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Mitigation

In accordance with the *2021 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 to be developed and evaluated.

Introduction

As detailed in the preceding chapters, upon completion, the Proposed Project has the potential to result in significant adverse impacts on historic resources as well as traffic, transit, and pedestrian elements at certain locations. The Proposed Project also has the potential to result in significant adverse impacts during construction. Mitigation measures have been identified to address those impacts where feasible and/or practical. As discussed below in more detail, partial mitigation is proposed for some of the significant adverse impacts of the Proposed Project. If no mitigation has been identified, an unavoidable significant adverse impact may result.

Principal Conclusions

Historic and Cultural Resources

The CUNY Hunter College Brookdale Campus located on the Development Site was determined eligible for listing on the State and National Registers of Historic Places (S/NRHP) in 2023. The S/NRHP-eligible buildings would be demolished to construct the new SPARC campus buildings and grounds. Under the State Historic Preservation Act, demolition of a historic resource is an Adverse Impact that triggers the requirement for an Alternatives Analysis to identify alternatives that would avoid or minimize the Adverse Impact. The requested Alternatives Analysis is being prepared by the project sponsors and will be completed between publication of the Draft EIS (DEIS) and Final EIS (FEIS). If the Alternatives Analysis establishes that the Adverse Impact cannot be avoided or

minimized, then mitigation measures will be explored between the DEIS and FEIS, in consultation with the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP) and the New York City Landmarks Preservation Commission (LPC) and undertaken as part of the Proposed Project. Any practicable or feasible mitigation measures will be stipulated in a Letter of Resolution to be developed by the project sponsors in conjunction with OPRHP and LPC. If no practicable or feasible mitigation is identified, the impact would constitute an unavoidable significant adverse impact on this architectural resource.

Transportation

Traffic

Of the 23 intersections analyzed, the Proposed Project would result in significant adverse traffic impacts at 15 intersections during the AM peak hour, 13 intersections during the midday peak hour, and eight intersections during the PM peak hour. Standard traffic capacity improvements typically implemented by New York City Department of Transportation (NYC DOT), such as signal timing modifications, could potentially provide full or partial mitigation at some of the significantly impacted intersections. These mitigation measures are being explored and will be studied further in conjunction with NYC DOT between the DEIS and FEIS. In addition, NYC DOT is currently in the process of developing the Second Avenue Bus and Bike Lane Enhancements project which could result in changes to vehicular and pedestrian operations at intersections along Second Avenue. Should the plan be adopted prior to the release of the FEIS, the transportation analysis will be updated to incorporates these changes and, as a result, the traffic impact results in the FEIS may be different than those identified in the DEIS. Should traffic mitigation measures be determined to not be feasible, the impacts to the intersections listed below would remain unmitigated.

- FDR Drive Southbound / Avenue C and East 23rd Street (midday)
- FDR Drive / Avenue C Northbound and East 23rd Street (AM and midday)
- FDR Drive and East 34th Street (AM, midday, and PM)
- First Avenue and East 22nd Street (midday)
- First Avenue and East 23rd Street (AM, midday, and PM)
- First Avenue and East 25th Street (AM and midday)
- First Avenue and East 26th Street (AM, midday, and PM)
- First Avenue and East 29th Street (AM)
- First Avenue and East 30th Street (AM, midday, and PM)
- First Avenue and East 34th Street (AM, midday, and PM)
- Second Avenue and East 22nd Street (AM)
- Second Avenue and East 23rd Street (AM, midday, and PM)
- Second Avenue and East 26th Street (midday)
- Second Avenue and East 30th Street (AM and PM)
- Second Avenue and East 34th Street (AM and midday)
- East 34th Street and Queens-Midtown Tunnel Entrance (AM, midday, and PM)
- East 34th Street and Queens Midtown Tunnel Exit (AM)

› FDR Drive and East 30th Street (AM)

Subway

Subway station analysis was performed at two subway stations – the 23rd Street and 28th Street Stations (both stations are served by the No. 6 subway line). Of the five fare control areas and 21 stairs analyzed, the Proposed Project would result in significant adverse impacts at eight stairs in the AM peak hour (three stairs in the 28th Street subway station and five stairs in the 23rd Street subway station), and five stairs in the PM peak hour (three stairs in the 28th Street subway station and two stairs in the 23rd Street subway station). Typical measures to mitigate these impacted stairs would include widening of the stairs.

Subway station improvements at the 28th Street Station would need to be performed in conjunction with accessibility improvements under the Americans with Disabilities Act (ADA); the station is currently ADA accessible only in the southbound direction. ADA improvements may include the installation of elevators, the feasibility of ADA improvements and of potential widening of impacted stairs would need to be coordinated with New York City Transit (NYCT) between the DEIS and FEIS.

Bus

The Proposed Project would result in a capacity shortfall for the M15 local (southbound direction), M34A-SBS (eastbound direction) and M23-SBS (eastbound direction) during the AM peak hour and for the M15-SBS (northbound direction) and M23-SBS (westbound direction) during the PM peak hour.

Impacts to the M15, M15-SBS and M34A-SBS bus routes could be mitigated with an additional bus in the impacted direction during the impacted peak hour. The M23-SBS bus route could be mitigated with the addition of 11 buses in the eastbound direction in the AM peak hour and five buses in the westbound direction in the PM peak hour. The general policy of the NYCT it to provide additional bus service where demand warrants, taking into account financial and operational constraints.

Pedestrians

Of the 61 pedestrian elements analyzed, the Proposed Project would result in significant adverse pedestrian impacts at eight pedestrian elements (three sidewalks, two crosswalks, and three corners) during the AM peak hour, five pedestrian elements (two sidewalks, one crosswalk, and two corners) during the midday peak hour, and five pedestrian elements (three sidewalks and two corners) during the PM peak hour. Potential improvements that could mitigate the significant impacts, such as widening of crosswalks or relocation of sidewalk or corner obstructions, are being explored and will be studied further in conjunction with NYC DOT between the DEIS and FEIS. In addition, NYC DOT is currently in the process of developing the Second Avenue Bus and Bike Lane Enhancements project which could result in changes to vehicular and pedestrian operations at intersections along Second Avenue. Should the plan be adopted prior to the release of the FEIS, the transportation analysis will be updated to incorporate these changes and, as a result, the pedestrian impact results in the FEIS may be different than those identified in the DEIS. Should pedestrian improvements to mitigate impacts be determined to not be feasible, the impacts to the pedestrian elements would remain unmitigated.

Construction

Construction Transportation

As discussed in **Chapter 16, Construction**, 23 intersections were analyzed for potential significant traffic impacts during the AM and PM construction traffic peak hours. Significant impacts were identified at nine analysis intersections during the AM peak hour and at seven intersections during the PM peak hour. Where impacts during construction may occur, measures such as signal timing modifications could potentially provide full or partial mitigation at some of the significantly impacted intersections. These measures and additional mitigation measures will be studied further in conjunction with NYC DOT between the DEIS and FEIS. NYC DOT is currently in the process of developing the Second Avenue Bus and Bike Lane Enhancements project, which could result in changes to vehicular and pedestrian operations at intersections along Second Avenue. Should the plan be adopted prior to the release of the FEIS, the transportation analysis will be updated to incorporate these changes and, as a result, the traffic impact results in the FEIS may be different than those identified in the DEIS.

Construction Noise

Since noise levels during construction would have the potential to exceed the thresholds for exterior increases in noise, there would be potential for the project to result in high exterior and interior noise levels at existing noise receptors at the Office of the Chief Medical Examiner located immediately north of the Development Site. As described in **Chapter 16, Construction**, exterior noise levels would have the potential to exceed the 85 dBA criterion for New York City Noise Code during certain phases of construction if the upper limits of projected construction noise are realized.

The primary sources of construction noise causing impact include demolition of the existing building and pile driving during the foundation phases of construction. Because the potential noise exceedances are predicted to occur only on the southern facade over a limited period of the construction duration (up to four months total depending on the location), the Proposed Project could result in short-term exceedances at these locations. As such, noise control measures would be incorporated in a construction noise mitigation plan required under the New York City Noise Control Code to further reduce the noise impact from the construction operations. Potential noise reduction measures could include a variety of source and path controls, such as temporary barriers and/or shrouds around specific equipment; and substitution with the equipment of lower noise emissions, i.e., using drill rigs instead of pile driving, as well as other measures, as warranted.

Historic and Cultural Resources

As discussed in **Chapter 6, Historic and Cultural Resources**, the CUNY Hunter College Brookdale Campus located on the Development Site was determined eligible for listing on the State and National Registers of Historic Places in 2023. The S/NRHP-eligible buildings would be demolished to construct the new SPARC campus buildings and grounds. Under the State Historic Preservation Act, demolition of a historic resource is an Adverse Impact that triggers the requirement for an Alternatives Analysis to identify alternatives that would avoid or minimize the Adverse Impact. The requested Alternatives Analysis is being prepared by the project sponsors and will be completed between publication of the DEIS and FEIS. If the Alternatives Analysis establishes that the Adverse

Impact cannot be avoided or minimized, then mitigation measures will be explored between the DEIS and FEIS, in consultation with the OPRHP and the New York City Landmarks Preservation Commission (LPC) and undertaken as part of the Proposed Project. Any practicable or feasible mitigation measures will be stipulated in a Letter of Resolution to be developed by the project sponsors in conjunction with OPRHP and LPC. If no practicable or feasible mitigation is identified, the impact would constitute an unavoidable significant adverse impact on this architectural resource.

Transportation

As discussed in **Chapter 10, Transportation**, the Proposed Project would result in significant impacts at a number of locations in the study area. This section describes the mitigation measures that could reduce or eliminate significant impacts and indicates where impacts would remain unmitigated.

Traffic

Of the 23 intersections analyzed, the Proposed Project would result in significant adverse traffic impacts at 15 intersections during the AM peak hour (at 24 traffic movements), 13 intersections (at 22 traffic movements) during the midday peak hour, and eight intersections (at 16 traffic movements) during the PM peak hour.

Table 18-1 summarizes the number of significant traffic impacts and whether they could be fully mitigated (i.e., "mitigated") or partially mitigated, and **Table 18-2** summarizes the significantly impacted traffic movements. Details of the intersection capacity analyses are summarized in **Table 18-3** through **Table 18-5.**

Table 18-1 Traffic Impact Mitigation Summary

Intersections	AM Peak Hour	Midday Peak Hour	PM Peak Hour
No significant impact	8	10	15
Fully mitigated impact	0	0	0
Partially mitigated impact	0	0	0
Unmitigated impact	15	13	8

Table 18-2 Summary of Significantly Impacted Traffic Movements

Intersection	AM Peak Hour	Midday Peak Hour	PM Peak Hour
FDR Drive Southbound and East 23rd Street (west side)		EBTR SBLTR	
FDR Drive Southbound and East 23rd Street (east side)	NBLTR	EBL	
FDR Drive Southbound and East 30th Street	EBR		
FDR Drive and East 34th Street	EBL NBLTR SBLTR	EBL EBLTR SBLTR	EBL EBLTR NBLTR
First Avenue and East 22nd Street		NBT	
First Avenue and East 23rd Street	EBL WBR	EBL WBR	EBL WBR
First Avenue and East 25th Street	WBR NBLT	WBR	
First Avenue and East 26th Street	EBLT	EBLT NBLT	EBLT WBTR
First Avenue and East 29th Street	NBLT		
First Avenue and East 30th Street	EBT NBR	NBT	EBT
First Avenue and East 34th Street	EBT NBR	EBT	EBT WBR
Second Avenue and East 22nd Street	EBTR		
Second Avenue and East 23rd Street	EBT WBL SBL	EBT WBL SBL	EBT WBL SBL
Second Avenue and East 26th Street		WBL	
Second Avenue and East 30th Street	EBT		EBT
Second Avenue and East 34th Street	EBR	WBLT	
East 34th Street at Queens Midtown Tunnel Entrance	EBT WBR	EBT WBT WBR	EBT WBR
East 34th Street at Queens Midtown Tunnel Exit	WBT		
Number of impacted traffic movements	24	22	16
Number of unmitigated traffic movements	24	22	16

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

Standard traffic capacity improvements typically implemented by NYC DOT, such as signal timing modifications, could potentially provide full or partial mitigation at some of the significantly impacted intersections. These measures and additional mitigation measures will be studied further in conjunction with NYC DOT between the DEIS and FEIS. As the traffic study area includes connections to major roadways, i.e., access to FDR Drive and Queens Midtown Tunnel, there is prevalent congestion within the study area. Therefore, signal timing modifications may be able to mitigate traffic impacts at individual intersections but could also potentially result in new traffic impacts or worsen impacts at nearby intersections. The auxiliary effects of traffic signal modifications would be considered in identifying appropriate traffic mitigation measures.

In addition, NYC DOT is currently in the process of developing the Second Avenue Bus and Bike Lane Enhancements project which could result in changes to vehicular and pedestrian operations at intersections along Second Avenue. Should the plan be adopted prior to the release of the FEIS, the transportation analysis will be updated to incorporates these changes and, as a result, the traffic impact results in the FEIS may be different than those identified in the DEIS. Should traffic improvements to mitigate impacts be determined to not be feasible, the impacts to the intersections, as shown in **Table 18-1**, would remain unmitigated. During the AM peak hour, 15 of the 23 intersections would remain unmitigated, 13 intersections would remain unmitigated during the midday peak hour, and eight intersections would remain unmitigated during the PM peak hour.

Table 18-3 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – AM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
SIGNALIZED INTERSECTIONS														
FDR Drive Southbound / Avenue C at East 23rd Street (west side)														
East 23rd Street	EB	TR	1.06	113.3	F	TR	1.08	111.3	F	TR	1.08	111.3	F	Mitigation not required
	EB	R	1.06	115.5	F	R	1.07	117.7	F	R	1.07	117.7	F	
	WB	L	0.29	29.8	C	L	0.29	29.3	C	L	0.29	29.3	C	
	WB	T	0.33	87.7	F	T	0.37	87.9	F	T	0.37	87.9	F	
FDR Dr SB	SB	LTR	1.07	101.6	F	LTR	1.09	100.7	F	LTR	1.09	100.7	F	
Overall Intersection[2]		-	-	**103.0**	**F**	-	-	**102.1**	**F**	-	-	**102.1**	**F**	
FDR Drive Southbound / Avenue C at East 23rd Street (east side)														
East 23rd Street	EB	L	1.06	89.3	F	L	1.06	88.6	F	L	1.06	88.6	F	**Unmitigable**
	EB	TR	1.06	87.1	F	TR	1.09	86.1	F	TR	1.09	86.1	F	
	WB	LTR	0.08	15.1	B	LTR	0.08	15.1	B	LTR	0.08	15.1	B	
Avenue C	NB	LTR	0.72	52.0	D	LTR	0.76	76.8	E	LTR	0.76	76.8	E	
Overall Intersection		-	-	**66.7**	**E**	-	-	**79.5**	**E**	-	-	**79.5**	**E**	

Table 18-3 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – AM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
FDR Drive at East 34th Street														
East 34th Street	EB	L	0.94	59.6	E	L	1.09	87.1	F	L	1.09	87.1	F	**Unmitigable**
	EB	LTR	0.94	58.7	E	LTR	1.01	61.9	E	LTR	1.01	61.9	E	
	EB	R	0.94	34.8	C	R	0.99	39.2	D	R	0.99	39.2	D	
	WB	LTR	0.02	30.2	C	LTR	0.02	30.2	C	LTR	0.02	30.2	C	
FDR Dr NB	NB	L	1.23	156.8	F	L	1.22	151.4	F	L	1.22	151.4	F	
	NB	LTR	1.22	150.5	F	LTR	1.23	155.6	F	LTR	1.23	155.6	F	
FDR Dr SB	SB	LTR	1.05	73.2	E	LTR	1.13	102.4	F	LTR	1.13	102.4	F	
Overall Intersection		-	-	**87.9**	**F**	-	-	**99.7**	**F**	-	-	**99.7**	**F**	
First Avenue at East 22nd Street														
East 22nd Street	EB	LT	0.36	15.7	B	LT	0.41	14.6	B	LT	0.41	14.6	B	Mitigation not required
First Avenue	NB	T	0.84	77.6	E	T	0.86	78.8	E	T	0.86	78.8	E	
	NB	R	0.03	15.6	B	R	0.03	15.6	B	R	0.03	15.6	B	
Overall Intersection		-	-	**69.2**	**E**	-	-	**69.5**	**E**	-	-	**69.5**	**E**	

Table 18-3 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – AM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
First Avenue at East 23rd Street														
East 23rd Street	EB	L	0.97	60.2	E	L	1.17	121.6	F	L	1.17	121.6	F	**Unmitigable**
	EB	T	0.46	16.7	B	T	0.47	16.9	B	T	0.47	16.9	B	
	WB	T	0.58	17.9	B	T	0.58	17.0	B	T	0.58	17.0	B	
	WB	R	1.05	102.1	F	R	1.28	183.4	F	R	1.28	183.4	F	
First Avenue	NB	L	0.90	60.5	E	L	0.90	59.5	E	L	0.90	59.5	E	
	NB	T	0.81	62.0	E	T	0.85	63.7	E	T	0.85	63.7	E	
	NB	R	0.76	25.2	C	R	0.96	54.4	D	R	0.96	54.4	D	
Overall Intersection		-	-	**46.5**	**D**	-	-	**61.0**	**E**	-	-	**61.0**	**E**	
First Avenue at East 24th Street														
East 24th Street	EB	L	0.07	17.9	B	L	0.08	18.1	B	L	0.08	18.1	B	Mitigation not required.
First Avenue	NB	LT	0.79	63.8	E	LT	0.85	65.4	E	LT	0.85	65.4	E	
Overall Intersection		-	-	**62.8**	**E**	-	-	**64.5**	**E**	-	-	**64.5**	**E**	
First Avenue at East 25th Street														
East 25th Street	WB	T	0.44	20.1	C	T	0.46	20.4	C	T	0.46	20.4	C	**Unmitigable**
	WB	R	0.74	33.4	C	R	1.33	194.4	F	R	1.33	194.4	F	
First Avenue	NB	LT	0.90	33.6	C	LT	0.98	59.7	E	LT	0.98	59.7	E	
	NB	R	0.07	2.5	A	R	0.36	12.8	B	R	0.36	12.8	B	
Overall Intersection		-	-	**31.4**	**C**	-	-	**80.4**	**F**	-	-	**80.4**	**F**	

Table 18-3 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – AM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
First Avenue and East 26th Street														
East 26th Street	EB	L	1.22	148.3	F	LT	1.58	299.6	F	LT	1.58	299.6	F	**Unmitigable**
Former East 26th Street	WB	TR	0.54	29.7	C	TR	0.66	33.6	C	TR	0.66	33.6	C	
First Avenue	NB	LT	0.92	62.1	E	LT	1.04	60.6	E	LT	1.04	60.6	E	
	NB	-	-	-	-	R	0.31	7.3	A	R	0.31	7.3	A	
Overall Intersection		-	-	**72.2**	**E**	-	-	**91.2**	**F**	-	-	**91.2**	**F**	
First Avenue at East 29th Street														
East 29th Street	WB	TR	0.07	22.6	C	TR	0.07	22.6	C	TR	0.07	22.6	C	**Unmitigable**
First Avenue	NB	LT	1.13	69.2	E	LT	1.22	110.1	F	LT	1.22	110.1	F	
	NB	R	0.07	0.7	A	R	0.07	0.6	A	R	0.07	0.6	A	
Overall Intersection		-	-	**67.7**	**E**	-	-	**107.7**	**F**	-	-	**107.7**	**F**	
First Avenue at East 30th Street														
East 30th Street	EB	L	0.63	28.0	C	L	0.64	28.0	C	L	0.64	28.0	C	**Unmitigable**
	EB	T	1.10	97.8	F	T	1.20	134.1	F	T	1.20	134.1	F	
First Avenue	NB	T	0.79	11.8	B	T	0.84	35.2	D	T	0.84	35.2	D	
	NB	R	0.89	14.3	B	R	1.11	68.7	E	R	1.11	68.7	E	
Overall Intersection		-	-	**29.4**	**C**	-	-	**54.8**	**D**	-	-	**54.8**	**D**	

Table 18-3 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – AM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
First Avenue at East 33rd Street														
East 33rd Street	EB	L	0.20	20.5	C	L	0.20	20.5	C	L	0.20	20.5	C	Mitigation not required
	WB	TR	0.01	17.2	B	TR	0.01	17.2	B	TR	0.01	17.2	B	
First Avenue	NB	L	0.41	6.8	A	L	0.41	6.5	A	L	0.41	6.5	A	
	NB	T	0.81	10.0	A	T	0.85	11.1	B	T	0.85	11.1	B	
	NB	R	0.07	4.7	A	R	0.07	4.6	A	R	0.07	4.6	A	
Overall Intersection		-	-	**9.9**	**A**	-	-	**10.8**	**B**	-	-	**10.8**	**B**	
First Avenue at East 34th Street														
East 34th Street	EB	L	0.74	13.3	B	L	0.74	13.2	B	L	0.74	13.2	B	**Unmitigable**
	EB	T	1.11	72.6	E	T	1.20	113.0	F	T	1.20	113.0	F	
	WB	T	0.91	47.7	D	T	0.91	47.9	D	T	0.91	47.9	D	
	WB	R	1.29	171.7	F	R	1.29	171.8	F	R	1.29	171.8	F	
First Avenue	NB	L	0.37	9.1	A	L	0.42	9.8	A	L	0.42	9.8	A	
	NB	T	0.72	10.4	B	T	0.75	11.4	B	T	0.75	11.4	B	
	NB	R	0.84	35.8	D	R	0.91	61.4	E	R	0.91	61.4	E	
Overall Intersection		-	-	**46.1**	**D**	-	-	**58.7**	**E**	-	-	**58.7**	**E**	
Second Avenue at East 22nd Street														
East 22nd Street	EB	TR	0.85	60.0	E	TR	0.89	66.1	E	TR	0.89	66.1	E	**Unmitigable**
Second Avenue	SB	LT	0.78	10.8	B	LT	0.80	11.0	B	LT	0.80	11.0	B	
Overall Intersection		-	-	**17.9**	**B**	-	-	**19.3**	**B**	-	-	**19.3**	**B**	

Table 18-3 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – AM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
Second Avenue at East 23rd Street														
East 23rd Street	EB	T	1.08	113.9	F	T	1.13	128.4	F	T	1.13	128.4	F	**Unmitigable**
	EB	R	0.34	48.8	D	R	0.34	47.9	D	R	0.34	47.9	D	
	WB	L	1.13	169.1	F	L	1.22	199.7	F	L	1.22	199.7	F	
	WB	T	1.07	114.5	F	T	1.07	114.4	F	T	1.07	114.4	F	
Second Avenue	SB	L	1.12	111.8	F	L	1.20	139.9	F	L	1.20	139.9	F	
	SB	T	0.70	6.3	A	T	0.72	6.2	A	T	0.72	6.2	A	
	SB	R	0.56	8.7	A	R	0.62	10.3	B	R	0.62	10.3	B	
Overall Intersection		-	-	**54.6**	**E**	-	-	**60.6**	**E**	-	-	**60.6**	**E**	
Second Avenue at East 24th Street														
East 24th Street	EB	TR	0.47	31.0	C	TR	0.48	31.2	C	TR	0.48	31.2	C	Mitigation not required
	WB	LT	0.16	24.8	C	LT	0.16	24.8	C	LT	0.16	24.8	C	
Second Avenue	SB	LT	0.73	9.3	A	LT	0.76	9.7	A	LT	0.76	9.7	A	
Overall Intersection		-	-	**11.4**	**B**	-	-	**11.7**	**B**	-	-	**11.7**	**B**	
Second Avenue at East 25th Street														
East 25th Street	WB	LT	0.72	25.4	C	LT	0.72	25.5	C	LT	0.72	25.5	C	Mitigation not required
Second Avenue	SB	T	0.70	13.3	B	T	0.73	15.0	B	T	0.73	15.0	B	
	SB	R	0.40	11.1	B	R	0.48	14.3	B	R	0.48	14.3	B	
Overall Intersection		-	-	**15.3**	**B**	-	-	**16.8**	**B**	-	-	**16.8**	**B**	

Table 18-3 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – AM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
Second Avenue at East 26th Street														
East 26th Street	EB	TR	0.59	30.7	C	TR	0.62	31.8	C	TR	0.62	31.8	C	Mitigation not required
	WB	L	0.65	33.7	C	L	0.90	48.6	D	L	0.90	48.6	D	
Second Avenue	SB	L	0.50	28.3	C	L	0.54	30.8	C	L	0.54	30.8	C	
	SB	T	0.56	28.8	C	T	0.56	30.0	C	T	0.56	30.0	C	
Overall Intersection		-	-	**29.5**	**C**	-	-	**32.4**	**C**	-	-	**32.4**	**C**	
Second Avenue at East 30th Street														
East 30th Street	EB	T	0.97	73.8	E	T	1.01	84.7	F	T	1.01	84.7	F	**Unmitigable**
	EB	R	0.34	30.4	C	R	0.34	30.4	C	R	0.34	30.4	C	
Second Avenue	SB	L	0.56	18.4	B	L	0.59	19.2	B	L	0.59	19.2	B	
	SB	T	0.52	11.3	B	T	0.53	11.3	B	T	0.53	11.3	B	
Overall Intersection		-	-	**22.2**	**C**	-	-	**24.2**	**C**	-	-	**24.2**	**C**	
Second Avenue at East 34th Street														
East 23rd Street	EB	T	0.70	27.6	C	T	0.76	29.4	C	T	0.76	29.4	C	**Unmitigable**
	EB	R	0.88	62.4	E	R	0.97	80.6	F	R	0.97	80.6	F	
	WB	LT	0.83	90.7	F	LT	0.85	88.3	F	LT	0.85	88.3	F	
Second Avenue	SB	L	0.35	15.0	B	L	0.35	15.1	B	L	0.35	15.1	B	
	SB	T	0.96	35.4	D	T	0.97	37.4	D	T	0.97	37.4	D	
	SB	R	0.89	60.6	E	R	0.89	60.6	E	R	0.89	60.6	E	
Overall Intersection		-	-	**40.0**	**D**	-	-	**42.0**	**D**	-	-	**42.0**	**D**	

Table 18-3 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – AM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
Midtown Tunnel Entrance at East 34th Street														
East 34th Street	EB	L	0.44	29.4	C	L	0.44	29.9	C	L	0.44	29.9	C	**Unmitigable**
	EB	T	1.13	93.2	F	T	1.21	125.4	F	T	1.21	125.4	F	
	WB	T	1.09	118.6	F	T	1.11	121.2	F	T	1.11	121.2	F	
	WB	R	0.75	60.3	E	R	0.82	65.8	E	R	0.82	65.8	E	
Overall Intersection		-	-	**87.1**	**F**	-	-	**106.2**	**F**	-	-	**106.2**	**F**	
Midtown Tunnel Exit at East 34th Street														
East 34th Street	EB	T	0.60	17.2	B	T	0.61	18.2	B	T	0.61	18.2	B	**Unmitigable**
	WB	T	1.13	105.6	F	T	1.14	110.1	F	T	1.14	110.1	F	
Midtown Tunnel Exit	SB	L	0.37	37.5	D	L	0.51	40.0	D	L	0.51	40.0	D	
	SB	R	0.37	13.5	B	R	0.37	13.6	B	R	0.37	13.6	B	
Overall Intersection		-	-	**49.2**	**D**	-	-	**50.9**	**D**	-	-	**50.9**	**D**	
UNSIGNALIZED INTERSECTIONS														
FDR Drive Southbound at East 25th Street														
East 25th Street	EB	R	-	15.9	C	R	-	17.1	C	R	-	17.1	C	Mitigation not required
FDR Dr SB	SB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
Overall Intersection		-	-	**0.3**	**A**	-	-	**0.2**	**A**	-	-	**0.2**	**A**	

Table 18-3 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – AM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
FDR Drive Southbound at East 30th Street														
East 30th Street	EB	R	-	17.6	C	R	-	35.8	E	R	-	35.8	E	**Unmitigable**
FDR Dr SB	SB	TR	-	12.2	B	TR	-	16.9	C	TR	-	16.9	C	
Overall Intersection		**-**	**-**	**16.0**	**C**	**-**	**-**	**29.6**	**D**	**-**	**-**	**29.6**	**D**	

[1] Control delay is measured in seconds per vehicle.

[2] Overall intersection v/c ratio is the critical lane groups' v/c ratio.

Denotes a significantly impacted movement

Table 18-4 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – Midday Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
SIGNALIZED INTERSECTIONS														
FDR Drive Southbound / Avenue C at East 23rd Street (west side)														
East 23rd Street	EB	TR	0.97	58.1	E	TR	0.99	67.7	E	TR	0.99	67.7	E	**Unmitigable**
	EB	R	0.92	63.5	E	R	0.94	66.7	E	R	0.94	66.7	E	
	WB	L	0.35	37.3	D	L	0.37	38.8	D	L	0.37	38.8	D	
	WB	T	0.24	85.7	F	T	0.26	85.4	F	T	0.26	85.4	F	
FDR Dr SB	SB	LTR	0.91	75.8	E	LTR	0.92	81.8	F	LTR	0.92	81.8	F	
Overall Intersection[2]		-	-	**69.1**	**E**	-	-	**74.8**	**E**	-	-	**74.8**	**E**	
FDR Drive Southbound / Avenue C at East 23rd Street (east side)														
East 23rd Street	EB	L	0.84	46.6	D	L	0.88	55.3	E	L	0.88	55.3	E	**Unmitigable**
	EB	TR	0.85	49.5	D	TR	0.87	54.4	D	TR	0.87	54.4	D	
	WB	LTR	0.05	14.7	B	LTR	0.06	14.8	B	LTR	0.06	14.8	B	
Avenue C	NB	LTR	0.54	22.1	C	LTR	0.56	22.8	C	LTR	0.56	22.8	C	
Overall Intersection		-	-	**32.6**	**C**	-	-	**35.6**	**D**	-	-	**35.6**	**D**	

Table 18-4 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – Midday Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
FDR Drive at East 34th Street														
East 34th Street	EB	L	1.02	73.6	E	L	1.11	84.7	F	L	1.11	84.7	F	**Unmitigable**
	EB	LTR	1.02	74.3	E	LTR	1.12	89.4	F	LTR	1.12	89.4	F	
	EB	R	1.00	34.0	C	R	1.08	53.5	D	R	1.08	53.5	D	
	WB	LTR	0.06	32.5	C	LTR	0.06	32.5	C	LTR	0.06	32.5	C	
FDR Dr NB	NB	L	0.88	54.7	D	L	0.88	55.4	E	L	0.88	55.4	E	
	NB	LTR	0.87	52.9	D	LTR	0.87	52.9	D	LTR	0.87	52.9	D	
FDR Dr SB	SB	LTR	0.95	48.0	D	LTR	1.00	57.2	E	LTR	1.00	57.2	E	
Overall Intersection		-	-	**49.6**	**D**	-	-	**59.5**	**E**	-	-	**59.5**	**E**	
First Avenue at East 22nd Street														
East 22nd Street	EB	LT	0.28	26.1	C	LT	0.3	27.6	C	LT	0.3	27.6	C	**Unmitigable**
First Avenue	NB	T	0.74	53.7	D	T	0.77	64.1	E	T	0.77	64.1	E	
	NB	R	0.01	15.4	B	R	0.01	15.4	B	R	0.01	15.4	B	
Overall Intersection		-	-	**50.3**	**D**	-	-	**59.5**	**E**	-	-	**59.5**	**E**	

Table 18-4 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – Midday Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
First Avenue at East 23rd Street														
East 23rd Street	EB	L	0.89	48.9	D	L	1.01	66.0	E	L	1.01	66.0	E	**Unmitigable**
	EB	T	0.40	18.1	B	T	0.41	17.8	B	T	0.41	17.8	B	
	WB	T	0.37	30.1	C	T	0.38	30.9	C	T	0.38	30.9	C	
	WB	R	1.06	122.3	F	R	1.33	217.6	F	R	1.33	217.6	F	
First Avenue	NB	L	0.99	89.2	F	L	0.99	88.8	F	L	0.99	88.8	F	
	NB	T	0.76	18.5	B	T	0.79	21.2	C	T	0.79	21.2	C	
	NB	R	0.64	23.7	C	R	0.68	26.5	C	R	0.68	26.5	C	
Overall Intersection		-	-	**33.8**	**C**	-	-	**44.1**	**D**	-	-	**44.1**	**D**	
First Avenue at East 24th Street														
East 24th Street	EB	L	0.13	18.8	B	L	0.15	19.0	B	L	0.15	19.0	B	Mitigation not required
First Avenue	NB	LT	0.73	9.6	A	LT	0.78	11.5	B	LT	0.78	11.5	B	
Overall Intersection		-	-	**10.0**	**B**	-	-	**11.8**	**B**	-	-	**11.8**	**B**	
First Avenue at East 25th Street														
East 25th Street	WB	T	0.45	20.2	C	T	0.46	20.3	C	T	0.46	20.3	C	**Unmitigable**
	WB	R	0.51	22.9	C	R	0.97	70.0	E	R	0.97	70.0	E	
First Avenue	NB	LT	0.81	9.6	A	LT	0.87	12.8	B	LT	0.87	12.8	B	
	NB	R	0.08	7.2	A	R	0.29	13.1	B	R	0.29	13.1	B	
Overall Intersection		-	-	**13.1**	**B**	-	-	**23.1**	**C**	-	-	**23.1**	**C**	

Table 18-4 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – Midday Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
First Avenue and East 26th Street														
East 26th Street	EB	L	1.20	147.0	F	LT	1.92	455.9	F	LT	1.92	455.9	F	**Unmitigable**
Former East 26th Street	WB	TR	0.47	27.9	C	TR	0.79	42.0	D	TR	0.79	42.0	D	
First Avenue	NB	LT	0.83	21.0	C	LT	0.92	62.7	E	LT	0.92	62.7	E	
	NB		-	-	-	R	0.20	10.3	B	R	0.20	10.3	B	
Overall Intersection		-	-	**42.9**	**D**	-	-	**117.6**	**F**	-	-	**117.6**	**F**	
First Avenue at East 29th Street														
East 29th Street	WB	TR	0.06	22.4	C	TR	0.06	22.5	C	TR	0.06	22.5	C	Mitigation not required.
First Avenue	NB	LT	0.93	54.5	D	LT	1.03	54.6	D	LT	1.03	54.6	D	
	NB	R	0.05	6.2	A	R	0.05	6.3	A	R	0.05	6.3	A	
Overall Intersection		-	-	**53.1**	**D**	-	-	**53.4**	**D**	-	-	**53.4**	**D**	
First Avenue at East 30th Street														
East 30th Street	EB	L	0.61	24.8	C	L	0.62	25.3	C	L	0.62	25.3	C	**Unmitigable**
	EB	T	0.62	27.1	C	T	0.67	28.9	C	T	0.67	28.9	C	
First Avenue	NB	T	0.92	58.9	E	T	1.01	67.6	E	T	1.01	67.6	E	
	NB	R	0.79	36.2	D	R	0.95	37.7	D	R	0.95	37.7	D	
Overall Intersection		-	-	**45.0**	**D**	-	-	**50.8**	**D**	-	-	**50.8**	**D**	

Table 18-4 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – Midday Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
First Avenue at East 33rd Street														
East 33rd Street	EB	L	0.17	19.9	B	L	0.17	19.9	B	L	0.17	19.9	B	Mitigation not required
	WB	TR	0.04	17.6	B	TR	0.04	17.6	B	TR	0.04	17.6	B	
First Avenue	NB	L	0.39	9.5	A	L	0.40	8.8	A	L	0.40	8.8	A	
	NB	T	0.73	12.9	B	T	0.80	13.6	B	T	0.80	13.6	B	
	NB	R	0.02	7.2	A	R	0.02	6.8	A	R	0.02	6.8	A	
Overall Intersection		-	-	**12.7**	**B**	-	-	**13.2**	**B**	-	-	**13.2**	**B**	
First Avenue at East 34th Street														
East 34th Street	EB	L	1.04	58.4	E	L	1.05	60.9	E	L	1.05	60.9	E	**Unmitigable**
	EB	T	1.09	60.8	E	T	1.14	81.0	F	T	1.14	81.0	F	
	WB	T	1.06	71.9	E	T	1.07	72.3	E	T	1.07	72.3	E	
	WB	R	0.78	31.5	C	R	0.79	31.8	C	R	0.79	31.8	C	
First Avenue	NB	L	0.36	4.4	A	L	0.47	7.1	A	L	0.47	7.1	A	
	NB	T	0.66	4.7	A	T	0.69	6.3	A	T	0.69	6.3	A	
	NB	R	0.61	7.8	A	R	0.72	12.6	B	R	0.72	12.6	B	
Overall Intersection		-	-	**33.0**	**C**	-	-	**38.4**	**D**	-	-	**38.4**	**D**	
Second Avenue at East 22nd Street														
East 22nd Street	EB	TR	0.66	40.4	D	TR	0.69	42.5	D	TR	0.69	42.5	D	
Second Avenue	SB	LT	0.78	8.9	A	LT	0.80	10.1	B	LT	0.80	10.1	B	
Overall Intersection		-	-	**12.8**	**B**	-	-	**14.2**	**B**	-	-	**14.2**	**B**	

Table 18-4 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – Midday Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
Second Avenue at East 23rd Street														
East 23rd Street	EB	T	0.95	55.3	E	T	0.98	62.0	E	T	0.98	62.0	E	**Unmitigable**
	EB	R	0.41	22.1	C	R	0.41	22.3	C	R	0.41	22.3	C	
	WB	L	0.98	104.0	F	L	1.04	122.5	F	L	1.04	122.5	F	
	WB	T	0.94	55.0	D	T	0.94	54.9	D	T	0.94	54.9	D	
Second Avenue	SB	L	1.09	103.8	F	L	1.17	127.7	F	L	1.17	127.7	F	
	SB	TR	0.83	12.3	B	TR	0.87	15.0	B	TR	0.87	15.0	B	
Overall Intersection		-	-	**37.6**	**D**	-	-	**43.4**	**D**	-	-	**43.4**	**D**	
Second Avenue at East 24th Street														
East 24th Street	EB	TR	0.37	28.3	C	TR	0.37	28.3	C	TR	0.37	28.3	C	Mitigation not required
	WB	LT	0.14	24.3	C	LT	0.14	24.3	C	LT	0.14	24.3	C	
Second Avenue	SB	LT	0.71	8.2	A	LT	0.74	8.6	A	LT	0.74	8.6	A	
Overall Intersection		-	-	**9.9**	**A**	-	-	**10.2**	**B**	-	-	**10.2**	**B**	
Second Avenue at East 25th Street														
East 25th Street	WB	LT	0.77	31.1	C	LT	0.79	32.3	C	LT	0.79	32.3	C	Mitigation not required
Second Avenue	SB	TR	0.76	16.2	B	TR	0.81	19.0	B	TR	0.81	19.0	B	
Overall Intersection		-	-	**19.0**	**B**	-	-	**21.5**	**C**	-	-	**21.5**	**C**	

Table 18-4 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – Midday Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
Second Avenue at East 26th Street														
East 26th Street	EB	TR	0.66	33.9	C	TR	0.67	34.3	C	TR	0.67	34.3	C	**Unmitigable**
	WB	L	0.55	35.7	D	L	0.89	59.3	E	L	0.89	59.3	E	
Second Avenue	SB	L	0.43	25.9	C	L	0.44	26.5	C	L	0.44	26.5	C	
	SB	T	0.51	22.4	C	T	0.51	22.8	C	T	0.51	22.8	C	
Overall Intersection		-	-	**25.4**	**C**	-	-	**28.8**	**C**	-	-	**28.8**	**C**	
Second Avenue at East 30th Street														
East 30th Street	EB	T	0.79	45.6	D	T	0.82	48.9	D	T	0.82	48.9	D	Mitigation not required
	EB	R	0.63	42.3	D	R	0.63	42.3	D	R	0.63	42.3	D	
Second Avenue	SB	L	0.61	19.4	B	L	0.64	20.2	C	L	0.64	20.2	C	
	SB	T	0.47	10.7	B	T	0.47	10.7	B	T	0.47	10.7	B	
Overall Intersection		-	-	**18.9**	**B**	-	-	**19.6**	**B**	-	-	**19.6**	**B**	
Second Avenue at East 34th Street														
East 23rd Street	EB	T	0.75	43.8	D	T	0.78	44.4	D	T	0.78	44.4	D	**Unmitigable**
	EB	R	0.67	48.8	D	R	0.70	49.5	D	R	0.70	49.5	D	
	WB	LT	0.72	51.3	D	LT	0.74	58.7	E	LT	0.74	58.7	E	
Second Avenue	SB	L	0.29	14.2	B	L	0.29	14.3	B	L	0.29	14.3	B	
	SB	T	0.78	21.8	C	T	0.78	22.1	C	T	0.78	22.1	C	
	SB	R	0.30	16.1	B	R	0.30	16.1	B	R	0.30	16.1	B	
Overall Intersection		-	-	**29.5**	**C**	-	-	**30.8**	**C**	-	-	**30.8**	**C**	

Table 18-4 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – Midday Peak Hour

Intersection & Approach		2031 No-Action				2031 With-Action				2031 Mitigation				Mitigation Measures
		Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	
Midtown Tunnel Entrance at East 34th Street														
East 34th Street	EB	L	0.55	41.4	D	L	0.55	42.1	D	L	0.55	42.1	D	**Unmitigable**
	EB	T	1.11	86.4	F	T	1.16	103.5	F	T	1.16	103.5	F	
	WB	T	1.09	120.6	F	T	1.13	127.7	F	T	1.13	127.7	F	
	WB	R	0.98	93.6	F	R	1.14	133.1	F	R	1.14	133.1	F	
Overall Intersection		-	-	**87.9**	**F**	-	-	**104.5**	**F**	-	-	**104.5**	**F**	
Midtown Tunnel Exit at East 34th Street														
East 34th Street	EB	T	0.68	30.2	C	T	0.69	31.9	C	T	0.69	31.9	C	Mitigation not required
	WB	T	0.84	27.2	C	T	0.86	28.4	C	T	0.86	28.4	C	
Midtown Tunnel Exit	SB	L	0.29	36.5	D	L	0.32	36.9	D	L	0.32	36.9	D	
	SB	R	0.30	12.6	B	R	0.32	12.9	B	R	0.32	12.9	B	
Overall Intersection		-	-	**27.5**	**C**	-	-	**28.7**	**C**	-	-	**28.7**	**C**	
UNSIGNALIZED INTERSECTIONS														
FDR Drive Southbound at East 25th Street														
East 25th Street	EB	R	-	14.5	B	R	-	15.1	C	R	-	15.1	C	Mitigation not required
FDR Dr SB	SB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
Overall Intersection		-	-	**0.3**	**A**	-	-	**0.3**	**A**	-	-	**0.3**	**A**	

Table 18-4 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – Midday Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
FDR Drive Southbound at East 30th Street														
East 30th Street	EB	R	-	10.3	B	R	-	11.9	B	R	-	11.9	B	Mitigation not required
FDR Dr SB	SB	TR	-	9.3	A	TR	-	10.1	A	TR	-	10.1	A	
Overall Intersection		**-**	**-**	**10.1**	**B**	**-**	**-**	**11.4**	**B**	**-**	**-**	**11.4**	**B**	

[1] Control delay is measured in seconds per vehicle.

[2] Overall intersection v/c ratio is the critical lane groups' v/c ratio.

Denotes a significantly impacted movement

Table 18-5 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – PM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
SIGNALIZED INTERSECTIONS														
FDR Drive Southbound / Avenue C at East 23rd Street (west side)														
East 23rd Street	EB	TR	0.86	39.7	D	TR	0.88	41.6	D	TR	0.88	41.6	D	Mitigation not required
	EB	R	0.77	45.6	D	R	0.78	46.9	D	R	0.78	46.9	D	
	WB	L	0.17	24.9	C	L	0.18	24.9	C	L	0.18	24.9	C	
	WB	T	0.25	85.3	F	T	0.27	84.5	F	T	0.27	84.5	F	
FDR Dr SB	SB	LTR	1.00	105.8	F	LTR	1.01	105.8	F	LTR	1.01	105.8	F	
Overall Intersection[2]		-	-	**76.0**	**E**	-	-	**76.4**	**E**	-	-	**76.4**	**E**	
FDR Drive Southbound / Avenue C at East 23rd Street (east side)														
East 23rd Street	EB	L	0.71	43.7	D	L	0.74	49.6	D	L	0.74	49.6	D	Mitigation not required
	EB	TR	0.71	46.0	D	TR	0.73	51.9	D	TR	0.73	51.9	D	
	WB	LTR	0.06	14.7	B	LTR	0.09	15.0	B	LTR	0.09	15.0	B	
Avenue C	NB	LTR	0.53	21.7	C	LTR	0.54	22.0	C	LTR	0.54	22.0	C	
Overall Intersection		-	-	**30.1**	**C**	-	-	**32.3**	**C**	-	-	**32.3**	**C**	

Table 18-5 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – PM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
FDR Drive at East 34th Street														
East 34th Street	EB	L	0.85	47.0	D	L	0.93	55.3	E	L	0.93	55.3	E	**Unmitigable**
	EB	LTR	0.85	47.8	D	LTR	0.93	56.9	E	LTR	0.93	56.9	E	
	EB	R	0.84	14.7	B	R	0.93	21.6	C	R	0.93	21.6	C	
	WB	LTR	0.03	32.0	C	LTR	0.03	32.0	C	LTR	0.03	32.0	C	
FDR Dr NB	NB	L	1.42	230.9	F	L	1.42	228.9	F	L	1.42	228.9	F	
	NB	LTR	1.41	224.2	F	LTR	1.42	231.3	F	LTR	1.42	231.3	F	
FDR Dr SB	SB	LTR	0.83	34.7	C	LTR	0.86	36.8	D	LTR	0.86	36.8	D	
Overall Intersection		-	-	113.4	F	-	-	**114.3**	**F**	-	-	**114.3**	**F**	
First Avenue at East 22nd Street														
East 22nd Street	EB	LT	0.28	26.4	C	LT	0.28	26.7	C	LT	0.28	26.7	C	Mitigation not required
First Avenue	NB	T	0.80	76.0	E	T	0.81	76.2	E	T	0.81	76.2	E	
	NB	R	0.01	15.4	B	R	0.01	15.4	B	R	0.01	15.4	B	
Overall Intersection		-	-	**70.9**	**E**	-	-	**71.0**	**E**	-	-	**71.0**	**E**	

Table 18-5 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – PM Peak Hour

Intersection & Approach		2031 No-Action				2031 With-Action				2031 Mitigation				Mitigation Measures
		Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	
First Avenue at East 23rd Street														
East 23rd Street	EB	L	0.94	54.3	D	L	1.02	68.1	E	L	1.02	68.1	E	**Unmitigable**
	EB	T	0.36	19.6	B	T	0.37	19.2	B	T	0.37	19.2	B	
	WB	T	0.42	31.6	C	T	0.43	32.3	C	T	0.43	32.3	C	
	WB	R	0.77	63.4	E	R	0.99	108.9	F	R	0.99	108.9	F	
First Avenue	NB	L	0.82	52.6	D	L	0.82	52.7	D	L	0.82	52.7	D	
	NB	T	0.83	22.7	C	T	0.84	24.6	C	T	0.84	24.6	C	
	NB	R	0.54	20.5	C	R	0.57	21.8	C	R	0.57	21.8	C	
Overall Intersection		-	-	**29.2**	**C**	-	-	**34.1**	**C**	-	-	**34.1**	**C**	
First Avenue at East 24th Street														
East 24th Street	EB	L	0.07	17.9	B	L	0.08	18.0	B	L	0.08	18.0	B	Mitigation not required
First Avenue	NB	LT	0.75	8.0	A	LT	0.77	9.1	A	LT	0.77	9.1	A	
Overall Intersection		-	-	**8.3**	**A**	-	-	**9.3**	**A**	-	-	**9.3**	**A**	
First Avenue at East 25th Street														
East 25th Street	WB	T	0.39	19.0	B	T	0.39	19.1	B	R	0.39	19.1	B	Mitigation not required
	WB	R	0.32	18.6	B	R	0.54	25.7	C	LT	0.54	25.7	C	
First Avenue	NB	LT	0.87	10.8	B	LT	0.9	12.5	B	R	0.9	12.5	B	
	NB	R	0.02	7.4	A	R	0.05	8.5	A	-	0.05	8.5	A	
Overall Intersection		-	-	**12.6**	**B**	-	-	**14.7**	**B**	-	-	**14.7**	**B**	

Table 18-5 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – PM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
First Avenue and East 26th Street														
East 26th Street	EB	L	1.08	116.7	F	LT	2.03	514.4	F	LT	2.03	514.4	F	**Unmitigable**
Former East 26th Street	WB	TR	0.61	31.5	C	TR	0.92	57.9	E	TR	0.92	57.9	E	
First Avenue	NB	LT	0.76	10.7	B	LT	0.80	38.7	D	LT	0.80	38.7	D	
	NB		-	-	-	R	0.09	8.3	A	R	0.09	8.3	A	
Overall Intersection		-	-	**26.9**	**C**	-	-	**98.0**	**F**	-	-	**98.0**	**F**	
First Avenue at East 29th Street														
East 29th Street	WB	TR	0.03	22.1	C	TR	0.03	22.1	C	TR	0.03	22.1	C	Mitigation not required
First Avenue	NB	LT	0.91	12.1	B	LT	1.00	21.9	C	LT	1.00	21.9	C	
	NB	R	0.06	6.2	A	R	0.06	6.3	A	R	0.06	6.3	A	
Overall Intersection		-	-	**12.1**	**B**	-	-	**21.7**	**C**	-	-	**21.7**	**C**	
First Avenue at East 30th Street														
East 30th Street	EB	L	0.60	26.5	C	L	0.61	26.7	C	L	0.61	26.7	C	**Unmitigable**
	EB	T	1.04	79.3	E	T	1.07	86.7	F	T	1.07	86.7	F	
First Avenue	NB	T	0.65	8.9	A	T	0.72	10.1	B	T	0.72	10.1	B	
	NB	R	0.50	10.7	B	R	0.59	10.6	B	R	0.59	10.6	B	
Overall Intersection		-	-	**25.4**	**C**	-	-	**26.6**	**C**	-	-	**26.6**	**C**	

Table 18-5 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – PM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
First Avenue at East 33rd Street														
East 33rd Street	EB	L	0.14	19.2	B	L	0.14	19.2	B	L	0.14	19.2	B	Mitigation not required
	WB	TR	0.04	17.5	B	TR	0.04	17.5	B	TR	0.04	17.5	B	
First Avenue	NB	L	0.37	8.5	A	L	0.38	8.1	A	L	0.38	8.1	A	
	NB	T	0.81	13.2	B	T	0.89	16.4	B	T	0.89	16.4	B	
	NB	R	0.03	5.9	A	R	0.03	5.7	A	R	0.03	5.7	A	
Overall Intersection		-	-	**12.8**	**B**	-	-	**15.5**	**B**	-	-	**15.5**	**B**	
First Avenue at East 34th Street														
East 34th Street	EB	L	1.04	82.0	F	L	1.04	82.1	F	L	1.04	82.1	F	**Unmitigable**
	EB	T	1.02	49.8	D	T	1.05	71.6	E	T	1.05	71.6	E	
	WB	T	1.09	68.4	E	T	1.09	70.5	E	T	1.09	70.5	E	
	WB	R	1.40	206.8	F	R	1.41	212.9	F	R	1.41	212.9	F	
First Avenue	NB	L	0.43	10.0	A	L	0.57	12.0	B	L	0.57	12.0	B	
	NB	T	0.78	12.1	B	T	0.80	13.3	B	T	0.80	13.3	B	
	NB	R	0.59	12.6	B	R	0.74	17.6	B	R	0.74	17.6	B	
Overall Intersection		-	-	**48.9**	**D**	-	-	**53.1**	**D**	-	-	**53.1**	**D**	
Second Avenue at East 22nd Street														
East 22nd Street	EB	TR	0.71	44.9	D	TR	0.72	45.2	D	TR	0.72	45.2	D	Mitigation not required
Second Avenue	SB	LT	0.93	15.6	B	LT	0.94	18.2	B	LT	0.94	18.2	B	
Overall Intersection		-	-	**18.6**	**B**	-	-	**20.9**	**C**	-	-	**20.9**	**C**	

Table 18-5 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – PM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
Second Avenue at East 23rd Street														
East 23rd Street	EB	T	1.08	92.7	F	T	1.1	100.7	F	T	1.1	100.7	F	**Unmitigable**
	EB	R	0.37	22.0	C	R	0.37	22.2	C	R	0.37	22.2	C	
	WB	L	0.98	104.3	F	L	1.03	119.2	F	L	1.03	119.2	F	
	WB	T	0.96	59.6	E	T	0.97	60.1	E	T	0.97	60.1	E	
Second Avenue	SB	L	0.96	62.0	E	L	1.02	76.1	E	L	1.02	76.1	E	
	SB	T	0.87	17.4	B	T	0.89	22.6	C	T	0.89	22.6	C	
	SB	R	0.53	7.9	A	R	0.58	9.0	A	R	0.58	9.0	A	
Overall Intersection		-	-	**36.8**	**D**	-	-	**42.6**	**D**	-	-	**42.6**	**D**	
Second Avenue at East 24th Street														
East 24th Street	EB	TR	0.34	27.3	C	TR	0.34	27.3	C	TR	0.34	27.3	C	Mitigation not required
	WB	LT	0.14	24.2	C	LT	0.14	24.2	C	LT	0.14	24.2	C	
Second Avenue	SB	LT	0.82	10.2	B	LT	0.84	11.1	B	LT	0.84	11.1	B	
Overall Intersection		-	-	**11.4**	**B**	-	-	**12.2**	**B**	-	-	**12.2**	**B**	
Second Avenue at East 25th Street														
East 25th Street	WB	LT	0.76	27.7	C	LT	0.78	29.6	C	LT	0.78	29.6	B	Mitigation not required
Second Avenue	SB	T	0.77	15.2	B	T	0.79	16.8	B	T	0.79	16.8	B	
	SB	R	0.33	10.3	B	R	0.4	12.2	B	R	0.4	12.2	B	
Overall Intersection		-	-	**17.0**	**B**	-	-	**18.7**	**B**	-	-	**18.7**	**B**	

Table 18-5 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – PM Peak Hour

Intersection & Approach		2031 No-Action				2031 With-Action				2031 Mitigation				Mitigation Measures
		Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	
Second Avenue at East 26th Street														
East 26th Street	EB	TR	0.48	27.9	C	TR	0.49	28.0	C	TR	0.49	28.0	C	Mitigation not required
	WB	L	0.65	39.6	D	L	0.82	51.4	D	L	0.82	51.4	D	
Second Avenue	SB	L	0.28	20.5	C	L	0.28	20.6	C	L	0.28	20.6	C	
	SB	T	0.61	63.7	E	T	0.61	63.7	E	T	0.61	63.7	E	
Overall Intersection		-	-	**55.9**	**E**	-	-	**56.8**	**E**	-	-	**56.8**	**E**	
Second Avenue at East 30th Street														
East 30th Street	EB	T	0.99	76.7	E	T	1.01	81.8	F	T	1.01	81.8	F	Mitigation not required
	EB	R	0.34	29.9	C	R	0.35	30.1	C	R	0.35	30.1	C	
Second Avenue	SB	L	0.49	16.6	B	L	0.50	16.8	B	L	0.50	16.8	B	
	SB	T	0.51	11.1	B	T	0.52	11.1	B	T	0.52	11.1	B	
Overall Intersection		-	-	**22.7**	**C**	-	-	**23.6**	**C**	-	-	**23.6**	**C**	
Second Avenue at East 34th Street														
East 23rd Street	EB	T	0.67	39.0	D	T	0.70	38.9	D	T	0.70	38.9	D	Mitigation not required
	EB	R	0.68	50.6	D	R	0.69	50.2	D	R	0.69	50.2	D	
	WB	LT	0.61	32.8	C	LT	0.62	34.4	C	LT	0.62	34.4	C	
Second Avenue	SB	L	0.29	14.1	B	L	0.29	14.2	B	L	0.29	14.2	B	
	SB	T	0.97	36.1	D	T	0.97	36.6	D	T	0.97	36.6	D	
	SB	R	0.33	17.1	B	R	0.33	17.1	B	R	0.33	17.1	B	
Overall Intersection		-	-	**33.9**	**C**	-	-	**34.3**	**C**	-	-	**34.3**	**C**	

Table 18-5 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – PM Peak Hour

Intersection & Approach		2031 No-Action				2031 With-Action				2031 Mitigation				Mitigation Measures
		Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	
Midtown Tunnel Entrance at East 34th Street														
East 34th Street	EB	L	0.47	31.6	C	L	0.48	34.4	C	L	0.48	34.4	C	**Unmitigable**
	EB	T	0.93	77.7	E	T	0.96	82.1	F	T	0.96	82.1	F	
	WB	T	1.09	120.7	F	T	1.12	122.7	F	T	1.12	122.7	F	
	WB	R	1.10	118.9	F	R	1.26	171.7	F	R	1.26	171.7	F	
Overall Intersection		-	-	**87.2**	**F**	-	-	**102.3**	**F**	-	-	**102.3**	**F**	
Midtown Tunnel Exit at East 34th Street														
East 34th Street	EB	T	0.55	15.3	B	T	0.56	15.8	B	T	0.56	15.8	B	Mitigation not required
	WB	T	0.73	21.2	C	T	0.74	21.6	C	T	0.74	21.6	C	
Midtown Tunnel Exit	SB	L	0.28	36.5	D	L	0.31	36.9	D	L	0.31	36.9	D	
	SB	R	0.29	12.6	B	R	0.31	12.9	B	R	0.31	12.9	B	
Overall Intersection		-	-	**18.4**	**B**	-	-	**19.0**	**B**	-	-	**19.0**	**B**	
UNSIGNALIZED INTERSECTIONS														
FDR Drive Southbound at East 25th Street														
East 25th Street	EB	R	-	13.6	B	R	-	13.9	B	R	-	13.9	B	Mitigation not required
FDR Dr SB	SB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
Overall Intersection		-	-	**0.1**	**A**	-	-	**0.1**	**A**	-	-	**0.1**	**A**	

Table 18-5 No-Action vs With-Action vs Mitigation Traffic Levels of Service Comparison – PM Peak Hour

		2031 No-Action				2031 With-Action				2031 Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
FDR Drive Southbound at East 30th Street														
East 30th Street	EB	R	-	11.6	B	R	-	13.0	B	R	-	13.0	B	Mitigation not required
FDR Dr SB	SB	TR	-	10.2	B	TR	-	11.0	B	TR	-	11.0	B	
Overall Intersection		**-**	**-**	**11.2**	**B**	**-**	**-**	**12.4**	**B**	**-**	**-**	**12.4**	**B**	

[1] Control delay is measured in seconds per vehicle.

[2] Overall intersection v/c ratio is the critical lane groups' v/c ratio.

Denotes a significantly impacted movement

Eighteen of the 23 intersections have significant adverse traffic impacts that would result from the Proposed Project and could not be fully mitigated in at least one peak hour, including:

- FDR Drive Southbound / Avenue C and East 23rd Street (midday)
- FDR Drive / Avenue C Northbound and East 23rd Street (AM and midday)
- FDR Drive and East 34th Street (AM, midday, and PM)
- First Avenue and East 22nd Street (midday)
- First Avenue and East 23rd Street (AM, midday, and PM)
- First Avenue and East 25th Street (AM and midday)
- First Avenue and East 26th Street (AM, midday, and PM)
- First Avenue and East 29th Street (AM)
- First Avenue and East 30th Street (AM, midday, and PM)
- First Avenue and East 34th Street (AM, midday, and PM)
- Second Avenue and East 22nd Street (AM)
- Second Avenue and East 23rd Street (AM, midday, and PM)
- Second Avenue and East 26th Street (midday)
- Second Avenue and East 30th Street (AM and PM)
- Second Avenue and East 34th Street (AM and midday)
- 34th Street and Queens-Midtown Tunnel Entrance (AM, midday, and PM)
- East 34th Street and Queens Midtown Tunnel Exit (AM)
- FDR Drive and East 30th Street (AM)

Additional mitigation measures will be explored in conjunction with NYC DOT between the DEIS and FEIS.

FDR Drive

FDR Drive Southbound / Avenue C and East 23rd Street (west side)

Significant impacts at this intersection would occur during the midday peak hour. These impacts could not be mitigated.

FDR Drive Southbound / Avenue C and East 23rd Street (east side)

Significant impacts at this intersection would occur during the AM and midday peak hours. These impacts could not be mitigated.

FDR Drive Southbound at East 30th Street

Significant impacts at this intersection would occur during the AM peak hour. These impacts could not be mitigated.

FDR Drive and East 34th Street

Significant impacts at this intersection would occur during the AM, midday, and PM peak hours. These impacts could not be mitigated.

First Avenue

First Avenue and East 22nd Street

Significant impacts at this intersection would occur during the midday peak hour. These impacts could not be mitigated.

First Avenue and East 23rd Street

Significant impacts at this intersection would occur during the AM, midday, and PM peak hours. These impacts could not be mitigated.

First Avenue and East 25th Street

This intersection would be significantly impacted during the AM and midday peak hours. These impacts could not be mitigated.

First Avenue and East 26th Street

This intersection would be significantly impacted during the AM, midday, and PM peak hours. These impacts could not be mitigated.

First Avenue and East 29th Street

Traffic impacts were identified at the intersection of First Avenue and East 29th Street during the AM peak hour; these impacts could not be mitigated.

First Avenue and East 30th Street

This intersection would be significantly impacted during the AM, midday, and PM peak hours. These would remain unmitigated.

First Avenue and East 34th Street

This intersection would be significantly impacted during the AM, midday, and PM peak hours. These impacts could not be mitigated.

Second Avenue

NYC DOT is currently in the process of developing the Second Avenue Bus and Bike Lane Enhancements project which could result in changes to vehicular and pedestrian operations at intersections along Second Avenue. Should the plan be adopted prior to the release of the FEIS, the transportation analysis will be updated to incorporates these changes and, as a result, the traffic impact results in the FEIS may be different than those identified in the DEIS.

Second Avenue and East 22nd Street

This intersection would be significantly impacted during the AM and midday peak hours. These impacts could not be mitigated.

Second Avenue and East 23rd Street

This intersection would be significantly impacted during the AM, midday, and PM peak hours. These impacts could not be mitigated.

Second Avenue and East 26th Street

This intersection would be significantly impacted during the midday peak hour. These impacts could not be mitigated.

Second Avenue and East 30th Street

This intersection would be significantly impacted during the AM and PM peak hours; these impacts could not be mitigated.

Second Avenue and East 34th Street

This intersection would be significantly impacted during the AM, midday, and PM peak hours. These impacts could not be mitigated.

34th Street

East 34th Street at Queens-Midtown Tunnel Entrance

This intersection would be significantly impacted during the AM, midday, and PM peak hours. These impacts could not be mitigated.

East 34th Street at Queens-Midtown Tunnel Exit

This intersection would be significantly impacted during the AM peak hour; these impacts could not be mitigated.

Implementation

Implementation of signal timing modification measures would be performed by NYC DOT. Signal timing modifications and additional mitigation measures will be studied further in conjunction with NYC DOT between the DEIS and FEIS.

Subway

Subway Station Element Analysis

As discussed in **Chapter 10, Transportation**, subway station elements at the 23rd Street and the 28th Street No. 6 subway stations were analyzed during the AM and PM commuter peak hours. The Proposed Project would not result in significant impacts to the fare control areas but significant impacts were identified at the stairs in both subway stations.

Significant impacts were identified at the following stairs:

- 28th Street downtown track stairs O4A/O4B and O5A/O5B in the AM and PM peak hours
- 28th Street uptown track stair P2 in the AM and PM peak hours.

- 23rd Street downtown track stair S7 in the AM peak hour.
- 23rd Street downtown track stair S5 and P5 in the AM peak hour.
- 23rd Street uptown track stairs S8A/S8B and P8A/P8B in the AM and PM peak hours.

Typical measures to mitigate these impacted stairs would include widening of stairs. Subway station improvements at the 28th Street Station would need to be assessed in conjunction with accessibility improvements under the Americans with Disabilities Act (ADA); the station is ADA accessible only in the southbound direction. ADA improvement may include the installation of elevators, the feasibility of ADA improvements and potential widening of impacted stairs would need to be coordinated with NYCT between the DEIS and FEIS.

Buses

Bus Line-Haul Analysis

As discussed in **Chapter 10, Transportation**, the Proposed Project would result in a capacity shortfall for the following bus routes:

- The M15 local bus route in the southbound direction during the AM peak hour.
- The M34A-SBS bus route in the eastbound direction in the AM peak hour.
- The M23-SBS bus route in the eastbound direction in the AM peak hour.
- The M15-SBS bus route in the northbound direction during the PM peak hour.
- The M23-SBS bus route in the westbound direction during the PM peak hour.

As detailed in **Table 18-6**, impacts to the M15, M15-SBS and M34A-SBS bus routes could be mitigated with an additional bus in the impacted direction during the impacted peak hour. The M23-SBS bus route could be mitigated with the addition of 11 buses in the eastbound direction in the AM peak hour and five buses in the westbound direction in the PM peak hour. The general policy of the NYCT it to provide additional bus service where demand warrants, taking into account financial and operational constraints.

Table 18-6 With-Action with Mitigation Bus Analysis

Peak Hour	Route	Direction	Maximum Load Point	Peak Hour Buses	Project Increment	With-Action Available Capacity	Additional Peak Hour Buses[1]	Available Capacity With Mitigation[2]
AM	M15	SB	Second Ave/E 57th St	6	118	-22	1	63
	M34A-SBS	EB	W 34th St/Broadway	7	91	-40	1	45
	M23-SBS	EB	E 23rd St/Park Av S	9	966	-897	11	38
PM	M15-SBS	NB	W 23rd St/7 Av	11	41	-38	1	47
	M23-SBS	WB	E 23rd St/3 Av	9	421	-406	5	19

Notes:
[1] Additional peak hour buses needed to accommodate project-generated demand
[2] Available capacity based on NYCT loading guidelines of 85 passengers per articulated bus.

Pedestrians

As discussed in **Chapter 10, Transportation**, the Proposed Project would result in significant impacts at eight pedestrian elements (three sidewalks, two crosswalks, and three corners) during the AM peak hour, five pedestrian elements (two sidewalks, one crosswalk, and two corners) during the midday peak hour, and five pedestrian elements (three sidewalks and two corners) during the PM peak hour. A total of 61 pedestrian elements were analyzed for the weekday AM, midday, and PM peak hours.

Potential improvements that could mitigate the significant impacts, such as widening of crosswalks or relocation of sidewalk or corner obstructions, are being explored and will be studied further in conjunction with NYC DOT between the DEIS and FEIS. In addition, NYC DOT is currently in the process of developing the Second Avenue Bus and Bike Lane Enhancements project which could result in changes to vehicular and pedestrian operations at intersections along Second Avenue. Should the plan be adopted prior to the release of the FEIS, the transportation analysis will be updated to incorporates these changes and, as a result, the pedestrian impact results in the FEIS may be different than those identified in the DEIS. Should pedestrian improvements to mitigate impacts be determined to not be feasible, the impacts to the pedestrian elements would remain unmitigated.

Table 18-7 summarizes the significantly impacted pedestrian elements and whether they could be mitigated. Detailed pedestrian levels of service and mitigation measures are summarized in **Table 18-8** through **Table 18-10**.

Table 18-7 Summary of Elements with Significant Adverse Pedestrian Impacts

Peak Hour	Elements Analyzed	Elements with No Significant Impacts	Mitigated Elements	Unmitigated Elements
Sidewalks				
AM	22	19	0	3
Midday	22	20	0	2
PM	22	19	0	3
Crosswalks				
AM	15	13	0	2
Midday	15	14	0	1
PM	15	15	0	0
Corner Areas				
AM	24	21	0	3
Midday	24	22	0	2
PM	24	22	0	2

Sidewalks

Pedestrian impacts were identified along six sidewalks during at least one peak hour. These sidewalks include:

- East 28th Street south sidewalk between Park Avenue and Lexington Avenue (AM peak hour)
- East 25th Street north sidewalk between First Avenue and FDR Drive (AM and midday peak hours)
- East 23rd Street north sidewalk between Madison Avenue and Park Avenue (midday and PM peak hours)
- East 23rd Street north sidewalk between Lexington Avenue and Third Avenue (PM peak hour)
- First Avenue east sidewalk between East 23rd Street and East 24th Street (AM and PM peak hours)

At these impacted sidewalks, typical measures such as relocation of obstructions along the narrowest points of the sidewalk were reviewed and determined to be infeasible. Therefore, pedestrian impacts at these sidewalks could not be mitigated. Additional mitigation measures will be explored between the DEIS and FEIS.

Table 18-8 presents the level of service comparison between No-Action, With-Action and Mitigation conditions.

Table 18-8 Sidewalk Impact Mitigation Summary

Sidewalk	No-Action			With-Action			Mitigation			Mitigation Measures
	Effective Width, ft	Avg Ped Space, SF/P	LOS	Effective Width, ft	Avg Ped Space, SF/P	LOS	Effective Width, ft	Avg Ped Space, SF/P	LOS	
AM Peak Hour										
East 28th Street between Park Avenue and Lexington Avenue (south side)	4.6	36.2	D	4.6	28.2	D	4.6	28.2	D	Unmitigated
East 25th Street between FDR Drive and First Avenue (north side)	4.4	110.6	B	6.0	19.6	E	6.0	19.6	E	Unmitigated
First Avenue between 23rd Street and 24th Street (east side)	3.8	57.1	C	3.8	20.8	E	3.8	20.8	E	Unmitigated
Midday Peak Hour										
East 25th Street between FDR Drive and First Avenue (north side)	4.4	166.0	B	6.0	21.1	E	6.0	21.1	E	Unmitigated
East 23rd Street between Park Avenue and Madison Avenue (north side)	1.8	166.3	B	1.8	25.5	D	1.8	25.5	D	Unmitigated
PM Peak Hour										
East 23rd Street between Park Avenue and Madison Avenue (north side)	1.8	51.7	C	1.8	19.8	E	1.8	19.8	E	Unmitigated
East 23rd Street between Lexington Avenue and Third Avenue (north side)	3.9	34.9	D	3.9	31.0	D	3.9	31.0	D	Unmitigated
First Avenue between 23rd Street and 24th Street (east side)	3.8	62.5	C	3.8	31.3	D	3.8	31.3	D	Unmitigated

Denotes significantly impacted pedestrian element

Crosswalks

Pedestrian impacts were identified at the east crosswalk of First Avenue at East 25th Street during the AM and midday peak hours. Pedestrian impacts were also identified at the east crosswalk at First Avenue and East 23rd Street during the AM peak hour. Impacts at these crosswalks could not be mitigated, additional mitigation measures will be explored between the DEIS and FEIS. **Table 18-9** presents the level of service comparison between No-Action, With-Action and Mitigation conditions.

Table 18-9 Crosswalk Impact Mitigation Summary

		No-Action		With-Action		Mitigation		
Intersection	Crosswalk	Avg Ped Space, SF/P	LOS	Avg Ped Space, SF/P	LOS	Avg Ped Space, SF/P	LOS	Mitigation Measures
AM Peak Hour								
First Avenue at East 25th Street	East	48.8	B	9.0	E	9.0	E	Unmitigated
First Avenue at East 23rd Street	East	58.6	B	18.3	D	18.3	D	Unmitigated
Midday Peak Hour								
First Avenue at East 25th Street	East	91.7	A	16.2	D	16.2	D	Unmitigated

Denotes significantly impacted pedestrian element

Corners

Pedestrian impacts were identified at the southwest corner at the intersection of Lexington Avenue and East 28th Street and the northeast corner at the intersection of First Avenue and East 26th Street during all peak hours analyzed. Pedestrian impacts were also identified at the southeast corner of the intersection of First Avenue and East 23rd Street during the AM peak hour. Typical measures such as relocation of obstructions within the corner area were reviewed and determined to be infeasible. Therefore, pedestrian impacts at these corners could not be mitigated. Additional mitigation measures will be explored between the DEIS and FEIS. The pedestrian levels of services at the impacted corners are shown in **Table 18-10**.

Table 18-10 Corner Impact Mitigation Summary

Intersection	Corner	No-Action Avg Ped Space, SF/P	No-Action LOS	With-Action Avg Ped Space, SF/P	With-Action LOS	Mitigation Avg Ped Space, SF/P	Mitigation LOS	Mitigation Measures
AM Peak Hour								
Lexington Avenue at East 28th Street	Southwest	5.9	F	2.4	F	2.4	F	- Unmitigated
First Avenue at East 26th Street	Northeast	48.9	B	15.9	D	15.9	D	- Unmitigated
First Avenue at E 23rd Street	Southeast	38.8	C	7.7	E	7.7	E	- Unmitigated
Midday Peak Hour								
Lexington Avenue at East 28th Street	Southwest	19.0	D	12.4	E	12.4	E	- Unmitigated
First Avenue at East 26th Street	Northeast	44.0	B	12.4	E	12.4	E	- Unmitigated
PM Peak Hour								
Lexington Avenue at East 28th Street	Southwest	11.4	E	9.0	E	9.0	E	- Unmitigated
First Avenue at East 26th Street	Northeast	51.5	B	14.4	E	14.4	E	- Unmitigated

Denotes significantly impacted pedestrian element

Implementation

Implementation of mitigation measures would be subject to review and approval by NYC DOT. If, prior to implementation, NYC DOT determines that an identified mitigation measure is infeasible, an alternative and equivalent mitigation measure would be identified. In the absence of the application of a particular mitigation measure, the impact would remain unmitigated.

Construction

Construction Transportation

As discussed in **Chapter 16, Construction**, 23 intersections were analyzed for potential significant traffic impacts during the AM and PM construction traffic peak hours. Significant impacts were identified at eight analysis intersections during the AM peak hour and at seven intersections during the PM peak hour. Where impacts during construction may occur, measures such as signal timing modifications could potentially provide full or partial mitigation at some of the significantly impacted intersections. These measures and additional mitigation measures will be studied further in conjunction with NYC DOT between the DEIS and FEIS. As discussed in **Chapter 18, Mitigation**, NYC DOT is currently in the process of developing the Second Avenue Bus and Bike Lane Enhancements project which could result in changes to vehicular and pedestrian operations at intersections along

Second Avenue. Should the plan be adopted prior to the release of the FEIS, the transportation analysis will be updated to incorporate these changes and, as a result, the traffic impact results in the FEIS may be different than those identified in the DEIS.

Construction Noise

Since noise levels during construction would have the potential to exceed the thresholds for exterior increases in noise, there would be potential for the project to result in high exterior and interior noise levels at existing noise receptors at the Office of the Chief Medical Examiner located immediately north of the Development Site. As described in **Chapter 16, Construction**, exterior noise levels would have the potential to exceed the 85 dBA criterion for New York City Noise Code during certain phases of construction if the upper limits of projected construction noise are realized.

The primary sources of construction noise causing impact include demolition of the existing building and pile driving during the foundation phases of construction. Because the potential noise exceedances are predicted to occur only on the southern facade over a limited period of the construction duration (up to four months total depending on the location), the Proposed Project could result in short-term exceedances at these locations. As such, noise control measures would be incorporated in a construction noise mitigation plan required under the New York City Noise Control Code to further reduce the noise impact from the construction operations. Potential noise reduction measures could include a variety of source and path controls, such as temporary barriers and/or shrouds around specific equipment; and substitution with the equipment of lower noise emissions, i.e., using drill rigs instead of pile driving, as well as other measures, as warranted.