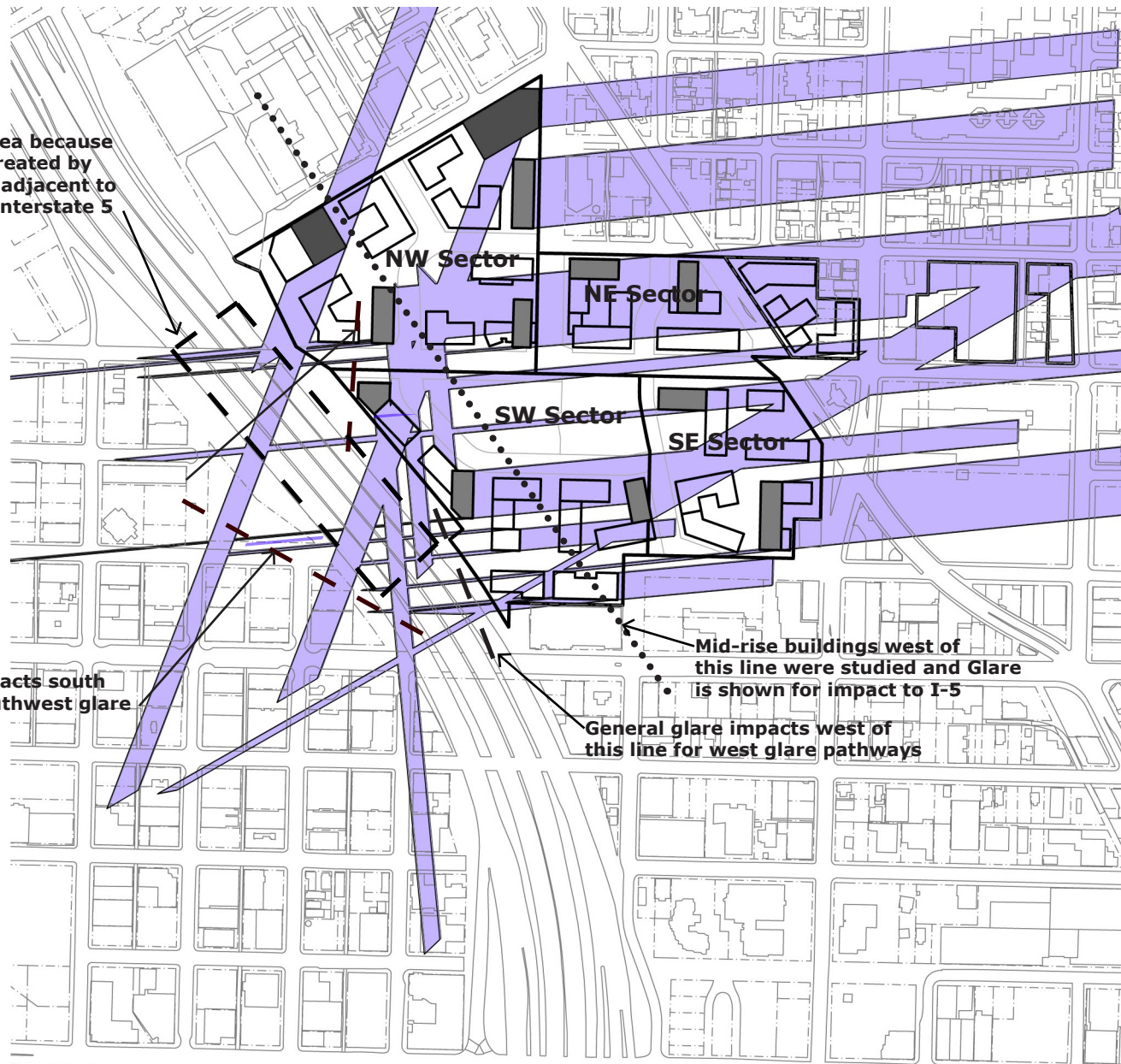




## Appendix H - SHADOW and GLARE GRAPHICS

No glare at this area because of glare shadow created by the retaining wall adjacent to the north side of Interstate 5

General Glare impacts south of this line for southwest glare pathways

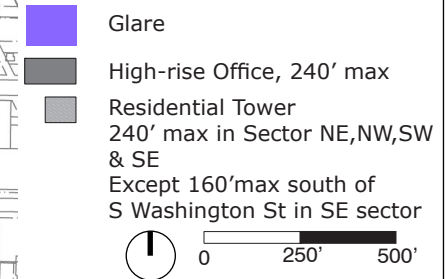


March 21 - 8 AM

Azimuth: N97.85°

Solar Elevation: 7.7°

The elevation of the sun at this time is high enough (7.7°) to impact portions of Interstate 5 to the south and west of the site even though the site and surrounding topography slopes steeply to the southwest. However due to the orientation of the buildings only very narrow glare pathways cross Interstate 5. Glare impacts to the south and west of the buildings would occur south of the line shown on the diagram for glare pathways oriented to the southwest and west of the lines shown on the diagram for glare pathways oriented to the west. All of the lanes of Interstate 5 will be shadowed from glare where a glare shadow will be created along the retaining wall adjacent to Interstate 5 as shown in the diagram. Glare shown in the diagram to the north and east of the buildings is actual glare hitting the ground plane along the entire length of the glare pathway.

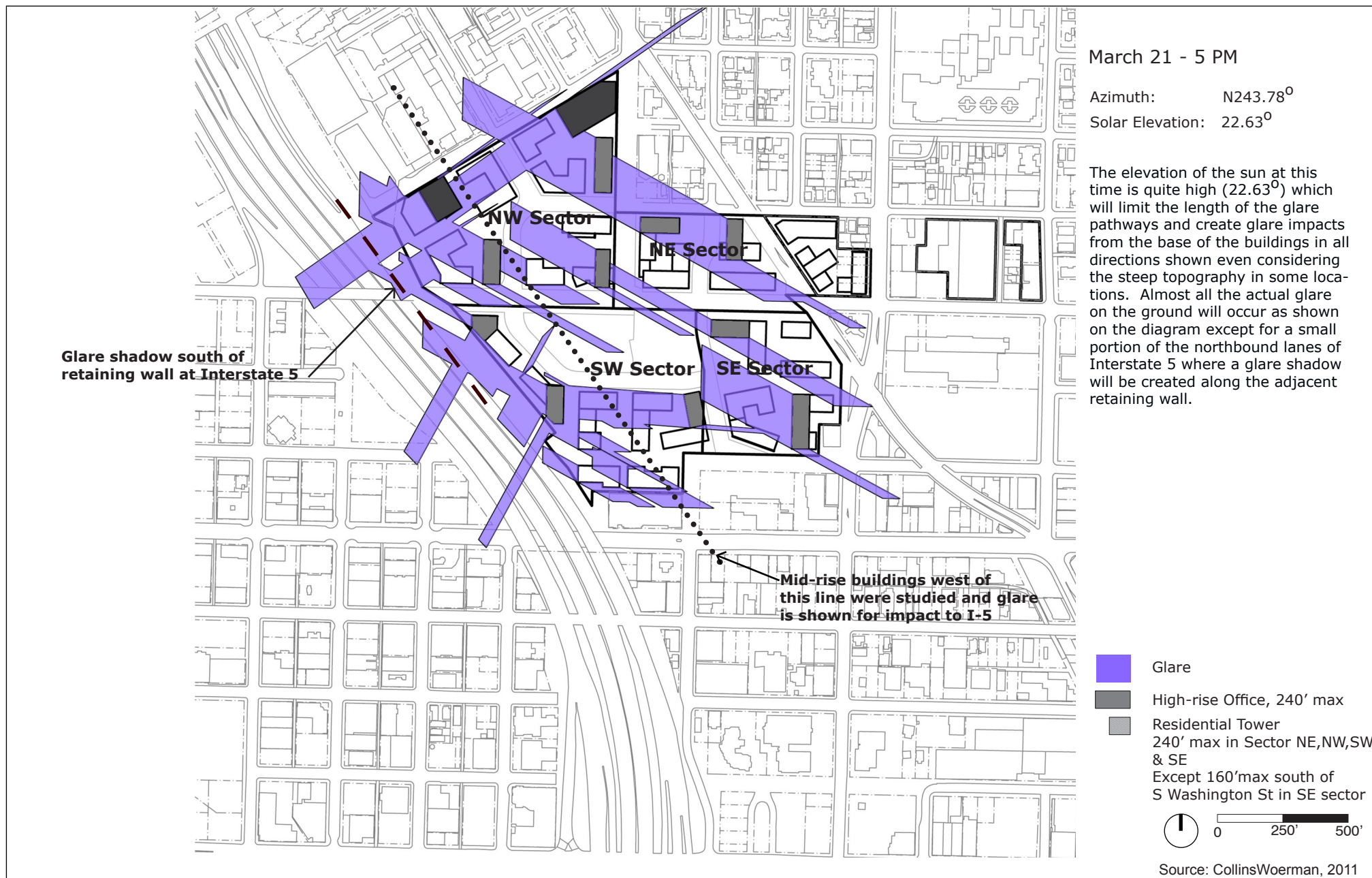


Source: CollinsWoerman, 2011

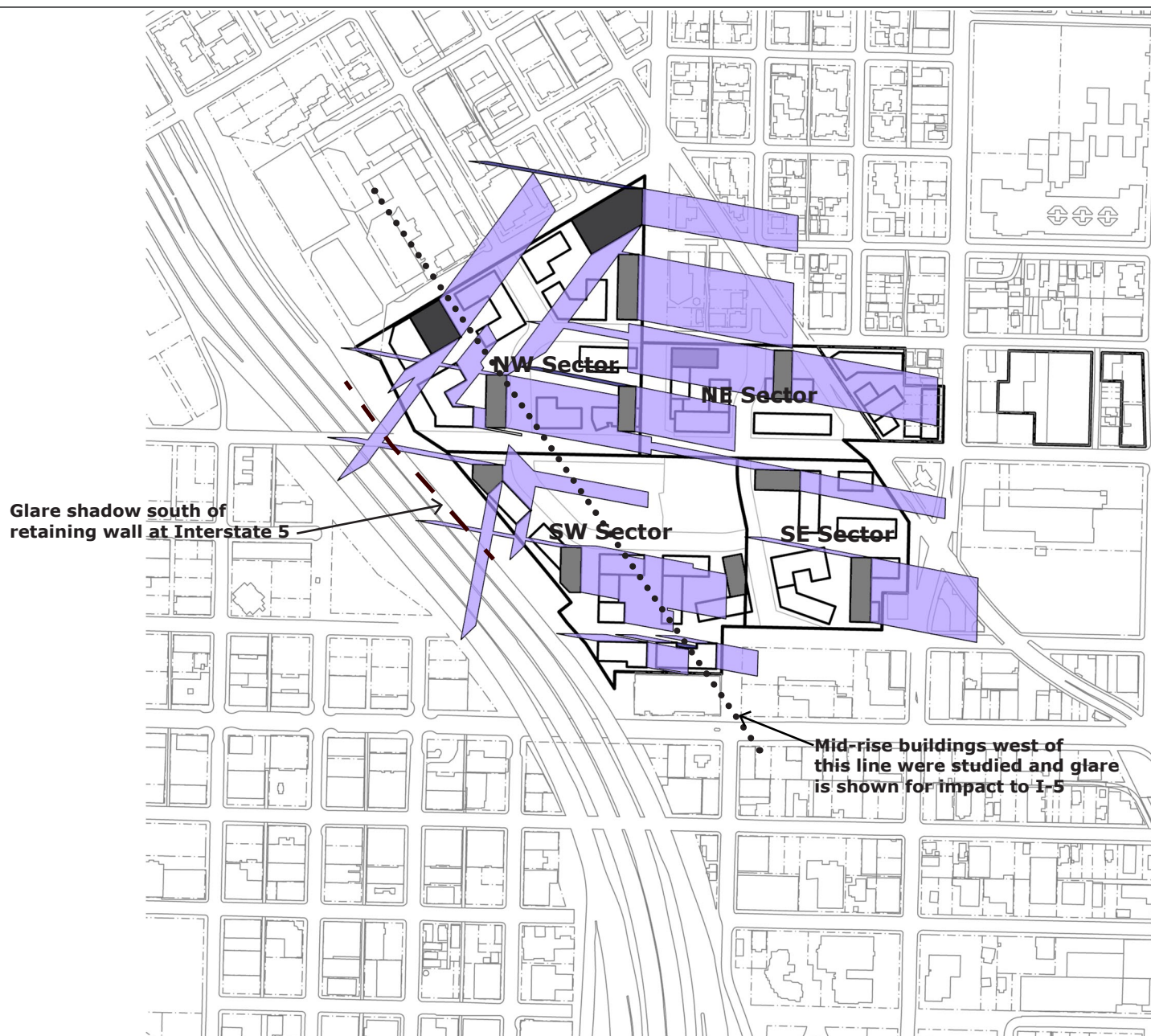


Figure H.1  
Glare - March 21st: 8 AM - Preferred Alternative

Yesler Terrace  
Redevelopment EIS





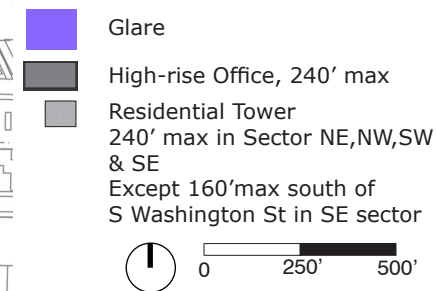


June 21 - 8 AM

Azimuth: N82.08°

Solar Elevation: 25.17°

The elevation of the sun at this time is quite high (25.17°) which will limit the length of the glare pathways and create glare impacts from the base of the buildings in all directions shown even considering the steep topography in some locations. Almost all the actual glare on the ground will occur as shown on the diagram except for a small portion of the northbound lanes of Interstate 5 where a glare shadow will be created along the adjacent retaining wall.



Source: CollinsWoerman, 2011



Figure H.3  
Glare - June 21st: 8 AM - Preferred Alternative

Yesler Terrace  
Redevelopment EIS



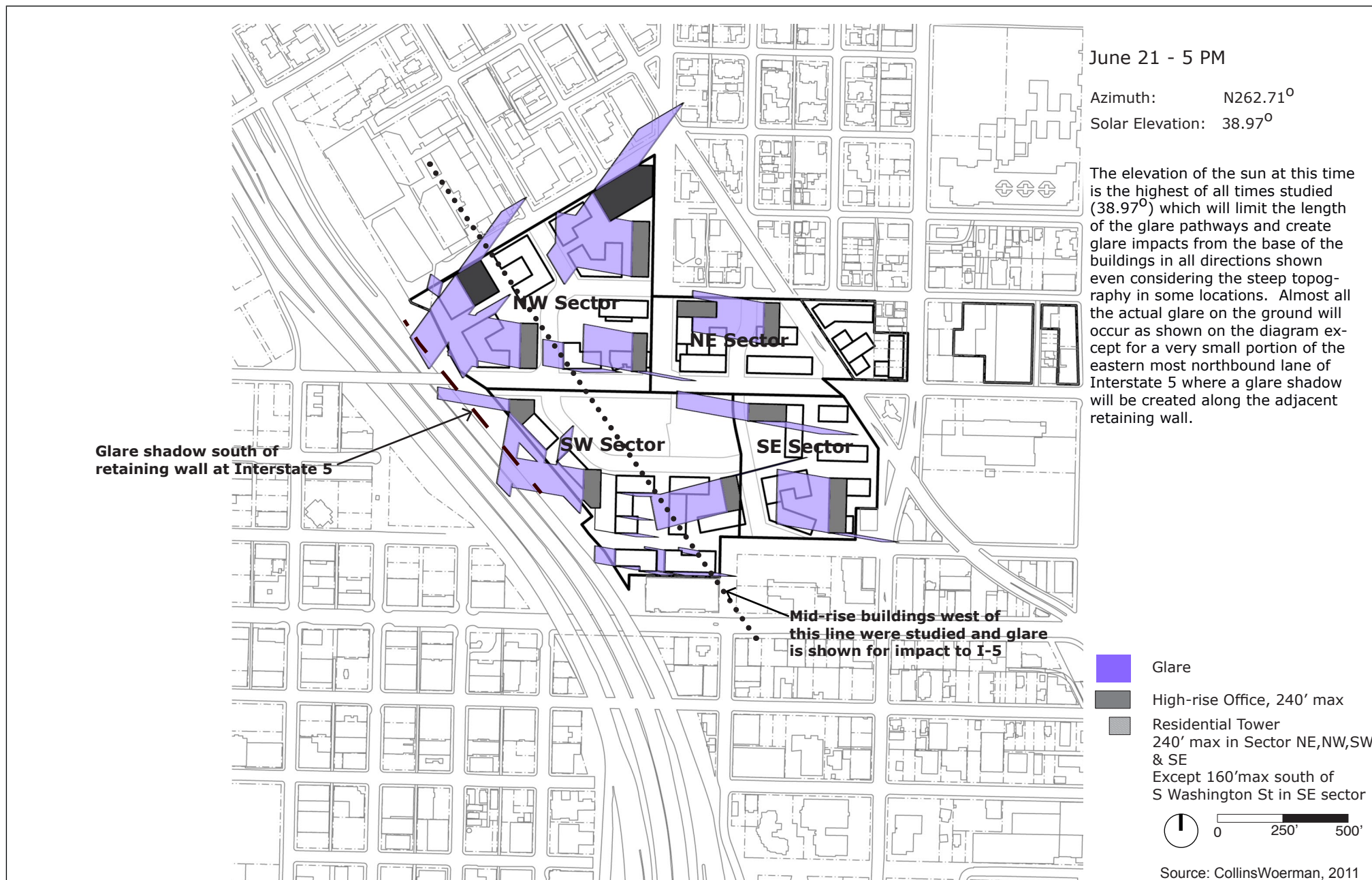


Figure H.4  
Glare - June 21st: 5 PM - Preferred Alternative

Yesler Terrace  
Redevelopment EIS

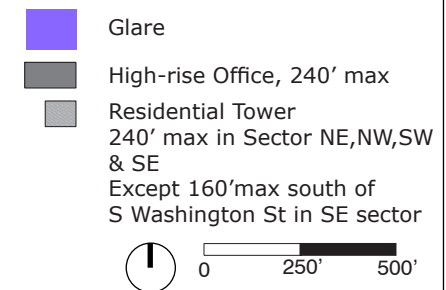
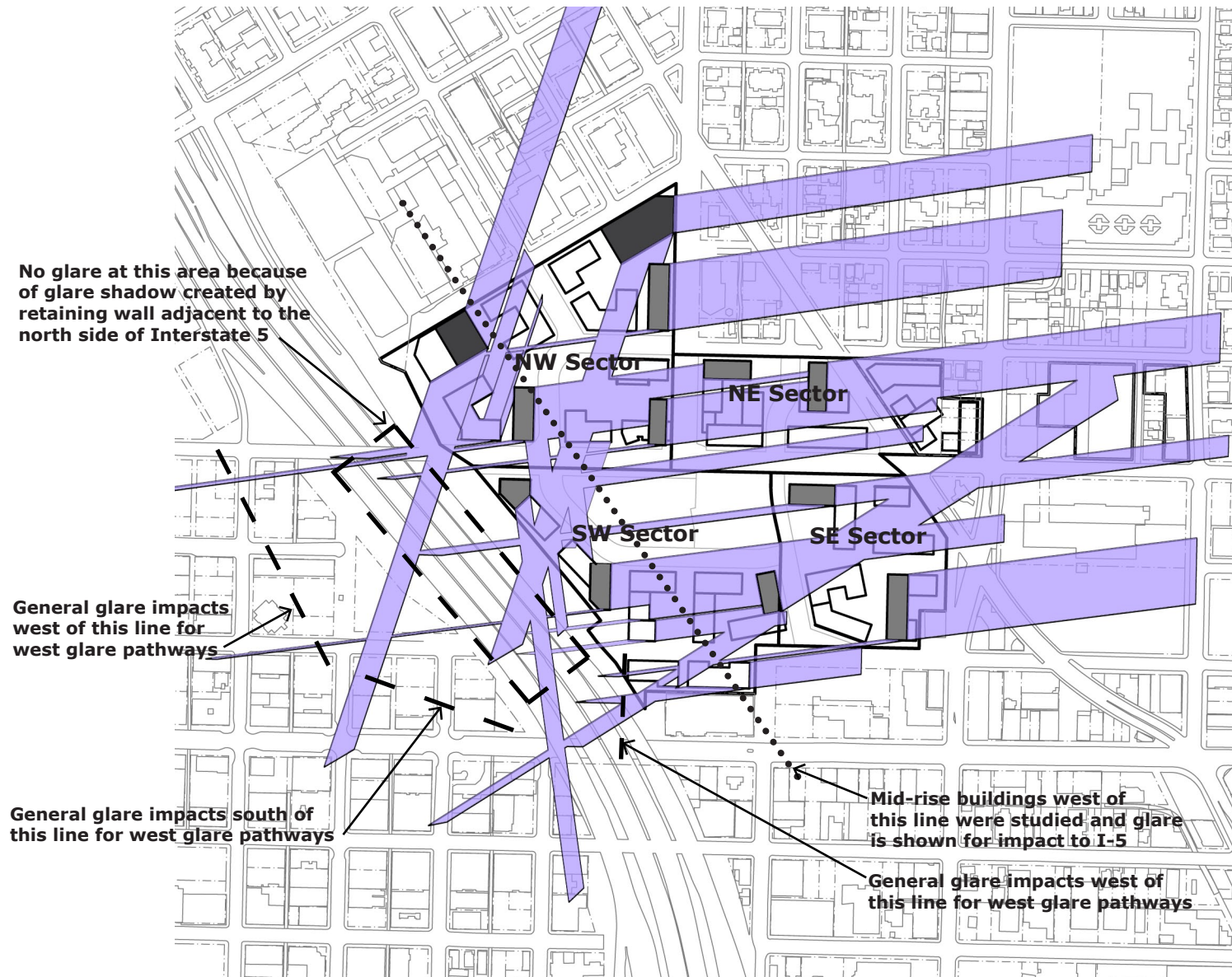


September 21 - 8 AM

Azimuth: N100.35°

Solar Elevation: 10.18°

The elevation of the sun at this time is high enough (10.18°) to impact portions of Interstate 5 to the south and west of the site even though the site and surrounding topography slopes steeply to the southwest. Glare impacts will be similar to March 21 at 8 AM but will be slightly more impactful due to the higher elevation of the sun. Glare impacts to the south and west of the buildings would occur south of the line shown on the diagram for glare pathways oriented to the southwest and west of the lines shown on the diagram for glare pathways oriented to the west. For the west and southwest oriented glare, a glare shadow will be created along the retaining wall adjacent to Interstate 5 and protect all of the Interstate 5 lanes from glare where shown. Glare shown in the diagram to the north and east of the buildings is actual glare hitting the ground plane along the entire length of the glare pathway.



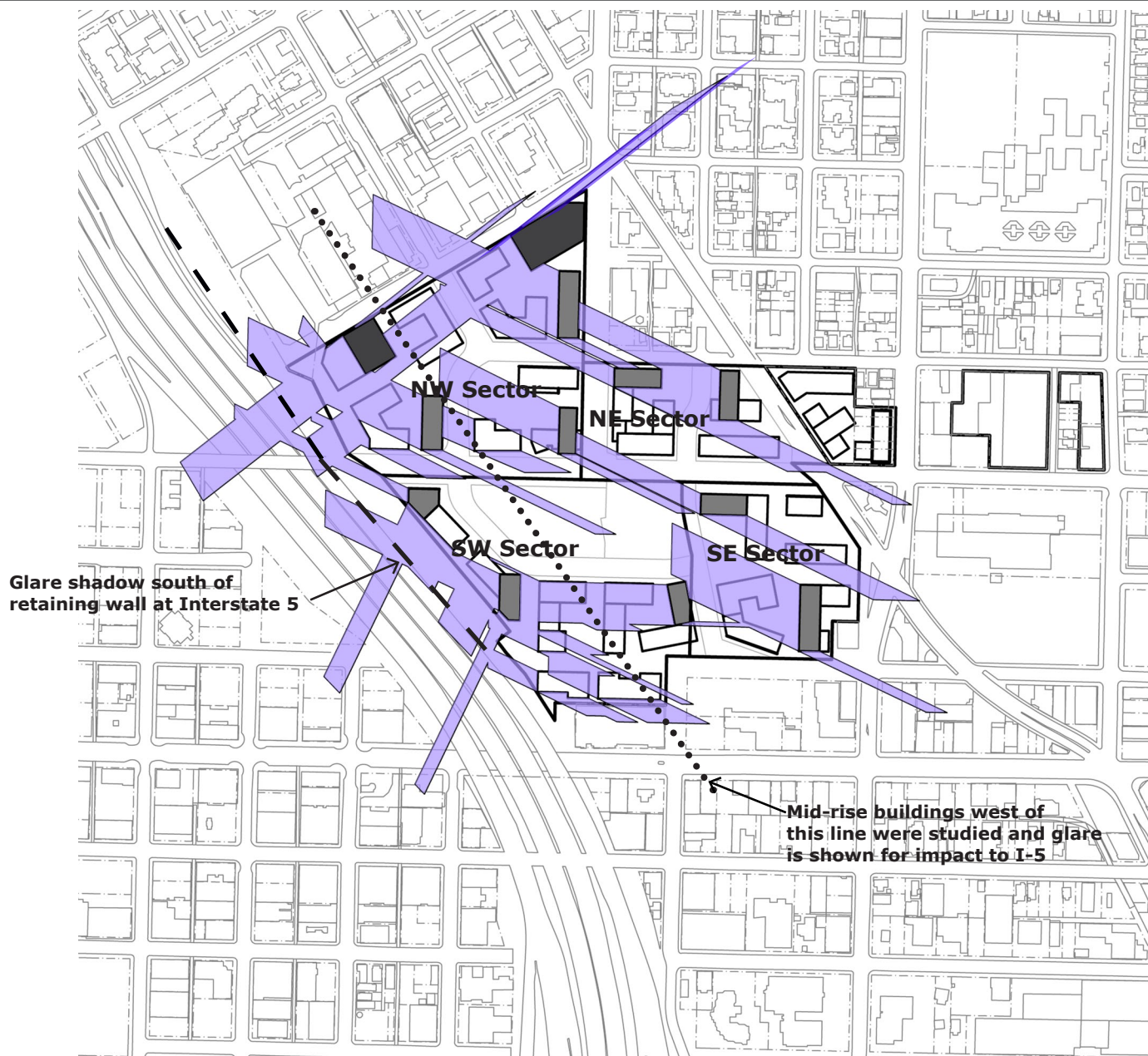
Source: CollinsWoerman, 2011



Figure H.5  
Glare - September 21st: 8 AM - Preferred Alternative

Yesler Terrace  
Redevelopment EIS



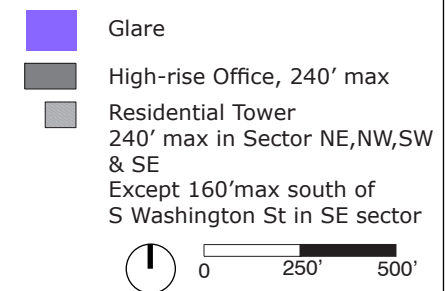


September 21 - 5 PM

Azimuth: N246.73°

Solar Elevation: 20.43°

The elevation of the sun at this time is quite high (20.43°) which will limit the length of the length of the glare pathways and create glare impacts from the base of the buildings in all directions shown even considering the steep topography in some locations. Almost all the actual glare on the ground will occur as shown on the diagram except for a small portion of the northbound lanes of Interstate 5 where a glare shadow will be created along the adjacent retaining wall.



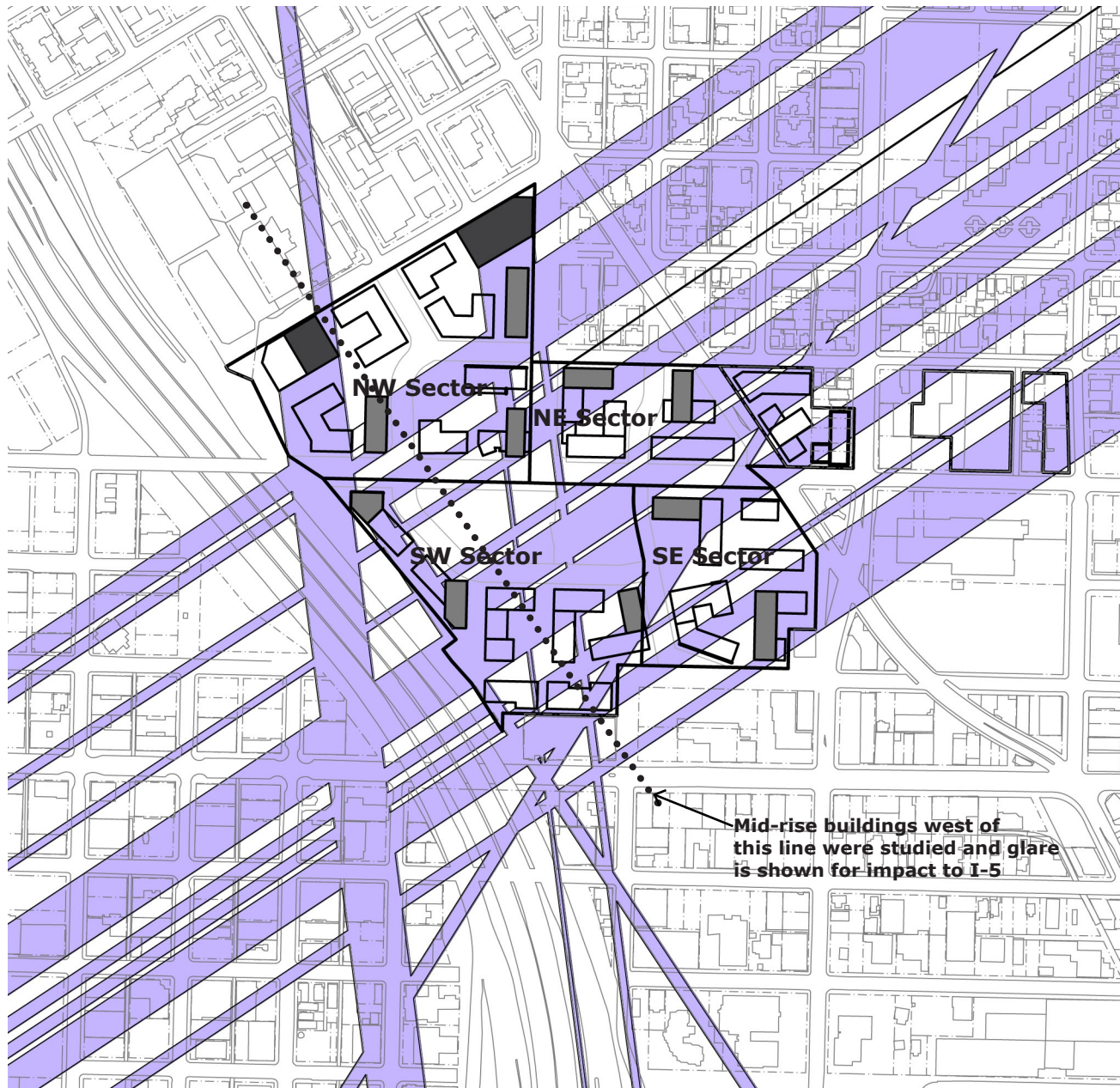
Source: CollinsWoerman, 2011



Figure H.6  
Glare - September 21st: 5 PM - Preferred Alternative

Yesler Terrace  
Redevelopment EIS



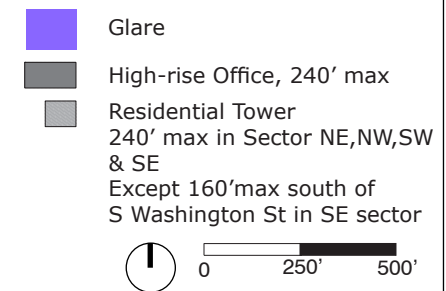


December 21 - 8 AM

Azimuth: N126°

Solar Elevation: 0.39°

The elevation of the sun at this time is very low (.39°) and the topography of the site, as well as the general area surrounding the site, slopes steeply downward to the southwest toward the Duwamish river valley. These two factors cause glare impacts to south and southwest of the site to be minimal since any glare from buildings in these directions would fall 1-3 miles from the site and not align or cross Interstate 5 where they hit the ground. Glare shown in the diagram orientated to the south and southwest of the buildings represents only glare pathways as any actual glare would be above the ground plane in these locations. Glare shown in the diagram to the north and northeast of the buildings is actual glare hitting the ground plane since the topography is sloping upward to the north.



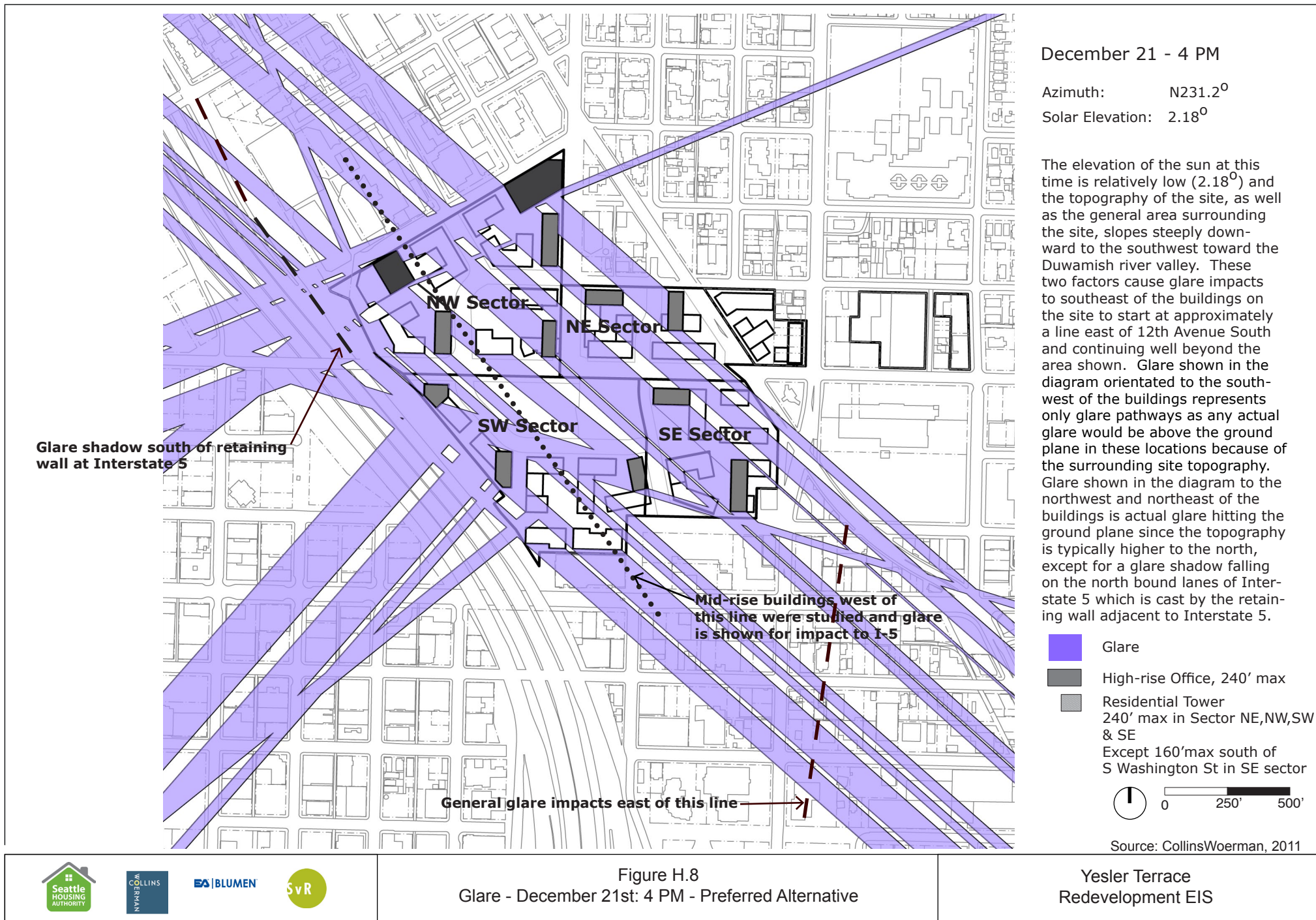
Source: CollinsWoerman, 2011

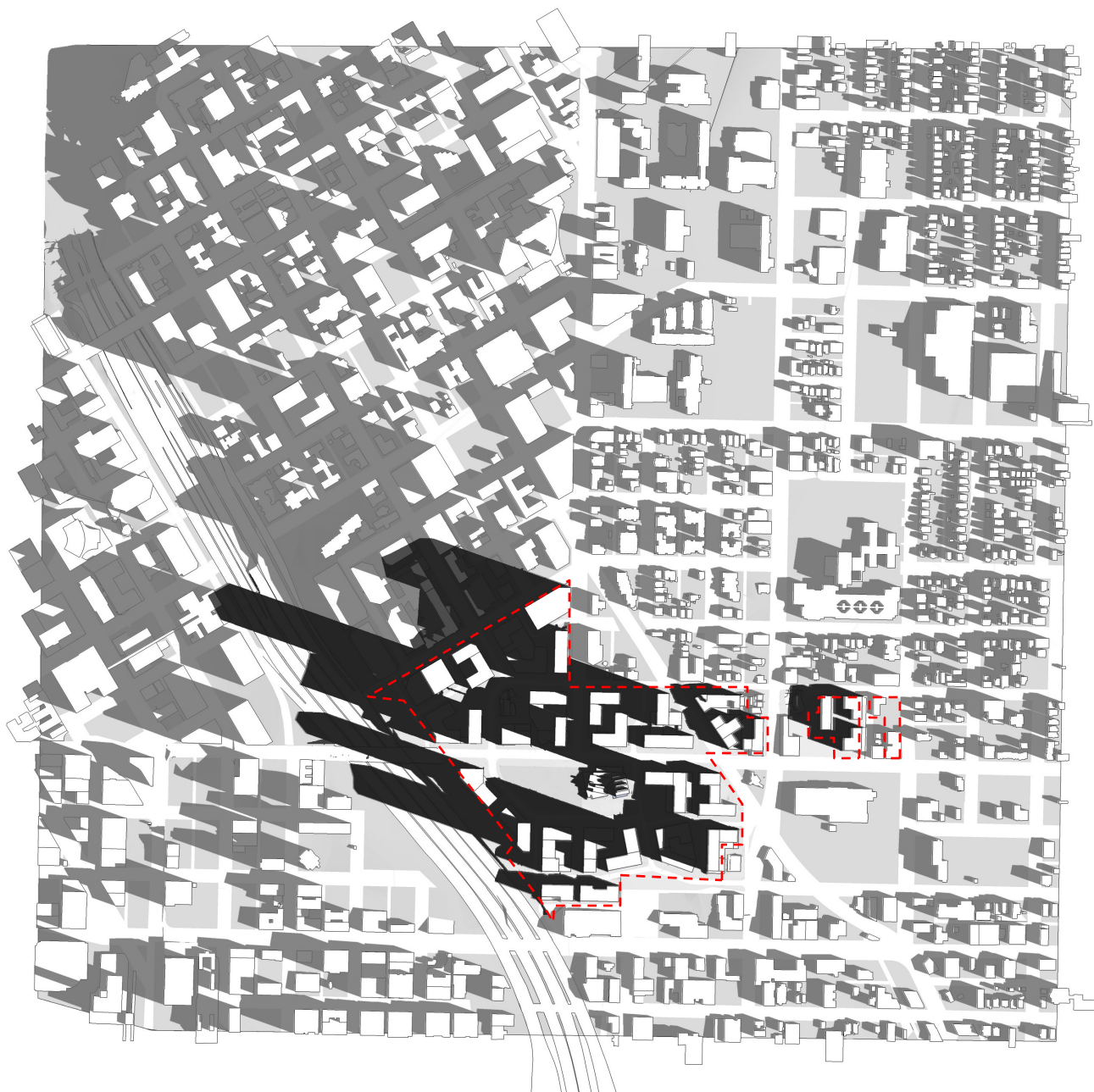


Figure H.7  
Glare - December 21st: 8 AM - Preferred Alternative

Yesler Terrace  
Redevelopment EIS







-- Site Boundary

Source: CollinsWoerman, 2011



Figure H.9  
Preferred Alternative Shadow Studies  
March 21st, 9AM

Yesler Terrace  
Redevelopment EIS





-- Site Boundary

Source: CollinsWoerman, 2011



Figure H.10  
Preferred Alternative Shadow Studies  
March 21st, 12PM

Yesler Terrace  
Redevelopment EIS



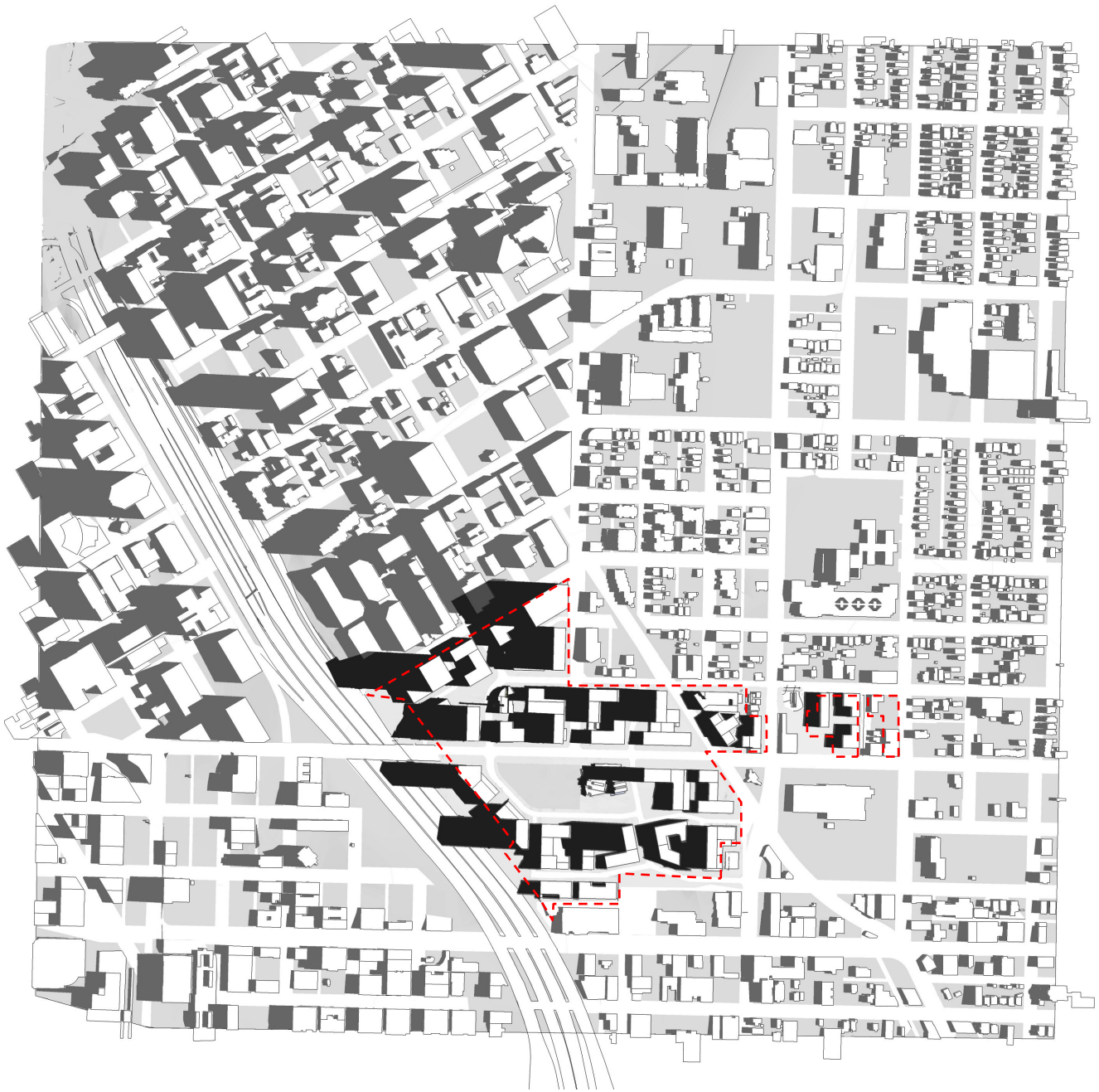
-- Site Boundary

Source: CollinsWoerman, 2011



Figure H.11  
Preferred Alternative Shadow Studies  
March 21st, 5PM

Yesler Terrace  
Redevelopment EIS



-- Site Boundary

Source: CollinsWoerman, 2011



Figure H.12  
Preferred Alternative Shadow Studies  
June 21st, 9AM

Yesler Terrace  
Redevelopment EIS





-- Site Boundary

Source: CollinsWoerman, 2011



Figure H.13  
Preferred Alternative Shadow Studies  
June 21st, 12PM

Yesler Terrace  
Redevelopment EIS



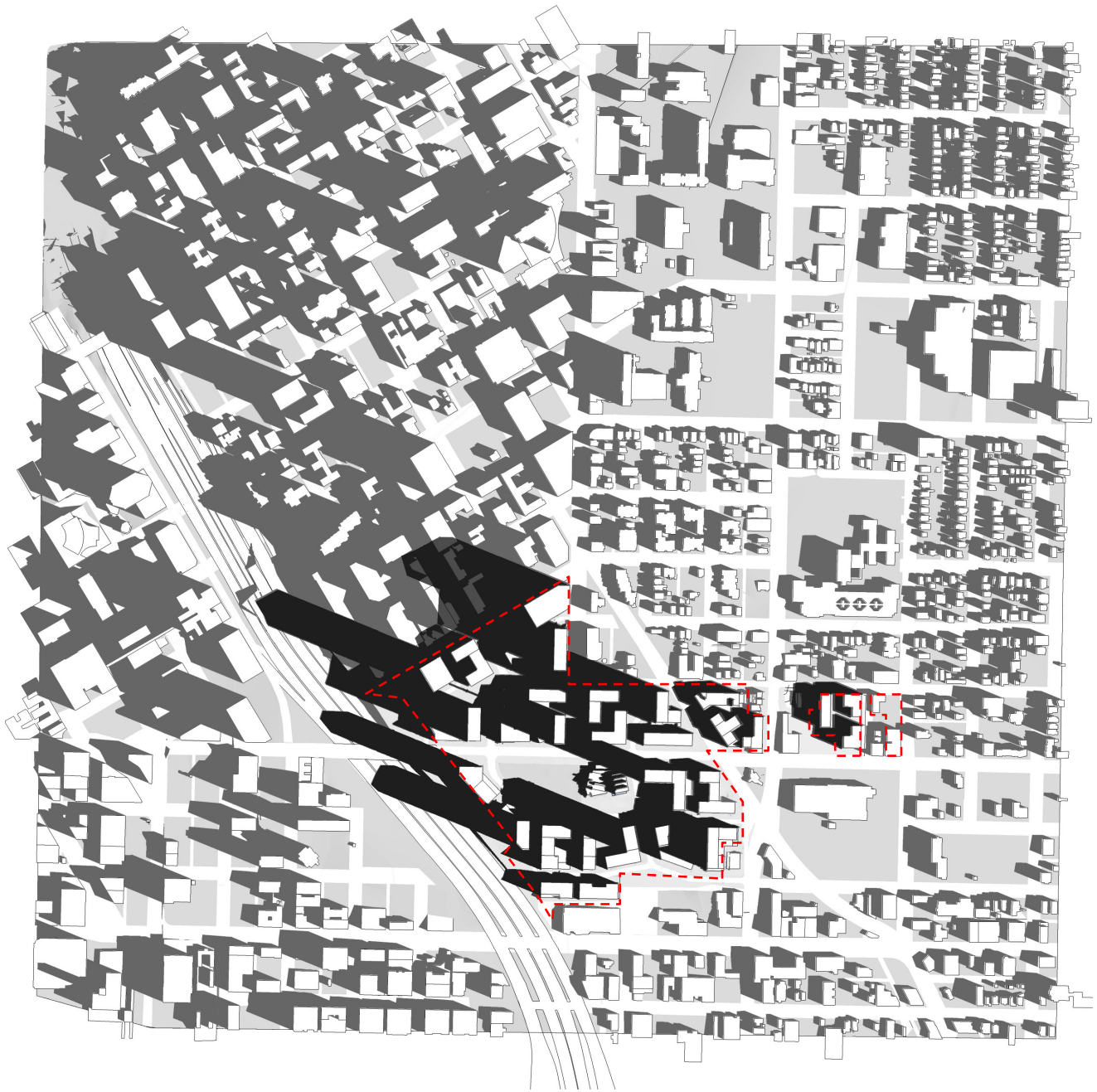
-- Site Boundary

Source: CollinsWoerman, 2011



Figure H.14  
Preferred Alternative Shadow Studies  
June 21st, 5PM

Yesler Terrace  
Redevelopment EIS



-- Site Boundary

Source: CollinsWoerman, 2011



Figure H.15  
Preferred Alternative Shadow Studies  
September 21st, 9AM

Yesler Terrace  
Redevelopment EIS





-- Site Boundary

Source: CollinsWoerman, 2011



Figure H.16  
Preferred Alternative Shadow Studies  
September 21st, 12PM

Yesler Terrace  
Redevelopment EIS



-- Site Boundary

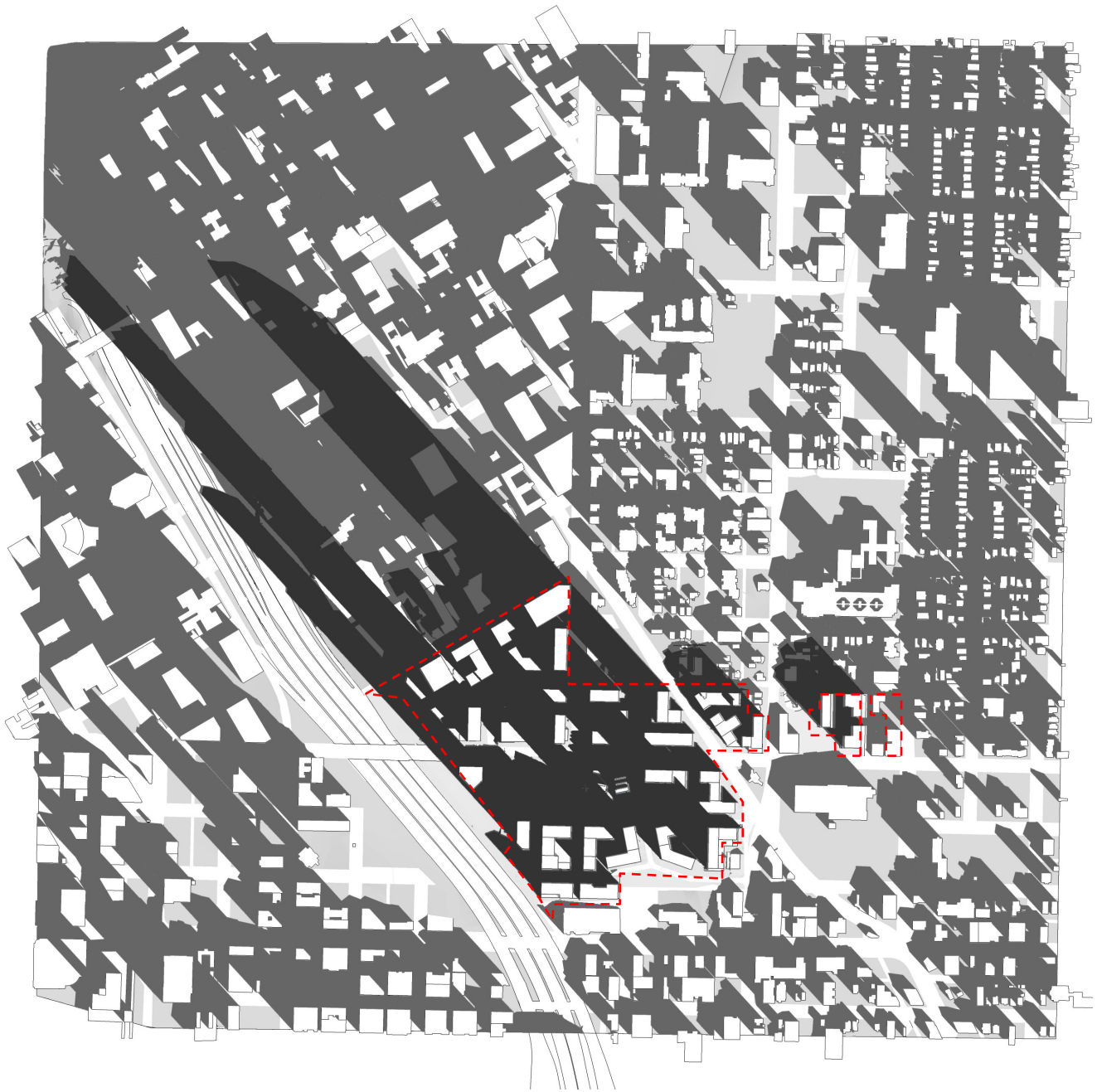
Source: CollinsWoerman, 2011



Figure H.17  
Preferred Alternative Shadow Studies  
September 21st, 5PM

Yesler Terrace  
Redevelopment EIS





-- Site Boundary

Source: CollinsWoerman, 2011



Figure H.18  
Preferred Alternative Shadow Studies  
December 21st, 9AM

Yesler Terrace  
Redevelopment EIS



-- Site Boundary

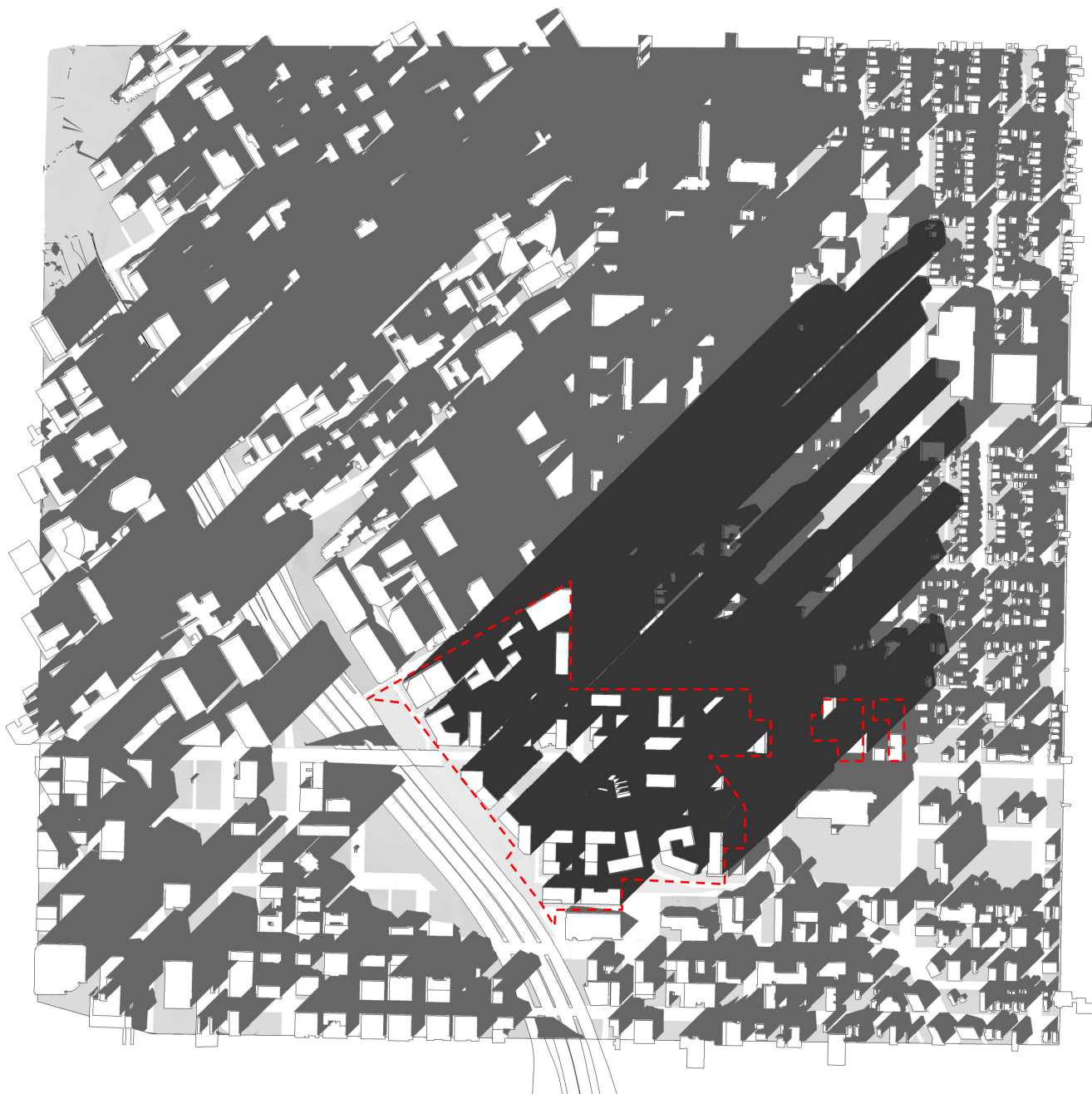
Source: CollinsWoerman, 2011



Figure H.19  
Preferred Alternative Shadow Studies  
December 21st, 12PM

Yesler Terrace  
Redevelopment EIS





-- Site Boundary

Source: CollinsWoerman, 2011



Figure H.20  
Preferred Alternative Shadow Studies  
December 21st, 3:30PM

Yesler Terrace  
Redevelopment EIS