2011 – 2012 Development Schedule

Research Building and Infrastructure

Conservation Areas

Ductbank (Electrical Infrastructure Additions)

Carolina North Greenway

Landfill Gas Pipeline and Generator
Projected Development: First 800,000 square feet

<table>
<thead>
<tr>
<th>Building</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Building One</td>
<td>225,000 sf</td>
</tr>
<tr>
<td>Small Central Utility Plant</td>
<td>5,000 sf</td>
</tr>
<tr>
<td>Law School</td>
<td>250,000 sf</td>
</tr>
<tr>
<td>Research Building Two</td>
<td>120,000 sf</td>
</tr>
<tr>
<td>Housing</td>
<td>200,000 sf</td>
</tr>
</tbody>
</table>
2011-2012 Development Schedule: Research Building & Infrastructure

Infrastructure
- Design commenced in June 2011

Research Building
- Design commenced in October 2011
2011-2012 Development Schedule: Conservation Areas

EXHIBIT E. Map: Conservation Areas

Note: Composite Map – Weighted Analysis from Ecological Assessment, with smoothed boundaries and upland hardwood borders
Conservation Areas: Development Agreement Plan with Corrections
Carolina North Conservation Areas Report: Overview Map
Conservation Areas: Improved Ecological Value

- Conservation Areas per Development Agreement
- Conservation Areas - Improved Ecological Value
- Streams, Buffers, Wetlands, & Floodplains
- Significant Natural Heritage Areas
- Landfill
- Existing Groundwater Treatment Infrastructure
- Existing Utilities
- Existing Gravel Service Roads, Utility Easements, ROWs

[Map showing conservation areas with labels 1, 2, 6A, 6B, 4, 5, 20-year Development Area (133 ac), 50-year Development Area]
Conservation Areas

• Use restrictive covenants as mechanism

• Third-party monitoring

• Protection identical to what is in Development Agreement

• Conservation area total remains 311 acres
2011-2012 Development Schedule: Ductbank (Electrical Infrastructure Additions)

Ductbank (Electrical Infrastructure Additions) Construction
The ductbank will provide more reliable power to Giles Horney Building Complex and Administrative Office Building.

Nationwide permit received from Army Corps of Engineers July 2011

Phase One construction Aug 2011-Aug 2012

Phase Two early site clearing Oct - Nov 2011

Phase Two construction Feb 2012 - Aug 2012
Carolina North Greenway
A paved greenway from Homestead Road to Municipal Drive, co-located with the ductbank, will be built when ductbank construction is complete.

Greenway construction Fall 2012
(Homestead Rd. to Municipal Drive)
2011-2012 Development Schedule: Landfill Gas Project

Landfill Gas Pipe Construction Phasing
The pipe brings methane gas from the landfill on Eubanks Road to a generator located on the site of the future Small Central Utility Plant at Carolina North. The electricity generated there will connect to the Duke Energy power grid at a point on Martin Luther King, Jr. Blvd. Eventually, heat will be recovered from the generator to be used to heat buildings at Carolina North.

Phase One: collection system at Eubanks Rd.

Phase Two: pipe from Eubanks Rd. to Homestead Rd.
Jan – April 2012

Phase Three: pipe from Homestead Rd. to generator (with ductbank)
Feb 2012 – Aug 2012
Landfill Gas Generator Site at Carolina North
For further information

Carolina North:
http://www.carolinanorth.unc.edu

Capital Improvement Projects:
Landfill Gas Project
Electrical Infrastructure Additions (ductbank)
http://www.fpc.unc.edu

Project Permits:
http://fpc.unc.edu/Projects/CurrentPermits.aspx

Carolina North Forest Facebook Page:
http://tinyurl.com/4484tgz