini-Warehouse/Storage**		**Daycare**		**Shared Demand**	**20% Transit Credit**
Size	44,000		300		26,700		8,000			
Unit	SF		Students and Faculty		SF		SF			
Rate	1 parking space per 334 square feet of gross floor area; except for offices in development parks, 1 parking space per 1,000 square feet of active commercial floor area.		1 parking space per person		1 parking space per worker employed at any one time, plus one space per 5,000 square feet of floor area or fraction thereof; where the number of workers cannot be determined, 1 parking space per 500 square feet of active floor area.		5 parking spaces, plus 1 parking space per every 2 workers employed at any one time			
Spaces	132		300		6		10		**448**	**358**
Time	**%**	**Space**	**%**	**Space**	**%**	**Space**	**%**	**Space**	**Subtotal**	**Subtotal**
7:00AM	30%	40	0%	0	0%	0	30%	3	**43**	**34**
8:00AM	75%	99	23%	69	14%	1	75%	8	**177**	**142**
9:00AM	95%	125	48%	144	71%	4	95%	10	**284**	**227**
10:00AM	100%	132	75%	225	50%	3	100%	10	**371**	**297**
11:00AM	100%	132	90%	270	79%	5	100%	10	**418**	**334**
12:00PM	90%	119	100%	300	57%	3	90%	9	**432**	**346**
1:00PM	90%	119	96%	288	64%	4	90%	9	**421**	**337**
2:00PM	100%	132	92%	275	64%	4	100%	10	**422**	**338**
3:00PM	100%	132	92%	275	79%	5	100%	10	**423**	**338**
4:00PM	90%	119	71%	213	71%	4	90%	9	**346**	**277**
5:00PM	50%	66	50%	150	100%	6	50%	5	**228**	**182**
6:00PM	25%	33	73%	219	14%	1	25%	3	**257**	**206**
7:00PM	10%	13	98%	294	0%	0	10%	1	**309**	**247**
8:00PM	7%	9	100%	300	0%	0	7%	1	**311**	**249**
9:00PM	3%	4	96%	288	0%	0	3%	0	**293**	**234**
10:00PM	1%	1	46%	138	0%	0	1%	0	**139**	**111**
11:00PM	0%	0	0%	0	0%	0	0%	0	**0**	**0**
									Peak Parking Demand	**346**

Table 3
Weekday Shared Parking Calculations for 25 Van Zant Street
(ITE Time of Day Factors)

Use	**Office Space**		**Work Force Training Center**		**Mini-Warehouse/Storage**		**Daycare**		**Shared Demand**	**20% Transit Credit**
Size	44,000		300		26,700		8,000			
Unit	SF		Students and Faculty		SF		SF			
Rate	1 parking space per 334 square feet of gross floor area; except for offices in development parks, 1 parking space per 1,000 square feet of active commercial floor area		1 parking space per person		1 parking space per worker employed at any one time, plus one space per 5,000 square feet of floor area or fraction thereof; where the number of workers cannot be determined, 1 parking space per 500 square feet of active floor area		5 parking spaces, plus 1 parking space per every 2 workers employed at any one time			
Spaces	132		300		6		10		**448**	**358**
Time	**%**	**Space**	**%**	**Space**	**%**	**Space**	**%**	**Space**	**Subtotal**	**Subtotal**
7:00AM	13%	17	0%	0	0%	0	30%	3	**20**	**16**
8:00AM	48%	63	23%	69	14%	1	75%	8	**141**	**113**
9:00AM	88%	116	48%	144	71%	4	95%	10	**274**	**219**
10:00AM	100%	132	75%	225	50%	3	100%	10	**371**	**297**
11:00AM	100%	132	100%	300	79%	5	100%	10	**448**	**358**
12:00PM	85%	112	100%	300	57%	3	90%	9	**424**	**339**
1:00PM	84%	111	96%	288	64%	4	90%	9	**412**	**330**
2:00PM	93%	123	92%	275	64%	4	100%	10	**412**	**330**
3:00PM	94%	124	92%	275	79%	5	100%	10	**414**	**331**
4:00PM	85%	112	71%	213	71%	4	90%	9	**339**	**271**
5:00PM	56%	74	50%	150	100%	6	50%	5	**236**	**189**
6:00PM	20%	26	73%	219	14%	1	25%	3	**250**	**200**
7:00PM	11%	15	98%	294	0%	0	10%	1	**311**	**249**
8:00PM	0%	0	100%	300	0%	0	7%	1	**301**	**241**
9:00PM	0%	0	96%	288	0%	0	3%	0	**288**	**230**
10:00PM	0%	0	46%	138	0%	0	1%	0	**138**	**110**
11:00PM	0%	0	0%	0	0%	0	0%	0	**0**	**0**
									Peak Parking Demand	**358**

Alternate Parking Demand Projections

As alternate methodologies, future parking demand was also analyzed utilizing the existing parking demand for 25 Van Zant and the City Building Zone Regulation requirements.

Based on an existing building square footage of 256,000 square feet and a maximum occupancy of 374 people, the occupancy rate was determined to be 0.00163 occupants per square foot. Given that the original shared parking analysis prepared by Fuss & O'Neill in April 2021 was conducted assuming 205,000 square feet of leasable area and this supplemental analysis is accounting for up to 229,000 square feet of leasable area, the difference of 24,000 square feet of leasable building space can be reviewed for additional parking demand. The original shared parking analysis concluded that the 300 on-site parking spaces would be sufficient for 205,000 square feet of leasable development space. At a rate of 0.00163 occupants per square foot, the additional 24,000 square feet of leasable space would require an additional 40 parking spaces, for a total of 340 parking spaces. Thus, with the inclusion of the 90 off-site parking spaces at 22 and 28 Van Zant Street, a surplus of 50 spaces would be provided for development.

Furthermore, utilizing regulation SS 118-1220, the following was determined:

- "Active commercial floor area. (1) Active commercial floor area [applies to subsection C(12), (13) and (15)] is the area the use of which is directly related to parking generation and shall specifically exclude area devoted to the housing of automated equipment, service equipment, inventory storage space, space devoted to serving and maintaining the premises, employee service, common lobby area in office buildings, etc."
- "(2) until the active commercial floor area is known, seventy-five percent (75%) of the gross floor area shall be the basis for determining the parking and loading required."

If the regulation stated above is applied toward the overall building square footage of 256,000 square feet, then a total of 192,000 square feet of active commercial space would need to be analyzed for parking demand. Both the original shared parking analysis (April 2021 study) and this supplemental parking letter respectively determined the required parking for an assumed 205,000 square feet and 229,000 square feet of "active commercial space" and should both therefore be considered conservative in their analyses.

Conclusion

The purpose of preparing this supplemental parking analysis was to confirm the adequacy of the existing site parking supply for 25 Van Zant Street to accommodate the future parking demand for the proposed mixed use/workforce training center development. The existing parking supply at 25

Van Zant includes 300 on site parking spaces and 90 adjacent off-site parking spaces for a total of 390 spaces. The off-site parking lot is located less than 600 feet from the site and can therefore be included in the development's parking count per the City's Zoning regulations.

The peak demands for the proposed uses on site occur at different times of the day, therefore a number of spaces may be shared. In addition, given the site's excellent proximity to transit, walking and biking facilities, a 20 percent transit oriented development (TOD) credit can be applied to the parking demand projections. Factoring this in, the ULI method of shared parking analysis indicates a conservative maximum demand of 346 parking spaces for the development as a whole. The ITE method of shared parking analysis indicates a maximum demand of 358 parking spaces. Therefore, using either methodology, the 390 on and off site parking spaces will provide ample parking supply to accommodate the projected parking demand from the development.

As a cross check, two alternative parking demand projections were reviewed based on the development's occupancy rate (374 people) and based on an assumed 75% active commercial floor area of the total building square footage of 256,000. Both methodologies revealed parking demand numbers for the development well below the 390 spaces provided.

Based on the results of the foregoing analysis, it is the professional opinion of Fuss & O'Neill, Inc. that the parking demand of the proposed 25 Van Zant Street development uses can be supported by the development's existing on and off site parking facilities.

Should you have any questions on this letter or need additional information, please contact us at 860-646-2469.

Sincerely,

Tyler Rudolph

Tyler Rudolph, EIT
Transportation Engineer

Reviewed By,

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