

A. INTRODUCTION

As discussed in Chapter 6, “Shadows,” a detailed analysis comparing shadows in the future with the proposed project with the shadows in the future with the Previously Approved Project and with the Expanded Development Scenario was undertaken on each of the four analysis days, consistent with the methodology outlined in the *CEQR Technical Manual*. For a substantial number of open space and historic resources, the proposed project would not result in any incremental increase in shadow. In addition, there are a number of resources that would receive incremental shadow for fewer than 30 minutes. These resources are described in detail in this appendix.

B. ASSESSMENT OF INCREMENTAL SHADOWS: PROPOSED PROJECT COMPARED WITH PREVIOUSLY APPROVED PROJECT**OPEN SPACES THAT WOULD NOT RECEIVE ANY INCREMENTAL SHADOW***THE SHEFFIELD RESIDENTIAL PLAZAS*

These plazas, located on the block bounded by Eighth and Ninth Avenues and West 56th and 57th Streets, are fully in existing shadow during the first 15 minutes of the December 21 analysis day, when the proposed project’s shadow would otherwise affect them. No incremental shadow would fall on these spaces at any time of year, and no shadow impacts would occur as a result of the proposed project.

MCCAFFREY PLAYGROUND

This playground is located on the north side of West 43rd Street between Eighth and Ninth Avenues. Shadow from the proposed project would be long enough to reach this playground from 6:57 AM to 7:15 AM on the June 21 analysis day; however, the portions of the space that could be affected are already in shadow at this time, and so no incremental shadow would occur. No incremental shadow would fall on this space at any time of year, and no shadow impacts would occur as a result of the proposed project.

RAMON APONTE PARK

This park is located on the north side of West 47th Street between Eighth and Ninth Avenues. Shadow cast by the proposed project would be long enough to reach this park for about 5 minutes (7:50 AM to 7:55 AM) on the morning of the May 6/August 6 analysis day. However, the park is fully in existing shadows at this time, and so no incremental shadow would occur. No incremental shadow would fall on this space at any time of year, and no shadow impacts would occur as a result of the proposed project.

PARK AVENUE MALLS

These malls run up the center of Park Avenue South and Park Avenue from East 14th Street to East 96th Street. Project-generated shadow would be long enough to reach one or more of these malls in the late afternoon (after 5:00 PM) on the March/September, May/August, and June analysis days. However, the malls that would otherwise be affected are in existing shadows at this time on all three analysis days, and no incremental shadow would occur at any time of year. Therefore, the proposed project would not cause a significant adverse impact on these resources.

WEST 59TH STREET RECREATION CENTER

This space is located between West 59th and 60th Streets and Tenth and Eleventh Avenues. Project-generated shadow would be long enough to fall briefly on this space around 9:00 AM on the December day only. However, the center is fully shaded by existing buildings to its southeast at this time, and so no incremental shadow would occur. The project would therefore not cause a shadow impact to this space.

MARIAN S. HEISKELL GARDEN

This garden is located on the south side of West 48th Street between Eighth and Ninth Avenues. It is completely shaded by existing buildings to its east between 7:30 AM and 7:45 AM on June 21, which is the only time on any analysis day that project-generated shadow would be able to affect it. No incremental shadow would occur at any time of year, and there would be no shadow impact on this resource as a result of the proposed project.

PARK LANE HOTEL PLAZA

This narrow plaza in front of the hotel on the north side of West 58th Street between Fifth and Sixth Avenues contains a driveway and two planters with ledges wide enough to sit on. On the March 21/September 21 and December 21 analysis days, this plaza is fully shaded by the tall buildings to its south during the time in the mid-afternoon when project-generated shadow would otherwise fall on it. There would be no incremental shadow on this plaza on any analysis day, and therefore no shadow impact would result from the proposed project.

9 WEST 57TH STREET PLAZA

The strip of plaza in front of 9 West 57th Street, on the north side of West 57th Street, is essentially a widened sidewalk with no sun-sensitive amenities. The plaza space at the back of the building on West 58th Street contains moveable tables and chairs and water features. At 3:00 PM on March 21 and September 21 and at 2:45 PM on December 21, this plaza is fully shaded by 9 West 57th Street and other buildings to its immediate south and southwest, and therefore it would not be affected by the proposed project's shadow. No shadow impacts would occur on this plaza at any time of year.

450 PARK AVENUE PLAZA

This small plaza on the south side of East 57th Street between Park and Madison Avenues is fully shaded by existing buildings to its west at 5:15 PM and 5:30 PM on the May 6/August 6 and June 21 analysis days, when project shadow would otherwise fall on it. No shadow impacts would occur on any analysis day.

1370 SIXTH AVENUE PLAZA

This plaza is located on the southeast corner of Sixth Avenue and West 56th Street. It contains an outdoor café right at the corner, and benches and planters along the street and avenue sides. The tall buildings at 1370, 1360, 1350, and 1340 Sixth Avenue stand between this plaza and the development site and cast shadow on the plaza during the early afternoons, when project-generated shadow would fall on it. No incremental shadow would affect this plaza on any analysis day, and there would be no shadow impacts.

PARK AVENUE TOWER PLAZA

This residential plaza on the north side of East 55th Street between Park and Madison Avenues could be reached by shadow from the proposed project only on the June 21 analysis day at around 6:15 PM. However, the plaza is already completely in shade from existing buildings at this time. No incremental shadow would occur on any analysis day, and there would be no shadow impacts to this space.

WALTER DILLON READ PLAZA

This plaza on the north side of East 54th Street between Park and Madison Avenues could be reached by shadow from the proposed project only at the very end of the June 21 analysis day at around 7:00 PM. However, the plaza is already in shade from existing buildings at this time. No incremental shadow would occur on any analysis day, and there would be no shadow impacts to this space.

EQUITABLE CENTER ATRIUM SKYLIGHT

This atrium lobby is located at 787 Seventh Avenue. It contains original artwork and is lit by natural light through a skylight. The skylight is fully shaded by the Equitable tower itself during the time in the morning of the May/August and June analysis days when the proposed project's shadow would otherwise affect it. No incremental shadow would fall on the skylight at any time of year, and no shadow impacts would occur.

PAINWEBBER GALLERIA

This skylit galleria, which connects West 51st and 52nd Streets midway between Seventh and Sixth Avenues, is in existing shadow early on the May/August and June analysis days when project shadow could otherwise affect it. No incremental shadow would fall on the skylight at any time of year, and no shadow impacts would occur.

PAINWEBBER PLAZA

This plaza consists of two narrow sections along the north (West 52nd Street) and south (West 51st Street) sides of the PaineWebber building. On the June 21 analysis day, this plaza is fully shaded by the tall buildings to its northeast early in the morning when project-generated shadow would otherwise fall on it. There would be no incremental shadow on this plaza on any analysis day, and therefore no shadow impact would occur.

SYMPHONY HOUSE PLAZA

This plaza, located on the northeast corner of Eighth Avenue and West 56th Street, is fully in existing shadow during the first 20 minutes of the December 21 analysis day when the proposed

53 West 53rd Street

project's shadow would otherwise affect it. No incremental shadow would fall on this space at any time of year, and no shadow impacts would occur.

888 SEVENTH AVENUE PLAZA

Located on the south side of West 57th Street between Broadway and Seventh Avenue, this plaza would be fully in existing shadow at the time (around 10:00 AM) on December 21 when project shadow could otherwise affect it. Project-generated shadow would not reach far enough north on the other analysis days to affect the space, and no shadow impacts would occur.

CARNEGIE MEWS

Located on the north side of West 56th Street between Broadway and Seventh Avenue, this plaza would be fully in existing shadow at the time (around 9:30 AM) on December 21 when project shadow could otherwise affect it. Project-generated shadow would not reach far enough north on the other analysis days to affect the space, and no shadow impacts would occur.

230 WEST 55TH STREET PLAZA

This plaza is located on the north side of West 55th Street between Broadway and Eighth Avenue. On March 21 and September 21, project-generated shadow would be just long enough to reach the eastern side of this space at 10:30 AM; however, this portion of the plaza is in existing shadow at this time. Project shadow would not fall far enough to the south on the morning of December 21 to affect this plaza, and would not be long enough on May 6/August 6 or June 21 to reach the space. No incremental shadow would fall on these spaces at any time of year, and no shadow impacts would occur.

135 EAST 57TH STREET

This plaza comprises two separate sections, both located several blocks east of the development site on the north side of East 57th Street just west of Lexington Avenue. May 6/August 6 is the only analysis day when the project's shadow would be long enough and fall far enough east to affect these spaces. However, these spaces are fully covered in existing shadow at the time (5:45 PM to 6:00 PM). No incremental shadow would fall on these spaces at any time of year, and no shadow impacts would occur.

THE RITZ PLAZA

This plaza is located on the north side of West 48th Street just east of Eighth Avenue. It is fully in existing shadow during the first 15 minutes of the May 6/August 6 and June 21 analysis days when it could otherwise be affected by project shadow. No shadow impacts would occur at any time of year.

COLUMBUS CIRCLE

The shadow from the proposed project would pass across Columbus Circle at 10:15 AM on December 21, but there would be no incremental shadow because the space is completely in existing shadow at this time. Project shadow would not be long enough on the other analysis days to reach Columbus Circle, and no shadow impacts would occur.

CONCERTO PLAZA

This plaza is located on the north side of West 59th Street just west of Tenth Avenue. The proposed project's shadow would be long enough to pass across this plaza at 9:00 AM on December 21; however, the plaza is completely shaded by existing buildings at this time. There would be no shadow impacts on any analysis day.

THE REGENT AND BEAUMONT PLAZAS

These connected residential plazas are located on the west side of the block bounded by West 60th and 61st Streets, Ninth Avenue and Broadway. The proposed project's shadow would be long enough to reach the southern edge of these spaces on December 21 at 10:00 AM, but they are completely shaded by existing buildings at this time. There would be no shadow impacts on any analysis day.

TRUMP INTERNATIONAL HOTEL AND TOWER PLAZA

This plaza abuts Columbus Circle on its north side. The proposed project's shadow would be long enough to pass across a portion of this plaza at 10:30 AM on December 21; however, the plaza is completely shaded by existing buildings at this time. There would be no shadow impacts on any analysis day.

P.S. 191 SCHOOLYARD

The proposed project's shadow would not be long enough to reach this space on any analysis day.

ST. LUKE'S-ROOSEVELT HOSPITAL PLAZA

This plaza is located on the east side of Tenth Avenue between West 58th and 59th Streets. The proposed project's shadow would be long enough to pass across a portion of this plaza at 9:00 AM on December 21; however, the plaza is completely shaded by existing buildings at this time. There would be no shadow impacts on any analysis day.

FORDHAM UNIVERSITY PLAZA

The proposed project's shadow would not be long enough to reach this space on any analysis day.

OPEN SPACES THAT WOULD RECEIVE LESS THAN 30 MINUTES OF INCREMENTAL SHADOW

GRAND ARMY PLAZA

The southern portion of this plaza would receive a small area of new shadow for 10 minutes around 4:00 PM on the March 21/September 21 analysis day. No incremental shadow would occur on the other analysis days. The short duration and small extent of new shadow would not cause a significant adverse impact.

810 SEVENTH AVENUE PLAZA

This plaza is located two blocks west of the development site, encircling the building at 810 Seventh Avenue along the west side of Seventh Avenue, the south side of West 53rd Street, and the east side of Broadway. It contains planters, benches, and an outdoor café. It would experience a small area of incremental shadow from 9:10 AM to 9:20 AM on the March 21/September 21 analysis day, and from 9:55 AM to 10:05 AM on the May 6/August 6 analysis day (see Figure 6-5 in Chapter 6). The proposed project's shadow would be too short to reach the plaza on the June 21 analysis day and would fall north of the plaza at the start of the December 21 analysis day. The short duration and limited extent of incremental shadow over the course of the year would not result in a significant adverse impact.

CBS BUILDING PLAZA

Located south of the development site across West 53rd Street, this plaza would experience a small area of incremental shadow for 10 minutes on the June 21 analysis day, from 9:15 AM to 9:25 AM. The short duration and limited extent of incremental shadow over the course of the year would not result in a significant adverse impact.

PARAMOUNT PLAZA

This plaza is located on the west side of Broadway between West 50th and 51st Streets. On the March 21/September 21 and December 21 analysis days, project shadow would fall too far to the north in the mornings to reach this plaza. On May 6 and August 6, a small patch of incremental shadow would fall on the plaza for 15 minutes, between 8:30 AM and 8:45 AM. On June 21, no incremental shadow would occur. No significant shadow impacts would occur at any time of year on this space.

METROPOLITAN TOWER PLAZA

This plaza is located on the north side of West 56th Street between Sixth and Seventh Avenues. Incremental shadow would fall on a small patch of this plaza for 5 minutes (at 12:15 PM) on the March 21/September 21 analysis day. On December 21, existing shadows cover the plaza during the time (around 10:45 AM) project shadow would otherwise affect it. Project shadow would not reach far enough north on the May/August and June analysis days to affect this space, and there would be no shadow impacts at any time of year.

HISTORIC RESOURCES THAT WOULD NOT RECEIVE ANY INCREMENTAL SHADOW

CATHOLIC APOSTOLIC CHURCH (NYCL)

This church is located on the north side of West 57th Street just west of Ninth Avenue. The proposed project's shadow would be long enough to fall on the rear (north) portion of the church's roof for the first few minutes of the December 21 analysis day. The church is completely shaded by existing buildings to its southeast at this time, and there would be no shadow impacts on this or any other analysis day.

CENTRAL SYNAGOGUE (NYCL)

Shadow from the proposed project would reach far enough to the south to fall on the roof of the Central Synagogue, which is located at the southwest corner of Lexington Avenue and East 55th Street, during the final few minutes of the June 21 analysis day (around 7:00 PM). However, the roof is covered in existing shadow at this time, and no incremental shadow would occur. No incremental shadow would fall on this resource at any time of year, and no shadow impacts would result.

(FORMER) COTY BUILDING (NYCL)

The Lalique glass windows of this landmark building, which is located at 714 Fifth Avenue, are noted in the designation report and should be considered a sun-sensitive feature. However, the street-facing façade where the windows are situated is on the west side of Fifth Avenue facing east, and therefore would not be affected by project shadow.

OSBORNE APARTMENTS (NYCL)

Located at the northwest corner of West 57th Street and Seventh Avenue, this landmark building has street facades on both streets and is faced in rusticated stone with deeply set windows. These facades may be considered a sun-sensitive feature. On December 21, at around 10:30 AM project shadow would be long enough to pass across portions of these facades; however, the facades are already in existing shadow at this time, and no incremental shadow would occur. Project shadow would not be long enough to reach this building on any other analysis day, and no shadow impacts would occur.

RODIN STUDIOS (NYCL)

Located at the southwest corner of West 57th Street and Seventh Avenue, this landmark building has street facades on both streets. The facades feature molded terra-cotta ornament in high relief, and therefore may be considered sun-sensitive features. On December 21 at around 10:15 AM, project shadow would be long enough to pass across portions of the east facade; however, the facades are already in existing shadow at this time, and no incremental shadow would occur. Project shadow would not be long enough to reach this building on any other analysis day, and no shadow impacts would occur.

WILLIAM J. SYMS OPERATING THEATER, ROOSEVELT HOSPITAL

This building on the southwest corner of Ninth Avenue and West 59th Street has an unusual semi-conical skylight, which could be considered a sun-sensitive feature. At 9:20 AM on December 21, this feature is completely in existing shadow when the proposed project's shadow would be long enough to pass across it. Project shadow would not be long enough to reach this building on any other analysis day, and no shadow impacts would occur.

SACRED HEART OF JESUS CHURCH

This church is located far to the west of the development site on the north side of West 51st Street between Ninth and Tenth Avenues. The proposed project's shadow would not be long enough to reach this space on any analysis day.

ST. PAUL THE APOSTLE CHURCH

This church is located at the southwest corner of West 60th Street and Columbus Avenue. On December 21 at around 9:40 AM, project shadow would be long enough to pass briefly across a small portion of the church's east facade; however, the facade is already in existing shadow at this time, and no incremental shadow would occur. Project shadow would not be long enough to reach this building on any other analysis day, and no shadow impacts would occur.

ST. THOMAS CHURCH (NYCL)

This church is located at the northwest corner of Fifth Avenue and West 53rd Street. The proposed project's shadow would not reach far enough to the south in the late afternoon on the March/September, May/August, or December analysis days to reach this resource. On the June analysis day, shadow from the proposed building could reach the northwest corner of St. Thomas Church in the last few minutes of the analysis period at about 7:00 PM. However, this area is already in shadow from adjacent intervening buildings at this time, so the proposed project would not cast any additional shadow on the St. Thomas Church. No shadow impacts would occur at any time of year.

CHRIST CHURCH UNITED METHODIST

Located on the northwest corner of Park Avenue and East 60th Street, this church has street-facing facades on both streets. Project shadow would be long enough to reach the south façade of this church during the final 15 minutes of the March 21/September 21 analysis day, but this façade is already completely in existing shadow at this time. No incremental shadow would occur on this or any other analysis day, and no shadow impacts would occur.

HISTORIC RESOURCES THAT WOULD RECEIVE LESS THAN 30 MINUTES OF INCREMENTAL SHADOW

ALWYN COURT APARTMENTS (NYCL)

The facades of this designated landmark are highly carved and may be considered a sunlight-sensitive resource. The building is located at the southeast corner of West 58th Street and Seventh Avenue. On December 21, incremental shadow from the proposed project would pass across the rooftop and upper part of the south façade of the Alwyn Court from 11:00 AM and 11:15 AM. Project shadow would not be long enough to reach this building on any other analysis day. The 15-minute duration of new shadow would not cause a significant adverse impact on the building.

FRICK COLLECTION LAWN (NYCL)

This resource is located on the east side of Fifth Avenue across from Central Park between East 70th and 71st Streets. A narrow area of incremental shadow would pass across a portion of the enclosed lawn area in front of the Frick Collection for less than 5 minutes on the December 21 analysis day. Project shadow would not be long enough to reach this resource on any other analysis day. This minimal duration of new shadow would not cause a significant adverse impact.

C. ASSESSMENT OF INCREMENTAL SHADOWS: PROPOSED PROJECT COMPARED WITH EXPANDED DEVELOPMENT SCENARIO

OPEN SPACES THAT WOULD NOT RECEIVE ANY INCREMENTAL SHADOW

GRAND ARMY PLAZA

No incremental shadow would occur on any analysis day, and therefore there would be no shadow impact on this resource.

THE SHEFFIELD RESIDENTIAL PLAZAS

These plazas are fully in existing shadow during the first 15 minutes of the December 21 analysis day when shadow cast by the proposed building could otherwise reach them. No incremental shadow would fall on these spaces at any time of year, and no shadow impacts would occur.

MCCAFFREY PLAYGROUND

Shadow from the proposed project would be long enough to reach this playground from 6:57 AM to 7:15 AM on the June 21 analysis day; however, the portions of the space that could be affected are already in shadow at this time, so no incremental shadow would occur. No incremental shadow would fall on this space at any time of year, and no shadow impacts would occur.

RAMON APONTE PARK

Shadow cast by the proposed project would be long enough to reach this park for about 5 minutes (7:50 AM to 7:55 AM) on the morning of the May 6/August 6 analysis day; however, the park is fully in existing shadows at this time, and so no incremental shadow would occur. No incremental shadow would fall on this space at any time of year, and there would be no shadow impacts as a result of the proposed project.

PARK AVENUE MALLS

Project-generated shadow would be long enough to reach one or more of these malls in the late afternoon (after 5:00 PM) on the March/September, May/August, and June analysis days. However, the malls that would otherwise be affected are in existing shadows at this time on all three analysis days, and no incremental shadow would occur at any time of year. Therefore, the proposed project would not cause a significant adverse impact on these resources.

WEST 59TH STREET RECREATION CENTER

Project-generated shadow would be long enough to fall on this space briefly around 9:00 AM on the December day only. However, the center is fully shaded by existing buildings to its southeast at this time, and no incremental shadow would occur. The project would therefore not cause a shadow impact to this space.

MARIAN S. HEISKELL GARDEN

The garden is completely shaded by existing buildings to its east between 7:30 AM and 7:45 AM on June 21, which is the only time on any analysis day that project-generated shadow would be able to affect it. No incremental shadow would occur at any time of year, and there would be no shadow impact on this resource.

PARK LANE HOTEL PLAZA

On the March 21/September 21 and December 21 analysis days, this plaza is fully shaded by the tall buildings to its south during the time in the mid-afternoon when project-generated shadow would otherwise fall on it. There would be no incremental shadow on this plaza on any analysis day, and therefore no shadow impact would result.

9 WEST 57TH STREET PLAZA

At 3:00 PM on March 21 and September 21 and at 2:45 PM on December 21, this plaza is fully shaded by 9 West 57th Street and other buildings to its immediate south and southwest, and therefore it would not be affected by the proposed project's shadow. No shadow impacts would occur on this plaza at any time of year.

450 PARK AVENUE PLAZA

This small plaza is fully shaded by existing buildings to its west at 5:15 PM and 5:30 PM on the May 6/August 6 and June 21 analysis days when project shadow would otherwise fall on it. No shadow impacts would occur on any analysis day.

1370 SIXTH AVENUE PLAZA

The tall buildings at 1370, 1360, 1350, and 1340 Sixth Avenue stand between this plaza and the development site, and cast shadow on the plaza during the early afternoons when project-generated shadow would fall on it. No incremental shadow would affect this plaza on any analysis day, and there would be no shadow impacts.

PARK AVENUE TOWER PLAZA

Shadow from the proposed project could reach this residential plaza only on the June 21 analysis day at around 6:15 PM; however, the plaza is already completely in shade from existing buildings at this time. No incremental shadow would occur on any analysis day, and there would be no shadow impacts to this space.

WALTER DILLON READ PLAZA

Shadow from the proposed project could reach this plaza only at the very end of the June 21 analysis day at around 7:00 PM; however, the plaza is already in shade from existing buildings at this time. No incremental shadow would occur on any analysis day, and there would be no shadow impacts to this space.

EQUITABLE CENTER ATRIUM SKYLIGHT

This atrium skylight is fully shaded by the Equitable tower itself during the time in the morning of the May/August and June analysis days when the proposed project's shadow would otherwise

affect it. No incremental shadow would fall on the skylight at any time of year, and no shadow impacts would occur.

PAINWEBBER GALLERIA

This skylit galleria is in existing shadow early on the May/August and June analysis days when project shadow could otherwise affect it. No incremental shadow would fall on the skylight at any time of year, and no shadow impacts would occur.

PAINWEBBER PLAZA

On the June 21 analysis day, this plaza is fully shaded by the tall buildings to its northeast early in the morning when project-generated shadow would otherwise fall on it. There would be no incremental shadow on this plaza on any analysis day, and therefore no shadow impact would result.

SYMPHONY HOUSE PLAZA

This plaza is fully in existing shadow during the first 20 minutes of the December 21 analysis day when the proposed project's shadow would otherwise affect it. No incremental shadow would fall on this space at any time of year, and no shadow impacts would occur.

888 SEVENTH AVENUE PLAZA

This plaza would be fully in existing shadow at the time (around 10:00 AM) on December 21 when project shadow could otherwise affect it. Project-generated shadow would not reach far enough north on the other analysis days to affect the space, and no shadow impacts would occur.

CARNEGIE MEWS

This plaza would be fully in existing shadow at the time (around 9:30 AM) on December 21 when project shadow could otherwise affect it. Project-generated shadow would not reach far enough north on the other analysis days to affect the space, and no shadow impacts would occur.

230 WEST 55TH STREET PLAZA

On March 21 and September 21, project-generated shadow would be just long enough to reach the eastern side of this space at 10:30 AM; however, this portion of the plaza is in existing shadow at this time. Project shadow would not fall far enough to the south on the morning of December 21 to affect this plaza, and would not be long enough on May 6/August 6 or June 21 to reach the space. No incremental shadow would fall on these spaces at any time of year, and no shadow impacts would occur.

135 EAST 57TH STREET

May 6/August 6 is the only analysis day when the project's shadow would be long enough and fall far enough east to affect these spaces. However, these spaces are fully covered in existing shadow at the time (5:45 PM to 6:00 PM) they could otherwise be affected by the proposed project's shadow. No incremental shadow would fall on these spaces at any time of year, and no shadow impacts would occur.

THE RITZ PLAZA

This plaza is fully in existing shadow during the first 15 minutes of the May 6/August 6 and June 21 analysis days when it could otherwise be affected by project shadow. No shadow impacts would occur at any time of year.

COLUMBUS CIRCLE

The shadow from the proposed project would pass across Columbus Circle at 10:15 AM on December 21, but there would be no incremental shadow because the space is completely in existing shadow at this time. Project shadow would not be long enough on the other analysis days to reach Columbus Circle, and no shadow impacts would occur.

CONCERTO PLAZA

The proposed project's shadow would be long enough to pass across this plaza at 9:00 AM on December 21; however, the plaza is completely shaded by existing buildings at this time. There would be no shadow impacts on any analysis day.

THE REGENT AND BEAUMONT PLAZAS

The proposed project's shadow would be long enough to reach the southern edge of these spaces on December 21 at 10:00 AM, but they are completely shaded by existing buildings at this time. There would be no shadow impacts on any analysis day.

TRUMP INTERNATIONAL HOTEL AND TOWER PLAZA

The proposed project's shadow would be long enough to pass across a portion of this plaza at 10:30 AM on December 21; however, the plaza is completely shaded by existing buildings at this time. There would be no shadow impacts on any analysis day.

P.S. 191 SCHOOLYARD

The proposed project's shadow would not be long enough to reach this space on any analysis day.

ST. LUKE'S-ROOSEVELT HOSPITAL PLAZA

The proposed project's shadow would be long enough to pass across a portion of this plaza at 9:00 AM on December 21; however, the plaza is completely shaded by existing buildings at this time. There would be no shadow impacts on any analysis day.

FORDHAM UNIVERSITY PLAZA

The proposed project's shadow would not be long enough to reach this space on any analysis day.

OPEN SPACES THAT WOULD RECEIVE LESS THAN 30 MINUTES OF INCREMENTAL SHADOW

767 FIFTH AVENUE PLAZA

On March 21 and September 21, incremental shadow from the proposed project would fall across portions of this plaza from 4:15 PM to 4:30 PM. A portion of the plaza would remain in sun during this period. Incremental shadow would not fall on the plaza on the other three analysis days. The limited duration and extent of incremental shadow on this plaza would not cause a significant adverse impact.

1325 SIXTH AVENUE GALLERIA

Located a block northwest of the development site, the galleria skylight would be affected by project shadow in the late mornings of the spring, summer, and fall analysis days. On December 21, however, the proposed building's shadow would fall just north of the galleria at the start of the analysis period and would not affect it on this day.

The tall intervening building at 1335 Sixth Avenue already casts shadow across the skylight in the late morning, but a very small additional area, represented by the additional bulk on the south side of the proposed project, compared with the Expanded Development Scenario, would be affected by project shadow for periods ranging from 10 minutes to 15 minutes depending on the season. The short duration and small extent of incremental shadow over the course of the year would not cause a significant adverse impact to the galleria.

810 SEVENTH AVENUE PLAZA

This plaza would experience incremental shadow from 9:00 AM to 9:20 AM on the March 21/September 21 analysis day, and from 9:55 AM to 10:05 AM on the May 6/August 6 analysis day (see Figure 6-14 in Chapter 6). The proposed project's shadow would be too short to reach the plaza on the June 21 analysis day, and would fall north of the plaza at the start of the December 21 analysis day. The short duration and limited extent of incremental shadow over the course of the year would not cause a significant adverse impact.

CBS BUILDING PLAZA

The Expanded Development Scenario would shade the section of the plaza that would otherwise be affected by the proposed project's shadow in the morning on the May/August and June analysis days when shadows fall to the southwest. A very small section of the space would receive incremental shadow from 9:15 AM to 9:25 AM due to the bulkier south façade of the proposed project compared with the Expanded Development Scenario. No other incremental shadow would affect the space at any time of year. Due to the very limited extent and duration of incremental shadow, no shadow impacts would occur as a result of the proposed project.

PARAMOUNT PLAZA

On the March 21/September 21 and December 21 analysis days, project shadow would fall too far to the north in the mornings to reach this plaza. On May 6 and August 6, a small patch of incremental shadow would fall on the plaza for 15 minutes, between 8:30 AM and 8:45 AM. On June 21, no incremental shadow would occur. No significant shadow impacts would occur at any time of year on this space.

METROPOLITAN TOWER PLAZA

Incremental shadow would fall on a small patch of this plaza for 5 minutes (at 12:15 PM) on the March 21/September 21 analysis day. On December 21, existing shadows cover the plaza during the time (around 10:45 AM) project shadow would otherwise affect it. Project shadow would not reach far enough north on the May/August and June analysis days to affect this space, and there would be no shadow impacts at any time of year.

HISTORIC RESOURCES THAT WOULD NOT RECEIVE ANY INCREMENTAL SHADOW

CATHOLIC APOSTOLIC CHURCH (NYCL)

The proposed project's shadow would be long enough to fall on the rear (north) portion of the church's roof for the first few minutes of the December 21 analysis day. The church is completely shaded by existing buildings to its southeast at this time, and there would be no shadow impacts on this or any other analysis day.

ALWYN COURT APARTMENTS (NYCL)

On December 21, incremental shadow from the proposed project would be long enough to pass across the rooftop and upper part of the south façade of the Alwyn Court from 11:00 AM and 11:15 AM. However, shadow from the Expanded Development Scenario would cast the same shadow northward at this time on Alwyn Court, and no incremental shadow would occur. Project shadow would not be long enough to reach this building on any other analysis day. Therefore, the proposed project would not cause a significant adverse impact.

CENTRAL SYNAGOGUE (NYCL)

Shadow from the proposed project would reach far enough to the south to fall on the roof of the Central Synagogue during the final few minutes of the June 21 analysis day (around 7:00 PM). However, the roof is covered in existing shadow at this time, and no incremental shadow would occur. No incremental shadow would fall on this resource at any time of year, and no shadow impacts would occur.

(FORMER) COTY BUILDING (NYCL)

The Lalique glass windows of this landmark building are noted in the designation report and should be considered a sun-sensitive feature. However, the street-facing façade where the windows are situated is on the west side of Fifth Avenue facing east, and therefore would not be affected by project shadow.

OSBORNE APARTMENTS (NYCL)

On December 21 at around 10:30 AM project shadow would be long enough to pass across portions of the building's facades; however, the facades are already in existing shadow at this time, and no incremental shadow would occur. Project shadow would not be long enough to reach this building on any other analysis day, and no shadow impacts would occur.

RODIN STUDIOS (NYCL)

This landmark building has street facades on both streets. The facades feature molded terra-cotta ornament in high relief, and therefore may be considered sun-sensitive features. On December 21 at around 10:15 AM, project shadow would be long enough to pass across portions of the east facade; however, the facades are already in existing shadow at this time, and no incremental shadow would occur. Project shadow would not be long enough to reach this building on any other analysis day, and no shadow impacts would occur.

WILLIAM J. SYMS OPERATING THEATER, ROOSEVELT HOSPITAL

This building has an unusual semi-conical skylight, which could be considered a sun-sensitive feature. At 9:20 AM on December 21, this feature is completely in existing shadow when the proposed project's shadow would be long enough to pass across it. Project shadow would not be long enough to reach this building on any other analysis day, and no shadow impacts would occur.

SACRED HEART OF JESUS CHURCH

The proposed project's shadow would not be long enough to reach this space on any analysis day.

ST. PAUL THE APOSTLE CHURCH

On December 21 at around 9:40 AM, project shadow would be long enough to pass briefly across a small portion of the church's east facade; however, the facade is already in existing shadow at this time, and no incremental shadow would occur. Project shadow would not be long enough to reach this building on any other analysis day, and no shadow impacts would occur.

ST. THOMAS CHURCH (NYCL)

The proposed project's shadow would not reach far enough to the south in the late afternoon on the March/September, May/August, or December analysis days to reach this resource. On the June analysis day, shadow from the proposed building could reach the northwest corner of St. Thomas Church in the last few minutes of the analysis period at about 7:00 PM. However, this area is already in shadow from adjacent intervening buildings at this time, and so the proposed project would not cast any additional shadow on the St. Thomas Church. No shadow impacts would occur at any time of year.

CHRIST CHURCH UNITED METHODIST

This church has street-facing facades on both Park Avenue and East 60th Street. Project shadow would be long enough to reach the south façade of this church during the final 15 minutes of the March 21/September 21 analysis day, but this façade is already completely in existing shadow at this time. No incremental shadow would occur on this or any other analysis day, and no shadow impacts would occur.

HISTORIC RESOURCES THAT WOULD RECEIVE LESS THAN 30 MINUTES OF INCREMENTAL SHADOW

FRICK COLLECTION LAWN (NYCL)

A narrow area of incremental shadow would pass across a portion of the enclosed lawn area in front of the Frick Collection for less than 5 minutes on the December 21 analysis day. Project shadow would not be long enough to reach this resource on any other analysis day. This minimal duration of new shadow would not cause a significant adverse impact. *