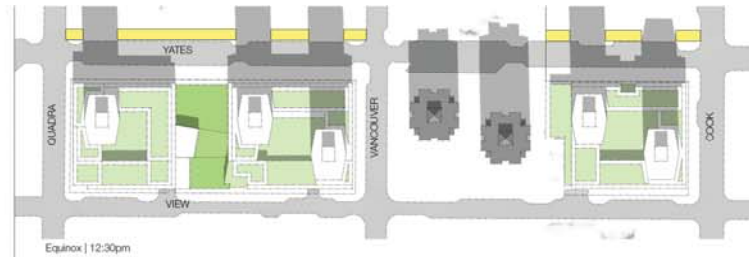
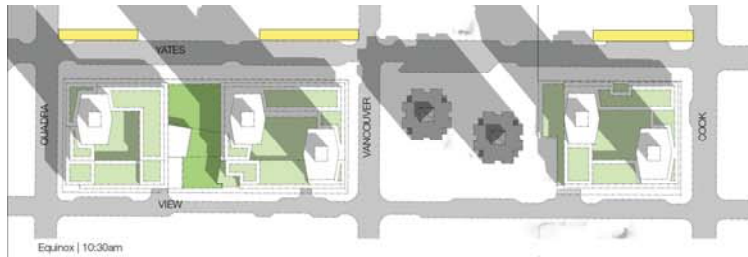
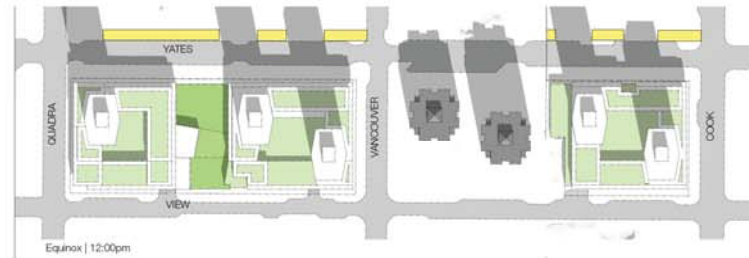
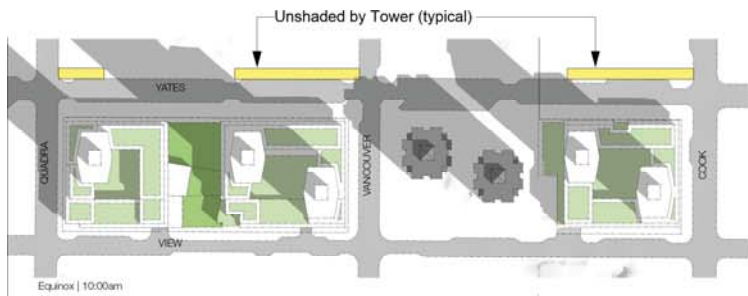


Harris Green Shadow Studies

A test of the Urban Design Guidelines | Section 3.1.d)

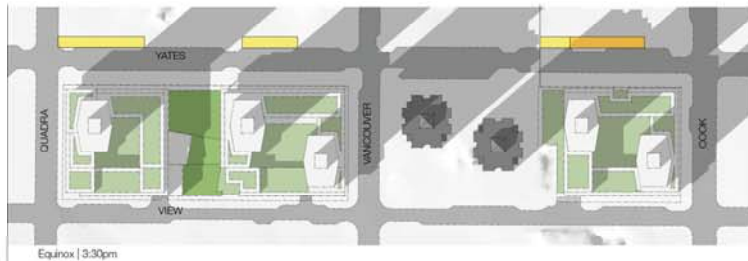
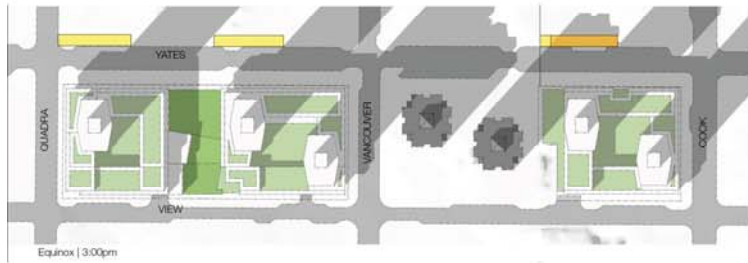
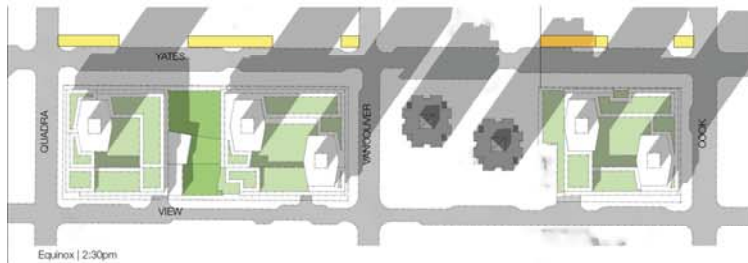
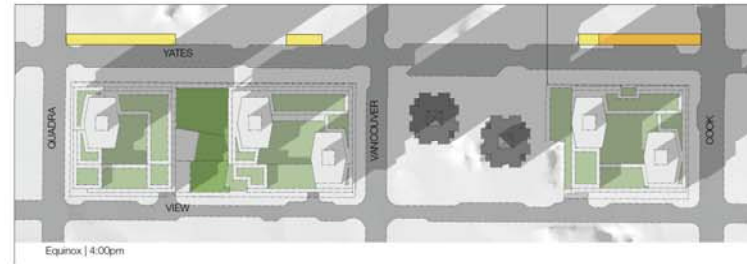


General Notes:

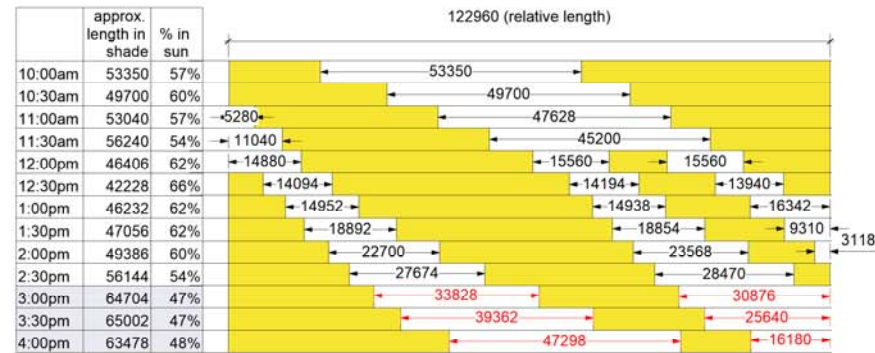
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2. September 22 was used as the date of the Equinox.
3. All calculations are approximate and have been generated from 2D views of the Sketch Up model.
4. All calculations are relative and are not to scale.

UD Guideline 3.1. d) i)
Where the subject project site is not in the shadow of surrounding existing buildings, it should be demonstrated that 50% of the length of the sidewalk opposite the development shall be exposed to direct sunlight for approximately 4.5 hours between 10am and 4pm at the equinoxes.

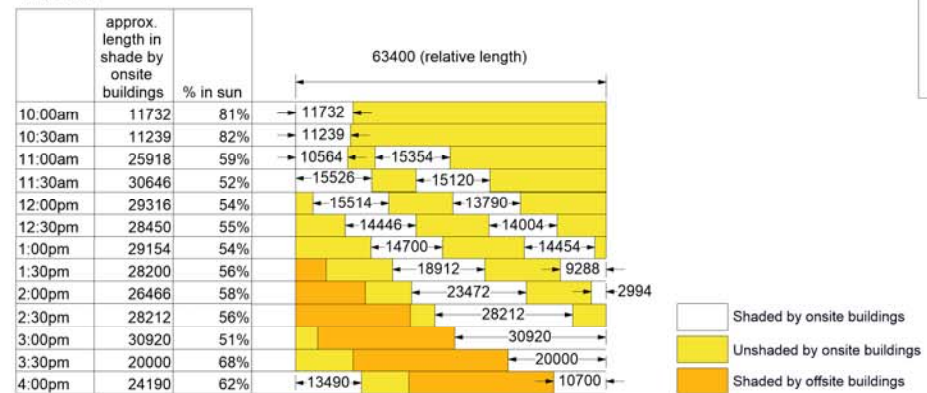




900 Block



1045 Block



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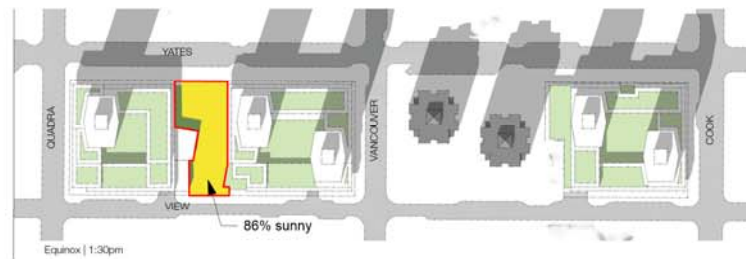
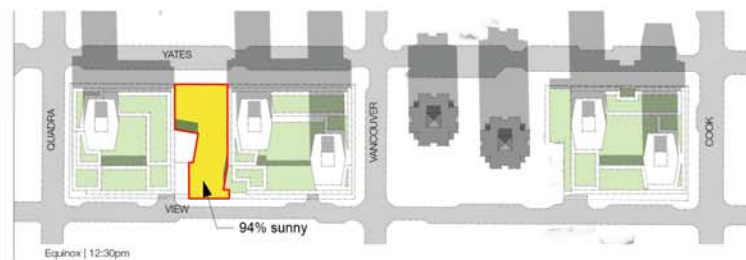
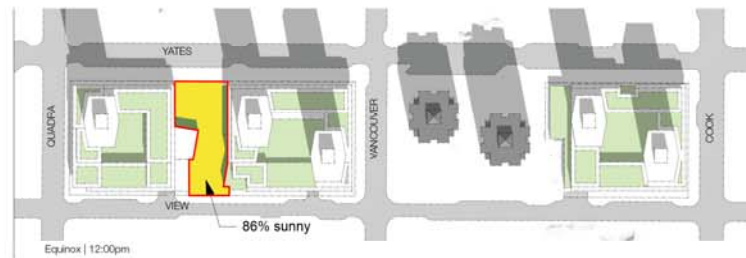
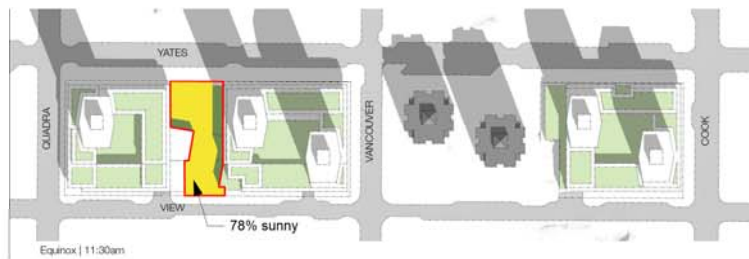
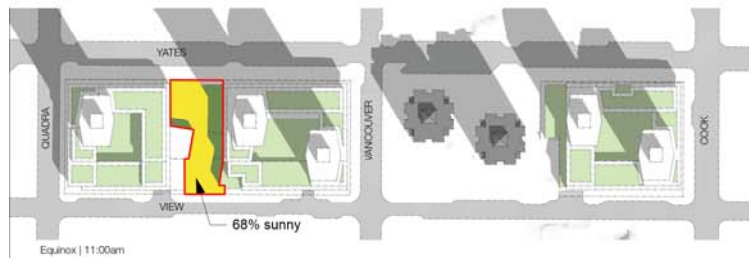
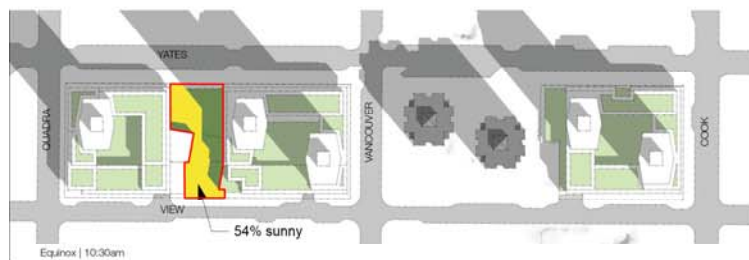
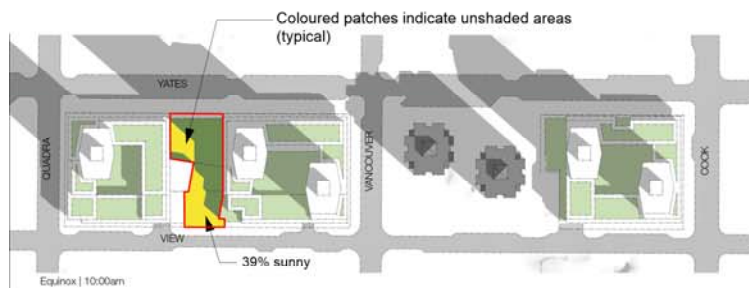
UD Guideline 3.1. d) i)
Where the subject project site is not in the shadow of surrounding existing buildings, it should be demonstrated that 50% of the length of the sidewalk opposite the development shall be exposed to direct sunlight for approximately 4.5 hours between 10am and 4pm at the equinoxes.

Summary (Yates Street):
900 Block
Onsite towers do not shade more than 50% of the sidewalk between 10:00 and 2:30pm = approx. 4.5 hours.

1045
Onsite towers do not shade more than 50% of the sidewalk between 10:00 and 4:00 = 6 hours

Note shade is cast by offsite buildings and is not considered by these calculations to be shaded.



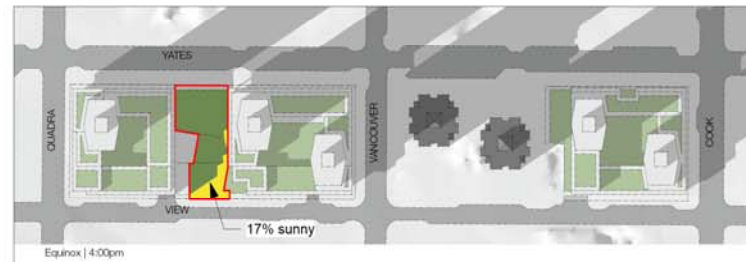
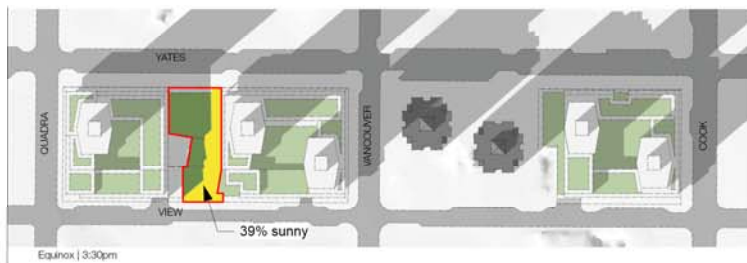
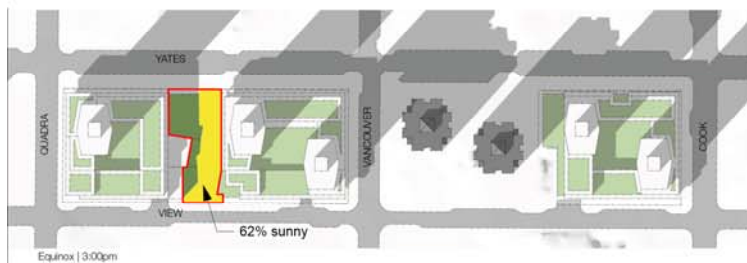
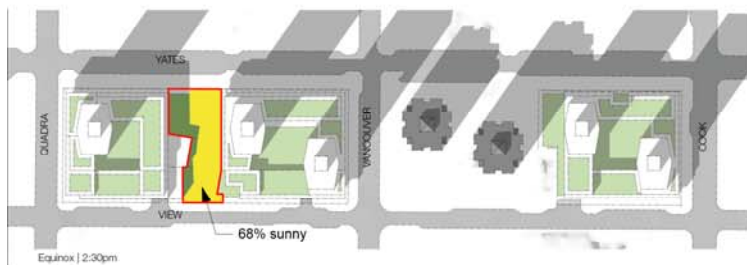
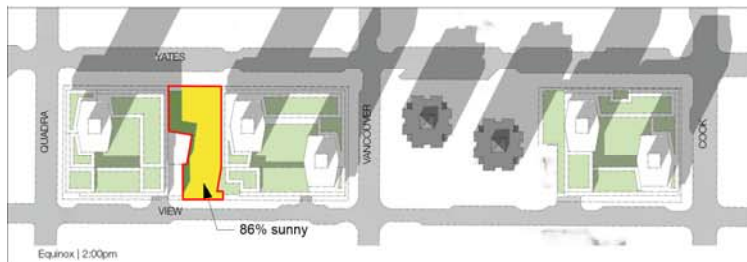


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 4. All calculations are relative and are not to scale.
 5. The area of the plaza and green (indicated in red) excludes exterior ground level area that is underneath upper floor levels.

UD Guideline 3.1. d) ii)
Limit the scale and height of the buildings to allow 4.5 hours of sunlight to reach approximately 50% of the Yates Street Plaza and View Street Green between 10 am and 4 pm at the equinoxes.
*Note existing offsite buildings may interfere with sunlight reaching the Green.



DAU #1930
June 9, 2021



Plaza and green sunlight

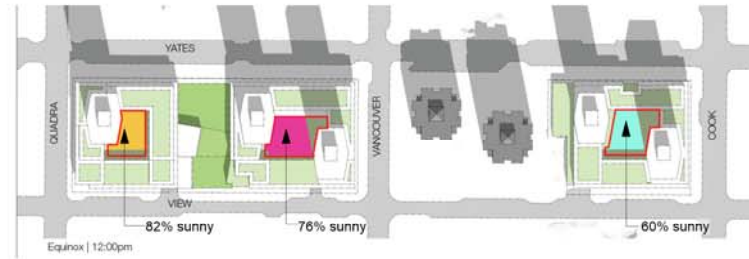
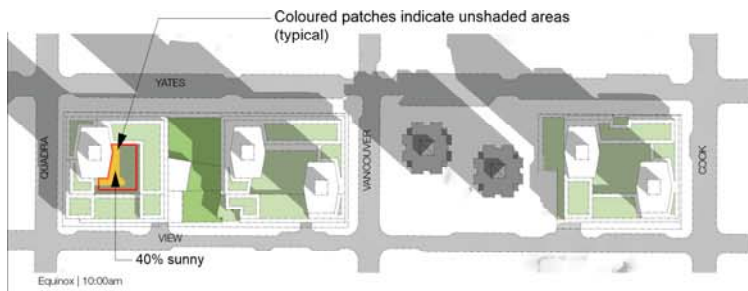
	% in sun
10:00am	39%
10:30am	54%
11:00am	68%
11:30am	78%
12:00pm	86%
12:30pm	94%
1:00pm	93%
1:30pm	86%
2:00pm	86%
2:30pm	68%
3:00pm	62%
3:30pm	39%
4:00pm	17%

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Limit the scale and height of the buildings to allow 4.5 hours of sunlight to reach approximately 50% of the Yates Street Plaza and View Street Green between 10 am and 4 pm at the equinoxes.
*Note existing offsite buildings may interfere with sunlight reaching the Green.

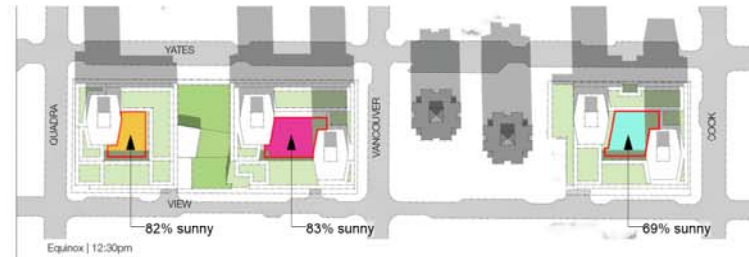
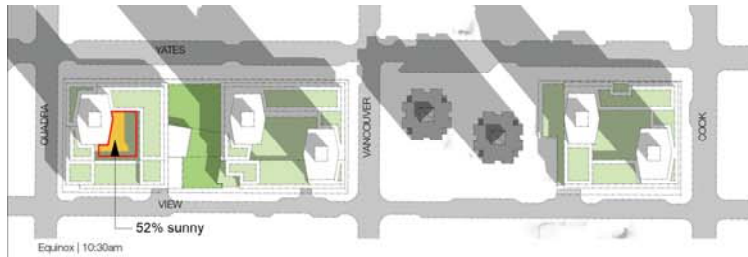
Summary:
Plaza and Green combined are unshaded for 50% or more of its area between 10:30am - 3:00pm = 4.5 hrs



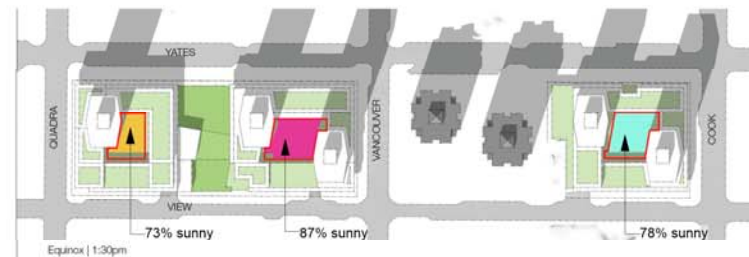
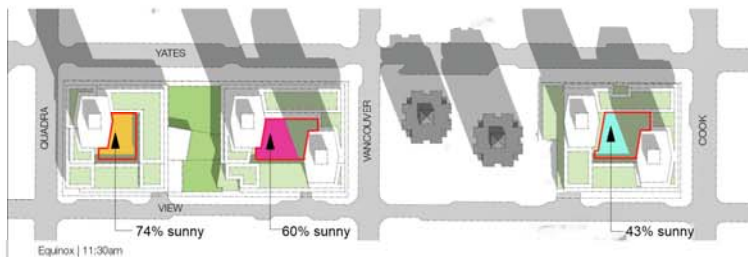
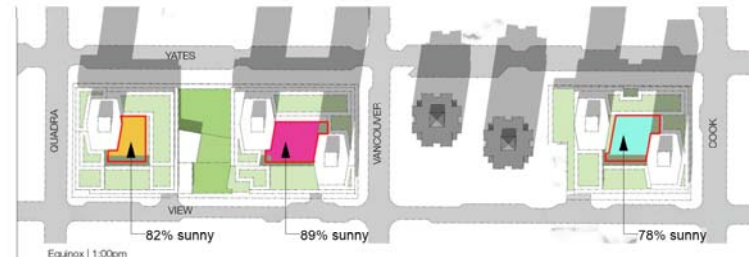
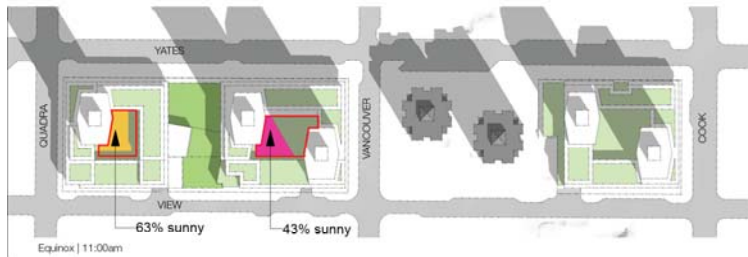


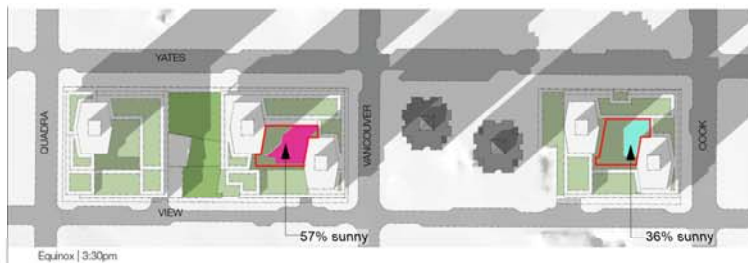
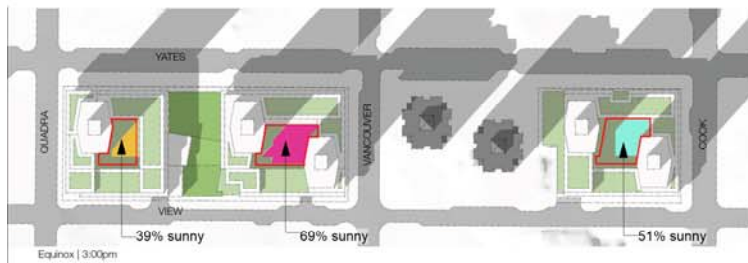
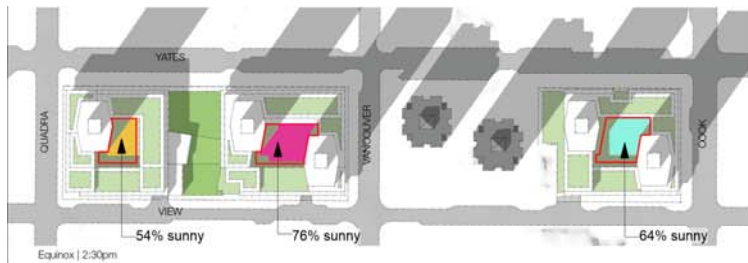
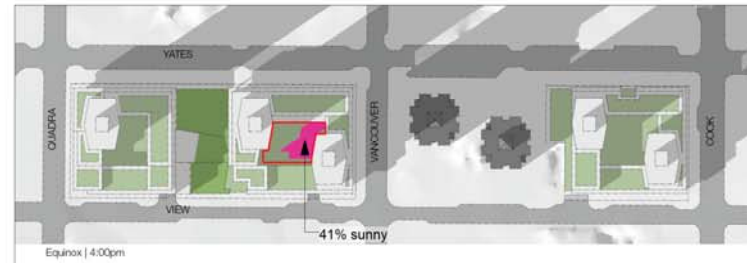
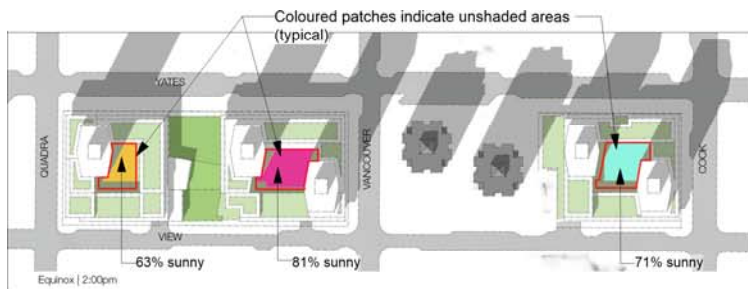
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UD Guideline 3.1. d) iii)
Limit the scale and height of the buildings surrounding the private courtyards to allow 3 hours of sunlight to reach approximately 50% of the area of the semi-public courtyard area between 10 am and 4 pm at the equinoxes.





Courtyards

	Courtyard 1	Courtyard 2	Courtyard 3
	% in sun	% in sun	% in sun
10:00am	40%	-	-
10:30am	52%	-	-
11:00am	63%	43%	-
11:30am	74%	60%	43%
12:00pm	82%	76%	60%
12:30pm	82%	83%	69%
1:00pm	82%	89%	78%
1:30pm	73%	87%	78%
2:00pm	63%	81%	71%
2:30pm	54%	76%	64%
3:00pm	39%	69%	51%
3:30pm	-	57%	36%
4:00pm	-	41%	-

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UD Guideline 3.1. d) iii)
Limit the scale and height of the buildings surrounding the private courtyards to allow 3 hours of sunlight to reach approximately 50% of the area of the semi-public courtyard area between 10 am and 4 pm at the equinoxes.

Summary:
Courtyard 1: has sunlight for 50% or more of its area between 10:30am - 2:30pm = 4 hrs

Courtyard 2: has sunlight for 50% or more of its area between 11:30am - 3:30pm = 4 hrs

Courtyard 3: has sunlight for 50% or more of its area between 12:00pm - 3:00pm = 3 hrs

