ATTACHMENT 2

**CITY OF DURHAM – KIMLEY-HORN AND ASSOCIATES, INC.
ON-CALL SUPPLEMENTAL AGREEMENT NUMBER 6 TO THE
MASTER AGREEMENT DATED SEPTEMBER 16, 2003**

I. PURPOSE:

The purpose of this supplemental agreement is for the CONSULTANT, Kimley-Horn and Associates, Inc., to provide on-call transportation planning and engineering services, as assigned, in accordance with the Master Agreement dated September 16, 2003 as described in the Scope of Services below for the Old Durham-Chapel Hill Road Bicycle/Pedestrian Feasibility Study.

II. SCOPE:

Consultant will perform Transportation Planning and Engineering services for the Old Durham-Chapel Hill Road Bicycle/Pedestrian Feasibility Study, upon receipt of request and assignment from the Transportation Manager or his designated representative. During the initial setup phase of the project, a work program will be developed to assist with the coordination and scheduling of milestones for the overall project. The work program will include specific elements and milestones required for completion of the data collection, public outreach, alternatives evaluation, constructability and probable cost estimates. Each monthly invoice will include an updated progress report with key project milestones identified.

Services to be provided include:

Step 1: Start-up

Task 1.1 — Develop Public Involvement Plan and Kickoff Meeting
The project team of Kimley-Horn and Associates (KHA) and Toole Design Group will develop a work program and public involvement plan to meet the following objectives:

- Identify specific elements and milestones required for completion of the data collection, public outreach, alternatives evaluation, constructability and probable cost estimates (work program)
- Disseminate information about the project to the general public and to directly affected communities and businesses
- Identify and actively solicit input from stakeholder groups most affected by and interested in the project
- Provide opportunities for public participation and involvement throughout the process
- Produce recommendations after considering public comment
- Respond to issues raised by the area's multiple stakeholders, either by incorporation into the recommendations or as a separate summary of public issues that were considered

The work program and public involvement plan will help guide the Lead Planning Agency (LPA) – i.e., the City of Durham – of the Durham-Chapel Hill-Carrboro (DCHC) Metropolitan Planning Organization (MPO) in forming two study committee groups. A technical committee made up of professional staff and bicycle/pedestrian specialists will be formed to serve as a sounding board for the consultant's technical work and recommendations. Also, a citizen-based policy committee representing Durham and Chapel Hill municipalities (and having experience in bicycle and pedestrian planning activities) will be formed to help guide the planning process and study issues, communicating and affirming findings with the public, and facilitating a decision by elected and appointed officials to determine a preferred plan.

A draft public involvement plan will be presented to the LPA at the project kickoff meeting. The scope and schedule for the project will also be discussed during the meeting.

Task 1.2 — Meet with Policy Committee and Technical Committee
The policy committee is intended to bring perspective from a variety of community interests. Committee members will represent their interests from an individual perspective, but also will be encouraged to take a broad view for the betterment of all aspects. At the first meeting of the policy committee, the goals of the study process will be discussed and the role of the committee reviewed. Any issues or concerns presented by members of the policy committee will be discussed as they review and refine the planning study.

The project team will create materials, suggest agenda items, and facilitate the kickoff meeting, as well as other meetings with the policy committee. KHA also will provide counsel on how to gain maximum media exposure so that the general public has an understanding about the focus of the group and the logistics of the project.

A kickoff meeting with the technical committee will be scheduled the same day as the Policy Committee to establish study protocols, project approach, facility design standards, evaluation criteria, schedule, and deliverables. We understand that members of the committee are responsible for many projects and their time is limited. This kickoff meeting will present an opportunity to clearly define expectations.

Step 2: Technical Analysis

Task 2.1 — Data Collection
Data collection is the first step in the technical analysis. In review of the inventory data list provided by the DCHC planning staff, many of the pertinent data items have already been collected. The project team will conduct a two-day site visit to view the corridor and collect additional information including location of obstructions and design features – ultimately to augment the data list and develop adequate base mapping for the project. These data needs include:

- Photo inventory of the corridor
- Observed bicycle and pedestrian use, including worn pedestrian paths
- Record posted speed limit and location of bus stops
- Intersection and roadway lane geometry, including disabled accessibility
- Typical street, lane, and probable right-of-way (ROW) widths
- Obstructions within 20 feet of existing ROW
- Traffic control (signalization, signal timing)
- On-street parking
- Existing bicycle and pedestrian facilities (both on-road and off-road within ROW)
- Above-ground utilities and drainage features
- Land use inventory of parcels that abut Old Durham/Chapel Hill Road directly using the following categories — single-family, multi-family, school, retail, office, industrial, activity centers, recreational areas, other; with consideration of local land use plans
- Driveways intersecting Old Durham/Chapel Hill Road

Based on the initial discussions with DCHC planning staff, the following information will be provided by the LPA, DATA, and NCDOT:

- Peak-hour intersection turning movement counts for all signalized intersections along the study corridor (it is presumed that the project team will analyze one peak hour, either a.m. or p.m.)
- 24-hour machine traffic counts (and projections) at several locations on the corridor, including cross-streets, if available
- Base mapping for the study area in GIS format (including roadways, parcels, zoning, sidewalks, structures, and drainage features, if available)
- Aerial photography for study area
- 2-foot contour – topographic mapping
- Vehicle speed survey data and summary reports for study street and cross-streets, if available
- Bus route schedules, ridership by route, on-board surveys and bus stop locations, plus any programmed changes for the bus route(s) on crossing streets
- Copies of reports, public meeting minutes, and design plans for other projects in the area, including development plans
- Copies of local plans including the Draft Comprehensive Plan (September 2004 adoption anticipated) and the Long-Range Transportation Plan
- Available historic traffic count data for the corridor
- Accident data and summaries for a three-year period (NCDOT)

Utilizing existing GIS information provided by the LPA and field reconnaissance, KHA will develop base mapping for the project. Base maps (GIS format) will include existing planimetric features such as drives, buildings, parking lots, and above ground utilities. Existing ownership limits will be plotted from record drawings. 2-foot Contours, provided by the city of Durham and Town of Chapel Hill will be used to develop existing profiles and cross sections of the project limits. All base maps will be prepared and plotted at a horizontal scale of 1" = 50'.

Task 2.2 — Existing Conditions Analysis

Based on the data collected and provided in Task 2.1, the project team will conduct an operational analysis of the existing traffic conditions along the corridor. This task will help integrate bicycle and pedestrian facilities as it relates to the interaction between vehicles and non-motorized travel. The analysis will be based on the traffic count and accident data provided by the LPA and NCDOT respectively. The operational analysis will include:

- Analysis of signalized intersections using Synchro traffic analysis software (one peak-hour)
- Review of accident data and identification of accident "hot spots" and potential causes

Mapping of existing conditions will be prepared for the design charrette and subsequent concept renderings. This effort will include:

- Develop base mapping — roadway, edge of pavement, right-of-way, laneage, shoulders, signal locations, posted speed limit, existing bicycle/pedestrian features, ADA features/ impediments, utilities, driveways, bridges and culverts
- Planned roadway improvements (LRTP, TIP, and CIP), transit routes and facilities, existing greenways or bike/ped facilities, and proposed development. The US 15-501/Europa Drive Superstreet concept will be included in this exercise to ensure coordination between bicycle and pedestrian facilities
- Activity centers and destination areas — parks, open space, schools, shopping areas, office parks, residential subdivisions, etc., including Githens Middle School, Jordan Lake – Corps Property, Patterson Place, East Town Office Park, Blue Cross-Blue Shield, and a multitude of single family subdivisions
- Environmental, cultural, and social features and constraints

- Land use and zoning — this information will be pulled from the *Draft* Comprehensive Plan and coordinated with both jurisdictions

Step 3: Public Design Charrette

Task 3.1 — Bicycle and Pedestrian Vision and Design Charrette
The purpose of the design charrette is to give citizens the opportunity for "hands-on" involvement with the development of the Old Durham/Chapel Hill Road Bicycle and Pedestrian facilities. Local citizens, business owners, community groups, local staff, and the project team will work together as a collective group to identify issues and concerns, develop goals and vision, and "brainstorm" possible solutions and recommendations.

A public design charrette is one of the most cost-effective ways to meet project needs and build public consensus for this type of project. Housed on-location and within the corridor (possibly at Githens Middle School), the charrette format will allow interested groups the opportunity to share their thoughts without fear of public backlash on bicycle and pedestrian needs along the corridor. This two-day event will be conducted by trained facilitators, Roger Henderson and Jennifer Toole, to help guide the public and local stakeholders and encourage participation using mark-up maps and "Post-it" notes. Brainstorming sessions and planning activities specifically tailored to generate discussion would be conducted to identify bicycle and pedestrian access and mobility throughout the corridor, natural and man-made constraints, and to develop ideas for improvement. This effort will include the participation of KHA landscape architects who specialize in developing "on the spot" concept renderings of the ideas generated by the participants. This has a tremendous effect for the general public who have a hard time visualizing a particular concept or idea.

The following is a discussion of the proposed format for the charrette.

- The project team will handle logistics for planning and conducting the charrette
- LPA staff will set the date for the charrette, secure the meeting location(s), secure the vanpool for corridor drive-about, and mail-out personal invitations to local (corridor) businesses, residents, and elected and appointed officials
- KHA will assist in advertising for the charrette by preparing one digital copy each of a flyer and a fact sheet. Multiple copies and distribution of each will be the responsibility of LPA staff. Mail-outs with water bills and word-of-mouth advertisement will be encouraged.
- Members of the technical and policy committees will be encouraged to participate in the two-day charrette event.

The following schedule/agenda is proposed for the charrette events:

Friday: Visioning Session
12:00 – 12:30
Lunch with introduction

12:30 – 1:00
An inspiring presentation by the project team that will outline the goals and solicit continued participation by attendees

1:00 – 2:00
Corridor drive-about (vanpool for ADA and others)

2:00 – 3:15
Issues identification exercise (good, bad, indifferent) using breakout groups

3:15 – 4:30
Breakout Groups — Strategies and brainstorm on key issues/needs

4:30 – 5:00
Summarize and prioritize issues and needs — establish a "vision"

Friday's Final Deliverable: A list of main issues/needs and how they rank (using voting by sticky dots exercise).

Saturday: Options for Alternatives
8:00 – 12:00
Work session for project team — staff will prepare drawings depicting various ideas for improving bicycle and pedestrian safety and mobility

12:00 – 1:00
Lunch and view maps

1:00 – 1:30
Recap/advise as to today's events

1:30 – 3:00
Present and discuss alternative solutions — impacts (pros and cons) and develop concept renderings

3:00 – 3:15 Break

3:15 – 4:15
Breakout — preferences on alternative solutions

4:15 – 4:30
Wrap up and summarize — a general session for citizens to comment on the ideas

Saturday's Final Deliverable: A subset of potential ideas (use pictures/renderings to illustrate ideas) that specifically address issues/needs to be evaluated in the study.

The results of the design charrette will be presented at a meeting with the technical committee. The meeting will allow committee members to comment on the field data, vision process, design constraints, and potential alternative solutions generated at the charrette, as well as provide input on the less tangible aspects of the corridor. The committee members' familiarity with the area also will enable them to help identify potential bicycle and pedestrian facilities and design issues along the corridor — an important step in identifying potential improvements.

In addition to providing input on the technical aspect of the study, an important task of the technical committee will be to articulate a "vision" of the corridor in the future and prioritize the bicycle and pedestrian issues related to the corridor. This will help to make sure that the proposed alternatives address the primary concerns of the technical committee, as well as the policy committee.

Step 4: Evaluate Alternatives

Task 4.1 — Refine Alternatives
With a corridor of this length (2.75 miles) and with varying needs of bicycle and pedestrian travel, it will be important to develop alternative improvements that are specific to areas along the corridor. Destinations and activity centers coupled with the varying degrees of bicycle and pedestrian needs (i.e., the level of experience of the cyclist traveling along the corridor) will be a key factor in determining the type (i.e., bike lane vs. wide outside lane, sidewalk vs. multi-use path, etc.) of a bicycle/ pedestrian facility. With this in mind, the project team will develop alternative improvements based on segments along the corridor — what applies to one area may not be applicable to another area. Based on the visions and priorities gathered from the public design charrette and at the technical committee meeting, the project team and the LPA staff will refine the alternatives to serve bicycle and pedestrian travel in the study corridor. Specific information for each alternative considered may include:

- Concept rendering/layout
- System continuity with other existing bike and pedestrian facilities
- Streetscape elements to improve the cohesiveness and livability of the corridor combined with safety improvements for pedestrians, bicycles, and vehicles — this may include specific traffic calming devices
- Design and operational considerations including safety, aesthetics, accessibility, and ability to serve trip destinations
- Operational improvements, such as pedestrian signal timing coordination
- Probable cost estimates including design, ROW acquisition, construction, and maintenance
- Sponsor advocates and key stakeholders
- Environmental and social considerations

Alternatives will be considered in light of the feasibility of implementation. For example, available right-of-way, utility conflicts, and the use of construction easements will be a major factor to consider when developing reasonable and feasible alternatives.

Task 4.2 — Alternatives Evaluation
The project team will develop an alternatives evaluation matrix based on the design, operational, system continuity, and constructability factors described in Task 4.1. The alternatives also will be evaluated in terms of their ability to improve pedestrian, bicycle, and vehicle safety; the aesthetic enhancements they provide; and their impacts on local residents and businesses. An important element of this exercise will be to identify how well each alternative addresses the issues presented by members of the public, technical committee, and the policy committee in the "visioning" step of the project.

The project team will coordinate by telephone with the State and potentially impacted utilities to aid in determining the feasibility of alternatives.

Task 4.3 — Constructability Drawings
Utilizing the base mapping, field reconnaissance, alternative evaluation and input received at the public design charrette, KHA will identify topography and detailed constructability constraints for the proposed improvements (i.e., one drawing per corridor section) for each section of the corridor.

This effort will include evaluation of physical and property impacts associated with the constructability of the proposed improvements. Items may include the following:

- Drainage Considerations
- Utility Impacts/Relocations
- Right-of-way Impacts/Acquisition
- Traffic Control Considerations
- Probable Construction Cost

Typical sections in conjunction with horizontal and vertical conditions will be developed for the proposed improvements. Using the Microstation and GIS information obtained from the local agencies, KHA will prepare proposed cross-sections at fifty-foot intervals for the proposed improvements. These cross-sections, along with the typical sections, will be used to identify the limits of construction.

KHA will develop design criteria (approved by the Technical Committee) for the project in compliance with Local and State requirements.

Deliverables: The constructability drawings will be prepared in English units at a scale of 1"=50'. KHA shall provide up to 5 copies of the constructability drawings to the LPA for review. We expect that the following sheets will be included in the constructability drawings:

- Typical Section Sheet(s)
- Plan Sheets
- Design Cross-Sections

Preliminary quantities for the proposed improvements will be estimated and an opinion of probable construction cost will be developed and submitted as part of the constructability drawings deliverable.

Task 4.4 — Open House

An open house style meeting will be conducted with the general public and the policy committee to present the alternative evaluation and discuss the recommended improvements. This will allow the public to provide feedback on the proposed improvements.

In the context of this study, the policy committee will be responsible for selecting a preferred alternative for the Old Durham/Chapel Hill Road corridor. Note that the preferred alternative shall have the ability of being constructed in conformance with NCDOT bicycle and pedestrian facilities planning and design guidelines, as well as local jurisdiction standards and specifications.

The project team will help set up the open house and advise the LPA staff on creating materials, fine-tuning the "project message," and generating media interest for the open house.

Task 4.5 — Implementation Strategy and Funding Research

Probably one of the most important elements of the overall study, a sound implementation plan (including project phasing) will provide stakeholders with a tool for pursuing the bicycle and pedestrian improvements. Working with the technical committee and LPA staff, the project team will develop priorities and an action plan for implementing the recommended bicycle and pedestrian improvements. The recommendations will be presented in a format that can be used to request funding through the NCDOT TIP process. Likely sources of funding will be identified for each of the recommended improvements and procedures to obtain funding will be identified.

Several existing and proposed funding sources might provide valuable resources to aid in the implementation and construction of the Old Durham/Chapel Hill Road Bicycle and Pedestrian facility. KHA has been successful on similar projects in working with municipalities to obtain these additional

resources. With this in mind, KHA will research available funding sources and identify their applicability to the program, as well as their requirements. The following funding programs may apply:

- NCDOT Enhancement.Grant
- NCDOT Bicycle TIP Projects
- NC Moving Ahead
- NCDOT Division Funds
- State Highway "Powell Bill" Fund
- Developer Impact Fees or Infrastructure Improvements
- STP-DA Funds

Task 5.1 — Recommended Plan and Draft Report
A draft report will be prepared that summarizes the study activities and process, stakeholder and public input, technical analysis, and recommendations resulting from the study. The draft report (5 copies) will be submitted and presented to the LPA staff and technical committee. Based on one set of comments, the plan will be revised.

Task 5.2 — Local Agency Meetings
Two independent meetings with local agencies will be conducted to present the final recommendations including: 1) the City of Durham and 2) the Town of Chapel Hill.

Task 5.3 — Finalize Report
Following receipt of the combined comments from interested agencies, the project team will revise and finalize the draft report. KHA will submit fifteen paper copies and one electronic copy (i.e., PDF format) of the report. All associated maps and graphics will be provided to the client in Microstation or GIS - ArcView format for future use. An Internet-ready version of the final products will be provided by KHA.

III. SCHEDULE:

Consultant will perform tasks as expeditiously as practical and in conformance with schedules developed during the initial setup phase of the project, when a work program is to be developed to assist with the coordination and scheduling of milestones for the overall project. The work program will include specific elements and milestones required for completion of the data collection, public outreach, alternatives evaluation, constructability and probable cost estimates. A 5-6 month timeframe should be anticipated, after the issuance of a notice to proceed. The consultant will provide services based on the following schedule.

Task Item	Tentative Completion Schedule
Task 0 - Notice to Proceed	2/01/05
Task 1.1 - Develop PIP and Kickoff Meeting	2/18/05
Task 1.2 - Meet with PC and TC	2/28/05
Task 2.1 - Data Collection & Mapping	3/11/05
Task 2.2 - Existing Conditions Analysis	3/25/05
Task 3.1 - Bicycle and Pedestrian Design Charrette	4/1/05
Task 4.1 - Refine Alternatives	4/15/05
Task 4.2 - Alternatives Evaluation	4/22/05
Task 4.3 - Constructability Drawings	5/13/05

Task 4.4 - Open House	5/27/05
Task 4.5 - Implementation Strategy and Funding	6/10/05
Task 5.1 - Recommended Plan and Draft Report	6/17/05
Task 5.2 - Local Agency Meetings	7/22/05
Task 5.3 - Finalize Report	8/12/05

The proposed schedule is based on similar project duration. However, the schedule is subject to elements outside of direct control including but not limited to the public review process, conflicts with scheduling elected official meetings, and the City's Holiday schedule.

IV. PERIOD OF SERVICE:

This Supplemental Agreement shall be for a period from January 31, 2005 to September 15, 2006.

V. COMPENSATION

Consultant shall perform the services detailed in the "Scope of Basic Services" above on the basis of the hourly rate schedule contained in the Master Agreement and attached hereto. Basic incidental project expenses will be billed in an amount equal to 6.5% of labor costs as an allocation without receipts in accordance with Section V.B.2 of the Master Agreement. Non-routine direct expenses will be billed at actual cost and receipts will be provided. Billing shall be on a monthly basis in conformance with Section V.B. of the Master Agreement, and invoices for all compensation owed in accordance with this Supplemental Agreement shall be submitted to the City with sufficient detail to process the invoice for payment and for a proper pre-audit and post-audit thereof in accordance with City standards. The total amount billed to the City under this Supplemental Agreement shall not exceed $62,500.00.

Fee Schedule

KHA will perform the services in Tasks 1-5.3 for a lump sum fee of $62,500. The following fee table provides a breakdown of major task items.

Task Item	Expenses	Total Fee
Task 1.1 - Develop PIP and Kickoff Meeting	$50	$2,500
Task 1.2 - Meet with PC and TC	$50	$2,000
Task 2.1 - Data Collection & Mapping	$400	$5,000
Task 2.2 - Existing Conditions Analysis	$200	$6,000
Task 3.1 - Bicycle and Pedestrian Design Charrette	$1000	$12,500
Task 4.1 - Refine Alternatives .	$400	$2,500
Task 4.2 - Alternatives Evaluation	$50	$1,500
Task 4.3 - Constructability Drawings	$1,300	$14,000
Task 4.4 - Open House	$400	$1,500
Task 4.5 - Implementation Strategy and Funding	$50	$2,000
Task 5.1 - Recommended Plan and Draft Report	$500	$3,500
Task 5.2 - Local Agency Meetings	$400	$2,000
Task 5.3 - Finalize Report	$700	$2,000
	$5500	**$57,000**

Note: Expenses are included in the lump-sum fee. Typical expenses may include express delivery services, air travel, in-house duplicating, local mileage, telephone calls, facsimiles, postage, and word processing. Also included in our lump sum expenses are administrative time, computer time for design, analysis, GIS, and graphics. All permitting, application, and similar project fees will be paid directly by the Client.

Fees will be invoiced monthly based upon the percentage of services completed as of the invoice date. Payment will be made within 30 days of the date of receipt of the invoice, based on the terms agreed to in Section V of the Master Agreement for Transportation Planning and Engineering Services.

VI. INSURANCE COVERAGE AND INDEMNIFICATION:

Consultant shall provide high risk insurance coverage as provided for in Section VII of the Master Agreement for Transportation Planning and Engineering Services.

VII. OTHER SPECIAL TERMS:

The City will provide the Consultant copies of all pertinent studies and reports, base mapping, accident data and all traffic count data available to the City and deemed necessary to perform assigned tasks.

(15)

CITY OF DURHAM
ATTEST:

_____ By:_____
City Clerk City Manager

Date:_____

KIMLEY-HORN AND ASSOCIATES, INC.
ATTEST:

_____ By:_____
_____Secretary _____ President
(Affix Corporate Seal)

State of _____ ACKNOWLEDGMENT BY CORPORATION

County of _____

I, a notary public in and for the aforesaid county and state, certify that _____ Personally appeared before me this day and stated that he or she is _____ Secretary of _____, a corporation, and that by authority duly given and as the act of the corporation, the forgoing contract or agreement with the City of Durham was signed in its name by its _____ President, whose name is _____, sealed with its corporate seal, and attested by him/herself as it said Secretary or Assistant Secretary. This the _____ day of _____, 200_.

My Commission Expires:

_____ _____
Notary Public