



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

CAROLINA NORTH DEVELOPMENT AGREEMENT
ANNUAL REPORT
SEPTEMBER 1, 2010

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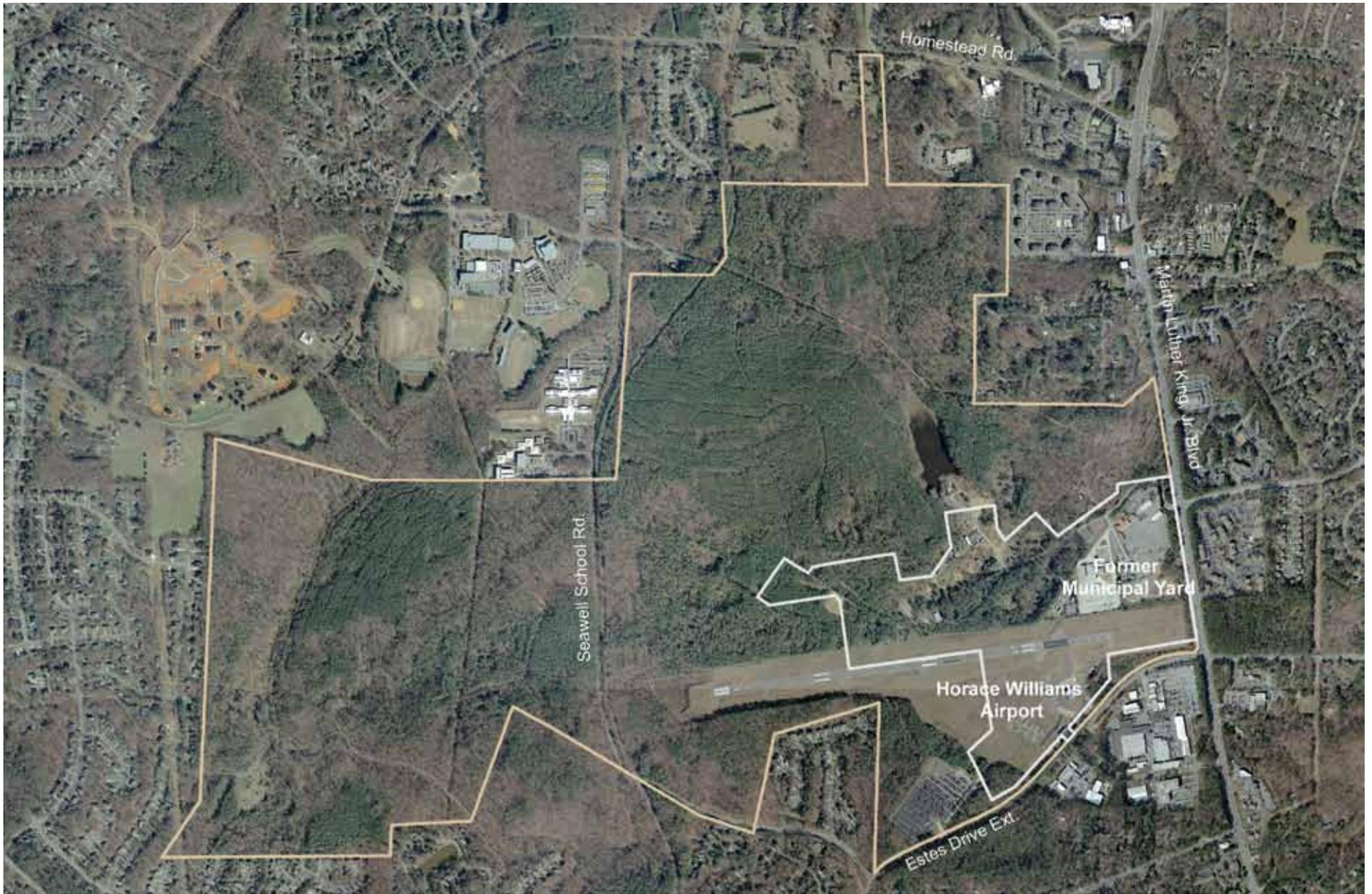


Exhibit 1: Existing Conditions

Legend

-  Carolina North Surveyed Boundary
-  Development Agreement Boundary



I. INTRODUCTION



Depiction of future Carolina North Entry Drive

The University of North Carolina at Chapel Hill is pleased to present the Town of Chapel Hill and the Town Manager this first Annual Report required under the Carolina North Development Agreement (“CNDA”). That agreement, approved in June 2009, created a new University-Town relationship for management of the extensive development anticipated for Carolina North and a new, more stable platform for the University’s planning. A new spirit of cooperation and collaboration that began with the meetings of the Joint Staff Work Group and joint meetings of the Town Council, Board

of Trustees representatives and the Chancellor during negotiation of the Development Agreement has been developed further with continued collaboration during this first year of implementation of the Development Agreement. As a result of this continuing town-gown communication, much of the information contained in this report will come as no surprise to many recipients.

Carolina North represents a vital opportunity for growth and innovation in support of the University’s mission of teaching, research, service, outreach, and economic development. Although the current downturn in the economy has delayed early development at Carolina North, these delays have done nothing to diminish the eventual role that Carolina North will play. No ground has been broken on the site this year, but University staff have been actively engaged in preparations for

the future. The Development Agreement has already served as a guiding agenda for much of this work, as the content of this first Annual Report will indicate.

This first Carolina North Annual Report is relatively short. Most of the activity on the site this year has been the recreational use that community residents continue to make of the well-maintained trails of the Carolina North Forest that serve walkers, joggers, bikers, and competitive cross-country runners. This range of users suggests that Carolina North is not a race to be run by one individual or group, but a relay to be run by successive groups of participants in its development. The Development Agreement defines many of the milestones to be achieved, and this first report documents the first stage of the Carolina North journey.

Carolina North represents a vital opportunity for growth and innovation in support of the University’s mission of teaching, research, service, outreach and economic development.



Depiction of future Carolina North Central Greenway

II. 2009–2010 ACTIVITY HIGHLIGHTS

While no development activity has occurred at Carolina North during this reporting period, the University has continued to lay the groundwork for future development at the site. The following activities illustrate these preparations.

Organization for managing Carolina North responsibilities

Within the University the primary coordination of activities related to Carolina North and the Development Agreement occurs through the Carolina North Steering Committee. This group meets monthly and coordinates with activities of the Joint Staff Work Group, the Town and University staff members who meet monthly to monitor activities related to Carolina North. Supplementing these meetings, monthly Carolina North Coordination meetings bring together the primary University staff members who are involved with Carolina North. These meetings are used for communication and coordination regarding all activities related to Carolina North.

Process for managing responsibilities related to the Development Agreement

University staff members have prepared comprehensive inventories of the University's obligations under the

Development Agreement (see Section IV). These obligations fall into two primary categories.

- Reportable items for each Annual Report required by the Development Agreement
- Plans, approvals, and reports required by the Development Agreement

The inventory of reportable items will serve as a checklist for the gathering of information and drafting of the various sections of the Annual Report. In addition, “process owners” and “contributors” have been identified for each of these reportable items. This assignment of reporting responsibilities will serve as a management document in each reporting cycle. The inventory of plans, approvals, and reports similarly serves as a management document for any review and communication responsibilities that arise as specific activities related to Carolina North develop.

Geo-referenced plan

The first step in moving from the master plan phase to the implementation phase of Carolina North was to ground, or geo-reference, the master plan drawings. Working with Ayers Saint Gross, the Baltimore consultants who developed the Carolina North master



Horace Williams Airport Runway

plan, University staff members created a geographical information system (GIS) database that includes all the proposed building footprints, roads, open space and other features of the master plan. This database allows staff members to create accurate maps that overlay the proposed development on existing site features, enabling planners to make adjustments necessary to accommodate the actual landscape. (See Exhibit 4)

Army Corps permit application preparation

During the 2010 fiscal year, a team of University employees spent a considerable amount of time preparing materials related to the Carolina North individual permit

application to be submitted to the U.S. Army Corp of Engineers. A public information meeting was held on June 21, 2010, which included information presented by representatives of both the University and the Army Corp of Engineers. The University expects to submit the application to the Army Corp of Engineers in the fall of 2010. A copy of the submitted application will be publicly available on the University's Carolina North website (<http://research.unc.edu/carolina-north/index.htm>). This permit application will include plans to mitigate and offset impacts to streams and wetlands caused by development at Carolina North. That mitigation plan might include one or more of the conservation areas.

Once a mitigation plan is approved by the Army Corp of Engineers, the University can formulate an approach for the conservation areas.

Minor Modifications

On June 11, 2010, the University submitted two requests for minor modifications to the Development Agreement in accordance with the procedures outlined in Section 3.5.5(j) of the Land Use Management Ordinance and Section 4.12 of the CDNA. (These modifications resulted from the geo-referenced master plan and Army Corps permit work mentioned above.) Maps and other content in this report (which covers

activity through June 30, 2010) have been prepared with the assumption that these minor modifications will be accepted by the Town Manager.

The purpose of Minor Modification 2010-1 is to adjust the perimeter of the Development Area to avoid unintended wetland impact and an unintended building siting on a steep slope. In Minor Modification 2010-1, a technical correction was made to the map to reflect the recorded Development Agreement's legal description of the boundary. The total acreage of the Development Area under the new boundary is the same as the previous amount. The purpose of Minor Modification 2010-2 is to avoid significant adverse stream impacts from the construction of a sidewalk on top of a stream along a section of Seawell School Road. The proposed alternative avoids the adverse stream impacts by constructing a multiuse facility/sidewalk on the opposite side of that section of Seawell School Road.

Baseline light survey

In March 2009, UNC Energy Services staff conducted a light survey along the Carolina North property line where it adjoins residential neighborhoods and along Martin Luther King Jr. Boulevard. This survey will serve to establish baseline light levels to be used in future years for purposes of documenting compliance with the Development Agreement. (See Section 5.25.4 of the CNDA.)

Ductbank and greenway design and its effect on tree canopy

Design work has begun on a ductbank from the former Duke Energy site at the corner of Homestead Road and Martin Luther King Jr. Boulevard through the Carolina North property to the existing University buildings south of Estes Drive Extension. The purpose of this project is to serve these buildings with more

reliable power. Future work will include a greenway on top of the ductbank from the Carolina North Development Area running northward to Homestead Road, consistent with the requirement of Section 5.16.9.2.ii. of the CNDA. (See Exhibit 2)

Because some trees will need to be cleared to build and maintain the ductbank and the greenway, the overall tree canopy for Carolina North may be decreased during the construction of the ductbank and greenway. There will also be periods of time during the growth

of Carolina North when there will be a net increase in the amount of tree canopy, as in the development of a long central greenway and a number of working landscapes on land that currently is largely devoid of trees. The University is committed to using its best efforts throughout the development of the Carolina North project to maintain or increase the total amount of tree canopy coverage on the Carolina North tract, as required by Section 5.21.1 of the CNDA.



Exhibit 2. General location of planned greenway above ductbank (solid green line)

Note: The dashed lines indicate the general location of potential greenways. The circled area indicates the general location of a crossing. All will require future field study.



III. 2009–2010 ACTIVITIES TO REPORT

A. Housing

Units constructed: None.

Estimated number of residents living in Carolina North housing: None.

Estimated number of Full Time Equivalent employees working on site at Carolina North, as of June 30, 2010:

- 12.5 FTE employees at Horace Williams Airport, including 10 AHEC (Area Health Education Centers) FTE employees
- 2 FTE employees at the Carolina North Forest Management office
- 5 FTE employees at the Chapel Hill Police Department substation
- 1.5 FTE Grounds Department employees

B. Parking, Traffic and Transit

Report on parking provided vs. baseline parking ratios

The University has not constructed any new facilities nor provided any parking during this reporting period. The University entered into an agreement to allow the Chapel Hill Police Department to use the former transportation administration building in the former municipal operations yard, which includes the nonexclusive use of parking adjacent to the building.

Current status of transit planning for Carolina North Project and coordination within Short Range Transit Plan process

Chapel Hill Transit is in the process of developing a Short Range Transit Plan that is due to be completed in 2010-11; therefore no coordination with the plan has taken place to date.

Coordination with Transportation Management Plan

The University had no development during the reporting period; therefore, no coordination with the Transportation Management Plan occurred.

Exhibit 3. Roadbed seeding

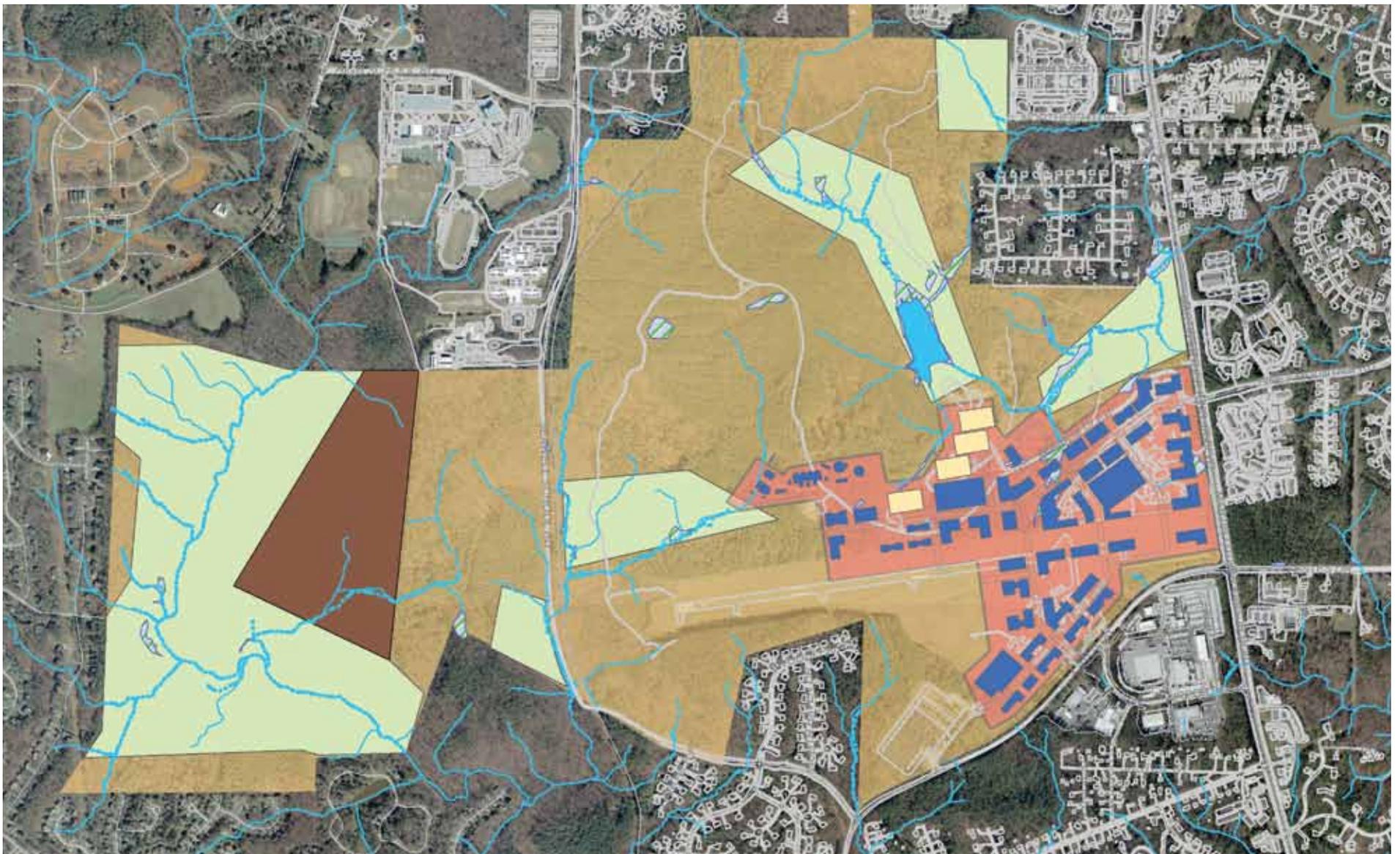


Exhibit 4: Geo-referenced Plan

Legend

- | | | | |
|---|---|--|--|
|  Limited Development Area 50 years* |  Limited Development Area 100 Years* |  Existing Roads and Buildings |  Proposed Recreation Fields |
|  Development Area |  Wetlands |  Proposed Buildings | * not yet geo-referenced |
|  Proposed Conservation Area* |  Streams |  Proposed Road | |



C. Land Use and Activities in Limited Development Area

Chilled water, steam, electric ductbank, water and telecom lines: No activity.

Reclaimed water line (with OWASA): No activity.

Maintenance and improvements to existing utility lines: No activity.

Stormwater lines and improvements: No activity.

Stormwater structures: No activity.

Public utility lines traversing site: No activity.

Utility structures without a building (e.g., electrical substation): No activity.

Alterations to utility equipment (generator, other mechanicals): No activity.

Site storage and construction staging areas: No activity.

Stream restoration projects: No activity.

Greenways and other paved trails: No activity.

Public art: The Town Manager appointed a staff liaison from the Town of Chapel Hill to the University's campus art advisory committee in accordance with Section 5.12.10 of the Development Agreement. No other activity.

Site clearing for any other purpose: To address potential safety issues, University staff provided assistance to Horace Williams Airport by felling trees

that exceeded a surveyed height tolerance at the west end of the runway to create a clear sight and flight path. (See Exhibit 13)

Alterations (but not expansion) in existing parking lots, including repaving, replanting for stormwater mitigation, etc.: No activity.

Roads, internal service without exterior connections and not designed for vehicular circulation to serve buildings within Carolina North developed area: In October 2009, University staff seeded existing forest roads with annual rye grass for erosion control during the winter rainy season. (See Exhibit 3)

Exterior tennis and basketball courts: No activity.

Athletic facilities and events that are not buildings and that do not involve land clearing or grading of more than 20,000 square feet:

- TarWheel Mountain Bike Race (July 2009) (See Exhibit 6)
- N.C. State University Mountain Bike Invitational, regional collegiate mountain biking competitions, sponsored by the NCSU Mountain Biking Club (September 2009)
- Carrboro High School Cross Country Meet (September 2009) (See Exhibit 20)
- Pumpkin Run, an annual community 4K race (October 2009) (See Exhibit 19)
- K-9 Officer Training by the Chapel Hill Police Department (March 2010)



Exhibit 5. Philosopher's Way Trail Run



Exhibit 6. TarWheel Mountain Bike Race



Exhibits 7, 8. Exercise stations along the Pumpkin Loop

- The Philosopher’s Way Trail Run, running race sponsored by the TrailHeads (May 2010) (See Exhibit 5)
- TarWheel Mountain Bike Race, sponsored by the Triangle Off-Road Cyclists (June 2010) (See Exhibit 6)
- Technical Rescue Training by Southern Orange Rescue Service (June 2010)
- Technical Rescue Training by Chapel Hill Fire Department (June 2010)

Gazebos and other open air shelters, parks, children’s play areas, passive recreation features, and park site furnishings: During the summer of 2009, the University’s Carolina North Forest Management Office staff installed a series of simple exercise stations (pull-ups, sit-ups, push-ups, and dips exercises) around the Pumpkin Loop in the Crow Branch division of the

Carolina North Forest. These exercise stations, like the Carolina North trails themselves, are available for use by the public. (See Exhibits 7 and 8)

Unpaved trail construction/maintenance (including volunteer work on paths, harvesting, etc.): (See Exhibit 13)

- Trail reinforcement on the Wormhole trail between marker 8 and marker 9 (July 2009)
- Identification of existing trail loops (September 2009), including posting of wayfinding points throughout the trail system (See Exhibits 9 and 22) and update of display and on-line maps (See Exhibit 13)
- Chain gate installed at north end of Duke Energy corridor to prevent vehicular access (November 2009)

- Raking and brushing on Nature Observation trail between marker 6 and marker 7 (December 2009)
- Installation of “bog bridge” (small footbridge)



Exhibit 9. Wayfinding points along trail

over identified ephemeral stream crossing to improve water quality and protect wetland species (salamanders) (April 2010)

- Invasive plant suppression activity undertaken by staff, student, and community volunteers (see Exhibits 10 and 11)
 - Mechanical control of *W. floribunda* and *A. altissima* on Crow Branch Overlook trail between marker 19 and marker 20 (September 2009)
 - Mechanical removal of *E. umbellata* along Nature Observation trail between marker 1 and marker 2 (October 2009)
 - Mechanical removal of *E. umbellata* along Trip Farm, Nature Observation and Creekside trails (November 2009)
 - Mechanical removal of *E. umbellata* along Lowlands trail between marker 8 and marker 9 (December 2009)
 - Mechanical removal of *E. umbellata* near Castlebury Mill Site (April 2010)

Memorial gardens: No activity.

Kiosks and benches: Informational sign installed at a site of future bridge crossing of Bolin Creek. (See Exhibit 12)

Incidental parking areas: No activity.

Site furnishings (recycle containers, fixtures, blue lights): No activity.

Support facilities for special events (Tar Heel Town, concerts, etc.): No activity, but see also page 11.



Exhibits 10,11. Volunteers working to suppress invasive plants



Demolitions: No activity.

Landscaping activities: No activity.

Community gardens: No activity.

Crossing Bolin Creek

UNC is planning to formalize the user-created creek crossings (behind you) by installing a pedestrian bridge, re-aligning the trails on the east and west sides of the creek, re-vegetating the stream bank, and closing or removing the existing unsustainable crossings.




The current crossings contribute to erosion and sedimentation of the Bolin Creek. During periods of high flow they contribute to flood conditions by re-directing water out of the creek channel. They'll be removed, closed and re-planted after the construction of the bridge and trail re-alignment.



The bridge will connect the west side of the creek to the trail on the east side of the creek. Abutments and access ramps will also be constructed to support the bridge to make it accessible to pedestrians, cyclists and other forest visitors.




The existing bike and forest road will be re-aligned to avoid the muddy area at the toe of the slope (where you're standing) after it rains.



Using stones from the current crossing, the over-used ford will be closed to traffic as well. The eroded creek banks and new trail alignments will be stabilized with tree, shrub and herbaceous (ferns, reeds, grasses, etc.) species native to the Piedmont region of North Carolina.

The bridge project is managed by Carolina North Forest Management. Consulting engineers and UNC staff have worked with planning, permitting and design. The Town of Canters and the Office of State Construction have approved and issued completion of the project. Construction will begin once all necessary floodplain permits are issued by appropriate state and federal agencies.



THE UNIVERSITY OF NORTH CAROLINA
AT CANTERS, N.C.

Exhibit 12. Crossing Bolin Creek informational sign

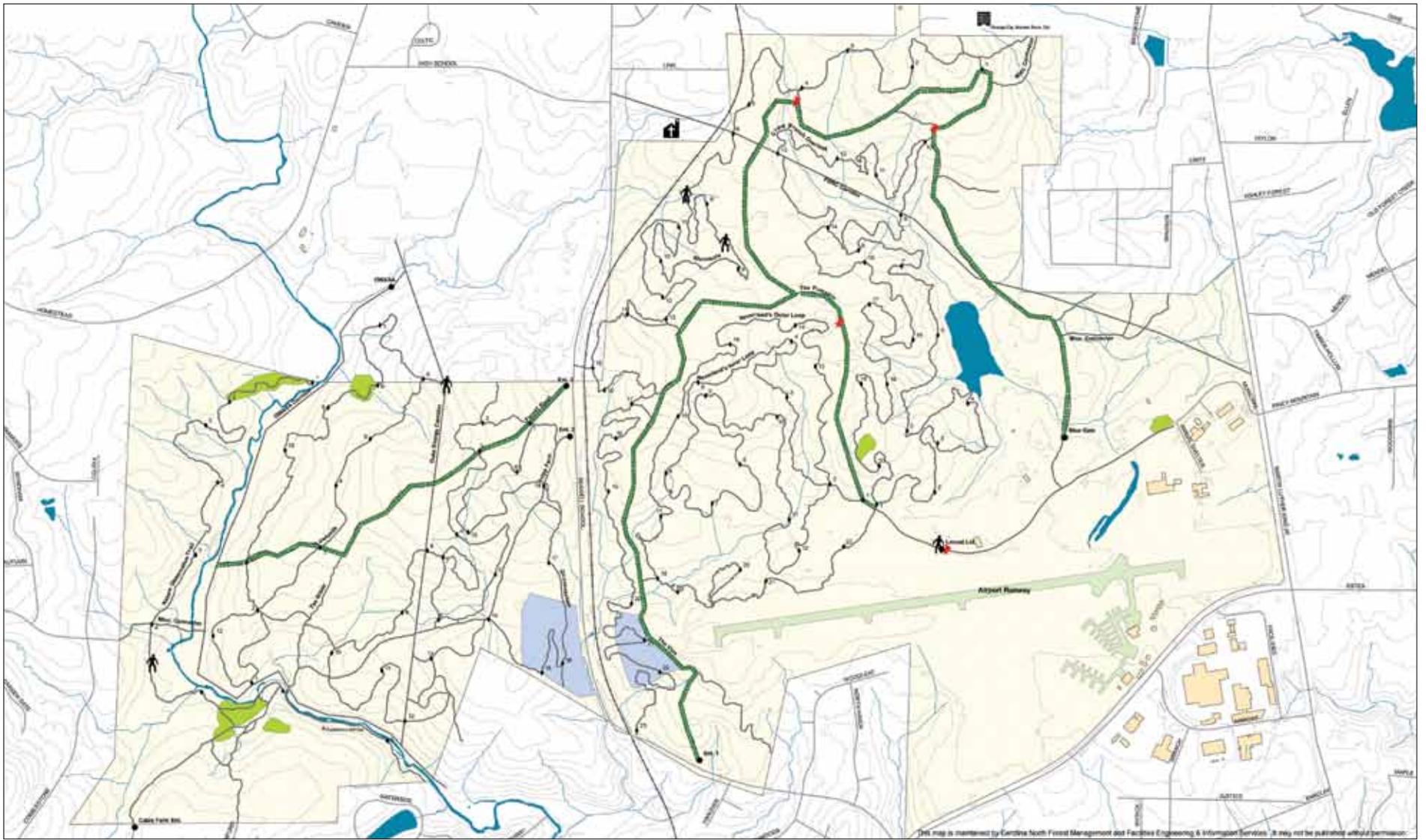


Exhibit 13: Activities in Carolina North Forest

Legend

-  Trail Maintenance
-  Site Furnishings
-  Road Seeding
-  Invasive Control
-  Selective Tree Removal



D. Land Use and Activities in Development Area

Chilled water, steam, electric ductbank, water and telecom lines: No activity.

Reclaimed water line (with OWASA): No activity.

Maintenance and improvements to existing utility lines: No activity.

Stormwater lines and improvements: No activity.

Stormwater structures: No activity.

Public utility lines traversing site: No activity.

Utility structures without a building (e.g., electrical substation): No activity.

Alterations to utility equipment (generator, other mechanicals): No activity.

Site storage and construction staging areas: A portion of the Town of Chapel Hill's former municipal operations yard and transit operations headquarters is being used for construction staging by four contractors working on large construction projects on main campus. A map is included as Exhibit 14 in the report showing the location of the staging areas.

Stream restoration projects: No activity.

Greenways and other paved trails: No activity.

Public art: The Town Manager appointed a staff liaison from the Town of Chapel Hill to the University's campus art advisory committee in accordance with Section



Exhibit 14. Site storage and construction staging areas

5.12.10 of the Development Agreement. No other activity.

Site clearing for any other purpose: No activity.

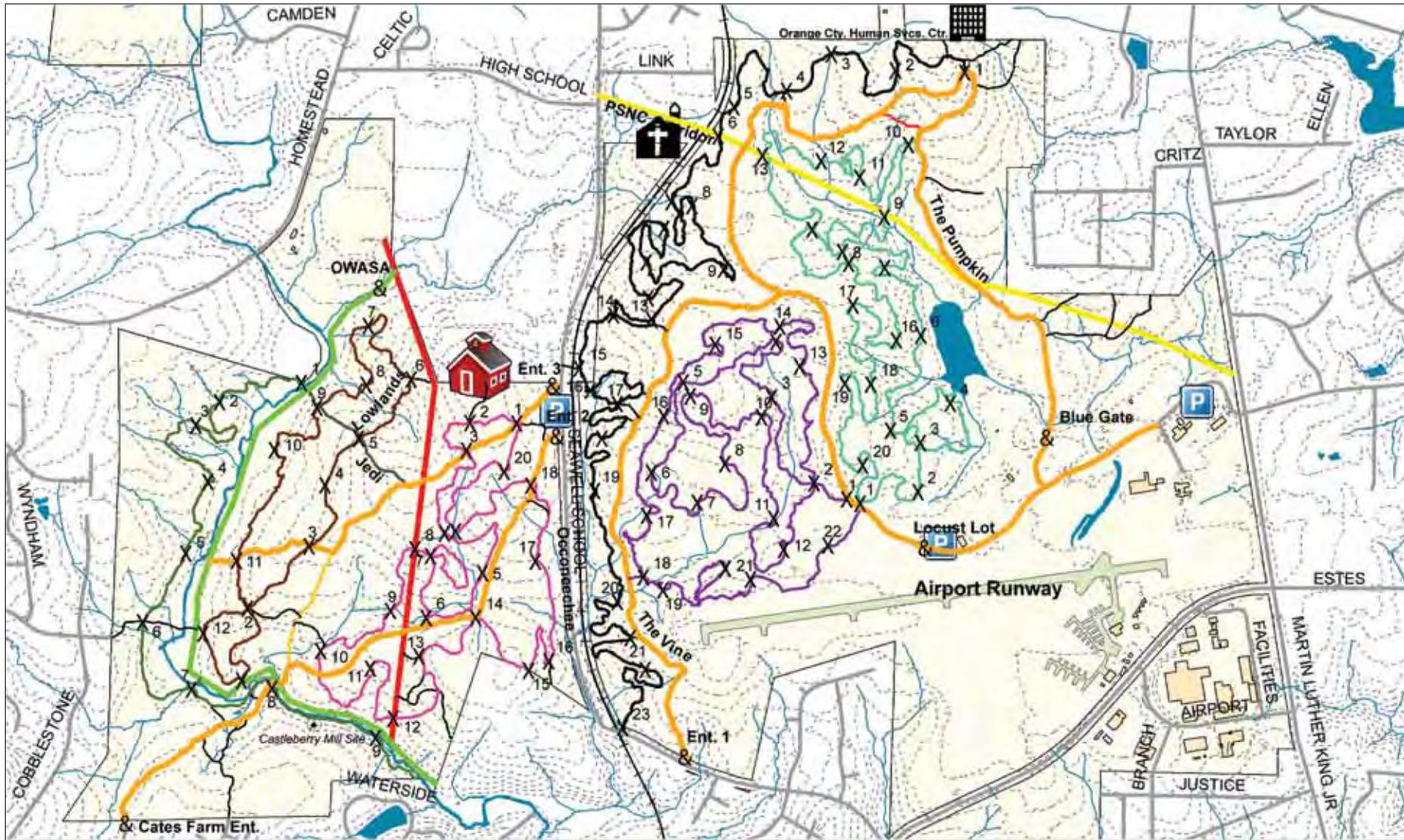


Exhibit 15: Carolina North Forest Trail System

Legend

X	Waypoints		Forest Road		Nature Observation Trail		Ocooneechee		The Pumpkin
	Connection Mabe		Jedi		Neverland's Inner Loop		PSNC Corridor		The Vine
	Crow Branch Overlook		Lowlands		Neverland's Outer Loop		Temple of the Pines		Tripp Farm
	Duke Energy Corridor		Misc. Connector		OWASA Corridor		The Glade		Wormhole





Exhibits 16, 17. Campus-to-campus public workshops

E. Greenways

Report on examination and recommendations for a greenways partnership model comparable to public transit partnership:

This discussion with the Town of Chapel Hill is ongoing.

Report on potential locations and funding alternatives for campus-to-campus greenway and bike connection:

In accordance with Section 5.16.2 of the Development Agreement, beginning in the fall of 2009, University and Town staff began a collaborative process of planning for a greenway/bike path connection between Carolina North and the main UNC campus. Through a series of public workshops (see Exhibits 16 and 17) and technical research, a preferred route was selected from three identified options (See Exhibit 18). A report documenting the process, the recommendation, funding alternatives and next steps toward implementation is included as an attachment to this report.

Current status and funding of greenway connections at Carolina North (after greenways plan submitted with initial individual site development permit):

The University proposes to co-locate the first greenway with the construction of the electric ductbank from Homestead Road to existing Municipal Drive. (See Exhibit 2)

Greenway improvements and document compliance with Section 5.16.14: No activity.

Report on consideration of pedestrian connections to adjacent neighborhoods: No activity.



Exhibit 18. Possible routes for Campus-to-Campus connector



Exhibit 19. 8th Annual Pumpkin Run



Exhibit 20. Carrboro High School cross-country meet

F. Waste Management

The University's approach to waste management at Carolina North is consistent with its approach to waste management for the University generally. The University provides trash and recycling services for all University facilities, including those at Carolina North. The recycling program covers a variety of materials and is continually evaluated for improvement and expansion. To ensure construction debris is properly recycled, a representative from the University Office of Waste Reduction and Recycling reviews each phase of each building project to identify waste reduction, reuse, and recycling opportunities. University staff educate contractors about University, local, state, and project-specific requirements; review and suggest changes to contractor Solid Waste Management Plans; collect and analyze waste reports; and conduct site visits regularly. Specifications detailing University and regulatory requirements regarding construction waste management and reporting are given to each construction contractor. Future construction projects and finished buildings will be managed and supported similarly. There have been no amendments to waste management strategies, and therefore, there has been no fiscal impact on the Town.

G. Recreation Areas

Study of feasibility and cost-sharing options for future joint use recreation areas at Carolina North

On June 18, July 12, and August 2, 2010, staff employees of the University and the Town met to study the feasibility of future joint use of recreation areas at Carolina North. This working group is composed of approximately a dozen individuals involved with coordinating and overseeing recreational activities and facilities for the Town and the University, respectively.

Through the meetings that have occurred to date of this working group, recreation facility needs of the University and Town, respectively, have been identified that currently are not being fully met with existing facilities. Opportunities for synergies are being explored, although a potential obstacle has been identified in that the late afternoon and early evening during the academic year is a period of peak facility demand for both the University and the Town.

The development of capital-intensive recreation facilities on the Carolina North property will likely not be undertaken in the immediate future due to the recent economic recession and resulting budgetary constraints. However, the use of the Carolina North property for recreational purposes is thriving. The citizens of the Town of Chapel Hill and surrounding communities make frequent and extensive use of the University's network of trails on the Carolina North property.

The University, through its Forest Management Office staff, facilitates the use of the network of trails in the Carolina North Forest for the benefit of local schools, community groups, and individual citizens of the Town of Chapel Hill and the broader community. The TarWheel mountain bike race, the Pumpkin Run,

the Philosopher's Way Trail Run, and Carrboro High School cross country meets are four leading examples.

The TarWheel mountain bike race, an annual event open to local mountain bikers, took place on July 12, 2009. The TarWheel is a 6.5-mile mountain bike race organized by Triangle Off-Road Cyclists on the Carolina North trails. (See Exhibit 6)

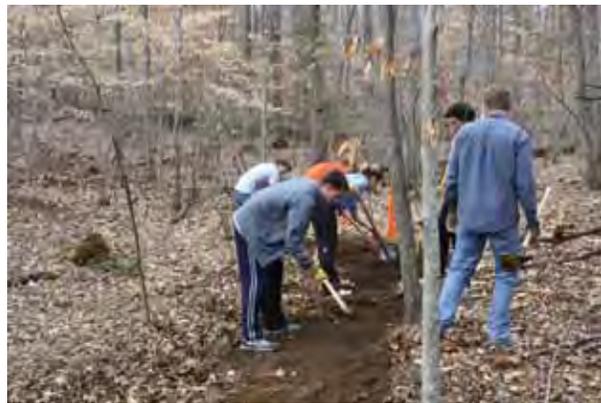


Exhibit 21. Trail maintenance by the UNC Cross Country Club

The 8th annual Pumpkin Run was held on the Carolina North trails on October 24, 2009. More than 250 runners from the community participated in the event. The 2009 Pumpkin Run was organized by SeeJaneRun. SeeJaneRun donated proceeds from the events to the Carolina North trail maintenance fund, the YMCA and the Chapel Hill High School Cross Country Team. (See Exhibit 19)

On May 8, 2010, approximately 300 runners from the local community participated in the annual Philosopher's Way Trail Run on the Carolina North property. The Philosopher's Way Trail Run includes both 7k and 15k races. (See Exhibit 5)

The Carolina North trails are frequently used by local schools for cross-country team practices and meets. Carrboro High School uses Carolina North as the team's "home course" because the school lacks similar facilities. (See Exhibit 20)

Description of improvements for recreation areas and compliance with Section 5.15.5

Improvements to Carolina North recreation areas in the form of Carolina North trail maintenance are regularly undertaken by the University's Carolina North Forest Management Office staff. Additional trail maintenance work is regularly performed by UNC affiliated groups and local nonprofits and community groups, acting in concert with the University's Carolina North Forest Management Office staff. (See Exhibit 21)



Exhibit 22. Wayfinding points along trail

IV. 2010–2011 DEVELOPMENT SCHEDULE

A possibility exists that construction on the portion of the ductbank project described in Section II of the Carolina North property may begin during the University's 2011 fiscal year. No other development is expected during the period July 1, 2010, to June 30, 2011.

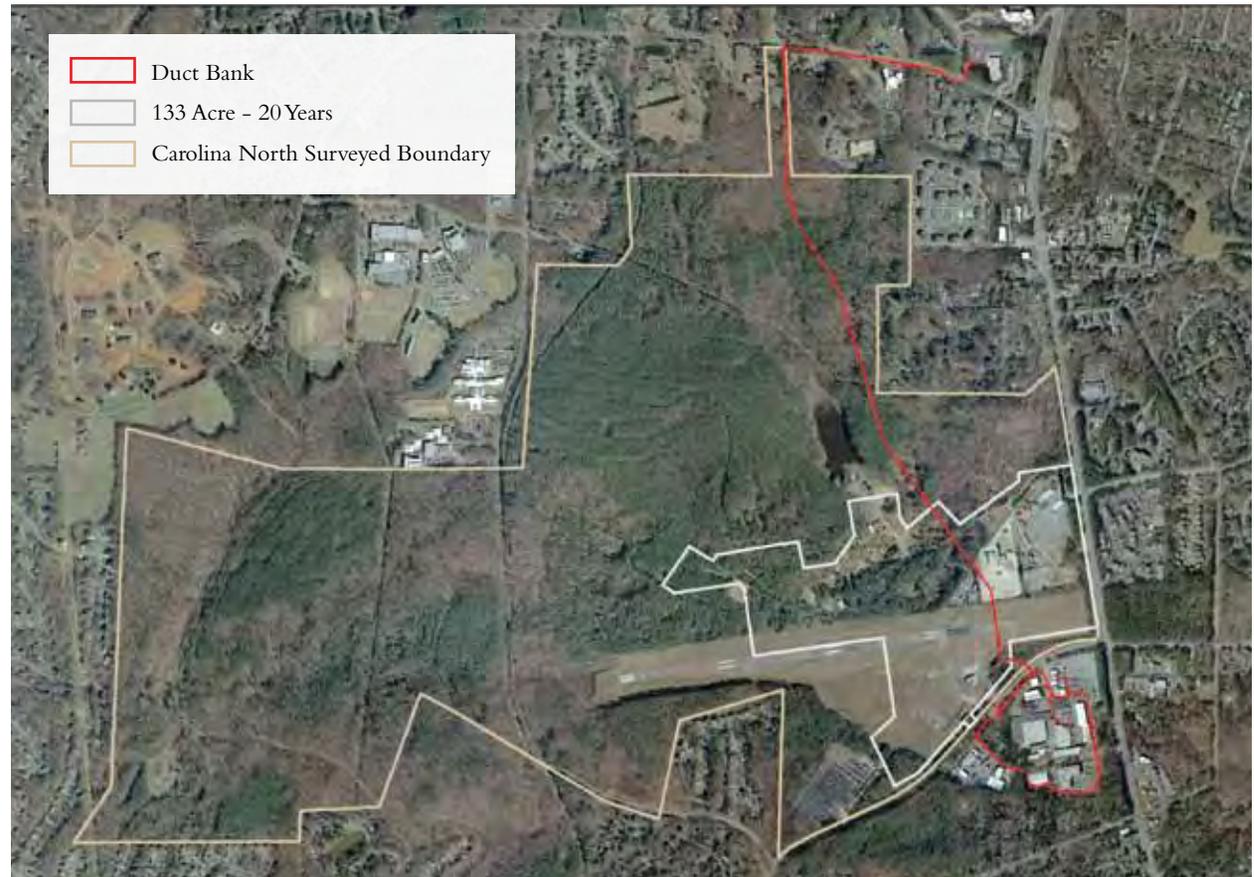


Exhibit 23. Proposed Ductbank Route

V. 2009–2010 REPORTABLE ITEMS CHECKLIST

CNDA Section	Topic	Subtopic	2010 Annual Report Section (or reason for no report)
4.14	Report demonstrating good faith compliance with terms of DA	Report demonstrating good faith compliance with terms of DA	Cover letter
4.14 (& 5.27.4.a.)	Construction Activity	List of individual site development permits issued	No activity to report.
4.14 (& 5.27.4.a.)	Construction Activity	Building floor area constructed	No activity to report.
4.14 (& 5.27.4.a.)	Construction Activity	Infrastructure installed	No activity to report.
4.14 (& 5.27.4.a.)	Construction Activity	Status of University participation in provision of or financing of public infrastructure	No activity to report.
4.14 (& 5.27.4.a.)	Construction Activity	Infrastructure dedicated/acquired	No activity to report.
4.14 (& 5.27.4.a.)	Construction Activity	Projected schedule for CN development for following year	Section IV.
5.4.2 (& 5.27.4.b.)	Housing	Units constructed	Section III.A.
5.4.2 (& 5.27.4.b.)	Housing	Estimated number of residents living in CN housing	Section III.A.
5.4.2 (& 5.27.4.b.)	Housing	Estimated number of FTE employees working on site at CN	Section III.A.
5.5.2.e.1 (& 5.27.4.f.)	Land Use - Limited Development Area	Chilled water, steam, electric duct bank, water and telecom lines	Section III.C.
5.5.2.e.2 (& 5.27.4.f.)	Land Use - Limited Development Area	Reclaimed water line (with OWASA)	Section III.C.

CNDA Section	Topic	Subtopic	2010 Annual Report Section (or reason for no report)
5.5.2.e.3 (& 5.27.4.f.)	Land Use - Limited Development Area	Maintenance and improvements to existing utility lines	Section III.C.
5.5.2.e.4 (& 5.27.4.f.)	Land Use - Limited Development Area	Stormwater lines and improvements	Section III.C.
5.5.2.e.5 (& 5.27.4.f.)	Land Use - Limited Development Area	Stormwater structures	Section III.C.
5.5.2.e.6 (& 5.27.4.f.)	Land Use - Limited Development Area	Public utility lines traversing site	Section III.C.
5.5.2.e.7 (& 5.27.4.f.)	Land Use - Limited Development Area	Utility structures without a building (e.g., electrical substation)	Section III.C.
5.5.2.e.8 (& 5.27.4.f.)	Land Use - Limited Development Area	Alterations to utility equipment (generator, other mechanicals)	Section III.C.
5.5.2.e.9 (& 5.27.4.f.)	Land Use - Limited Development Area	Site storage and construction staging areas	Section III.C.
5.5.2.e.10 (& 5.27.4.f.)	Land Use - Limited Development Area	Stream restoration projects	Section III.C.
5.5.2.e.11 (& 5.27.4.f.)	Land Use - Limited Development Area	Greenways and other paved trails	Section III.C.
5.5.2.e.12 (& 5.27.4.f.)	Land Use - Limited Development Area	Public art	Section III.C.
5.5.2.e.13 (& 5.27.4.f.)	Land Use - Limited Development Area	Site clearing for any other purpose	Section III.C.
5.5.2.f.2 (& 5.27.4.f.)	Land Use - Limited Development Area	Alterations (but not expansion) in existing parking lots, including repaving, replanting for stormwater mitigation, or changing impervious to pervious pavement	Section III.C.
5.5.2.f.3 (& 5.27.4.f.)	Land Use - Limited Development Area	Roads, internal service without exterior connections and not designed for vehicular circulation to serve buildings within CN developed area	Section III.C.
5.5.2.f.4 (& 5.27.4.f.)	Land Use - Limited Development Area	Exterior tennis and basketball courts	Section III.C.
5.5.2.f.5 (& 5.27.4.f.)	Land Use - Limited Development Area	Athletic facilities and events that are not buildings and that do not involve land clearing or grading of more than 20,000 square feet	Section III.C.

CNDA Section	Topic	Subtopic	2010 Annual Report Section (or reason for no report)
5.5.2.f.6 (& 5.27.4.f.)	Land Use - Limited Development Area	Gazebos and other open air shelters, parks, children's play areas, passive recreation features, and park site furnishings	Section III.C.
5.5.2.f.7 (& 5.27.4.f.)	Land Use - Limited Development Area	Unpaved trail construction/maintenance (including volunteer work on paths, harvesting, etc.)	Section III.C.
5.5.2.f.8 (& 5.27.4.f.)	Land Use - Limited Development Area	Memorial gardens	Section III.C.
5.5.2.f.9 (& 5.27.4.f.)	Land Use - Limited Development Area	Kiosks and benches	Section III.C.
5.5.2.f.10 (& 5.27.4.f.)	Land Use - Limited Development Area	Incidental parking areas	Section III.C.
5.5.2.f.11 (& 5.27.4.f.)	Land Use - Limited Development Area	Site furnishings (recycle containers, fixtures, blue lights)	Section III.C.
5.5.2.f.12 (& 5.27.4.f.)	Land Use - Limited Development Area	Support facilities for special events (Tar Heel Town, concerts, etc.)	Section III.C.
5.5.2.f.13 (& 5.27.4.f.)	Land Use - Limited Development Area	Demolitions	Section III.C.
5.5.2.f.14 (& 5.27.4.f.)	Land Use - Limited Development Area	Landscaping activities	Section III.C.
5.5.2.f.15 (& 5.27.4.f.)	Land Use - Limited Development Area	Community gardens	Section III.C.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.1)	Land Use - Development Area	Chilled water, steam, electric duct bank, water and telecom lines	Section III.D.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.2)	Land Use - Development Area	Reclaimed water line (with OWASA)	Section III.D.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.3)	Land Use - Development Area	Maintenance and improvements to existing utility lines	Section III.D.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.4)	Land Use - Development Area	Stormwater lines and improvements	Section III.D.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.5)	Land Use - Development Area	Stormwater structures	Section III.D.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.6)	Land Use - Development Area	Public utility lines traversing site (Duke Energy, PSNC, etc.)	Section III.D.

CNDA Section	Topic	Subtopic	2010 Annual Report Section (or reason for no report)
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.7)	Land Use - Development Area	Utility structures without a building (e.g., electrical substation)	Section III.D.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.8)	Land Use - Development Area	Alterations to utility equipment (generator, other mechanicals)	Section III.D.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.9)	Land Use - Development Area	Site storage and construction staging areas	Section III.D.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.10)	Land Use - Development Area	Stream restoration projects	Section III.D.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.11)	Land Use - Development Area	Greenways and other paved trails	Section III.D.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.12)	Land Use - Development Area	Public art	Section III.D.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.13)	Land Use - Development Area	Site clearing for any other purpose	Section III.D.
5.7.2 (& 5.27.4.c.)	Stormwater Cost-Sharing	Cost-sharing agreements (to be updated every three years)	No report required. New cost sharing agreement will be required beginning July 1, 2013.
5.8.7.a (& 5.27.4.d.)	Parking, Traffic and Transit	Report on parking provided vs. baseline parking ratios	Section III.B.
5.8.7.a (& 5.27.4.d.)	Parking, Traffic and Transit	Current status of transit planning for CN Project and coordination within SRTP process	Section III.B.
5.8.11.b (& 5.27.4.d.)	Parking, Traffic and Transit	Coordination with Transportation Management Plan	Section III.B.
5.9.3 (& 5.27.4.e.)	Short Range Fiscal Plan	Actions taken to address recommendations in most recent SRFP	The initial SRFP is to be completed in conjunction with the issuance of initial site development permit.

CNDA Section	Topic	Subtopic	2010 Annual Report Section (or reason for no report)
5.10 (& 5.27.4.h.)	Carbon and Other Greenhouse Emissions	Greenhouse gas emissions and offsets updated biennially	UNC's Climate Action Plan was submitted to the Town in 2009 (www.climate.unc.edu/portfolio/cap2009) and is not required in the current reporting cycle.
5.11.3 (& 5.27.4.i.)	Water Use/Water Reclamation	Progress toward reductions of 20 percent indoor and 50 percent outdoor	No report is required, since no site development permit applications have been submitted.
5.12 (& 5.27.4.j.)	Design Guidelines	Informational copy of any updates to Design Guidelines	No updates have been made to Design Guidelines.
5.12.11 (& 5.27.4.k.)	Public Art	Update on plans, activities, implementation	There are no activities to report.
5.15.4 (& 5.27.4.o.)	Recreation Areas	Study of feasibility and cost-sharing options for future joint-use recreation areas at CN	Section III.G.
5.15.5 (& 5.27.4.o.)	Recreation Areas	Description of improvements for recreation areas and document compliance with 5.15.5	Section III.G.
5.16.1.b (& 5.27.4.l.)	Greenways	Report on examination and recommendations for a greenways partnership model comparable to public transit partnership	Section III.E.
5.16.2 (& 5.27.4.l.)	Greenways	Report on potential locations and funding alternatives for campus-to-campus greenway and bike connection	Section III.E. & attached Campus-to-Campus Report
5.16.4 (& 5.27.4.l.)	Greenways	Current status and funding of greenway connections at CN (after greenways plan submitted with initial individual site development permit)	Section III.E.
5.16.14 (& 5.27.4.l.)	Greenways	Greenway improvements and document compliance with 5.16.14	Section III.E.
5.16.15 (& 5.27.4.l.)	Greenways	Report on consideration of pedestrian connections to adjacent neighborhoods	Section III.E.

CNDA Section	Topic	Subtopic	2010 Annual Report Section (or reason for no report)
5.18 (& 5.27.4.m.)	Waste Management	Description of strategies/impacts	Section III.F.
5.19.5 (& 5.27.4.p.)	Airport Closing Assessment	Environmental impacts (after cessation of airport activities)	Horace Williams Airport is still open, so no report is due.
5.20.1 (& 5.27.4.n.)	Stream Buffers	Description of improvements and document compliance with 5.20	No improvements were made within stream buffers in the previous year. An invasive species removal project within the stream buffers is reported in Section III.C.

VI. ATTACHMENT: CAMPUS-TO-CAMPUS CONNECTOR REPORT

Executive Summary

One of the requirements of the Carolina North Development Agreement is for the University and the Town of Chapel Hill to collaborate on identifying a greenway and bike path connection between the main campus and Carolina North (5.16.2). Through a series of public meetings, staff evaluation, and field review of three primary options (Route A, B, and C), 'Route A' was identified as the preferred candidate for the Campus-to-Campus Connector.

Route A emerged as the preferred route for a number of reasons:

1. Relatively flat topography, with only a few sloped sections.
2. Located entirely on Town of Chapel Hill, Town of Carrboro and NCDOT-owned property.
3. Requires only restriping or minor improvements at some locations.
4. Less environmental impact compared to the other routes.

5. Least number of at-grade street crossings which increases safety and is less costly to build.
6. Significant portions of the route would be off-road which increases safety and is less costly to build.

Factors that will need to be considered during a design phase of Route A include the following:

1. Its length is about a third longer than the other routes although travel times may be offset by relatively flat topography and fewer vehicular conflicts.
2. It requires clearing and grading on the Town of Chapel Hill owned property.
3. It connects with an unpaved section of Broad Street in Carrboro.
4. Additional community input.
5. Coordination with Carrboro is required for part of the route.

While this report contains an evaluation of Route A, a full design study would be required to estimate its costs and benefits and to propose an implementation schedule. Information on Federal and State funding options is included in the evaluation of Route A.

The input of the technical group and the community participants was key to developing a thoughtful and well-researched recommendation for the Campus to Campus Connector. A description of the public evaluation process is included in the body of this report.

Introduction

One of the requirements of the Carolina North Development Agreement is for the University and the Town of Chapel Hill to identify the priority route for a greenway and bike path connection between the main campus and Carolina North (Section 5.16.2). University and Town staffs were directed to identify and recommend the most direct and flat connections (not located on Martin Luther King Jr. Boulevard), and to avoid steep grades where feasible. The route might include existing or planned greenways for a portion of the route.

Materials developed during this review process, including maps, presentations and public comments, have been posted to the Town's website on the Carolina North Campus to Campus Connector page. This report is included in the University's first Annual Report to the Town of Chapel Hill as required under Section 5.16.2 of the Carolina North Development Agreement.

Stakeholders Input / Public Participation

A technical group of Town of Chapel Hill staff, UNC at Chapel Hill staff and a representative of the Town's Transportation Advisory Board and Bicycle and Pedestrian Advisory Board organized a series of public meetings to involve the community in identifying the preferred connector.

December 5, 2009 – 1st Public Meeting

- Technical group of Town of Chapel Hill and the University of North Carolina at Chapel Hill staff prepared background materials
- About 75 participants analyzed topography, parcel maps and aerial photography of the

areas of Chapel Hill between Estes Drive and Cameron Street, along Fordham Boulevard, and areas in Carrboro.

- The group identified possible routes for the connector.
- Comments and suggested routes were posted on the town's webpage with a meeting summary and presentations.

February, 2010 – Data Collection

- Technical staff evaluated the possible alignments and identified three primary alternative routes with options/variations (see Map 2: Possible Routes Compiled from December 5, 2009 Public Meeting).
- The alternative routes and an evaluation form were published on the webpage and two walks were organized.
- The community was invited to join the walks; a citizen group, Campus to Campus Bike Connector, also organized two walks of the routes.
- Groups walked the three primary routes and collected images and data.

April 15, 2010 – 2nd Public Meeting

- Data, maps and photos were presented at a public meeting with about 45 participants (See Appendix 2 for the data).

- Route A was identified by participants as the most appropriate option.
- Comments were collected and posted on the town's website.

Summer 2010 – Data Analysis

- Staff analyzed the preferred Route A in more detail,
- Evaluation and recommendation were drafted for this report

August 12, 2010

- A third public meeting was held to seek comments and suggestions from community members. General support was expressed for route A. Community comments are in Appendix 4.



Map 2: Possible Routes Compiled from December 5, 2009 Public Meeting

Communications

The Town and University used a variety of electronic and face-to-face communications tools to support the project.

- Town website updates for meeting announcements, background, presentation materials, maps and feedback.
- University website updates on the connector project.
- Email addresses for meeting attendees were compiled and used for invitations.
- Town of Chapel Hill Advisory Boards were invited to meetings.
- Presentations on the project by request to Advisory Boards.
- Presentations on the project by request to Town of Carrboro Staff.
- Contact with interested community groups, NC DOT, and property owners.

Based on the input from the entire process, a summary of the pros and cons of all three routes follows.

Pros and Cons

Route A

Length: Approximately 3.27 miles

Pros

- Relatively flat topography, with only a few sloped sections.

- Located entirely on Town of Chapel Hill, Town of Carrboro and NCDOT-owned property.
- Requires only restriping or minor improvements at some locations.
- Less environmental impact compared to the other routes.
- Least number of at-grade street crossings which increases safety and is less costly to build.
- Significant portions of the route would be off-road which increases safety and is less costly to build.

Cons

- Its length is about a third longer than the other routes although travel times may be offset by relatively flat topography and fewer vehicular conflicts.
- It requires clearing and grading on the Town of Chapel Hill owned property.
- It connects with an unpaved section of Broad Street in Carrboro.
- Coordination with Carrboro is required for part of the route.

Route B

Length: Approximately 2.82 miles

Pros

- Shortest route in terms of distance, appeals to time-sensitive cyclists.

- Serves densely-populated residential neighborhoods and Northside School between Carolina North and UNC main campus.
- Provides a connection to the central part of downtown Chapel Hill.
- Could be coordinated with the University Square redevelopment design.

Cons

- Umstead Park creek crossings with a paved path could be difficult to permit.
- Topography in the park is challenging further complicates environmental permitting.
- Access around the proposed school site is unclear.
- Bicycle facilities on existing streets in the Northside neighborhood could be challenging due to narrow street widths.
- Connection from Northside neighborhood across Rosemary Street, Franklin Street, and University Square property could require extensive design.

Route C

Length: Approximately 2.80 miles

Pros

- Provides a shorter distance connection than Route A.
- Provides a connection to the eastern side of main campus.

Cons

- Significant topography at creek crossings.
- Stream impacts on Cole Springs Branch.
- Could require use of power and sewer easements, unlikely to be permitted.
- Some areas of connection in existing neighborhoods are not well-defined or access is unclear.

Evaluation of Route A

The technical group proceeded to evaluate Route A more closely, based on the four categories below: ownership, regulatory, environmental, and funding

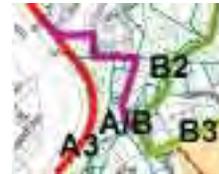
Ownership: Establishing a Right-of-Way

Route A is located on publicly-owned property. It runs parallel to a railroad right-of-way, but does not cross or enter the railroad right-of-way. This public ownership means planning and design phases could proceed without requiring much, if any, purchase of easements or property. There is an option to create a direct connection from Lloyd Street to the Libba Cotton bike trail through the private property at 300 West Main in Carrboro. This would be more direct than using public right-of-way on West Main Street and Roberson Street. In early discussions with NCDOT and an owner's representative for the 300 West Main Street property, there is support for that direct connection. Whether it can be implemented will need to be determined during a later design phase.



Challenge: the railroad tracks block east-bound access to the route between Village Drive and Broad Street in Carrboro; this does not interfere with the north-south connection between the two campuses

Challenge: Implementation in a second jurisdiction requires additional coordination. If a connection through Carrboro was not viable for any reason, an option to connect Route A with Route B via Umstead Park should be explored (purple A/B).



Challenge: Coordinating a direct connection across West Main Street through the proposed 300 West Main development could make the route easier to navigate but requires additional design consideration.

Regulatory: North Carolina Department of Transportation (NCDOT) Areas of Impact

There are two main NCDOT areas of impact: Estes Drive Extension in Chapel Hill and West Main Street in Carrboro. Both of these roadways are owned and maintained by the NCDOT.

On Estes Drive Extension, the connector could be implemented in a number of different ways, depending on the final design considerations, NCDOT requirements and available funding sources. At present, the roadway has wide shoulders that are frequently used by cyclists. The least costly and least intrusive option could involve resurfacing and widening the existing

roadway in order to construct striped bicycle lanes. This option could also include installing sidewalks on both sides of Estes Drive Extension. The Development Agreement requires the University to provide sidewalks and bike lanes between Martin Luther King Jr. Blvd and Seawell School Road. A second option Could involve installing a multi-purpose path on the southern side of Estes Drive Extension, with crossings at the existing and planned intersections at Seawell School Road and Airport Drive in Chapel Hill and at the planned Estes Park crossing in Carrboro.

Challenge: Estes Drive crosses Bolin Creek, any changes to that crossing would need to be carefully evaluated. As proposed, Route A crosses West Main Street in Carrboro. One option would involve construction of a perpendicular crossing from Lloyd Street through the proposed 300 West Main development project to the existing Libba Cotton bicycle trail.

Challenge: This preferred option requires coordination with the property owners of 300 West Main Street.

Alternately, the cyclists could be directed to turn right on West Main Street, go through the light then cross at the existing Robeson Street crosswalk. South Roberson Street then connects to the existing Libba Cotton bike trail. This would create a less direct connection than turning left at the Main/Roberson light, but the lack of room and existing conditions at that intersection do not support construction of a left turn lane for cyclists or cars so that movement is prohibited during peak hours. During non-peak hours, when the motor vehicle operators are allowed to make left turns, bicyclists could make the left turn as well, as opposed to advancing to the crosswalk.

Environmental: Stormwater and Stream Impacts

The stormwater and stream impacts would need to be considered for all sections of the route in order to insure compliance with updated regulations.

Along Estes Drive Extension, the crossing of Bolin Creek would be the primary concern. Village Drive would require only restriping that would result in no significant stream impacts.

Improvements on the Town of Chapel Hill-owned property parallel to the railroad right-of-way would have to consider the following: a simple stream crossing, Resource Conservation District issues, and verification of whether Jordan Lake Buffer requirements are applicable. According to the existing floodplain mapping, there are no existing floodplain concerns in the study area.

The Broad Street section of Route A in Carrboro from the Town of Chapel Hill owned property to the Broad/Hill intersection could be best served by paving the current width of unpaved road. Widening the road cross-section here could be problematic due to environmental impacts where the mid-section descends to an existing low point. This section of the path, while short, has the steepest grades.

Challenge: During the design phase of the project, the existing stream regulations will need to be evaluated.

Funding: Federal and State Options

Federal and State funding could be utilized for the Campus to Campus project if it is intended to provide general purpose transportation access rather than serve primarily as a recreation facility.

Federal Surface Transportation Program Direct Allocation (STP-DA) and Congestion Mitigation Air Quality (CMAQ) funds could be allocated to the project. These funds are administered by the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC-MPO) and require a 20% local match. The STP DA funds available to the MPO have been allocated through FY2017 while the CMAQ program funds have been allocated through FY2013. The CMAQ funds require the preparation of an air quality assessment documenting the impact of the proposed project on travel behavior and air pollution.

The State of North Carolina provides limited funding through the Transportation Improvement Program (TIP) for bicycle and pedestrian projects, although grant awards are limited to approximately \$600,000 per project.

A portion of the route along Estes Drive Extension is scheduled for improvement under the terms of the Carolina North Development Agreement. Bike lanes and sidewalks will be added by the University on both sides of Estes Drive Extension from Martin Luther King Jr. Blvd to Seawell School Road.

Recommendation

Based on the public input and the data collected during the evaluation of all three routes, the technical group recommends Route A as the location for a Campus to Campus Connector. This recommendation does not preclude implementing other routes or connections that are important to the overall network of bicycle and pedestrian connectivity in Chapel Hill.

If and when the Town and University decide to proceed with the Campus to Campus connector, the

technical group would encourage that the follow steps be considered:

1. Identify design funding for Route A.
2. Establish and confirm a Right-of-Way and/or grant access.
3. Establish Route A design guidelines (main trunk, pedestrian/bike waysides & connections, landscape enhancements, lighting, safety, way-finding etc.).
4. Prepare a design and cost estimate for Route A.
5. Identify an implementation strategy that addresses:
 - a. Management and maintenance of the pathway,
 - b. Identify appropriate construction funding mechanisms, and
 - c. Define and schedule implementation phases.

Other findings

Although this report is based on the specific direction of the Development Agreement to seek a connector that does not use the Martin Luther King Jr. Blvd. right-of-way, during each of the public sessions, participants noted that Martin Luther King Jr. Blvd. does provide the most direct access between the campuses and when schedules are a concern, active cyclists will likely choose the direct route over the more circuitous Route A. Based on this consistent input, the technical group

recommends that improvements to Martin Luther King Jr. Blvd. continue to be part of the ongoing town-wide efforts to improve bicycle access and increase the use of non-motorized transportation.

Similarly, many participants in the workshops noted that this connector is only one element of a comprehensive system of greenways, sidewalks and bicycle facilities in Chapel Hill. While this report recommends Route A, it is important to continue looking system-wide for improvements to support all alternative transportation modes in the community. This recommendation should not be to the exclusion of other equally viable components of the system. The maps and comments from the workshops identify additional connections that could enhance the overall system.

Appendices

1. December notes and maps
2. April data sheets
3. April route evaluation posters with public comment:
 - a. Route A, April 15, 2010
 - b. Route B, April 15, 2010
 - c. Route C, April 15, 2010
4. August 2010 public input

Thanks to the many community participants who attended the workshops and the technical staff who shared their input and expertise:

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