Chapter 21: Mitigation

A. INTRODUCTION

In accordance with the 2014 *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. Measures to further mitigate adverse impacts will be evaluated between the Draft Environmental Impact Statement (DEIS) and Final EIS (FEIS). Therefore, the FEIS will include more complete information and commitments on all practicable mitigation measures to be implemented with the Proposed Actions.

B. PRINCIPAL CONCLUSIONS

The Proposed Actions would result in significant adverse impacts related to shadows, historic and cultural resources, transportation (traffic, pedestrians, and transit), and construction (noise). Mitigation measures being proposed to address those impacts, where feasible and/or practical, are discussed below. If no possible mitigation can be identified, an unavoidable significant adverse impact would result.

SHADOWS

As described in Chapter 6, "Shadows," the Proposed Actions would result in significant adverse impacts to three open space resources. The detailed analysis found that El Catano Garden, Eugene McCabe Field, and Jackie Robinson Garden would be significantly impacted by new shadow originating from projected and potential development sites. The duration or extent of incremental shadow cast on these open spaces would be great enough to significantly impact the use of the open space or its ability to support vegetation.

Possible measures that could mitigate significant adverse shadow impacts on open spaces may include relocating sunlight-sensitive features within an open space to avoid sunlight loss; relocating or replacing vegetation; undertaking additional maintenance to reduce the likelihood of species loss; or providing replacement facilities on another nearby site. Other potential mitigation strategies include the redesign or reorientation of the open space site plan to provide for replacement facilities, vegetation, or other features. In addition, the *CEQR Technical Manual* identifies strategies to reduce or eliminate shadow impacts, including modifications to the height, shape, size, or orientation of a proposed development that creates the significant adverse shadow impact. The New York City Department of City Planning (DCP), as lead agency, will explore possible mitigation measures with the New York City Department of Parks and Recreation (NYC Parks) between the DEIS and FEIS.

HISTORIC AND CULTURAL RESOURCES

As discussed in Chapter 7, "Historic and Cultural Resources," the Proposed Actions would result in significant adverse construction-related impacts to several historic buildings. In addition, construction activity at two development sites located on the south side of East 128th Street (east

of Park Avenue) have the potential to result in significant adverse archaeology impacts associated with burial remains.

ARCHITECTURAL RESOURCES

The Proposed Actions would result in significant adverse construction-related impacts to four eligible architectural resources located within 90 feet of projected or potential development sites. The impacted resources include:

- St. Paul's Rectory and School (Resource #17, State and National Registers of Historic Places [S/NR]-Eligible) is located within 90 feet of Potential Development Site C;
- Chambers Memorial Baptist Church (Resource #28, S/NR-Eligible) is located within 90 feet of Potential Development Site AI;
- 166 East 124th Street (Resource #27, S/NR-Eligible) is located within 90 feet of Projected Development Site 11; and
- The Park Avenue Viaduct (Resource #39, S/NR-Eligible) is located within 90 feet of several projected and potential development sites.

Designated New York City Landmarks (NYCL) or S/NR-Listed architectural resources located within 90 feet of a projected or potential new construction site are subject to the protections of DOB's TPPN #10/88. The four resources listed above are not NYCLs or S/NR-Listed, therefore they would not be afforded any of the protections under TPPN #10/88. If the eligible resources are designated in the future prior to the initiation of construction, the protective measures of TPPN #10/88 would apply and significant adverse impacts from construction would be avoided. As discussed below, the viability of these or other mitigation measures will be explored between the DEIS and FEIS. Should the resources remain undesignated or no feasible mitigation be identified the additional protective measures of TPPN #10/88 would not apply and the potential for significant adverse construction-related impacts would be unavoidable.

ARCHAEOLOGICAL RESOURCES

The Proposed Actions have the potential to result in significant adverse archaeology impacts. Construction activity at Projected Development Site 4 and Potential Development Site V, located on the south side of East 128th Street and east of Park Avenue, has the potential to result in significant adverse archaeology impacts associated with burial remains. A Phase 1A study of Potential Development Site V and Projected Development Site 4 was completed in March 2017. The Phase 1A study identified the development sites as potentially sensitive for human remains associated with the churchyard and burial vaults of Saint Andrew's Church, which was formerly located within both development sites. The Proposed Actions therefore have the potential to result in a significant adverse impact on archaeological resources if archaeological resources are present.

Mitigation measures include Phase 1B testing, which is designed to confirm the presence or absence of archaeological resources in areas of archaeological sensitivity that are identified in the Phase 1A study. Based on the results of the Phase 1B investigation and in consultation with the New York City Landmarks Preservation Commission (LPC), if the Phase 1B investigation reveals the presence of human remains, recovery of human remains would be required. Prior to the completion of the Phase 1B archaeological investigation, a Phase 1B Testing Protocol and Human Remains Discovery Plan would be prepared and submitted to LPC for review and concurrence.

Projected Development Site 4 contains a City-owned lot under New York City Department of Housing Preservation and Development (HPD) jurisdiction. Development of Projected Development Site 4 would be in accordance with HPD requirements, including measures to require prospective sponsors to conduct archaeological testing and if warranted, recovery of human remains. Potential Development Site V is owned by a private entity. There is no mechanism in place to require archaeological testing prior to construction or require the preservation or documentation of archaeological resources, should they exist. In the event that human remains are encountered during the construction of an as-of-right project, it is expected that the developer would contact the New York City Police Department (NYPD) and the New York City Office of the Chief Medical Examiner. However, because there is no mechanism to ensure that the potential impacts would be avoided or mitigated in full at Potential Development Site V, the significant adverse impact would be considered unavoidable.

TRANSPORTATION

The Proposed Actions would result, as detailed below, in significant adverse impacts to: a) vehicular traffic at 26 intersections, b) six subway stairs at three stations, c) public bus service on one route, and d) pedestrians at one sidewalk. Mitigation measures that could address these transportation impacts are discussed below.

TRAFFIC

As described in Chapter 14, "Transportation," the Proposed Actions would result in significant adverse traffic impacts at 26 study area intersections during one or more analyzed peak hours; specifically 31 lane groups at 19 intersections during the weekday AM peak hour, 15 lane groups at 12 intersections during the midday peak hour, 32 lane groups at 22 intersections during the PM peak hour, and 19 lane groups at 16 intersections during the Saturday peak hour. Implementation of traffic engineering improvements such as signal timing changes and modifications to curbside parking regulations are being proposed and would provide mitigation for many of the anticipated traffic impacts. These proposed traffic engineering improvements are subject to review and approval by the New York City Department of Transportation (DOT). DCP, as lead agency, will coordinate with DOT between the DEIS and FEIS to obtain their approval of the proposed mitigation measures. If DOT determines that a proposed mitigation measure is infeasible, the impact would be unavoidable.

Table 21-1 shows, assuming all the proposed mitigation measures were implemented, that significant adverse impacts would be fully mitigated at all but seven lane groups at two intersections during the weekday AM peak hour, eight lane groups at three intersections in the weekday PM peak hour, and one lane group at one intersection during each of the weekday midday and Saturday peak hours. **Table 21-2** provides a more detailed summary of the intersections and lane groups that would have unmitigated significant adverse traffic impacts. In total, impacts to one or more lane groups would remain unmitigated in one or more peak hours at four intersections.

Table 21-1
Summary of Lane Groups/Intersections with Significant Adverse Traffic Impact

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	135/50	104/31	31/19	24/17	7/2
Weekday Midday	133/50	118/38	15/12	14/11	1/1
Weekday PM	134/50	102/28	32/22	24/19	8/3
Saturday	132/50	113/34	19/16	18/15	1/1

Table 21-2
Lane Groups With Unmitigated Significant Adverse Traffic Impacts

Intersection	Peak Hour			
	Weekday AM	Weekday Midday	Weekday PM	Saturday
Signalized Intersections				
East 125th Street & First Ave/Willis Ave Bridge	---	---	EB-LT	---
East 125th Street/RFK Bridge & Second Ave	EB-T, WB (E.125th St)-LT, WB (ramp)-L, WB (ramp)-LT	EB-T	EB-T, WB (E.125th St)-LT, WB (ramp)-L, WB (ramp)-LT, SB-T	EB-T
East 125th Street & Lexington Ave	EB-T, WB-T, SB-LT	---	---	---
East 126th Street & Second Ave/RFK Bridge Exit	---	---	WB-L, NB-L	---

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

TRANSIT

Subway

With the implementation of Phase II of the Second Avenue Subway, substantial transit demand reductions are expected in both No Action and With Action Conditions at the Lexington Avenue Line 103rd Street, 116th Street, and 125th Street stations served by the Nos. 4, 5, and/or 6 trains. In addition, the Second Avenue Subway Phase II would also likely include improvements to pedestrian circulation elements at the 125th Street station. The Proposed Actions, in the absence of the Second Avenue Subway Phase II, would result in significant impacts to one street stair at the 103rd Street subway station, one street stair at the 116th Street subway station and two street stairs and two platform stairs at the 125th Street subway station. DCP, as lead agency, will coordinate with New York City Transit (NYCT) between the DEIS and FEIS, to determine what, if any, mitigation measures should be implemented to address these specific impacts. In the absence of the Second Avenue Subway Phase II or mitigation measures applicable to these specific station elements, the Proposed Actions' significant impacts to one street stair at the 103rd Street subway station, one street stair at the 116th Street subway station and two street stairs and two platform stairs at the 125th Street subway station would remain unmitigated.

Bus

The Proposed Actions would result in a passenger capacity shortfall of 22 on southbound M15 Select Bus Service (SBS) buses in the AM peak hour. This significant adverse impact could be fully mitigated by the addition of one M15 SBS bus in the southbound direction in the AM peak hour. The general policy of NYCT is to provide additional bus service where demand warrants, taking into account financial and operational constraints.

As discussed in Chapter 14, "Transportation," it is anticipated that completion of Second Avenue Subway Phase II would reduce demand on bus routes serving the Project Area. Therefore, the overcapacity condition on southbound M15 SBS buses in the AM peak hour would likely not occur as the result of the Proposed Actions, and the proposed mitigation would not be needed, with the extension of the Second Avenue Subway to the Project Area.

PEDESTRIANS

Incremental demand from the Proposed Actions would significantly adversely impact one sidewalk—the south sidewalk on East 125th Street between Lexington and Park Avenues—in all four analyzed peak hours. There would be no significant impacts to corner areas or crosswalks in any period. Removing a tree pit at the most constrained point on the impacted sidewalk would fully mitigate the significant adverse impact in all periods, and there would be no unmitigated significant adverse pedestrian impacts. Implementation of this mitigation measure would be subject to review and approval by NYC Parks. DCP, as lead agency, will coordinate with NYC Parks between the DEIS and FEIS to obtain their approval to remove the tree pit at this location. In the absence of the application of this mitigation measure, the impact would remain unmitigated.

CONSTRUCTION

NOISE

Chapter 20, "Construction," concludes that the Proposed Actions would have the potential to result in significant adverse construction noise impacts throughout the Project Area and at sensitive receptors in the vicinity of the Project Area.

Three representative construction sites were selected for analysis. Based on the construction stage predicted to occur at each development site according to the conceptual construction schedule during each of the selected analysis periods, each receptor expected to experience an exceedance of the *CEQR Technical Manual* noise impact threshold was determined for each period. One peak construction period per year over the analysis period of 2018 to 2027 was analyzed. Based on these determinations, receptors where noise level increases are predicted to exceed the noise impact threshold criteria for two or more consecutive years were identified.

Because the analysis is based on construction phases, it does not capture the natural daily and hourly variability of construction noise at each receptor. The level of noise produced by construction fluctuates throughout the days and months of the construction phases, while the construction noise analysis is based on the worst-case time periods only, which is conservative. The noise analysis results show that the predicted noise levels could exceed the *CEQR Technical Manual* impact criteria throughout the Project Area. The analysis is based on a conceptual site plan and construction schedule. It is possible that the actual construction may be of less magnitude, or that construction on multiple projected development sites may not overlap, in which case construction noise would be less intense than the analysis predicts.

Proposed mitigation could include a variety of source and path controls. Between the DEIS and FEIS, all possible mitigation measures to address the identified construction noise impacts will be explored. In the event no additional practicable or feasible mitigation measures are determined, the significant adverse construction noise impacts would be unavoidable.

C. SHADOWS

As described in Chapter 5, "Open Space," and Chapter 6, "Shadows," the Proposed Actions would result in significant adverse shadow impacts to three open space resources. The detailed analysis found that El Catano Garden, Eugene McCabe Field, and Jackie Robinson Garden would be significantly impacted by new shadow originating from projected and potential development sites. The duration or extent of incremental shadow cast on these open spaces would be great enough to significantly impact the use of the open space or its ability to support

vegetation. The impacted resources and proposed mitigation measures are discussed in more detail below.

EL CATANO GARDEN

Projected and potential development resulting from the Proposed Actions would cast El Catano Garden in new shadow on all analysis days. El Catano Garden is located on East 110th Street directly west of Potential Development Site AH and across Third Avenue from Projected Development Site 17. Compared with the No Action Condition, the incremental shadow would not significantly alter the public's use of the open space resource but may significantly change the variety of plant life supported in the garden. The duration of new shadow would last between approximately five and six hours, depending on the analysis day. However, most of the new shadow would occur before the garden's 10 AM opening hour. Garden users wishing to enjoy sun would, in most cases, find direct sunlight in a nearby area of the small garden. The time of day on May 6 and June 21 when the Proposed Actions would prevent any direct sunlight from reaching the garden would occur when the garden is closed. During December, the garden would be expected to be closed to the public for most of the day.

Within the growing season, development resulting from the Proposed Actions would reduce the hours of direct sunlight received by the garden by up to approximately 2 hours and 30 minutes on March 21, 4 hours on May 6, and 5 hours on June 21. On March 21, most of the garden would receive less than 2 hours of direct sunlight. On May 6 and June 21, the central portion of the garden receiving at least 4 hours of direct sunlight would be mostly eliminated and instead receive less than 2 hours of direct sunlight. With the limited hours of direct sunlight, it is possible that the garden would no longer be able to support the variety of plant life that it would in the No Action Condition. Therefore, El Catano Garden would experience a significant adverse shadow impact due to the Proposed Actions. The *CEQR Technical Manual* identifies several different measures that could mitigate significant adverse shadow impacts on open spaces. These measures include relocating sunlight-sensitive features within an open space to avoid sunlight loss; relocating or replacing vegetation; undertaking additional maintenance to reduce the likelihood of species loss; or providing replacement facilities on another nearby site. Other potential mitigation strategies include the redesign or reorientation of the open space site plan to provide for replacement facilities, vegetation, or other features. In addition, the *CEQR Technical Manual* identifies strategies to reduce or eliminate shadow impacts, including modifications to the height, shape, size, or orientation of the proposed development that creates the significant adverse shadow impact.

Possible mitigation measures will be explored in consultation with NYC Parks between the DEIS and FEIS. If feasible mitigation is found, the impacts will be considered mitigated or partially mitigated. In the absence of feasible mitigation, the significant adverse impact to El Catano Community Garden would be unavoidable.

EUGENE MCCABE FIELD

Projected development resulting from the Proposed Actions would cast Eugene McCabe Field in new shadow on all analysis days. Eugene McCabe Field is located on the west side of Park Avenue between East 120th and East 121st Streets. The field is directly adjacent to Projected Development Sites 2, 6, and 24. Compared with the No Action Condition, the incremental shadow could significantly alter the public's use of the open space by reducing the direct sunlight received by the resource throughout the year and lowering its utilization rate. Development resulting from the Proposed Actions would not significantly impact the limited

vegetation growing within the park. The duration of new shadow on the analysis days would last between approximately 6 hours and 8 hours, depending on the analysis day. On March 21 and December 21, all areas of the field would experience a 2-hour reduction in the duration of direct sunlight. On the May 6 and June 21 analysis days, incremental shadow could reduce the total hours of direct sunlight on the resource by up to approximately 4 hours and 35 minutes, and 5 hours, respectively. The addition of shadow on all analysis days may change a user's experience within a resource that, in the No Action Condition, receives long, interrupted durations of direct sunlight.

Shadow cast by the Proposed Actions would not significantly alter the resource's ability to support vegetation. The field is synthetic turf and does not require sunlight. The limited landscaping around the edges of the field would receive enough direct sunlight within the growing season to support its viability. But because the duration of incremental shadow may significantly impact use of the resource, McCabe Field would experience a significant adverse shadow impact due to the Proposed Actions.

The With Action Condition shadows assessment found that due to the duration and breadth of the new shadows the open space would experience a significant impact to its utilization. Possible mitigation measures may include artificial lighting and the reduction of building heights. Mitigation measures will be explored in coordination with NYC Parks between the DEIS and FEIS. If feasible mitigation is found, the impact will be considered partially mitigated. In the absence of feasible mitigation, the significant adverse impact to Eugene McCabe Field would be unavoidable.

JACKIE ROBINSON GARDEN

Projected development resulting from the Proposed Actions would cast Jackie Robinson Garden in new shadow on all analysis days. Jackie Robinson Garden is located at East 122nd Street and Park Avenue. Compared with the No Action Condition, the incremental shadow would not significantly alter the public's use of the open space resource but may significantly change the variety of plant life supported in the park. The duration of new shadow on the analysis days would be relatively long. Even though most of new shadow would occur in the afternoon when the garden would presumably be open to the public, at no time would the new shadow prevent all direct sunlight from reaching the garden. Garden users wishing to enjoy direct sunlight in the newly shaded areas could find direct sunlight in a different location of the garden.

The Proposed Actions would significantly alter the hours of direct sunlight received by the park on the analysis days within the growing season. On March 21, few areas of the garden would receive more than 4 hours of direct sunlight. On May 6 and June 21, when compared with the No Action Condition, most areas of the garden would no longer receive 4 hours of direct sunlight throughout the day. Because at least 4 hours of direct sunlight are needed to support a variety of plant life, it is possible that the garden would no longer be able to support the same plant life that it would in the No Action Condition. Therefore, the Jackie Robinson Community Garden would experience a significant adverse shadow impact due to the Proposed Actions. The *CEQR Technical Manual* identifies several different measures that could mitigate significant adverse shadow impacts on open spaces. These measures include relocating sunlight-sensitive features within an open space to avoid sunlight loss; relocating or replacing vegetation; undertaking additional maintenance to reduce the likelihood of species loss; or providing replacement facilities on another nearby site. Other potential mitigation strategies include the redesign or reorientation of the open space site plan to provide for replacement facilities, vegetation, or other features. In addition, the *CEQR Technical Manual* identifies strategies to

reduce or eliminate shadow impacts, including modifications to the height, shape, size, or orientation of the proposed development that creates the significant adverse shadow impact.

Mitigation measures will be explored in consultation with NYC Parks between the DEIS and FEIS. If feasible mitigation is found, the impact will be considered mitigated or partially mitigated. In the absence of feasible mitigation, the significant adverse shadow impact on Jackie Robinson Garden would be unavoidable.

D. HISTORIC AND CULTURAL RESOURCES

ARCHITECTURAL RESOURCES

The Proposed Actions would result in significant adverse construction-related impacts to four eligible architectural resources located within 90 feet of projected or potential development sites. The impacted resources include:

- St. Paul's Rectory and School (Resource #17, S/NR-Eligible) is located within 90 feet of Potential Development Site C;
- Chambers Memorial Baptist Church (Resource #28, S/NR-Eligible) is located within 90 feet of Potential Development Site AI;
- 166 East 124th Street (Resource #27, S/NR-Eligible) is located within 90 feet of Projected Development Site 11; and
- The Park Avenue Viaduct (Resource #39, S/NR-Eligible) is located within 90 feet of several projected and potential development sites.

Designated New York City Landmarks (NYCL) or S/NR-Listed architectural resources located within 90 feet of a projected or potential new construction site are subject to the protections of DOB's TPPN #10/88. The resources listed above are not NYCLs or S/NR-Listed, therefore they would not be afforded any of the protections under TPPN #10/88. If the eligible resources are designated in the future prior to the initiation of construction, the protective measures of TPPN #10/88 would apply and significant adverse impacts from construction would be avoided. Should the resources remain undesignated, the additional protective measures of TPPN #10/88 would not apply and the potential for significant adverse construction-related impacts would be unavoidable.

In order to make TPPN #10/88 or comparable measures applicable to the eligible historic resources in the absence of site-specific discretionary approval, a mechanism would have to be developed to ensure implementation and compliance, since it is not known and cannot be assumed that owners of these properties would voluntarily implement the mitigation. The viability of these or other mitigation measures will be explored between the DEIS and FEIS. Should no feasible mitigation be identified, the significant adverse construction impact on the historic resources would be unavoidable.

The Park Avenue Viaduct is owned and maintained by the Metropolitan Transportation Authority (MTA). Those development sites within 90 feet of the Park Avenue Viaduct and currently owned in part by the City could be required to implement a Construction Protection Plan to protect from inadvertent construction-related damage. The Department of City Planning will explore possible mitigation measures specific to the Park Avenue Viaduct with the Landmarks Preservation Commission (LPC), MTA and HPD between DEIS and FEIS. Should no feasible mitigation be identified, the significant adverse construction impacts to the four S/NR-Eligible architectural resources would be unavoidable.

ARCHAEOLOGICAL RESOURCES

Construction activity at two development sites located on the south side of East 128th Street and east of Park Avenue have the potential to result in significant adverse archaeology impacts associated with burial remains. Potential Development Site V and Projected Development Site 4 possess potential archaeological significance. A Phase 1A study of Potential Development Site V and Projected Development Site 4 was completed in March 2017. The Phase 1A study identified the potential and projected development sites as potentially sensitive for human remains associated with the churchyard and burial vaults of Saint Andrew's Church, which was formerly located within both development sites. The Proposed Actions therefore have the potential to result in a significant adverse impact on archaeological resources if archaeological resources are present.

The Phase 1A Study concluded that Phase 1B archaeological testing is necessary to confirm the presence or absence of human remains on the sites in question as outlined in the *CEQR Technical Manual* and LPC's 2002 *Guidelines for Archaeological Work in New York City*. Phase 1B testing is designed to confirm the presence or absence of archaeological resources in any areas of archaeological sensitivity that are identified in the Phase 1A study. Prior to the completion of the Phase 1B archaeological investigation, a Phase 1B Testing Protocol and Human Remains Discovery Plan would be prepared and submitted to LPC for review and concurrence. Based on the results of the Phase 1B investigation and in consultation with LPC, if the Phase 1B investigation reveals the presence of human remains, recovery of human remains would be required. In the event that the Phase 1B archaeological investigation determines that Projected Development Site 4 possesses no archaeological sensitivity and that human remains are not present, then further archaeological analysis would not be warranted.

If intact archaeological resources or human remains are identified during the Phase 1B archaeological investigation, then a Phase 2 Archaeological Investigation would be required to determine the vertical and horizontal boundaries of those resources and to determine their significance and eligibility for S/NR-Listing. If the Phase 2 investigation determines that significant archaeological resources are present and if the proposed project cannot be modified to avoid those resources, then mitigation measures—which may include full archaeological excavation in the form of a Phase 3 Archaeological Data Recovery—must be developed and implemented. If such work is not possible, then this would be considered an impact that cannot be mitigated. Mitigation is not considered to be complete until a final report has been reviewed and approved and artifacts are transferred to an appropriate repository for long-term curation. All archaeological testing and documentation would be done in consultation with LPC.

The mitigation may involve a search for a descendant community or descendant congregation associated with the church formerly located on the property. The descendant community would be consulted regarding the archaeological investigation and analysis of any recovered human remains. In the event that human remains are exhumed from the project site, a funeral director must be retained and who will be responsible for applying for a disinterment permit from the New York City Department of Health (NYCDOH). Finally, mitigation may involve the reburial of any exhumed human remains in an appropriate alternate burial location as determined in consultation with LPC and the descendant community.

Projected Development Site 4 contains a City-owned lot under HPD jurisdiction. Development of Projected Development Site 4 would be in accordance with HPD requirements, including measures to require prospective sponsors to conduct archaeological testing and if warranted, recovery of human remains. Measures to require a Phase 1B and mitigation, if warranted, would

be required through provisions in the Land Disposition Agreement (LDA) between HPD and the project sponsor. Additional archaeological investigations, including a Phase 1B, would be required on Projected Development Site 4.

Potential Development Site V is owned by a private entity. There is no mechanism in place to require archaeological testing prior to construction or require the preservation or documentation of archaeological resources, should they exist. In the event that human remains are encountered during the construction of an as-of-right project, it is expected that the developer would contact the New York City Police Department (NYPD) and the New York City Office of the Chief Medical Examiner. However, because there is no mechanism to ensure that the potential impacts would be avoided or mitigated in full at Potential Development Site V, the significant adverse impact would be considered unavoidable.

E. TRANSPORTATION

The Proposed Actions would result, as detailed below, in significant adverse impacts to: a) vehicular traffic at 26 intersections, b) six subway stairs at three stations, c) public bus service on one route, and d) pedestrians at one sidewalk. Mitigation measures that could address these transportation impacts are discussed below.

TRAFFIC

As described in Chapter 14, "Transportation," the Proposed Actions would result in significant adverse traffic impacts at 26 study area intersections during one or more analyzed peak hours; specifically 31 lane groups at 19 intersections during the weekday AM peak hour, 15 lane groups at 12 intersections during the midday peak hour, 32 lane groups at 22 intersections during the PM peak hour, and 19 lane groups at 16 intersections during the Saturday peak hour.

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

- Modification of traffic signal phasing and/or timing; and
- Elimination of on-street parking within 100 feet of intersections to add a limited travel lane

The types of mitigation measures proposed herein are standard measures that are routinely identified by the City and considered feasible for implementation. **Table 21-3** summarizes the recommended mitigation measures for each of the intersections with significant adverse traffic impacts during the weekday AM, midday and PM and Saturday peak hours. Implementation of the recommended traffic engineering improvements is subject to review and approval by DOT. DCP, as lead agency, will coordinate with DOT between the DEIS and FEIS to obtain their approval of the proposed mitigation measures. . In the absence of the application of mitigation measures, the impacts would remain unmitigated.

Tables 21-4 through 21-7 show the v/c ratios, delays, and levels of service (LOS) for impacted lane groups at each intersection with implementation of the recommended mitigation measures and compares them with No Action and With Action Conditions for the weekday AM, midday, and PM and Saturday peak hours, respectively. (The Action-With-Mitigation level of service analyses for all lane groups at each impacted intersection are shown in Table E-6 in **Appendix E**.) According to *CEQR Technical Manual* criteria, an impact is considered fully mitigated when the resulting LOS degradation under the Action-with-Mitigation Condition compared with the No Action Condition is no longer deemed significant following the impact criteria described in Chapter 14, "Transportation." **Tables 21-4 through 21-7** show that significant adverse impacts

would be fully mitigated at all but seven lane groups at two intersections during the weekday AM peak hour, eight lane groups at three intersection in the weekday PM peak hour and one lane group at one intersection during each of the weekday midday and Saturday peak hours. In total, impacts to one or more lane group would remain unmitigated in one or more peak hours at four intersections. Consequently, these impacts would constitute unavoidable significant adverse traffic impacts as a result of the Proposed Actions (see also Chapter 23, "Unavoidable Adverse Impacts").

EFFECTS OF PEDESTRIAN MITIGATION ON TRAFFIC CONDITIONS

Proposed pedestrian mitigation measures (discussed later in this chapter) would not affect traffic conditions at any analyzed intersection in any peak hour.

Table 21-3
Proposed Traffic Mitigation Measures

Intersection	Signal Phase	No-Action Signal Timing (Seconds) (1) AM	MD	PM	SAT	Proposed Signal Timing (Seconds) (1) AM	MD	PM	SAT	Recommended Mitigation
East 106th Street &	EB/WB	36	36	36	36	37	36	36	37	-Transfer 1s of green time from NB to EB/WB in AM and Saturday.
First Avenue	NB	33	33	33	33	32	33	33	32	
	NB-L/NB	21	21	21	21	21	21	21	21	
East 125th Street &	EB	40	40	42	40	40	41	42	40	- Transfer 1s of green time from NB to EB in midday.
First Avenue	NB	50	50	48	50	50	49	48	50	
East 106th Street &	EB/WB	36	36	36	36	37	37	37	37	-Transfer 1s of green time from SB to EB/WB in AM, midday, PM and Saturday.
Second Avenue	SB	34	34	34	34	33	33	33	33	
	SB-L/SB	20	20	20	20	20	20	20	20	
East 119th Street &	WB	36	36	36	36	36	36	36	37	- Transfer 1s of green time from SB to WB in Saturday.
Second Avenue	SB	54	54	54	54	54	54	54	53	
East 120th Street &	EB	36	36	36	36	38	36	38	36	- Transfer 2s of green time from SB to EB in AM and PM.
Second Avenue	SB	54	54	54	54	52	54	52	54	
East 125th Street &	WB (RFK Ramp)	28	24	24	25	28	24	24	25	- Unmitigated
Second Avenue	EB/WB	28	34	34	28	28	34	34	28	
	SB	34	32	32	37	34	32	32	37	
East 126th Street &	WB	26	30	26	28	27	31	26	29	-Transfer 1s of green time from NB/SB to WB in AM, midday and Saturday.
Second Avenue	NB/SB	40	38	41	39	38	37	41	38	-Transfer 1s of green time from NB/SB to NB-L/NB in AM.
	NB-L/NB	24	22	23	23	25	22	23	23	
East 127th Street &	EB	36	36	41	36	37	36	43	36	- Transfer 1s of green time from NB/SB to EB in AM; and 2s in PM.
Second Avenue	NB/SB	54	54	49	54	53	54	47	54	
East 128th Street &	EB	45	45	45	45	45	45	46	45	- Transfer 1s of green time from SB to EB in PM.
Second Avenue	SB	45	45	45	45	45	45	44	45	
East 116th Street &	EB/WB	41	41	41	41	42	41	42	41	- Transfer 1s of green time from NB to EB/WB in AM and PM.
Third Avenue	NB	49	49	49	49	48	49	48	49	
East 122nd Street &	EB	36	36	36	36	37	36	36	36	- Transfer 1s of green time from NB to EB in AM.
Third Avenue	NB	54	54	54	54	53	54	54	54	
East 124th Street &	EB	36	36	36	36	36	36	36	37	- Transfer 1s of green time from NB to EB in Saturday.
Third Avenue	NB	54	54	54	54	54	54	54	53	
East 125th Street &	EB/WB	43	43	42	41	45	44	44	43	- Transfer 2s of green time from NB to EB/WB in AM, PM and Saturday; and 1s in midday.
Third Avenue	NB	47	47	48	49	45	46	46	47	
East 126th Street &	WB	38	38	41	40	39	38	43	41	- Transfer 1s of green time from NB to WB in AM and Saturday; and 2s in PM.
Third Avenue	NB	52	52	49	50	51	52	47	49	
East 120th Street &	EB	36	36	36	36	36	36	37	36	- Transfer 1s of green time from SB to EB in PM.
Lexington Avenue	SB	54	54	54	54	54	54	53	54	
East 125th Street &	EB/WB	37	37	37	37	37	38	38	38	- Transfer 1s of green time from SB to EB/WB in midday, PM and Saturday.
Lexington Avenue	Ped	7	7	7	7	7	7	7	7	
	SB	46	46	46	46	46	45	45	45	
East 126th Street &	WB	36	39	38	38	36	40	40	40	- Transfer 1s of green time from SB to WB in midday; and 2s in PM and Saturday.
Lexington Avenue	SB	54	51	52	52	54	50	50	50	
East 111th Street &	Ped	7	7	7	7	7	7	7	7	- Install "No Standing 4PM-7PM Mon-Fri" regulation for 100' along north curb of WB
Park Avenue NB	WB	29	29	29	29	30	30	28	30	approach to provide two effective moving lanes (one through and one right-turn).
	NB	54	54	54	54	53	53	55	53	- Transfer 1s of green time from NB to WB in AM, midday and Saturday.
										- Transfer 1s of green time from WB to NB in PM.
East 119th Street &	Ped	7	7	7	7	7	7	7	7	- Transfer 3s of green time from NB to WB in AM and PM; and 2s in midday and Saturday.
Park Avenue NB	WB	29	29	29	29	32	31	32	31	
	NB	54	54	54	54	51	52	51	52	
East 120th Street &	Ped	7	7	7	7	7	7	7	7	- Transfer 1s of green time from NB to EB in AM and 2s in PM.
Park Avenue NB	EB	29	37	29	29	30	37	31	29	
	NB	54	46	54	54	53	46	52	54	
East 128th Street &	Ped	7	7	7	7	7	7	7	7	- Transfer 1s of green time from NB to EB in PM.
Park Avenue NB	EB	29	29	29	29	29	29	30	29	
	NB	54	54	54	54	54	54	53	54	
East 119th Street &	Ped	7	7	7	7	7	7	7	7	- Install "No Standing 7AM-7PM Mon-Fri" regulation for 100' along west curb of
Park Avenue SB	WB	29	29	29	29	32	31	32	31	SB approach to provide two effective moving lanes (one through and one right-turn).
	SB	54	54	54	54	51	52	51	52	- Transfer 3s of green time from SB to WB in AM and PM; and 2s in midday and Saturday.
East 120th Street &	Ped	7	7	7	7	7	7	7	7	- Install "No Standing 7AM-10AM Mon-Fri" regulation for 100' along south curb of
Park Avenue SB	EB	29	29	29	29	28	29	31	30	EB approach to provide two effective moving lanes (one through and one right-turn).
	SB	54	54	54	54	55	54	52	53	- Transfer 1s of green time from EB to SB in AM.
										- Transfer 2s of green time from SB to EB in PM; and 1s in Saturday.
East 128th Street &	Ped	7	7	7	7	7	7	7	7	- Transfer 1s of green time from SB to EB in AM, midday, PM and Saturday.
Park Avenue SB	EB	29	29	29	29	30	30	30	30	
	SB	54	54	54	54	53	53	53	53	
East 116th Street &	Ped	7	7	7	7	7	7	7	7	- Transfer 1s of green time from NB to EB/WB in AM, PM and Saturday.
Madison Avenue	EB/WB	33	33	33	33	34	33	34	34	
	NB	50	50	50	50	49	50	49	49	
East 119th Street &	WB	36	36	36	36	38	37	38	36	- Transfer 2s of green time from NB to WB in AM and PM; and 1s in midday.
Madison Avenue	NB	54	54	54	54	52	53	52	54	

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

Table 21-4
Action-With-Mitigation Conditions at Impacts Lane Groups
Weekday AM Peak Hour

Intersection	Approach	No-Action Weekday AM				With-Action Weekday AM				Mitigation Weekday AM				
		Lane Group	V/C Ratio	Delay (sec/veh)	LOS	Lane Group	V/C Ratio	Delay (sec/veh)	LOS	Lane Group	V/C Ratio	Delay (sec/veh)	LOS	
East 106th Street (EB/WB) & First Avenue (NB)	EB	L	1.02	112.0	F	L	1.09	135.3	F	L	1.02	111.2	F	
		LT	1.02	105.4	F	LT	1.08	125.1	F	LT	1.00	99.3	F	
	WB	TR	0.90	54.1	D	TR	0.96	64.8	E	TR	0.93	57.1	E	
East 106th Street (EB/WB) & Second Avenue (SB)	EB	TR	1.18	133.8	F	TR	1.20	140.4	F	TR	1.16	124.8	F	
East 120th Street (EB) & Second Avenue (SB)	EB	TR	0.92	58.1	E	TR	1.00	75.4	E	TR	0.94	58.8	E	
East 125th St (EB/WB)/RFK Bridge (WB) & Second Avenue (SB)	EB	T	1.36	203.1	F	T	1.42	230.6	F	T	1.42	230.6	F	*
	WB (E 125 St)	LT	0.66	39.6	D	LT	0.74	45.3	D	LT	0.74	45.3	D	*
	WB (Ramp)	L	1.09	108.2	F	L	1.14	125.5	F	L	1.14	125.5	F	*
	WB (Ramp)	LT	1.20	146.7	F	LT	1.23	158.8	F	LT	1.23	158.8	F	*
East 126th Street (WB) & Second Avenue (SB)/RFK Bridge Exit (NB)	WB	L	1.00	117.5	F	L	1.08	139.1	F	L	1.02	119.2	F	
	NB	L	1.03	96.8	F	L	1.07	106.8	F	L	1.01	89.2	F	
East 127th Street (EB) & Second Avenue (SB)	EB	L	1.21	147.4	F	L	1.26	168.2	F	L	1.22	150.1	F	
East 116th Street (EB/WB) & Third Avenue (NB)	EB	LT	1.10	92.2	F	LT	1.12	99.4	F	LT	1.09	86.0	F	
East 122nd Street (EB) & Third Avenue (NB)	EB	LT	0.79	42.1	D	LT	0.87	51.3	D	LT	0.84	46.5	D	
East 125th Street (EB/WB) & Third Avenue (NB)	EB	L	1.16	162.5	F	L	1.19	174.7	F	L	1.03	118.1	F	
		T	1.30	173.6	F	T	1.36	197.0	F	T	1.29	166.3	F	
	WB	TR	1.23	146.8	F	TR	1.25	155.1	F	TR	1.19	128.0	F	
East 126th Street (WB) & Third Avenue (NB)	WB	T	0.91	47.7	D	T	0.95	55.8	E	T	0.93	49.7	D	
East 125th Street (EB/WB) & Lexington Avenue (SB)	EB	T	1.35	200.9	F	T	1.38	211.6	F	T	1.38	211.6	F	*
	WB	T	1.46	248.0	F	T	1.48	257.4	F	T	1.48	257.4	F	*
	SB	LT	1.00	53.4	D	LT	1.05	66.6	E	LT	1.05	66.6	E	*
East 111th Street (WB) & Park Avenue (NB)	WB	TR	1.09	116.0	F	TR	1.13	131.9	F	TR	1.08	111.6	F	
East 119th Street (WB) & Park Avenue (NB)	WB	TR	1.16	136.0	F	TR	1.35	210.8	F	TR	1.18	138.4	F	
East 120th Street (EB) & Park Avenue (NB)	EB	LT	0.80	49.8	D	LT	0.89	60.1	E	LT	0.85	53.3	D	
East 119th Street (WB) & Park Avenue (SB)	WB	LT	0.95	70.9	E	LT	1.09	110.3	F	LT	0.95	67.0	E	
	SB	TR	1.02	58.5	E	TR	1.06	72.9	E	TR	N/A	25.5	C	
East 120th Street (EB) & Park Avenue (SB)	EB	TR	0.99	86.8	F	TR	1.07	109.9	F	TR	N/A	57.0	D	
	SB	LT	0.98	49.5	D	LT	1.02	58.5	E	LT	1.00	52.4	D	
East 128th Street (EB) & Park Avenue (SB)	EB	TR	1.20	156.5	F	TR	1.22	164.7	F	TR	1.16	139.9	F	
East 116th Street (EB/WB) & Madison Avenue (NB)	EB	LT	1.10	98.3	F	LT	1.12	104.7	F	LT	1.08	87.3	F	
East 119th Street (WB) & Madison Avenue (NB)	WB	TR	0.99	71.0	E	TR	1.05	87.8	F	TR	0.99	68.3	E	

Shading denotes significant adverse impact that would remain unmitigated.

Table 21-5
Action-With-Mitigation Conditions at Impacted Lane Groups
Weekday Midday Peak Hour

Intersection	Approach	No-Action Weekday MD				With-Action Weekday MD				Mitigation Weekday MD			
		Lane Group	V/C Ratio	Delay (sec/veh)	LOS	Lane Group	V/C Ratio	Delay (sec/veh)	LOS	Lane Group	V/C Ratio	Delay (sec/veh)	LOS
East 125th Street (EB/WB) & First Avenue/Willis Avenue Bridge (SB)	EB	LT	1.05	72.4	E	LT	1.08	80.3	F	LT	1.05	69.4	E
East 106th Street (EB/WB) & Second Avenue (SB)	EB	TR	1.13	116.6	F	TR	1.16	126.6	F	TR	1.11	110.6	F
	WB	L	0.91	84.5	F	L	0.93	88.1	F	L	0.86	71.9	E
East 125th St (EB/WB)/RFK Bridge (WB) & Second Avenue (SB)	EB	T	1.10	92.8	F	T	1.13	104.5	F	T	1.13	104.5	F
East 126th Street (WB) & Second Avenue (SB)/RFK Bridge Exit (NB)	WB	L	0.75	55.8	E	L	0.80	61.6	E	L	0.76	55.4	E
East 125th Street (EB/WB) & Third Avenue (NB)	EB	T	1.25	153.5	F	T	1.29	170.5	F	T	1.26	155.7	F
	WB	TR	1.15	116.5	F	TR	1.17	123.6	F	TR	1.14	110.8	F
East 125th Street (EB/WB) & Lexington Avenue (SB)	EB	T	1.48	256.1	F	T	1.49	261.5	F	T	1.45	241.1	F
	WB	T	1.20	137.5	F	T	1.21	141.1	F	T	1.17	126.5	F
East 126th Street (WB) & Lexington Avenue (SB)	WB	LT	1.35	199.3	F	LT	1.40	219.1	F	LT	1.36	200.2	F
East 111th Street (WB) & Park Avenue (NB)	WB	TR	0.88	62.1	E	TR	0.93	71.5	E	TR	0.89	62.4	E
East 119th Street (WB) & Park Avenue (NB)	WB	TR	0.82	46.2	D	TR	0.90	57.8	E	TR	0.84	46.8	D
East 119th Street (WB) & Park Avenue (SB)	WB	LT	0.85	55.1	E	LT	0.97	75.9	E	LT	0.88	56.5	E
East 128th Street (EB) & Park Avenue (SB)	EB	TR	1.03	102.5	F	TR	1.08	116.9	F	TR	1.03	100.4	F
East 119th Street (WB) & Madison Avenue (NW)	WB	TR	0.81	43.0	D	TR	0.86	48.0	D	TR	0.83	43.7	D

Shading denotes significant adverse impact that would remain unmitigated.

Table 21-6
Action-With-Mitigation Conditions at Impacted Lane Groups
Weekday PM Peak Hour

Intersection	Approach	No-Action Weekday PM Lane Group	V/C Ratio	Delay (sec/veh)	LOS	With-Action Weekday PM Lane Group	V/C Ratio	Delay (sec/veh)	LOS	Mitigation Weekday PM Lane Group	V/C Ratio	Delay (sec/veh)	LOS
East 125th Street (EB/WB) & First Avenue/Willis Avenue Bridge (SB)	EB	LT	1.31	174.1	F	LT	1.36	194.1	F	LT	1.36	194.1	F
East 106th Street (EB/WB) & Second Avenue (SB)	EB	TR	1.16	130.6	F	TR	1.19	138.8	F	TR	1.14	121.4	F
	WB	L	0.91	85.1	F	L	0.92	88.8	F	L	0.86	72.1	E
East 120th Street (EB) & Second Avenue (SB)	EB	TR	1.18	132.1	F	TR	1.26	165.5	F	TR	1.19	132.2	F
East 125th St (EB/WB)/RFK Bridge (WB) & Second Avenue (SB)	EB	T	1.42	226.6	F	T	1.49	254.7	F	T	1.49	254.7	F
	WB (E 125 St)	LT	0.77	43.8	D	LT	0.94	67.9	E	LT	0.94	67.9	E
	WB (Ramp)	L	0.95	76.8	E	L	1.00	88.6	F	L	1.00	88.6	F
	WB (Ramp)	LT	0.98	81.8	F	LT	1.02	89.6	F	LT	1.02	89.6	F
	SB	T	1.06	74.9	E	T	1.08	82.7	F	T	1.08	82.7	F
East 126th Street (WB) & Second Avenue (SB)/RFK Bridge Exit (NB)	WB	L	1.35	235.7	F	L	1.50	295.8	F	L	1.50	295.8	F
	NB	L	0.98	82.6	F	L	0.99	86.7	F	L	0.99	86.7	F
East 127th Street (EB) & Second Avenue (SB)	EB	L	1.01	70.2	E	L	1.06	85.5	F	L	1.00	67.1	E
East 128th Street (EB) & Second Avenue (SB)	EB	T	1.16	105.5	F	T	1.18	112.0	F	T	1.15	99.6	F
East 116th Street (EB/WB) & Third Avenue (NB)	EB	LT	0.95	51.4	D	LT	0.98	56.5	E	LT	0.95	49.3	D
East 125th Street (EB/WB) & Third Avenue (NB)	EB	L	0.91	79.5	E	L	0.96	91.9	F	L	0.84	63.0	E
		T	1.57	294.0	F	T	1.66	332.4	F	T	1.57	292.4	F
	WB	TR	1.22	142.6	F	TR	1.23	149.0	F	TR	1.17	121.2	F
East 126th Street (WB) & Third Avenue (NB)	WB	T	1.04	75.0	E	T	1.10	95.5	F	T	1.04	75.0	E
East 120th Street (EB) & Lexington Avenue (SB)	EB	TR	0.91	54.2	D	TR	0.97	65.3	E	TR	0.94	57.9	E
East 125th Street (EB/WB) & Lexington Avenue (SB)	EB	T	1.73	364.5	F	T	1.77	385.6	F	T	1.72	362.2	F
	WB	T	1.21	143.1	F	T	1.23	149.3	F	T	1.19	133.7	F
East 126th Street (WB) & Lexington Avenue (SB)	WB	LT	1.54	281.7	F	LT	1.61	311.9	F	LT	1.51	268.5	F
East 111th Street (WB) & Park Avenue (NB)	WB	TR	1.09	113.4	F	TR	1.16	135.2	F	TR	N/A	51.6	D
	NB	LT	1.06	70.8	E	LT	1.08	76.9	E	LT	1.06	69.2	E
East 119th Street (WB) & Park Avenue (NB)	WB	TR	1.09	113.0	F	TR	1.24	167.4	F	TR	1.08	104.2	F
East 120th Street (EB) & Park Avenue (NB)	EB	LT	1.05	96.9	F	LT	1.16	132.6	F	LT	1.06	94.3	F
East 128th Street (EB) & Park Avenue (NB)	EB	LT	0.76	46.0	D	LT	0.85	54.8	D	LT	0.81	49.2	D
East 119th Street (WB) & Park Avenue (SB)	WB	LT	1.01	85.6	F	LT	1.17	136.6	F	LT	1.01	80.8	F
East 120th Street (EB) & Park Avenue (SB)	EB	TR	1.16	135.8	F	TR	1.25	171.1	F	TR	1.13	124.6	F
East 128th Street (EB) & Park Avenue (SB)	EB	TR	0.96	78.5	E	TR	1.02	93.8	F	TR	0.97	78.8	E
East 116th Street (EB/WB) & Madison Avenue (NB)	EB	LT	1.13	114.0	F	LT	1.16	123.2	F	LT	1.10	100.9	F
East 119th Street (WB) & Madison Avenue (NB)	WB	TR	0.95	61.6	E	TR	1.01	75.1	E	TR	0.94	58.2	E

Shading denotes significant adverse impact that would remain unmitigated.

Table 21-7
Action-With-Mitigation Conditions at Impacted Lane Groups
Saturday Peak Hour

Intersection	Approach	No-Action Saturday Lane Group	V/C Ratio	Delay (sec/veh)	LOS	With-Action Saturday Lane Group	V/C Ratio	Delay (sec/veh)	LOS	Mitigation Saturday Lane Group	V/C Ratio	Delay (sec/veh)	LOS
East 106th Street (EB/WB) & First Avenue (NB)	EB	L	1.02	107.5	F	L	1.05	118.2	F	L	0.98	95.1	F
		LT	1.03	118.4	F	LT	1.07	132.1	F	LT	0.99	105.2	F
East 106th Street (EB/WB) & Second Avenue (SB)	EB	TR	1.12	112.3	F	TR	1.14	120.6	F	TR	1.11	104.6	F
East 119th (WB) Street & Second Avenue (SB)	WB	LT	1.14	117.0	F	LT	1.15	121.2	F	LT	1.11	106.6	F
East 125th St (EB/WB)/RFK Bridge (WB) & Second Avenue (SB)	EB	T	1.12	107.1	F	T	1.16	120.4	F	T	1.16	120.4	F
East 126th Street (WB) & Second Avenue (SB)/RFK Bridge Exit (NB)	WB	L	0.77	62.3	E	L	0.83	72.3	E	L	0.79	63.6	E
East 124th Street (EB) & Third Avenue (NB)	EB	LT	0.95	61.7	E	LT	0.97	65.9	E	LT	0.94	57.7	E
East 125th Street (EB/WB) & Third Avenue (NB)	EB	T	1.04	76.5	E	T	1.08	86.8	F	T	1.02	67.8	E
	WB	TR	1.32	188.2	F	TR	1.34	196.6	F	TR	1.27	165.6	F
East 126th Street (WB) & Third Avenue (NB)	WB	T	0.90	46.5	D	T	0.95	55.8	E	T	0.93	49.9	D
		R	1.06	101.3	F	R	1.07	107.4	F	R	1.04	95.2	F
East 125th Street (EB/WB) & Lexington Avenue (SB)	EB	T	1.20	137.4	F	T	1.21	140.5	F	T	1.17	125.3	F
East 126th Street (WB) & Lexington Avenue (SB)	WB	LT	1.58	298.6	F	LT	1.64	329.1	F	LT	1.55	285.2	F
East 111th Street (WB) & Park Avenue (NB)	WB	TR	1.03	93.1	F	TR	1.06	101.5	F	TR	1.01	86.1	F
East 119th Street (WB) & Park Avenue (NB)	WB	TR	1.09	112.8	F	TR	1.20	151.5	F	TR	1.09	109.7	F
East 119th Street (WB) & Park Avenue (SB)	WB	LT	0.85	53.6	D	LT	0.95	69.8	E	LT	0.86	53.1	D
East 120th Street (EB) & Park Avenue (SB)	EB	TR	0.99	85.0	F	TR	1.05	101.4	F	TR	1.00	87.1	F
East 128th Street (EB) & Park Avenue (SB)	EB	TR	0.81	54.5	D	TR	0.86	60.7	E	TR	0.82	54.0	D
East 116th Street (EB/WB) & Madison Avenue (NB)	EB	LT	1.12	107.2	F	LT	1.13	112.4	F	LT	1.09	94.8	F

Shading denotes significant adverse impact that would remain unmitigated.

PROPOSED SCHEDULE FOR TRAFFIC MITIGATION MEASURES

Subject to the approval of DOT, the mitigation measures summarized in **Table 21-3** would be implemented to mitigate the significant adverse traffic impacts resulting from full build-out of

the Proposed Actions in 2027. As the development of the Proposed Actions would be expected to occur over an approximately 10-year period, it is possible that some of the significant adverse traffic impacts could occur prior to full build-out in 2027. Based on the anticipated construction schedule shown in Chapter 20, "Construction," incremental vehicle trips associated with traffic generated by projected development sites could potentially result in significant adverse traffic impacts beginning in the third quarter of 2021 when completed incremental development would result in a net increase of 924 dwelling units, 51,962 gsf of retail/restaurant space, 55,283 gsf of office space, 19,440 gsf of light industrial space and 26,751 gsf of community facility (medical office) space. This level of new development would generate more than the *CEQR Technical Manual* analysis threshold of 50 peak hour vehicle trip ends in all peak periods. At this earlier time, implementation of some or all of the mitigation measures developed for full build-out of the Proposed Actions in 2027 would be considered at impacted intersections, primarily those in proximity to the 125th Street and 126th Street corridors where project-generated traffic en route to and from the RFK Bridge would be most concentrated.

EFFECTS OF TRAFFIC MITIGATION ON PARKING CONDITIONS

As discussed above, the proposed traffic mitigation plan would incorporate a number of modifications to curbside parking regulations. New restrictions would be implemented at three locations along Park Avenue within the Project Area. However, at only one location—Park Avenue at East 119th Street—would the additional restriction affect on-street parking during the analyzed weekday midday period; none of the proposed modifications to curbside parking regulations would affect the analyzed overnight period. At the Park Avenue/East 119th Street intersection, the proposed mitigation would displace approximately five on-street parking spaces during the weekday midday period along the west curb of the southbound Park Avenue approach.

As discussed in Chapter 14, "Transportation," the Proposed Actions would result in a shortfall of approximately 174 on-street parking spaces in proximity to the Project Area during the weekday midday period, and with the proposed traffic mitigation, this shortfall would increase by five spaces to a total of 179 spaces. As a shortfall in on-street parking in this area of Manhattan is not considered a significant adverse impact based on *CEQR Technical Manual* criteria (see Section F, "Transportation Analysis Methodologies," in Chapter 14, "Transportation"), the proposed traffic mitigation measures would not result in new significant adverse impacts to on-street parking conditions.

TRANSIT

SUBWAY

As summarized in **Table 21-8**, under the Proposed Actions, one street stair at the 103rd Street subway station, one street stair at the 116th Street subway station, and two street stairs and two platform stairs at the 125th Street subway station would be significantly adversely impacted by project-generated demand in one or both peak hours. All of these stations are on the Lexington Avenue Line and are served by the Nos. 4, 5, and/or 6 trains.

Table 21-8
Summary of Significant Subway Station Impacts

Subway Station	Station Element	Impacted Time Period
103rd Street (6) Station	Street Stair S4/M4	AM/PM
116th Street (6) Station	Street Stair S3/P3	AM
125th Street (4,5,6) Station	Street Stair S2/M2	AM
	Street Stair S3/M3	AM/PM
	Platform Stair P2	AM/PM
	Platform Stair P3	AM/PM

As discussed in Chapter 14, "Transportation," unrelated to the Proposed Actions, the Metropolitan Transportation Authority (MTA) is planning to construct three new subway stations in proximity to the Project Area under Phase II of the Second Avenue Subway. Data provided in the 2004 *Second Avenue Subway FEIS* indicate that with completion of the Second Avenue Line, demand at existing Lexington Avenue Line stations would be substantially reduced. AM peak hour demand at the 103rd Street and 116th Street subway stations would be reduced by approximately 33 percent and 48 percent, respectively, with completion of the full Second Avenue Line from 125th Street to Lower Manhattan, while demand at the 125th Street station on the Lexington Avenue Line, which would be connected to the new terminus station for the Second Avenue Line, would decrease by approximately 35 percent. The 2004 FEIS also identified improvements that are likely to be made at the 125th Street station on the Lexington Avenue Line under Second Avenue Subway Phase II, including expansion of one or more existing station entrances at Lexington Avenue and East 125th Street, installation of one or more additional entrances at Park Avenue, and expansion of the station's mezzanine. (As noted in Chapter 14, detailed designs for the improvements to the existing 125th Street station of the Lexington Avenue Line were not available at the time this EIS was prepared.)

Although the reductions in demand at existing Project Area subway stations forecast in the 2004 FEIS were based upon completion of the full Second Avenue Line to Lower Manhattan, it is reasonable to assume that much of the projected decrease would occur upon completion of Phase II which would extend the line through the Project Area. In addition, it is anticipated that much of the incremental demand generated by projected development sites along Second Avenue, and to a lesser extent those along Third Avenue, would use the planned new Second Avenue Line stations at East 106th and East 116th streets. Much of the demand from projected development sites in proximity to East 125th Street would similarly use the new Second Avenue Line 125th Street subway station where new entrances would be provided at Park Avenue and improvements would be made to existing subway station entrances at Lexington Avenue. Consequently, it is anticipated that both No Action and With Action Condition demand at most pedestrian elements at the three Lexington Avenue Line stations impacted by the Proposed Actions would be reduced with completion of Second Avenue Subway Phase II, and that AM and PM peak hour conditions would generally be better than those reflected in the impact analyses shown in Tables 14-37 and 14-38 in Chapter 14, "Transportation." It is therefore anticipated that many, if not all, of the significant adverse peak hour stair impacts at the Lexington Avenue Line 103rd Street, 116th Street and 125th Street subway stations would not occur with implementation of Phase II of the Second Avenue Subway.

Given the substantial reductions in both No Action and With Action Condition demand expected to occur at the 103rd Street, 116th Street and 125th Street subway stations with implementation

of Second Avenue Subway Phase II, and that Second Avenue Subway Phase II would also likely include improvements to pedestrian circulation elements at the 125th Street station.

The Proposed Actions, in the absence of the Second Avenue Subway Phase II, would result in significant impacts to one street stair at the 103rd Street subway station, one street stair at the 116th Street subway station and two street stairs and two platform stairs at the 125th Street subway station. DCP, as lead agency, will coordinate with NYCT between the DEIS and FEIS, to determine what, if any, mitigation measures should be implemented to address these specific impacts. In the absence of the Second Avenue Subway Phase II or mitigation measures applicable to these specific station elements, the Proposed Actions' significant impacts to one street stair at the 103rd Street subway station, one street stair at the 116th Street subway station and two street stairs and two platform stairs at the 125th Street subway station would remain unmitigated.

BUS

As discussed in Chapter 14, "Transportation," the Proposed Actions would add approximately 53 trips through the maximum load point on the southbound M15 SBS service in the AM peak hour, resulting in a passenger capacity shortfall of 22. Therefore, southbound M15 SBS service would be significantly adversely impacted in the AM peak hour based on *CEQR Technical Manual* criteria. As shown in **Table 21-9**, this significant adverse impact to the M15 SBS could be fully mitigated by the addition of one bus in the southbound direction in the AM peak hour. The general policy of NYCT is to provide additional bus service where demand warrants, taking into account financial and operational constraints.

As discussed in Chapter 14, "Transportation," it is anticipated that completion of Phase II of the Second Avenue Subway would reduce demand on bus routes serving the project area. Therefore, the overcapacity condition on southbound M15 SBS buses in the AM peak hour would likely not occur as the result of the Proposed Actions, and the proposed mitigation would not be needed with the extension of the Second Avenue Subway to the Project Area.

Table 21-9
Action-With-Mitigation Local Bus Analysis

Peak Hour	Route	Direction	Maximum Load Point	Peak Hour Buses[1]	No Action Available Capacity[2]	Project Increment	Available Capacity w/ proposed Actions[2]	Additional Buses Needed to Accommodate Project-Generated Demand	Available Capacity With Mitigation
AM	M15 SBS	SB	2nd Ave & E. 100th Street	15	31	53	-22*	1	63

Notes:
1. Assumes service levels adjusted to address capacity shortfalls in the No Action conditions.
2. Available capacity based on MTA loading guidelines of 85 passengers per articulated bus.
* Denotes a significant adverse impact.

PEDESTRIANS

As discussed in Chapter 14, "Transportation," the results of the analyses of pedestrian conditions show that demand from the Proposed Actions would significantly adversely impact one sidewalk in all four analyzed peak hours under the With Action Condition (see **Table 21-10**). There would be no significant impacts to any corner area or crosswalk in any period.

Table 21-10
Summary of Significant Pedestrian Impacts

Corridor/ Intersection	Impacted Element	Peak Hour			
		Weekday AM	Weekday Midday	Weekday PM	Saturday
East 126th Street between Lexington Ave and Park Ave	South Sidewalk	X	X	X	X

The Proposed Actions' single pedestrian impact would occur on the south sidewalk along East 126th Street where an existing curbside tree pit constrains pedestrian flow. Under *CEQR Technical Manual* criteria, a significant adverse pedestrian impact is considered mitigated if measures implemented return the anticipated conditions to an acceptable level, following the same impact criteria used in determining impacts. **Table 21-11** shows the recommended mitigation measure to address the impact to the south sidewalk along East 126th Street and its effectiveness. As shown in **Table 21-11**, removal of the tree pit would fully mitigate the Proposed Actions' significant adverse impact to this sidewalk by improving conditions to an acceptable LOS C in all four analyzed peak hours. DCP, as lead agency, will coordinate with NYC Parks between the DEIS and FEIS to obtain their approval to remove the tree pit at this location.

Table 21-11
Action-With-Mitigation Sidewalk Conditions

Location	Side	No-Action			With-Action			Action-With-Mitigation			
		Effective Width (ft)	Average Space (ft^2/ped)	LOS	Effective Width (ft)	Average Space (ft^2/ped)	LOS	Effective Width (ft)	Average Space (ft^2/ped)	LOS	Mitigation Measures
(S7) East 126th Street Lexington Ave to Park Ave	South	**Weekday AM Peak Hour**									Mitigated by removing a tree pit at an existing constraint point.
		1.0	20.0	E	1.0	15.4	E*	5.3	96.6	C	
		Weekday Midday Peak Hour									
		1.0	20.7	E	1.0	13.8	E*	5.3	89.6	C	
		Weekday PM Peak Hour									
		1.0	22.5	E	1.0	14.3	E*	5.3	91.6	C	
		Saturday Peak Hour									
		1.0	23.3	E	1.0	13.2	E*	5.3	87.0	C	

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

EFFECTS OF TRAFFIC MITIGATION ON PEDESTRIAN CONDITIONS

Proposed traffic mitigation measures (discussed previously) would potentially affect pedestrian conditions at a total of three analyzed crosswalks and 14 analyzed corner areas at seven intersections in one or more peak hours. It should be noted, however, that the recommended traffic mitigation measures at each of these locations would consist of minor signal timing adjustments of one to three seconds and/or changes to parking regulations, and these measures are not expected to have a substantial effect on crosswalk and corner area levels of service. Sufficient pedestrian crossing time would also continue to be provided at all crosswalks. Given that all analyzed crosswalks and corner areas potentially affected by traffic mitigation are projected to operate at an uncongested LOS A or B with the Proposed Actions, no new significant adverse pedestrian impacts are anticipated in any peak hour as a result of the proposed traffic mitigation.

PROPOSED SCHEDULE FOR PEDESTRIAN MITIGATION MEASURES

Subject to DOT approval, the pedestrian mitigation measure described above would be implemented to mitigate the significant adverse sidewalk impact resulting from full build-out of the Proposed Actions in 2027. As the development of the Proposed Actions would be expected to occur over an approximately 10-year period, it is possible that this sidewalk impact could occur prior to full build-out in 2027.

Based on the anticipated construction schedule shown in Chapter 20, "Construction," incremental pedestrian trips generated by the Proposed Actions would potentially occur on the impacted sidewalk (the south sidewalk on East 126th Street between Lexington and Park Avenues) beginning in the first quarter of 2020 upon completion of Projected Development Site 9. At this earlier point in time, implementation of the mitigation measure developed for full build-out of the Proposed Actions in 2027 would be considered to address the potential significant adverse sidewalk impact.

F. CONSTRUCTION NOISE

As discussed in Chapter 20, "Construction," the Proposed Actions would result in significant adverse construction noise impacts. Three representative construction sites were selected for analysis. The largest projected development site (Projected Development Site 4a), a typical projected development site on Park Avenue (Projected Development Site 9), and a projected development site on Third Avenue (Projected Development Site 16) were selected to be analyzed for each phase of construction: excavation and foundation; superstructure; and interior fit-out. Projected Development Site 9 was selected to represent all projected development sites along Park Avenue (except for Projected Development Site 4a) and Projected Development Site 16 was selected to represent all projected development sites along Lexington Avenue, Third Avenue, Second Avenue, and other streets. This analysis was based on a conceptual site plan and construction schedule. The conceptual construction schedule conservatively accounts for overlapping construction activities at development sites in proximity to one another to capture the cumulative nature of construction impacts with respect to number of worker vehicles, trucks, and construction equipment at any given time, within reasonable construction scheduling constraints for each of the development sites in the rezoning area. Because the analysis is based on construction phases, it does not capture the natural daily and hourly variability of construction noise at each receptor. The level of noise produced by construction fluctuates throughout the days and months of the construction phases, while the construction noise analysis is based on the worst-case time periods only, which is conservative.

Based on the schedule and location of the three projected development sites selected for quantitative analysis, they would not have the potential to simultaneously affect noise levels at any surrounding receptor sites (i.e., these projected development sites would not be constructed simultaneously. Consequently, they were analyzed independently. Based on the construction stage predicted to occur at each development site according to the conceptual construction schedule during each of the selected analysis periods, each receptor expected to experience an exceedance of the *CEQR Technical Manual* noise impact threshold was determined for each period. One peak construction period per year over the analysis period of 2018 to 2027 was analyzed. Based on these determinations, receptors where noise level increases are predicted to exceed the noise impact threshold criteria for two or more consecutive years were identified.

The noise analysis results show that the predicted noise levels could exceed the *CEQR Technical Manual* impact criteria throughout the Project Area. The analysis is based on a conceptual site

plan and construction schedule. It is possible that the actual construction may be of less magnitude, or that construction on multiple projected development sites may not overlap, in which case construction noise would be less intense than the analysis predicts.

NOISE REDUCTION MEASURES

Construction of the Proposed Project would be required to follow the requirements of the NYC Noise Control Code for construction noise control measures. Specific noise control measures would be incorporated in noise mitigation plan(s) required under the NYC Noise Code. These measures could include a variety of source and path controls.

The following proposed mitigation measures beyond the noise control measures already identified in Chapter 20, "Construction," may partially mitigate significant adverse impacts (and substantially reduce construction-related noise levels) at some locations:

- Noise barriers constructed from plywood or other materials at a height of 12 to 16 feet utilized to provide shielding;
- Utilization of isolation pads between the pile driver hammer and piles;
- Acoustical shrouds surrounding the pile driver hammer and piles;
- Electric cranes or cranes with exhaust silencers that have lower noise emission levels; and
- Excavators with exhaust silencers that have lower noise emission levels.

Between the DEIS and FEIS, the above mitigation measures will be explored, which are intended to address the pieces of construction equipment that would produce the highest noise levels. However, even if all of the above mitigation measures are determined to be feasible and practicable, some significant adverse construction noise impacts could potentially continue to be experienced at sensitive receptors and, as the result, be unavoidable. In the event no additional practicable or feasible mitigation measures are determined, the significant adverse construction noise impacts identified in Chapter 20, "Construction," would be unavoidable. ✷