19 MITIGATION

19.1 Introduction

Per the 2021 *CEQR Technical Manual*, where significant adverse impacts are identified, mitigation to reduce or eliminate the impacts to the extent practicable is developed and evaluated. The potential for unmitigated or unmitigable significant adverse impacts must be disclosed. Where mitigation is not practicable, a reasoned elaboration as to why the significant adverse impact cannot be mitigated should be described.

As presented in the previous chapters of this Draft Environmental Impact Statement (DEIS), the Proposed Actions have the potential to result in significant adverse impacts to transportation and construction. Potential mitigation measures for these technical areas are identified below. Measures to further mitigate adverse impacts will be evaluated between the DEIS and Final Environmental Impact Statement (FEIS).

19.2 Principal Conclusions

Based on the analysis performed in the in the preceding chapters, the Proposed Actions have the potential to result in significant adverse related to transportation (traffic and pedestrians) and construction (traffic). Measures to reduce or fully mitigate these significant adverse impacts are identified and described below.

Transportation

In the With-Action Condition, the Proposed Actions would not result in significant transit or parking impacts but would result in potentially significant adverse traffic and pedestrian impacts.

Traffic

As discussed in Chapter 12, "Transportation," the Proposed Actions would have the potential to result in significant adverse traffic impacts during one or more peak hours at five intersection approaches/lane groups at four study area intersections (see Table 19-1).

Table 19-1: Summary of Potentially Significant Adverse Traffic Impacts due to the Proposed Actions

		Peak Hour			
ID	**Intersection Name (Direction)**	**Weekday AM**	**Weekday MD**	**Weekday PM**	**Saturday MD**
3A	Sheridan Blvd (NB/SB) & Edgewater Rd (WB) (at Jennings St)	(1) WB Approach	-	-	-
3B	Sheridan Blvd & Edgewater Rd (NB) (at Jennings St)	(1) NB Left-Turn	(1) NB Left-Turn	(1) NB Left-Turn	(1) NB Left-Turn
4	Westchester Ave (EB/WB) & Edgewater Rd/ NB Sheridan Expy Off-Ramp (NB)	-	-	(1) NB Through/ Right-Turn	-
5	Westchester Ave (EB/WB) & Whitlock Ave (SB)	(1) SB Through/ Right-Turn	(1) SB Through/ Right-Turn	(2) SB Left-Turn	(2) SB Left-Turn

EB: Eastbound; WB: Westbound; NB: Northbound; and SB: Southbound.

Specifically, the potential for significant adverse traffic impacts would occur at three intersections during the weekday AM peak hour, two intersections during the weekday midday peak hour, three intersections during the weekday PM peak hour, and two intersections during the Saturday midday peak hour (see Table 19-1).

The potentially significant adverse traffic impacts at all five impacted intersection approaches/lane groups could be mitigated with the modification of traffic signal timings. The feasibility of these proposed traffic signal timing modifications will be further explored by the applicant in consultation with the New York City Department of Transportation (NYCDOT) between the DEIS and the FEIS. If these measures are deemed infeasible and no alternative mitigation measures can be identified, then the significant adverse traffic impacts would be unmitigated.

Pedestrians

As discussed in Chapter 12, "Transportation," the Proposed Actions would have the potential to result in significant adverse pedestrian impacts during one or more peak hours at seven pedestrian elements at four study area intersections (see Table 19-2).

Table 19-2: Summary of Potentially Significant Adverse Pedestrian Impacts due to the Proposed Actions

		Peak Hour			
ID	**Element Name (Direction)**	**Weekday AM**	**Weekday MD**	**Weekday PM**	**Saturday MD**
1	Freeman St (EB/WB) & Hoe Ave (NB/SB)	(1) NE E-W Sidewalk	-	(1) NE E-W Sidewalk	(1) NE E-W Sidewalk
4	Freeman St (EB/WB) & Longfellow Ave (NB/SB)	(1) NE Corner	-	-	-
8	Sheridan Blvd (NB/SB) & Jennings Street (EB/WB)	(1) S Crosswalk	(1) S Crosswalk (2) N Crosswalk	(1) S Crosswalk	(1) S Crosswalk
9	Edgewater Rd (NB/SB) & Jennings St (EB/WB)	(1) S Crosswalk (3) NE N-S Sidewalk	(1) S Crosswalk (3) NE N-S Sidewalk	(1) S Crosswalk (2) N Crosswalk	(1) S Crosswalk (2) N Crosswalk

EB: Eastbound; WB: Westbound; NB: Northbound; SB: Southbound; NE: Northeast; NW: Northwest; SE: Southeast; SW: Southwest; E: East; W: West; N: North; S: South; N-S: North-South; and E-W: East-West.

Specifically, the potential for significant adverse pedestrian impacts would occur at four intersections during the weekday AM peak hour, two intersections during the weekday

midday peak hour, three intersections during the weekday PM peak hour, and three intersections during the Saturday midday peak hour (see Table 19-2).

The potentially significant adverse pedestrian impacts at four out of the seven impacted pedestrian elements could be mitigated with readily implementable engineering measures, including the installation of a physical corner extension, crosswalk widening, and the relocation of an existing signpost. Implementation of the recommended mitigation measures would be the responsibility of the applicant and is subject to review and approval by NYCDOT. If these measures are deemed infeasible and no alternative mitigation measures can be identified, then the significant adverse pedestrian impacts would be unmitigated.

Three pedestrian elements that could experience potentially significant adverse impacts would remain unmitigated with the Proposed Actions. These include the south crosswalk of Sheridan Boulevard and Jennings Street, the sidewalk on the north side of Freeman Street, between Hoe and Vyse Avenues, and the south crosswalk of Edgewater Road and Jennings Street.

Sheridan Boulevard and Jennings Street – South Crosswalk

In the weekday AM, midday, PM, and Saturday midday peak hours, the significant adverse pedestrian impacts to the south crosswalk would remain unmitigated with the Proposed Actions. The intersection's proximity to up- and downstream traffic signals, as well as the relatively long pedestrian crossing distance on Sheridan Boulevard, limit opportunities for implementation of readily available operational improvements.

Freeman Street and Hoe Avenue

In the weekday AM, PM, and Saturday midday peak hours, the significant adverse pedestrian impacts on the north sidewalk of Freeman Street, between Hoe and Vyse avenues (northeast, east-west sidewalk), would remain unmitigated. The sidewalk's total width (approximately 8 feet) and proximity to adjacent private properties to the north, as well as the presence of utility infrastructures (light poles and a fire hydrant), limit opportunities to implement readily available improvements.

Edgewater Road and Jennings Street – South Crosswalk

In the weekday AM, midday, PM, and Saturday midday peak hours, the significant adverse pedestrian impacts to the south crosswalk would remain unmitigated with the Proposed Actions. The traffic signal at this intersection works as a couplet with the adjacent signal at Sheridan Boulevard and Jennings Street, with one coordinated signal timing plan for both intersections. As discussed above, these intersections' proximity to up- and downstream traffic signals, as well as the relatively long pedestrian crossing distance on Sheridan Boulevard, limit opportunities to implement readily available operational improvements.

Construction

As discussed in Chapter 18, "Construction," potentially significant adverse traffic impacts could result from construction of the Proposed Development during one or more peak hours at up to three intersection approaches/lane groups at three study area intersections (see Table 19-3). Specifically, the potential for significant adverse traffic impacts would

occur at one intersection during the weekday AM construction peak hour and three intersections during the weekday PM construction peak hour (see Table 19-3).

Table 19-3: Summary of Potentially Significant Adverse Traffic Impacts due to Construction

ID	Intersection Name (Direction)	Peak Hour	
		Weekday AM Construction	Weekday PM Construction
2B	Sheridan Blvd & Edgewater Rd (NB) (at East 172nd Street)	-	NB Left-Turn
3B	Sheridan Blvd & Edgewater Rd (NB) (at Jennings St)	NB Left-Turn	NB Left-Turn
5	Westchester Ave (EB/WB) & Whitlock Ave (SB)	-	SB Left-Turn

The potentially significant adverse traffic impacts at all three intersection approaches/lane groups could be mitigated with the modification of traffic signal timings. The feasibility of these proposed traffic signal timing modifications will be further explored by the applicant in consultation with NYCDOT between the DEIS and the FEIS. If these measures are deemed infeasible and no alternative mitigation measures can be identified, then the significant adverse traffic impacts would be unmitigated.

19.3 Transportation

Traffic

As discussed in Chapter 12, "Transportation," the Proposed Actions would have the potential to result in significant adverse traffic impacts during one or more peak hours at up to five intersection approaches/lane groups at four study area intersections, summarized as follows and in Table 19-1:

- The westbound approach at the Sheridan Boulevard and Edgewater Road intersection, opposite Jennings Street, during the weekday AM peak hour.
- The northbound left-turn at the Sheridan Boulevard and Edgewater Road intersection, opposite Jennings Street, during the weekday AM, midday, PM and Saturday midday peak hours, respectively.
- The northbound through/right-turn at the Westchester Avenue and Edgewater Road intersection during the weekday PM peak hour.
- The southbound left-turn at the Westchester Avenue and Whitlock Avenue intersection during the weekday PM and Saturday midday peak hours.
- The southbound through and through/right-turn at the Westchester Avenue and Whitlock Avenue intersection during the weekday AM and midday peak hours.

The potentially significant adverse traffic impacts at all five impacted intersection approaches/lane groups could be mitigated with the modification of traffic signal timings. The proposed signal timing modifications are discussed as follows and summarized in Table 19-4 through 20-7 for the weekday AM, midday, PM, and Saturday midday peak hours, respectively:

Sheridan Boulevard and Edgewater Road (at Jennings Street) – West of Service Road Median

In the weekday AM peak hour, the potentially significant adverse traffic impact to the westbound Edgewater Road approach could be mitigated by shifting three seconds from the northbound/southbound Sheridan Boulevard phase to the westbound Edgewater Road phase.

Sheridan Boulevard and Edgewater Road (at Jennings Street) – East of Service Road Median

The potentially significant adverse traffic impacts to the northbound Edgewater Road left-turn movement could be mitigated as follows:

- In the weekday AM peak hour, shift three seconds from the northbound through Edgewater Road phase to the northbound left-turn/through Edgewater Road phase.
- In the weekday midday peak hour, shift two seconds from the northbound through Edgewater Road phase to the northbound left-turn/through Edgewater Road phase.
- In the weekday PM peak hour, shift three seconds from the northbound through Edgewater Road phase to the northbound left-turn/through Edgewater Road phase.
- In the Saturday midday peak hour, shift three seconds from the northbound through Edgewater Road phase to the northbound left-turn/through Edgewater Road phase.

Westchester Avenue, Edgewater Road and the Northbound Sheridan Expressway Off-Ramp

In the weekday PM peak hour, the potentially significant adverse traffic impact to the northbound Sheridan Expressway Off-Ramp through/right-turn movement could be mitigated by shifting one second from the eastbound/westbound Westchester Avenue phase to the northbound Sheridan Expressway Off-Ramp phase; and shifting three additional seconds from the shared eastbound/westbound Westchester Avenue phase to the exclusive eastbound Westchester Avenue phase.

Westchester Avenue and Whitlock Avenue

The potentially significant adverse traffic impacts to the southbound Whitlock Avenue through/right-turn movement and southbound Whitlock Avenue left-turn movement could be mitigated as follows:

- In the weekday AM peak hour, shift one second from the shared eastbound/westbound Westchester Avenue phase to the southbound Whitlock Avenue phase; and shift two additional seconds from the shared eastbound/westbound Westchester Avenue phase to the exclusive westbound Westchester Avenue phase.
- In the weekday midday peak hour, shift one second from the eastbound/westbound Westchester Avenue phase to the southbound Whitlock Avenue phase.
- In the weekday PM peak hour, shift seven seconds from the eastbound/westbound Westchester Avenue phase to the southbound Whitlock Avenue phase.
- In the Saturday midday peak hour, shift one second from the eastbound/westbound Westchester Avenue phase to the southbound Whitlock Avenue phase.

Table 19-4: Summary of Recommended Traffic Mitigation Measures – Weekday AM Peak Hour

ID	Intersection Name (Direction)	No-Action Signal Timing	Recommended Mitigation Measures	Recommended Signal Timing
3A	Sheridan Blvd (NB/SB) & Edgewater Rd (WB) (at Jennings St)	NB/SB: Green = 71s WB: Green = 11s PED: Total = 34s	(1) Shift 3 seconds from NB/SB phase to the WB phase.	NB/SB: Green = 68s WB: Green = 14s PED: Total = 34s
3B	Sheridan Blvd & Edgewater Rd (NB) (at Jennings St)	NB T: Green = 71s NB: Green = 11s PED: Total = 34s	(1) Shift 3 seconds from NB T (through) phase to the NB phase.	NB T: Green = 68s NB: Green = 14s PED: Total = 34s
5	Westchester Ave (EB/WB) & Whitlock Ave (SB)	SB: Green = 27s EB/WB: Green = 35s WB: Green = 6s LPI: Total = 7s	(1) Shift 1 second from EB/WB phase to the SB phase. (2) Shift 2 seconds from the EB/WB phase to the WB phase.	SB: Green = 28s EB/WB: Green = 32s WB: Green = 8s LPI: Total = 7s

EB: Eastbound; WB: Westbound; NB: Northbound; SB Southbound; PED: Exclusive Pedestrian Phase; T: Through.

Table 19-5: Summary of Recommended Traffic Mitigation Measures – Weekday Midday Peak Hour

ID	Intersection (Direction)	No-Action Signal Timing	Recommended Mitigation Measures	Recommended Signal Timing
3A	Sheridan Blvd (NB/SB) & Edgewater Rd (WB) (at Jennings St)	NB/SB: Green = 71s WB: Green = 11s PED: Total = 34s	(1) Shift 2 seconds from NB/SB phase to the WB phase.	NB/SB: Green = 69s WB: Green = 13s PED: Total = 34s
3B	Sheridan Blvd & Edgewater Rd (NB) (at Jennings St)	NB T: Green = 71s NB: Green = 11s PED: Total = 34s	(1) Shift 2 seconds from NB T (through) phase to the NB phase.	NB T: Green = 69s NB: Green = 13s PED: Total = 34s
5	Westchester Ave (EB/WB) & Whitlock Ave (SB)	SB: Green = 28s EB/WB: Green = 34s WB: Green = 6s LPI: Total = 7s	(1) Shift 1 second from EB/WB phase to the SB phase.	SB: Green = 29s EB/WB: Green = 33s WB: Green = 6s LPI: Total = 7s

EB: Eastbound; WB: Westbound; NB: Northbound; SB Southbound; PED: Exclusive Pedestrian Phase; LPI: Lead Pedestrian Interval; T: Through.

Table 19-6: Summary of Recommended Traffic Mitigation Measures – Weekday PM Peak Hour

ID	Intersection Name (Direction)	No-Action Signal Timing	Recommended Mitigation Measures	Recommended Signal Timing
3A	Sheridan Blvd (NB/SB) & Edgewater Rd (WB) (at Jennings St)	NB/SB: Green = 71s WB: Green = 11s PED: Total = 34s	(1) Shift 3 seconds from NB/SB phase to the WB phase.	NB/SB: Green = 68s WB: Green = 14s PED: Total = 34s
3B	Sheridan Blvd & Edgewater Rd (NB) (at Jennings St)	NB T: Green = 71s NB: Green = 11s PED: Total = 34s	(1) Shift 3 seconds from NB T (through) phase to the NB phase.	NB T: Green = 68s NB: Green = 14s PED: Total = 34s
4	Westchester Ave (EB/WB) & Edgewater Rd/NB Sheridan Expy Off-Ramp (NB)	NB: Green = 32s EB/WB: Green = 30s EB: Green = 13s	(1) Shift 1 second from the EB/WB phase to the NB phase. (2) Shift 3 seconds from the EB/WB phase to the EB phase.	NB: Green = 33s EB/WB: Green = 26s EB: Green = 16s
5	Westchester Ave (EB/WB) & Whitlock Ave (SB)	SB: Green = 28s EB/WB: Green = 34s WB: Green = 6s LPI: Total = 7s	(1) Shift 7 seconds from EB/WB phase to the SB phase.	SB: Green = 35s EB/WB: Green = 27s WB: Green = 6s LPI: Total = 7s

EB: Eastbound; WB: Westbound; NB: Northbound; SB Southbound; PED: Exclusive Pedestrian Phase; LPI: Lead Pedestrian Interval; T: Through.

Table 19-7: Summary of Recommended Traffic Mitigation Measures – Saturday Midday Peak Hour

ID	Intersection Name (Direction)	No-Action Signal Timing	Recommended Mitigation Measures	Recommended Signal Timing
3A	Sheridan Blvd (NB/SB) & Edgewater Rd (WB) (at Jennings St)	NB/SB: Green = 71s WB: Green = 11s PED: Total = 34s	(1) Shift 3 seconds from NB/SB phase to the WB phase.	NB/SB: Green = 68s WB: Green = 14s PED: Total = 34s
3B	Sheridan Blvd & Edgewater Rd (NB) (at Jennings St)	NB T: Green = 71s NB: Green = 11s PED: Total = 34s	(1) Shift 3 seconds from NB T (through) phase to the NB phase.	NB T: Green = 68s NB: Green = 14s PED: Total = 34s
5	Westchester Ave (EB/WB) & Whitlock Ave (SB)	SB: Green = 28s EB/WB: Green = 34s WB: Green = 6s LPI: Total = 7s	(1) Shift 1 second from EB/WB phase to the SB phase.	SB: Green = 29s EB/WB: Green = 33s WB: Green = 6s LPI: Total = 7s

EB: Eastbound; WB: Westbound; NB: Northbound; SB Southbound; PED: Exclusive Pedestrian Phase; LPI: Lead Pedestrian Interval.

Table 19-8 through Table 19-11 summarize the volume-to-capacity (v/c) ratios, delays and Levels of Service (LOS) for the impacted intersections in the With-Action-With-Mitigation Condition, and compares them to the No-Action and With-Action Conditions for the weekday AM, midday, PM, and Saturday midday peak hours, respectively. Per *CEQR Technical Manual* guidelines, a significant adverse traffic impact is considered to be mitigated when the LOS in the With-Action-With-Mitigation Condition, as compared to the No-Action Condition, does not exceed the significant impact criteria discussed in Chapter 12, "Transportation."

The feasibility of these proposed traffic signal timing modifications will be further explored by the applicant in consultation with NYCDOT between the DEIS and the FEIS. Specifically, the applicant will perform the relevant signal coordination and progression analysis related to signal timing modifications at the impacted intersections in consultation with NYCDOT. The signal coordination and progression analysis will evaluate the feasibility of proposed signal timing modifications along specified corridors. If these measures are deemed infeasible and no alternative mitigation measures can be identified, then the significant adverse traffic impacts would remain unmitigated.

Table 19-8: LOS Comparison Summary – Weekday AM Peak Hour

						No-Action			With-Action			With-Action with Mitigation		
ID	Intersection Name	Control	Street Name	Direction	Lane Group	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS
3A	Sheridan Boulevard & Edgewater Road (at Jennings Street)	Signal	Edgewater Road	WB	LR	0.93	24.8	C	1.19	108.9	F	0.93	20.0	B
			Sheridan Boulevard	NB	T/T	0.31	7.6	A	0.31	7.6	A	0.32	8.9	A
				SB	T/T/T	0.65	11.1	B	0.66	11.2	B	0.68	13.3	B
				Overall Intersection		-	*11.2*	*B*	-	*18.3*	*B*	-	*12.9*	*B*
3B	Sheridan Boulevard & Edgewater Road (at Jennings Street)	Signal	Edgewater Road	NB	L	1.06	135.1	F	1.38	252.1	F	1.09	133.0	F
					R	0.21	3.2	A	0.27	3.4	A	0.27	3.4	A
				Overall Intersection		-	*60.1*	*E*	-	*113.3*	*F*	-	*60.6*	*E*
5	Westchester Avenue & Whitlock Avenue	Signal	Westchester Avenue	EB	T/TR	0.57	23.5	C	0.57	23.6	C	0.62	26.8	C
				WB	LT/T	1.05	51.3	D	1.05	51.9	D	1.07	56.2	E
			Whitlock Avenue	SB	L	0.59	32.4	C	0.78	43.8	D	0.74	40.1	D
					T/TR	1.18	123.5	F	1.19	129.6	F	1.15	110.9	F
				Overall Intersection		-	*66.2*	*E*	-	*69.5*	*E*	-	*65.5*	*E*

Table 19-9: LOS Comparison Summary – Weekday Midday Peak Hour

						No-Action			With-Action			With-Action with Mitigation		
ID	Intersection Name	Control	Street Name	Direction	Lane Group	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS
3A	Sheridan Boulevard & Edgewater Road (at Jennings Street)	Signal	Edgewater Road	WB	LR	0.51	21.8	C	0.68	30.9	C	0.58	19.9	B
			Sheridan Boulevard	NB	T/T	0.32	16.8	B	0.32	16.8	B	0.33	17.9	B
				SB	T/T/T	0.58	8.1	A	0.59	8.3	A	0.61	9.4	A
				Overall Intersection		-	*10.8*	*B*	-	*11.5*	*B*	-	*12.0*	*B*
3B	Sheridan Boulevard & Edgewater Road (at Jennings Street)	Signal	Edgewater Road	NB	L	0.58	74.6	E	0.80	97.1	F	0.68	77.7	E
					R	0.26	11.3	B	0.31	11.9	B	0.31	11.9	B
				Overall Intersection		-	*26.1*	*C*	-	*34.4*	*C*	-	*29.3*	*C*
5	Westchester Avenue & Whitlock Avenue	Signal	Westchester Avenue	EB	T/TR	0.54	23.8	C	0.55	23.8	C	0.56	24.8	C
				WB	LT/T	0.83	14.9	B	0.83	15.0	B	0.85	16.2	B
			Whitlock Avenue	SB	L	0.52	29.4	C	0.64	33.9	C	0.61	32.0	C
					T/TR	1.04	73.4	E	1.07	83.3	F	1.03	69.7	E
				Overall Intersection		-	*38.2*	*D*	-	*42.0*	*D*	-	*37.9*	*D*

Table 19-10: LOS Comparison Summary – Weekday PM Peak Hour

						No-Action			With-Action			With-Action with Mitigation		
ID	Intersection Name	Control	Street Name	Direction	Lane Group	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS
3A	Sheridan Boulevard & Edgewater Road (at Jennings Street)	Signal	Edgewater Road	WB	LR	0.70	29.7	C	0.89	28.3	C	0.70	22.3	C
			Sheridan Boulevard	NB	T/T	0.53	20.1	C	0.53	20.1	C	0.56	22.2	C
				SB	T/T/T	0.56	8.2	A	0.57	8.6	A	0.60	10.3	B
				Overall Intersection		-	*13.7*	*B*	-	*14.0*	*B*	-	*15.4*	*B*
3B	Sheridan Boulevard & Edgewater Road (at Jennings Street)	Signal	Edgewater Road	NB	L	0.82	96.0	F	1.04	145.3	F	0.82	88.1	F
					R	0.26	11.2	B	0.31	11.9	B	0.31	11.9	B
				Overall Intersection		-	*38.9*	*D*	-	*56.8*	*E*	-	*37.5*	*D*
4	Westchester Avenue & Edgewater Road/ NB Sheridan Expressway Off-Ramp	Signal	Westchester Avenue	EB	LT/T	1.01	41.2	D	1.05	49.0	D	1.06	54.3	D
				WB	T/T	0.57	26.8	C	0.57	26.8	C	0.66	31.5	C
					R	0.18	22.2	C	0.45	30.8	C	0.57	41.2	D
			NB Sheridan Expy Off-Ramp	NB	L	0.10	19.8	B	0.10	19.8	B	0.10	19.1	B
					TR	0.83	41.7	D	0.94	55.7	E	0.91	49.6	D
				Overall Intersection		-	*35.9*	*D*	-	*42.7*	*D*	-	*46.2*	*D*
5	Westchester Avenue & Whitlock Avenue	Signal	Westchester Avenue	EB	T/TR	0.66	26.2	C	0.67	26.3	C	0.84	38.6	D
				WB	LT/T	0.64	8.6	A	0.64	8.7	A	0.80	13.7	B
			Whitlock Avenue	SB	L	1.04	80.5	F	1.36	210.4	F	1.03	75.3	E
					T/TR	0.73	33.1	C	0.76	34.8	C	0.59	24.3	C
				Overall Intersection		-	*33.9*	*C*	-	*61.5*	*E*	-	*36.2*	*D*

Table 19-11: LOS Comparison Summary – Saturday Midday Peak Hour

						No-Action			With-Action			With-Action with Mitigation		
ID	Intersection Name	Control	Street Name	Direction	Lane Group	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS
3A	Sheridan Boulevard & Edgewater Road (at Jennings Street)	Signal	Edgewater Road	WB	LR	0.82	26.2	C	1.03	54.2	D	0.81	19.1	B
			Sheridan Boulevard	NB	T/T	0.40	17.8	B	0.40	17.8	B	0.42	19.7	B
				SB	T/T/T	0.73	8.7	A	0.74	9.2	A	0.78	11.1	B
				Overall Intersection		-	*12.0*	*B*	-	*14.1*	*B*	-	*13.7*	*B*
3B	Sheridan Boulevard & Edgewater Road (at Jennings Street)	Signal	Edgewater Road	NB	L	1.05	148.0	F	1.33	246.3	F	1.04	134.7	F
					R	0.31	11.9	B	0.38	12.7	B	0.38	12.7	B
				Overall Intersection		-	*56.3*	*E*	-	*91.7*	*F*	-	*53.9*	*D*
5	Westchester Avenue & Whitlock Avenue	Signal	Westchester Avenue	EB	T/TR	0.63	25.3	C	0.64	25.4	C	0.65	26.6	C
				WB	LT/T	0.76	16.3	B	0.77	16.5	B	0.79	17.1	B
			Whitlock Avenue	SB	L	0.66	33.3	C	0.92	59.2	E	0.88	51.2	D
					T/TR	0.78	34.4	C	0.82	36.9	D	0.79	34.3	C
				Overall Intersection		-	*26.2*	*C*	-	*30.6*	*C*	-	*29.3*	*C*

Pedestrians

As discussed in Chapter 12, "Transportation," the Proposed Actions would have the potential to result in significant adverse pedestrian impacts during one or more peak hours at up to seven pedestrian elements at four study area intersections, summarized as follows and in Table 19-2:

Crosswalks

- The north crosswalk (across Sheridan Boulevard) at the intersection of Sheridan Boulevard and Edgewater Road, opposite Jennings Street, during the weekday midday peak hour.
- The south crosswalk (across Sheridan Boulevard) at the intersection of Sheridan Boulevard and Edgewater Road, opposite Jennings Street, during the weekday AM, midday, PM and Saturday midday peak hours.
- The north crosswalk (across Edgewater Road) at the intersection of Sheridan Boulevard and Edgewater Road, opposite Jennings Street, during the weekday PM and Saturday midday peak hours.
- The south crosswalk (across Edgewater Road) at the intersection of Sheridan Boulevard and Edgewater Road, opposite Jennings Street, during the weekday AM, midday, PM and Saturday midday peak hours.

Corners

- The northeast corner at the intersection of Longfellow Avenue and Freeman Street during the weekday AM peak hour.

Sidewalks

- The northeast, east-west sidewalk at the intersection of Freeman Street and Hoe Avenue during the weekday AM, PM and Saturday midday peak hours.

- The northeast, north-south sidewalk at the intersection of Sheridan Boulevard and Edgewater Road, opposite Jennings Street, during the weekday AM and midday peak hours.

As discussed below, the potentially significant adverse pedestrian impacts at four out of the seven impacted pedestrian elements could be mitigated with readily implementable engineering measures, including the installation of a physical corner extension, crosswalk widening and the relocation of an existing sign post. Three pedestrian elements that could experience potentially significant adverse impacts would remain unmitigated with the Proposed Actions. These include the south crosswalk of Sheridan Boulevard and Jennings Street, the sidewalk on the north side of Freeman Street, between Hoe and Vyse Avenues, and the south crosswalk of Edgewater Road and Jennings Street.

Freeman Street and Hoe Avenue

In the weekday AM, PM, and Saturday midday peak hours, the significant adverse pedestrian impacts on the north sidewalk of Freeman Street, between Hoe and Vyse Avenues (northeast, east-west sidewalk) would remain unmitigated with the Proposed Actions. The sidewalk's total width (approximately 8 feet) and proximity to adjacent private properties to the north, as well as the presence of utility infrastructures (light poles and a fire hydrant), limit opportunities for implementation of readily available improvements. Providing additional pedestrian circulation space to the south of the sidewalk (i.e. extending the sidewalk into Freeman Street) would result in the loss of multiple on-street public parking spaces. Potential mitigation measures will be explored for this sidewalk segment between the DEIS and FEIS in consultation with DCP and NYCDOT. In the absence of feasible mitigation measures, the impacts during the weekday AM, PM, and Saturday midday peak hours would remain unmitigated.

Freeman Street and Longfellow Avenue

The potentially significant adverse pedestrian impact to the northeast corner of Freeman Street and Longfellow Avenue during the weekday AM peak hour could be mitigated by installing a physical corner extension within the existing roadway pavement area adjacent to the corner. A conceptual layout for the proposed physical corner extension at this location is shown in Appendix G – Figure G-1 (for illustrative purposes only). The proposed design for this improvement will be further refined between the DEIS and the FEIS and would require approval by NYCDOT for implementation. In the absence of a feasible mitigation measure, the impact during the weekday AM peak hour would remain unmitigated.

Sheridan Boulevard and Jennings Street

North Crosswalk

The significant adverse pedestrian impact to the north crosswalk during the weekday midday peak hour could be mitigated by widening the north crosswalk by approximately 2 feet, resulting in a total north crosswalk width equal to approximately 16 feet. Due to the existing alignment of the southbound Sheridan Boulevard STOP-bar at this intersection (set back approximately 14 feet from the existing crosswalk), the proposed crosswalk widening would not necessitate the relocation of the existing STOP-bar for southbound traffic on Sheridan Boulevard (minimum 10-foot setback is required).

South Crosswalk

In the weekday AM, midday, PM, and Saturday midday peak hours, the significant adverse pedestrian impacts to the south crosswalk would remain unmitigated with the Proposed Actions. The intersection's proximity to up- and downstream traffic signals, as well as the relatively long pedestrian crossing distance on Sheridan Boulevard, limit opportunities for implementation of readily available operational improvements. Potential alternative mitigation measures will be explored between the DEIS and FEIS in consultation with DCP and NYCDOT. In the absence of feasible mitigation measures, the impacts during the weekday AM, midday, PM, and Saturday midday peak hours remain unmitigated.

Edgewater Road and Jennings Street

North Crosswalk

The potentially significant adverse pedestrian impacts to the north crosswalk during the weekday PM and Saturday midday peak hours could be mitigated by widening the north crosswalk by approximately 4 feet, resulting in a total north crosswalk width equal to approximately 18 feet.

East Sidewalk (North of Jennings Street)

The potentially significant adverse pedestrian impacts to the sidewalk on the east side of Edgewater Road between Jennings and East 172nd Streets (northeast, north-south sidewalk) during the weekday AM and midday peak hours could be mitigated by relocating the existing "No Parking, Tuesday and Friday, 8:00 – 9:30 AM" sign post approximately 5 feet to the southwest, within the mid-block sidewalk bump-out area (see Appendix G – Figure G-3). This would result in a minimum effective passable width on the sidewalk equal to approximately 8 feet (accounting for shy distances), which would be sufficient to mitigate the significant adverse pedestrian impacts at this location.

South Crosswalk

In the weekday AM, midday, PM, and Saturday midday peak hours, the potentially significant adverse pedestrian impacts to the south crosswalk would remain unmitigated with the Proposed Actions. The traffic signal at this intersection works as a couplet with the adjacent signal at Sheridan Boulevard and Jennings Street, with one coordinated signal timing plan for both intersections. As discussed above, these intersections' proximity to up- and downstream traffic signals, as well as the relatively long pedestrian crossing distance on Sheridan Boulevard, limit opportunities for implementation of readily available operational improvements. Potential alternative mitigation measures will be explored between the DEIS and FEIS in consultation with DCP and NYCDOT. In the absence of feasible mitigation measures, the impacts during the weekday AM, midday, PM, and Saturday midday peak hours would remain unmitigated.

Table 19-12 through Table 19-14 summarize the average space (ft^2/p) and LOS in the With-Action-With-Mitigation Condition for the impacted pedestrian crosswalk, corner, and sidewalk elements, respectively, and compares them to the No-Action and With-Action Conditions. Per *CEQR Technical Manual* guidelines, a significant adverse pedestrian impact is considered to be mitigated when the LOS in the With-Action-With-Mitigation Condition, as compared to the No-Action Condition, does not exceed the significant impact criteria discussed in Chapter 12, "Transportation."

Implementation of the recommended mitigation measures would be the responsibility of the applicant and is subject to review and approval by NYCDOT. If these measures are deemed infeasible and no alternative mitigation measures can be identified, then the significant adverse pedestrian impacts would be unmitigated.

Table 19-12: LOS Comparison Summary – Crosswalk Analysis

				No-Action			With-Action			With-Action with Mitigation		
Analysis Period	ID	Location	Crosswalk	Two-Way Peak Hour Volume	Average Space (ft^2/p)	LOS	Two-Way Peak Hour Volume	Average Space (ft^2/p)	LOS	Two-Way Peak Hour Volume	Average Space (ft^2/p)	LOS
Weekday AM Peak Hour	8	Sheridan Boulevard & Jennings Street	North	45	214.0	A	172	54.5	B	172	62.7	A
			South	34	160.4	A	413	11.4	E	413	11.4	E
	9	Edgewater Road & Jennings Street	North	27	250.5	A	153	40.2	B	153	52.7	B
			South	14	380.5	A	393	12.0	E	393	12.0	E
Weekday Midday Peak Hour	8	Sheridan Boulevard & Jennings Street	North	45	89.1	A	176	21.2	D	176	24.5	C
			South	11	526.4	A	351	12.7	E	351	12.7	E
	9	Edgewater Road & Jennings Street	North	15	248.0	A	146	30.1	C	146	39.9	C
			South	9	403.7	A	349	7.7	F	349	7.7	F
Weekday PM Peak Hour	8	Sheridan Boulevard & Jennings Street	North	35	230.7	A	218	35.0	C	218	40.3	B
			South	30	260.8	A	516	12.9	E	516	12.9	E
	9	Edgewater Road & Jennings Street	North	13	424.3	A	197	18.6	D	197	24.9	C
			South	26	207.8	A	512	7.9	F	512	7.9	F
Saturday Midday Peak Hour	8	Sheridan Boulevard & Jennings Street	North	22	333.3	A	233	26.8	C	233	31.0	C
			South	33	201.1	A	585	9.0	E	585	9.0	E
	9	Edgewater Road & Jennings Street	North	24	309.5	A	235	22.9	D	235	30.4	C
			South	23	204.7	A	576	4.9	F	576	4.9	F

Shading denotes an unmitigable potentially significant adverse pedestrian impact in the DEIS.

Table 19-13: LOS Comparison Summary – Corner Analysis

				No-Action			With-Action			With-Action with Mitigation		
Analysis Period	ID	Location	Corner	Two-Way Peak Hour Volume	Average Space (ft^2/p)	LOS	Two-Way Peak Hour Volume	Average Space (ft^2/p)	LOS	Two-Way Peak Hour Volume	Average Space (ft^2/p)	LOS
Weekday AM Peak Hour	4	Longfellow Avenue & Freeman Street	North-East	31	47.8	B	31	15.0	D	31	162.3	A
Weekday Midday Peak Hour	4	Longfellow Avenue & Freeman Street	North-East	9	168.4	A	9	60.7	A	9	412.8	A
Weekday PM Peak Hour	4	Longfellow Avenue & Freeman Street	North-East	14	276.6	A	14	66.5	A	14	434.3	A
Saturday Midday Peak Hour	4	Longfellow Avenue & Freeman Street	North-East	10	397.1	A	10	51.5	B	10	362.0	A

Table 19-14: LOS Comparison Summary – Sidewalk Analysis

					No-Action			With-Action			With-Action with Mitigation		
Analysis Period	ID	Location	Sidewalk Movement	Effective Width (ft)	Two-Way Peak Hour Volume	Average Space (ft^2/p)	Platoon LOS	Two-Way Peak Hour Volume	Average Space (ft^2/p)	Platoon LOS	Two-Way Peak Hour Volume	Average Space (ft^2/p)	Platoon LOS
Weekday AM Peak Hour	1	North Sidewalk on Freeman Street between Hoe Avenue and Vyse Avenue	East-West	1.3	124	104.0	B	395	31.8	D	395	31.8	D
	9	East Sidewalk on Edgewater Road between Jennings Street and East 172nd Street	North-South	3.3	10	1,318.6	A	334	38.1	D	334	94.1	B
Weekday Midday Peak Hour	9	East Sidewalk on Edgewater Road between Jennings Street and East 172nd Street	North-South	3.3	73	193.1	B	400	33.7	D	400	84.0	C
Weekday PM Peak Hour	1	North Sidewalk on Freeman Street between Hoe Avenue and Vyse Avenue	East-West	1.3	90	103.4	B	375	23.8	D	375	23.8	D
	9	East Sidewalk on Edgewater Road between Jennings Street and East 172nd Street	North-South	3.3	55	714.9	A	517	75.8	C	517	183.4	B
Saturday Midday Peak Hour	1	North Sidewalk on Freeman Street between Hoe Avenue and Vyse Avenue	East-West	1.3	90	126.5	B	408	27.0	D	408	27.0	D
	9	East Sidewalk on Edgewater Road between Jennings Street and East 172nd Street	North-South	3.3	73	454.3	B	603	53.7	C	603	131.0	B

Shading denotes an unmitigable potentially significant adverse pedestrian impact in the DEIS.

19.4 Construction

As discussed in Chapter 18, "Construction," the peak number of trips generated by construction of the Proposed Development is expected to occur in the first quarter of 2027 (eighth quarter of construction [Q8]). During this quarter, construction of the Proposed Development could result in potentially significant adverse traffic impacts during at least one of the weekday AM (6:00 AM – 7:00 AM) or PM (3:00 PM – 4:00 PM) construction peak hours at up to three intersection approaches/lane groups at three study area intersections. These potentially significant adverse traffic impacts are summarized in Table 19-3 and as follows:

- The northbound left-turn at the Sheridan Boulevard and Edgewater Road intersection, opposite East 172nd Street, during the weekday PM construction peak hour.
- The northbound left-turn at the Sheridan Boulevard and Edgewater Road intersection, opposite Jennings Street, during the weekday AM and PM construction peak hours.
- The southbound left-turn at the Westchester Avenue and Whitlock Avenue intersection during the weekday PM construction peak hour.

As discussed below and summarized in Table 19-15 and Table 19-16, the significant adverse traffic impacts at the three impacted intersection approaches/lane groups could be mitigated with traffic signal timing modifications.

Table 19-17 and Table 19-18 summarize the v/c ratios, delays and LOS for the impacted intersections in the With-Action-With-Mitigation Condition and compare them to the No-Action and With-Action conditions for the weekday AM and PM construction peak hours, respectively. Per *CEQR Technical Manual* guidelines, a potentially significant adverse traffic impact is considered to be mitigated when the LOS in the With-Action-With-Mitigation Condition, as compared to the No-Action Condition, does not exceed the significant impact criteria discussed in Chapter 12, "Transportation."

The proposed traffic signal timing modifications would be subject to review and approval by NYCDOT. The feasibility of these proposed traffic signal timing modifications will be further explored by the applicant in consultation with NYCDOT between the DEIS and the FEIS. If these measures are deemed infeasible and no alternative mitigation measures can be identified, then the significant adverse traffic impacts would remain unmitigated.

Sheridan Boulevard and Edgewater Road (at East 172nd Street) – East of Service Road Median

In the weekday PM construction peak hour, the significant adverse traffic impact to the northbound left-turn Edgewater Road lane group could be mitigated by shifting one second from the northbound through Edgewater Road phase to the northbound left-turn/through Edgewater Road phase. This signal timing modification on northbound Edgewater Road, east of the service road median, would also require a one second shift from the northbound/southbound Sheridan Boulevard phase to the westbound Edgewater Road phase at the intersection of Sheridan Boulevard and Edgewater Road, at East 172nd Street, west of the service road median.

Sheridan Boulevard and Edgewater Road (at Jennings Street) – East of Service Road Median

The significant adverse traffic impacts to the northbound left-turn Edgewater Road lane group could be mitigated as follows:

- In the weekday AM construction peak hour, shift one second from the northbound through Edgewater Road phase to the northbound left-turn/through Edgewater Road phase. This signal timing modification on northbound Edgewater Road, east of the service road median, would also require a one second shift from the northbound/southbound Sheridan Boulevard phase to the westbound Edgewater Road phase at the intersection of Sheridan Boulevard and Edgewater Road, at Jennings Street, west of the service road median.
- In the weekday PM construction peak hour, shift three seconds from the northbound through Edgewater Road phase to the northbound left-turn/through Edgewater Road phase. This signal timing modification on northbound Edgewater Road, east of the service road median, would also require a three second shift from the northbound/southbound Sheridan Boulevard phase to the westbound Edgewater Road phase at the intersection of Sheridan Boulevard and Edgewater Road, at Jennings Street, west of the service road median.

Westchester Avenue and Whitlock Avenue

In the weekday PM construction peak hour, the significant adverse traffic impact to the southbound left-turn Whitlock Avenue lane group could be mitigated by shifting one second from the eastbound/westbound Westchester Avenue phase to the southbound Whitlock Avenue phase.

Table 19-15: Summary of Recommended Traffic Mitigation Measures – Weekday AM Construction Peak Hour

ID	Intersection Name (Direction)	No-Action Signal Timing	Recommended Mitigation Measures	Recommended Signal Timing
3A	Sheridan Blvd (NB/SB) & Edgewater Rd (WB) (at Jennings St)	NB/SB: Green = 71s WB: Green = 11s PED: Total = 34s	(1) Shift 1 second from NB/SB phase to the WB phase.	NB/SB: Green = 70s WB: Green = 12s PED: Total = 34s
3B	Sheridan Blvd & Edgewater Rd (NB) (at Jennings St)	NB T: Green = 71s NB: Green = 11s PED: Total = 34s	(1) Shift 1 second from NB T (through) phase to the NB phase.	NB T: Green = 70s NB: Green = 12s PED: Total = 34s

EB: Eastbound; WB: Westbound; NB: Northbound; SB Southbound; PED: Exclusive Pedestrian Phase; T: Through.

Table 19-16: Summary of Recommended Traffic Mitigation Measures – Weekday PM Construction Peak Hour

ID	Intersection Name (Direction)	No-Action Signal Timing	Recommended Mitigation Measures	Recommended Signal Timing
2A	Sheridan Blvd (NB/SB) & Edgewater Rd (WB) (at East 172nd St)	NB/SB: Green = 70s WB: Green = 11s PED: Total = 35s	(1) Shift 1 second from NB/SB phase to the WB phase.	NB/SB: Green = 69s WB: Green = 12s PED: Total = 35s
2B	Sheridan Blvd & Edgewater Rd (NB) (at East 172nd St)	NB T: Green = 70s NB: Green = 11s PED: Total = 35s	(1) Shift 1 second from NB T (through) phase to the NB phase.	NB T: Green = 69s NB: Green = 12s PED: Total = 35s
3A	Sheridan Blvd (NB/SB) & Edgewater Rd (WB) (at Jennings St)	NB/SB: Green = 71s WB: Green = 11s PED: Total = 34s	(1) Shift 3 seconds from NB/SB phase to the WB phase.	NB/SB: Green = 68s WB: Green = 14s PED: Total = 34s
3B	Sheridan Blvd & Edgewater Rd (NB) (at Jennings St)	NB T: Green = 71s NB: Green = 11s PED: Total = 34s	(1) Shift 3 seconds from NB T (through) phase to the NB phase.	NB T: Green = 68s NB: Green = 14s PED: Total = 34s
5	Westchester Ave (EB/WB) & Whitlock Ave (SB)	SB: Green = 28s EB/WB: Green = 34s WB: Green = 6s LPI: Total = 7s	(1) Shift 1 second from the EB/WB phase to the SB phase.	SB: Green = 29s EB/WB: Green = 33s WB: Green = 6s LPI: Total = 7s

EB: Eastbound; WB: Westbound; NB: Northbound; SB Southbound; PED: Exclusive Pedestrian Phase; T: Through.

Table 19-17: LOS Comparison Summary – Weekday AM Construction Peak Hour

						No-Action			With-Action			With-Action with Mitigation		
ID	Intersection Name	Control	Street Name	Direction	Lane Group	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS
3A	Sheridan Boulevard & Edgewater Road (at Jennings Street)	Signal	Edgewater Road	WB	LR	0.49	12.4	B	0.58	15.1	B	0.54	11.6	B
			Sheridan Boulevard	NB	T/T	0.19	6.7	A	0.19	6.7	A	0.19	7.1	A
				SB	T/T/T	0.38	8.0	A	0.40	8.2	A	0.41	8.7	A
				Overall Intersection		-	*8.0*	*A*	-	*8.3*	*A*	-	*8.5*	*A*
3B	Sheridan Boulevard & Edgewater Road (at Jennings Street)	Signal	Edgewater Road	NB	L	0.61	52.1	D	0.73	61.4	E	0.66	54.4	D
					R	0.13	2.9	A	0.22	3.2	A	0.22	3.2	A
				Overall Intersection		-	*23.9*	*C*	-	*22.0*	*C*	-	*19.7*	*B*

EB: Eastbound; WB: Westbound; NB: Northbound; SB Southbound; L: Left; T: Through; R: Right.

Table 19-18: LOS Comparison Summary – Weekday PM Construction Peak Hour

						No-Action			With-Action			With-Action with Mitigation		
ID	Intersection Name	Control	Street Name	Direction	Lane Group	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS
2A	Sheridan Boulevard & Edgewater Road (at East 172nd Street)	Signal	Edgewater Road	WB	LR	0.21	5.1	A	0.39	10.3	B	0.36	7.1	A
			Sheridan Boulevard	NB	T/T	0.59	8.3	A	0.59	8.3	A	0.60	7.5	A
				SB	T/T/T	0.61	14.5	B	0.61	14.5	B	0.61	15.2	B
				Overall Intersection		-	*12.0*	*B*	-	*12.0*	*B*	-	*12.0*	*B*
2B	Sheridan Boulevard & Edgewater Road (at East 172nd Street)	Signal	Edgewater Road	NB	L	0.25	52.8	D	0.46	60.5	E	0.42	57.4	E
					T	0.39	28.7	C	0.62	35.9	D	0.62	35.9	D
				Overall Intersection		-	*32.0*	*C*	-	*39.7*	*D*	-	*39.2*	*D*
3A	Sheridan Boulevard & Edgewater Road (at Jennings Street)	Signal	Edgewater Road	WB	LR	0.70	29.7	C	0.93	32.9	C	0.73	23.3	C
			Sheridan Boulevard	NB	T/T	0.56	20.5	C	0.56	20.5	C	0.58	22.7	C
				SB	T/T/T	0.57	8.2	A	0.58	8.9	A	0.61	10.2	B
				Overall Intersection		-	*13.9*	*B*	-	*14.7*	*B*	-	*15.7*	*B*
3B	Sheridan Boulevard & Edgewater Road (at Jennings Street)	Signal	Edgewater Road	NB	L	0.82	96.0	F	1.10	162.9	F	0.86	94.5	F
					R	0.27	11.4	B	0.34	12.3	B	0.34	12.3	B
				Overall Intersection		-	*38.1*	*D*	-	*60.3*	*E*	-	*38.5*	*D*
5	Westchester Avenue & Whitlock Avenue	Signal	Westchester Avenue	EB	T/TR	0.70	27.3	C	0.70	27.3	C	0.72	28.6	C
				WB	LT/T	0.63	7.9	A	0.63	7.9	A	0.65	8.3	A
			Whitlock Avenue	SB	L	1.09	97.4	F	1.13	111.7	F	1.09	96.8	F
					T/TR	0.72	32.6	C	0.74	33.6	C	0.72	31.9	C
				Overall Intersection		-	*37.4*	*D*	-	*40.5*	*D*	-	*37.6*	*D*

EB: Eastbound; WB: Westbound; NB: Northbound; SB Southbound; L: Left; T: Through; R: Right.