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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 to transportation. Mitigation measures have been identified to address those impacts where feasible and/or practicable. 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

Based on the analysis provided in the preceding chapters, this Draft Environmental Impact Statement (DEIS) concludes that the Proposed Project has the potential to result in significant adverse impacts to water and sewer infrastructure and transportation (operational and construction period). Potential mitigation measures to address those impacts, where feasible and/or practical, are proposed below. The Office of the Deputy Mayor for Housing, Economic Development, and Workforce (ODMHEDW), as the lead agency, will continue to coordinate with City agencies to further examine and refine these measures between the Draft and Final EIS. Where no feasible and practicable mitigation can be identified, impacts would remain unavoidable significant adverse impacts of the Proposed Project.

Water and Sewer Infrastructure

As discussed in **Chapter 11, Water and Sewer Infrastructure**, flows from the Proposed Project, which would contribute to an exceedance of the capacity of the 24-inch sanitary main and the 37th Avenue Pump Station, could result in a potential significant impact to sewer infrastructure. Additional analysis will be undertaken between the Draft EIS (DEIS) and Final EIS (FEIS) of the hydraulic capacity of the 24-inch sewer and of the capacity of the 37th Avenue pump station. If it is confirmed that the flow levels in the With-Action condition would exceed operating capacity to an extent considered significant consistent with *2021 CEQR Technical Manual* guidance, a significant adverse impact would occur. In that event, potential mitigations could include capacity enhancements to the 24-inch sanitary sewer and/or the pump station, or other infrastructure improvements or operational changes that would avoid the impact.

Transportation

In accordance with the *CEQR Technical Manual*, where significant adverse impacts are identified as discussed in **Chapter 14, Transportation**, mitigation to reduce or eliminate the impacts to the fullest extent practicable is developed and evaluated. Where potential significant adverse impacts have been identified—in the areas of transportation measures are examined to mitigate the anticipated impacts.

Traffic

Local Roadway Network

Of the 48 intersections analyzed in the With-Action condition, the Proposed Project would result in significant adverse impacts at 11 intersections during the non-gameday weekday AM peak hour; 11 intersections during the non-gameday weekday midday peak hour; 18 intersections during the non-gameday weekday PM peak hour; 10 intersections during the non-gameday Saturday PM peak hour; 17 intersections during the gameday weekday PM peak hour; 18 intersections during the gameday Saturday PM Pre Game peak hour; 13 intersections during the gameday Saturday PM Post Game peak hour; 13 intersections during the gameday Sunday midday peak hour, and 14 intersections during the gameday Sunday PM peak hour. The majority of the 48 intersections analyzed would either not be significantly impacted or could be fully mitigated with readily implementable traffic improvement measures described below in this chapter.

As shown in **Table 21-1**, on non-gamedays three of the 48 intersections would remain unmitigated during the non-gameday weekday AM peak hour; seven intersections would remain unmitigated during the non-gameday weekday midday peak hour; 15 intersections would remain unmitigated (or partially unmitigated) during the non-gameday weekday PM peak hour; and eight intersections would remain unmitigated (or partially unmitigated) during the non-gameday Saturday PM peak hour.

As shown in **Table 21-2**, on gamedays, 15 of the 48 intersections would remain unmitigated (or partially unmitigated) during the gameday weekday PM peak hour; 16 intersections would remain unmitigated during the gameday Saturday PM Pre Game peak hour; 10 intersections would remain unmitigated during the gameday Saturday PM Post Game peak hour; 10 intersections would remain unmitigated during the gameday Sunday midday peak hour; and 14 intersections would remain unmitigated (or partially unmitigated) during the gameday Sunday PM peak hour.

Table 21-1 Non-Gameday Traffic Impact Mitigation Summary

Intersections	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour
No significant impact	37	37	30	38
Fully mitigated impact	8	4	3	2
Partially mitigated impact	0	0	2	1
Unmitigated impact	3	7	13	7

Note:
Includes 36 signalized intersections and 12 unsignalized intersections in the Mitigated With-Action condition.

Table 21-2 Gameday Traffic Impact Mitigation Summary

Intersections	Weekday PM Peak Hour	Saturday PM Pre Game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
No significant impact	31	30	35	35	34
Fully mitigated impact	2	2	3	3	0
Partially mitigated impact	1	0	1	0	2
Unmitigated impact	14	16	9	10	12

Note:
Includes 36 signalized intersections and 12 unsignalized intersections in the Mitigated With-Action condition. In the Mitigated With-Action condition during the gameday weekday PM, six unsignalized intersections are modeled as signalized intersections to simulate traffic agent activity. In the Mitigated With-Action condition during the Saturday PM Pre Game, and Sunday midday peak hours, five unsignalized intersections are modeled as signalized intersections to simulate traffic agent activity. In the Mitigated With-Action condition during the gameday Saturday PM Post Game peak hour, 10 unsignalized intersections are modeled as signalized intersections to simulate traffic agent activity. In the Mitigated With-Action condition during the gameday Sunday PM peak hour, eight unsignalized intersections are modeled as signalized intersections to simulate traffic agent activity.

Mitigation measures identified later in the chapter, such as signal timing changes or installation of new traffic signals, are standard traffic capacity improvements that are typically implemented by the New York City Department of Transportation (NYC DOT).

Highway Network

Of the 76 highway segments (including, basic, merging, diverging, and weaving segments) analyzed along the Grand Central Parkway west of the site, the Van Wyck and Whitestone Expressways north and east of the site, the Proposed Project would result in significant adverse traffic impacts to 23 highway segments during the weekday AM peak hour; 16 highway segments during the non-gameday weekday midday peak hour; 23 highway segments during the non-gameday weekday PM peak hour; 14 highway segments during the non-gameday Saturday PM peak hour; 17 highway segment during the gameday weekday PM peak hour; 20 highway segments during the gameday Saturday PM Pre Game peak hour; 22 highway segments during the gameday Saturday PM Post Game peak hour; 12 highway segments during the gameday Sunday midday peak hour, and 24 highway segments during the gameday Sunday PM peak hour.

The identification of significant adverse impacts on the highway network is not unusual for projects of this scale. The Grand Central Parkway, Van Wyck and Whitestone Expressways are in immediate proximity to the Development Site and are projected to be heavily used by visitors driving to the Proposed Project. Potential measures to provide more capacity along these facilities, such as

widening of the highways to provide additional lanes is not practical, and would be cost prohibitive; therefore, this has been precluded as an option. However, transportation demand management measures and operational strategies comprising a comprehensive Transportation Demand Management (TDM) plan can be effective in reducing vehicle usage along key segments of these highways as well as where they link to the local street network. The TDM plan would, if necessary, be refined and adjusted from time to time as real-time information becomes available through future monitoring of traffic conditions on gamedays.

The traffic analyses for the With-Action condition use a conservative approach in that they have assessed gameday peak hours along with trips associated with project land uses, with no reductions to levels of background traffic. As such, the With-Action analyses represent worst-case scenarios and would not typically occur during most days over the course of the year.

Subway

The Mets-Willets Point subway station was analyzed during the weekday AM and PM peak commuter peak periods, as well as weekday game ingress, Saturday game ingress, and Saturday game egress conditions to address reasonable worst-case conditions that occur on gamedays. A Baseline Scenario without modifications to the station was considered for the With-Action condition. The analysis determined that under the Baseline Scenario, all subway station elements would operate at acceptable levels of service during the non-gameday weekday AM, gameday weekday PM, Saturday PM Pre Game and Saturday PM Post Game peak hours. One element, the Mezzanine Outside Fare Zone Passageway, would be significantly impacted during the non-gameday weekday PM peak hour. Measures to mitigate the passageway would include the implementation of gameday subway station operations during the non-gameday weekday AM and PM peak periods, which would include the deactivation of the main control area on the mezzanine level, making it a free zone with access between the subway station and the Passerelle Bridge. With these measures in place, all subway station elements would operate at acceptable levels of service during all peak hours analyzed, and the Mezzanine Outside Fare Zone Passageway impact could be fully mitigated.

Buses

The Proposed Project would result in a capacity shortfall for the Q48 bus route during the weekday PM (23 spaces in the eastbound direction, 259 spaces in the westbound direction) and the Saturday PM peak hour (26 spaces in the eastbound direction, 126 spaces in the westbound direction).

Impacts to the Q48 bus route could be mitigated with the addition of one standard bus in the eastbound direction and five standard buses in the westbound direction during the weekday PM peak hour; and one standard bus in the eastbound direction and three standard buses in the westbound direction during the Saturday PM peak hour. The general policy of NYCT is to provide additional bus service where demand warrants, taking into account financial and operational constraints. Based on NYCT's ongoing passenger monitoring program and as new development occurs throughout the study area, a comprehensive service plan would be generated to respond to specific known needs with capital and/or operational improvements where fiscally and operationally practicable. NYCT's capital program is developed on a five-year cycle; through this program, expansion of bus services would be provided as needs are determined. It is therefore anticipated that NYCT would increase service frequency on the Q48 to address its capacity shortfalls.

Pedestrians

Of the 41 pedestrian elements analyzed, the Proposed Project would result in significant adverse impacts at two pedestrian elements (two crosswalks) during the non-gameday weekday midday, PM, and Saturday PM peak hours; three pedestrian elements (one sidewalk, two crosswalks) during the gameday weekday PM peak hour; five pedestrian elements (two sidewalks, two crosswalks, and one corner) during the gameday Saturday PM Pre Game peak hour; six pedestrian elements (two sidewalks, two crosswalks, and two corners) during the gameday Saturday PM Post Game peak hour; three pedestrian elements (one sidewalk, one crosswalk, and one corner) during the gameday Sunday midday peak hour; and eight pedestrian elements (three sidewalks, three crosswalks, and two corners) during the gameday Sunday PM peak hour. Mitigation measures were explored, and it was determined that no mitigation measures could be implemented; therefore, the impacts at the locations described above would remain unmitigated.

Potential improvements that could mitigate the significant adverse impacts are being explored and will be studied further in coordination with NYCDOT between the DEIS and FEIS. If no mitigation measures can be identified, these impacted locations would remain unmitigated.

Water and Sewer Infrastructure

As discussed in **Chapter 11, Water and Sewer Infrastructure**, flows from the Proposed Project, which would contribute to an exceedance of the capacity of the 24-inch sanitary main and the 37th Avenue Pump Station, could result in a potential significant impact to sewer infrastructure. Additional analysis will be undertaken between the DEIS and FEIS of the hydraulic capacity of the 24-inch sewer and of the capacity of the 37th Avenue pump station. If it is confirmed that the flow levels in the With-Action condition would exceed operating capacity to an extent considered significant consistent with *CEQR Technical Manual* guidance, a significant adverse impact would occur. In that event, potential mitigations could include capacity enhancements to the 24-inch sanitary sewer and/or the pump station, or other infrastructure improvements or operational changes that would avoid the impact.

Transportation

As discussed in **Chapter 14, Transportation**, the Proposed Project would result in significant adverse traffic, transit, and pedestrian impacts at a number of locations in the study area. This section describes the mitigation measures that could reduce or eliminate significant impacts and indicate where impacts would remain unmitigated.

Traffic

Local Roadway Network

Of the 48 intersection analyzed in the With-Action condition, the Proposed Project would result in significant adverse traffic impacts at 11 intersections (at 16 lane groups, or set of lanes established at an intersection approach for separate capacity and level of service analyses) during the non-gameday weekday AM peak hour; 11 intersections (at 18 lane groups) during the non-gameday weekday midday peak hour; 18 intersections (at 35 lane groups) during the non-gameday weekday PM peak hour; 10 intersections (at 19 lane groups) during the non-gameday Saturday PM peak hour; 17

intersections (at 37 lane groups) during the gameday weekday PM peak hour; 18 intersections (at 30 lane groups) during the gameday Saturday PM Pre Game peak hour; 13 intersections (at 27 lane groups) during the gameday Saturday PM Post Game peak hour; 13 intersections (at 19 lane groups) during the gameday Sunday midday peak hour, and 14 intersections (at 28 lane groups) during the gameday Sunday PM peak hour. **Table 21-1** and **Table 21-2** summarize the number of traffic impacts and whether they could be fully or partially mitigated, and **Table 21-3** identifies the significantly impacted intersections. Details of the intersection capacity analyses, and all traffic mitigation measures are summarized in **Table E-1** through **Table E-9** of **Appendix E**.

Table 21-3 Traffic Mitigation Summary

	Non-Gameday				Gameday				
Intersections	**Weekday AM Peak Hour**	**Weekday Midday Peak Hour**	**Weekday PM Peak Hour**	**Saturday PM Peak Hour**	**Weekday PM Peak Hour**	**Saturday PM Pre Game Peak Hour**	**Saturday PM Post Game Peak Hour**	**Sunday Midday Peak Hour**	**Sunday PM Peak Hour**
Astoria Boulevard at 108th Street/ 31st Drive						●	●		
Northern Boulevard at 108th Street	●	○	○	○	○	○		○	◐
Northern Boulevard at 114th Street		○	○	○	○	○		○	○
Northern Boulevard at Union Street	●		●	●	●		●	●	
Northern Boulevard at Parsons Boulevard		●	○		○	●	●	●	
Roosevelt Avenue at 108th Street	○	○	○	○	○	○	○	○	○
Roosevelt Avenue at 111th Street	●		○	○	○	○	○	○	○
Roosevelt Avenue at 114th Street	○	○	○	○	○	○	○	○	○
Roosevelt Avenue at 126th Street/ Seaver Way	●	○	○	○	○	○	○	○	○
Roosevelt Avenue westbound at College Point Boulevard	●	○	●		●	○		●	
Roosevelt Avenue eastbound at College Point Boulevard						○			
Roosevelt Avenue at Prince Street			○		○	○	○	○	○

Table 21-3 Traffic Mitigation Summary

	Non-Gameday				Gameday				
Intersections	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour	Weekday PM Peak Hour	Saturday PM Pre Game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
Roosevelt Avenue at Main Street			◐		◐				
Roosevelt Avenue at Union Street	●	○	○	◐	○	○	◐	○	◐
Roosevelt Avenue at Parsons Boulevard	○	●	◐		○	○		○	○
34th Avenue at 126th Street/ Seaver Way						○	○		
35th Avenue at 126th Street/ Seaver Way								○	
Grand Central Parkway westbound exit ramp/ Podium Parking West Access at Shea Road			○	○	○	○			
Shea Road at Tower Parking					○				
Shea Road at Stadium Place North					○	○			
Marina Road at Boat Basin Place	●	●			○	○	○		○
Shea Road at Northfield Parking Structure North Access 2									○
Shea Road at Meridian Road			○						○
Shea Road at Grand Central Parkway westbound exit ramp (9P)	●	●	●	●					
Shea Road at New York Avenue			○			○	○		○

Table 21-3 Traffic Mitigation Summary

	Non-Gameday				Gameday				
Intersections	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday PM Peak Hour	Weekday PM Peak Hour	Saturday PM Pre Game Peak Hour	Saturday PM Post Game Peak Hour	Sunday Midday Peak Hour	Sunday PM Peak Hour
New York Avenue at United Nations Avenue North			○				○		○

Notes:

○ Unmitigable

◐ Partially Mitigated

● Mitigated

A blank cell indicates that the intersection is not significantly impacted during the peak hour.

As shown in **Table 21-1**, on non-gamedays three of the 48 intersections would remain unmitigated during the non-gameday weekday AM peak hour; seven intersections would remain unmitigated during the non-gameday weekday midday peak hour; 15 intersections would remain unmitigated (or partially unmitigated) during the non-gameday weekday PM peak hour; and eight intersections would remain unmitigated (or partially unmitigated) during the non-gameday Saturday PM peak hour.

As shown in **Table 21-2**, on gamedays, 15 of the 48 intersections would remain unmitigated (or partially unmitigated) during the gameday weekday PM peak hour; 16 intersections would remain unmitigated during the gameday Saturday PM Pre Game peak hour; 10 intersections would remain unmitigated (or partially unmitigated) during the gameday Saturday PM Post Game peak hour; 10 intersections would remain unmitigated during the gameday Sunday midday peak hour; and 14 intersections would remain unmitigated (or partially unmitigated) during the gameday Sunday PM peak hour.

The overall finding of the traffic mitigation analysis indicates that majority of the 48 intersections analyzed would either not be significantly impacted or could be fully mitigated with standard readily implementable traffic improvement measures, including signal timing changes, that are typically implemented by NYC DOT. Overall vehicle demand could be reduced with the implementation of a comprehensive Transportation Demand Management (TDM) plan, outlined at the end of this chapter. It should be noted that in order to provide a conservative analysis, the Mitigated With-Action analysis does not include any reductions in traffic demand that could result from the potential TDM plan.

Astoria Boulevard

One of the two intersections analyzed along Astoria Boulevard (at 108th Street/31st Drive) would be significantly impacted during the gameday Saturday PM Pre Game peak hour and gameday Saturday PM Post Game peak hour. This impact could be fully mitigated with signal timing modifications.

Northern Boulevard

Two of the 10 intersections analyzed along Northern Boulevard would be significantly impacted during the non-gameday weekday AM, gameday Saturday PM Post Game peak, and gameday Sunday PM peak hours; three intersections would be impacted during the non-gameday weekday

midday, non-gameday Saturday PM, and gameday Saturday PM Pre Game peak hours; and four intersections would be impacted during the non-gameday weekday PM, gameday weekday PM, and Sunday midday peak hours. Of the four intersections along Northern Boulevard that would be significantly impacted during at least one peak hour, one intersection could be fully mitigated across all the impacted peak hours. The following intersections could not be fully mitigated during the following peak hours:

- Northern Boulevard and 108th Street could not be mitigated during the non-gameday weekday midday, weekday PM, and Saturday PM, and during the gameday weekday PM, Saturday PM Pre Game and Sunday midday peak hours. The intersection could be partially mitigated during the gameday Sunday PM peak hour.
- Northern Boulevard and 114th Street could not be mitigated during the non-gameday weekday midday, weekday PM, and Saturday PM, and during the gameday weekday PM, Saturday PM Pre Game, Sunday midday, and Sunday PM peak hours.
- Northern Boulevard and Parsons Boulevard could not be mitigated during the non-gameday weekday PM and gameday weekday PM peak hours.

Northern Boulevard and 108th Street

This intersection would be significantly impacted during all peak hours analyzed except for the gameday Saturday PM Post Game peak hour. Impacts during the non-gameday weekday AM peak hour could be fully mitigated with signal timing modifications. Impacts during the gameday Sunday PM peak hour could be partially mitigated with signal timing modifications. Impacts during the non-gameday weekday midday, weekday PM, and Saturday PM, and during the gameday weekday PM, Saturday PM Pre Game, and Sunday midday could not be mitigated.

Northern Boulevard and 114th Street

This intersection would be significantly impacted during all peak hours analyzed except for the non-gameday weekday AM and gameday Saturday PM Post Game peak hours. Impacts during the non-gameday weekday midday, weekday PM, and Saturday PM, and during the gameday weekday PM, Saturday PM Pre Game, Sunday midday, and Sunday PM peak hours could not be mitigated.

Northern Boulevard and Union Street

This intersection would be significantly impacted during the non-gameday weekday AM, weekday PM, and Saturday PM, and during the gameday weekday PM, Saturday PM Post Game, and Sunday midday peak hours. Impacts during these six peak periods could be fully mitigated with signal timing modifications.

Northern Boulevard and Parsons Boulevard

This intersection would be significantly impacted during the non-gameday weekday midday and weekday PM, and during the gameday weekday PM, Saturday PM Pre Game, Saturday PM Post Game, and Sunday midday peak hours. Impacts during the non-gameday weekday midday, gameday Saturday PM Pre Game, Saturday PM Post, and Sunday midday peak hours could be fully mitigated with signal timing modifications. Impacts during the non-gameday weekday PM and gameday weekday PM peak hours could not be mitigated.

Roosevelt Avenue

Five of the 13 intersections analyzed along Roosevelt Avenue would be significantly impacted during the non-gameday Saturday PM peak hour, six intersections would be significantly impacted during the non-gameday weekday midday and gameday Saturday PM Post Game peak hours, seven intersections would be significantly impacted during the non-gameday weekday AM and gameday Sunday PM peak hours, eight intersections would be significantly impacted during the gameday Sunday midday peak hour, and nine intersections would be significantly impacted during the non-gameday weekday PM and gameday weekday PM and Saturday PM Pre Game peak hours. Of the 10 intersections that would be significantly impacted during at least one peak hour, none of the intersections could be fully mitigated across all impacted peak hours. The intersections listed below could not be fully mitigated during the following peak hours:

- Roosevelt Avenue and 108th Street could not be mitigated in any of the peak hours analyzed.
- Roosevelt Avenue and 111th Street could not be mitigated during the non-gameday weekday PM and Saturday PM, and during the gameday weekday PM, Saturday PM Pre Game, Saturday PM Post Game, Sunday midday, and Sunday PM peak hours.
- Roosevelt Avenue and 114th Street could not be mitigated in any of the peak hours analyzed.
- Roosevelt Avenue and 126th Street/Seaver Way could not be mitigated during the non-gameday weekday midday, weekday PM, and Saturday PM, and during the gameday weekday PM, Saturday PM Pre Game, Saturday PM Post Game, Sunday midday, and Sunday PM peak hours.
- Westbound Roosevelt Avenue and College Point Boulevard could not be mitigated during the non-gameday weekday midday, and during the Saturday PM Pre Game peak hours.
- Eastbound Roosevelt Avenue and College Point Boulevard could not be mitigated during the Saturday PM Pre Game peak hour.
- Roosevelt Avenue and Prince Street could not be mitigated during the non-gameday weekday PM and during the gameday weekday PM, Saturday PM Pre Game, Saturday PM Post Game, Sunday midday and Sunday PM peak hours.
- Roosevelt Avenue and Main Street could be partially mitigated during the non-gameday weekday PM and gameday weekday PM peak hours.
- Roosevelt Avenue and Union Street could not be mitigated during the non-gameday weekday midday and weekday PM, and during the gameday weekday PM, Saturday PM Pre Game, and Sunday midday peak hours. The intersection could be partially mitigated during the non-gameday Saturday PM and during the gameday Saturday PM Post Game and Sunday PM peak hours.
- Roosevelt Avenue and Parsons Boulevard could not be mitigated during the non-gameday weekday AM and during the gameday weekday PM, Saturday PM Pre Game, Sunday midday, and Sunday PM peak hours. The intersection could be partially mitigated during the non-gameday weekday PM peak hour.

Roosevelt Avenue and 108th Street

This intersection would be significantly impacted during all peak hours analyzed and could not be mitigated.

Roosevelt Avenue and 111th Street

This intersection would be significantly impacted during all hours except for the non-gameday weekday midday peak hour. Impacts during the non-gameday weekday AM peak hour could be fully mitigated with signal timing modifications. Impacts during the non-gameday weekday PM and Saturday PM, and during the gameday weekday PM, Saturday PM Pre Game, Saturday PM Post Game, Sunday midday, and Sunday PM peak hours could not be mitigated.

Roosevelt Avenue and 114th Street

This intersection would be significantly impacted during all peak hours analyzed and could not be mitigated.

Roosevelt Avenue and 126th Street/Seaver Way

This intersection would be significantly impacted during all peak hours analyzed. Impacts during the non-gameday weekday AM peak hour could be fully mitigated with signal timing modifications. Impacts during the non-gameday weekday midday, weekday PM, and Saturday PM, and during the gameday weekday PM, Saturday PM Pre Game, Saturday PM Post Game, Sunday midday, and Sunday PM peak hours could not be mitigated.

Roosevelt Avenue and westbound College Point Boulevard

This intersection would be significantly impacted during the non-gameday weekday AM, weekday midday, and weekday PM, and during the gameday weekday PM, Saturday PM Pre Game, and Sunday midday peak hours. Impacts during the non-gameday weekday AM and weekday PM, and during the gameday weekday PM and Sunday midday peak hours could be fully mitigated with signal timing modifications. Impacts during the non-gameday weekday midday and during the gameday Saturday PM Pre Game peak hours could not be mitigated.

Roosevelt Avenue and eastbound College Point Boulevard

This intersection would be significantly impacted during the gameday Saturday PM Pre Game peak hour and could not be mitigated.

Roosevelt Avenue and Prince Street

This intersection would be significantly impacted during the non-gameday weekday PM and during the gameday weekday PM, Saturday PM Pre Game, Saturday PM Post Game, Sunday midday and Sunday PM peak hours. Impacts at this intersection could not be mitigated.

Roosevelt Avenue and Main Street

This intersection would be significantly impacted during the non-gameday weekday PM and gameday weekday PM peak hours. Impacts could be partially mitigated during these peak hours with signal timing modifications.

Roosevelt Avenue and Union Street

This intersection would be significantly impacted during all peak hours analyzed. Impacts during the non-gameday weekday AM peak hour could be fully mitigated with signal timing modifications.

Impacts during the non-gameday Saturday PM and during the gameday Saturday PM Post Game and Sunday PM peak hours could be partially mitigated with signal timing modifications. Impacts during the non-gameday weekday midday and weekday PM, and during the gameday weekday PM, Saturday PM Pre Game, and Sunday midday peak hours could not be mitigated.

Roosevelt Avenue and Parsons Boulevard

This intersection would be significantly impacted during all peak hours except for the non-gameday Saturday PM and gameday Saturday PM Post Game peak hours. Impacts during the non-gameday weekday midday peak hour could be fully mitigated with signal timing modifications. Impacts during the non-gameday weekday PM peak hour could be partially mitigated with signal timing modifications. Impacts during the non-gameday weekday AM and during the gameday weekday PM, Saturday PM Pre Game, Sunday midday, and Sunday PM peak hours could not be mitigated.

Seaver Way

One of the nine intersections analyzed along Seaver Way would be significantly impacted during the gameday Saturday PM Pre Game, Saturday PM Post Game, and Sunday midday peak hours. No intersections would be significantly impacted during the non-gameday weekday AM, weekday midday, weekday PM, and Saturday PM and during the gameday Sunday PM peak hour. Of the two intersections along Seaver Road that would be significantly impacted during at least one peak hour, none of the intersections could be fully mitigated across all the impacted peak hours. The following intersections could not be fully mitigated during the following peak hours:

- 34th Avenue and 126th Street/Seaver Way could not be mitigated during the gameday Saturday PM Pre Game and Saturday PM Post Game peak hours.
- 35th Avenue and 126th Street/Seaver Way could not be mitigated during the gameday Sunday midday peak hour.

34th Avenue and 126th Street/Seaver

This intersection would be significantly impacted during the gameday Saturday PM Pre Game and Saturday PM Post Game peak hours. Impacts during these peak hours could not be mitigated.

35th Avenue and 126th Street/Seaver

This intersection would be significantly impacted during the gameday Sunday midday peak hour and could not be mitigated.

Shea Road

One of the 17 intersections analyzed along Shea Road would be significantly impacted during the non-gameday Saturday PM peak hour; two intersections would be significantly impacted during the non-gameday weekday AM and weekday midday, and during the gameday Saturday PM Post Game peak hours; three intersections would be significantly impacted during the non-gameday weekday PM and during the gameday weekday PM, Saturday PM Pre Game, and Sunday PM peak hours. No intersections would be significantly impacted during the gameday Sunday midday peak hour. Of the seven intersections along Shea Road that would be significantly impacted during at least one peak hour, one intersection could be fully mitigated across all the impacted peak hours. The following intersections could not be fully mitigated during the following peak hours:

- Grand Central Parkway westbound exit ramp/Podium Parking West Access and Shea Road could not be mitigated during the non-gameday weekday PM and Saturday PM, and during the gameday weekday PM and Saturday PM Pre Game peak hours.
- Shea Road and Tower Parking could not be mitigated during the gameday weekday PM peak hour.
- Shea Road at Stadium Place North could not be mitigated during the gameday weekday PM and Saturday PM Pre Game peak hours.
- Shea Road at Northfield Parking Structure North Access 2 could not be mitigated during the gameday Sunday PM peak hour.
- Shea Road at Meridian Road could not be mitigated during the non-gameday weekday PM and gameday Sunday PM peak hours.
- Shea Road at New York Avenue could not be mitigated during the non-gameday weekday PM and during the gameday Saturday PM Pre Game, Saturday PM Post Game, and Sunday PM peak hours.

Grand Central Parkway westbound exit ramp/Podium Parking West Access at Shea Road

This intersection would be significantly impacted during the non-gameday weekday PM and Saturday PM, and during the gameday weekday PM and Saturday PM Pre Game peak hours. Impacts during these peak hours could not be mitigated.

Shea Road and Tower Parking

This intersection would be significantly impacted during the gameday weekday PM peak hour and could not be mitigated.

Shea Road and Stadium Place North

This intersection would be significantly impacted during the gameday weekday PM and Saturday PM Pre Game peak hours. Impacts during these peak hours could not be mitigated.

Shea Road and Northfield Parking Structure North Access 2

This intersection would be significantly impacted during the gameday Sunday PM peak hour. Impacts during this peak hour could not be mitigated.

Shea Road and Meridian Road

This intersection would be significantly impacted during the non-gameday weekday PM and during the gameday Sunday PM peak hours. Impacts during these peak hours could not be mitigated.

Shea Road and Grand Central Parkway westbound exit ramp (9P)

This intersection would be significantly impacted during the non-gameday weekday AM, weekday midday, weekday PM, and Saturday PM peak hours. Impacts at this intersection could be fully mitigated by installing a two-phase signal with a cycle length of 60 seconds. The signal would operate with an eastbound left turn phase and a northbound/southbound phase. The eastbound right turn would operate as stop-controlled as in existing conditions, and the southbound right turn would have a "Right Turn on Red."

Shea Road and New York Avenue

This intersection would be significantly impacted during the non-gameday weekday PM and during the gameday Saturday PM Pre Game, Saturday PM Post Game, and Sunday PM peak hours. Impacts during these peak hours could not be mitigated.

Marina Road at Boat Basin Place

This intersection would be significantly impacted during the non-gameday weekday AM and weekday midday, and during the gameday weekday PM, Saturday PM Pre Game, Saturday PM Post Game, and Sunday PM peak hours. Impacts during the non-gameday weekday AM and weekday midday peak hours could be fully mitigated with signal timing modifications. Impacts during the gameday weekday PM, Saturday PM Pre Game, Saturday PM Post Game, and Sunday PM peak hours could not be mitigated.

New York Avenue at United Nations Avenue North

This intersection would be significantly impacted during the non-gameday weekday PM and gameday Saturday PM Post Game and Sunday PM peak hours. Impacts during these peak hours could not be mitigated.

Implementation

The Applicant is responsible for all costs associated with the design and implementation of the mitigation measures, with the exception of signal timing modifications which would be implemented by NYC DOT. The implementation of these measures would not result in the loss of any parking or "standing" spaces. If, prior to implementation, NYC DOT determines that any of the identified mitigation measures are infeasible, and no other alternative and equivalent mitigation measures could be advanced, then the impacts would remain unmitigated.

Highway Network

As discussed in **Chapter 14, Transportation,** the Proposed Project would result in significant adverse traffic impacts to 23 highway segments during the weekday AM peak hour; 16 highway segments during the non-gameday weekday midday peak hour; 23 highway segments during the non-gameday weekday PM peak hour; 14 highway segments during the non-gameday Saturday PM peak hour; 17 highway segment during the gameday weekday PM peak hour; 20 highway segments during the gameday Saturday PM Pre Game peak hour; 22 highway segments during the gameday Saturday PM Post Game peak hour; 12 highway segments during the gameday Sunday midday peak hour, and 24 highway segments during the gameday Sunday PM peak hour.

The identification of significant adverse impacts on the highway network is not unusual for projects of this scale. The Grand Central Parkway, Van Wyck and Whitestone Expressways are in immediate proximity to the Development Site and are projected to be heavily used by visitors driving to the Proposed Project. Potential measures to provide more capacity along these facilities, such as widening of the highways to provide additional lanes is not practical, and would be cost prohibitive; therefore, this has been precluded as an option. However, transportation demand management measures and operational strategies comprising a comprehensive Transportation Demand Management (TDM) plan can be effective in reducing vehicle usage along key segments of these highways as well as where they link to the local street network. The TDM plan would, if necessary, be

refined and adjusted from time to time as real-time information becomes available through future monitoring of traffic conditions on gamedays.

The traffic analyses for the With-Action condition use a conservative approach in that they have assessed gameday peak hours along with trips associated with project land uses, with no reductions to levels of background traffic. Assumptions used to generate project trips do not account for additional linkages between complimentary land uses on the Development Site on gamedays. The analyses also do not account for "stay-away factors" to account for trips that may not happen on gamedays due to drivers choosing to travel using another mode (i.e. public transit). Potential shifts in arrival or departure times away from peak periods or drivers avoiding the Project site entirely due to traffic congestion associated with Mets games were also not assumed in trip generation for the Proposed Project. Furthermore, the analysis assumes there would be no changes in baseline traffic volumes on the highway network, while some motorists could choose to alter their travel patterns either by using an alternate highway or traveling at a different time of day. With regards to the analysis of highway segments, the results of the VISSIM model are conservative since the analysis does not reflect how congestion on upstream portions of the highway network could serve to meter the demand of vehicles on the analyzed highway segments. As such, the With-Action analyses represent worst-case scenarios and may not be indicative of what would typically occur during most days over the course of the year.

Transit

Subway Station Elements

As discussed in **Chapter 14, Transportation,** subway station elements at the Mets – Willets Point subway station were analyzed during the weekday AM and PM peak commuter periods; the weekday and Saturday game ingress conditions; as well as the Saturday game egress condition to address reasonable worst-case conditions that occur on gamedays. A Baseline Scenario without modifications to the station, as well as a With Improvements Scenario with proposed station enhancements were considered for the With-Action condition.

Under the Baseline Scenario, significant impacts would occur at the Mezzanine Outside Fare Zone Passageway during the non-gameday weekday PM peak hour. One potential mitigation measure would be for the applicant to pay for the reconfiguration of the area around the agent booth. Possible changes could include adding more turnstiles to the fare array (so people in the unpaid area can avoid the narrowest portion of the corridor); shifting the northernmost segment of the control line railing two to four feet east; shifting the turnstiles two feet to the east; adjusting the doorway/window panels north of the booth to provide a wider corridor. These are not mutually exclusive options.

It is also expected that MetroCard will have been fully phased out before 2030. The existing MetroCard reader adjacent to the unpaid side of the control line railing would therefore have been removed, allowing for approximately one extra foot of width.

Another potential measure to mitigate the passageway would be to implement gameday subway station operations during the non-gameday weekday AM and PM peak periods, which would include the deactivation of the main control area on the mezzanine level, making it a free zone with access between the subway station and the Passerelle Bridge. This would also entail keeping the Citi Field stair on the north side of Roosevelt Avenue open during non-game days. As it is not typical practice

to operate special event circulation elements when there is no special event, this measure would be subject to a review of station operating policy, which would include an assessment of whether current non-gameday staffing levels would be sufficient under game day operations. The four individual fare control areas located at the Manhattan-bound and Flushing-bound platform levels would be activated during the commuter peak periods for patrons boarding and alighting the platforms. The Special Event fare control area along the southernmost platform would remain closed as part of the proposed mitigation.

Background volumes within the station were shifted to logical routing using available elements open on gamedays; these assumptions were based on volume distributions observed during existing conditions as well as professional engineering judgment. Under these operations, it is assumed that the nominal number of existing transfers between the Flushing-bound and Manhattan-bound platforms would require exiting a Flushing-bound fare control area and reentering a Manhattan-bound fare control area, or vice versa. No-Action background project volume increments to specific elements were rerouted based on logical patterns of travel between the project locations and platforms. Subway trips generated by the Proposed Project originally assigned to the northeast and northwest street stairs under non-gameday station operations would be rerouted to primarily use the Citi Field stairs, which would provide direct access to the Development Site, in addition to the Roosevelt northeast and northwest street stairs.

Table 21-4 through **Table 21-6** show levels of service under the Baseline Scenario with the proposed mitigation levels of service. However, if implemented, all subway station elements would operate at acceptable levels of service during all peak hours analyzed, and the Mezzanine Outside Fare Zone Passageway impact could be fully mitigated. The level of service at this element would improve to LOS B during the non-gameday PM peak hour.

Table 21-4 2030 Mitigation Baseline Scenario Subway Station Vertical Circulation Level of Service

Vertical Circulation Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			Up	Down				
Non-Gameday Weekday AM Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	173	58	0.80	0.90	0.27	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	35	24	0.80	0.90	0.07	A
North Mezzanine Stair (M4)	13.0	11.8	208	82	0.80	0.90	0.19	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	39	17	0.80	0.90	0.06	A
South Mezzanine Stair (M1)	30.6	28.3	35	23	0.80	0.90	0.02	A
South Mezzanine Stair (M5)	12.0	10.8	35	23	0.80	0.90	0.04	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	304	23	0.80	0.90	0.10	A
Flushing-bound East Stair (P2)	10.0	8.8	16	42	0.75	0.90	0.06	A
Flushing-bound East Stair (P4)	10.0	8.8	8	60	0.75	0.90	0.07	A
Flushing-bound West Stair (P10)	10.0	8.8	6	43	0.75	0.90	0.05	A
Flushing-bound West Stair (P12)	10.0	8.8	8	37	0.75	0.90	0.05	A
Citi Field Stairs (U2)	44.3	41.6	41	174	0.80	0.90	0.05	A
Non-Gameday Weekday PM Peak Hour								
Roosevelt Avenue Northeast Stair (S2)	8.0	6.8	123	154	0.80	0.90	0.34	A
Roosevelt Avenue Northwest Stair (S3)	8.0	6.8	192	140	0.80	0.90	0.40	A
North Mezzanine Stair (M4)	13.0	11.8	315	294	0.80	0.90	0.43	A
Roosevelt Avenue South Stair (S1)	8.3	7.1	14	30	0.80	0.90	0.05	A
South Mezzanine Stair (M1)	30.6	28.3	6	28	0.80	0.90	0.01	A
South Mezzanine Stair (M5)	12.0	10.8	6	28	0.80	0.90	0.03	A
Manhattan-bound Mezzanine Stair (P1)	32.9	31.2	479	205	0.80	0.90	0.20	A
Flushing-bound East Stair (P2)	10.0	8.8	199	183	0.75	0.90	0.37	A
Flushing-bound East Stair (P4)	10.0	8.8	61	156	0.75	0.90	0.23	A
Flushing-bound West Stair (P10)	10.0	8.8	69	155	0.75	0.90	0.23	A
Flushing-bound West Stair (P12)	10.0	8.8	26	160	0.75	0.90	0.20	A
Citi Field Stairs (U2)	44.3	41.6	281	446	0.80	0.90	0.15	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0. At the Mezzanine Manhattan-bound stair (P1) during non-gameday and gameday peak hours, surges are experienced from both the Manhattan-bound and Flushing-bound platforms; therefore, a surging factor of 0.8 is applied to entry volumes.

Table 21-5 2030 Mitigation Baseline Scenario Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			In	Out				
Non-Gameday Weekday AM Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	244	95	0.80	0.90	0.32	A
Mezzanine Central Corridor Passageway	27.8	25.8	425	48	0.80	0.90	0.11	A
Manhattan-bound West Ramp Passageway	17.1	15.1	86	78	0.75	0.90	0.06	A
Manhattan-bound East Ramp Passageway	16.0	14.0	195	53	0.75	0.90	0.09	A
Flushing-bound East Passageway	18.3	16.3	24	102	0.80	0.90	0.05	A
Flushing-bound West Passageway	14.0	12.0	14	80	0.80	0.90	0.05	A
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	2	1	1.00	0.90	0.00	A
South Mezzanine to Pedestrian Bridge Passageway	7.0	5.0	9	37	1.00	0.90	0.05	A
Pedestrian Bridge to Flushing Meadows Corona Park Passageway	38.0	36.0	18	47	1.00	0.90	0.01	A
Special Event Mezzanine Ramp Passageway	43.9	41.9	8	10	0.80	0.90	0.00	A
Non-Gameday Weekday PM Peak Hour								
Within Mets – Willets Point Station								
Mezzanine Outside Fare Zone Passageway	7.6	5.6	316	334	0.80	0.90	0.65	B
Mezzanine Central Corridor Passageway	27.8	25.8	804	365	0.80	0.90	0.28	A
Manhattan-bound West Ramp Passageway	17.1	15.1	66	122	0.75	0.90	0.07	A
Manhattan-bound East Ramp Passageway	16.0	14.0	240	74	0.75	0.90	0.12	A
Flushing-bound East Passageway	18.3	16.3	260	339	0.80	0.90	0.21	A
Flushing-bound West Passageway	14.0	12.0	95	315	0.80	0.90	0.20	A

Table 21-5 2030 Mitigation Baseline Scenario Subway Station Passageway Level of Service

Subway Station Element	Width (ft)	Effective Width (ft)	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
			In	Out				
Outside Mets – Willets Point Station								
Roosevelt Avenue South Ramp to Mezzanine Passageway	5.7	3.7	5	3	1.00	0.90	0.01	A
South Mezzanine to Pedestrian Bridge Passageway	7.0	5.0	26	55	1.00	0.90	0.08	A
Pedestrian Bridge to Flushing Meadows Corona Park Passageway	38.0	36.0	66	124	1.00	0.90	0.03	A
Special Event Mezzanine Ramp Passageway	43.9	41.9	40	69	0.80	0.90	0.01	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0. At the Mezzanine Central Corridor Passageway, surging factors of 0.80 are applied to the entry and exit volumes during non-gameday and gameday peak hours. This is due to the passageway experiencing cross flows from both the platforms and station entrances due to its central location within the station.
Shading denotes significantly impacted subway element

Table 21-6 2030 Mitigation Baseline Scenario Subway Station Fare Control Level of Service

Fare Control Element	15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	v/c Ratio	LOS
	In	Out				
Non-Gameday Weekday AM Peak Hour						
Manhattan-bound East Ramp Turnstiles	86	78	0.75	0.90	0.06	A
Manhattan-bound West Ramp Turnstiles	195	53	0.75	0.90	0.11	A
Flushing-bound East Stair Turnstiles	24	102	0.80	0.90	0.04	A
Flushing-bound West Stair Turnstiles	14	80	0.80	0.90	0.03	A
Non-Gameday Weekday PM Peak Hour						
Manhattan-bound East Ramp Turnstiles	66	122	0.75	0.90	0.06	A
Manhattan-bound West Ramp Turnstiles	240	74	0.75	0.90	0.13	A
Flushing-bound East Stair Turnstiles	260	339	0.80	0.90	0.18	A
Flushing-bound West Stair Turnstiles	95	315	0.80	0.90	0.15	A

Note:
Methodology based on *2021 CEQR Technical Manual* guidelines
Surging factors only apply to exiting volumes. The surge factor for entry volumes is 1.0.

Buses

As discussed in **Chapter 14, Transportation,** the Proposed Project would result in a capacity shortfall for the Q48 bus route during the weekday PM (23 spaces in the eastbound direction, 259

spaces in the westbound direction) and the Saturday PM peak hour (26 spaces in the eastbound direction, 126 spaces in the westbound direction).

As detailed in **Table 21-7**, impacts to the Q48 bus route could be mitigated with the addition of one standard bus in the eastbound direction and five standard buses in the westbound direction during the weekday PM peak hour; and one standard bus in the eastbound direction and three standard buses in the westbound direction during the Saturday PM peak hour. The general policy of NYCT is to provide additional bus service where demand warrants, taking into account financial and operational constraints. Based on NYCT's ongoing passenger monitoring program and as new development occurs throughout the study area, a comprehensive service plan would be generated to respond to specific known needs with capital and/or operational improvements where fiscally and operationally practicable. NYCT's capital program is developed on a five-year cycle; through this program, expansion of bus services would be provided as needs are determined. It is therefore anticipated that NYCT would increase service frequency on the Q48 to address its capacity shortfalls.

Table 21-7 With-Action and Mitigation Local Bus Analysis

Peak Hour	Route	Direction	Maximum Load Point	Peak Hour Buses[1]	Project Increment	With-Action Available Capacity[3]	Additional Peak Hour Buses Needed to Accommodate Project-Generated Demand	Available Capacity with Mitigation
AM	Q19	EB	Astoria Blvd/108 St	5	4	73	0	73
			Northern Blvd/126 Pl	5	5	78	0	78
	Q48	EB	Roosevelt Av/108 St	4	55	54	0	54
			Roosevelt Av/114 St	4	61	59	0	59
		WB	108 St/34 Av	4	9	72	0	72
	Q66	EB	Northern Blvd/127 Pl	15	1	293	0	293
			Northern Blvd/126 Pl	15	5	278	0	278
PM	Q19	EB	Astoria Blvd/77 St	3	2	13	0	13
	Q48	EB	108 St/37 Av	3	70	-18	4	36
			Roosevelt Av/108 St	3	126	-23	4	31
		WB	Roosevelt Av/College Pt Blvd	4	289	-259	9	11
	Q66	EB	Northern Blvd/54 St	11	2	189	0	189
SAT PM	Q19	EB	Astoria Blvd/49 St	2	1	44	0	44
	Q48	EB	Roosevelt Av/Willets Pt Blvd Station	4	130	-26	5	28
		WB	Roosevelt Av/Grand Central Pkwy	3	127	-126	6	36
	Q66	EB	Northern Blvd/54 St	6	1	78	0	78

Pedestrians

As discussed in **Chapter 14, Transportation,** the Proposed Project would result in significant impacts at two pedestrian elements (two crosswalks) during the non-gameday weekday midday and PM and non-gameday Saturday peak hours; three pedestrian elements (one sidewalk and two crosswalks) during the gameday PM peak hour; five pedestrian elements (two sidewalks, two crosswalks, and one corner) during the gameday Saturday PM Pre Game peak hour; six pedestrian elements (two sidewalks, two crosswalks, and two corners) during the gameday Saturday PM Post Game peak hour; three pedestrian elements (one sidewalk, one crosswalk, and one corner) during the gameday Sunday midday peak hour; and eight pedestrian elements (three sidewalks, three crosswalks, and two corners) during the gameday Sunday PM peak hour. A total of 41 pedestrian elements were analyzed

Table 21-8 and **Table 21-9** summarizes the significantly impacted pedestrian elements and whether they could be mitigated on non-gamedays and gamedays, respectively. Detailed pedestrian levels of service and mitigation measures are summarized in **Table 21-10** through **Table 21-12**.

Table 21-8 Non-Gameday Summary of Elements with Significant Adverse Pedestrian Impacts

Peak Hour	Elements Analyzed	Elements with No Significant Impacts	Elements with Significant Impacts	Unmitigated Elements
Sidewalks				
Weekday AM	16	16	0	0
Weekday Midday	16	16	0	0
Weekday PM	16	16	0	0
Saturday PM	16	16	0	0
Crosswalks				
Weekday AM	16	16	0	0
Weekday Midday	16	14	2	2
Weekday PM	16	14	2	2
Saturday PM	16	14	2	2
Corners				
Weekday AM	9	9	0	0
Weekday Midday	9	9	0	0
Weekday PM	9	9	0	0
Saturday PM	9	9	0	0

Table 21-9 Gameday Summary of Elements with Significant Adverse Pedestrian Impacts

Peak Hour	Elements Analyzed	Elements with No Significant Impacts	Elements with Significant Impacts	Unmitigated Elements
Sidewalks				
Weekday PM	16	15	1	1
Saturday PM Pre Game	16	14	2	2
Saturday PM Post Game	16	14	2	2
Sunday Midday	16	15	1	1
Sunday PM	16	13	3	3
Crosswalks				
Weekday PM	16	14	2	2
Saturday PM Pre Game	16	14	2	2
Saturday PM Post Game	16	14	2	2
Sunday Midday	16	15	1	1
Sunday PM	16	13	3	3
Corners				
Weekday PM	9	9	0	0
Saturday PM Pre Game	9	8	1	1
Saturday PM Post Game	9	7	2	2
Sunday Midday	9	8	1	1
Sunday PM	9	7	2	2

Table 21-10 Sidewalk Impact Mitigation Summary

Intersection	No-Action		With-Action		Mitigation		Mitigation Measures
	Avg Ped Space, SF/P	LOS	Avg Ped Space, SF/P	LOS	Avg Ped Space, SF/P	LOS	
Gameday Weekday PM Peak Hour							
126th Street/Seaver Way between 36th Avenue and Citi Field Entrance 1 (west side)	95.2	B	35.7	D	35.7	D	Unmitigable Impact
Gameday Saturday PM Pre Game Peak Hour							
126th Street/Seaver Way between 34th Avenue and 35th Avenue (east side)	246.7	B	29.2	D	29.2	D	Unmitigable Impact
126th Street/Seaver Way between 36th Avenue and Citi Field Entrance 1 (west side	70.2	C	15.0	E	15.0	E	Unmitigable Impact
Gameday Saturday PM Post Game Peak Hour							
126th Street/Seaver Way between 34th Avenue and 35th Avenue (east side)	154.1	B	26.7	D	26.7	D	Unmitigable Impact
126th Street/Seaver Way between 36th Avenue and Citi Field Entrance 1 (west side	25.8	C	2.2	E	2.2	E	Unmitigable Impact
Gameday Sunday Midday Peak Hour							
126th Street/Seaver Way between 36th Avenue and Citi Field Entrance 1 (west side	93.1	B	19.4	E	19.4	E	Unmitigable Impact
Gameday Sunday PM Peak Hour							
126th Street/Seaver Way between 36th Avenue and Citi Field Entrance 1 (west side	12.5	E	*	F	*	F	Unmitigable Impact
Roosevelt Avenue between Subway Station and 126th Street (north side)	62.8	C	37.6	D	37.6	D	Unmitigable Impact
Roosevelt Avenue between 126th Street and Flushing Creek (north side)	52.9	C	24.7	D	24.7	D	Unmitigable Impact

Denotes significantly impacted pedestrian element

* The available sidewalk area would not be sufficient to accommodate all pedestrians; some pedestrians would need to use additional right-of way within the roadway along the sidewalk

Table 21-11 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
Non-Gameday Weekday AM Peak Hour								
Roosevelt Avenue and 126th Street/Seaver Way	North	160.4	A	83.0	A	76.9	A	- Shift 4 seconds from N/S crosswalk to E/W crosswalk. [Measures needed for traffic mitigation]
Non-Gameday Weekday Midday Peak Hour								
Roosevelt Avenue and 126th Street/Seaver Way	East	121.3	A	20.1	D	20.1	D	Unmitigable Impact
Roosevelt Avenue and 126th Street/Seaver Way	West	698.3	A	*	F	*	F	Unmitigable Impact
Non-Gameday Weekday PM Peak Hour								
Roosevelt Avenue and 126th Street/Seaver Way	East	74.7	A	16.6	D	16.6	D	Unmitigable Impact
Roosevelt Avenue and 126th Street/Seaver Way	West	575.9	A	5.9	F	5.9	F	Unmitigable Impact
Non-Gameday Saturday PM Peak Hour								
Roosevelt Avenue and 126th Street/Seaver Way	East	66.6	A	2.0	F	2.0	F	Unmitigable Impact
Roosevelt Avenue and 126th Street/Seaver Way	West	2,412.8	A	*	F	*	F	Unmitigable Impact
Gameday Weekday PM Peak Hour								
Roosevelt Avenue and 126th Street/Seaver Way	East	99.1	A	14.7	E	14.7	E	Unmitigable Impact
Roosevelt Avenue and 126th Street/Seaver Way	West	646.0	A	4.9	F	4.9	F	Unmitigable Impact
Gameday Saturday PM Pre Game Peak Hour								
Roosevelt Avenue and 126th Street/Seaver Way	East	47.8	B	9.4	E	9.4	E	Unmitigable Impact
Roosevelt Avenue and 126th Street/Seaver Way	West	78.6	A	0.4	F	0.4	F	Unmitigable Impact

Table 21-11 Crosswalk Impact Mitigation Summary

Gameday Saturday PM Pre Game Peak Hour

Roosevelt Avenue and 126th Street/Seaver Way	East	9.7	E	1.8	F	1.8	F	Unmitigable Impact
Roosevelt Avenue and 126th Street/Seaver Way	West	11.6	E	0.0	F	0.0	F	Unmitigable Impact

Gameday Sunday Midday Peak Hour

Roosevelt Avenue and 126th Street/Seaver Way	West	393.4	A	2.6	F	2.6	F	Unmitigable Impact

Gameday Sunday PM Peak Hour

Roosevelt Avenue and 126th Street/Seaver Way	East	36.8	C	2.5	F	2.5	F	Unmitigable Impact
Roosevelt Avenue and 126th Street/Seaver Way	West	107.6	A	0.3	F	0.3	F	Unmitigable Impact
Roosevelt Avenue and Subway Station	Central	258.3	A	21.7	D	21.7	D	Unmitigable Impact

Denotes significantly impacted pedestrian element

At Roosevelt Avenue and Subway Station the central crosswalk in the With-Action condition is compared to the east and west crosswalks in the No-Action condition and considers the more acceptable of the two elements for impact determination

* The available crosswalk area would not be sufficient to accommodate all pedestrians; some pedestrians would need to use additional right-of way within the roadway to cross the street

Table 21-12 Corner Impact Mitigation Summary

		No-Action		With-Action				Mitigation
Intersection	Corner	Avg Ped Space, SF/P	LOS	Avg Ped Space, SF/P	LOS	Avg Ped Space, SF/P	LOS	Mitigation Measures
Gameday Saturday PM Pre Game Peak Hour								
Roosevelt Avenue and 126th Street/Seaver Way	Southwest	1,066.0	A	*	F	*	F	Unmitigable Impact
Gameday Saturday PM Post Game Peak Hour								
Roosevelt Avenue and 126th Street/Seaver Way	Southwest	111.3	A	16.0	D	16.0	D	Unmitigable Impact
Roosevelt Avenue and 126th Street/Seaver Way	Northwest	126.6	A	*	F	*	F	Unmitigable Impact
Gameday Sunday Midday Peak Hour								
Roosevelt Avenue and 126th Street/Seaver Way	Southwest	2277.2	A	0.2	F	0.2	F	Unmitigable Impact
Gameday Sunday PM Peak Hour								
Roosevelt Avenue and 126th Street/Seaver Way	Southwest	967.9	A	13.8	E	13.8	E	Unmitigable Impact
Roosevelt Avenue and 126th Street/Seaver Way	Northwest	98.1	A	*	F	*	F	Unmitigable Impact

Denotes significantly impacted pedestrian element

* The available corner area would not be sufficient to accommodate all pedestrians; some pedestrians would need to wait on the adjacent sidewalk area instead of the corner reservoir to cross the street.

Sidewalks

Pedestrian impacts were identified at the following locations:

- The west sidewalk of 126th Street/Seaver Way between 36th Avenue and Citi Field Entrance 1 during the gameday weekday PM, Saturday PM Pre Game, Saturday PM Post Game, Sunday midday, and Sunday PM peak hours.
- The east sidewalk of 126th Street/Seaver Way between 34th Avenue and 35th Avenue during the gameday Saturday PM Pre Game and Saturday PM Post Game peak hours.
- The north side of Roosevelt Avenue between Subway Station and 126th Street during the gameday Sunday PM peak hour.
- The north side of Roosevelt Avenue between 126th Street and Flushing Creek during the gameday Sunday PM peak hour.

Typical measures to mitigate impacts to sidewalks include the relocation of obstructions along the narrowest point of the sidewalk. However, the obstructions along these sidewalks include bollards, tree pits, or light posts, and relocating these obstructions would be infeasible. Therefore, impacts to these sidewalks could not be mitigated.

Crosswalks

Pedestrian impacts were identified at the crosswalks listed below. Impacts to these crosswalks could not be mitigated.

- Roosevelt Avenue and 126th Street/Seaver Way
  - The east crosswalk during the non-gameday weekday midday, weekday PM, Saturday PM, and gameday weekday PM, Saturday PM Pre Game, Saturday PM Post Game, and Sunday PM peak hours
  - The west crosswalk during the non-gameday weekday midday, weekday PM, Saturday PM, and gameday weekday PM, Saturday PM Pre Game, Saturday PM Post Game, Sunday midday, and Sunday PM peak hours
- Roosevelt Avenue and Subway Station
  - The central crosswalk during the gameday Sunday PM peak hour

Typical measures to mitigate impacts to crosswalks include crosswalk widening, changes to signal timings, and reduction in crosswalk lengths. However, improvements beyond what was identified in the No-Action improvements would be infeasible; therefore, impacts to these crosswalks could not be mitigated.

Corners

Pedestrian impacts were identified at the corners listed below. Impacts to these corners could not be mitigated.

- Roosevelt Avenue and 126th Street/Seaver Way
  - The southwest corner during the gameday Saturday PM Pre Game, gameday Saturday PM Post Game, Sunday midday, and Sunday PM peak hours
  - The northwest corner during the gameday Saturday PM Post Game and Sunday PM peak hours

Typical measures to mitigate impacts to corners include the relocation of obstructions, corner widening, or curb extensions. However, improvements beyond what was identified in the No-Action improvements would be infeasible; therefore, impacts to these corners could not be mitigated.

Traffic Monitoring Plan

As requested by NYCDOT, Queens Future would implement a comprehensive traffic monitoring program starting in the project's opening year that would allow for the detailed measurement of actual transportation conditions on non-gamedays and gamedays. The program would cover a period of non-summer conditions as well as summer conditions when park activity within Flushing Meadows Corona Park increases. Before the opening of the Proposed Project, the scope of work for a traffic monitoring program would be developed, in consultation with NYCDOT. The scope of work for

the monitoring program would include collecting several types of field data (e.g vehicle occupancies, on-site parking utilization, and/or transit ridership) and conducting surveys of Mets and gaming facility patrons to understand their origins and destinations and the travel characteristics used by patrons in traveling to and from the Development Site. Detailed trip generation surveys would be performed and would include trip generation rates, modal splits, and directional and temporal distributions. The monitoring plan would also include traffic counts and level of service analyses, and would determine whether proposed mitigation measures would be appropriate based on actual field conditions upon buildout of the Proposed Project. The traffic monitoring program would help identify the implementation of specific mitigation measures as well as potential effective transportation demand management measures and operational strategies that could be implemented, as discussed in the following section.

Transportation Demand Management (TDM)

As part of the Proposed Project, Queens Future would execute a comprehensive TDM plan which would be implemented from the opening of the development and coordinated with the Mets. This would include a combination of transportation demand measures and operational strategies informed by the traffic monitoring plan, with the goal of reducing the volume of project-generated vehicular traffic overall and redistributing traffic away from peak arrival and departure hours on gamedays, and from critical highway segments to the extent possible. While no single strategy would likely result in a reduction in the overall traffic demand to completely negate any potential unmitigable impacts, a combination of several measures would reduce congestion and could lead to a reduction in some of the overall vehicle demand to the highway and local street networks. It should be noted that in order to provide a conservative analysis, the Mitigated With-Action analysis does not include any reductions in traffic demand that could result from the potential TDM plan.

Carpooling and Shared Ride Strategies

To reduce the volume of project-generated vehicular traffic, a carpooling and shared ride program could be developed and promoted on gamedays, particularly focusing on Mets season ticket and ticket plan holders and regular gaming facility visitors. In addition to reducing the use of single occupant vehicles, carpooling would allow visitors to share the driving and cost of parking and gas.

The promotion of the use of shared ride options offered by transportation network companies (e.g., UberPOOL, Lyft Line) and/or providing discounts to Mets and gaming facility patrons using these services by combining trips could also be implemented, thus increasing the vehicle occupancy of rideshare vehicles.

Group sales programs could also encourage large groups of attendees to ride to the Development Site in charter buses and reduce the number of trips made by private autos.

Transit Strategies

The Mets and the MTA currently have existing coordination to provide additional subway service for the No. 7 subway line at the Mets – Willets Point station on gamedays. It is anticipated that this coordination would continue in the future with the Proposed Project to further increase subway service during time periods before and after gamedays or events at either Citi Field or the proposed gaming facility along the No. 7 route as part of the TDM for the development.

Strategies that Encourage Patrons to Arrive Early And/Or Stay Later

Under existing conditions where Citi Field is the only attraction on site, the majority of pre-game traffic arrives in the hour before the first pitch. Post-game traffic peaks almost immediately after the game concludes The goal of these strategies is to redistribute vehicular traffic away from the peak arrival and departure hours for Mets games by incentivizing Mets patrons and gaming facility visitors to arrive early and/or stay later. These strategies could include specific actions such as scheduling and promoting pregame and postgame events and activities within the Development Site (e.g. live music, Mets alumni and mascot appearances, games for adults and children, promotions, drawings and contests, food and beverage vendors, and interactive sponsor booths). They could also include offering pregame and postgame discounts to on-site food and beverage uses with a ticket stub; holding pregame and postgame television and radio shows in locations accessible to patrons; and encouraging patrons to arrive early to watch teams warm up before games. Travel packages could also be offered to visiting Mets and gaming facility patrons to see a Mets game and stay at the on-site hotel within Area of Development A. Getting a portion of patrons to come early and/or leave later could reduce the level of congestion that may otherwise occur during the site's peak arrival and departure hours, effectively "flattening the curve" of traffic demand and resulting congestion on the surrounding network.

Parking Strategies

Additional strategies involving parking would be considered to encourage patrons to carpool to games and/or arrive early including: providing sufficient discounts to large carpools (4+ occupant cars), providing preferential parking locations to large carpools, limiting reserved parking permits based on the amount of tickets purchased (e.g. one parking space per every four tickets purchased), charging market rates for parking, and/or providing discounts for patrons that arrive and park on-site early (with additional discounts for large carpools). Consideration could also be given to explore parking space occupancy technology to minimize circulation within structured parking facilities and/or using staff/traffic agents to help direct drivers to unoccupied parking spaces within these facilities in a more efficient manner. Mets gameday-based signage could also be used to help direct motorists to parking facilities. These parking strategies would be further evaluated as part of the traffic monitoring program, which would identify the effectiveness of these measures.

Providing Transportation Information to Mets and Gaming Facility Patrons

A transportation section on the Mets' and gaming facility operators' apps and websites would be created to provide information about transportation options to the Development Site for Mets and gaming facility patrons. This would include maps and diagrams showing the locations of parking facilities, arrival and departure routes for autos, the Mets – Willets Point subway station, bus stops, and rideshare pick-up/drop-off locations. To promote the use of alternate modes of transportation, the information could include maps and schedules for public transportation services operating to and from the site. The Development Site would also provide real-time transit departure information at key locations. On gamedays with high expected attendance levels, social media services could be used to recommend that patrons carpool, arrive early, and/or use public transportation.

Event Management Strategies

The use of the transportation demand management measures and operational strategies described above would be combined into multi-tiered and comprehensive sets of event management

strategies tailored for different game attendance levels (e.g. sold-out games, non-sellout games with significant sales). Major sports venues in the United States have different attendance thresholds at which traffic congestion begins to materialize and at which point it becomes noticeably severe.

Numerous sports venues have implemented similar TDM plans in congested urban environments using many of these strategies to create an effective overall coordinated plan that is constantly reviewed and modified to increase its effectiveness to reduce vehicular traffic volumes overall. A TDM plan would be specifically developed for the Proposed Project, focusing on the most sensitive locations such as intersections along Shea Road, 126th Street/Seaver Way, Roosevelt Avenue, and highway segments along the Grand Central Parkway. However, the TDM plan could not likely result in the mitigation of all significant impacts because the potential would still exist for unavoidable adverse impacts to highway segments on the Grand Central Parkway, Whitestone Expressway, and Van Wyck Expressway, as well as at critical intersections around the site during high attendance games at Citi Field. However, with advance publicity and advertising of such games, a substantial portion of background traffic may avoid using these highway segments adjacent to the Development Site during the half hour or hour immediately preceding or following a game, as often happens at other major venues.

Construction Mitigation

Traffic

Non-Gameday With-Action Construction Scenario

As discussed in **Chapter 20, Construction**, in the non-gameday With-Action Construction Scenario, two of the 41 analysis intersections would be significantly impacted during the AM construction peak hour, and five of the 41 analysis intersections would be significantly impacted during the PM construction peak hour. The following intersections would be significantly impacted:

- The intersection of Northern Boulevard and Union Street would be significantly impacted during the AM and PM construction peak hours. Impacts during these peak hours could be fully mitigated with signal timing modifications.
- The intersection of Northern Boulevard and Parsons Boulevard would be significantly impacted during the AM and PM construction peak hours. Impacts during the AM construction peak hour could be fully mitigated with signal timing modifications. During the PM construction peak hour impacts could not be mitigated.
- The intersection of Roosevelt Avenue and 114th Street would be significantly impacted during the PM construction peak hour and could not be mitigated.
- The intersection of Roosevelt Avenue and 126th Street/Seaver Way would be significantly impacted during the PM construction peak hour and could be partially mitigated with signal timing modifications.
- The intersection of Roosevelt Avenue and Prince Street would be significantly impacted during the PM construction peak hour and could be fully mitigated with signal timing modifications.

Gameday With-Action Construction Scenario

Under this scenario, six of the 41 analysis intersections would be significantly impacted during the AM construction peak hour, and 11 of the 41 analysis intersections would be significantly impacted during the PM construction peak hour. The following intersections would be significantly impacted:

- The intersection of Northern Boulevard at Prince Street would be significantly impacted during the AM and PM construction peak hours. Impacts could be partially mitigated during the PM construction peak hour with signal timing modifications. Impacts during the AM construction peak hour could not be mitigated.
- The intersection of Northern Boulevard at Union Street would be significantly impacted during the AM and PM construction peak hours and could be fully mitigated with signal timing modifications.
- The intersection of Northern Boulevard at Parsons Boulevard would be significantly impacted during the AM and PM construction peak hours. Impacts during the AM construction peak hour could be fully mitigated with signal timing modifications. During the PM construction peak hour impacts could not be mitigated.
- The intersection of Roosevelt Avenue and 114th Street would be significantly impacted during the AM and PM construction peak hours. Impacts could be fully mitigated during the AM construction peak hour with signal timing modifications; impacts could not be mitigated during the PM construction peak hour.
- The intersection of Roosevelt Avenue and 126th Street/Seaver Way would be significantly impacted during the PM construction peak hour and could be fully mitigated with signal timing modifications.
- The intersection of Roosevelt Avenue westbound and Skyview Parking Garage would be significantly impacted during the AM and PM construction peak hours. Impacts during the PM construction peak hour could be fully mitigated with signal timing modifications; impacts could be not mitigated during the AM construction peak hour.
- The intersection of Roosevelt Avenue eastbound and Skyview Parking Garage would be significantly impacted during the AM construction peak hour and could not be mitigated.
- The intersection of Roosevelt Avenue and Prince Street would be significantly impacted during the PM construction peak hour and could not be mitigated.
- The intersection of Roosevelt Avenue and Union Street would be significantly impacted during the PM construction peak hour and could be partially mitigated with signal timing modifications.
- The intersection of Union Street and 39th Avenue would be significantly impacted during the PM construction peak hour and could not be mitigated.
- The intersection of College Point Boulevard and 40th Road would be significantly impacted during the PM construction peak hour and could not be mitigated.
- The intersection of 39th Avenue at Flushing Commons (SP+) South Garage would be significantly impacted during the PM construction peak hour and could not be mitigated.

Implementation of traffic improvements measures are subject to NYCDOT's review and approval. Implementation of signal timing improvements would be determined by NYCDOT based on future field conditions.

Detailed descriptions of the Construction traffic levels of service and traffic mitigation measures are presented in **Appendix F.**

Pedestrians

Gameday With-Action Construction Scenario

Under this scenario, significant pedestrian impacts would be expected at the 126th Street/Seaver Way and Roosvelt Avenue east crosswalk during both the AM and PM construction peak hours, and the 126th Street/Seaver Way and Roosevelt Avenue west crosswalk during the PM construction peak hour.

With traffic mitigation measures implemented during the PM construction peak hour, the level of service at the east and west crosswalks would improve slightly, as shown in **Table 21-13**. No other significant impacts would be expected as a result of these traffic mitigation measures.

Table 21-13 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**
PM Construction Peak Hour								
Roosevelt Avenue and 126th Street/Seaver Way	East	106.2	A	7.6	F	9.5	E	- Shift 3 seconds green time from EB/EB phase to NB/SB phase [measures needed for traffic mitigation]
Roosevelt Avenue and 126th Street/Seaver Way	West	1,272.0	A	10.2	E	12.4	E	- Shift 3 seconds green time from EB/EB phase to NB/SB phase [measures needed for traffic mitigation]

Denotes significantly impacted pedestrian element