Site Selection & Development Calculations

What will we do for LEED?

• SS Cr 1 – Site Selection
• SS Cr 2 – Development Density & Community Connectivity
• SS Cr 3 – Brownfield Sites
• SS Cr 4 – Alternative Transportation
Site Selection – Credit 1

• Pick an appropriate site
• Reduce environmental impact of building on site
• Cannot develop on:
  – Prime farmland
  – Below 5’ above 100 year floodplain
  – Habitat of threatened or endangered animals
  – 100’ from wetlands
  – 50 ft from surface water
  – Public parkland
Development Density & Community Connectivity – Credit 2

- Construct or renovate building on previous developed site
- In a community with a minimum density of 60,000 SF/ac net
- Construct or renovate building on previous developed site
- Within ½ mi of a residential zone or neighborhood with an average density of 10 units/ac
- Within ½ mi of at least 10 basic services
- Pedestrian access between the building and services

- Calculate the Density Development for the Ag Engineering Science Building?
Brownfield Development – Credit 3

• What is a Brownfield Site?
  – Contaminated w/ hazardous substance or pollutant
• Rehabilitate damaged sites
• Land prices cheaper
• Remediation costs could be high

Alternative Transportation – Credit 4.1

• Public Transportation Access
• Reduce pollution from automobile use
• Locate project within ½ mi of existing or future commuter rail, light rail or subway station
• Locate project within ¼ mi of one or more public or campus bus lines usable by occupants
Alternative Transportation – Credit 4.2

• Bicycle Storage & Changing Rooms
• Commercial or institutional blgs
  – Provide secure bicycle racks and/or storage for at least 5% of all blg users
  – Provide shower and changing facilities in blg for 0.5% of FTE occupants
• Residential
  – Covered storage for bicycles for 15% of blg occupants

Alternative Transportation – Credit 4.3

• Low emitting & Fuel Efficient Vehicles
• 3 options
  – Provide low-emitting & fuel-efficient vehicles for 3% of FTE occupants AND preferred parking
  – Provide preferred parking for low-emitting & fuel-efficient vehicles for 5% of the total vehicle parking capacity
  – Install alternative fuel refueling stations for 3% of the total vehicle parking capacity
Alternative Transportation – Credit 4.4

• Parking Capacity
• 4 options
  – Nonresidential - Size parking capacity to meet, but not exceed, minimum local zoning requirements AND provide preferred parking for carpools or vanpools for 5% of the total parking spaces
  – Nonresidential – provide parking for less than 5% of FTE blg occupants AND provide preferred parking for carpools or vanpools for 5% of the total parking spaces

Alternative Transportation – Credit 4.4

• Parking Capacity
• 4 options
  – Residential - Size parking capacity to meet, but not exceed, minimum local zoning requirements AND provide infrastructure and support programs to facilitate shared vehicle usage.
  – All – Provide no new parking
## What will we do for NAHB?

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Points</th>
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<tbody>
<tr>
<td>1.1.1 Avoid environmentally sensitive areas as identified through site footprinting process or existing third party data</td>
<td>7</td>
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<tr>
<td>1.3.1 Conserve Natural Resources</td>
<td>6</td>
</tr>
<tr>
<td>1.3.2 Site the home &amp; other built features to optimize solar resource</td>
<td>6</td>
</tr>
<tr>
<td>1.4.2 Conserve existing onsite vegetation</td>
<td>5</td>
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<tr>
<td>1.4.3 Minimize onsite soil disturbance and erosion</td>
<td>6</td>
</tr>
</tbody>
</table>

## What will we do for NAHB?

- Any other Credits?