



Vanasse Hangen Brustlin, Inc.

8601 Georgia Avenue
Suite 710
Silver Spring, MD 20910-3433
301 562-9433
Fax 301 562-8706

Memorandum

To: Ms. Emily T. Yasukochi, AICP
Transit Services Planner
Town of Chapel Hill
6900 Millhouse Road
Chapel Hill, North Carolina 27516

Date: 04/14/2011

Project No.: 83263.10

Project Name: Eubanks Road Park-and-Ride Expansion
Feasibility Study and Preliminary Engineering

From: Margaret M. Kubilins, P.E.

Re: Scope Of Work

INTRODUCTION

Park-and-Ride has long been an important component of Chapel Hill's transportation system. The Town has recognized that time will be needed for the planning, design, entitlements, construction and commissioning of an expanded park-and-ride lot at the north end of Martin Luther King, Jr. Boulevard. The process is starting now so that the capacity will be available by the time demand materializes for this expanded facility. The Town's Economic Development division has retained the planning services of Kling Stubbins to prepare a Concept Plan for property on Eubanks Road. This Plan will be incorporated into the Feasibility Study for the Park-and Ride facility. The Town desires adequate park-and-ride capacity developed in an environmentally-friendly, financially-efficient manner supportive of transit-compatible redevelopment of adjacent properties. The objectives of the study include:

- Confirm the level of demand for park-and-ride spaces in the Eubanks Road facility for both CHT passengers and other users;
- Review the site suitability and configuration options presented in the Eubanks Road Concept Plan by Kling Stubbins in relation to an expanded park-and-ride facility and formulate alternatives for park & ride expansion in the planning area;
- Develop an effective access plan including determination of impacts and service requirements so that transit service, walking and biking access, and traffic needs are addressed;
- Understand financial strategies and implications of park-and-ride development;

- Define a variety of potential alternatives, test the alternatives, complete NEPA requirements and select a preferred alternative for environmental permitting, funding, construction and operation;
- Define and manage an inclusive public and agency process to develop consensus around the Eubanks Road Concept Plan, facility options and study outcomes.

The TOD Planning Area is generally bound by Eubanks Road, Millhouse Road, Martin Luther King Jr Boulevard and I-40. The extent of the traffic analysis limits include the following ten (10) intersections:

1. Eubanks Road and Millhouse Road
2. Eubanks Road and Northwood Drive
3. Eubanks Road and Millhouse Road
4. Martin Luther King Jr. Boulevard and Whitfield Road
5. Martin Luther King Jr. Boulevard and I-40 Westbound Ramps
6. Martin Luther King Jr. Boulevard and I-40 Eastbound Ramps
7. Martin Luther King Jr. Boulevard and Eubanks Road
8. Martin Luther King Jr. Boulevard and Weaver Dairy Road
9. Martin Luther King Jr. Boulevard and Westminster Drive
10. Martin Luther King Jr. Boulevard and Homestead Road

SCOPE OF WORK

The project has two phases; Feasibility Study and Preferred Alternative Selection, and Environmental Assessment and Preliminary Engineering. The Scope of Work is outlined here is for the first phase. The second phase scope of services will be detailed if the Town decides to advance the project based on the Phase 1 findings. We have assumed a maximum seven-month duration for Phase 1 (completion in November of 2011, if not earlier).

Phase I: Feasibility Study and Preferred Alternative Selection

Task 1: Project Management and Administration

- VHB will manage the team consisting of four (4) sub-consultant firms for the Eubanks Road Park-and-Ride Expansion Feasibility Study (Feasibility Study);
- VHB will provide direct liaison with Chapel Hill Transit/Town of Chapel Hill;
- Within this task, VHB will manage the workflow, schedule, and budget. VHB will coordinate activity and task sequencing and facilitate cross-functional communication.

Task 1 Meetings Summary:

- Prior to a Project Kickoff Meeting, VHB will meet with Kling Stubbins to discuss the Eubanks Road Concept Plan and elements fleshed out through their process.
- Kickoff Meeting: The planning process will be initiated with a kick-off work session with Transit/Town officials to review the scope and schedule, confirm study objectives, establish priorities to be built into the planning process, and define explicit parameters for selecting the preferred alternative.

Task 1 Deliverables

- Monthly progress reports
- Meeting summaries

Task 2: Inventory, Review, and Analyze Existing Conditions

This task is intended to provide the engineering and analytic basis for the remainder of the planning effort. It will be informed by the scoping process and includes identification of the major physical systems, natural systems, and cultural resources in and around the site. This task will rely on readily available information and will not include detailed engineering investigations beyond those customary as part of a planning effort.

2.1. Data Gathering

- The Town will provide GIS area mapping; adjacent and area property ownership; site information such as survey data, geotechnical data, wetlands and stream data; marketing research; transit use data and regional transit data and plans;
- The team will rely upon the accuracy and thoroughness of information gathered or provided to us by the Town or other third parties;
- The Town will provide the following information:
 - Previous planning documents, reports and studies conducted for the project area;
 - Transportation and other related planning studies or data conducted for projects in and around the development area including plans for nearby portions of Carrboro;
 - Zoning by law and any applicable amendments;

- 1:100 map of the area with topographic info;
 - Any Town or neighborhood master plans that impact the study area;
 - Design drawings of I-40 adjacent to the Morris Property and the MLK interchange including the Eubanks Road intersection (if available);
 - CHT bus ridership and bus vehicle sizes for nearby routes;
 - CHT Information: routes, schedule, ridership;
 - List of stakeholders;
 - Tax maps or property data for each parcel within the development area;
 - Appropriate plans for the water system, sewer system, storm drains, and private utilities such as electric, telecommunications, and gas;
 - Drainage calculations and/or reports for adjacent facilities, including SWM reports if available SWM facilities are in the vicinity;
 - Traffic Impact Studies, Synchro files, and traffic count data within the general study area;
 - Planned roadway improvements within the general study area.
- The VHB Team will provide a peer review of Kling Stubbins work to define the market area(s) for individual uses and within the Eubanks Road Concept Plan.

2.2. Review Prior Studies and Reports

VHB will review prior studies and reports conducted in the area compiled during the inventory task and prepare a list of important findings which reinforce each other or contradict each other, including the Eubanks Road Concept Plan, the Carolina North Report, the Northern Area Plan, and plans developed by the Town of Carrboro in the vicinity of the site. The list will guide discussions as a vision for the area is brought into focus.

2.3. Site Investigation

Site and Study Area Tour – VHB’s Planning and Urban Design staff will be joined by key representatives from BBP & Associates, LLC, Sepi Engineering & Construction, Inc. and Speight, Marshall and Francis, PC to undertake a field

visit/reconnaissance of the study area to better understand the transportation elements, planning, urban design, and streetscape issues and opportunities.

2.4. Agency and Public Involvement

- VHB will coordinate with the Town's Planning Department and Economic Development Officer on the public involvement plan
- VHB anticipates discussions with Triangle Transit, the DCHC MPO, Orange County Planning Office, the Triangle Regional Model Bureau and the Chapel Hill Transit partners as part of this task.
- A Public Information Meeting to present an overview of Purpose of Effort and obtain feedback from the public on Existing Conditions and the Concept Plan.

2.5. Meetings

- Town-Staff Work sessions and Progress Meetings: VHB will conduct one (1) work sessions and up to two (2) agency meetings as part of this task;
- Teleconferences: VHB will conduct team teleconferences on an as-needed basis.
- Stakeholder and Public Meetings: VHB will prepare for and facilitate one public information meeting as part of this task.

Task 2 Deliverables:

- Study Area and Site mapping
- Technical Memorandum summarizing available data and data issues
- Summary of site visit and opportunities and constraints
- Public information meeting materials and logistics support
- Summary of feedback from Public Information Meeting

Task 3: Conduct Preliminary Analysis

VHB will define the transit requirements for the Park-and-Ride facility, review the viability of the Concept Plan, explore other alternatives potentially required under NEPA and develop an understanding of the project impacts, mitigation and viability.

3.1. Transportation Analysis and Forecasting

A Transportation Analysis will be conducted for existing conditions, and parking and transit demand estimates will be developed for the 2035 horizon year. The primary connections to Eubanks Road are from a set of closely-spaced intersections near the I-40 ramp system on Martin Luther King, Jr. Boulevard. A detailed model of the traffic operations surrounding the site will be prepared as a tool in master planning the roadway network serving the study area.

- Develop Parking and Transit Demand Estimates
 - An inventory of existing transit services to the existing Eubanks Road Park-and-Ride facility by Chapel Hill Transit, TTA, Piedmont Authority for Regional Transportation (PART) private shuttles, and intercity bus. The following information will be collected and documented:
 - Routing
 - Schedule/frequency
 - Ridership
 - Vehicle size
 - VHB will review multiple reports including the Chapel Hill - Carrboro Long Range Transit Plan, the CHT Short Range Transit Plan, PART long and short range plans if available, the DCHC MPO/CAMPO regional transportation plan, the Carolina North TIA, and Triangle Transit plans for service to and in the vicinity of the Eubanks Park-and- Ride. Data from UNC TDM and Transportation Reports will also be reviewed.
 - VHB will review the Triangle Regional Model (TRM), the 2035 Long Range Transportation Plans prepared for the Durham-Chapel Hill-Carrboro MPO, and the Regional Transit BluePrint to identify ridership assumptions related to Chapel Hill Transit and Triangle Transit service at the Eubanks Park-and-Ride.
 - Through an iterative analysis of the forecasted parking facility size, its potential utilization, turnover characteristics, and transit service characteristics. VHB will develop a parking program, supporting transit requirements, and a demand profile for the facility for CHT passengers and regional carpool and transit passengers.

- A Synchro model will be developed and calibrated to reflect conditions of the surrounding road network and up to 10 intersections identified at the beginning of this Scope of Work. The existing transportation analysis will include the following:
 - Collect AM (7-9), Noon (11-1), and PM (4-6) peak hour traffic count data, including vehicle mix, speeds, and pedestrian/bike counts for up to 10 intersections (if necessary). This count data will then be used to synthesize balanced AM, Noon, and PM peak hour traffic counts and turn movements at the analysis intersections. The counts will be conducted on weekdays: Tuesday, Wednesday or Thursdays only and will be collected in a format suitable for use by the DCHC MPO.
 - Collect 48-hour Automatic Traffic Recorder Counts at up to 5 locations (if necessary) including 12-hour pedestrian and bicycle counts (if necessary). The counts will be conducted on weekdays: Tuesday, Wednesday or Thursdays only.
 - Inventory intersection and road segment geometric features along the roadway network, including pedestrian accommodations (e.g., sidewalks and crosswalks), bus routes and bus stops. In addition, VHB will compile signal timing plans and Synchro files for each of the signalized intersections;
 - VHB will build a traffic model using the latest version of Synchro for the roadway network to evaluate the traffic capacity and determine the existing operational level of service (LOS) and volume-to-capacity (v/c) ratios for the AM, Noon, and PM peak hours for the analysis intersections. The *Highway Capacity Manual 2000* (HCM) methodology will be used for all analyses.

3.2. Facility Planning

Based on the findings from the site investigation work, existing transportation analysis and demand forecasting, VHB will prepare a framework for the facility alternatives, as either an expanded lot or structured parking.

3.3. Market Analysis

Land use opportunities and constraints within the Park-and-Ride planning area presented in the Eubanks Road Concept Plan prepared by Kling Stubbins, Inc. will be reviewed and economic viability will be

incorporated. The VHB team will quantify development potentials based on share of the potential market, regional growth projections and/or experience in similar locations across the country. Examples of Transit Oriented Development success will be presented and discussed as potential is identified and appropriateness for Chapel Hill is decided.

3.4. Site Element Assessment

The Eubanks Road Concept Plan developed by Kling Stubbins will serve as a framework for the site assessment. Potential alternatives to the Concept Plan will also be considered as part of this analysis. Elements of the concept plan will be reviewed to define constraints critical to constructability of the Plan. These elements may include:

- Topography;
- Utilities;
- Storm Water Management;
- Wetlands;
- Potential hazardous materials or historic uses likely to result in contamination;
- Forestation.

3.5. Financing Options

The VHB team will prepare a white paper on financing plans related to funding construction, programming operations and maintenance costs, and possible funding mechanisms. Financing options will include traditional transportation funding opportunities in addition to current funding alternatives and present strategies for leveraging matching grants.

3.6. Meetings

In coordination with the Town's Planning Department and Economic Development Officer, VHB is including an allowance of four (4) coordination meetings with property owners or other agencies conducted during no more than two separate trips.

- Progress Meetings with Town Staff: VHB will conduct two (2) progress meetings with the Town as part of this task;
- Teleconferences: VHB will conduct team teleconferences on an as-needed basis.

Task 3 Deliverables:

- A Technical Memorandum summarizing ridership potential, transit service implications, and parking demand for the Eubanks Park-and-Ride
- A Technical Memorandum summarizing review of the Eubanks Road concept plans and other alternatives that have been developed during Task 3. This memorandum will include the findings of existing conditions traffic analysis and likely impacts of the proposed park and ride expansion
- A Technical Memorandum summarizing the market potential, conditions, and limitations for transit-oriented development at the site
- A Technical Memorandum summarizing environmental and cultural resources on and near the site;
- A Technical Memorandum summarizing utility and other issues and constraints on expanded development of the site;
- An Issues and Opportunities Constraints Diagram illustrating the findings of the Technical Memoranda listed above ;
- A white paper on financial strategies to support the development.

Task 4: Master Plan Alternatives and Screening

In this task, site opportunities and constraints will be translated into master plan alternatives for the Eubanks Park-and-Ride and transit oriented development areas.

4.1. Concept Plan Analysis

VHB will provide additional detail regarding potential environmental and infrastructure constraints, access issues and transit operations associated with the Concept Plan. These development issues, along with the Concept Plan will serve as the basis for further discussion of the site feasibility with the Town and the Public.

4.2. Public Work Session

A public work session will be held to discuss the concept plan analysis. The work session will provide an overview of the Concept Plan and the analysis defined in Task 4.1 and will explore Park-and-Ride and transit issues in more detail.

- Transit loading/unloading, layby, and operational support areas
- Transit passenger parking (either surface or structured)
- Transit-supportive and/or oriented development

4.3. Meetings

- Working Sessions with CHT/Town staff to develop the Concept Plan analysis: VHB will conduct a working session with CHT and Town staff to finalize the Concept Plan Analysis in advance within the same trip as the public work session;

- Public Work Session: VHB will prepare for and facilitate a work session with the public to review for the concept plan and project analysis;
- Progress Meetings with Town Staff: VHB will conduct one (1) progress meeting with the Town as part of this task;
- Teleconferences: VHB will conduct team teleconferences on an as-needed basis.

Task 4 Deliverables:

- Concept Plan analysis for review with CHT/Town staff
- Preparation, meeting materials and logistics support for the public meeting focused on alternatives
- Refined preliminary alternatives based on public input and screening results.
- Meeting notes for public meeting

Task 5: Alternatives Refinement

The VHB team will use the results of the Concept Plan analysis and work session to refine the Park-and-Ride plan. More specific detail for at least three alternatives (i.e. No-Build, Concept Plan, Park-and-Ride only) will be prepared which will include:

5.1. Constructability:

The alternatives will be reviewed and refined in terms of construction staging, maintenance of access and parking, critical dependencies, and other plan features that impact the ability to implement the plan.

5.2. Cost Effectiveness:

More detailed planning-level cost estimates will be developed for the alternatives for comparison with metrics of the amount of parking, transit capacity, and development afforded by the alternative.

5.3. Operational Effectiveness:

The effectiveness in terms of site access, parking accessibility and circulations, transit operations, ease of maintenance, clarity of transit oriented development opportunities, and other operational factors will be developed.

5.4. Environmental Constraints:

The alternatives will be reviewed in terms of potential impacts to environmental and other property constraints on and around the project site.

5.5. Development Benefits Financial Analysis:

The potential financing opportunities and development potential for the site alternatives will be compared.

5.6. Meetings

- Working Sessions with CHT and Town staff to review refined alternatives and updated screening analysis.
- Public Worksession: VHB will prepare for and facilitate a work-session with the public to review refined alternatives and screening criteria
- Teleconferences: VHB will conduct team teleconferences on an as-needed basis.

Task 5 Deliverables:

- Refined Concept Plan and screening for review with CHT/Town staff
- Refined Concept Plan and screening for public discussion
- Preparation, meeting materials and logistics support for the Public meeting focused on refined alternatives
- Meeting notes summarizing public input on refined alternatives meeting.

Task 6: Preferred Alternative Selection and Project Advancement Decision

The VHB team will lead Chapel Hill Transit/Town of Chapel Hill and its partners through a two-phased decision process. The alternatives listed in Task 5 will be presented and their viability will be discussed.

VHB will lead the panel through a process to decide if it is the public's best interest to advance the project to Preliminary Engineering.

6.1. Meetings

- Working Sessions with CHT/Town staff to review refined alternatives and updated screening analysis including modifications to reflect public input;
- Progress Meetings with Town Staff: VHB will conduct one (1) progress meeting with the Town as part of this task;
- Teleconferences: VHB will conduct team teleconferences on an as-needed basis.

Task 6 Deliverables:

- Finalized alternatives and screening for CHT/Town consideration
- Decision support analysis for the CHT/Town's consideration
- Documentation of decision-making for the CHT/Town's use;
- Report summarizing the Phase 1 planning effort and results.

Phase II: *Environmental Assessment and Preliminary Engineering*

This phase of the project will result in having a 30% complete plan set and environmental permitting for advancing the project and will be scoped in more detail should the project proceed

Activities to be completed during this phase include:

- Coordination with local, state and federal agencies on NEPA scoping and requirements for the project
- Additional public involvement to address NEPA requirements and to continue stakeholder, public and agency involvement from the planning stage
- Conducting additional field survey of property boundaries or identified environmental and cultural resources
- Additional hazardous material investigations
- Refinement of parking, transit demand, and traffic analyses
- Supplemental analysis of environmental, cultural, economic and cumulative impacts as required under NEPA
- Identification of other state and local permitting requirements and preparation of necessary analysis and documents
- Conduct geotechnical investigations and preliminary structural design
- Develop project financial plan
- Develop facilities management plan
- Provide additional project coordination and participate in project meetings and teleconferences