A. INTRODUCTION

In accordance with the 2020 *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~~, and if possible described in the Draft Environmental Impact Statement (DEIS). However, it is not unusual that the details about certain mitigation measures will not be discussed until the Final Environmental Impact Statement (FEIS) and that the lead agency, in coordination with other City agencies, is typically exploring further and/or additional feasible and practicable mitigation measures between the DEIS and FEIS. Therefore, the FEIS will include more complete information and commitments on all practicable mitigation measures that will be implemented with the Proposed Actions~~.

The potential for the Proposed Actions and resultant Proposed Development to result in significant adverse impacts was evaluated in Chapters 2 through 18 of this EIS. The Proposed Actions have the potential to result in significant adverse impacts to pedestrian (crosswalk) conditions, pedestrian safety, and construction noise. Potential mitigation measures for these technical areas were developed in consultation with the NYC Department of City Planning (DCP) and the NYC Department of Transportation (DOT), and are identified below. Additional measures to mitigate these adverse impacts were evaluated between the DEIS and FEIS. Therefore, the FEIS includes additional information concerning practicable mitigation measures for the Proposed Actions.

B. PRINCIPAL CONCLUSIONS

Transportation

Pedestrians

Incremental demand from the Proposed Actions would significantly adversely impact five crosswalks in one or more analyzed peak hours. There would be no significant adverse impacts to analyzed sidewalks or corner areas in any period. Widening the impacted crosswalks by one to 5.5 feet would fully mitigate all of the significant impacts. Implementation of the proposed mitigation measures would be subject to review and approval by the New York City Department of Transportation (DOT). In the absence of the application of these mitigation measures, the impacts would remain unmitigated.

Street User Safety

Currently, the only crosswalk on River Street in proximity to the Project Area is located at North 3rd Street. It is therefore likely that some pedestrians traveling to and from the Proposed Development Site would choose to cross River Street at a more proximate location where a crosswalk is not present, such as at Metropolitan Avenue or North 1st Street. This would result in a significant pedestrian safety impact. ~~This impact is expected to be fully mitigated by t~~The installation of a new traffic signal and pedestrian crossing on River Street at Metropolitan Avenue ~~one or both of these locations. A new crossing would involve the installation of a new traffic signal, a new all-way stop control, or an Enhanced Pedestrian Crossing. Between~~

~~the DEIS and FEIS, the appropriate traffic control measure to be installed will be finalized in consultation with the lead agency and DOT to~~would facilitate the safe and efficient movement of pedestrians crossing River Street and fully mitigate the impact. ~~The installation of a new pedestrian crossing on River Street at Metropolitan Avenue and/or North 1st Street would fully mitigate the Proposed Actions' potential pedestrian safety impact.~~The proposed traffic signal and pedestrian crossing would be implemented by the Applicant in coordination with DOT, which has conditionally approved the installation. In the absence of the implementation of this mitigation measure, the impact would remain unmitigated.

Construction

Noise

As presented in Chapter 18, "Construction," construction activities associated with the Proposed Actions have the potential to result in temporary significant adverse impacts at residential, mixed-use, commercial and open space sensitive receptors in the vicinity of the Proposed Development Site.

As discussed in Chapter 18, "Construction," the Applicant has committed to feasible ~~various~~ noise reduction measures in accordance with the New York City Noise Code. Furthermore, a construction noise mitigation plan would be required to be prepared and approved by NYCDEP prior to construction. Additional path controls (such as portable barriers or shrouds around specific equipment) would be considered during the development of the construction noise mitigation plan. The Applicant is also committing to providing noise monitoring to ensure that violations of the NYC Noise Code do not occur at adjacent receptors.

~~However, for eight~~ Six of the impacted sensitive receptors (~~five~~ four residential/mixed use, and two commercial use~~ and one open space~~)~~,~~ already have double-paned windows and air conditioning/alternative means of ventilation (PTAC or central HVAC); thus there are no additional feasible and practicable receptor controls to further reduce noise levels~~no feasible and practicable receptor controls to further reduce noise levels were identified, and these temporary impacts would therefore remain unmitigated~~. For ~~one other~~two impacted sensitive receptors (residential buildings at 68 North 3rd Street and 223 Kent Avenue), window air conditioning units would be made available by the Applicant to apartments that do not already have an alternate means of ventilation prior to the start of construction of the Proposed Development, which would partially mitigate the significant adverse noise impacts predicted to occur at these locations during construction~~the feasibility of providing window AC units to any apartment units currently lacking them (if any) will be explored as a potential mitigation between the publication of the DEIS and FEIS~~. ~~This receptor control would reduce interior noise to less than the CEQR interior threshold for the temporary construction noise impact.~~ Lastly, Grand Ferry Park is predicted to experience a significant adverse construction noise impact. No practical and feasible mitigation measures have been identified that could reduce the ~~allow~~ noise levels to ~~stay~~ below ~~the~~ 55 dBA $L_{10(1)}$ guideline and/or eliminate project-generated impacts during construction at this location. It is important to note that for the majority of the construction period (35 months), the total noise level at Grand Ferry Park would be less than 65 dBA (L_{eq}), which is not atypical for open space resources in New York City.

~~Additional mitigation measures will be explored further by the Applicant in consultation with the lead agency between the DEIS and FEIS. If no additional feasible mitigation measures are found, the temporary construction noise impacts will be considered unmitigated.~~

C. TRANSPORTATION

Pedestrians

As discussed in Chapter 12, "Transportation," the results of the analyses of pedestrian conditions show that demand from the Proposed Actions would significantly adversely impact five crosswalks in one or more peak hours under the With Action Condition (see **Table 19-1**). There would be no significant impacts to any sidewalk or corner area in any period.

TABLE 19-1
Summary of Significant Pedestrian Impacts

Corridor/Intersection	Impacted Element	Peak Hour		
		AM	PM	Saturday
North 6th Street & Bedford Avenue	East Crosswalk		X	X
Wythe Avenue & Metropolitan Avenue	North Crosswalk		X	X
	South Crosswalk		X	X
Kent Avenue & Metropolitan Avenue	North Crosswalk	X	X	X
	South Crosswalk		X	X

A significant adverse pedestrian impact is considered mitigated if measures implemented return the anticipated conditions to an acceptable level, following the same criteria used in determining impacts. Standard mitigation for projected significant adverse crosswalk impacts can include providing additional signal green time or new signal phases; widening crosswalks; and providing curb extensions, neck-downs, or lane reductions to reduce pedestrian crossing distance. **Table 19-2** shows the recommended mitigation measures to address the Proposed Actions' significant crosswalk impacts and their effectiveness. As shown in **Table 19-2** and discussed below, with implementation of the proposed mitigation measures, all of the impacts would be fully mitigated in all analyzed peak periods.

East Crosswalk on North 6th Street at Bedford Avenue

As shown in **Table 19-2**, under the Proposed Actions the east crosswalk on North 6th Street at Bedford Avenue would operate at LOS D with an average of 22.6 ft^2/ped in the PM peak hour, and at LOS D with an average of 16.3 ft^2/ped in the Saturday peak hour. This crosswalk would be considered significantly adversely impacted in both periods based on *CEQR Technical Manual* criteria. With a one-foot widening (to a total of 12 feet in width), this crosswalk would improve to an acceptable LOS C in the PM peak hour and operate at LOS D with 18 ft^2/ped in the Saturday peak hour, and the Proposed Actions' significant adverse impacts to this crosswalk would be fully mitigated. In the absence of the application of this mitigation measure, the impacts would remain unmitigated.

North Crosswalk on Wythe Avenue at Metropolitan Avenue

As shown in **Table 19-2**, under the Proposed Actions the north crosswalk on Wythe Avenue at Metropolitan Avenue would operate at LOS D with 18.6~~22.5~~ ft^2/ped in the PM peak hour, and at LOS E~~D~~ with 13.8~~9.4~~ ft^2/ped in the Saturday peak hour, and would be considered significantly adversely impacted during both periods based on *CEQR Technical Manual* criteria. With a ~~2.5~~3-foot widening (to a total of 15.7~~2~~ feet in width), this crosswalk would operate at ~~improve to an acceptable~~ LOS D~~C~~ with 23.5 ft^2/ped in the PM peak hour and improve from LOS E to ~~operate at~~ LOS D with 17.5~~23.6~~ ft^2/ped in the Saturday peak hour, and the

Proposed Actions' significant adverse impacts to this crosswalk would be fully mitigated. In the absence of the application of this mitigation measure, the impacts would remain unmitigated.

TABLE 19-2
Action-With-Mitigation Crosswalk Conditions

Location	Crosswalk	No-Action			With-Action			Action-With-Mitigation			
		Width (ft)	Average Space (ft²/ped)	LOS	Width (ft)	Average Space (ft²/ped)	LOS	Width (ft)	Average Space (ft²/ped)	LOS	Mitigation Measures
AM Peak Hour											
Kent Ave & Metropolitan Ave	North	13.7	40.1	B	13.7	21.4	D*	19.2	30.5	C	Mitigated by widening the crosswalk by 5.5 feet
PM Peak Hour											
North 6th Street & Bedford Ave	East	11.0	29.0	C	11.0	22.6	D*	12.0	24.9	C	Mitigated by widening the crosswalk by 1 foot
Wythe Ave & Metropolitan Ave	North	12.7	25.230.5	C	12.7	18.622.5	D*	15.72	23.57.4	DC	Mitigated by widening the crosswalk by 32.5 feet
	South	16.1	26.4	C	16.1	19.5	D*	19.6	24.1	C	Mitigated by widening the crosswalk by 3.5 feet
Kent Ave & Metropolitan Ave	North	13.7	18.8	D	13.7	12.6	E*	19.2	18.1	D	Mitigated by widening the crosswalk by 5.5 feet
	South	13.3	18.0	D	13.3	13.3	E*	16.8	17.2	D	Mitigated by widening the crosswalk by 3.5 feet
Saturday Peak Hour											
North 6th Street & Bedford Ave	East	11.0	19.6	D	11.0	16.3	D*	12.0	18.0	D	Mitigated by widening the crosswalk by 1 foot
Wythe Ave & Metropolitan Ave	North	12.7	18.025.3	DC	12.7	13.819.4	ED*	15.72	17.523.6	D	Mitigated by widening the crosswalk by 32.5 feet
	South	16.1	16.624.7	DC	16.1	13.019.5	ED*	198.6	16.122.8	D	Mitigated by widening the crosswalk by 32.5 feet
Kent Ave & Metropolitan Ave	North	13.7	19.9	D	13.7	13.6	E*	19.2	19.2	D	Mitigated by widening the crosswalk by 5.5 feet
	South	13.3	15.3	D	13.3	12.4	E*	16.8	16.1	D	Mitigated by widening the crosswalk by 3.5 feet

Note: * denotes a significant adverse impact based on *CEQR Technical Manual* criteria.

South Crosswalk on Wythe Avenue at Metropolitan Avenue

As shown in **Table 19-2**, under the Proposed Actions the south crosswalk on Wythe Avenue at Metropolitan Avenue would operate at LOS D with 19.5 ft²/ped in the weekday PM peak hour and at LOS ED with 13.09.5 ft²/ped in the Saturday peak hour, and would be considered significantly adversely impacted during both this periods based on *CEQR Technical Manual* criteria. With a 32.5-foot widening (to a total of 189.6 feet in width), this crosswalk would operate at LOS C with 24.1 ft²/ped in the weekday PM peak hour and at LOS D with 16.122.8 ft²/ped in the Saturday peak hour, and the Proposed Actions' significant adverse impacts to this crosswalk would be fully mitigated. In the absence of the application of this mitigation measure, the impacts would remain unmitigated.

North Crosswalk on Kent Avenue at Metropolitan Avenue

As shown in **Table 19-2**, under the Proposed Actions the north crosswalk on Kent Avenue at Metropolitan Avenue would operate at LOS D in the weekday AM peak hour and LOS E in the weekday PM and Saturday peak hours, and would be considered significantly adversely impacted during these periods based on *CEQR Technical Manual* criteria. With a 5.5-foot widening (to a total of 19.2 feet in width), conditions would improve to LOS C in the AM peak hour, and LOS D in the weekday PM and Saturday peak hours, and the

Proposed Actions' significant adverse impacts to this crosswalk would be fully mitigated. In the absence of the application of this mitigation measure, the impacts would remain unmitigated.

South Crosswalk on Kent Avenue at Metropolitan Avenue

As shown in **Table 19-2**, under the Proposed Actions the south crosswalk on Kent Avenue at Metropolitan Avenue would operate at LOS E in the weekday PM and Saturday peak hours, and would be considered significantly adversely impacted during these periods based on *CEQR Technical Manual* criteria. With a 3.5-foot widening (to a total of 16.8 feet in width), conditions would improve to LOS D in both periods, and the Proposed Actions' significant adverse impacts to this crosswalk would be fully mitigated. In the absence of the application of this mitigation measure, the impacts would remain unmitigated.

Street User Safety

As discussed in Chapter 12, "Transportation," currently, the only crosswalk on River Street in proximity to the Project Area is located at North 3rd Street. It is therefore likely that some pedestrians en route to and from the Proposed Development Site would choose to cross River Street at a more proximate location where a crosswalk is not present, such as at Metropolitan Avenue or North 1st Street. This would result in a significant pedestrian safety impact. ~~This impact is expected to be fully mitigated by t~~he installation of a new traffic signal and pedestrian crossing at Metropolitan Avenue ~~one or both of these locations. A new crossing would involve the installation of a new traffic signal, a new all-way stop control, or an Enhanced Pedestrian Crossing.[1] Between the DEIS and FEIS, the appropriate traffic control measure to be installed will be finalized in consultation with the lead agency and DOT~~ would ~~to~~ facilitate the safe and efficient movement of pedestrians crossing River Street and fully mitigate the impact. The proposed traffic signal and pedestrian crossing would be implemented by the Applicant in coordination with DOT, which has conditionally approved the installation. The Applicant would be responsible for all costs associated with the design and installation of the traffic signal, including any proposed geometric modifications, traffic signs and pavement markings removals/installations. In the absence of the implementation of this mitigation measure, the impact would remain unmitigated.~~The installation of a new pedestrian crossing on River Street at Metropolitan Avenue and/or North 1st Street would fully mitigate the Proposed Actions' potential pedestrian safety impact.~~

Potential Effects of Street User Safety Mitigation on Traffic Conditions

As the traffic signal proposed to mitigate the potential street user safety impact at River Street/ Metropolitan Avenue would affect traffic flow, an LOS analysis was prepared to confirm that the intersection would operate at acceptable levels of service with installation of the new signal. The analysis examines conditions in the weekday AM, midday and PM peak hours and the Saturday peak hour when the increased travel demand attributable to the Proposed Actions is expected to be the greatest. The weekday 8:30-9:30 AM, 12-1 PM (midday) and 5-6 PM peak hours and the Saturday 1:30-2:30 PM peak hour were selected for analysis based on existing traffic volumes in the study area as reflected in traffic counts conducted in June 2021.

ANALYSIS METHODOLOGY

The capacity analysis of the intersection was based on the methodology presented in the Highway Capacity Manual (HCM) and utilizes HCS+ Version 5.5 software. Traffic data required for this analysis include the

~~[1] Enhanced Crossings give pedestrians a safe place to cross the street when there is no traffic signal or stop sign. They are found in low traffic areas near schools, parks and libraries. Enhanced Crossings are a standard treatment that meet the community need for marked crossings when traffic controls are not appropriate.~~

hourly volumes on each approach, turning movements and the percentage of trucks and buses. Field inventories are also necessary to document the physical layout and street widths and other relevant characteristics needed for the analysis.

The HCM methodology expresses the quality of traffic flow in terms of level of service (LOS), which is based on the amount of delay that a driver typically experiences at an intersection. For unsignalized intersections, LOS ranges from A, representing minimal delay (ten seconds or less per vehicle), to F, which represents long delays (greater than 50 seconds per vehicle).

Table 19-3 shows the LOS/delay relationship for unsignalized intersections using the HCM methodology. Levels of service A, B, and C generally represent highly favorable to fair levels of traffic flow. At LOS D, the influence of congestion becomes noticeable. LOS E reflects heavy delay, and LOS F is considered to be unacceptable to most drivers. For this analysis, a lane group operating at LOS E or F is considered congested.

TABLE 19-3
Intersection Level of Service Criteria
For Unsignalized Intersections

LOS	Average Delay per Vehicle (seconds)
A	Less than 10.1
B	10.1 to 15.0
C	15.1 to 25.0
D	25.1 to 35.0
E	35.1 to 50.0
F	Greater than 50.0

Source: *2000 Highway Capacity Manual*

FUTURE TRAFFIC CONDITIONS WITH POTENTIAL INSTALLATION OF A NEW TRAFFIC SIGNAL

At present, River Street operates two-way from Grand Street to North 3rd Street. Metropolitan Avenue also operates two-way, and the segment to the west of River Street is currently not open to traffic. The westbound Metropolitan Avenue approach to River Street is stop-controlled with a crosswalk, while the River Street approaches are uncontrolled. In the future with the Proposed Actions, the segment of Metropolitan Avenue west of River Street would be permanently closed to traffic and demapped.

Table 19-4 shows traffic conditions at the River Street/Metropolitan Avenue intersection with the installation of a new traffic signal in the 2027 Action-with-Mitigation condition. Conditions during the weekday AM, midday and PM peak hours and the Saturday midday peak hour are shown. The analysis reflects the new vehicular demand that would be generated by the Proposed Actions, demand from nearby developments expected to be completed by 2027, and a background growth rate of 0.5 percent/year applied to existing volumes for the 2021 through 2027 period. For the purposes of the analysis, a signal timing plan consistent with the existing traffic signal at the adjacent Kent Avenue/Metropolitan Avenue intersection was assumed. As shown in **Table 19-4**, in the Action-with-Mitigation condition, it is expected that all approaches at the River Street/Metropolitan Avenue intersection would operate at an uncongested LOS A or B in all analyzed peak hours.

TABLE 19-4
Traffic Conditions with Proposed Street User Safety Mitigation

Intersection	Lane Approach/ Group	AM			MD			PM			SAT		
		2027 With Action			2027 With Action			2027 With Action			2027 With Action		
		V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
River St (NB-SB) & Metropolitan Av (EB-WB) (Signalized)	WB-LR	0.10	12.3	B	0.16	13.0	B	0.15	12.7	B	0.16	12.9	B
	SB-LT	0.02	9.2	A	0.03	9.3	A	0.03	9.3	A	0.04	9.4	A
	NB-TR	0.21	11.0	B	0.25	11.6	B	0.24	11.4	B	0.18	10.8	B

Notes:

THIS TABLE IS NEW TO THE FEIS

** - Denotes a impacted movement (LOS E or F, or V/C ratio greater than or equal to 0.9)

Analysis is based on the 2000 Highway Capacity Manual methodology (HCS+, version 5.5)

D. CONSTRUCTION NOISE

As with all construction in New York City, the Proposed Development would be required to adhere to the New York City Noise Control Code, which mandates that all construction be conducted in accordance with noise mitigation plans that address the specific location, type of work, and timing of a project. Specific noise control measures will be described in the construction noise mitigation plan. As discussed in Chapter 18, "Construction," the Applicant has committed to noise reduction measures in accordance with the New York City Noise Code, including an 8-ft plywood fence around the perimeter of the construction site, the use of equipment meeting the requirements of noise control code, limitations on engine idling, and implementation of early electrification of certain equipment such as concrete vibrators, hoists, and man lifts. ~~Furthermore, a~~The construction noise mitigation plan would be required to be prepared and approved by NYCDEP prior to construction. Additional path controls (such as portable barriers or shrouds around specific equipment) would be considered during the development of the construction noise mitigation plan. Despite incorporation of these measures, the duration and magnitude of construction noise levels ~~would~~ may still constitute a temporary significant adverse impact at certain sensitive receptors as detailed in Chapter 18. The Applicant is committing to provide noise monitoring to ensure that violations of the NYC Noise Code do not occur at adjacent receptors. ~~Additional, source controls and other mitigation measures, as feasible, to reduce or to avoid potential significant adverse noise impacts will be explored between the Draft and Final EIS in consultation with DCP.~~ The Proposed Actions would result in a temporary unmitigated significant adverse construction noise impact where no practicable mitigation measures are identified or where impacts would only be partially mitigated, and further, if the proposed mitigation measures described below are deemed infeasible and no alternate measures are identified.

The following sensitive receptors are predicted to experience a significant adverse construction noise impact:

- 184 Kent Avenue (residential/mixed use)
- 187 Kent Avenue (residential)
- 200-206 Kent Avenue (commercial and office building)
- 221 Kent Avenue (residential)
- 223 Kent Avenue (residential)
- 254 Kent Avenue/70 River Street (commercial)
- 68 North 3rd Street (residential/mixed use)
- 1 North 4th Place (residential)

Six of these locations already have double-paned windows and air conditioning/alternative means of ventilation (PTAC or central HVAC), thus there are no additional feasible and practicable receptor controls to further reduce noise levels. ~~Therefore, without additional mitigation measures, the Proposed Actions would result in significant adverse construction noise impacts at these locations.~~

Two ~~other~~ locations (223 Kent Avenue and 68 North 3rd Street) may have some residential units without window AC units. The residential building at 223 Kent Avenue~~),~~, predicted to experience significant adverse construction noise impacts, has double-paned windows and utilizes window AC units in some residential units. For residential units within ~~this~~ these buildings that already ~~has~~ have window AC units, there are no additional feasible and practicable receptor controls to further reduce noise levels. Window air conditioning units would be made available by the Applicant prior to construction commencement to apartments that do not already have an alternate means of ventilation, which would partially mitigate the significant adverse noise impacts predicted to occur at these locations. ~~The feasibility of providing window AC units to any apartment units currently lacking them (if any) will be explored as a potential partial mitigation between the publication of the DEIS and FEIS. As receptor controls would not fully mitigate the impact, without additional mitigation measures, the Proposed Actions would result in significant adverse construction noise impact to this receptor.~~

The residential building at 68 North 3rd Street predicted to experience significant adverse construction noise impacts has double-paned windows and utilizes window AC units for some residential units. For residential units within this building that already have window ACs, the CEQR interior L_{10} noise guideline of 45 dBA would not be exceeded. For residential units within this building that do not have window ACs (if any), window air conditioning units would be made available by the Applicant to apartments that do not already have an alternate means of ventilation prior to the start of construction ~~the feasibility of providing window ACs will be explored as a potential mitigation between the publication of the DEIS and FEIS~~. Window AC for residential units that do not have them would mitigate the impact for this receptor to less than the CEQR interior noise guideline during construction ~~for this receptor~~.

Lastly, Grand Ferry Park is predicted to experience a significant adverse construction noise impact. No practical and feasible mitigation measures have been identified that could be implemented to reduce noise levels at Grand Ferry Park to below the 55 dBA $L_{10(1)}$ guideline and/or eliminate project impacts. It should be noted that although the *CEQR Technical Manual* 55 dBA $L_{10(1)}$ guideline is a worthwhile goal for outdoor areas requiring serenity and quiet, this relatively low noise level is typically not achieved in parks and open space areas in New York City. Based on *CEQR Technical Manual* guidance, the Proposed Actions would result in a temporary unmitigated significant adverse impact to this receptor.