A. INTRODUCTION

In accordance with the 20<u>20</u>~~14~~ *City Environmental Quality Review* (CEQR) *Technical Manual*, where significant adverse impacts are identified, mitigation measures to reduce or eliminate the impacts to the fullest extent practicable are developed and evaluated. As discussed in previous chapters of this EIS, significant adverse impacts from the Proposed Actions were identified for operational and construction traffic. Potential measures to mitigate these impacts <u>were developed in consultation with the NYC Department of City Planning (DCP) and the NYC Department of Transportation (DOT), and</u> are discussed below. Additional measures to mitigate these adverse impacts ~~may~~ <u>have</u> be<u>en</u> evaluated between the DEIS and FEIS. Therefore, the FEIS ~~will~~ include<u>s</u> more complete information and commitments on all practicable mitigation measures to be implemented with the Proposed Actions.

B. PRINCIPAL CONCLUSIONS

Transportation

Traffic

As described in Chapter 10, "Transportation," the Proposed Actions would result in significant adverse traffic impacts at eight study area intersections during one or both analyzed peak hours; specifically, seven lane groups at six intersections during the weekday AM peak hour and eight lane groups at seven intersections during the weekday PM peak hour. As shown in Tables 17-1 and 17-2, implementation of traffic engineering improvements such as signal timing changes and the installation of a new traffic signal would fully mitigate the significant adverse impacts to two lane groups at two intersections in the AM peak hour and three lane groups at three intersections during the weekday PM peak hour. Impacts to a total of six lane groups would remain unmitigated at five intersections in one or both analyzed peak hours.

Implementation of the recommended traffic engineering improvements is subject to review and approval by DOT. If, prior to implementation, DOT determines that an identified mitigation measure is infeasible, an alternative and equivalent mitigation measure may be identified.

TABLE 17-1
Summary of Lane Groups/Intersections with Significant Adverse Traffic Impacts

Peak Hour	Lane Groups/ Intersections Analyzed	Lane Groups/ Intersections With No Significant Impacts	Lane Groups/ Intersections With Significant Impacts	Mitigated Lane Groups/ Intersections	Unmitigated Lane Groups/ Intersections
Weekday AM	25/13	18/7	7/6	2/2	5/4
Weekday PM	25/13	17/6	8/7	3/3	5/4

TABLE 17-2
Lane Groups With Unmitigated Significant Adverse Traffic Impacts

	Peak Hour	
	Weekday AM	**Weekday PM**
Signalized Intersections		
Calyer Street & Franklin Street	NB-LTR, SB-LTR	NB-LTR, SB-LTR
Unsignalized Intersections		
Calyer Street & Lorimer Street	EB-TR	EB-TR
Meserole Avenue & Gem Street	---	NB-L
Norman Avenue & Banker Street	WB-TR	---
Norman Avenue & Dobbin Street	SB-LTR	SB-LTR

Notes:
NB – northbound, SB – southbound, EB – eastbound, WB – westbound
L – left-turn, T – through, R – right-turn, DefL – defacto left-turn

It should be noted that there have also been recent street network changes/closures related to DOT initiatives in response to the COVID-19 pandemic, including the Open Streets Program, the Open Restaurants Program, Open Streets Outdoor Learning, transit initiatives, and new bicycle lanes. However, as these changes are generally a response to an emergency order, and no approvals that would be needed to make the closures permanent have been granted, they are not reflected in the analyses of No-Action or With-Action conditions. ~~Should new information become available indicating that local street closures are permanent, before the FEIS is issued, the FEIS would account for any necessary updates. Additional traffic intersections could be impacted, and if so, additional mitigation measures will be explored, where feasible in consultation with DCP and DOT. If no additional mitigation measures are identified, the project's significant adverse impacts would remain unmitigated.~~

Construction

Traffic

As discussed in Chapter 16, "Construction," peak construction period traffic increments at each of the study area intersection approaches would be the same or lower than the corresponding peak hour operational traffic increments. Therefore any potential for significant adverse impacts in the construction peak periods would be within the envelope of the significant adverse impacts associated with the operational traffic.

As also discussed in Chapter 16, "Construction," six intersections impacted under the Proposed Actions would experience 50 or more passenger-car equivalent (PCE) trips in the AM and PM construction peak hours and would therefore have the potential for significant adverse impacts during the peak construction period. As was the case for operational conditions, mitigation for four of those intersections would likely not be feasible. At the two remaining intersections, recommended mitigation measures would fully address the Proposed Actions' significant adverse impacts, and this is also expected to be the case for any significant impacts during the peak construction period. ~~If any mitigation measures that are approved for the operational traffic impacts are advanced for the construction peak periods, then it is anticipated that these measures would be similarly effective at mitigating potential construction period traffic impacts.~~ However, if any of the~~se~~ recommended mitigation measures are not approved for the construction peak periods, then the corresponding construction period traffic impacts would remain unmitigated.

C. TRANSPORTATION

Traffic

As described in Chapter 10, "Transportation," the Proposed Actions would result in significant adverse traffic impacts at eight study area intersections (three signalized and five unsignalized) during one or both analyzed peak hours; specifically, seven lane groups at six intersections during the weekday AM peak hour and eight lane groups at seven intersections during the weekday PM peak hour. These impacted lane groups are summarized in Table 17-3.

TABLE 17-3
Lane Groups With Significant Adverse Traffic Impacts

	Peak Hour	
	Weekday AM	**Weekday PM**
Signalized Intersections		
Calyer Street & Franklin Street	NB-LTR, SB-LTR	NB-LTR, SB-LTR
Calyer Street & Manhattan Avenue	---	EB-LTR
Quay Street & Franklin Street	NB-LT	NB-LT
Unsignalized Intersections		
Meserole Avenue & Franklin Street	WB-LR	WB-LR
Calyer Street & Lorimer Street	EB-TR	EB-TR
Meserole Avenue & Gem Street	---	NB-L
Norman Avenue & Banker Street	WB-TR	---
Norman Avenue & Dobbin Street	SB-LTR	SB-LTR

Notes:
NB – northbound, SB – southbound, EB – eastbound, WB – westbound
L – left-turn, T – through, R – right-turn, DefL – defacto left-turn

As discussed below, some of these impacts could be mitigated through the implementation of traffic engineering improvements, including:

- Installation of a new traffic signal at the intersection of Franklin Street and Meserole Avenue; and
- Modification of traffic timing at the intersections of Calyer Street and Manhattan Avenue, and Quay and Franklin streets.

The types of mitigation measures proposed herein are standard measures that are routinely identified by the City and considered feasible for implementation. Table 17-4 summarizes the recommended mitigation measures for each of the intersections with significant adverse traffic impacts during the weekday AM and PM peak hours. Implementation of the recommended traffic engineering improvements is subject to review and approval by DOT. If, prior to implementation, DOT determines that an identified mitigation measure is infeasible, an alternative and equivalent mitigation measure will be identified. In the absence of the application of mitigation measures, the impacts would remain unmitigated.

Table 17-5 shows the weekday AM and PM peak hour v/c ratios, delays, and levels of service (LOS) at each impacted intersection with implementation of the recommended mitigation measures and compares them to No-Action and With-Action conditions. According to *CEQR Technical Manual* criteria, an impact is considered fully mitigated when the resulting LOS degradation under the Action-with-Mitigation condition compared to the No-Action condition is no longer deemed significant following the impact criteria

described in Chapter 10, "Transportation." Table 17-5 shows that significant adverse impacts would be fully mitigated at two lane groups at two intersections in the AM peak hour and three lane groups at three intersections during the weekday PM peak hour. In total, impacts to one or more lane groups would remain unmitigated in one or both analyzed peak hours at five intersections (one signalized and four unsignalized). These would include the signalized intersection of Calyer and Franklin streets where standard mitigation measures such as adjustments to signal phasing/timing, lane restriping and changes to curbside parking regulations were found to be infeasible and/or ineffective at mitigating the anticipated impacts. The remaining four intersections with unmitigated traffic impacts are all unsignalized, including Calyer Street/Lorimer Street, Meserole Avenue/Gem Street, Norman Avenue/Banker Street and Norman Avenue/Dobbin Street. Standard mitigation measures for impacts at unsignalized intersections typically involve the installation of all-way stop control (where stop-control is only present on the minor street) or installation of a new traffic signal. However, at each of these four locations, projected future traffic and pedestrian volumes would not be sufficient to satisfy a warrant for the installation of a new stop-control or traffic signal. Consequently, the significant impacts to the five intersections identified above would constitute unavoidable significant adverse traffic impacts as a result of the Proposed Actions (refer to Chapter 19, "Unavoidable Adverse Impacts").

TABLE 17-4
Proposed Traffic Mitigation Measures

Intersection	Signal Phase	With-Action Signal Timing (seconds) (1)		Proposed Signal Timing (seconds) (1)		Recommended Mitigation
		AM	PM	AM	PM	
Calyer Street & Franklin Street	Ped NB/SB	24 36	24 36	24 36	24 36	- Unmitigable
Calyer Street & Lorimer Street	WB SB	Stop-Controlled		Stop-controlled		- Unmitigable
Calyer Street & Manhattan Avenue	EB NB/SB	48 72	48 72	48 72	52 68	- Transfer 4s of green time from NB/SB to EB in PM.
Quay Street & Franklin Street	Ped NB/SB	24 36	24 36	23 37	22 38	- Transfer 1s of green time in AM and 2s in PM from Ped phase to NB/SB .
Meserole Avenue & Franklin Street	WB NB/SB	Stop-Controlled		24 36	24 36	- Install new traffic signal and crosswalks.
Meserole Avenue & Gem Street	NB-L	Stop-Controlled		Stop-Controlled		- Unmitigable
Norman Avenue & Banker Street	WB-TR NB-LTR	Stop-Controlled		Stop-Controlled		- Unmitigable
Norman Avenue & Dobbin Street	WB-LT SB-LTR	Stop-Controlled		Stop-Controlled		- Unmitigable

Notes:
(1) Signal timings shown indicate green plus yellow (including all red) for each phase.

It should be noted that there have also been recent street network changes/closures related to DOT initiatives in response to the COVID-19 pandemic, including the Open Streets Program, the Open Restaurants Program, Open Streets Outdoor Learning, transit initiatives, and new bicycle lanes. However, as these changes are generally a response to an emergency order, and no approvals that would be needed to make the closures permanent have been granted, they are not reflected in the analyses of No-Action or With-Action conditions. ~~Should new information become available indicating that local street closures are permanent, before the FEIS is issued, the FEIS would account for any necessary updates. Additional traffic intersections could be impacted, and if so, additional mitigation measures will be explored, where feasible in consultation with DCP and the DOT. If no additional mitigation measures are identified, the project's significant adverse impacts would remain unmitigated.~~

TABLE 17-5
Action-With-Mitigation Conditions at Impacted Lane Groups

Intersection	Lane Group	AM Peak Hour												PM Peak Hour											
		No-Action			With-Action				Action-with-Mitigation					No-Action			With-Action				Action-with-Mitigation				
		V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS		V/C Ratio	Delay (sec.)	LOS			V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS		V/C Ratio	Delay (sec.)	LOS	
Calyer Street (EB/WB) @	NB-LTR	1.12	85.6	F	1.18	110.7	F	**	1.18	110.7	F	**		1.52	254.9	F	1.70	335.2	F	**	1.70	335.2	F	**	
Franklin Street (NB/SB)	SB-LTR	1.14	102.0	F	1.32	172.9	F	**	1.32	172.9	F	**		1.80	383.8	F	2.02	484.4	F	**	2.02	484.4	F	**	
Calyer Street (EB) @	EB-LT	-	-	-	-	-	-		-	-	-			-	-	-	-	-	-		-	-	-		
Banker Street (NB)	NB-TR	-	-	-	-	-	-		-	-	-			-	-	-	-	-	-		-	-	-		
(Unsignalized Two-Way Stop)																									
Calyer Street (EB) @	EB-LT	0.01	7.7	A	0.01	7.7	A		0.01	7.7	A			0.01	7.6	A	0.01	7.7	A		0.01	7.7	A		
Guernsey Street (NB)	NB-TR	0.33	16.3	C	0.35	17.3	C		0.35	17.3	C			0.37	22.9	C	0.44	28.4	D		0.44	28.4	D		
(Unsignalized Two-Way Stop)																									
Calyer Street (EB) @	EB-TR	1.19	141.1	F	1.26	165.1	F	**	1.26	165.1	F	**		1.05	76.0	F	1.19	123.3	F	**	1.19	123.3	F	**	
Lorimer Street (SB)	SB-LT	0.02	7.3	A	0.02	7.3	A		0.02	7.3	A			0.00	7.2	A	0.00	7.2	A		0.00	7.2	A		
(Unsignalized Two-Way Stop)																									
Calyer Street (EB) @	EB-LTR	0.70	40.1	D	0.74	42.1	D		0.74	42.1	D			0.92	58.8	E	1.05	89.3	F	**	0.96	62.6	E		
Manhattan Avenue (NB/SB)	NB-TR	0.53	19.6	B	0.53	19.7	B		0.53	19.7	B			0.44	17.3	B	0.44	17.4	B		0.47	20.2	C		
	SB-LT	0.49	19.2	B	0.50	19.5	B		0.50	19.5	B			0.43	17.5	B	0.43	17.5	B		0.45	20.3	C		
Quay Street (EB) @	NB-LT	1.10	78.5	E	1.14	95.1	F	**	1.11	80.0	F			1.49	244.2	F	1.62	297.9	F	**	1.45	222.7	F		
Franklin Street (NB/SB)	SB-TR	0.56	13.2	B	0.56	13.3	B		0.54	12.3	B			0.60	13.7	B	0.60	13.8	B		0.56	11.7	B		
Meserole Avenue (WB) @	WB-LR	0.66	24.0	C	0.81	36.7	E	**	0.84	34.8	C			1.49	264.4	F	2.21	580.4	F	**	1.41	215.3	F		
Franklin Street (NB/SB)	NB-T								0.59	13.0	B										0.89	26.2	C		
(Unsignalized Two-Way Stop)	SB-T								0.45	11.2	B										0.45	11.0	B		
Meserole Avenue (WB) @	NB-L	0.06	13.8	B	0.14	17.2	C		0.14	17.2	C			0.48	36.8	E	1.68	384.8	F	**	1.68	384.8	F	**	
Gem Street (NB)																									
(Unsignalized Two-Way Stop)																									
Meserole Avenue (WB) @	WB-LT	0.10	8.5	A	0.15	9.0	A		0.15	9.0	A			0.14	9.0	A	0.15	9.6	A		0.15	9.6	A		
Dobbin Street (SB)	SB-TR	0.17	18.6	C	0.33	27.2	D		0.33	27.2	D			0.26	24.5	C	0.32	28.7	D		0.32	28.7	D		
(Unsignalized Two-Way Stop)																									
North 14th Street (EB/WB) @	EB-TR		18.9	C		20.2	C			20.2	C				15.4	C		18.8	C			18.8	C		
Wythe Avenue (SB)	WB-LT		-	-		-	-			-	-				-	-		-	-			-	-		
(Unsignalized All-Way Stop)	SB-LTR		23.4	C		25.3	D			25.3	D				14.7	B		16.1	C			16.1	C		
North 15th Street (WB) @	WB-LT	0.16	19.9	C	0.52	48.9	E		0.52	48.9	E			0.61	63.2	F	0.96	177.6	F		0.96	177.6	F		
Wythe Avenue (SB)																									
(Unsignalized Two-Way Stop)																									
Norman Avenue (WB) @	WB-TR		20.9	C		39.1	E	**		39.1	E	**			14.0	B		14.0	B			14.0	B		
Banker Street (NB)	NB-LTR		10.7	B		11.8	B			11.8	B				10.5	B		10.8	B			10.8	B		
(Unsignalized All-Way Stop)																									
Norman Avenue (WB) @	WB-LT	0.02	8.5	A	0.02	8.7	A		0.02	8.7	A			0.02	9.6	A	0.02	10.0	B		0.02	10.0	A		
Dobbin Street (NB)	SB-LTR	0.69	48.5	E	2.66	600+	F	**	2.66	600+	F	**		1.38	268.2	F	6.20	600+	F	**	6.20	600+	F	**	
(Unsignalized Two-Way Stop)																									

This table has been updated for the FEIS.

Notes:
EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound
L-Left, T-Through, R-Right, DfL-Analysis considers a defacto left-turn lane on this approach
V/C ratio - volume to capacity ratio
LOS - level of service
** - Denotes a significant adverse impact based on *CEQR Technical Manual* criteria.

Proposed Schedule for Traffic Mitigation Measures

Subject to the approval of DOT, the mitigation measures summarized in Table 17-4 would be implemented to mitigate the significant adverse traffic impacts resulting from the Proposed Development. As discussed in Chapter 1, "Project Description," construction of the Proposed Development would occur over an approximately 48-month period. It is anticipated that the new Acme Smoked Fish facility would be completed and operational after an estimated 21 months of construction (~~late~~ mid-2023~~2~~), with the Proposed Development's office and retail components completed and operational by ~~late~~ mid-2025~~4~~. As it is estimated that the Acme Smoked Fish facility by itself would generate fewer than 50 new vehicle trips in each analyzed peak hour (see Table 10-6 in Chapter 10, "Transportation"), significant adverse traffic impacts upon completion of the facility in ~~late~~ mid-2023~~2~~ are not anticipated. Therefore, implementation of the proposed traffic mitigation measures would likely not be needed until the Proposed Development is completed and fully operational in late 2025~~4~~.

Effects of Traffic Mitigation on Pedestrian Conditions

None of the proposed traffic mitigation measures discussed above would potentially affect pedestrian conditions at any analyzed crosswalk or corner area in either the weekday AM or PM hours.

Effects of Traffic Mitigation on Parking Conditions

As the proposed traffic mitigation measures would primarily consist of changes to traffic signal timing and the installation of a new traffic signal, no on-street parking spaces would be displaced, and the proposed measures are not expected to substantively affect the availability of curbside parking in proximity to the rezoning area.

D. CONSTRUCTION

Traffic

As discussed in Chapter 16, "Construction," peak construction period traffic increments at each of the study area intersection approaches would be the same or lower than the corresponding peak hour operational traffic increments. Therefore any potential for significant adverse impacts in the construction peak periods would be within the envelope of the significant adverse impacts associated with the operational traffic. As noted in Chapter 16, "Construction," six intersections impacted under the Proposed Actions would experience 50 or more passenger-car equivalent (PCE) trips in the AM and PM construction peak hours and would therefore have the potential for significant adverse impacts during the peak construction period. As was the case for operational conditions, mitigation for four of those intersections— Franklin Street at Calyer Street, Gem Street at Meserole Avenue and Norman Avenue at Banker and Dobbins streets— would likely not be feasible. At the signalized intersection of Franklin and Calyer streets, standard mitigation measures such as signal phasing/timing, lane restriping, and changes to curbside parking regulations were found to be infeasible and/or ineffective at mitigating the anticipated operational impacts, and this is also likely to be the case in the peak construction period. At the remaining three intersections, all of which are unsignalized, projected future traffic and pedestrian volumes would not be sufficient to satisfy a warrant for the installation of a new stop-control or traffic signal under both operational and construction conditions.

At the two remaining intersections with operational impacts (Franklin Street at Quay Street, and Franklin Street at Meserole Avenue), recommended mitigation measures (signal timing adjustments and the installation of a new traffic signal, respectively) would fully address the Proposed Actions' significant adverse impacts, and this is also expected to be the case for any significant impacts during the peak construction period. ~~If any mitigation measures that are approved for the operational traffic impacts are advanced for the construction peak periods, then it is anticipated that these measures would be similarly effective at mitigating potential construction period traffic impacts.~~ However, if ~~any of these~~these mitigation measure~~s~~ are not approved for the peak construction ~~peak~~ period~~s~~, then any ~~the~~ corresponding construction period traffic impacts would remain unmitigated.