

Q&A about UNC ductbank project from Sept. 13 public information meeting

The following list of questions and answers includes those submitted in advance of the Sept. 13, 2011, public information meeting on the Carolina North Development Agreement Annual Report as well as those asked and answered at the meeting.

1. **Where is the staging area for the ductbank project?** The staging will occur within the project limits (the cleared corridor) and on an existing parking area.
2. **What permit covers the ductbank project?** A U.S. Army Corps of Engineers Nationwide Permit for the ductbank project was approved July 21, 2011. The utility corridor and greenway are identified in the Development Agreement (ref. exhibit I). The greenway is permitted under the Army Corps of Engineers Individual Permit for Carolina North.
3. **Why is an electrical duct way proposed to go through the forest from Homestead Road? The community has heard that initial development was to occur on the airport.** The primary purpose of the ductbank project is to provide reliable power for existing University buildings and facilities located around Airport Drive. The ductbank will also eventually serve as the backbone for electrical power for all of Carolina North. The ductbank project has been planned for several years, is part of the Development Agreement, and has been discussed at both Town meetings and Army Corps of Engineers meetings, and is discussed in the 2010 and 2011 Carolina North Annual Reports. An alternative ductbank route along Martin Luther King Boulevard was studied and rejected by the N.C. Department of Transportation. The Duke Energy substation on Homestead Road is the closest substation to University property, the Airport Drive buildings and the Carolina North development.
4. **Has UNC conducted an inventory of trees in the area of the proposed duct way clearing?** No, we do not have a survey of trees; however, UNC consultants and staff have walked and evaluated the character of the forest canopy. After the staking of the project limits and before the commencement of clearing activities, University staff and project managers will review and if necessary, make minor adjustments to the project limits to minimize canopy loss.
5. **Will the clearing impact any water courses (such as Crow Branch), stands of trees or sensitive areas identified by the UNC's Biohabitats study?** Yes, there are temporary impacts at Wetland F, Crow Branch, Wetland C and Wetland Z. These impacts are permitted by the COE Nationwide Permit for the ductbank project. All areas will be substantially re-vegetated.
6. **Why does power need to be cut through the forest when a power plant is part of the Carolina North master plan?** There are no near-term plans to build a Carolina North power plant. The primary purpose of the ductbank project is to provide reliable power for existing University buildings and facilities located around Airport Drive and a connection to Duke Energy is necessary. The Duke Energy substation on Homestead Road is the closest substation to University property, the Airport Drive buildings and the Carolina North development.
7. **In UNC's statement regarding the 40-foot-wide duct way easement, there's mention of a "proposed" greenway on the clearing. How long after clearing would that greenway move from "proposed" to being available for use?** The greenway, from Homestead Road to

Municipal Drive, should be available for public use by early 2013. Completion of the rest of the greenway will be dependent on construction in the development area.

8. **Could this 40-foot-wide ductbank/greenway become a road to connect Carolina North with Weaver Dairy Extension?** The Carolina North Development Agreement does not include a future road along this route. The cleared area will be substantially re-vegetated following construction of the ductbank to a width of 10 feet for the greenway.
9. **There are currently gravel access roads through the forest. Why can't the ductwork follow those?** A straight line, shortest distance between two points route is the most economical, efficient and least destructive way to install the ductbank and greenway. Following existing, often circuitous paths would require more clearing.
10. **What is the actual dimension of the wires in the ductbank? How wide is the actual ductbank? Does it really require 40 feet for construction?** The ductbank itself is typically 42 inches wide. A clearing of 40 feet is required to provide safe work space for construction crews and access for heavy construction equipment along most of the corridor, and a clearing of 60 feet is needed where the vaults will be installed.
11. **If Carolina North is phased in its construction, how is the infrastructure phased to match it, in scale and substance?** Carolina North development will be phased and utility connections for initial buildings will bring public utilities, such as water and sewer service, onto the site. The new ductbank will provide for electrical and telecommunications service onto the site. Once on site, utility systems will be extended to all buildings as development progresses. UNC envisions the extensive use of utility tunnels in the main development areas. UNC will also develop central distribution systems for energy utilities (heating and cooling) when there is sufficient building capacity to support that concept.
12. **Given that the underlying principle of the Carolina North Development Agreement was to limit development to the airport footprint, what measures is UNC taking to limit disturbance on other parts of the tract?** Of the approximate 947 acres at Carolina North, the Development Agreement limits development of buildings for the first 20 years to 133 acres, and 311 acres are being assigned to permanent Conservation Areas. Certain land uses and activities that do not involve the construction of a building are permitted in the Limited Development Area, including the construction of utility lines.
13. **Has there been public notice and discussion of the ductwork project that I missed?** Yes, the ductbank project has been planned for several years, is part of the Development Agreement, has been discussed at both Town meetings and COE Individual Permit meetings, and was discussed in the 2010 and 2011 Carolina North Annual Reports.
14. **What is the Town approval process for the UNC electric ductbank project?** The ductbank corridor appears on one of the exhibits to the Development Agreement. The Development Agreement was approved in June 2009. In addition, certain land uses and activities that do not involve the construction of a building are permitted in the Limited Development Area, including the construction of utility lines. Such land uses and activities do not require Town approval, but the University is required by the terms of the Development Agreement to report such land uses and activities undertaken in the previous year in its Annual Report.
15. **Please clarify how the project limits fencing will work during the construction process.** Orange tree protection fencing and low erosion control fencing will be installed before clearing and will remain in place for the duration of the project. Additional chain link

fencing will be installed to fully enclose the active construction site as work proceeds. UNC Forest Management will work closely with the project managers and contractors to maintain trail access as the ductbank construction progresses.

- 16. Will the community be able to access the existing trails during construction?** Yes, there will be access to the trails during construction. However, through access will vary based on the location of the construction work. Reroute information will be posted on site, and on the Facebook page for the Carolina North forest. Here's some important information for trail users:
- Access to the trail system will continue to be available to the public.
 - Forest Management is still expecting to host the annual Pumpkin Run in October 2011 and October 2012
 - No permanent trail re-routes, closures, rehabilitation or re-vegetation of the Pumpkin Loop will begin until after the construction of the ductbank and greenway path.
 - The plans and resources for rehabilitation and re-vegetation of the Pumpkin Loop are in addition to the stabilization/replanting required as part of the ductbank scope-of-work.
 - We will continue to discuss the restoration plans for the existing gravel road known as the Pumpkin Loop.
- 17. Clarify the details for the greenway proposed.** The Development Agreement specifies this path will be paved. Although we included a graphic with our presentation that shows the greenway path as an asphalt path, we have not yet completed a design for the greenway path. We will share details as the design is developed.
- 18. Why weren't more details about the ductbank and greenway project included in the Development Agreement?** At the time the Development Agreement was created in 2009, we had a conceptual plan for the location of the ductbank and greenway. The concept was to co-locate the utilities and the greenway in order to limit the impact to the forest.
- 19. Was the central utility plant included in the Development Agreement?** Yes.
- 20. Will the ductbank carry methane gas?** The ductbank itself will carry only electrical and telecommunication cables. A portion of the corridor may carry gas lines to the Carolina North Development Area.
- 21. Will the electric lines be located overhead?** No. The lines will be beneath the ground in the ductbank.
- 22. Will electromagnetic energy be coming up to people walking on the greenway above?** Electromagnetic force is not generally considered to be an issue, especially with underground electrical lines
- 23. When will the project cross Estes Dr. Extension?** The ductbank will be bored under Estes Drive Extension in two locations. The exact construction schedule will be established by the contractor. The projected schedule is currently February to July 2012.
- 24. Some participants do not see it as a fair trade to put in an asphalt path for what was an unpaved/gravel road.** The Development Agreement requires the University to construct a paved greenway trail from the development area to Homestead Road. We will continue to discuss the restoration plans for the existing gravel road known as the Pumpkin Loop.

- 25. What will the effect be on the existing tree canopy as a result of this project?** The project will involve clearing a 40-foot-wide corridor at ground level (60 feet wide at the vaults). The resulting tree canopy gap above ground level will be of varying widths, but less wide than the width cleared at ground level. Over time the canopy will recover as the trees and other vegetation specified as part of the project mature.
- 26. For the panhandle area, where the forest is older, can we avoid removal of larger trees?** After the staking of the project limits and before the commencement of clearing activities, University staff and project managers will review and if necessary, make minor adjustments to the project limits to minimize canopy loss. Trees located in the middle of the project limits will need to be removed.
- 27. What types of energy will the University use for Carolina North?** The University is currently studying alternative energy sources that it is currently using and will continue to develop in the future for the main campus and Carolina North. The district energy concept (see Question 11) lends itself well to such alternative energy sources as geothermal, solar thermal, heat recovery chillers, and combined heat and power. All of these technologies will be considered as the Carolina North development grows consistent with the commitments the University made in the Development Agreement.
- 28. What is the project at the Municipal Drive that is doing some clearing work?** Public Service of North Carolina, which has a gas line that crosses Carolina North, is doing this work.
- 29. Will the Town's advisory boards be able to comment on the Annual Report?** Mary Jane Nirdlinger said that she will take the report to the advisory boards.
- 30. Where is the funding for the electric ductbank project coming from?** The project is a receipts-supported project from UNC's Energy Services, which means it is funded by income Energy Services receives from its customers on campus.