

-  Project Site
-  Tier 1: Expanded Longest Shadow Study Area Perimeter
-  Tier 2: Area South of Development Sites That Could Never Be Shaded by Proposed Developments
-  Publicly-Accessible Open Space (see Table 3-3)
-  Historic Resource with Sunlight-Sensitive Features (see Table 3-3)
-  Natural Resource (see Table 3-3)

Notes:  
 NAVD88 = North American Vertical Datum of 1988. 0' = approximately sea level.  
 Expanded longest shadow study area represents a highly conservative study area because it assumes the maximum elevations of the proposed developments casting their longest shadows at sea level. See Chapter 3 "Visual and Community Character," Section G.4.a "Tier 1 Screening Assessment" for details.



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

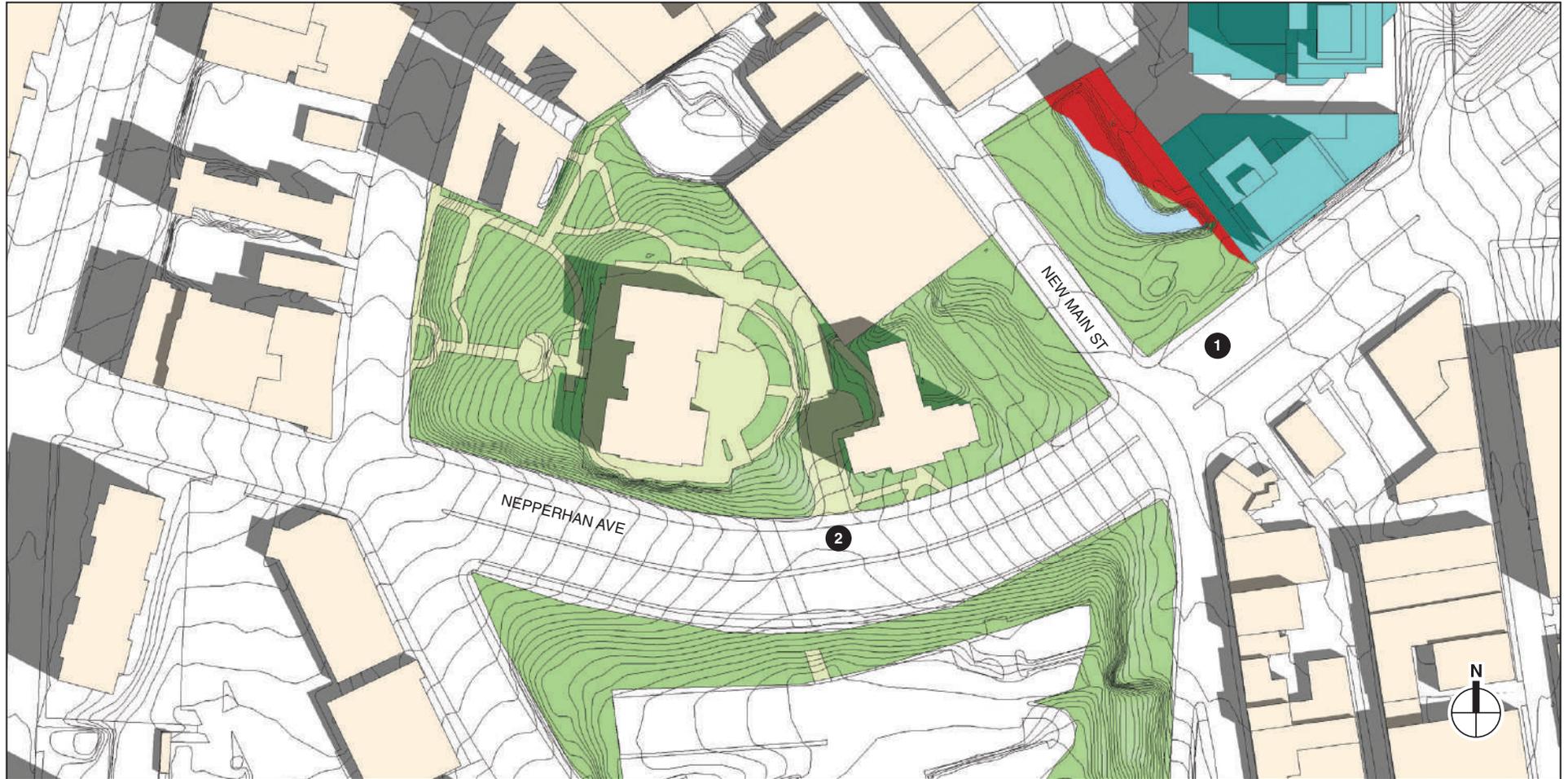
7:30 AM



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

8:30 AM



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

9:30 AM



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

6:00 AM



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

7:00 AM



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

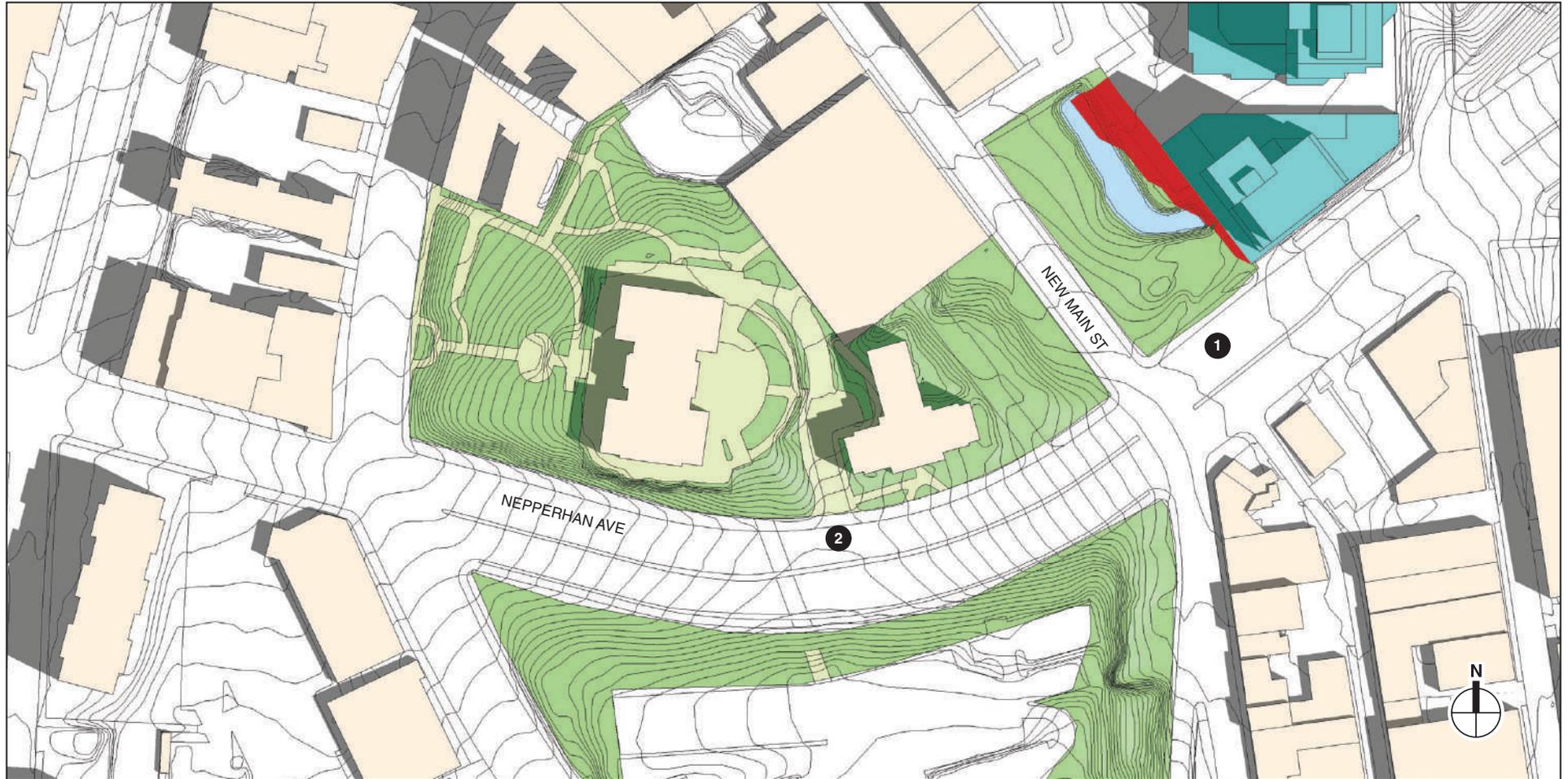
8:00 AM



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

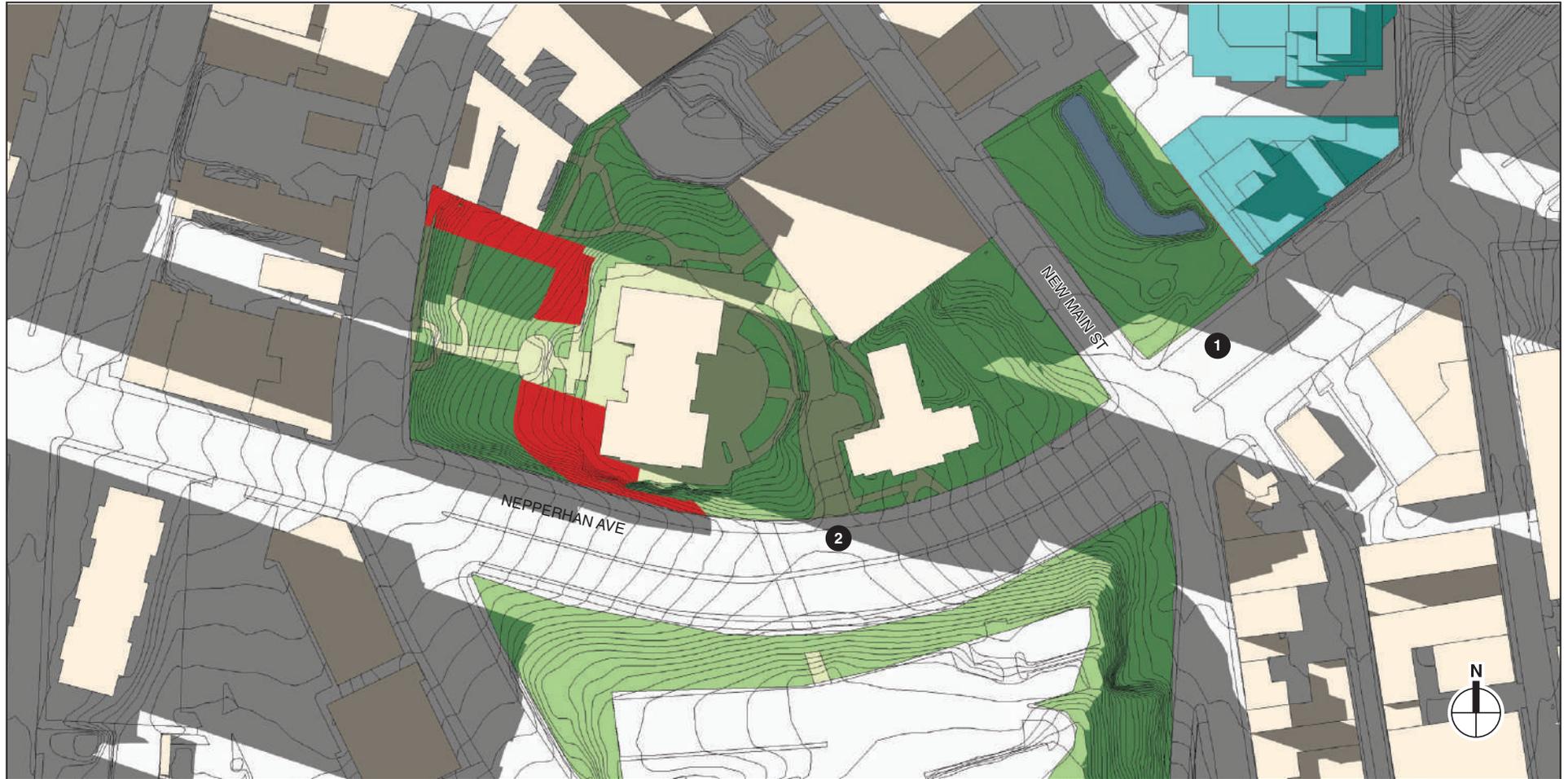
9:00 AM



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

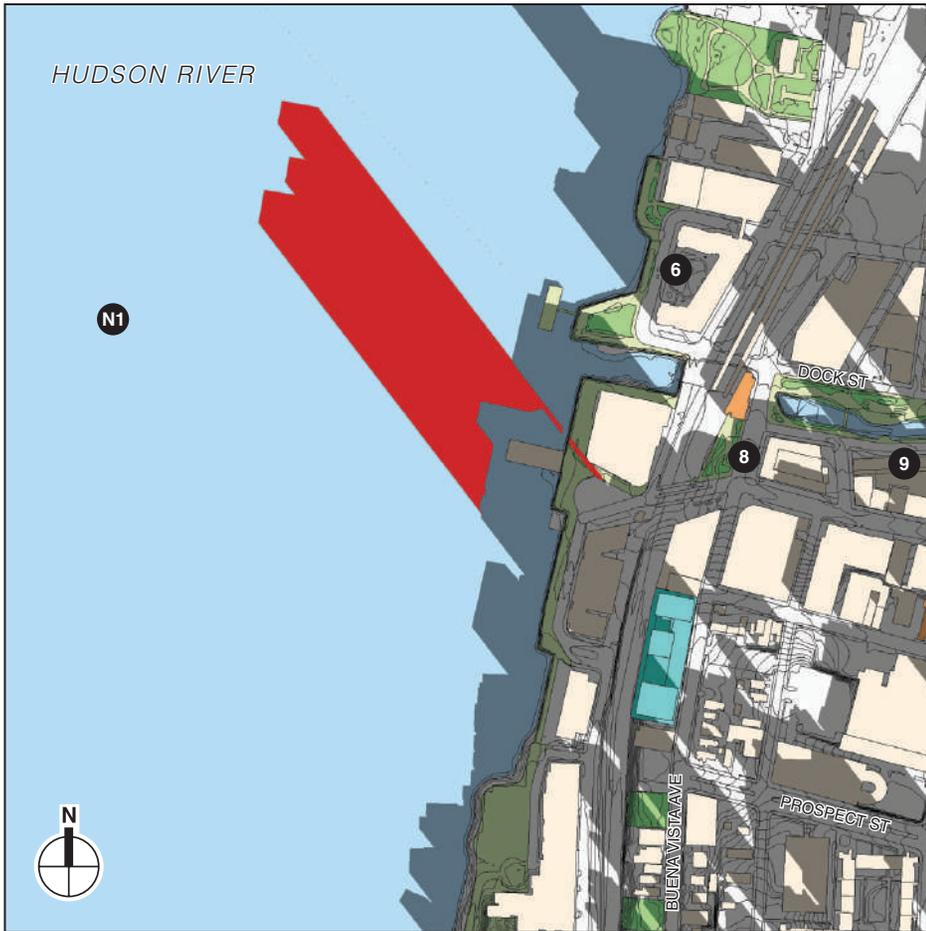
10:00 AM



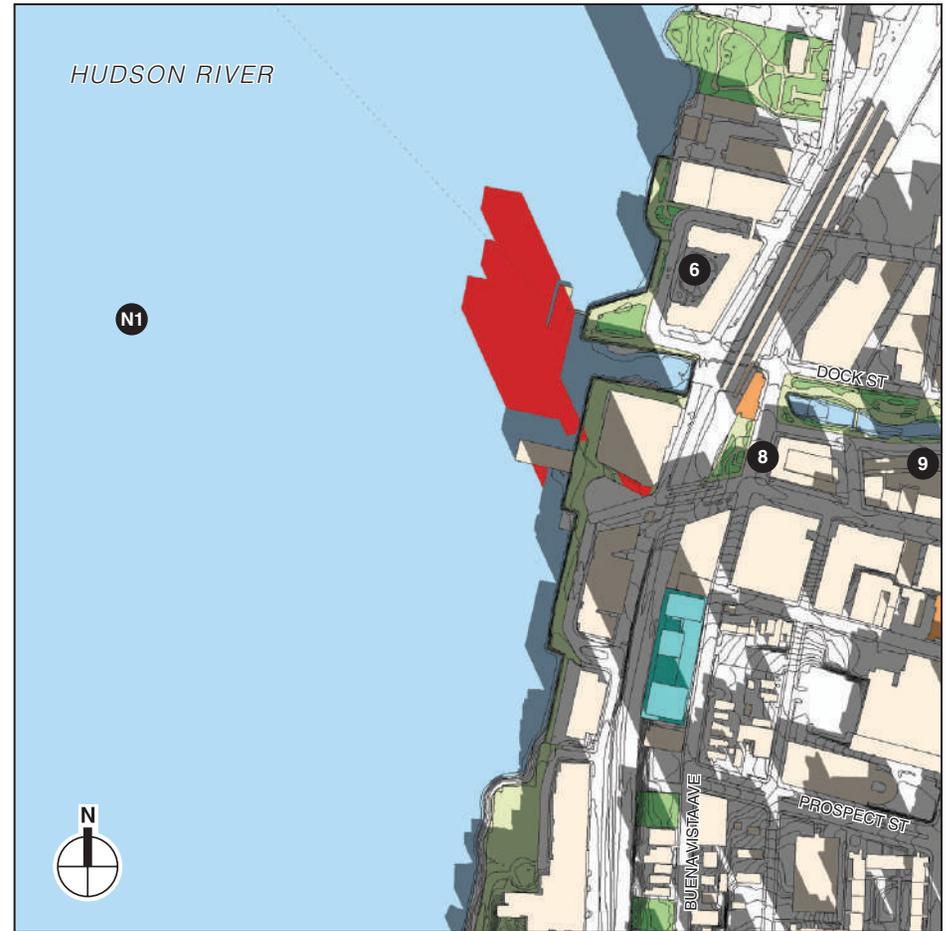
- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

6:00 PM



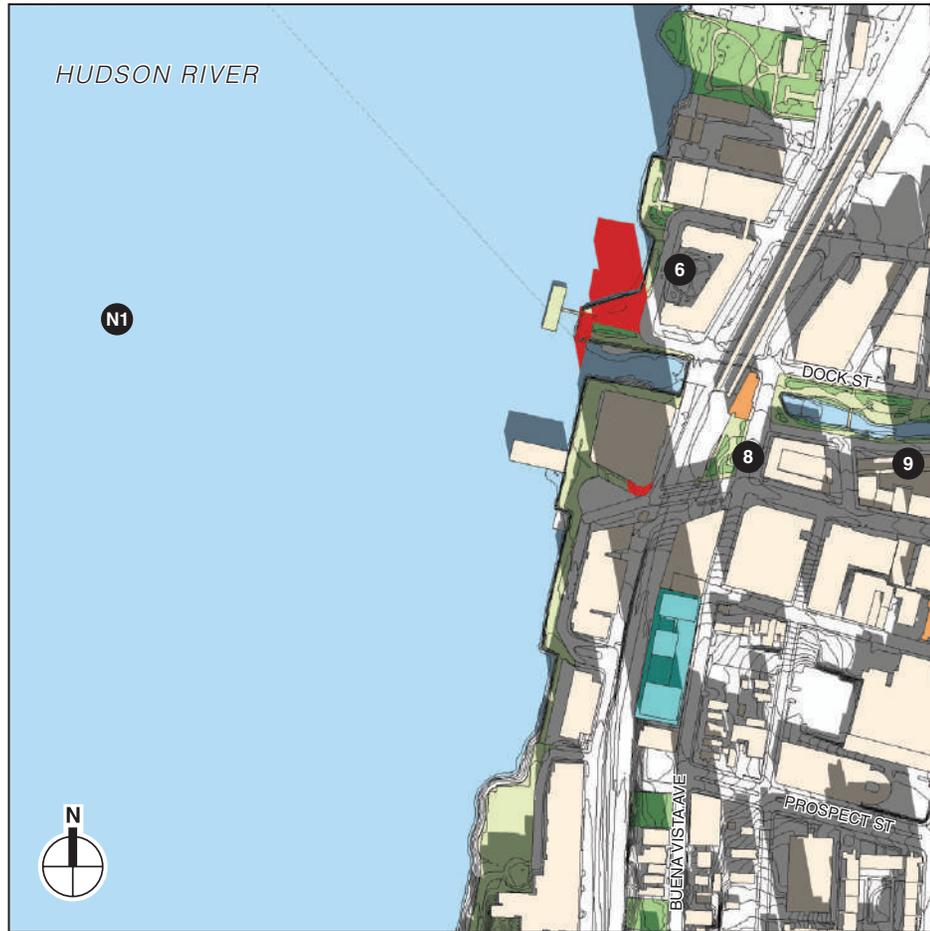
9:15 AM



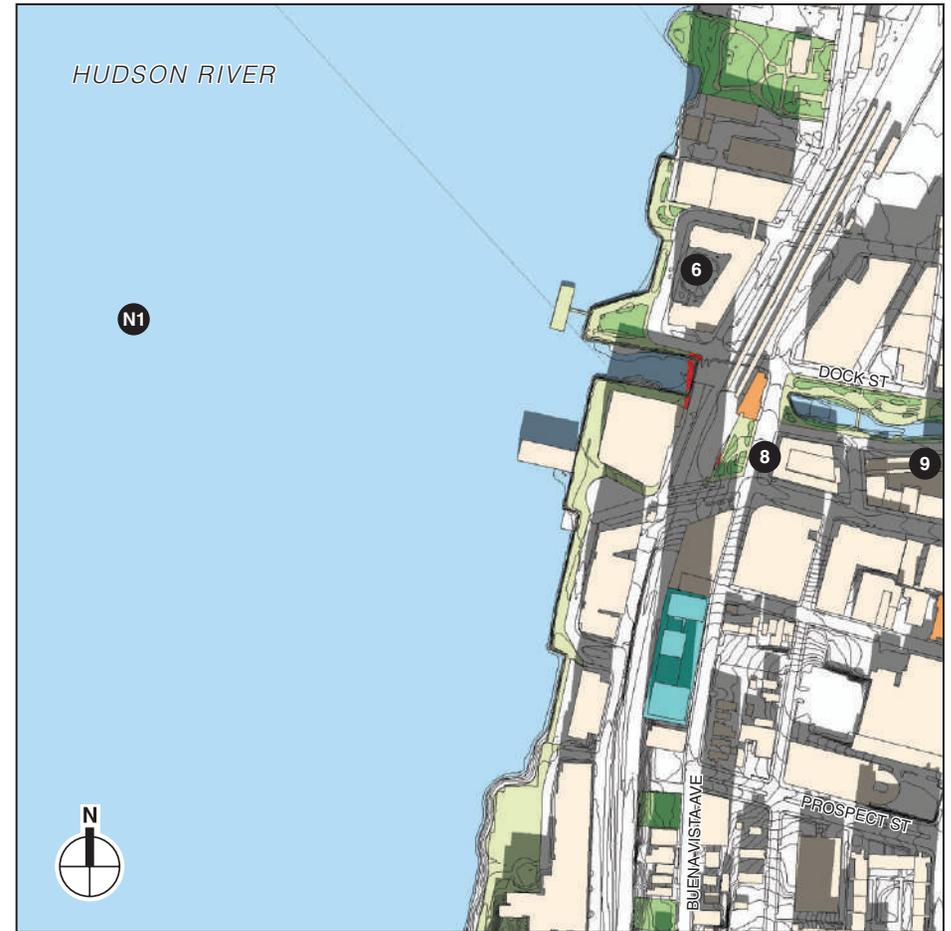
10:15 AM

- Proposed Project
- # Publicly Accessible Open Space (see Table 3-4 for number key)
- N# Natural Resources (see Table 3-4 for letter key)
- Incremental Shadow

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings.



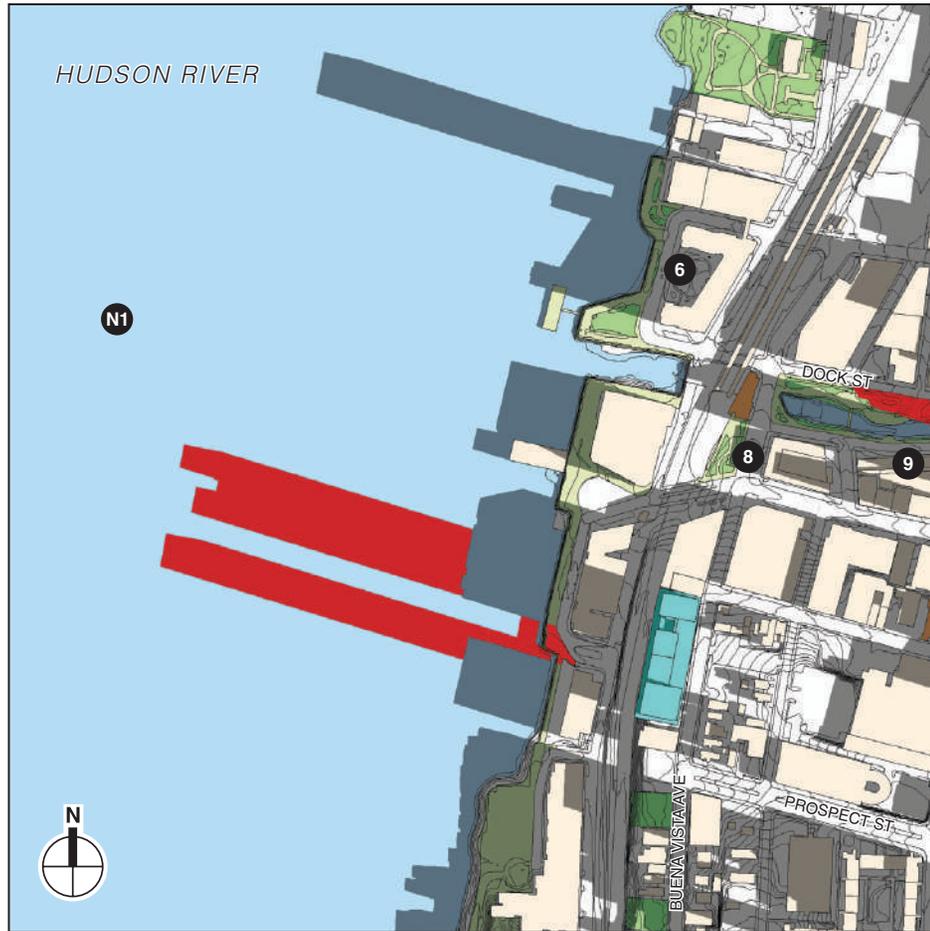
11:15 AM



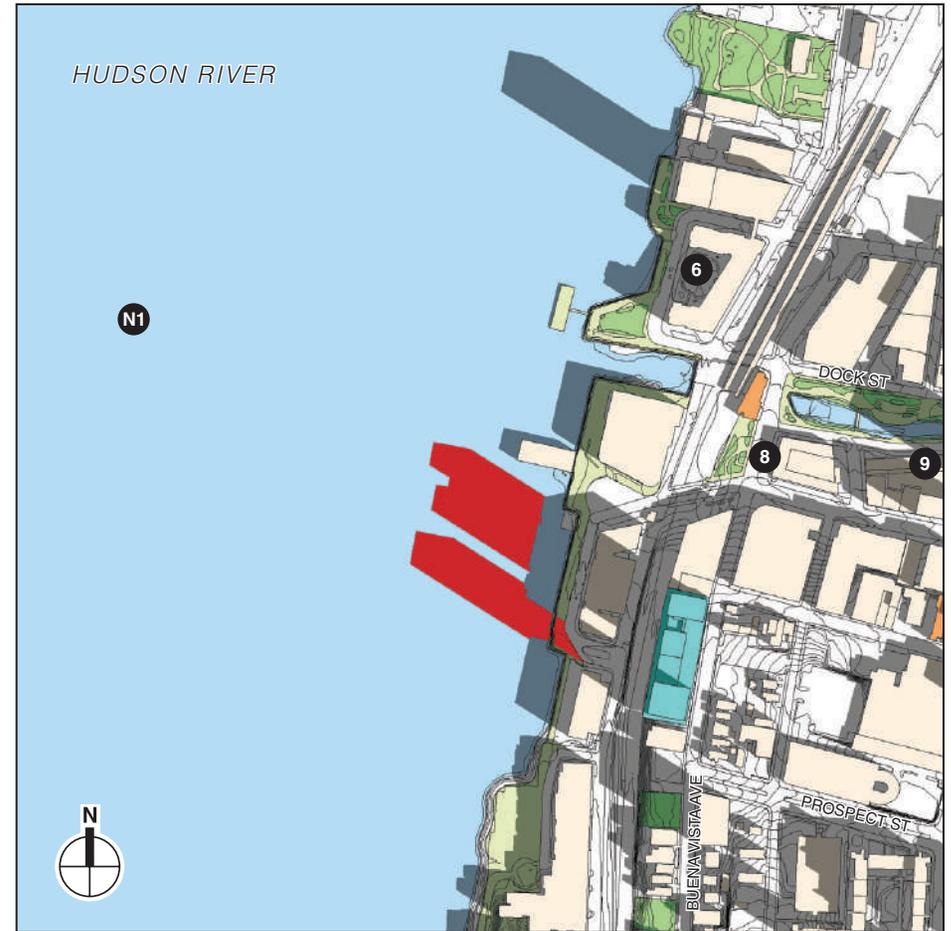
12:15 PM

- Proposed Project*
- # *Publicly Accessible Open Space (see Table 3-4 for number key)*
- N# *Natural Resources (see Table 3-4 for letter key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings.



7:45 AM

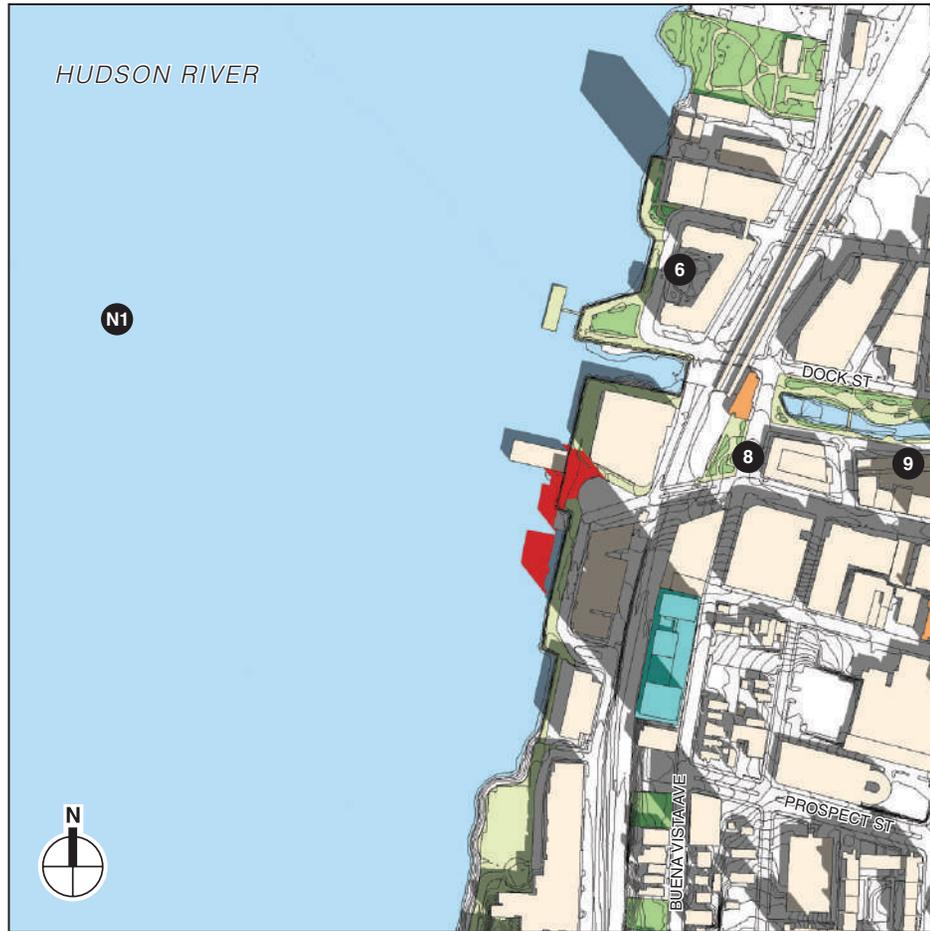


9:00 AM

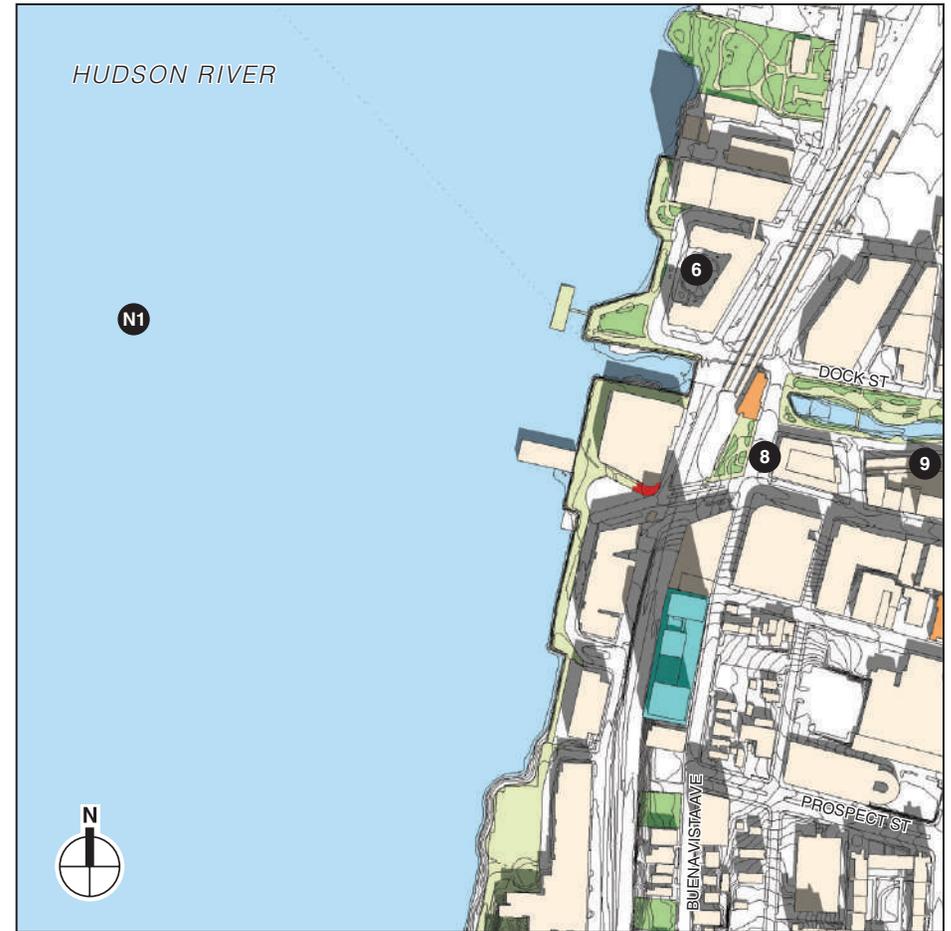
- Proposed Project
- # Publicly Accessible Open Space (see Table 3-4 for number key)
- N# Natural Resources (see Table 3-4 for letter key)
- Incremental Shadow

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per CEQR Technical Manual guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

March 21 / September 21  
Detailed Analysis  
Figure 3-42



10:15 AM

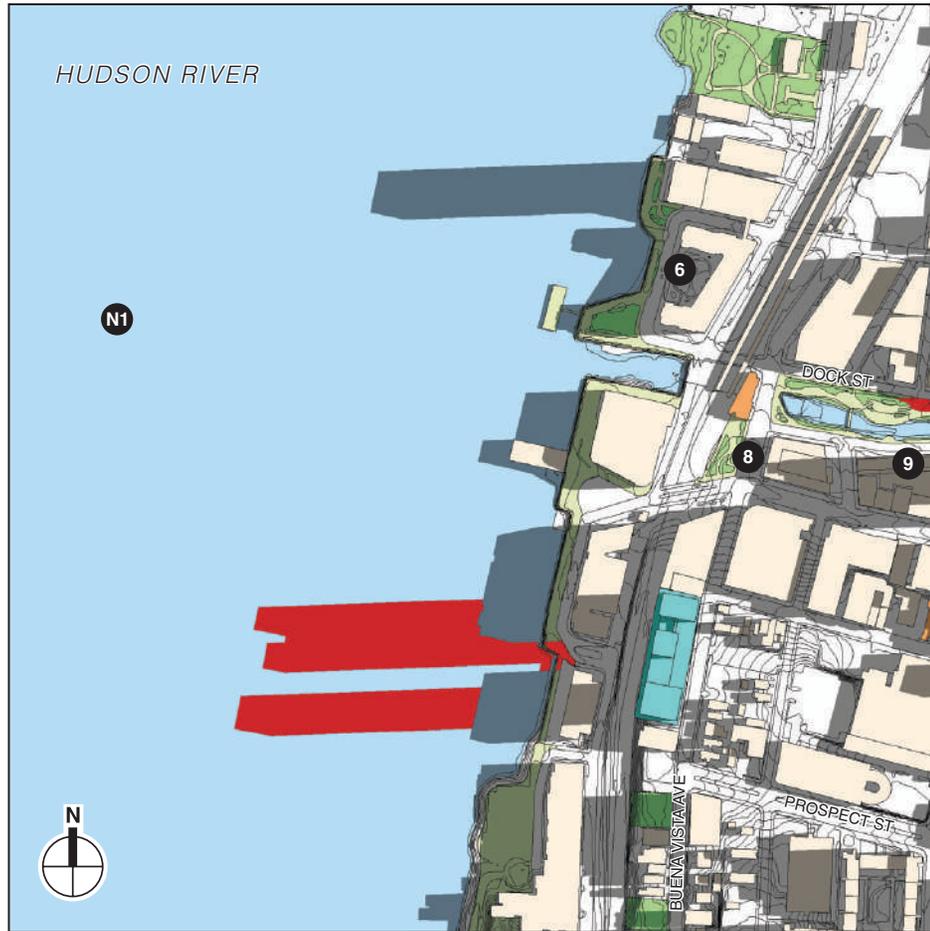


11:30 AM

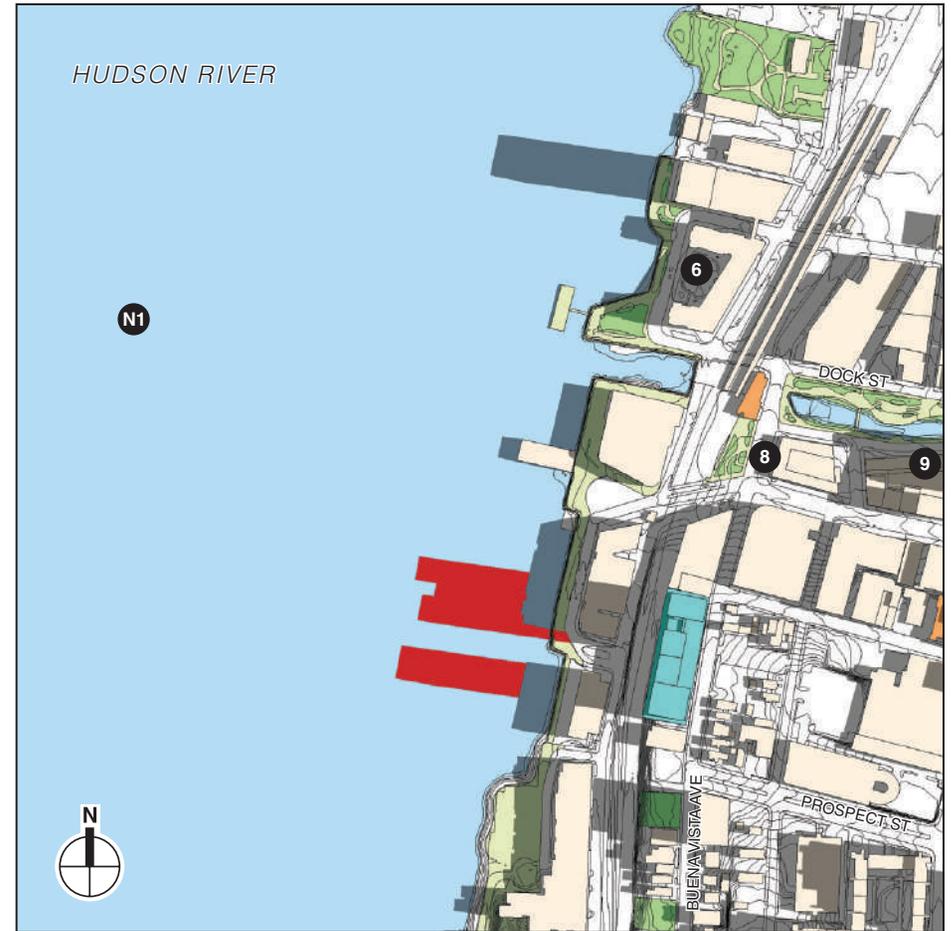
- Proposed Project
- # Publicly Accessible Open Space (see Table 3-4 for number key)
- N# Natural Resources (see Table 3-4 for letter key)
- Incremental Shadow

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per CEQR Technical Manual guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

March 21 / September 21  
Detailed Analysis  
Figure 3-43



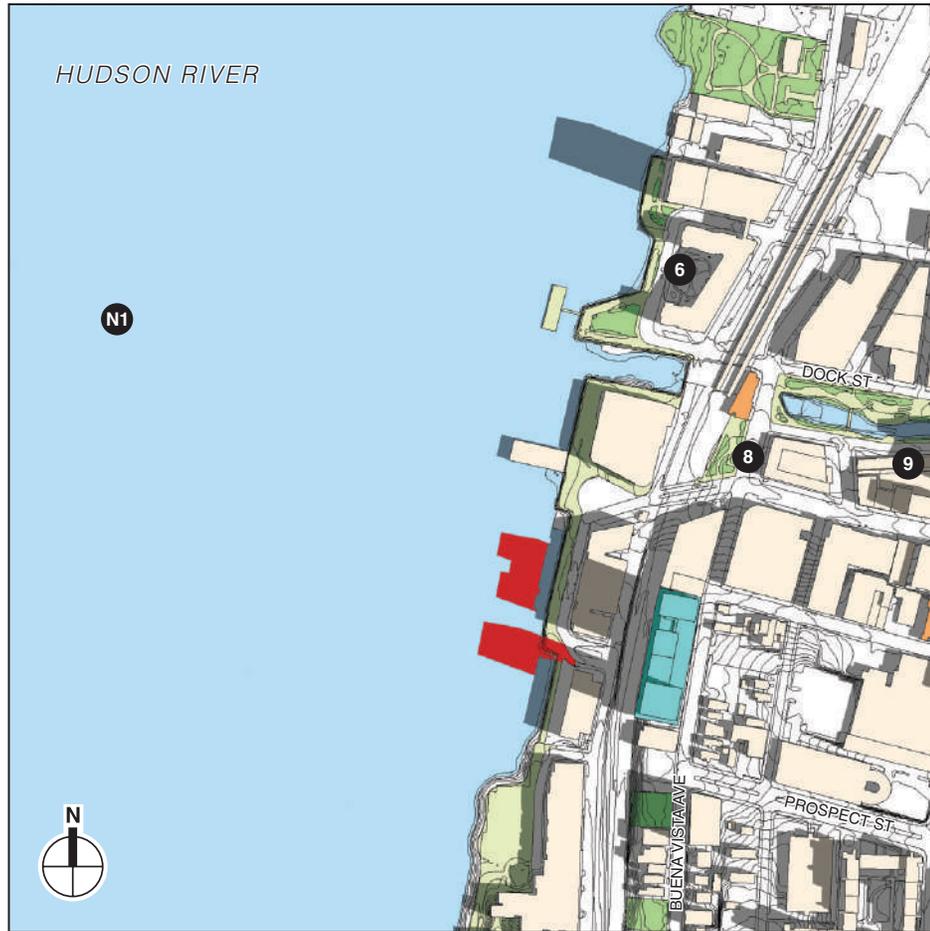
7:00 AM



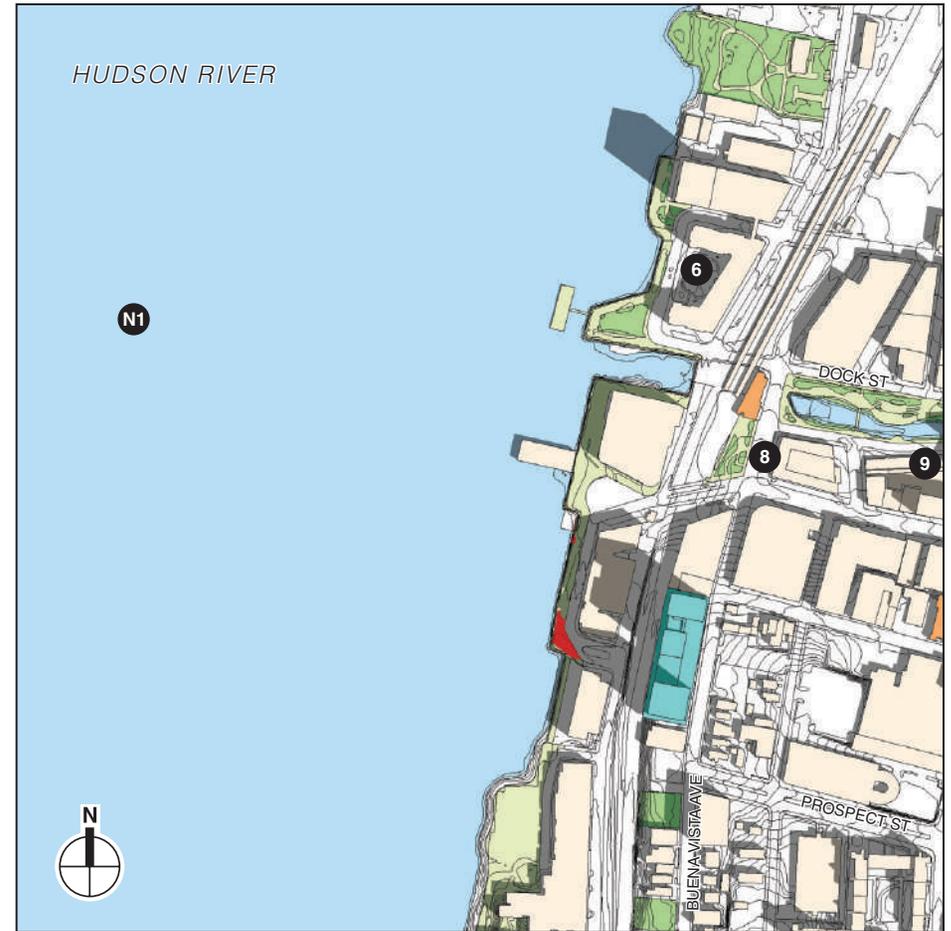
8:00 AM

- Proposed Project
- # Publicly Accessible Open Space (see Table 3-4 for number key)
- N# Natural Resources (see Table 3-4 for letter key)
- Incremental Shadow

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.



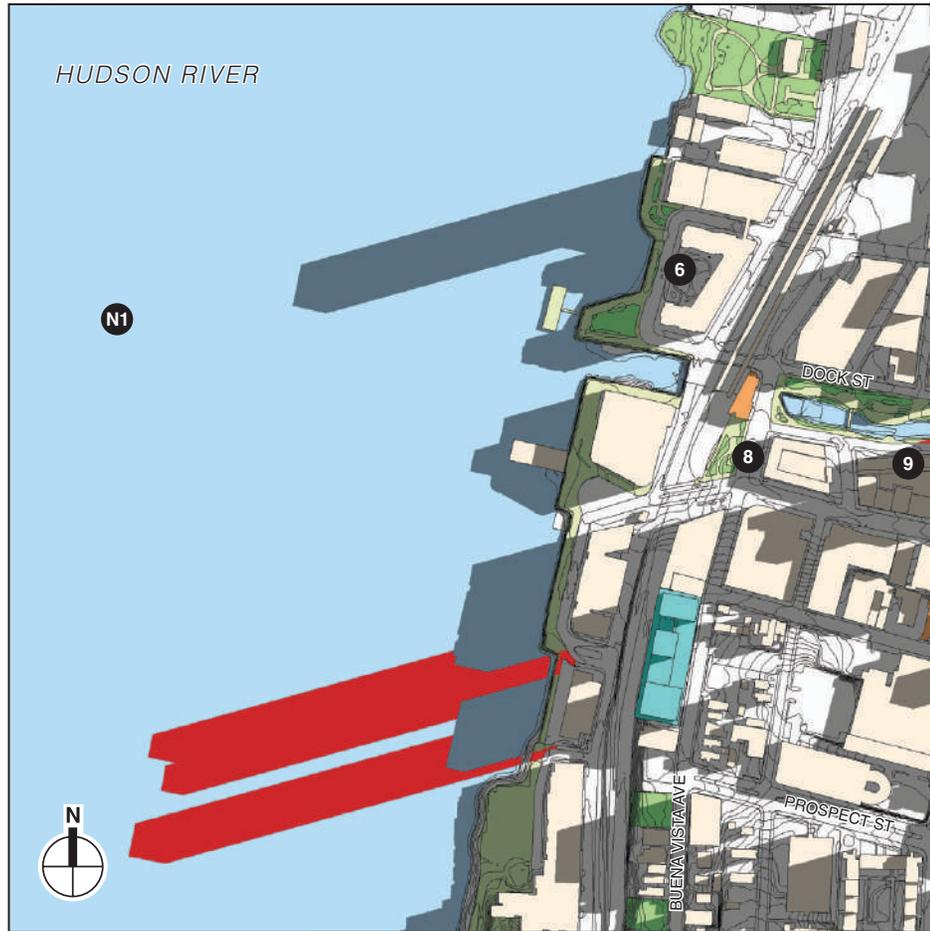
9:00 AM



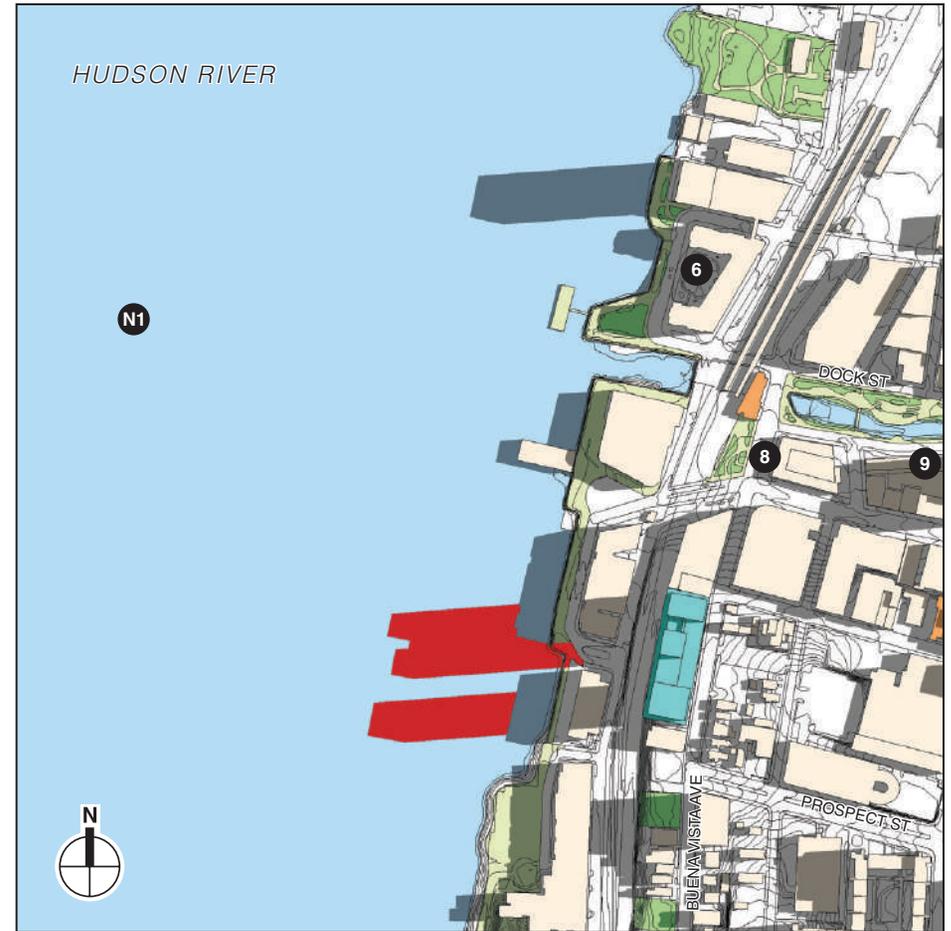
10:00 AM

- Proposed Project
- # Publicly Accessible Open Space (see Table 3-4 for number key)
- N# Natural Resources (see Table 3-4 for letter key)
- Incremental Shadow

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per CEQR Technical Manual guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.



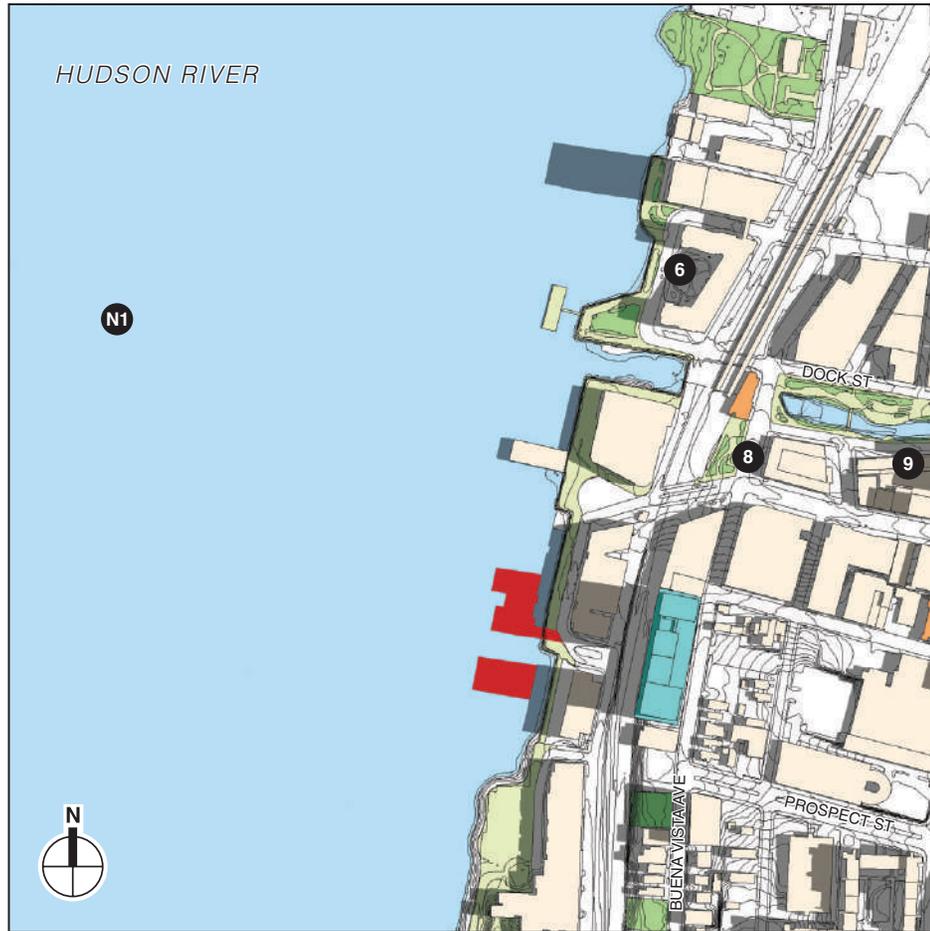
6:15 AM



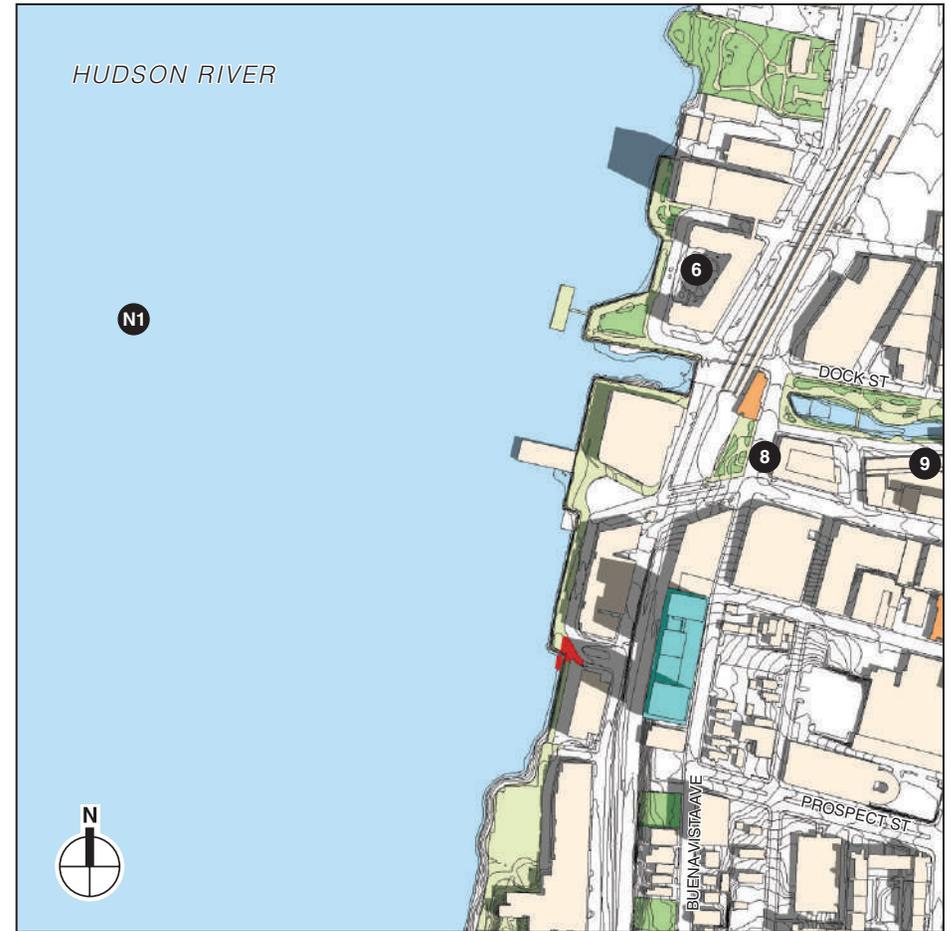
7:30 AM

- Proposed Project
- # Publicly Accessible Open Space (see Table 3-4 for number key)
- N# Natural Resources (see Table 3-4 for letter key)
- Incremental Shadow

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.



8:45 AM



10:00 AM

- Proposed Project
- # Publicly Accessible Open Space (see Table 3-4 for number key)
- N# Natural Resources (see Table 3-4 for letter key)
- Incremental Shadow

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per CEQR Technical Manual guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- N# *Natural Resources (see Table 3-4 for letter key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings.

12:15 PM



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- N# *Natural Resources (see Table 3-4 for letter key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings.

1:00 PM



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- N# *Natural Resources (see Table 3-4 for letter key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings.

1:45 PM



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- N# *Natural Resources (see Table 3-4 for letter key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings.

2:30 PM



- Proposed Project
- # Publicly Accessible Open Space (see Table 3-4 for number key)
- N# Natural Resources (see Table 3-4 for letter key)
- Incremental Shadow

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

7:36 AM



- Proposed Project*
- 6 *Publicly Accessible Open Space*  
*(see Table 3-4 for number key)*
- N1 *Natural Resources* *(see Table 3-4 for letter key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

8:15 AM



- Proposed Project
- # Publicly Accessible Open Space  
(see Table 3-4 for number key)
- N# Natural Resources (see Table 3-4 for letter key)
- Incremental Shadow

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

9:00 AM



- Proposed Project*
- # *Publicly Accessible Open Space (see Table 3-4 for number key)*
- N# *Natural Resources (see Table 3-4 for letter key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

12:45 PM

March 21 / September 21  
 Detailed Analysis  
**Figure 3-55**



- Proposed Project*
- # *Publicly Accessible Open Space (see Table 3-4 for number key)*
- N# *Natural Resources (see Table 3-4 for letter key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

4:29 PM

March 21 / September 21  
 Detailed Analysis  
**Figure 3-56**



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- N# *Natural Resources (see Table 3-4 for letter key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

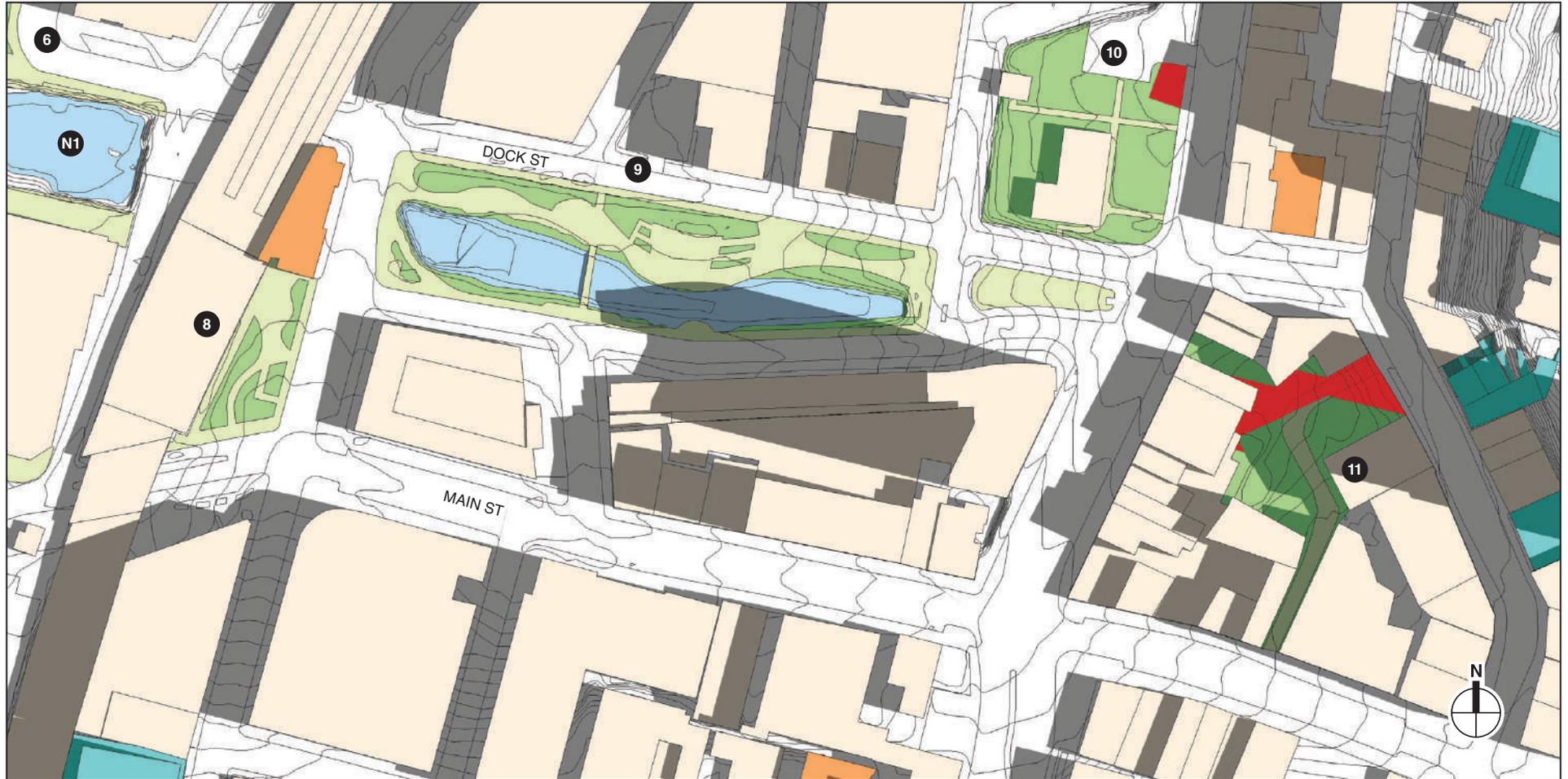
6:30 AM



- Proposed Project
- # Publicly Accessible Open Space  
(see Table 3-4 for number key)
- N# Natural Resources (see Table 3-4 for letter key)
- Incremental Shadow

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

7:30 AM



- Proposed Project*
- # *Publicly Accessible Open Space (see Table 3-4 for number key)*
- N# *Natural Resources (see Table 3-4 for letter key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

8:30 AM



- Proposed Project*
- # *Publicly Accessible Open Space (see Table 3-4 for number key)*
- N# *Natural Resources (see Table 3-4 for letter key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

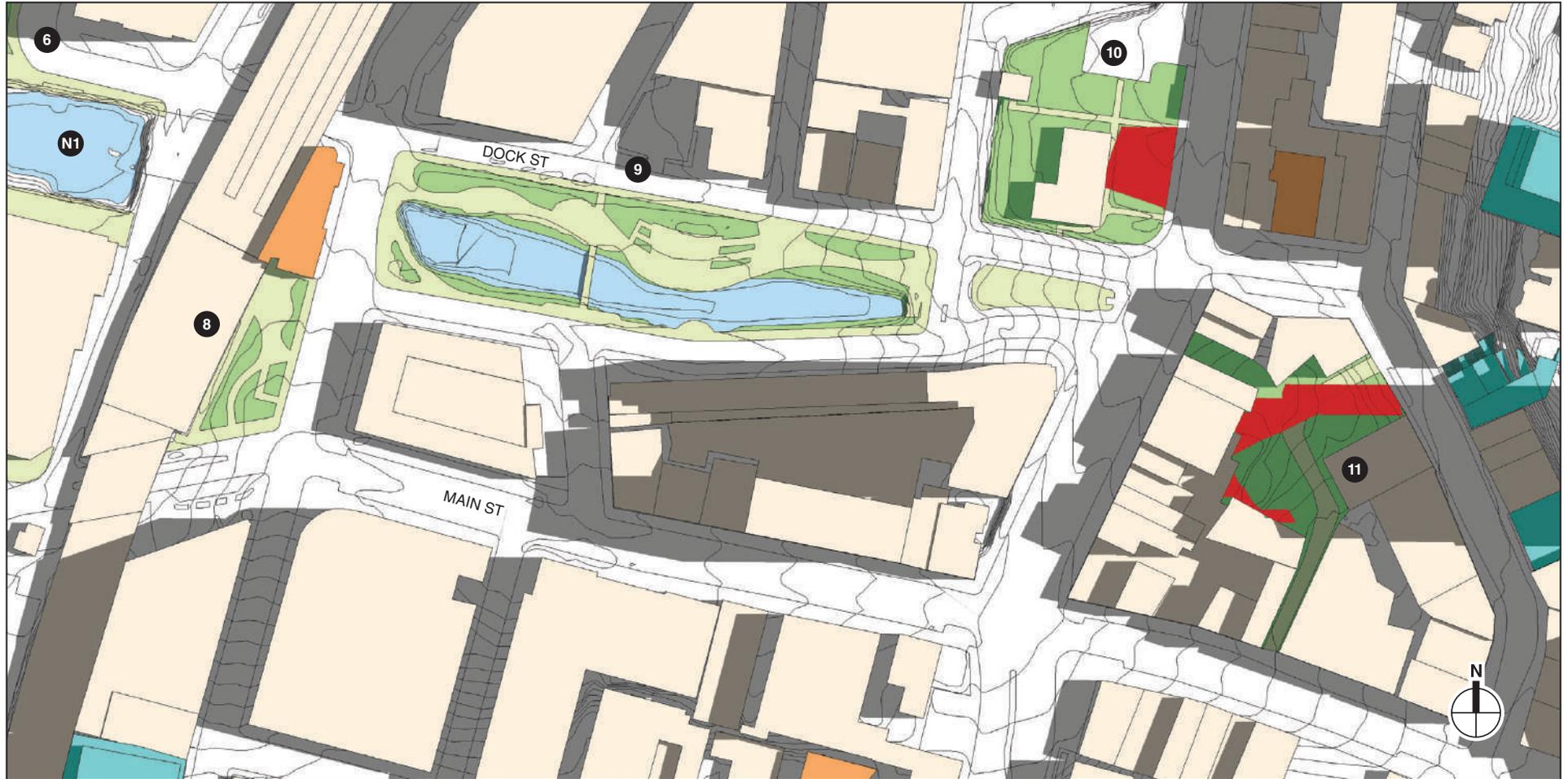
9:30 AM



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- N# *Natural Resources (see Table 3-4 for letter key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

6:45 AM



- Proposed Project*
- # *Publicly Accessible Open Space (see Table 3-4 for number key)*
- N# *Natural Resources (see Table 3-4 for letter key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

8:00 AM



- Proposed Project*
- # *Publicly Accessible Open Space  
(see Table 3-4 for number key)*
- N# *Natural Resources (see Table 3-4 for letter key)*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

9:15 AM



2:40 PM



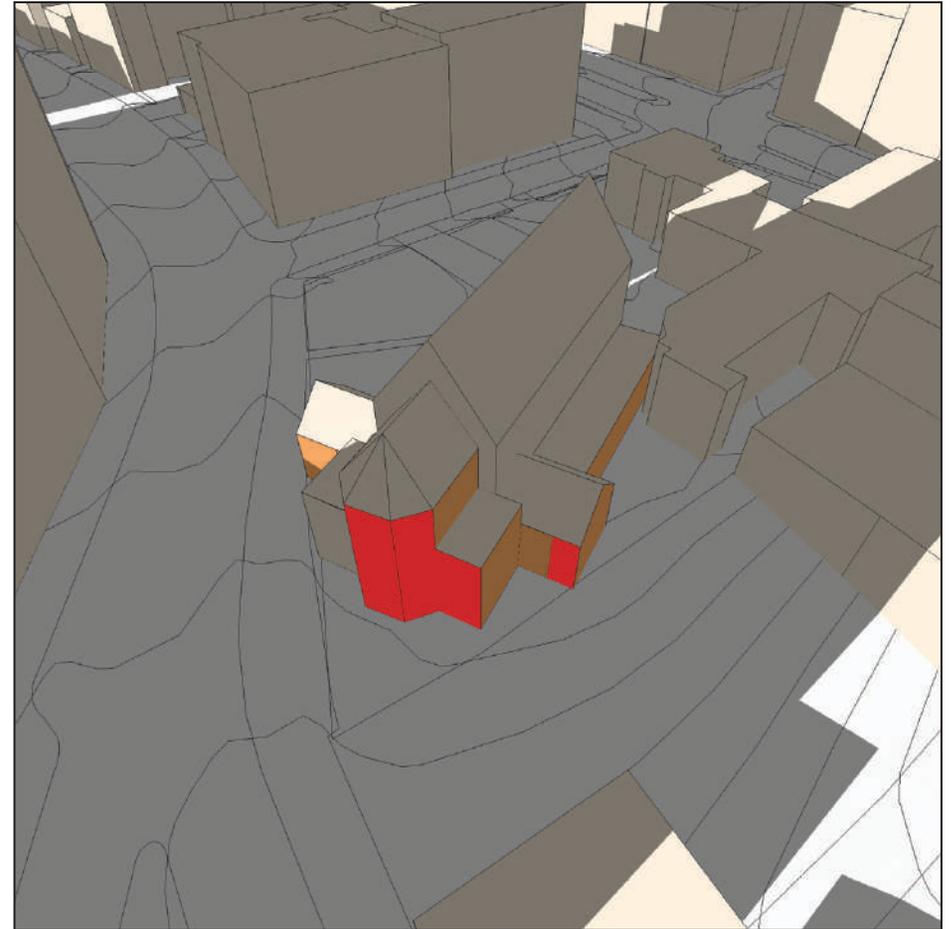
2:53 PM

- Proposed Project
- # Publicly Accessible Open Space  
(see Table 3-4 for number key)
- Incremental Shadow

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings.



Photo looking southwest



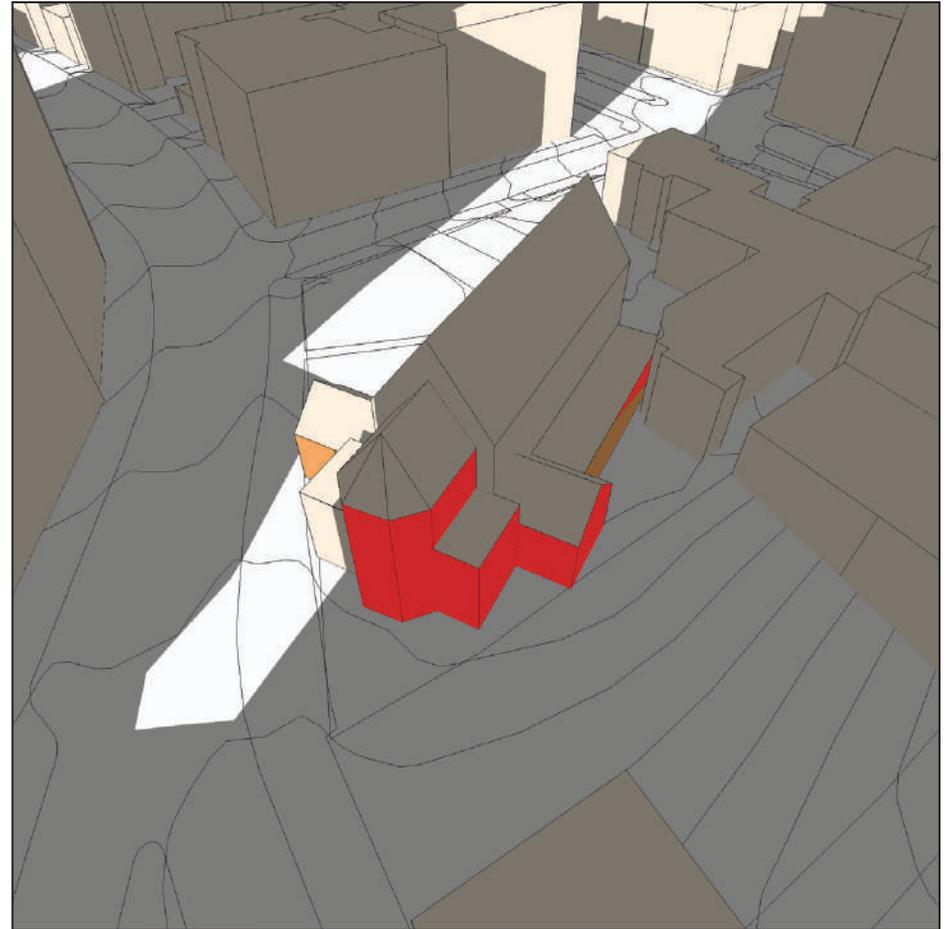
March 21 / September 21  
7:36 AM

- Sunlight-Sensitive Features of Historic Resources*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Development. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.



Photo looking southwest



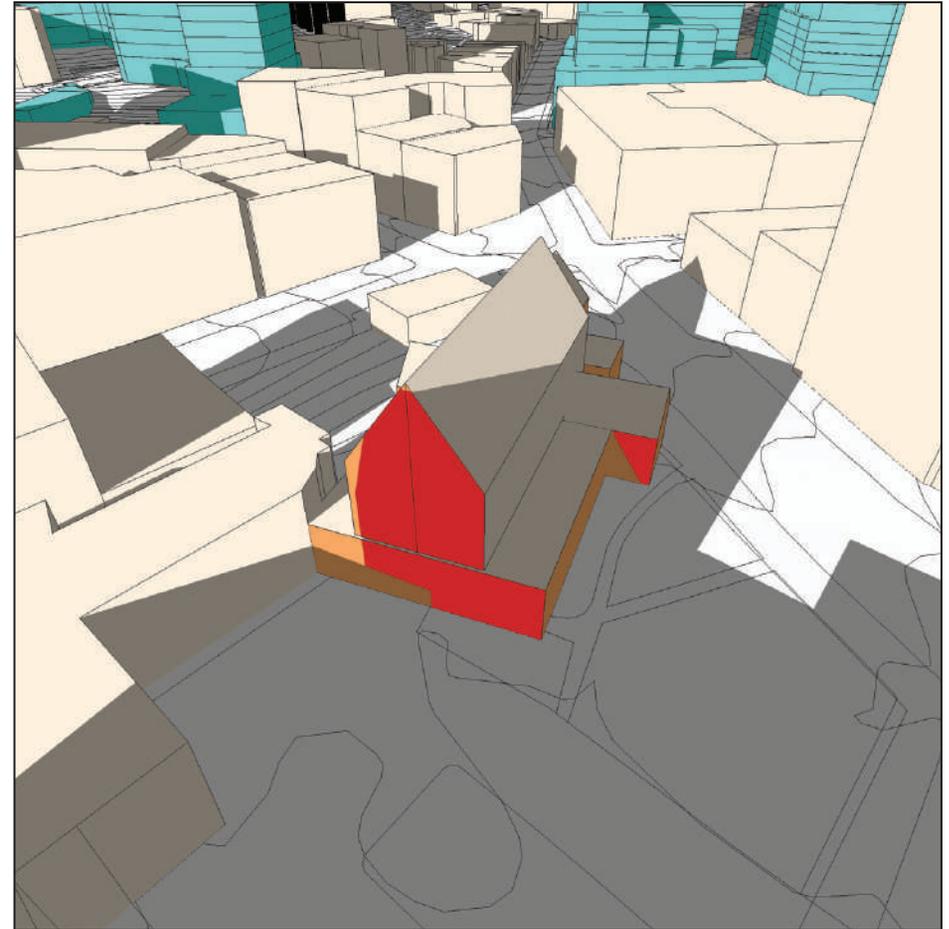
May 6 / August 6  
6:27 AM

- Sunlight-Sensitive Features of Historic Resources*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Development. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.



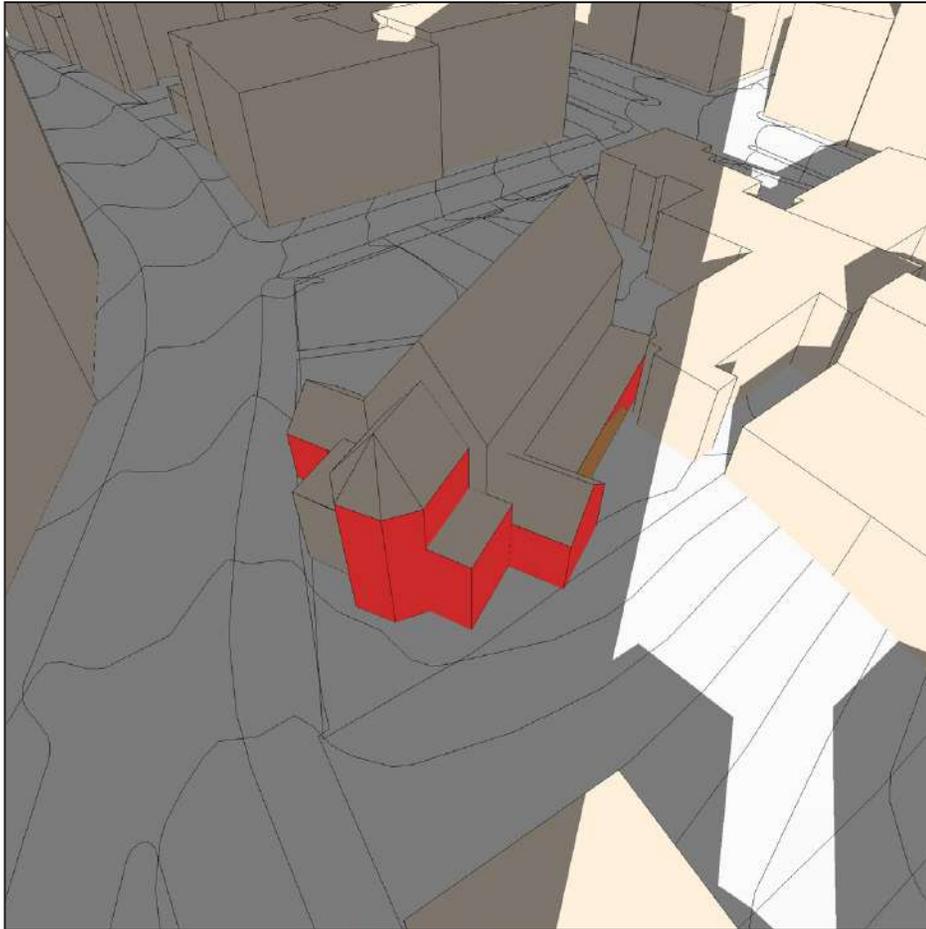
Photo looking northeast



May 6 / August 6  
5:10 PM

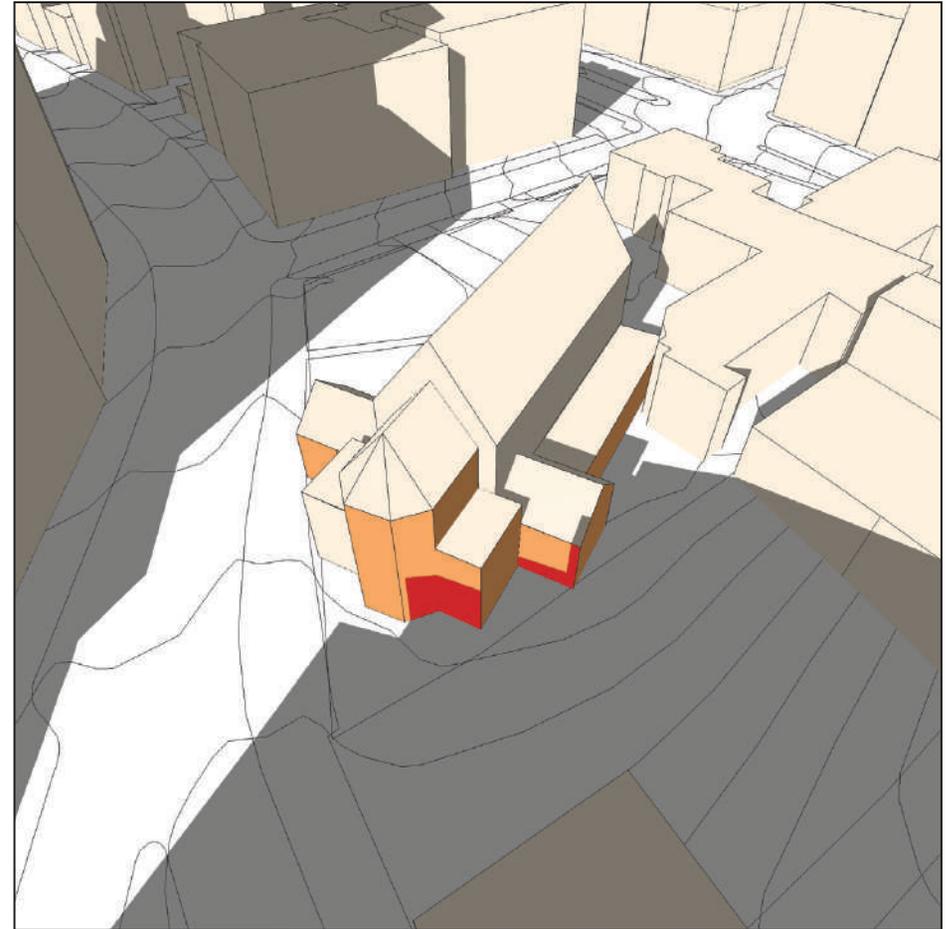
- Sunlight-Sensitive Features of Historic Resources*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Development. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.



June 21  
6:15 AM

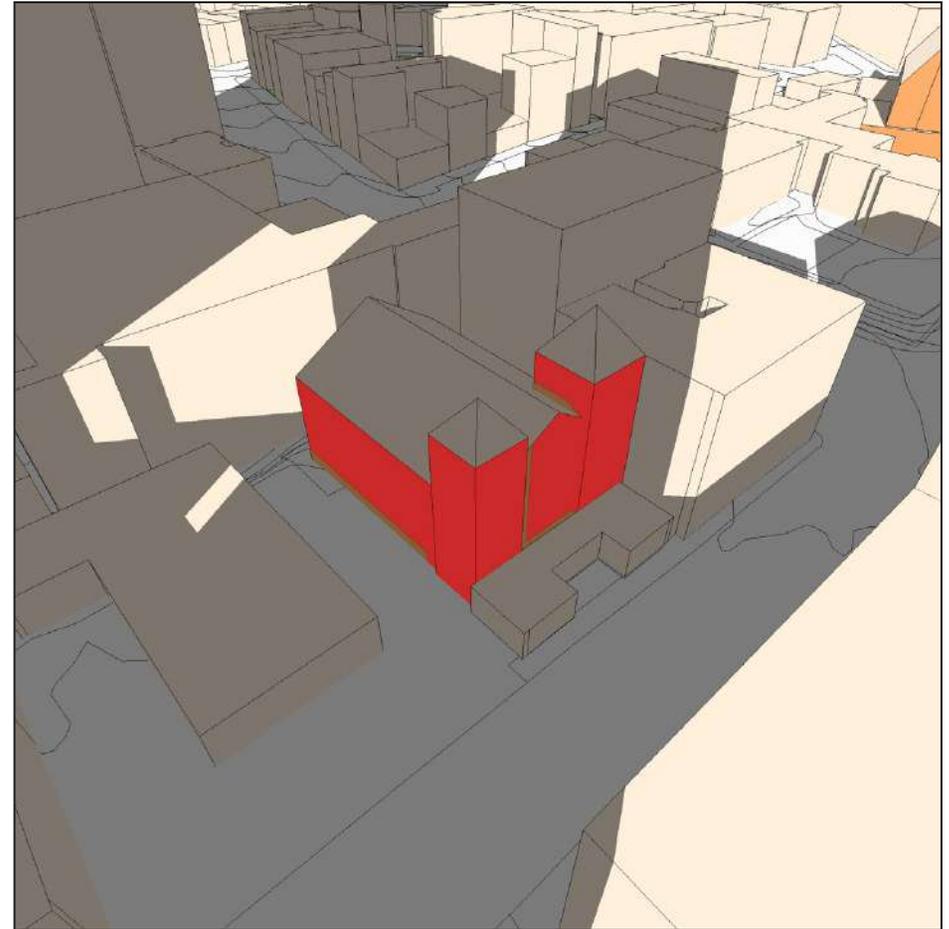
- Sunlight-Sensitive Features of Historic Resources*
- Incremental Shadow*



June 21  
7:15 AM

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Development. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

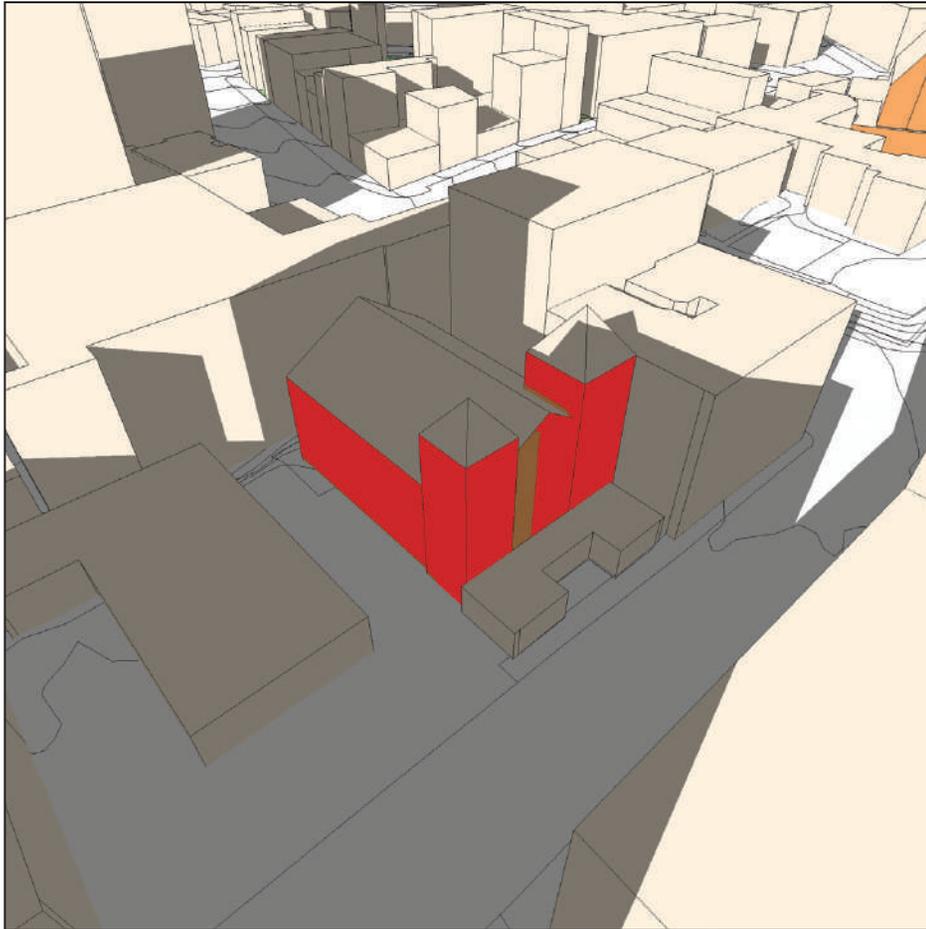
A - St Johns Episcopal Church  
Detailed Analysis  
**Figure 3-68**



March 21 / September 21  
4:25 PM

- Sunlight-Sensitive Features of Historic Resources
- Incremental Shadow

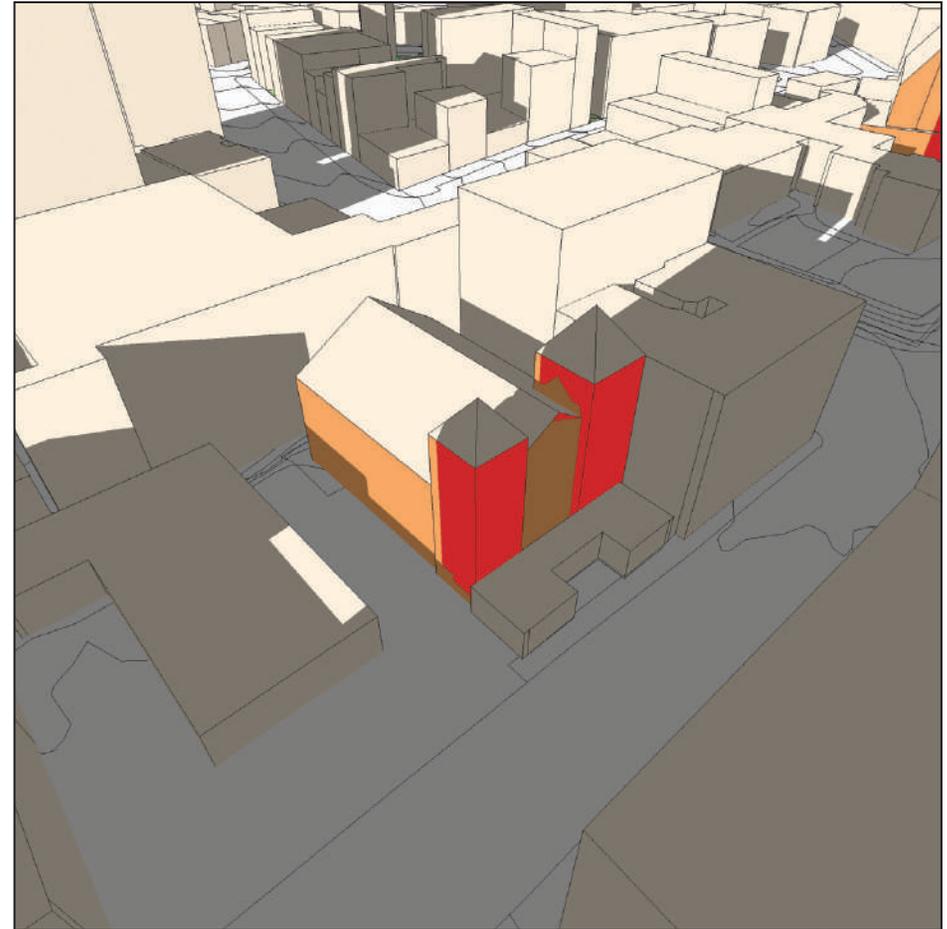
NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Development. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.



May 6 / August 6  
4:30 PM

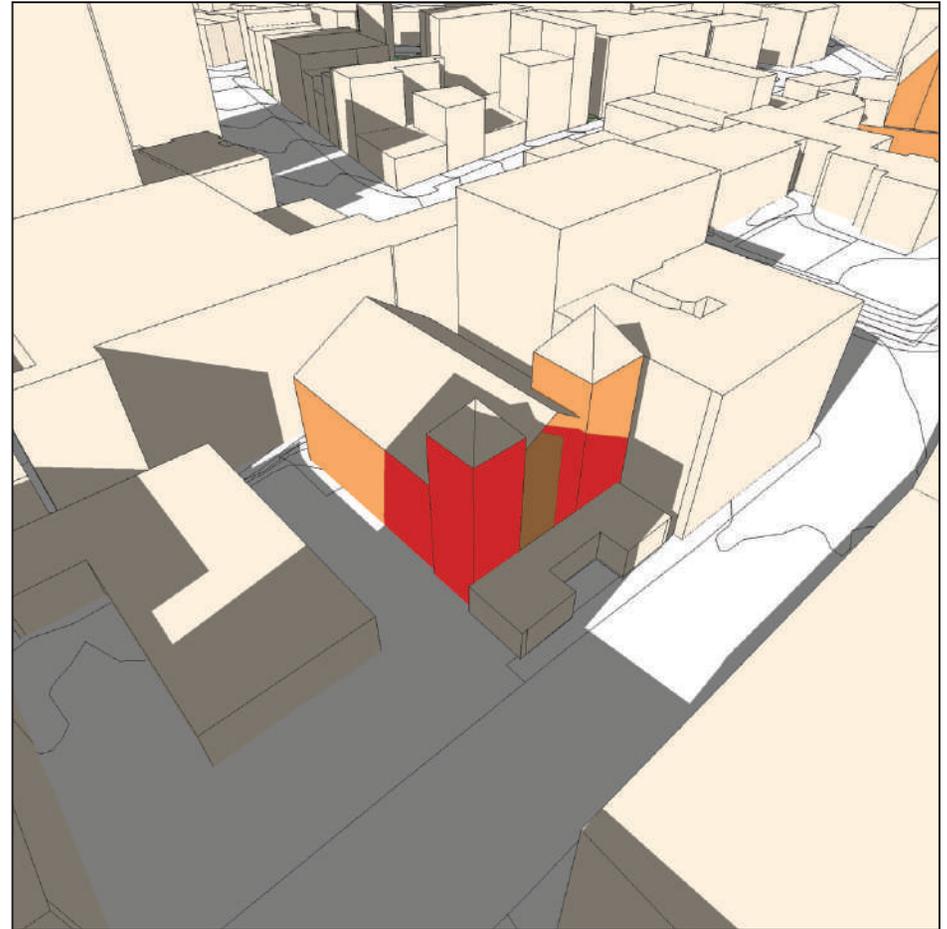
- Sunlight-Sensitive Features of Historic Resources*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Development. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.



May 6 / August 6  
5:18 PM

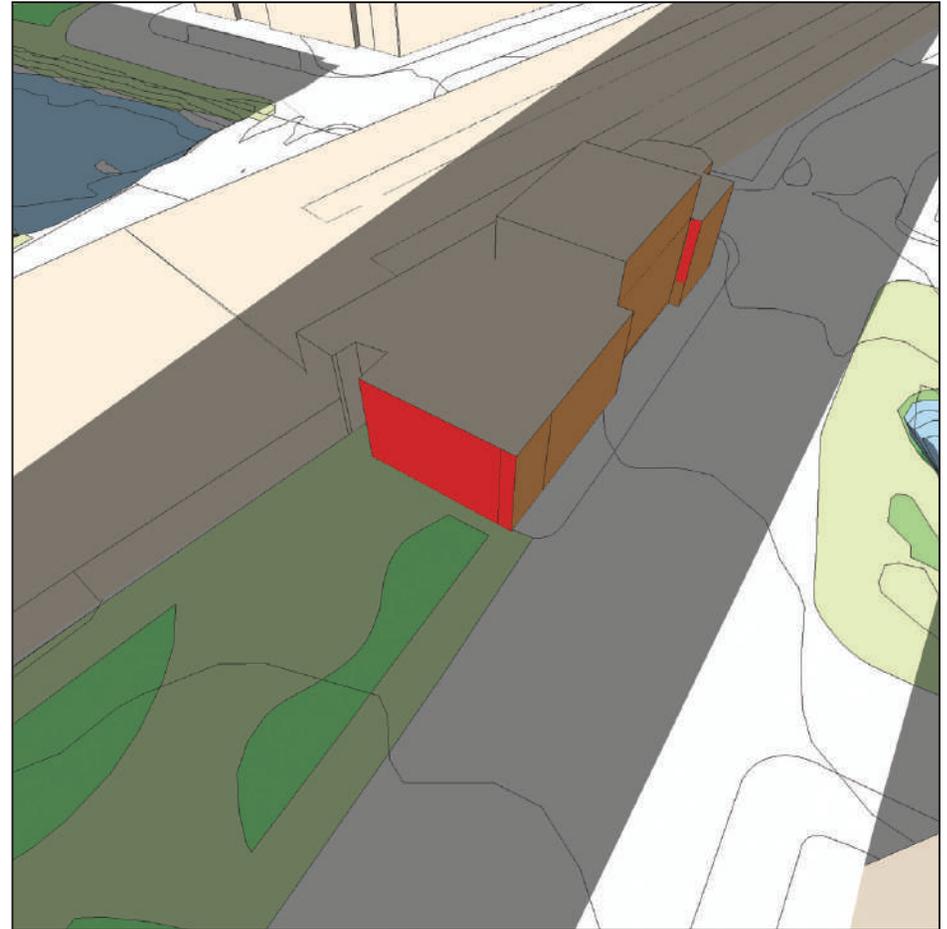
B - Central Methodist Church  
Detailed Analysis  
Figure 3-70



- Sunlight-Sensitive Features of Historic Resources
- Incremental Shadow

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Development. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

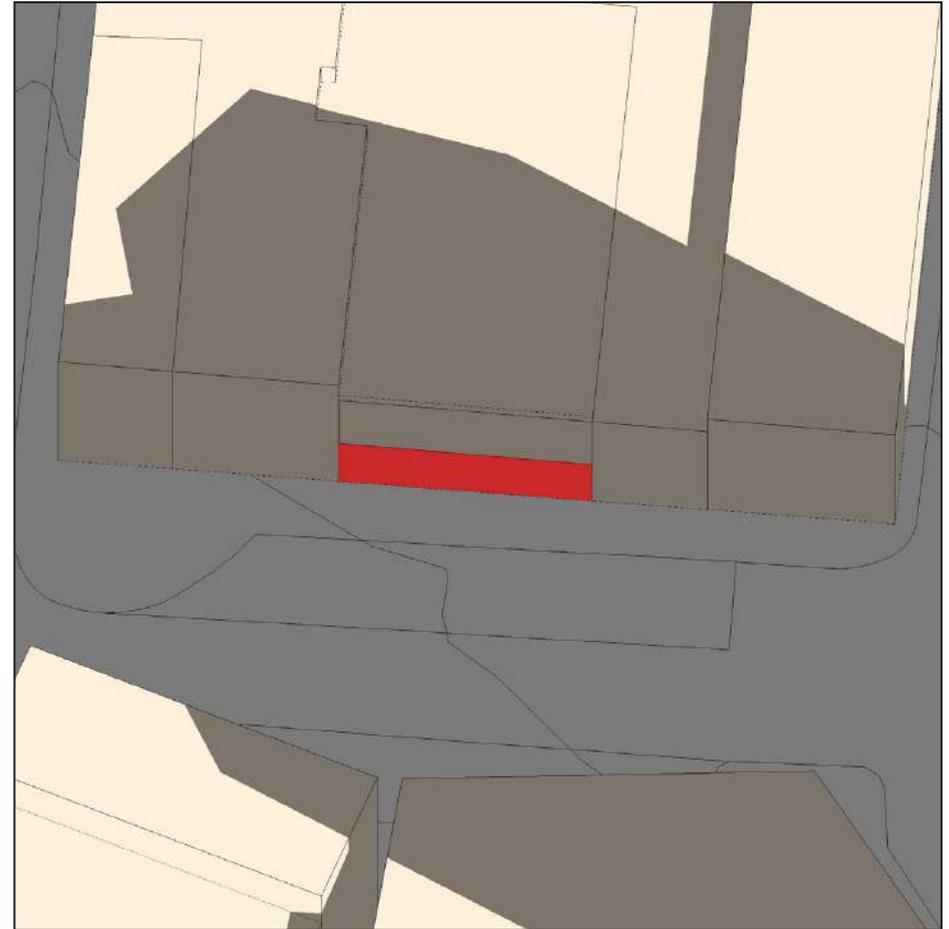
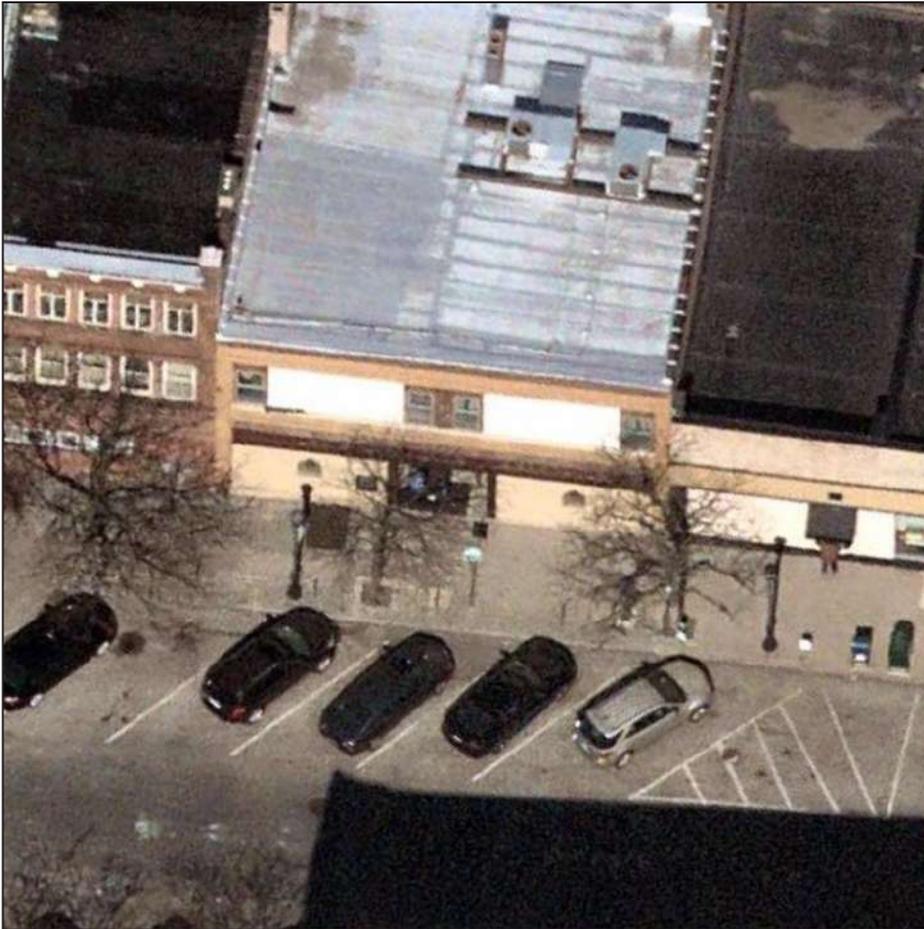
June 21  
4:30 PM



- Sunlight-Sensitive Features of Historic Resources*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Development. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings.

December 21  
1:00 PM

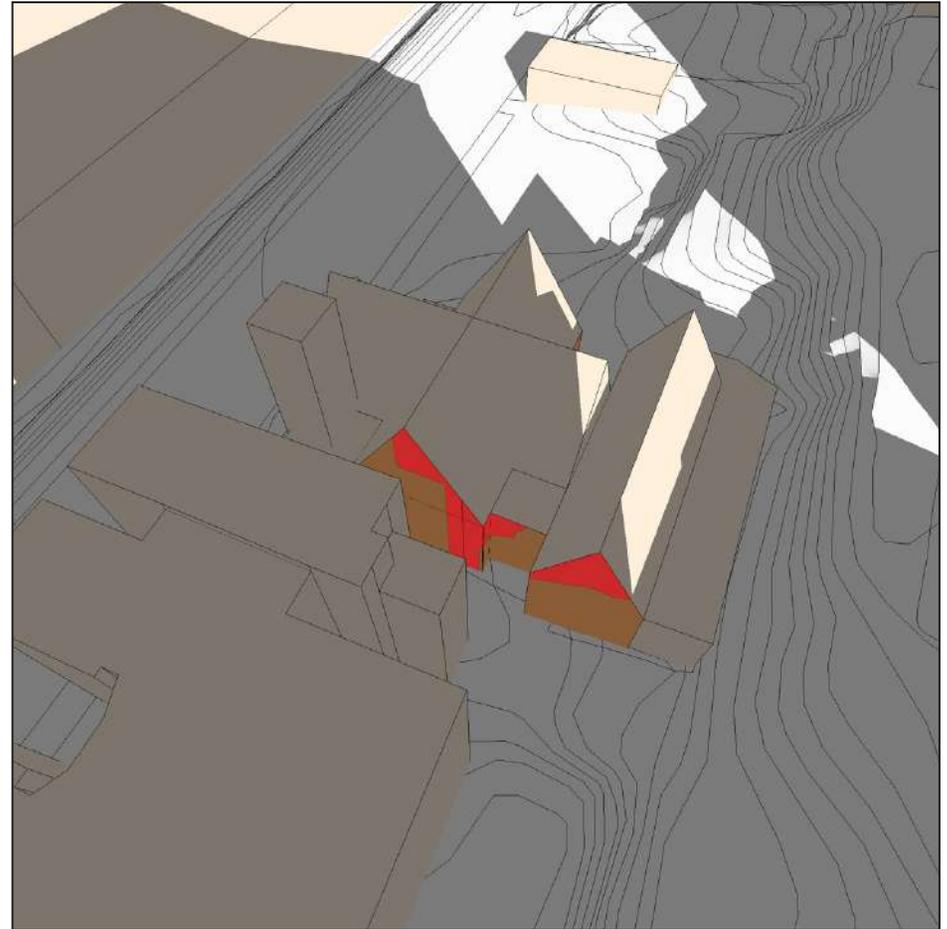


March 21 / September 21  
9:00 AM

- Sunlight-Sensitive Features of Historic Resources*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Development. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

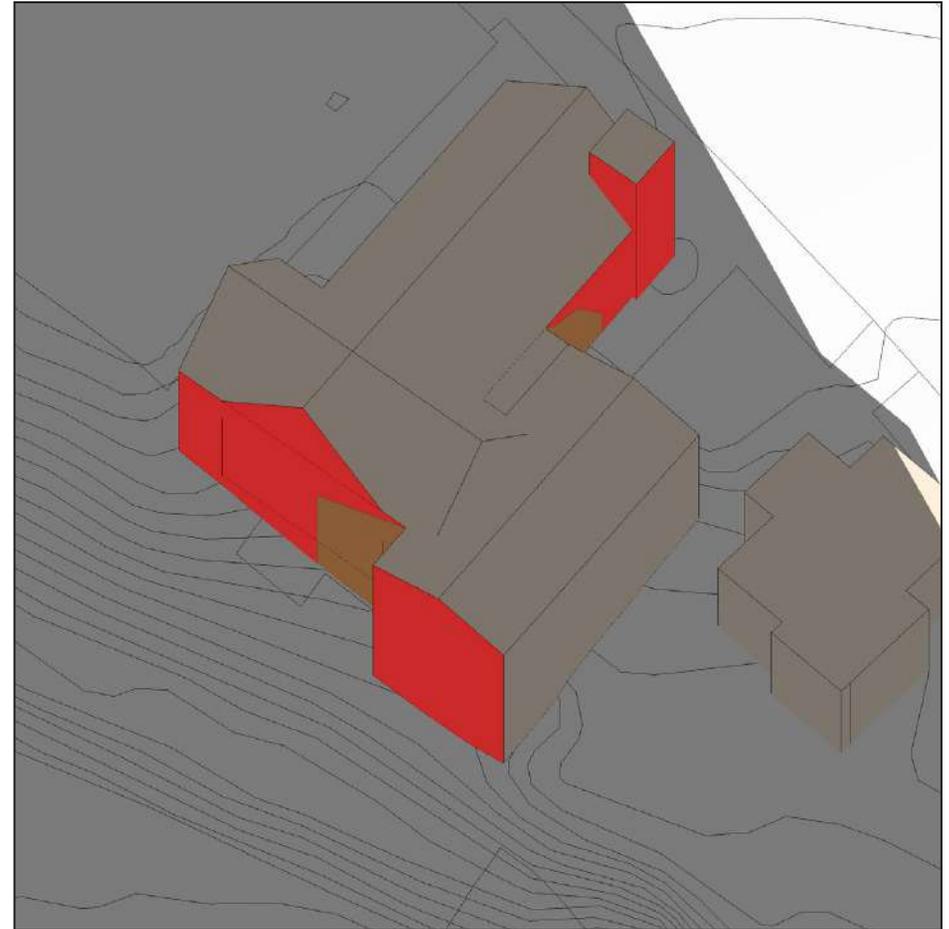
D - 5 Manor House Sq  
Detailed Analysis  
**Figure 3-73**



December 21  
10:00 AM

-  *Sunlight-Sensitive Features of Historic Resources*
-  *Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Development. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings.

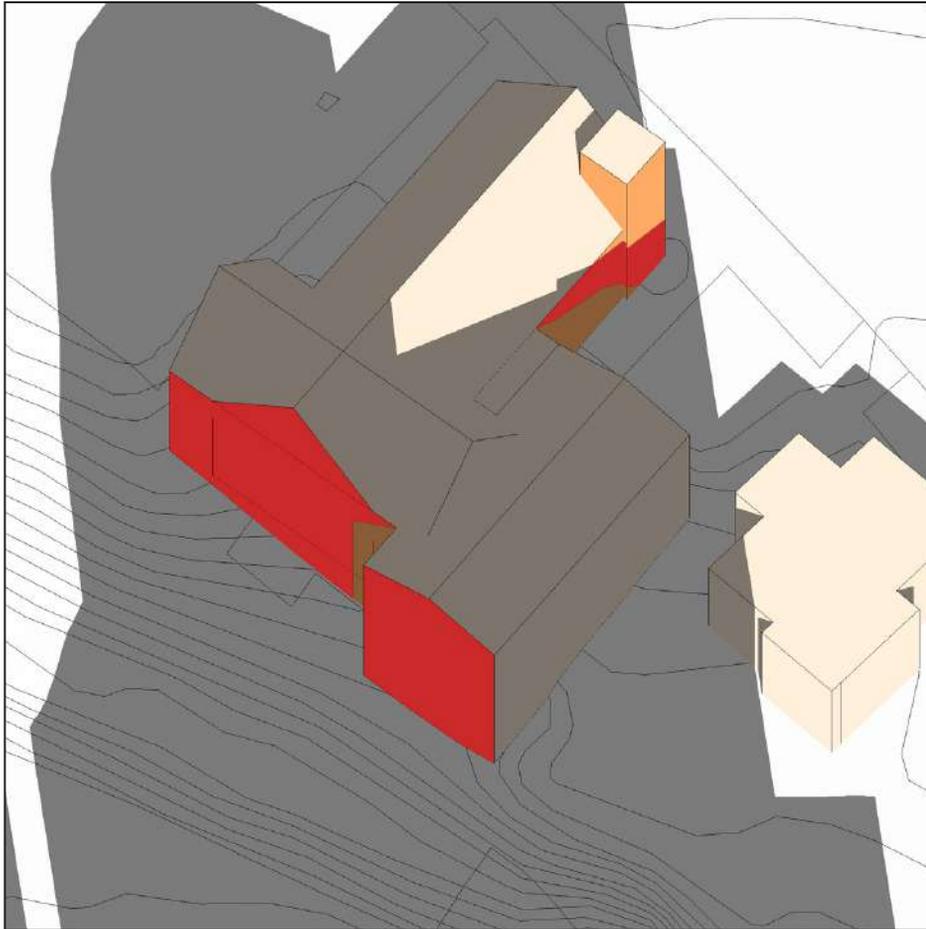


March 21 / September 21  
3:45 PM

- Sunlight-Sensitive Features of Historic Resources
- Incremental Shadow

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Development. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

I - Mt. Carmel Baptist Church  
Detailed Analysis  
**Figure 3-75**



May 6 / August 6  
4:00 PM

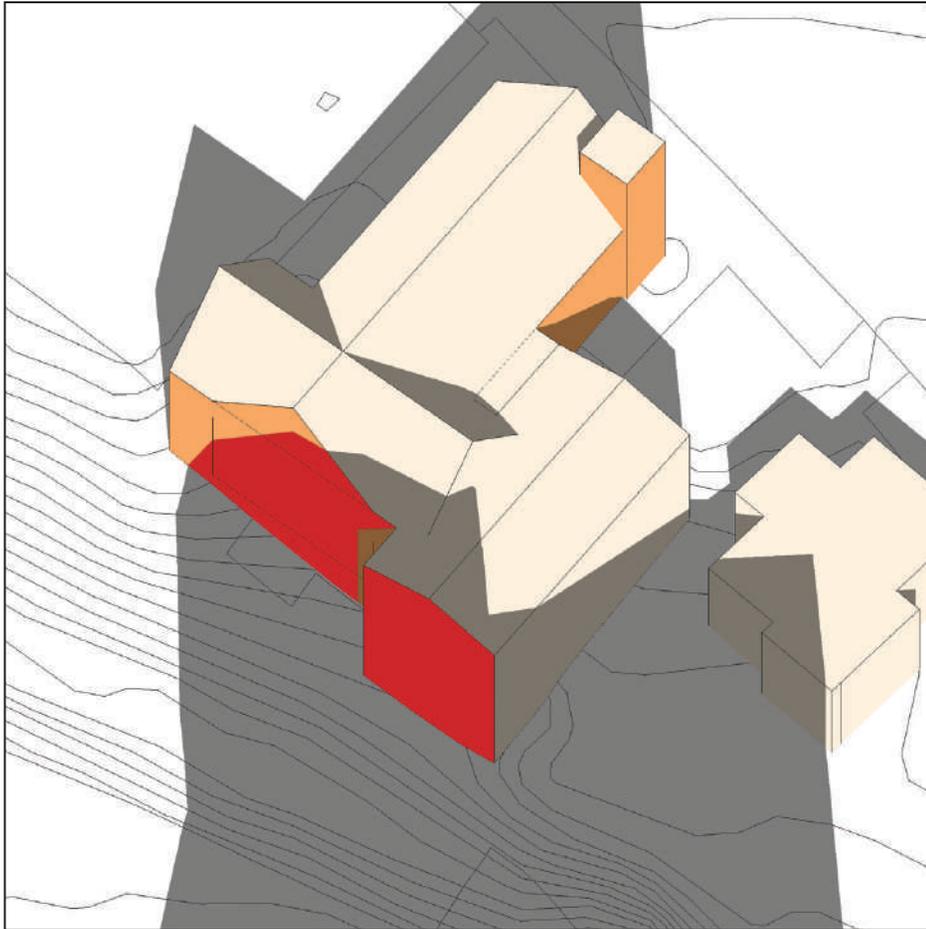
- Sunlight-Sensitive Features of Historic Resources
- Incremental Shadow

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Development. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.



May 6 / August 6  
5:00 PM

I - Mt. Carmel Baptist Church  
Detailed Analysis  
Figure 3-76



June 21  
3:45 PM

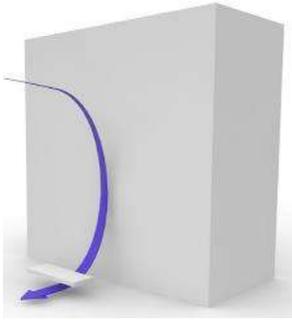
- Sunlight-Sensitive Features of Historic Resources*
- Incremental Shadow*

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the Proposed Development. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

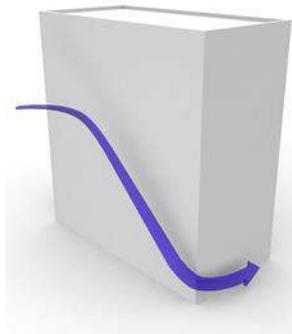


June 21  
5:00 PM

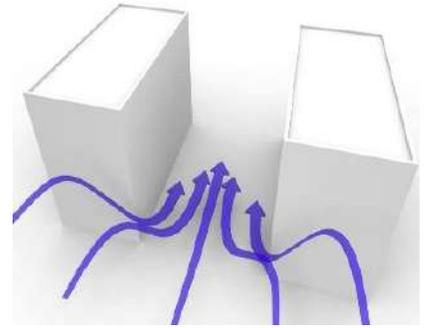
I - Mt. Carmel Baptist Church  
Detailed Analysis  
**Figure 3-77**



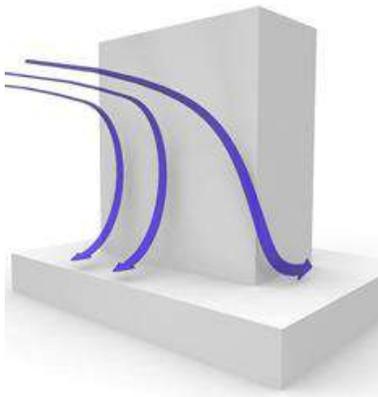
a) Downwashing



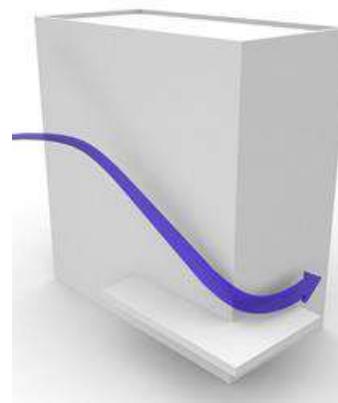
b) Corner Acceleration



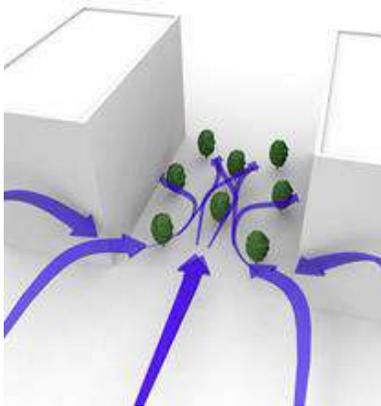
c) Channeling Effect



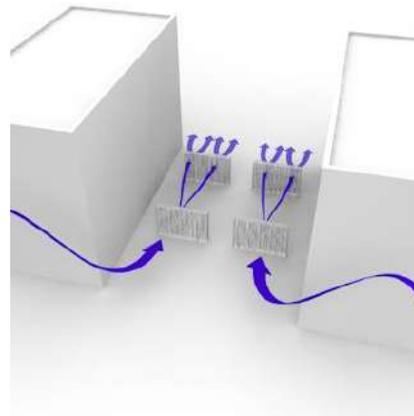
d) Podium/Tower Setback



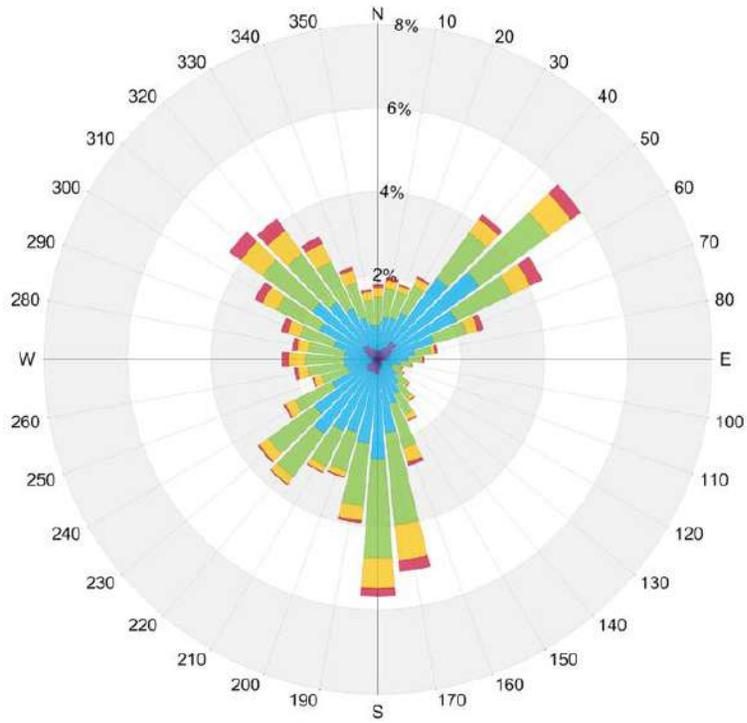
e) Canopy



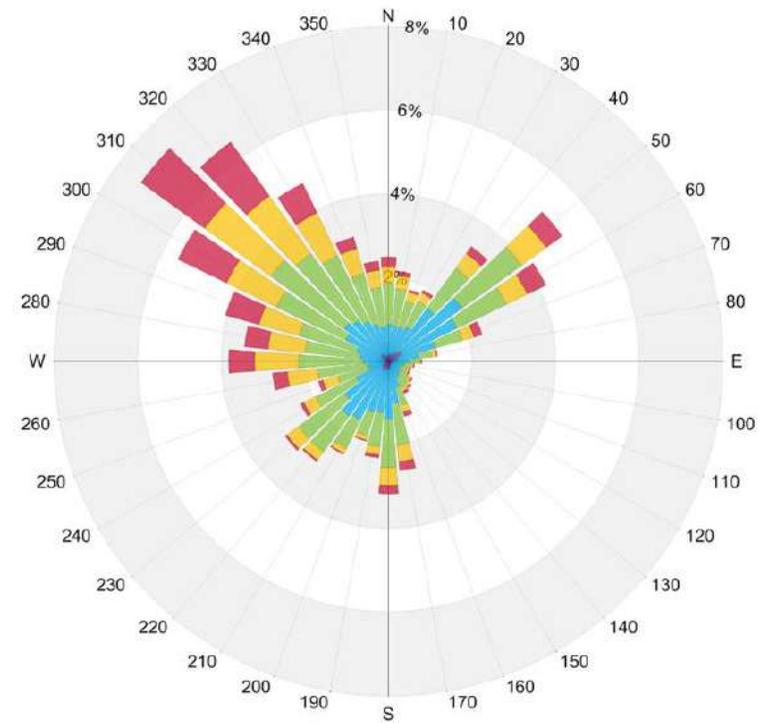
f) Landscaping



g) Wind Screens



**Summer (May - October)**



**Winter (November - April)**

Wind Speed (mph)	Probability (%)	
	Summer	Winter
Calm	3.9	2.9
1-5	9.4	6.0
6-10	37.6	28.0
11-15	34.7	34.5
16-20	10.7	17.1
>20	3.7	11.4



Distribution of Wind Speed and Direction (Blowing From) LaGuardia International Airport (1988-2018)

**Figure 3-79**

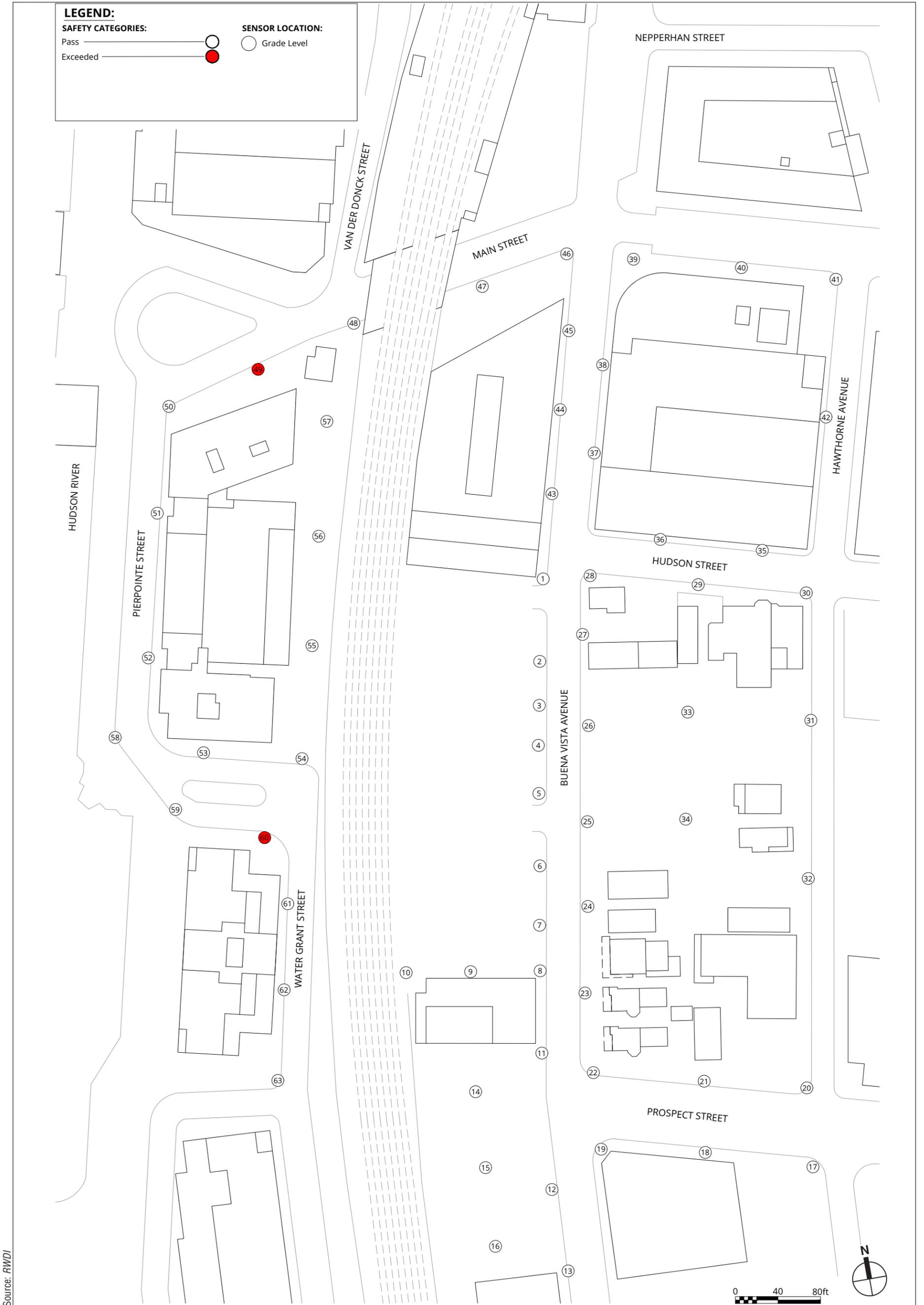


Source: RWDI

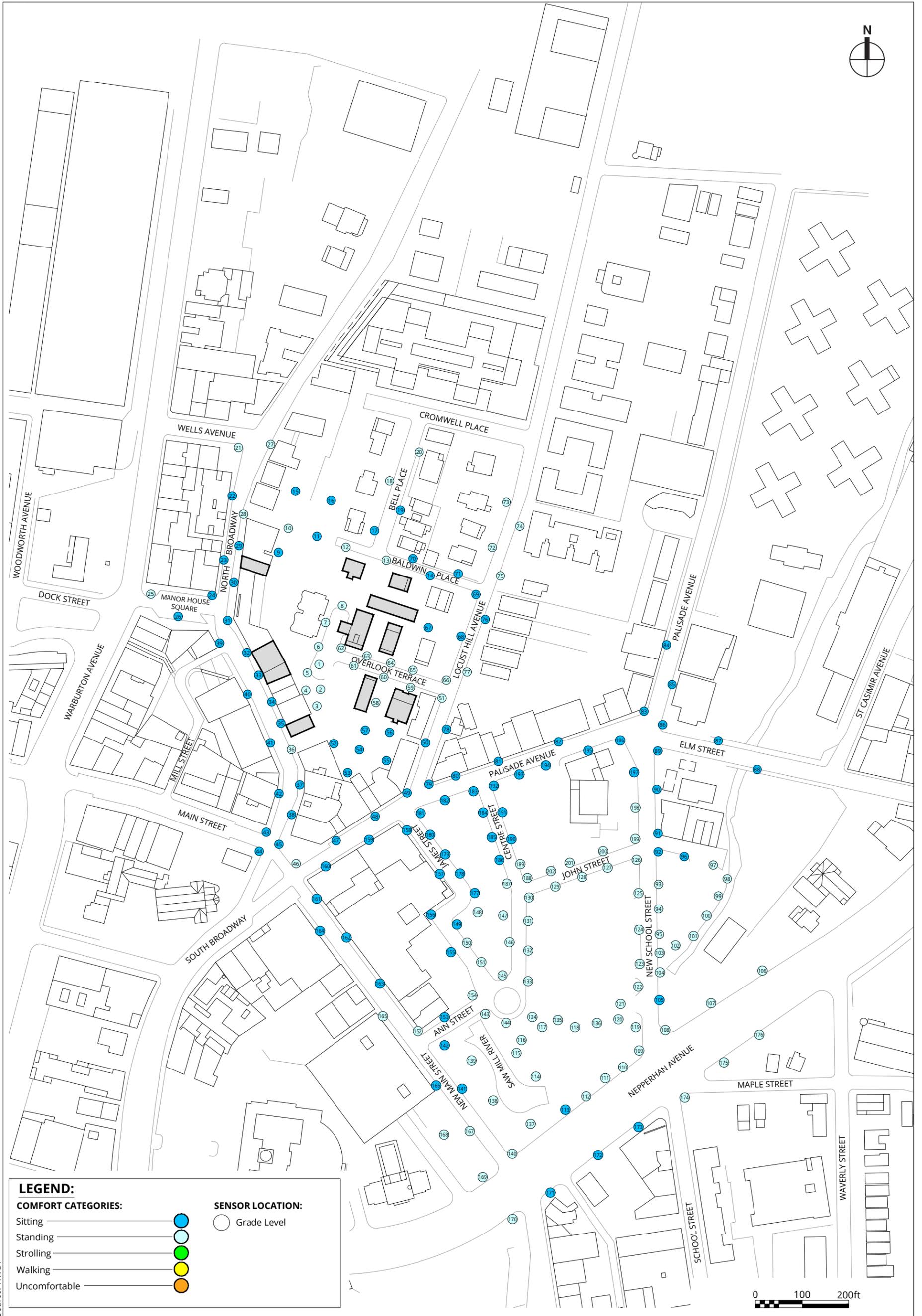
Pedestrian Wind Comfort Conditions, Teutonia Site Existing Conditions, Summer  
Figure 3-80



Source: RWDI



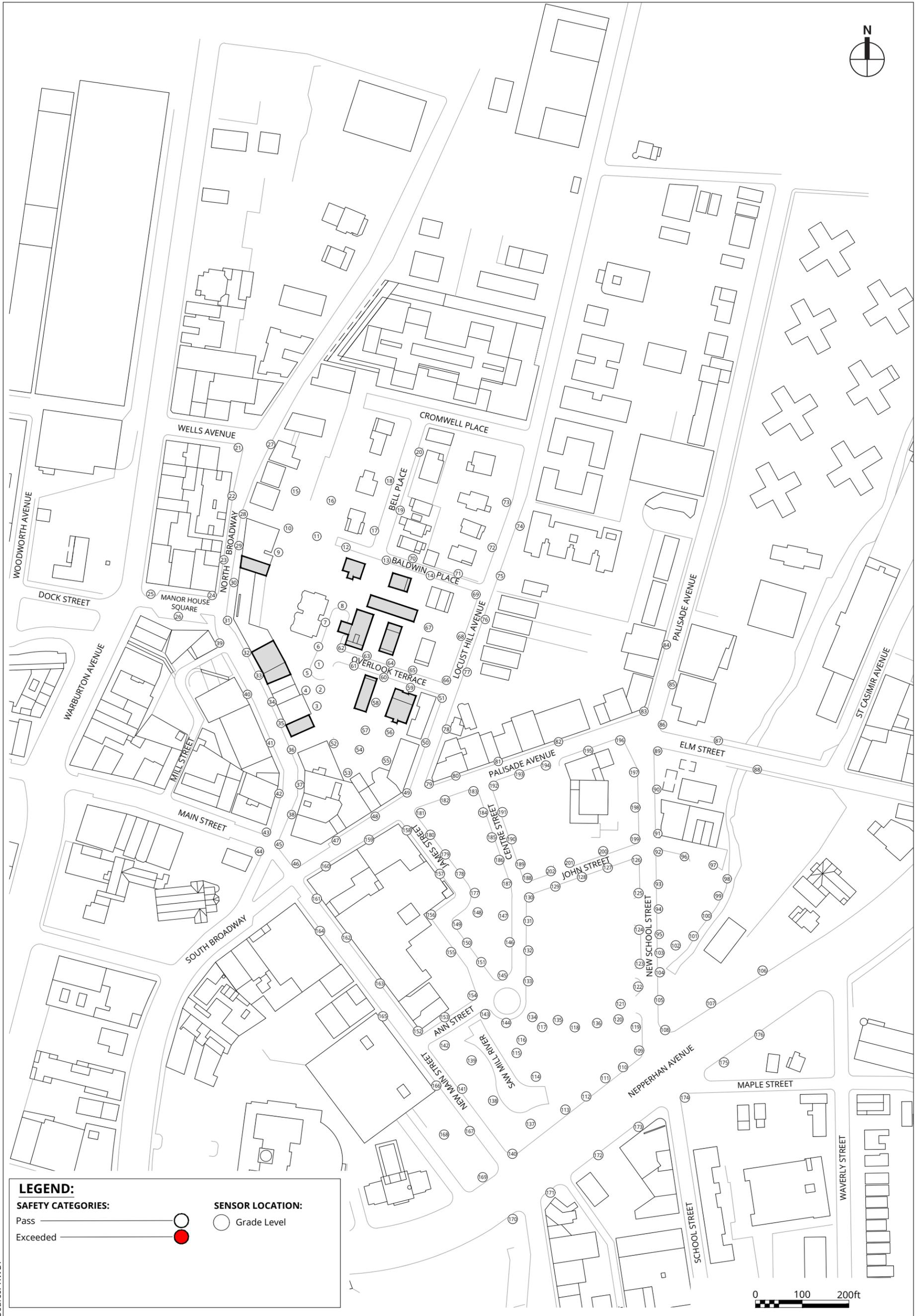
Pedestrian Wind Safety Conditions, Teutonia Site Existing Conditions  
Figure 3-82



Source: RWDI

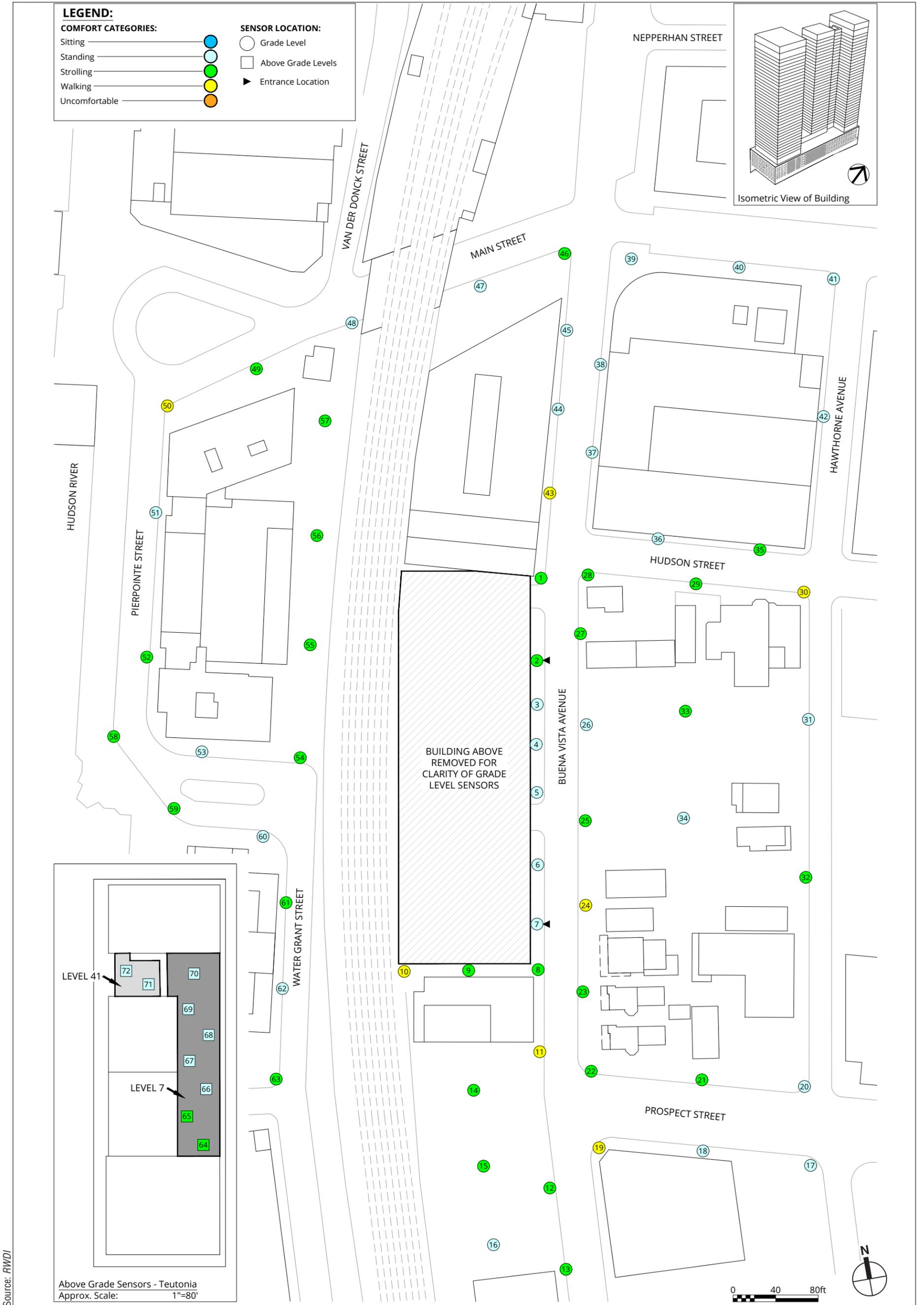
Pedestrian Wind Comfort Conditions, Chicken Island and North Broadway Sites Existing Conditions, Summer  
**Figure 3-83**



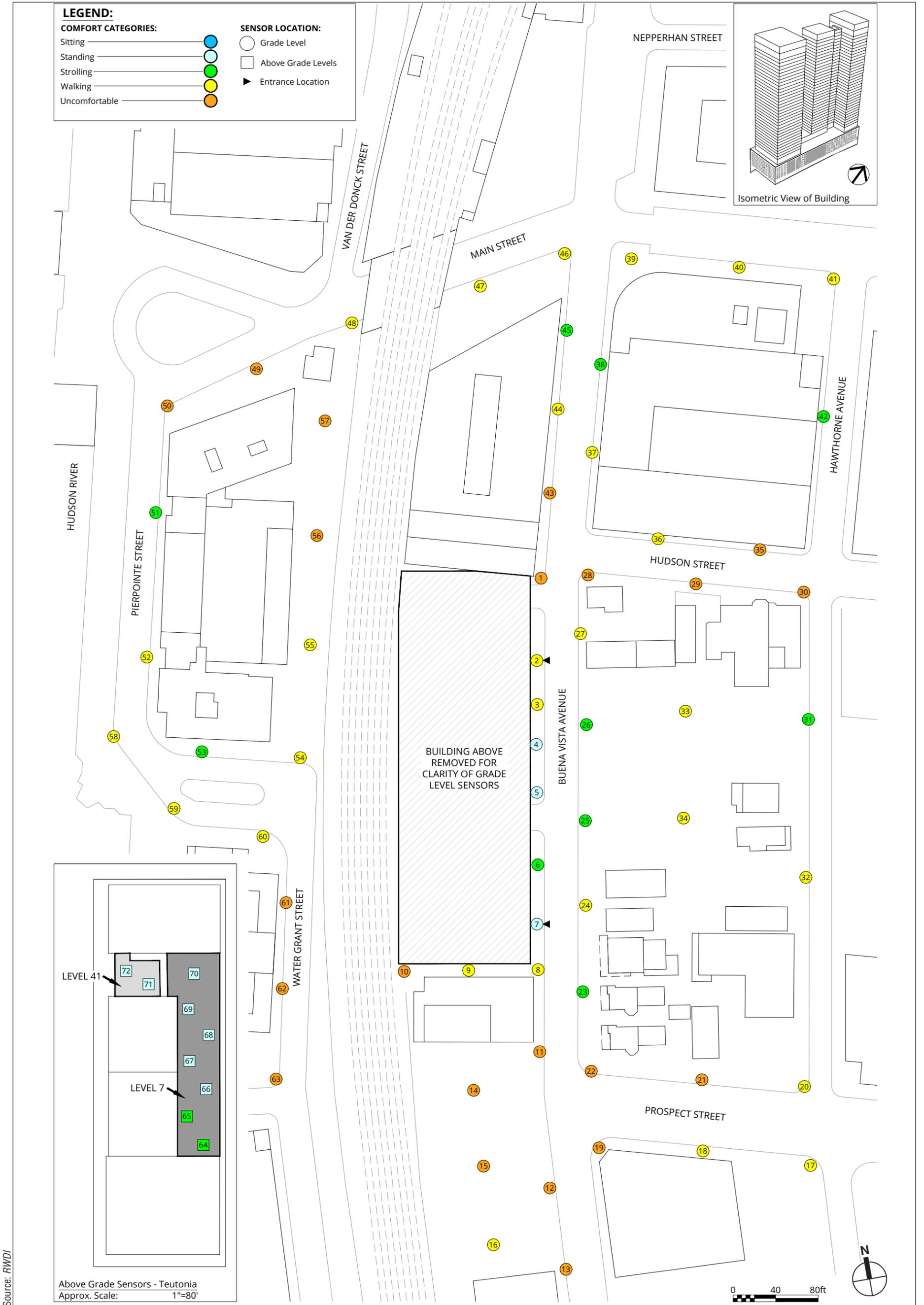


Source: RWDI

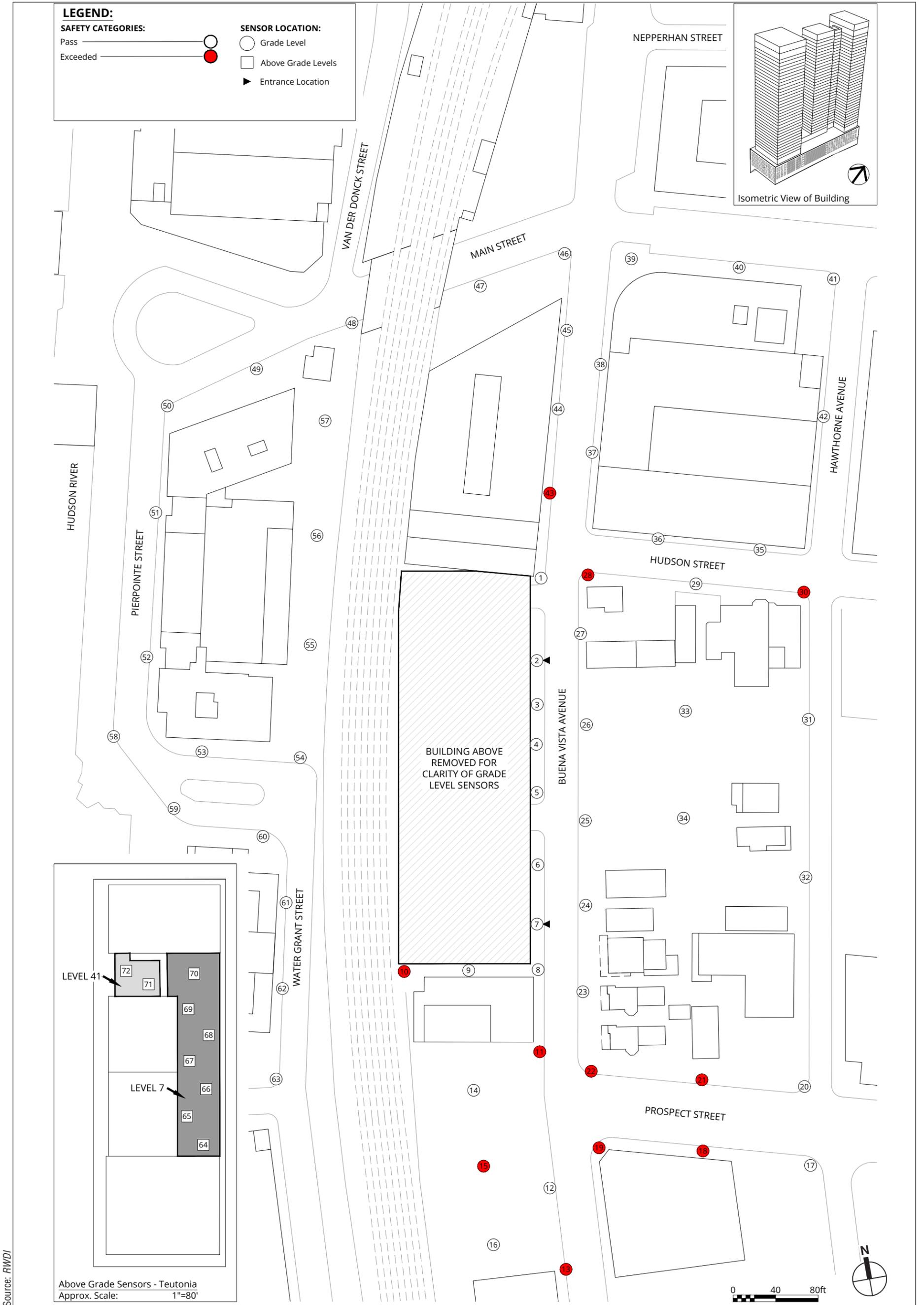
Pedestrian Wind Safety Conditions, Chicken Island and North Broadway Sites Existing Conditions  
**Figure 3-85**



Pedestrian Wind Comfort Conditions, Teutonia Site Proposed Conditions, Summer  
**Figure 3-86**



Pedestrian Wind Comfort Conditions, Teutonia Site Proposed Conditions, Winter  
**Figure 3-87**



Pedestrian Wind Safety Conditions, Teutonia Site Proposed Conditions  
**Figure 3-88**



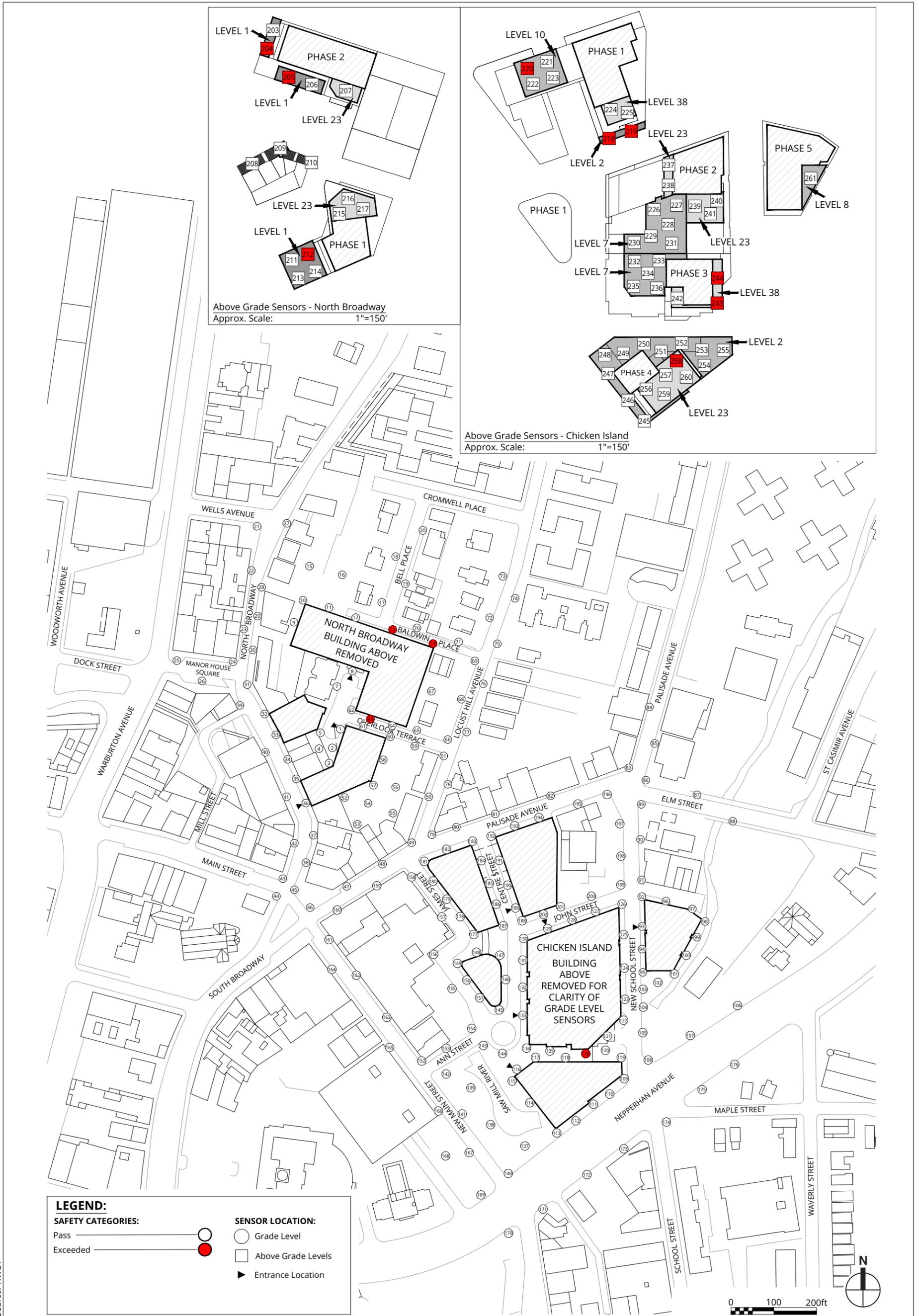
Source: RWDI

Pedestrian Wind Comfort Conditions, Chicken Island and North Broadway Sites Proposed Conditions, Summer  
**Figure 3-89**



Source: RWDI

Pedestrian Wind Comfort Conditions, Chicken Island and North Broadway Sites Proposed Conditions, Winter  
Figure 3-90



Source: RWDI

Pedestrian Wind Safety Conditions, Chicken Island and North Broadway Sites Proposed Conditions