

Performing a Proper Site Analysis



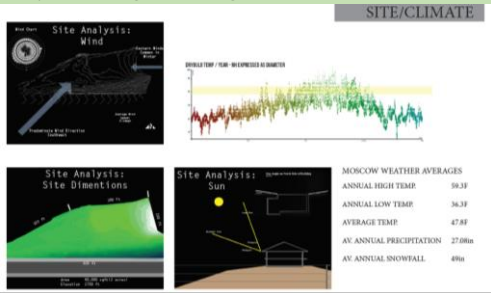
Better yet consider:

- Site
- Climate
- Program

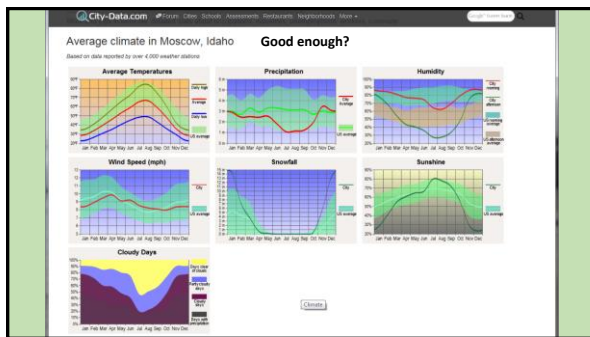
A passively heated, cooled, and lighted building fights global warming.

1

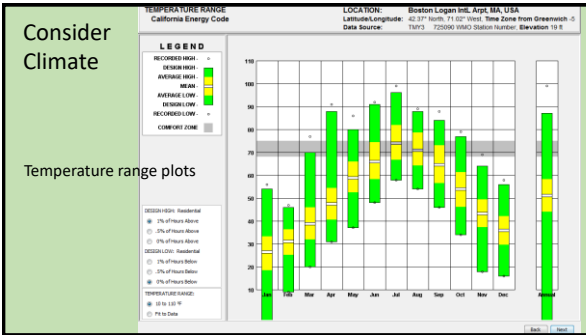
Why isn't this good enough?

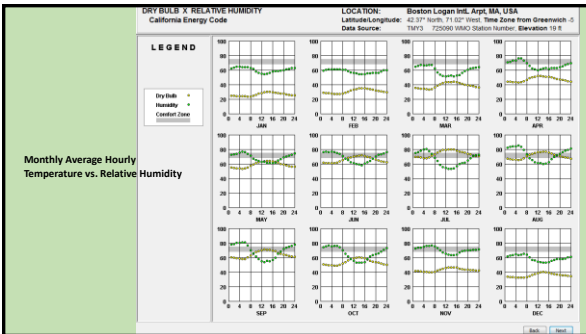


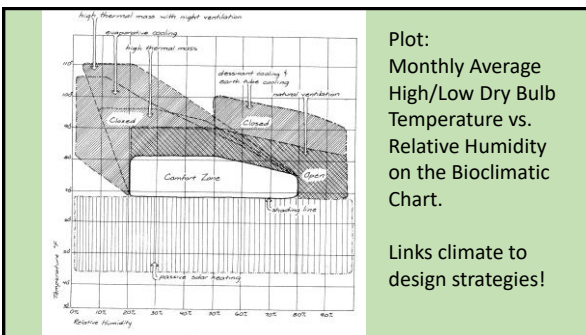
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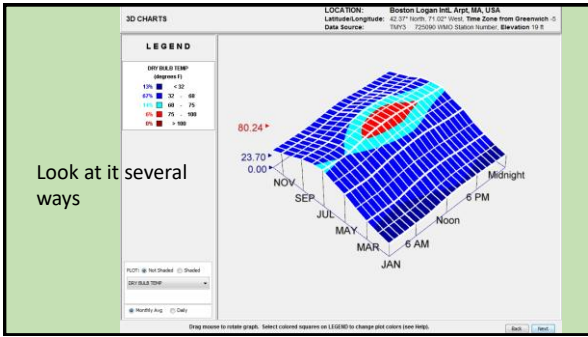
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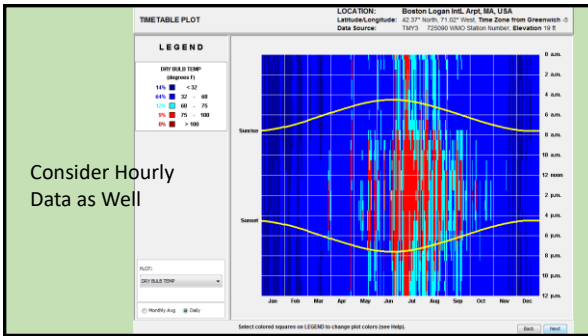


Plot:
Monthly Average High/Low Dry Bulb Temperature vs. Relative Humidity on the Bioclimatic Chart.
Links climate to design strategies!



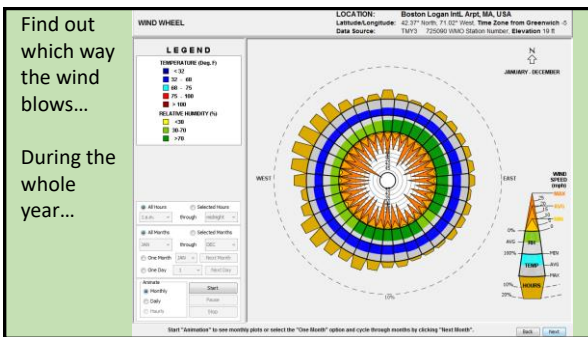
Look at it several ways

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Consider Hourly Data as Well

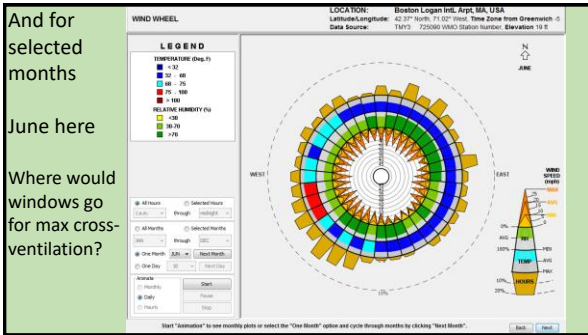
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Find out which way the wind blows...

During the whole year...

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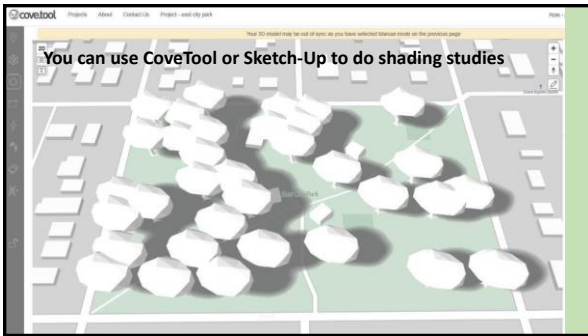
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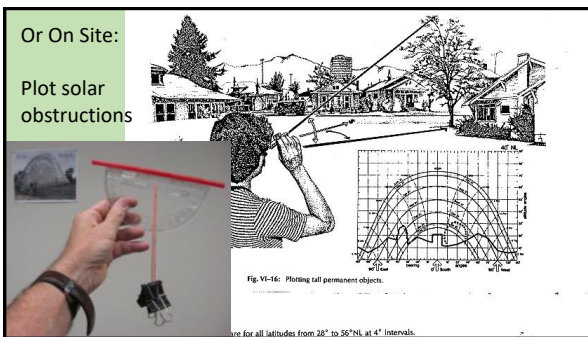
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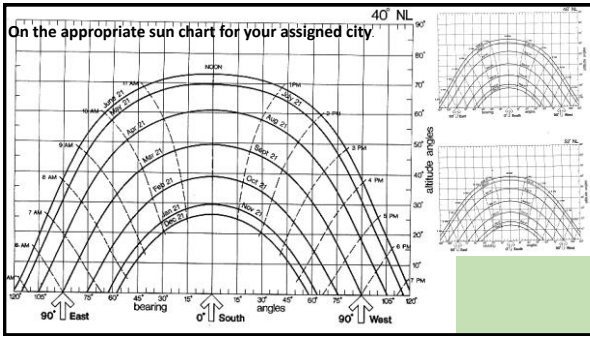
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Explore the site.

Look for microclimates. Your body is a sensor!

ARC111 2019
http://arc111.com

This small marker is up your thumb to the great sun chart nearby so that you can see the sun's path, orientation and direction.

Hike #1: Tilden Park (Seaview Trail)

90° East bearing 0° South bearings 90° West

altitudes angles

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Off Site

Construct a sun peg for your site's latitude

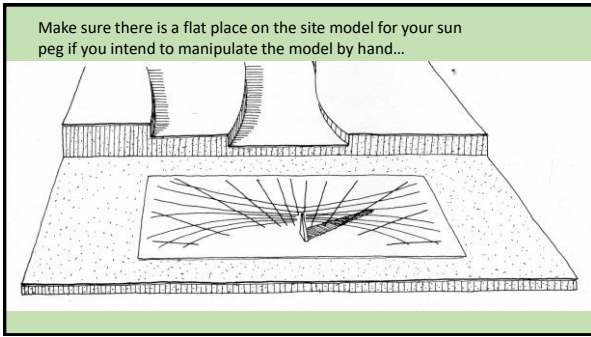
And a physical site model

Use of Sundial

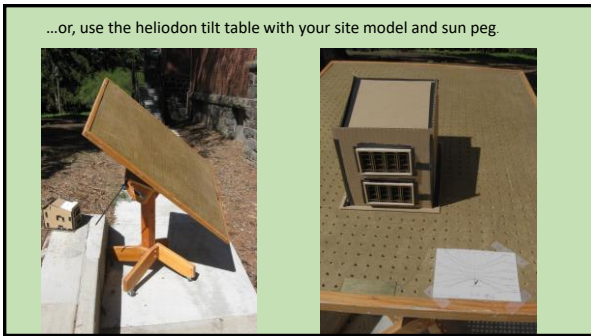
Sundial, 40° Latitude

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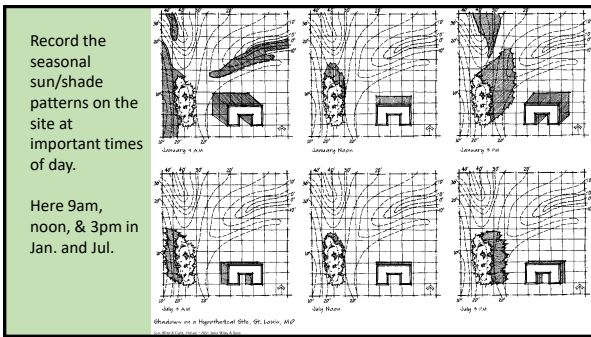
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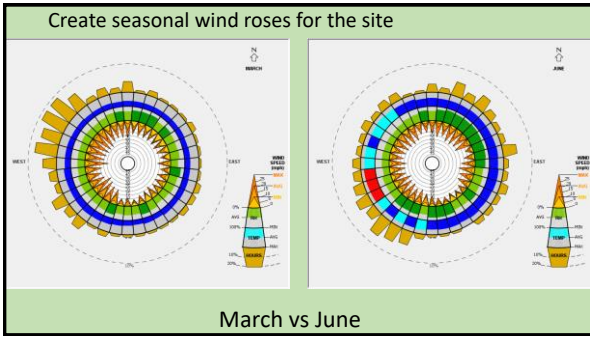
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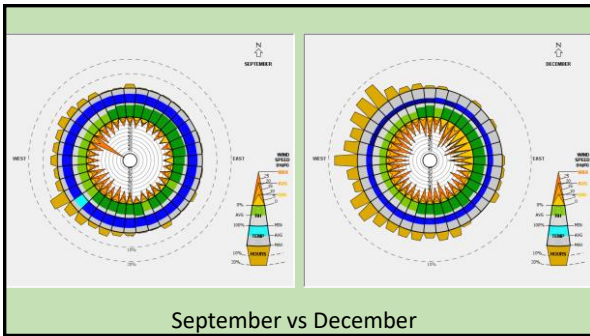
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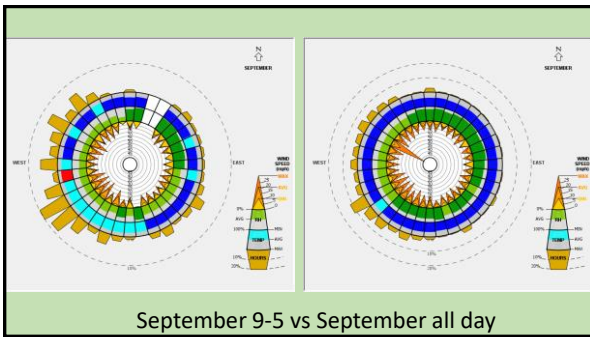
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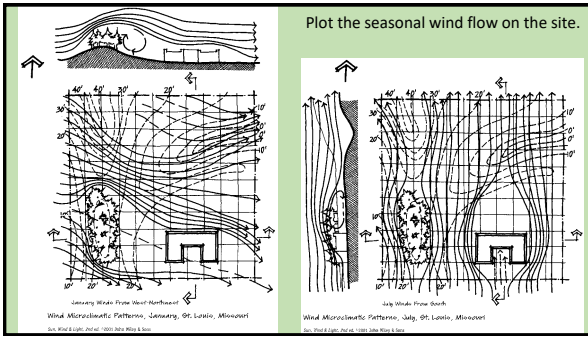
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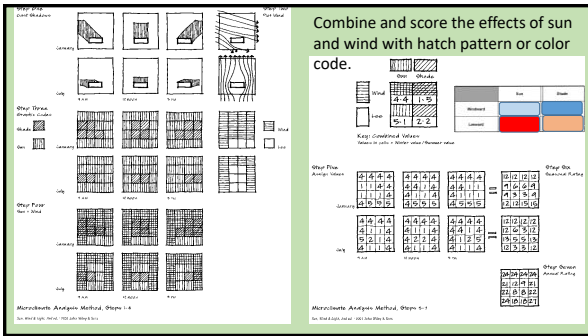
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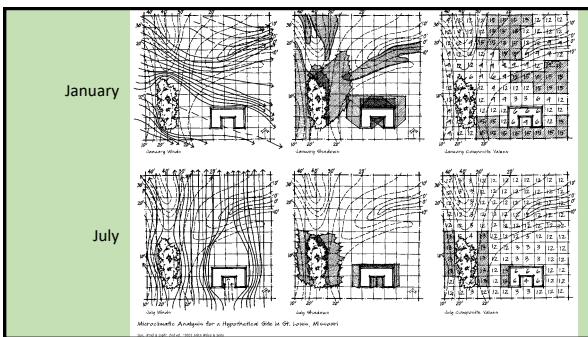
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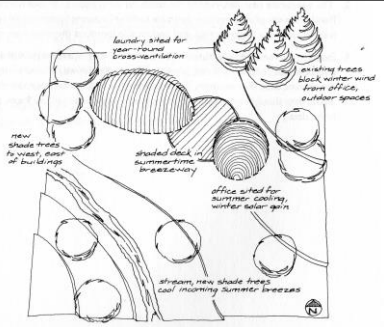


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Consider Program

A WESTERN BOOT FACTORY

- 2 ballrooms
 - Reception office for food/beverage, meetings, and activities
 - Factory bay with 10 bays
 - Garage (2 bays)
 - Lunchroom and patio
 - Workshops with "workshops" for 4 people (2,000 sq ft)
- Equipment:**
- Coffee maker
 - Electric kettles
 - 10 industrial laundry machines
 - 2 washing machines
- PAVING:**
- Concrete
 - 10 brickwork system
 - 2 brick pavers
 - Surface deck with 2 bays
- OCCUPANCY:**
- Management (2 people), Monday, Wednesday, Friday: 9 a.m. - 4 p.m.
 - Labor (24 people), Monday, Wednesday, Friday: 9 a.m. - 7 p.m.



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Now you're ready to start designing the properly sited building



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