

**A. INTRODUCTION**

Under the 2012 *City Environmental Quality Review (CEQR) Technical Manual* guidelines, open space is defined as publicly accessible, publicly or privately owned land that operates or is available for leisure, play, or sport, or serves to protect or enhance the natural environment. According to the *CEQR Technical Manual*, an open space assessment should be conducted if a project would have a direct effect on open space, such as eliminating or altering a public open space, or an indirect effect, such as when new population overburdens available open space.

The USTA Billie Jean King National Tennis Center (NTC) Strategic Vision (the proposed project) would result in a series of improvements on the project site, as described in Chapter 1, “Project Description.” The proposed project is not expected to introduce a substantial new resident and worker population to the study area that would create new demands for open space. However, the proposed project would result in notable improvements to the NTC site, which is located within Flushing Meadows Corona Park, a major nearly 900-acre open space resource under the jurisdiction of the New York City Department of Parks and Recreation (DPR). To accommodate the proposed project, 0.94 acres of land would be added to the NTC site, including 0.68 acres of park land that would be alienated, and 0.26 acres of previously alienated park land (a connector roadway) that is outside the current lease. Replacement park land in two parcels totaling 1.56 acres would be surrendered from within the current boundaries of the NTC in connection with the alienation of the 0.68-acre parcel. Outside of the NTC, an approximately 0.3-acre area would be affected by the relocation of the connector roadway. Accordingly, this chapter considers the proposed project’s potential impacts on open space resources.

**PRINCIPAL CONCLUSIONS**

Overall, the proposed project would not result in any significant adverse impacts to open space resources. The proposed project would result in improvements to landscaping, circulation, and amenities at the NTC that would be provided for the US Open and the public. The proposed project would affect areas outside of the current NTC fence line, including the landscaped teardrop area, where the new Stadium 3 would be constructed. The areas outside of the current NTC fence line that would be directly affected by the proposed project are lightly used, primarily for walking, running, and bicycling on the perimeter paths. Displacement or relocation of this activity would not be expected to have a notable effect on park users or create a strain on nearby sections of Flushing Meadows Corona Park. Park users would continue to have access to nearby sidewalks or pathways in adjacent areas of the park for walking, running, and bicycling, and replacement park land and walkways would be provided under the proposed project. Nearby sections of the park could accommodate the passive recreation activities that may be displaced from these areas. Approximately 1.56 acres of land that is currently within USTA’s alienation and lease boundaries would be returned to Flushing Meadow Corona Park for active and passive recreational use. The 0.94 acres that would be added to the NTC represent approximately 0.10

percent of the nearly 900-acre Flushing Meadows Corona Park. Construction of the proposed project ~~would affect~~ ~~would also require removal of~~ approximately 349 ~~422~~ trees both outside the existing fence line and inside the NTC site. USTA is working with DPR's Forestry Division to minimize the number of trees that would be removed and not replanted and has currently identified approximately 45 of the 347 living trees that would be replanted in place or transplanted. The other approximately 302 affected trees are being evaluated. Under a worst case scenario those approximately 302 trees would be removed and not replanted. However, some of these trees are expected to be determined by DPR to be suitable for transplant. Trees that could not be transplanted would be replaced pursuant to City regulations. All trees determined to be suitable for transplant would remain subject to the City's requirements that provide for a two-year guarantee period, which requires that trees that do not survive are replaced. The transplanted trees would be subject to a DPR Forestry Permit, which would detail a maintenance plan to ensure tree vitality. replacement would be conducted in conformance with DPR requirements. In conjunction with 0.94 acre expansion of the NTC site, certain additional improvements will be undertaken for the benefit of the general public within Flushing Meadows Corona Park. In addition, certain improvements would be undertaken for the benefit of those who utilize Flushing Meadows Corona Park. These potentially include: the renovation of existing soccer fields; development of a new comfort station; development of new picnic and barbeque areas; and vehicular, pedestrian, landscape, and drainage upgrades.

## **B. METHODOLOGY**

According to the *CEQR Technical Manual*, a direct effect on an open space would occur if a project would cause the physical loss of public open space; change the use of an open space so that it no longer serves the same user population; limit public access to an open space; or cause increased noise or air pollutant emissions, odors, or shadows that would affect its usefulness, whether on a permanent or temporary basis. The proposed project would add 0.94 acres of park land to the NTC, which would permanently change the use of this space, and limit public access to it during the approximately two-week US Open period. Replacement park land in two parcels totaling 1.56 acres would be surrendered from within the current boundaries of the NTC in connection with the alienation of the 0.68-acre parcel. Outside of the NTC, an approximately 0.3-acre area would be affected by the relocation of a connector roadway.

Accordingly, this chapter identifies the areas of Flushing Meadows Corona Park that would be directly affected by the proposed project, and describes their characteristics, features, and context within the park. Field surveys were conducted in 2010 and 2012 to determine the number of park users that could be affected by the proposed project, and to characterize the existing use of this park land. Surveys were undertaken during ten site visits, which were scheduled to not coincide with the US Open event. During each visit, the areas of park land that would be affected by the proposed project were surveyed in approximately 10 minute intervals at various times and dates ranging between July and September 2010 (five visits on eight separate days). Two additional site visits were conducted in 2012 to update and confirm the findings of the 2010 survey. The 2012 visits occurred on June 26 and June 30, utilizing the same methodology as the 2010 survey, including counting the number of users at five times of the day and noting the conditions of the space.

After characterizing existing conditions, this chapter describes anticipated future conditions for the 2019 analysis year without the proposed project (No-Action condition), in order to establish the analytic baseline against which the probable impacts associated with the proposed project are

assessed. The assessment of future conditions with the proposed project (With Action condition) accounts for the anticipated replacement park land ~~park improvement projects~~ that would be provided in Flushing Meadows Corona Park in connection with the proposed project.

### C. BACKGROUND

Portions of Flushing Meadows Corona Park (but not the NTC) have been improved with funds from the Federal Land and Water Conservation Fund (LWCF) Act, and much of the park, including the NTC, is subject to LWCF requirements. The health, welfare and recreational public purposes of the NTC have been recognized by the New York State Legislature and the New York City Council in the State legislation and City Administrative Code provisions that govern the NTC lease, as well as by the U.S. Department of the Interior, National Park Service (NPS), which determined in 1993 that the expansion and renovation of the NTC is consistent with the LWCF grant-in-aid manual requirements governing Flushing Meadows Corona Park. For the proposed project, NPS has determined that no approval is required in connection with LWCF Act program requirements because the NTC is and will continue to be used for public recreational purposes for 11 months of the year, consistent with LWCF requirements.

According to the *CEQR Technical Manual*, government-owned park land and open space (that has been dedicated as such) is invested with a “public trust” that prevents it from being converted to non-park land uses without State legislative authorization. Thus, when a project involves certain changes in use of dedicated City-owned park land or open space, the City must obtain the authorization of the New York State Legislature and Governor to alienate the park land or open space. This authorization takes the form of a park land alienation bill. In general, before it will pass such a bill, the State Legislature requires the City Council to pass a “home rule resolution,” requesting state authorization of the change of use. The proposed project would require a home rule resolution by the City Council and the authorization of the New York State Legislature and Governor.

~~The proposed project would also require a determination by U.S. Department of the Interior, National Park Service as to whether any approval is required in connection with Land and Water Conservation Fund Act program requirements due to previously funded improvements to Flushing Meadows Corona Park.~~

### D. DIRECT OPEN SPACE IMPACTS ANALYSIS

#### EXISTING CONDITIONS

The NTC site is located within Flushing Meadows Corona Park, a nearly 900-acre park under DPR jurisdiction that is bounded by the Whitestone Expressway to the north, the Van Wyck Expressway to the east, and the Grand Central Parkway to the west. As noted in Chapter 2, “Land Use, Zoning, and Public Policy,” the park was built on marshlands that were used as an ash dump that later became the grounds of the New York World’s Fairs in 1939-1940 and 1964-1965. The park is a recreational and cultural destination for Queens residents and visitors from throughout the New York metropolitan area.

The project site includes the 37.48-acre portion of the 42-acre NTC site bounded to the north and west by Meridian Road, to the east by the Passerelle Building, and to the south by United

Nations Avenue North.<sup>1</sup> The project site contains three stadiums (Arthur Ashe Stadium, Louis Armstrong Stadium, and Grandstand Stadium), one micro-stadium (Court 17), tennis courts, and ancillary buildings including retail kiosks, restrooms, the Indoor Training Center, and temporary broadcast trailers during the US Open.

As shown on **Figure 3-1**<sup>2</sup>, the proposed project would directly affect the following portions of park land on and adjacent to the NTC site:

1. A 0.68-acre area would be alienated, which is located north of United Nations Avenue North, and south of the existing NTC fence line, as shown in **Figure 3-1**. This area is currently a mix of landscaped and paved areas, including one lane of the three-lane United Nations Avenue North. The lane that would be eliminated is lightly used, primarily by DPR vehicles and to service the NTC during the US Open. The landscaped portion includes a triangular median area near the connector road, a median adjacent to the northernmost lane of United Nations Avenue North, and a narrow strip of lawn adjacent to the current NTC fence line. The landscaping includes 17 trees and park light fixtures, but no other park features, such as play equipment, benches, or statues.
2. A 0.26-acre portion of previously alienated land that consists solely of the connector roadway between Meridian Road and United Nations Avenue North. The roadway is mapped park land that was alienated for the 1993 expansion, and contains a pedestrian pathway on the east side of the connector road. This area would be added to the NTC lease as part of the proposed project.
3. The relocation of the connector roadway south of United Nations Avenue would directly affect an approximately 0.3-acre area of park land where the replacement roadway would be built. This grassy area contains mature trees and a dirt pathway but no other park features.
4. NTC land that is currently outside of the NTC fence line on the east and west sides of the connector road. This land includes: the 1.21-acre “teardrop” area bounded by the connector roadway, Meridian Road, and United Nations Avenue North; land on the west side of the NTC site adjacent to the northwest courts and the new parking garage; and land on the east side of the connector road that is west of the current NTC fence line (see **Figure 3-1**). While these areas have been previously alienated, and are already included in the NTC lease, they are outside of the NTC fence line, and are utilized by visitors to Flushing Meadows Corona Park. The landscaping includes trees circling the grass area and park light fixtures. Although the area is used for parking during the US Open, as well as occasionally by visitors for such uses as pick-up games and sledding, no other park recreation features, such as play equipment, benches, or statues are located in the “teardrop” area.

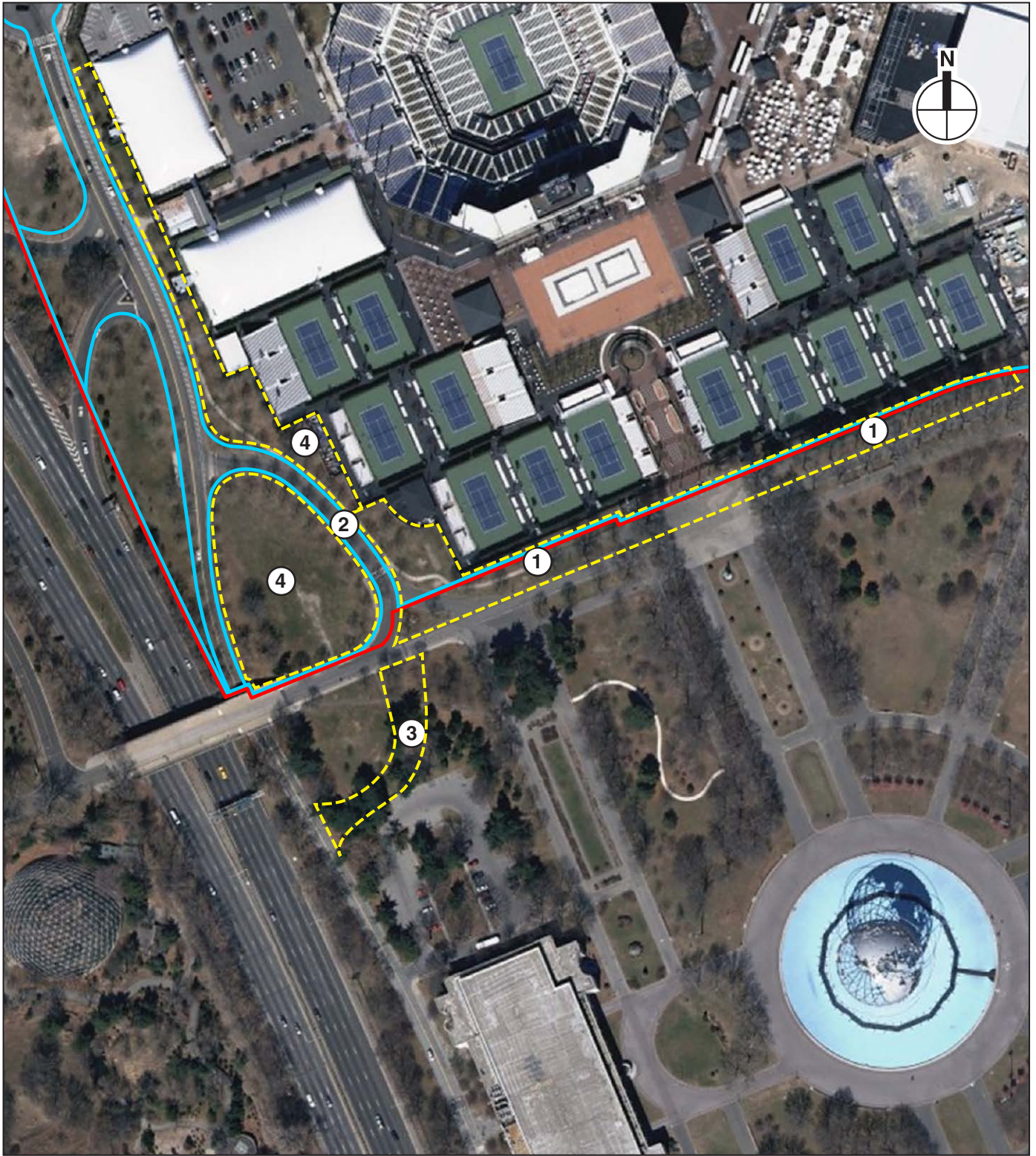
In addition, approximately 1.56 acres of land that is currently within USTA’s alienation and lease boundaries would be returned to Flushing Meadow Corona Park for active and passive recreational use.

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<sup>1</sup> The full NTC is 42.2 acres. The 37.48-acre project site includes: the 35.3-acre portion of the NTC site bounded by Meridian Road, United Nations Avenue North, and Path of the Americas; the 0.94 acres that would be added to the site along the southern and western boundaries; the 0.94-acre Lot S1, located west of Meridian Road at the northwest corner of the site; and the approximately 0.3-acre relocated connector road area, which would remain under City ownership and control.

<sup>2</sup> Note: **Figure 3-1** is the most recent publicly-accessible aerial photograph (2010). The aerial does not reflect more recent site plan changes to the NTC, which are shown on Figure 1-4.





— Current Limit of Alienated Lands  
 — Current Limit of NTC Lease

- ① Land to be Alienated and Added to NTC Lease (0.76 acres)
- ② Previously Alienated Land to be added to NTC Lease (0.26 acres)
- ③ Proposed Park Road Relocation (0.25 acres)
- ④ NTC Lease Land Outside of Current NTC Fence Line that is part of Project Site

0 200 FEET  
 SCALE

Directly Affected Open Space  
**Figure 3-1**

*OPEN SPACE USER SURVEY*

The areas that would be directly affected by the proposed project typically have low levels of utilization. The NTC land that is currently outside of the fence line was surveyed in 2010, as discussed above under “Methodology.” During the 50 observations that were made in 2010 and 2012 over ten days, a total of 231 park visitors were recorded.

In 2010, visitors were recorded on 22 out of 40 surveys in the area adjacent to the connector road, along the existing NTC fence line. A total of 59 visitors were recorded in groups ranging from 1 to 9 people, although most groups were around 1 to 4 people in size. No visitors were recorded during the other 18 surveys of this area. The “teardrop” area was very lightly used, with activity on only 10 out of 40 surveys. A total of 17 visitors were recorded in groups of 1 to 3 people. No users were recorded during the other 30 observations of this area. No visitors were observed in the triangular area at the intersection of the connector road and United Nations Avenue North (that is part of the 0.68-acre area that would be alienated) during any of the 40 surveys. The most common activities were running, walking, or bicycling along the connector road sidewalk.

Conditions in the other areas outside of the current NTC fence line that would be directly affected by the proposed project are substantially similar to those that were surveyed in 2010, as described above. The 2012 surveys confirmed that these areas are lightly used, primarily for activity such as walking, running, or bicycling.

**FUTURE WITHOUT THE PROPOSED PROJECT**

*PROJECT SITE*

No notable changes are expected to the portions of Flushing Meadows Corona Park that would be directly affected by the proposed project, in the No-Action condition. The NTC’s ongoing management of capital projects would result in minor alterations to the project site, as described in Chapter 2, “Land Use, Zoning, and Public Policy.”

*STUDY AREA*

Outside of the project site, there are three No-Action condition development projects that are planned or proposed within or adjacent to the ¼-mile land use study area. Within Flushing Meadows Corona Park, there is a proposal to construct a new stadium for professional soccer purposes in an approximately 13-acre area (see Figure 2-4). This project would eliminate a fountain, four existing soccer fields, one basketball court, landscaped areas, and pathways from public use. All displaced facilities would be replaced within the northeastern portion of the park, and tree replacement would occur as per City regulations.

Also within Flushing Meadows Corona Park, a series of improvements will be implemented as part of DPR’s ongoing capital projects program. Overall, four soccer fields are anticipated to be improved, new volleyball courts are expected to be created, and DPR has identified repair and resurfacing of Porpoise Bridge, including repair of its tide gates, as a priority project.

Within and just outside of the ¼-mile study area to the northeast, a major mixed use development proposal for the Willets Point Urban Renewal Area is expected to be under development by 2019.

Phase 1a of the Willets Point development project would result in a new commercial development known as Willets West on the existing surface parking lots to the west of Citi Field by 2018. To

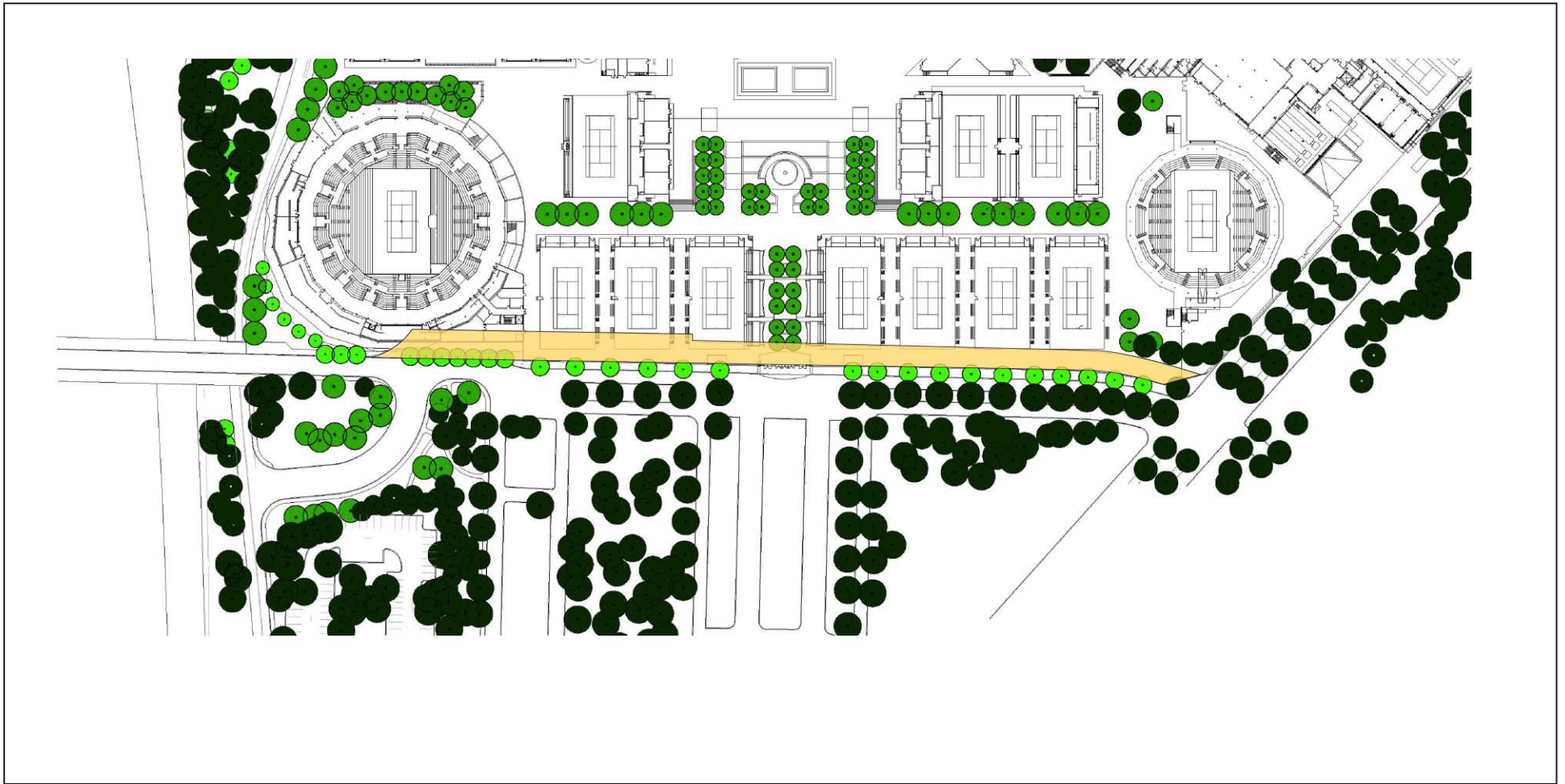
replace these spaces, ~~2,825~~ ~~2,725~~ parking spaces would be provided in the Special Willets Point District area, to the east of Citi Field. Upon completion of the Willets West development, 400 parking spaces for Citi Field use would be provided in this location. South of Roosevelt Avenue, structured parking containing ~~2,745~~ ~~2,863~~ spaces would be built for Citi Field use on South Lot and Lot D, which currently provide 1,795 spaces, resulting in an increase of ~~950~~ ~~1,068~~ spaces. Phase 1b of the Willets Point development project would result in the removal of the 2,725 parking spaces in the Special Willets Point District area, which would be replaced by additional spaces in South Lot and Lot D, which would then provide ~~2,745~~ ~~2,725~~ spaces.





### **FUTURE WITH THE PROPOSED PROJECT**

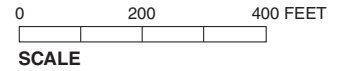
As described in greater detail in Chapter 1, “Project Description,” the proposed project would result in the following changes to the directly affected areas:

- The 0.68-acre strip would be alienated and added to the NTC site. The current NTC fence line would move 25 to 38 feet to the south, to abut the middle lane of the existing three-lane United Nations Avenue North. The northern lane and the landscaped areas would accommodate the relocated southerly tournament courts (see Chapter 1, “Project Description”). The proposed fence line would include approximately 34 trees and other landscaping that would improve the visual interface of the NTC with Flushing Meadows Corona Park (see **Figure 3-2** and Chapter 6, “Urban Design and Visual Resources”). This area would be open to the public during the non-US Open season.
- The previously-alienated 0.26-acre area containing the connector roadway would be added to the NTC lease. Stadium 3, the relocated Grandstand Stadium, would be constructed partially on this location. As with the rest of the NTC site, it would be open to the public for 11 months of the year, during the non-US Open period.
- The approximately 0.3-acre area south of United Nations Avenue North would accommodate the relocated connector road. The road would provide access between Meridian Road and United Nations Avenue North, to replace the connector road that would be displaced. New pedestrian walkways would be included. This component of the proposed project would not require park land alienation, and the area would remain mapped park land under the jurisdiction of the City. The 0.3-acre area would not be added to the NTC lease and would remain under the City’s ownership and control.
- The previously-alienated land that is currently included in the NTC lease and is outside of the NTC fence line on the east and west sides of the connector road, including the “teardrop” area, would be redeveloped with Stadium 3. The NTC fence line would be moved to encompass this area, except for a small area within the leased premises of the NTC, where the fence line would not reach the road to allow for a sidewalk and landscaping outside the fence line (see **Figure 3-2**). New trees and other landscaping would be provided along the proposed fence line, which would improve the visual interface between the NTC and Flushing Meadows Corona Park. In addition, the area east of Meridian Road and west of the existing NTC fence line, adjacent to the new parking garage and northwest courts, would be included within the new fence line. New landscaping would be provided along this portion of the proposed fence line.
- Improvements to landscaping, circulation, and amenities at the NTC would be provided for the US Open and the public. Such improvements would include a new pedestrian walkway connecting the proposed Stadium 3 with the NTC entrance at the South Gate, the South Plaza and Court 17 on the southeast corner of the site. The proposed walkway would





-  Existing Tree to Remain
-  Existing Tree in New Location
-  New Tree
-  Land to be Alienated and Added to NTC Lease





improve circulation within the site, and include new plantings and seating that would enhance the pedestrian realm. The existing concourse areas at the promenade level on the south side of Arthur Ashe Stadium (Stadium 1) would be expanded by approximately 11,000 square feet, to improve circulation and amenities. Landscaping improvements would also be provided throughout the NTC site.

As noted above under “Existing Conditions,” the areas outside of the current NTC fence line that would be directly affected are lightly used, primarily for walking, running, and bicycling on the sidewalk and the dirt pathway. Displacement or relocation of this activity would not be expected to have a notable affect on park users or create a strain on nearby sections of Flushing Meadows Corona Park. Park users would continue to have access to nearby sidewalks or pathways in other adjacent areas of the park for walking, running, and bicycling, and replacement walkways would be provided under the proposed project. Nearby sections of the park could accommodate the passive recreation activities that may be displaced from the surveyed areas. The 0.94 acres that would be added to the NTC represent approximately 0.10 percent of the overall nearly 900-acre Flushing Meadows Corona Park.

In addition, two parcels from USTA’s currently alienated and leased land would be returned to Flushing Meadows Corona Park as replacement park land. The replacement park land totals 1.56 acres, comprising 0.75 acres of passive landscaped areas and 0.81 acres of space for active recreation containing 5 tennis courts. These parcels were alienated in 1993 and are used as practice courts, with seating and related facilities, during the US Open and other major tennis tournaments. The two parcels, which are shown in Figure 1-3, are:

- A 1.31-acre parcel located southeast of David Dinkins Circle, occupied by five tennis courts and 0.5 acres of landscaped areas. When not in use by USTA, these courts are used by the City Parks Foundation for lessons, hourly rentals, tournaments, leagues and special events. A portion of this parcel located along the eastern edge of the tennis courts is alienated but not included in the NTC Lease. The area included in the NTC lease is 1.16 acres.
- A 0.25-acre landscaped parcel located just beyond the eastern end of the bank of six tennis courts to the east of the Passerelle.

With the proposed amendment of the 1993 USTA alienation legislation, these two parcels of replacement park land would no longer be alienated land and would be returned to Flushing Meadows Corona Park for recreational use under the jurisdiction of DPR. The NTC lease would also be amended, so these parcels would not be part of the NTC premises. Other than the tennis courts, the replacement park land is not fenced, so the landscaped portions of these parcels would be available as passive open space, accessible to the public.

USTA would have use of the replacement park land parcels during the US Open and, possibly, other tournaments, and USTA would remain responsible for maintenance and repair of the five tennis courts on an annual basis, so they continue to be available in good condition for public use.

As described in Chapter 7, “Natural Resources,” construction of the proposed project would affect ~~would require removal of~~ trees both outside the existing fence line and inside the NTC site. Tree replanting and replacement would comply with DPR’s applicable rules and regulations. Approximately 349,422 trees would be affected, two of which are dead, would be transplanted to the extent practicable. USTA is working with DPR’s Forestry Division to minimize the number of trees that would be removed and not replanted and has currently identified approximately 45 of the 347 living trees that would be replanted in place or

## USTA Billie Jean King National Tennis Center Strategic Vision

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transplanted. The other approximately 302 affected trees are being evaluated. Under a worst case scenario those approximately 302 trees would be removed and not replanted. However, some of these trees are expected to be determined by DPR to be suitable for transplant. Trees that could not be transplanted would be replaced pursuant to City regulations. All trees determined to be suitable for transplant would remain subject to the City's requirements that provide for a two-year guarantee period, which requires that trees that do not survive are replaced. The transplanted trees would be subject to a DPR Forestry Permit, which would detail a maintenance plan to ensure tree vitality.

Within the NTC, the proposed project would replace four temporary tennis courts in Lot A with four permanent courts on the roof of the proposed administrative and retail building. Thus, there would be a net increase of four permanent courts in the With Action condition. These courts would be made available to the public on the same basis as the other courts managed by USTA. Overall, the proposed project would maintain or improve public availability of courts at the NTC.

The proposed construction of two new parking garages in place of the currently surface lots will provide for additional parking spaces to satisfy the existing and future daily demand experienced for year-round operations at the NTC. During non-event conditions, the garages would serve the every day needs of the NTC, including for visitors and park users.

The additional 10,000 daily spectators anticipated during the US Open as a result of the proposed project would not have any significant adverse impacts on Flushing Meadows Corona Park given their concentration within the NTC and the temporary nature of the two-week event. Due to these factors, the proposed project would not result in any significant adverse impacts to open space resources.

### *PARK IMPROVEMENT PROJECTS*

In addition to the improvement of the NTC, which would require the alienation of 0.68 acres of park land, certain additional improvements will be undertaken for members of the public who utilize the benefit of the general public within Flushing Meadows Corona Park. A range of possible park improvement projects has been developed by DPR as part of project planning. Some examples of possible projects include: conversion of two soccer fields from natural to synthetic turf; reconstruction of one existing synthetic turf soccer field; the development of a new comfort station at Jurassic Playground; vehicular, pedestrian, landscape, and drainage upgrades to an area in the northeast corner of Meadow Lake Drive; and the development of new picnic and barbecue areas and improvements to pathways around Meadow Lake (see Figure 1-7).

~~The City would not seek replacement park land for the area to be included in the lease because the land would remain mapped park land (the alienation legislation would authorize the inclusion of park land within the lease); the leased area would remain publicly accessible in the same way the rest of the NTC is publicly accessible; and improvements and upgrades to existing sport fields and infrastructure within Flushing Meadows Corona Park would result in a more meaningful degree of public benefit than an in-kind replacement.~~

~~Should the Major League Soccer (MLS) stadium project proceed, the park improvements associated with the USTA project would be selected in coordination with the park facilities to be replaced or improved as part of the MLS project.~~

~~The final selection of park improvement projects would be determined by DPR.~~

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