RALEIGH DOWNTOWN STREETSCAPE IMPROVEMENT

MASTER PLAN

PART II (Nash Square to Civic Center)

PART III (State Government Area)

RALEIGH DOWNTOWN STREETSCAPE IMPROVEMENT MASTER PLAN
PART II (Nash Square to Civic Center)
Part III (State Government Area)
May 6, 1991

FOR THE RALEIGH CITY COUNCIL

Honorable Avery C. Upchurch, Mayor, City of Raleigh

Honorable Ralph Campbell, Jr., Mayor Pro Tem
Honorable Mary C. Cates, Councillor
Honorable E. Julian Ford, Councillor
Honorable Anne S. Franklin, Councillor
Honorable J. Barlow Herget, Councillor
Honorable Mary Watson Nooe, Councillor
Honorable Frank L. Turner, Councillor

Dempsey E. Benton, Jr., City Manager

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Special Contributions

Tom McCormick, City Attorney
Phil Stout, Wake County
Art Jackson, Downtown Development Corporation
Dick Schaub, State Planner
Charlie Allen, Carolina Power & Light

RESOLUTION 1991-98

RESOLUTION TO ADOPT THE DOWNTOWN STREETSCAPE MASTER PLAN PARTS II AND III PREPARED BY REYNOLDS AND JEWELL, LANDSCAPE ARCHITECTS, AS A GUIDE TO PUBLIC AND PRIVATE DOWNTOWN STREETSCAPE DEVELOPMENT

WHEREAS the City has been and is providing downtown development improvements including undergrounding overhead utility lines, renovating sidewalks, traffic signals, street lights, trees, curbs and gutters, etc; and

WHEREAS the City retained Reynolds and Jewell to prepare a program of flexible but orderly development for future downtown streetscape improvements; and

WHEREAS the plan prepared is intended to allow for flexibility in responding to changing needs for downtown streetscape improvements and response to public and private development plans and timetables; and

WHEREAS the goal of this plan is to provide direction for future improvements in a way that reflects the City's heritage and ensure that improvements are consistent while recognizing special characteristics and development; and

WHEREAS the plan recommendations are based on proposals from the Guide to Downtown Urban Design; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RALEIGH:

1. That this plan is adopted as a guide to improvements of streetscapes adjacent to public and private development in all of the Downtown Area with respect to: sidewalk paving, dimensions, materials, types and patterns, street furniture, curbing type and materials, street tree locations and types, tree guard type location and appearance, street lighting types and spacing.

2. It is understood that this program will be implemented as funds are made available in accordance with schedules established in the City's Capital Improvement Program and as the State or private development provides funds for such improvements.

3. The plan shall allow a diversity of design consistent with the City's policy requiring continuity and similarity of an entire block face treatment.

Adopted: 4/16/91

Effective: 4/16/91

Distribution: City Clerk
City Council
City Attorney
City Manager
Construction Projects Administrator
Planning Director

dd/cm12

GENERAL FEASIBILITY STATEMENT

The analyses and recommendations for streetscape improvements presented in this document are sound and viable.

Samuel T. Reynolds
Reynolds & Jewell

FEASIBILITY STATEMENT

It is my professional opinion that the Raleigh Downtown Streetscape Master Plan for improvements as presented is appropriate and economically feasible.

John L. Watters, Jr., P.E.
Doug Y. Perry & Associates

FEASIBILITY STATEMENT

Within the context of our limited conceptual graphic design input into the Raleigh Downtown Streetscape Master Plan, we are of the opinion that our improvements, as presented were appropriately responsive to the master plan goals, and with normal design development "fine tuning" will be economically feasible.

Jan Lorenc IDSA, President
JAN LORENC DESIGN INC d/b/a
LORENC DESIGN

RALEIGH DOWNTOWN STREETSCAPE IMPROVEMENT
MASTER PLAN PARTS II & III

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INTRODUCTION

- ☐ BACKGROUND
- ☐ PROJECT LOCATION
- ☐ GOAL

BACKGROUND

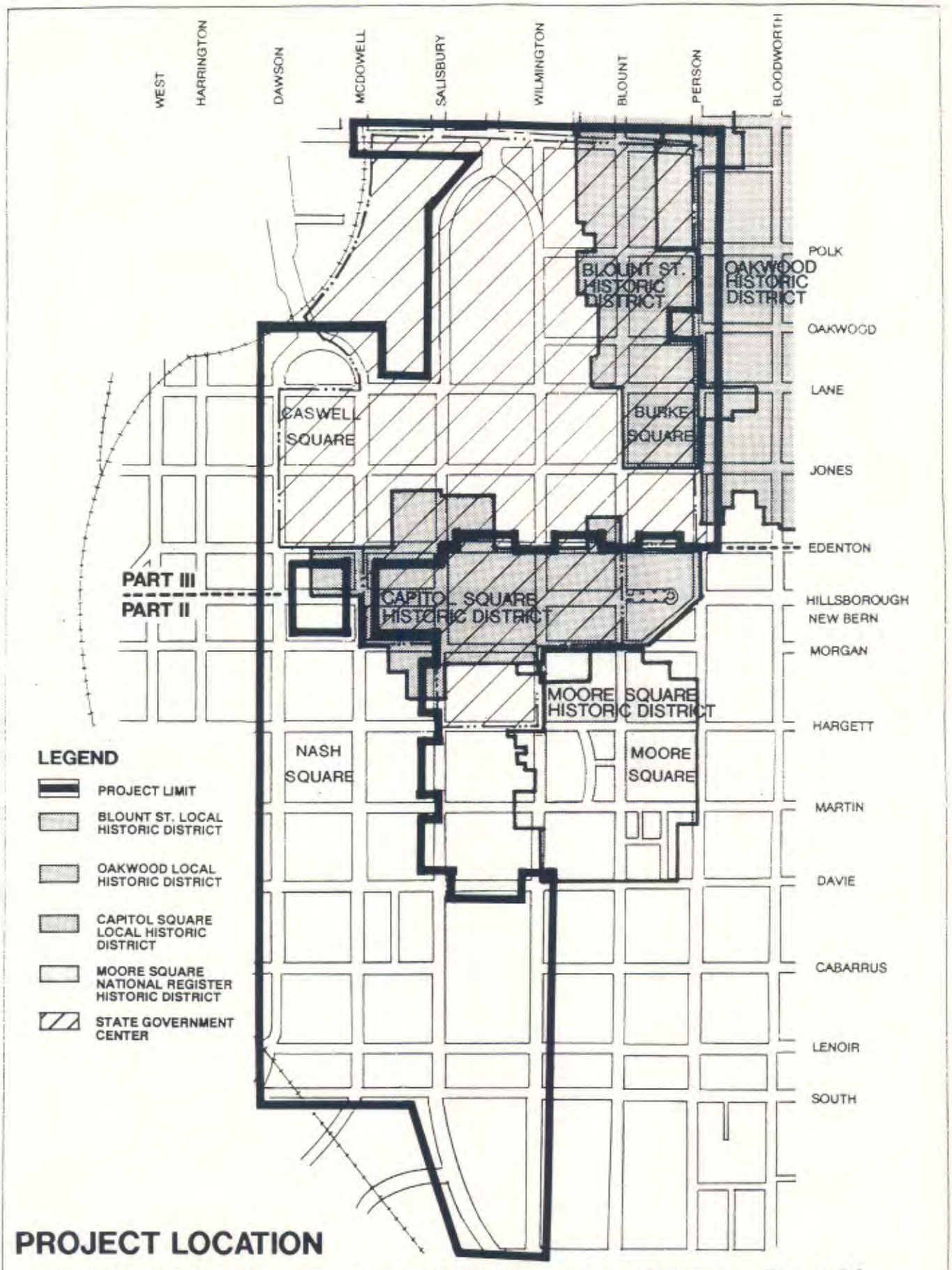
In November, 1987 the City Council adopted the Raleigh Downtown Plan to implement improvements in the center of the city. Development of urban design guidelines and a streetscape master plan were called for in the Downtown Plan. The Guide to Downtown Urban Design which is nearing completion, outlines broad policy for the downtown and gives specific recommendations for individual downtown districts. The Master Plan for design at the streetscape level focuses on selection and treatment of pavement materials, furniture, graphics, underground utilities, lighting, curbing and street trees.

PROJECT LOCATION

Raleigh Streetscape Master Plan Parts II and III covers an area which encompasses the State Government Complex, the Blount Street Local Historic District, a portion of Oakwood Local Historic District, the Capitol Square Local Historic District, the Nash Square area, and the Civic Center area. The Master Plan recommendations are based on proposals from the Guide to Downtown Urban Design and on Part I streetscape improvement efforts already initiated. The first phase included the twelve block area of downtown around Moore Square, the Capitol Building, and the Fayetteville Street Mall.

GOAL

The goal of the Raleigh Streetscape Master Plan is to provide direction for future improvements in a way that reflects the city's heritage, responds to its present needs, and looks forward to the future. The plan seeks to strengthen the existing character of Raleigh as a Capital city and to guide improvements to downtown which contribute to a distinctive image for Raleigh.



PROJECT LOCATION

DOWNTOWN STREETSCAPE MASTER PLAN

RALEIGH, N.C.

HunterReynoldsJewell, P.A.

ANALYSIS OF EXISTING CONDITIONS

In order to make more meaningful recommendations, it is necessary to understand the structure of downtown and how it now functions. Pedestrian activity, vehicular circulation and premises from the Guide to Downtown Urban Design were studied to give form and reason to the Master Plan recommendations.

Existing conditions related to sidewalk paving, curbing, street trees, utilities and lighting were analyzed to establish a basis from which to develop the Master Plan. For example, the sidewalk levels evolved out of considerations of use, physical location, character of vicinity, and functional and aesthetic appeal.

- ☐ URBAN DESIGN GUIDE
- ☐ PEDESTRIAN ACTIVITY
- ☐ VEHICULAR ACTIVITY
- ☐ SIDEWALK PAVING - EXISTING
- ☐ CURBING - EXISTING
- ☐ STREET TREES - EXISTING
- ☐ UTILITIES - EXISTING
- ☐ LIGHTING - EXISTING
- ☐ HISTORY

URBAN DESIGN GUIDE

These are the six premises of the Guide to Downtown Urban Design for Raleigh pending before the City Council.

1. There is the need to establish and constantly reinforce a physical and recognizable **structure** for downtown;
   The elements of the 1792 Christmas Plan; the five squares, the axial streets and the grid of streets should be reinforced. Downtown edges should be recognized and reinforced as a finite place emphasized by discrete edges and entrances. Dawson-McDowell and Person-Blount should be recognized as major vehicular thoroughfares and recurring elements unique to downtown should be encouraged such as consistent streetscape elements.

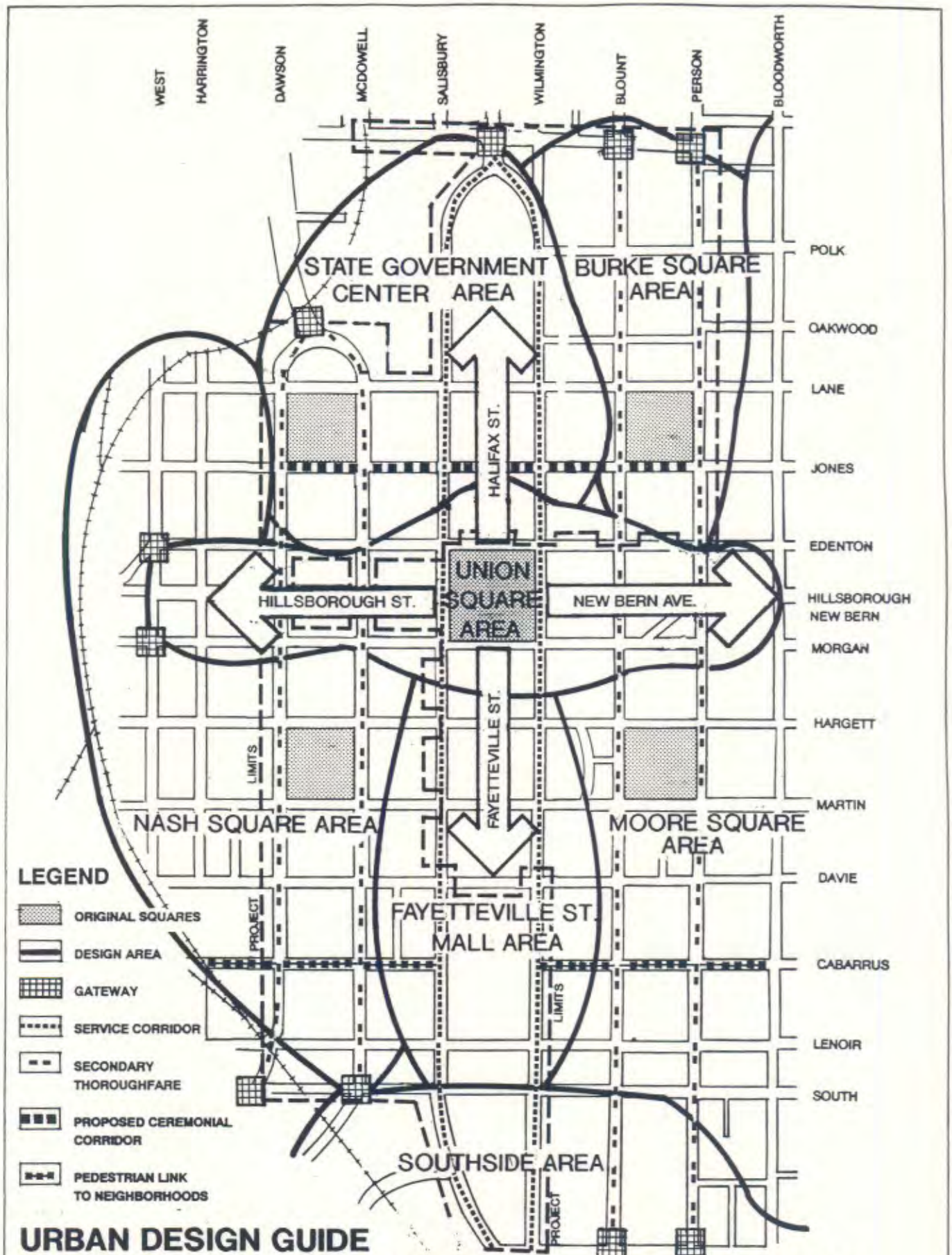
2. **Diversity** should be encouraged;
   Streets should be designed for multiple functions and should be flexible within an overall theme for downtown. Such flexibility would allow compatible individual design and provide special opportunities for enriching the character of downtown.

3. Increased **density** is necessary;
   The implications of projected high density development on the streetscape level call for a balance between wider walkways and the need to allow for a condensed interactive pedestrian environment.

4. Downtown should be a **pedestrian** domain; The downtown area should reflect the needs of the pedestrian. Ease of movement through downtown, scale, safety, comfort and quality should be considered in the development of the area. People attract people and the downtown streetscape should allow for various pedestrian activities; sitting, promenades, crowds and individual spaces.

5. Civic activities and therefore **public spaces** are an integral part of downtown life;
   The streetscape structure should allow for additional areas for public activities.

6. Raleigh's **heritage**, which includes its being the capital of North Carolina, should be a basis upon which future development is built.



URBAN DESIGN GUIDE

DOWNTOWN STREETSCAPE MASTER PLAN

RALEIGH, N.C.

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PEDESTRIAN ACTIVITY

Pedestrian activity in downtown Raleigh consists of distinct types and has definable areas of use. Visitors and tourists are drawn to attractions within the state government facility and to the Civic Center/Memorial Auditorium area. Business activity occurs around the state, city and county government centers and at various major office buildings throughout the city. Restaurant and retail establishments cater to both of these pedestrian types and are scattered throughout the downtown with major concentrations along Fayetteville Street Mall and in the City Market area.

There are several linkages that connect these various pedestrian centers together. Fayetteville Street Mall is the main pedestrian thoroughfare and is an area of intense pedestrian use. Other important pedestrian links are:

1. Martin Street from City Market to Nash Square.

2. Exchange Plaza between the Mall and Moore Square Station.

3. Moore Square Station and City Market.

4. West Hargett Street between the city government area and Fayetteville Street Mall.

There is also tourist activity between the Governor's Mansion, the Capitol, the museums and the legislative building. This activity spills over to the restaurants and retail establishments along the mall.

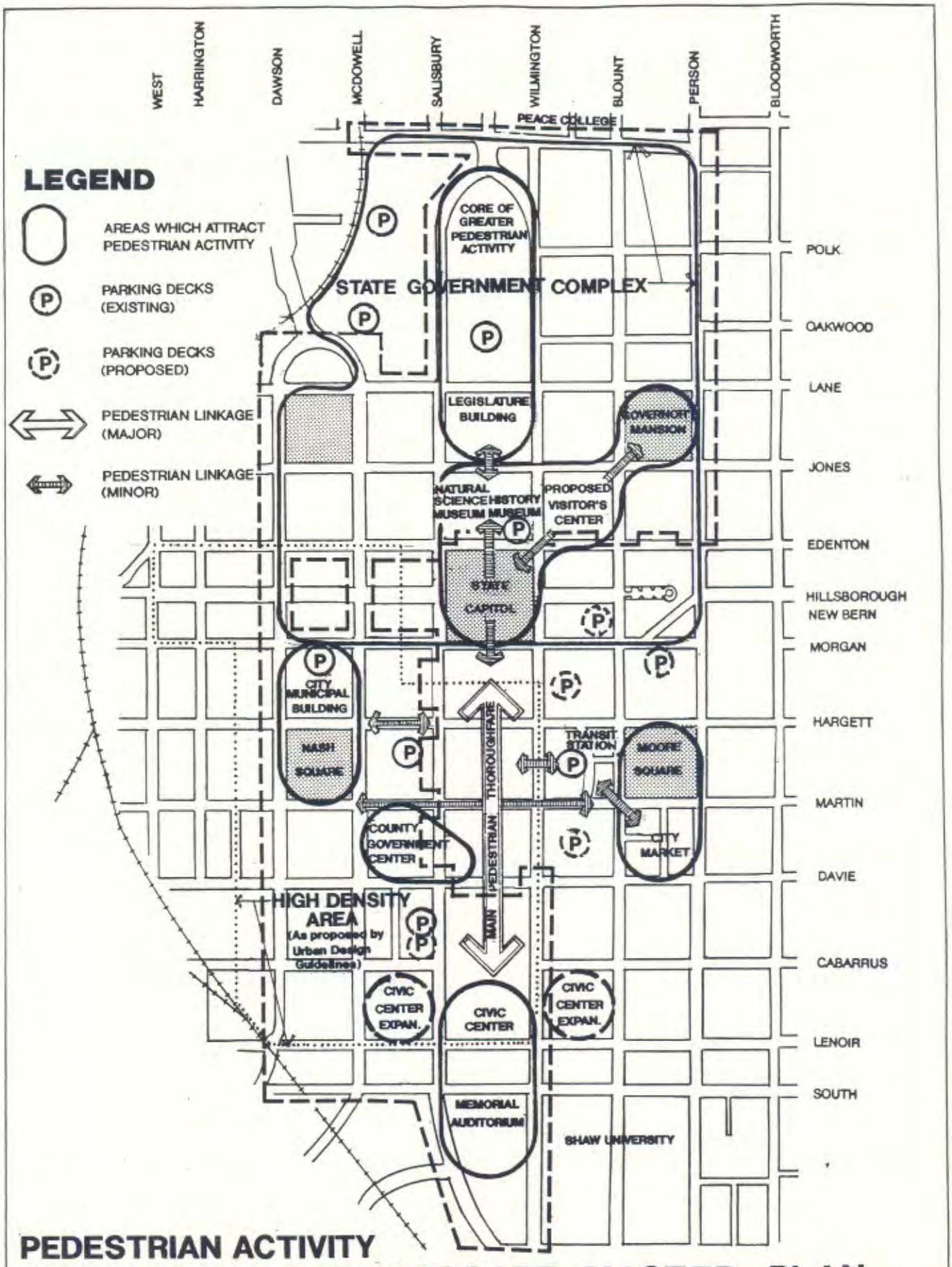
The following are centers of pedestrian activity within the general area of the project.

FAYETTEVILLE STREET MALL

The mall has a wide range of uses that attract pedestrians. It is bordered with the Capitol on the north end and the Civic Center/Memorial Auditorium on the southern end. There are major attractions along the mall such as the Wake County Courthouse, Radisson Hotel, and several large office towers in addition to varied retail

	establishments. Main occupants of the office space on the mall are banks, law firms, and corporate headquarters such as CP&L, banks, and others.
CITY MARKET/ MOORE SQUARE	The addition of restaurants, specialty retail shops, art galleries and studios along with the Moore Square Transit Station has made this area attractive as an eating and leisure shopping spot. A positive addition to the perception of security is the significant police presence in mounted officers and bike patrols.
MUNICIPAL BUILDING/ NASH SQUARE	Much of the pedestrian activity in this area is related to police and city government operations. Pedestrian activity occurs around the Southern Bell and News & Observer buildings. Several restaurants which have a stable clientele attract pedestrians to the area also.
STATE GOVERNMENT COMPLEX	This area covers the northern portion of the downtown and attracts tourists, people doing business with the state, and large numbers of state employees. Some pedestrian activity occurs along the mall between the Archdale Building and the Legislative Building. The mall has potential to be a major pedestrian area. The proposed Visitor Center in the block between the Governor's Mansion and the Capitol will help orient visitors to the State Government Area and nearby attractions. The Visitor Center will link the museums, the Capitol, Legislative Building, and the Governor's Mansion.
CIVIC CENTER/MEMORIAL AUDITORIUM AREA	This area functions as a location for concerts, plays, shows, special events, conventions, and large special interest meetings. Pedestrians generally come for a specific event. Restaurants and hotels along the mall and in the Moore Square area will receive spillover pedestrian activity.
OTHER AREAS	Parking decks and major parking lots are quite often the first impression the pedestrian has of the downtown and serve as points of entry. This makes them a prime spot for orienting graphics. The soon to be completed Public Safety Center across Salisbury street from the Wake County

Courthouse will make that block one of increased pedestrian activity. Where the World Center locates downtown will also attract a large number of school children. Also, as proposed by the Guide to Downtown Urban Design, the south west quadrant of the downtown is slated for higher density development in the future which should include housing, retail, and office uses.



PEDESTRIAN ACTIVITY
DOWNTOWN STREETSCAPE MASTER PLAN
RALEIGH, N.C.

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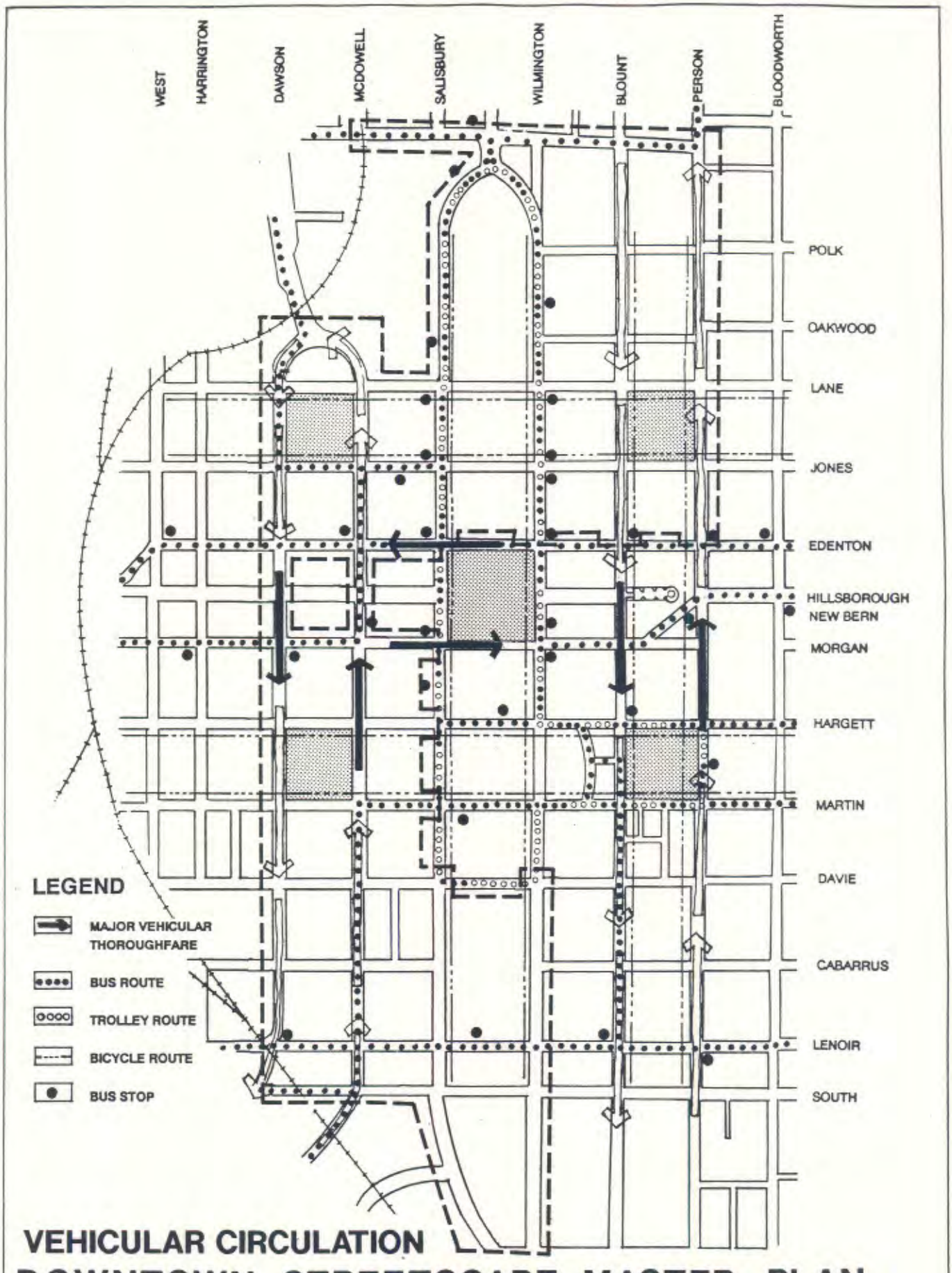
VEHICULAR ACTIVITY

The vehicular analysis shows how downtown Raleigh is heavily dominated by the automobile. There are two major pairs of north-south thoroughfares--Dawson/McDowell and Person/Blount. The major east-west connectors are Edenton Street and Morgan Street. Also, the Wilmington/Salisbury pair is important for traffic into downtown.

The downtown is well served by bus routes. Moore Square serves as the central transfer station. Downtown also has a shuttle bus service connecting the State Government Center with the Civic Center and Moore Square areas. The service runs during lunch hours Monday through Friday.

Bike routes shown are being recommended by the Council's Bicycle Advisory Task Force. They are the major east-west commuter routes. The intention is to encourage downtown Raleigh to become a more "bicycle friendly" environment. This will allow commuters to circulate to and from downtown safely. Salisbury and Wilmington Streets were selected as major bike accesses to Fayetteville Street Mall, the government complexes, and retail areas. The Task Force also recommends additional bicycle parking be made available adjacent to public parking areas and public open spaces.



VEHICULAR CIRCULATION

DOWNTOWN STREETSCAPE MASTER PLAN

RALEIGH, N.C.

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SIDEWALK PAVING - EXISTING

The majority of the existing sidewalks in downtown Raleigh are paved with concrete. Most are 4'- 8' wide with 2'- 4' grass planting strips. The remaining paving is as follows.

1. The Blount Street Historic District has several blocks with a clay brick walk in a running bond pattern which is 4' - 5' wide along a 2' - 4' wide grass planting strip.

2. The Governor's Mansion is surrounded on all four sides with a solid clay brick walk in a herringbone pattern running to the curb. This brick was specially cast and signed by the artisans.

3. The Civic Center has an exposed aggregate walk extending all the way to the curb on the three street sides.

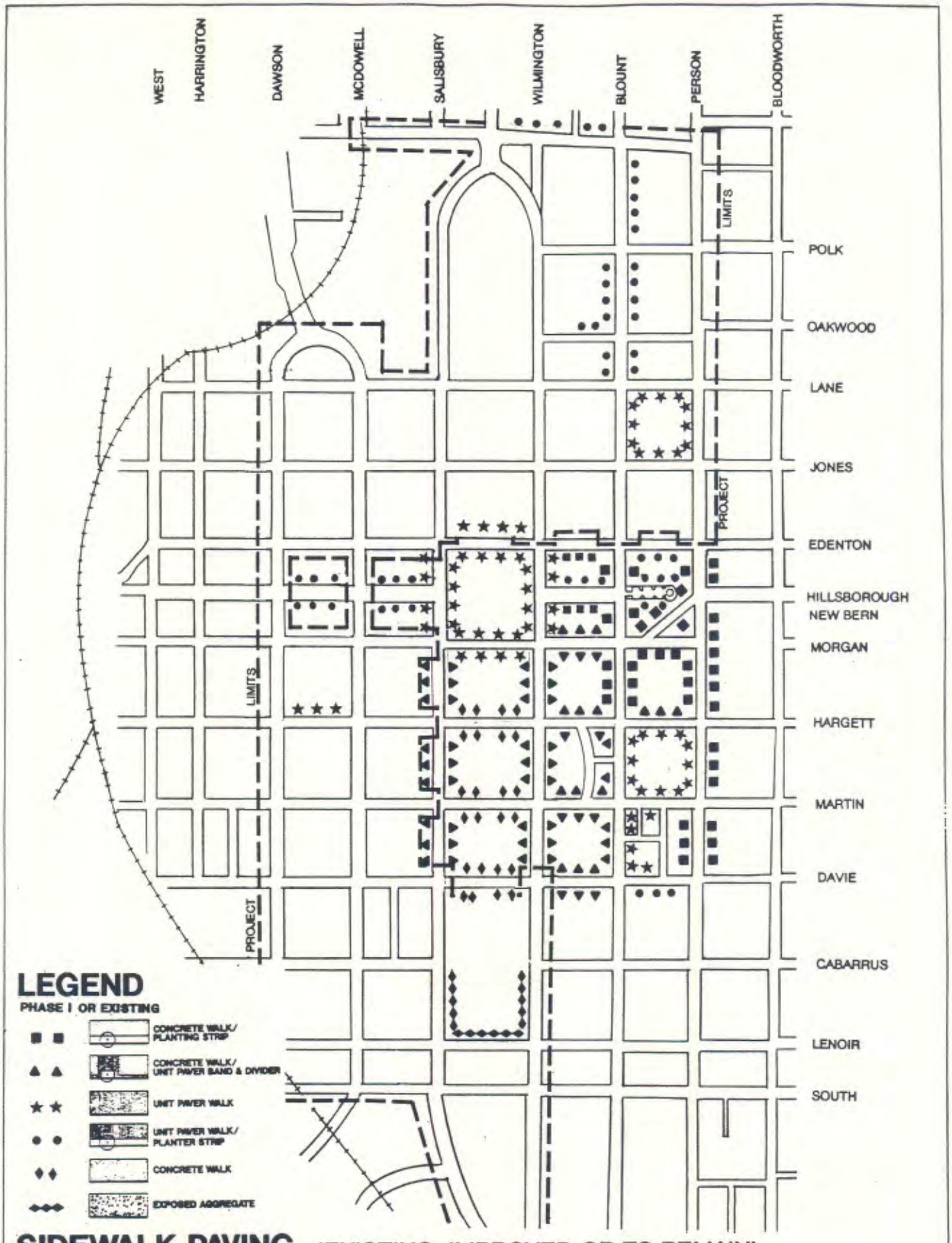
4. The Moore Square Historic District has been recently renovated using the following materials in various combinations:

   a. Poured in place concrete with a 2'x 2' scoring pattern.

   b. Unit paver bands varying in widths from 2' - 10'.

   c. Four foot planting strips used in locations where the sidewalk paving does not extend all the way to the curb.

5. Hillsborough Street has a 6'- 10' unit paver walk with a 6'- 12' planting strip next to the curb.



SIDEWALK PAVING (EXISTING, IMPROVED OR TO REMAIN)

DOWNTOWN STREETSCAPE MASTER PLAN

RALEIGH, N.C.

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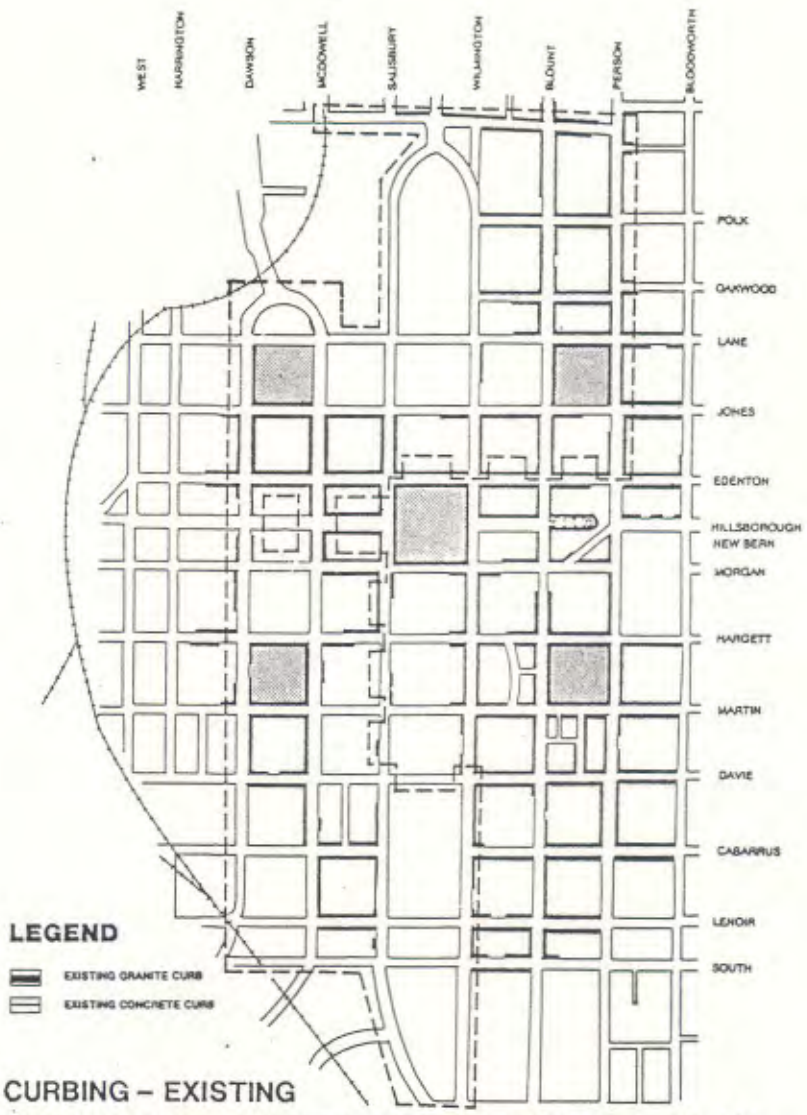
CURBING - EXISTING

The historic areas and the southern portion of downtown are predominantly granite curbing. The State Complex is now predominantly concrete curb. Granite curbing is initially an expensive item to install as compared to concrete. Granite which is extremely durable requires little maintenance and possesses aesthetic appeal making it desirable to use whenever possible. By utilizing granite curbing in areas which have mostly granite curbing, initial construction costs and maintenance costs will be lower.



CURBING – EXISTING

DOWNTOWN STREETSCAPE MASTER PLAN
PHASE II
RALEIGH, N.C.

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STREET TREES - EXISTING

The street tree plan shows existing trees many of which have been there for some time and new trees which have been installed by the city recently. The street tree plan was developed by the City of Raleigh and has been revised as necessary to replace certain species. The original plan had the six north/south corridors planted with three types of trees. Dawson-McDowell are planted with European Hornbeams. These trees were selected because they are slow growing, compact and have an upright head form. These streets have existing utility lines that prevent use of a more open spreading tree.

Patmore Ash (Fraxinus lanceolata 'Patmore') was selected for the Blount-Person Streets below Edenton Street. The Patmore Ash is a fast growing tree which can reach a height of 50 - 60' with 25 -30' spread. It is an extremely hardy tree that is able to withstand the conditions of the urban streetscape. The northern portion of Person Street has been planted with Hedge Maples (Acer campestre). This is a small tree with a height and spread of 25' -35'. It can be pruned into hedge shape and withstands severe pruning. It is also adaptable to dry soils, compaction, and air pollution. Blount Street to the north of Edenton Street is lined mostly with American Hophornbeams (Ostrya virginiana). These trees are slow growing and can reach a height of 25' to 40'and have a spread two thirds of their height.

Armstrong maples (Acer rubrum columnare Armstrong) were selected for Salisbury and Wilmington Streets. They have a columnar form and reach a height of 50 - 70'. These maples can have bright orange, red fall color.

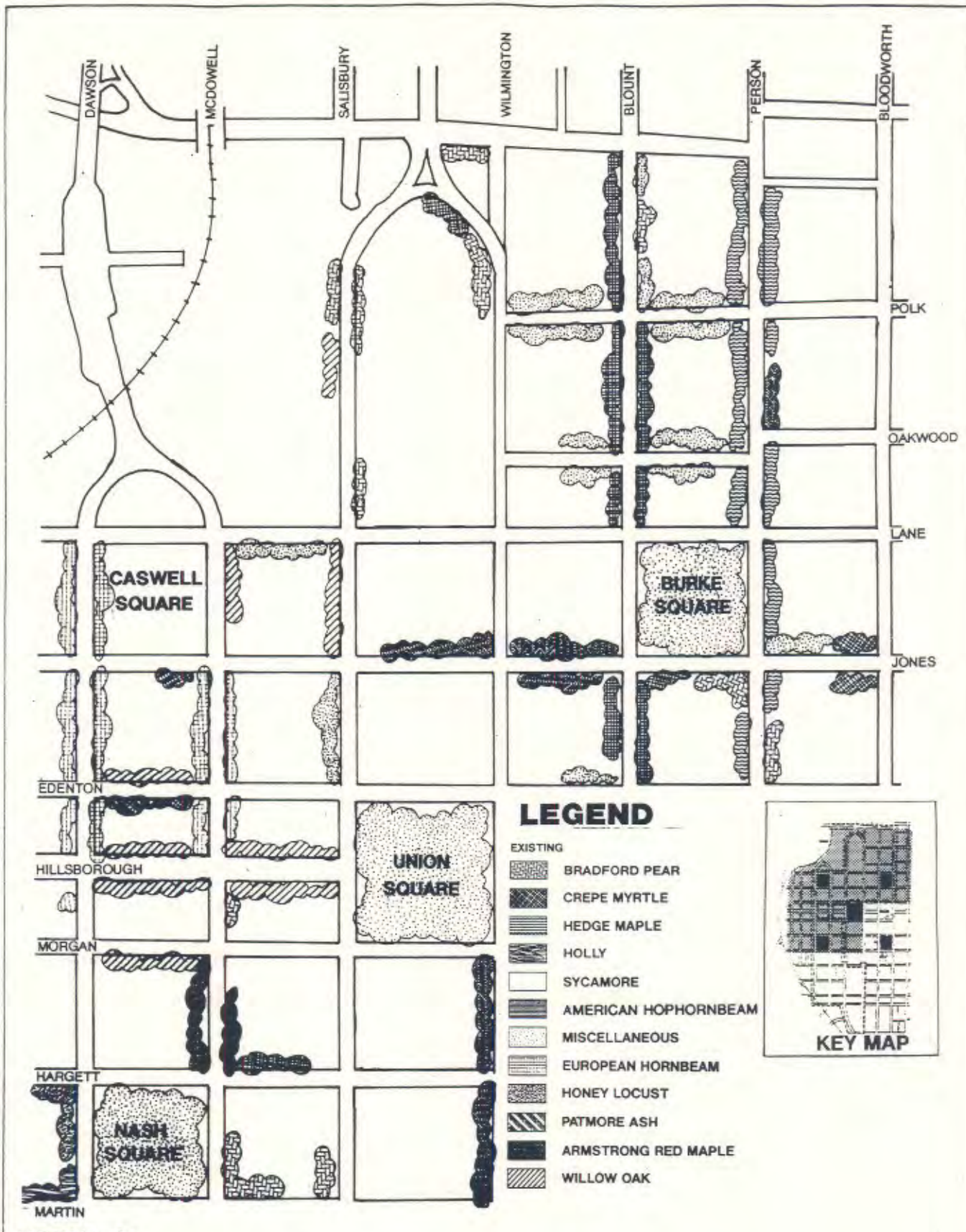
Honey locust (Gleditsia triancanthos var. inermis Moraine) has a fast growth rate. Its height can range from 30' to 70' with a similar spread. These are located along Hargett and Martin Streets.

Willow Oaks (Quercus phellos) reach a height of 60' to 80' with a similar spread. It is a fast growing tree which can withstand poorly drained soils. These are located along Hillsborough Street and New Bern Ave., between the Civic Center and Memorial Auditorium, and in the 700 and 800 block of South Blount Street.

Bradford Pear (Pyrus calleryana 'Bradford') has a conical, pyramidal crown with gray-green leaves which turn yellow to wine red in fall. The Bradford Pear grows 30'-50' in height with a 20-35' spread. These were at one time planted along Salisbury and Wilmington Streets in the State Complex. Small sections of these remain along with small groupings scattered throughout the city.

Crepe Myrtle (Lagerstroemia indica) is a small shrub-like tree growing 15-25' with large, clusters of crinkly (white, pink or purple) flowers. These are not centrally located, but scattered throughout the city.

Sycamore (Platanus occidentalis) with a long trunk and open crown is one of the largest trees in the eastern U.S. growing 75-100' in height with a similar spread. It is a massive tree with a wide-spreading open crown. These are located in the 100 block of New Bern Avenue.



DETAIL A:

STREET TREES – EXISTING

DOWNTOWN STREETSCAPE MASTER PLAN

RALEIGH, N.C.

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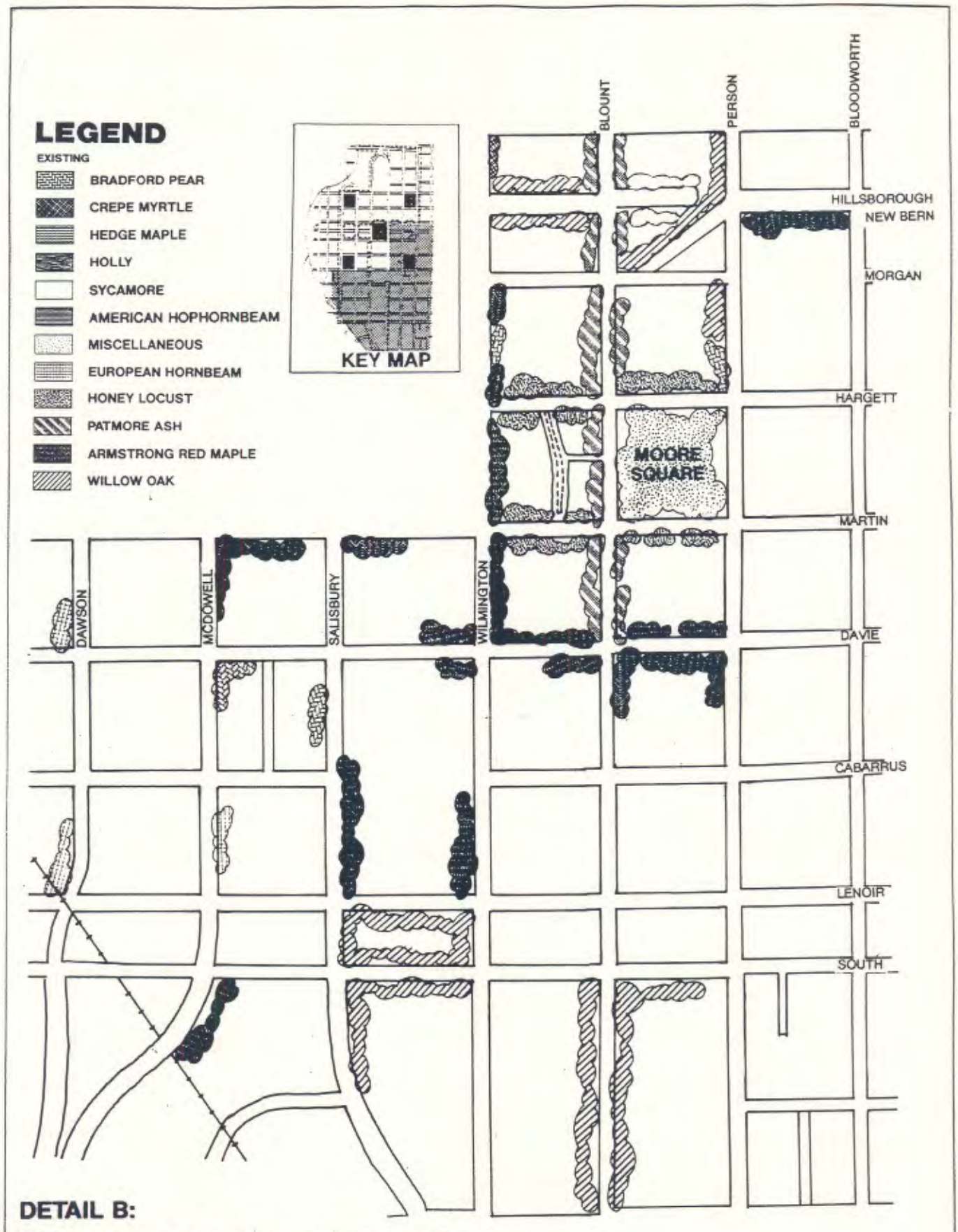

DETAIL B:

STREET TREES – EXISTING

DOWNTOWN STREETSCAPE MASTER PLAN

RALEIGH, N.C.

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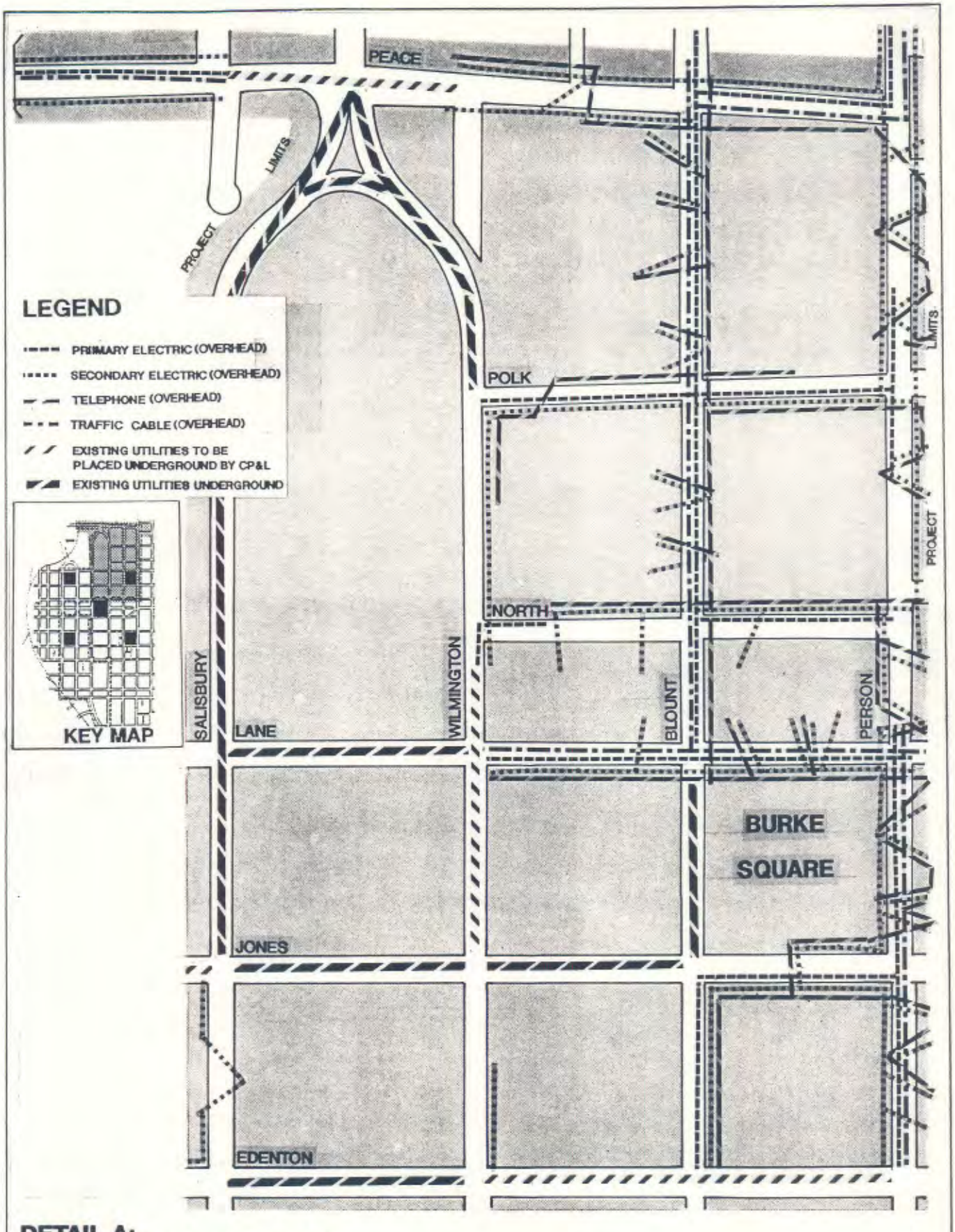
UTILITIES - EXISTING

Overhead utilities have a major impact on the streetscape character. Such utilities are a dominant factor in the overall appearance of the street and will affect the selection and placement of street trees and lights. Carolina Power & Light is currently in the process of placing utilities in designated areas of the city underground. A plan has been developed to phase in the underground work over the next four years.

On streets whose utilities are not designated to be placed underground by CP&L at their expense, existing overhead utilities have been shown. In addition to the utilites shown overhead, there are fiber optics located along Hargett Street both in the sidewalk and in the street.



DETAIL A:

EXISTING UTILITIES
DOWNTOWN STREETSCAPE MASTER PLAN
RALEIGH, N.C.

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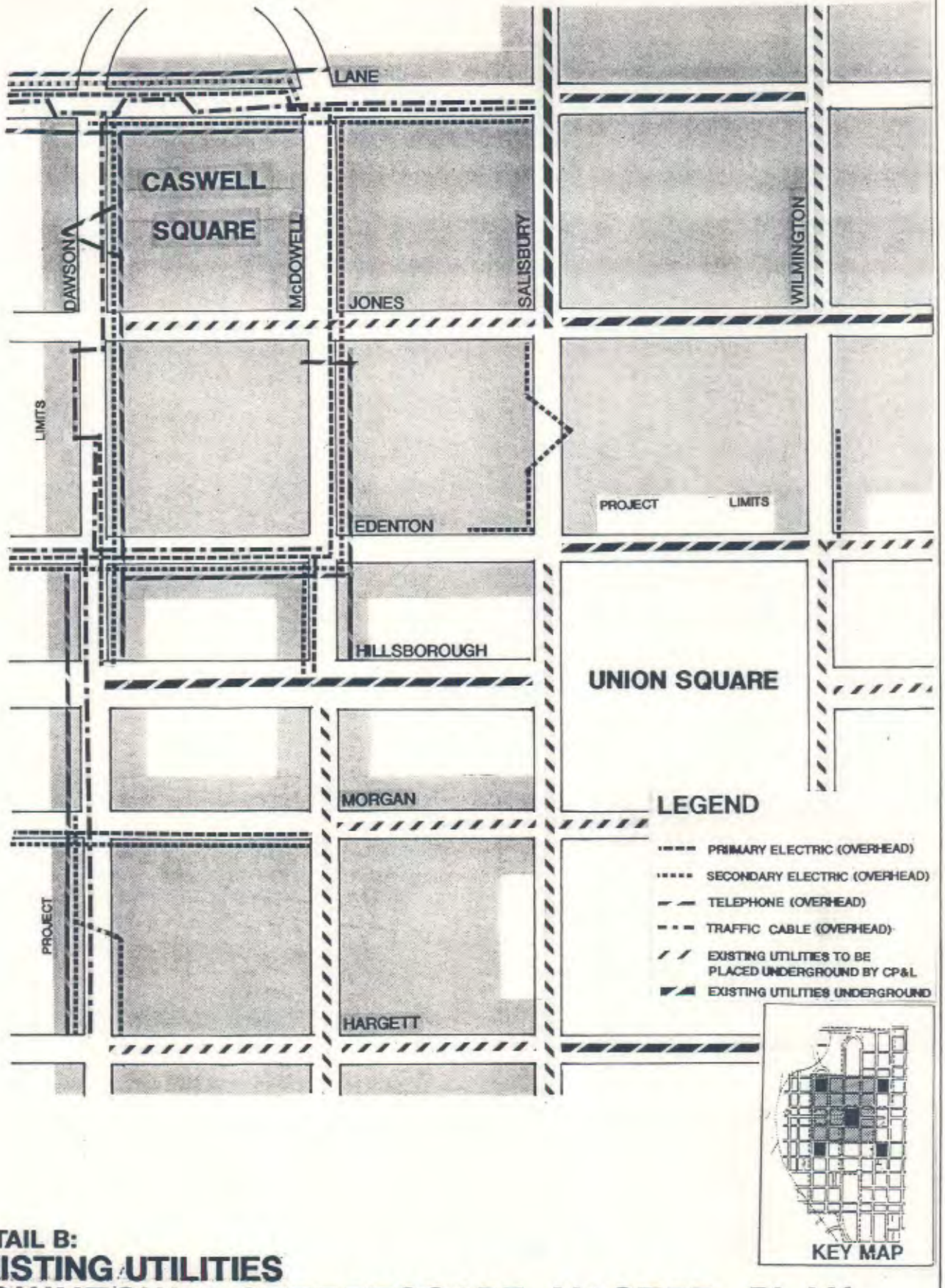

DETAIL B:

EXISTING UTILITIES
DOWNTOWN STREETSCAPE MASTER PLAN
RALEIGH, N.C.

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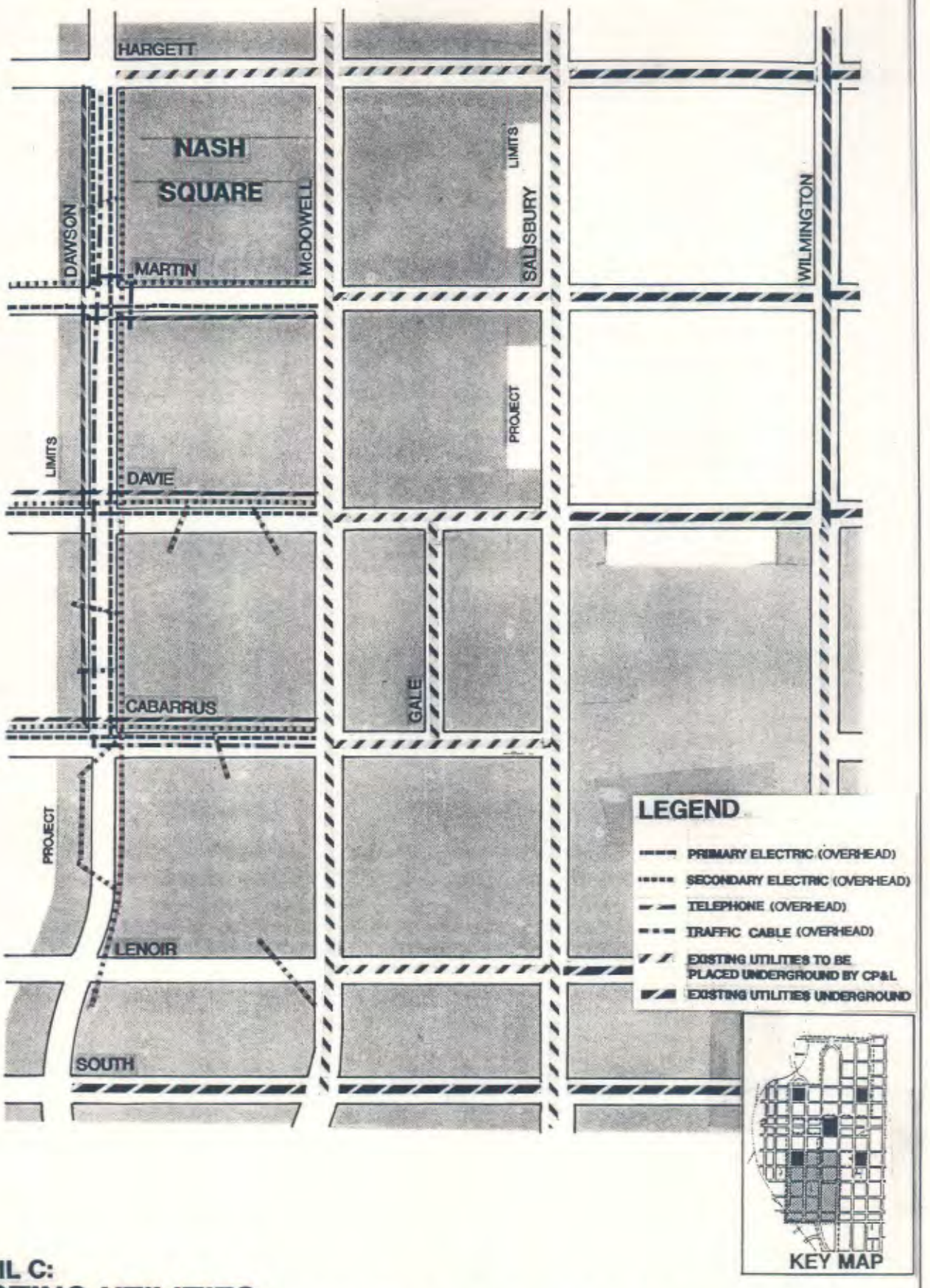

DETAIL C:
EXISTING UTILITIES
DOWNTOWN STREETSCAPE MASTER PLAN
RALEIGH, N.C.

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LIGHTING - EXISTING

A survey of the lighting on the downtown streets reveals five different types. All types are provided by Carolina Power & Light for the city. The following graphics illustrate the appearance of each fixture.

CAPITAL LIGHT FIXTURE

This fixture is located in Moore Square along Hillsborough Street and in the City Market area. These fixtures are very similar to the style used at the Governor's Mansion and Capitol Square. It is traditional, black, and has a traditional pole and base.

RALEIGH LIGHT FIXTURE

This fixture is located in the Moore Square area. While not as ornate as the Capital Fixture, the Raleigh light fixture is also traditional with a black post and an historic base.

SHOEBOX CUBE LIGHT FIXTURE

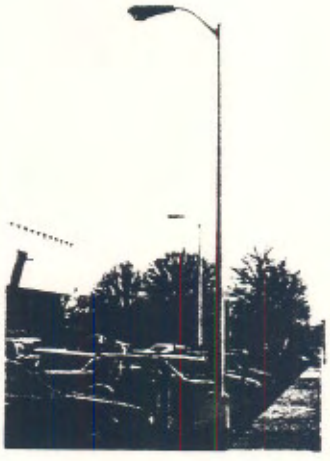
This is a contemporary light fixture used on Fayetteville Street Mall.

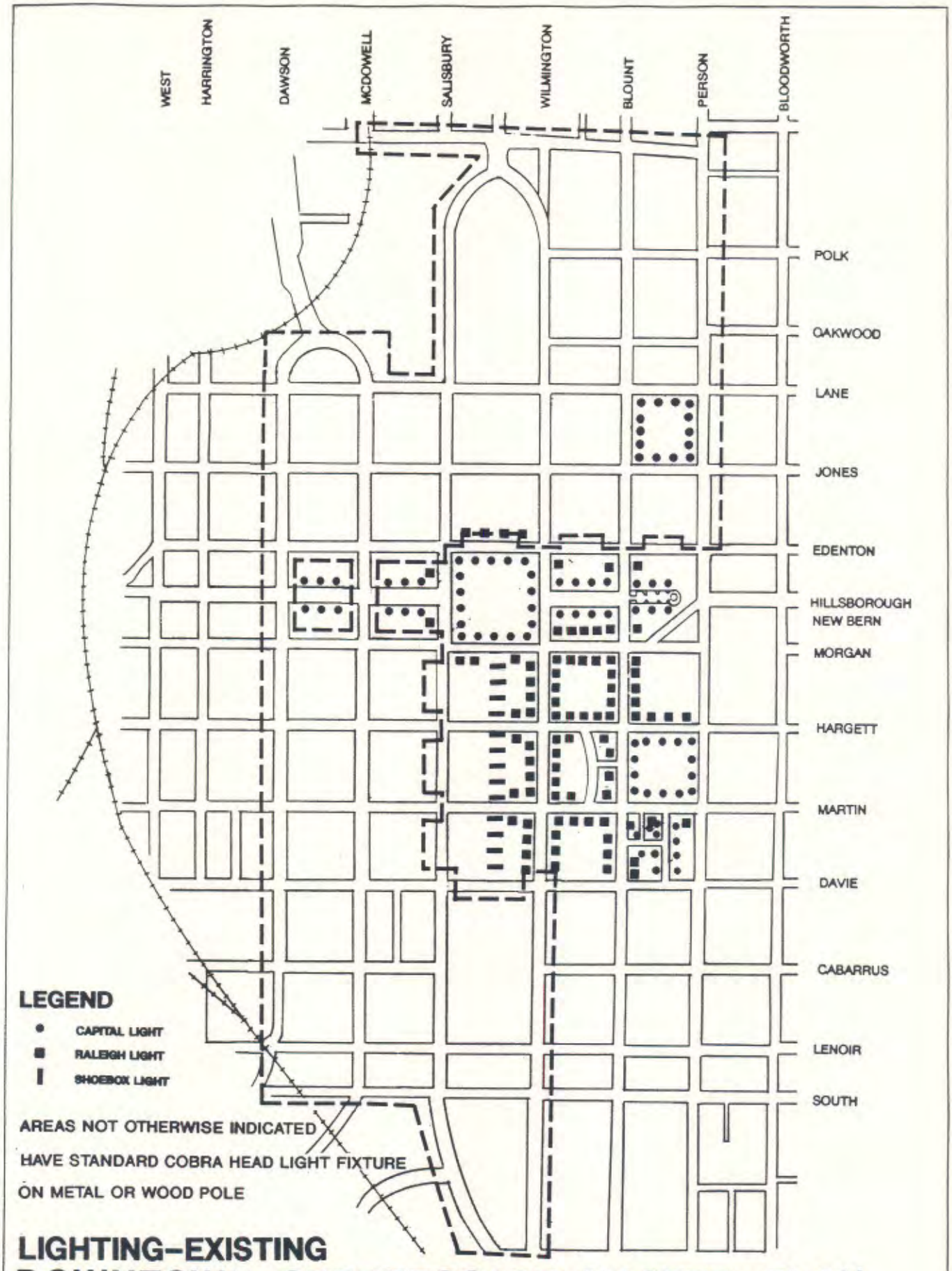
COBRA STYLE FIXTURE, WOODEN POLE

This common modern lighting fixture is attached to a wooden pole. It is most common in areas where overhead utilities occur and often uses the same pole as the utilities. The height of the fixture locates it well out of the pedestrian streetscape level.

COBRA STYLE FIXTURE, GALVANIZED STEEL POLE

This is the standard upgraded CP&L light fixture and pole.





LIGHTING–EXISTING
DOWNTOWN STREETSCAPE MASTER PLAN
RALEIGH, N.C.

HunterReynoldsJewell, P.A.

HISTORY

Raleigh was laid out in 1792 according to a plan by William Christmas, a colonel who had served with George Washington at Valley Forge. Joel Lane assisted Christmas in the planning. The plan called for five public squares. Union Square, site of the Capitol, is six acres. The other squares which are four acres each are Moore, Burke, Caswell, and Nash. The squares were planned for local use. The four squares have had various uses through time.

PUBLIC SQUARES

BURKE SQUARE

In the Christmas plan, the first Governor's Mansion called the Governor's Palace was located at the end of Fayetteville Street near where Memorial Auditorium now stands. Burke Square, was the site of Raleigh Academy until 1895 when the existing Governor's Mansion was built.

CASWELL SQUARE

In 1849 Caswell Square became the location for the North Carolina Institute for the Education of the Deaf, Dumb, and Blind. Designed by John W. Crosby, the building faced McDowell Street.

MOORE SQUARE

Moore Square was the site of an early Baptist Church and was referred to as Baptist Grove around 1822.

NASH SQUARE

Henry Stienmetz was contacted by the City to improve Nash Square and continue the work done by horticulturist A.B. Faircloth. By the 1930's Nash Square had fallen into such disrepair that the Garden Club worked to renovate it.

During the late nineteenth century the squares were used more by livestock than people. In the 1850's all four squares were used for public education. The Raleigh Street Committee took action to prevent selling off Moore and Nash Squares for building lots in 1888.

STREETSCAPE

In 1883 a bond referendum for street improvements was defeated. In 1886 city officials voted to "macadamize" Fayetteville Street. Paving occurred as slow as one block per year.

A bond issue in 1889 provided $25,000 for street improvements which resulted in 10,793 square yards of Belgium block paving and 3,796 feet of curbing.

In 1882-90 first street lights were installed. Gas was used first then later electricity became available when Carolina Power & Light was formed in 1908.

In 1910 there were only 20 miles of paved streets with 45 miles of unpaved.

OBSERVATIONS

Raleigh has a strong tradition of street trees, particularly oaks. New subdivisions had concrete walks and curb and gutter in the 1930's and 1940's. The concrete walks were viewed as progressive--"the latest thing." Contractors installed these walks with pride and often signed their work by imprinting their name or seal in the concrete.

MASTER PLAN OF STREETSCAPE IMPROVEMENTS

The next sections describe the design recommendations for the Raleigh Streetscape Master Plan Phase II, Parts II & III.

- ☐ SIDEWALK PAVING
- ☐ CURBING
- ☐ STREET TREE MASTER PLAN
- ☐ UNDERGROUND UTILITIES
- ☐ LIGHTING
- ☐ SITE FURNITURE
- ☐ GATEWAYS AND DISTRICT MAKING
- ☐ SIGNAGE AND PUBLIC GRAPHICS

SIDEWALK PAVING MASTER PLAN

Paving is one of the most important, if not the key element in creating a recognizable image for downtown. It is an element that occurs on every street and is a continuous element interrupted only by street crossings.

Materials selected for pavements in Part I were concrete unit pavers and 2' x 2' scored grid concrete pavement. Recommendations from this study continue the existing materials used in Part I within a simplified hierarchy.

Within the city there are numerous existing situations of relatively new sidewalk treatment. When this occurs and is in conflict with the Master Plan, it is not recommended that these areas be removed. As improvements and changes are made to the areas over time they could then be brought in compliance with the Master Plan. Diversity is welcome where it is compatible with the recommended streetscape improvements. Such diversity adds to the richness of the downtown street life. Existing conditions and new development will be addressed on a case by case basis for appropriateness as final plans are produced. New construction should be compatible with the Master Plan for sidewalk improvements, but may incorporate the design intent of the new construction.

Only one street in the project area has a decidedly residential character. This is North Person Street. It is the recommendation of this study that the residential character be maintained with its 5' wide concrete sidewalks and 4' to 7' wide planting strip. This will allow Person Street to keep it's original historic character and not become visually a part of the downtown.

PAVEMENT DESIGN

Three principles have been established to guide pavement design in the downtown area.

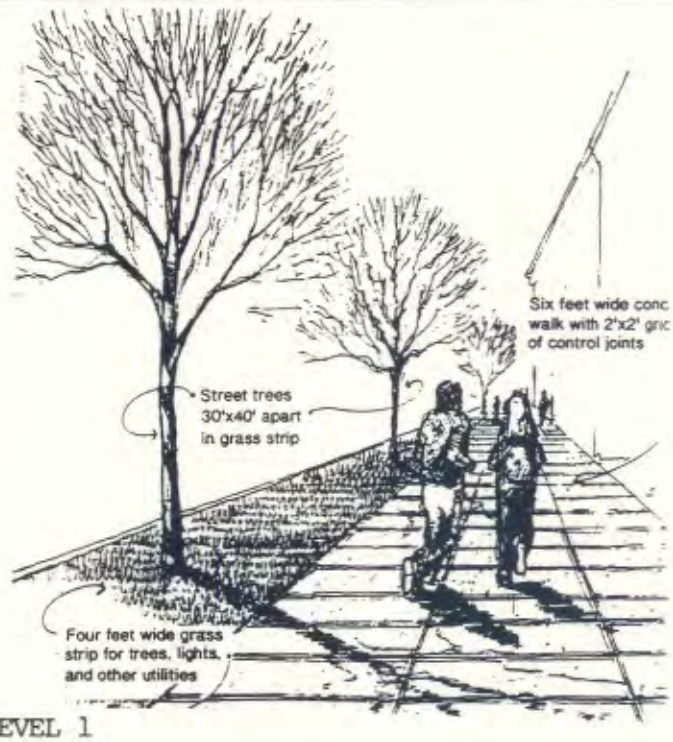
1. Any concrete paving in the downtown area should be the 2' x 2' scored concrete called 'Capital grid'.

2. If the paving is extended to the curb, there is always a 2' wide unit paver band which runs continuously behind the curb.

3. All intersection corners are to be totally unit pavers.

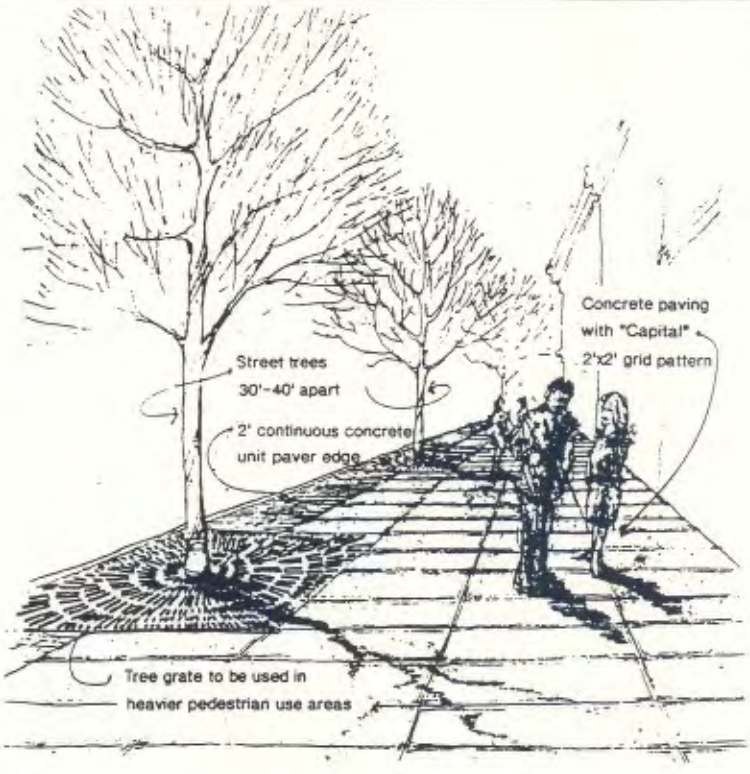
By adhering to these principles, a simple, but distinctive pavement treatment can be achieved. The principles have been applied and a hierarchy established for the treatment of sidewalks as illustrated by the plan and sketches. The various levels of sidewalk treatment will be additive in nature and relate to the intensity of pedestrian use. Patterns of paving were selected so that the paving may be installed in stages. The first level could be installed and as development and intensity of use increased additional paving and/or features could be added until the recommended level of paving, as shown in the Master Plan, was achieved.

LEVELS OF SIDEWALK DEVELOPMENT



LEVEL 1

The first level of sidewalk design occurs in the outlying areas of the downtown district where pedestrian activity is at its lowest levels. Within the ten to twelve foot right-of-way strip, concrete paving in the 2' x 2' Capital grid with a 2'-6' grass planting strip between the street and sidewalk should be used. Also, in residential areas, standard city sidewalks could be used. This is a transitional sidewalk pattern and occurs where improvements are made but the level of pedestrian activity does not warrant pavement in the entire right of way.



LEVEL 2

The second level of sidewalk design occurs when the pedestrian activity increases and involves paving the entire right of way. A 2' band of unit pavers immediately behind the curb would be added and concrete would extend from the 2' paver band to the edge of the right of way building line. Trees would be installed with a tree grate. This level is the standard pavement for all downtown sidewalks. Special areas and designated streets have added features to this basic pattern.

LEVEL 3

The third level of sidewalk design would occur in the pedestrian corridor on Salisbury and Wilmington Street. In addition to the two foot band of unit pavers along the curb parallel to the street, the pavers should extend from the tree planting area as a band perpendicular to the building face. The infill should be the 2' x 2' Capital grid. Trees should be installed in a tree grate with a tree guard. Paving bands and tree locations could be coordinated with major architectural elements.

LEVEL 4

To differentiate the original squares from the rest of downtown, the sidewalks surrounding the squares should be totally paved with unit pavers to the curb. No street trees should be planted in these walks due to the existing tree canopy in the Squares. The special treatment of solid unit pavers ties the four squares together visually. Caswell Square, one of the four original squares is not presently in use as a public square. When the state initiates reclamation of Caswell Square as a public square, Level 4 paving is recommended to visually tie it to the other squares.

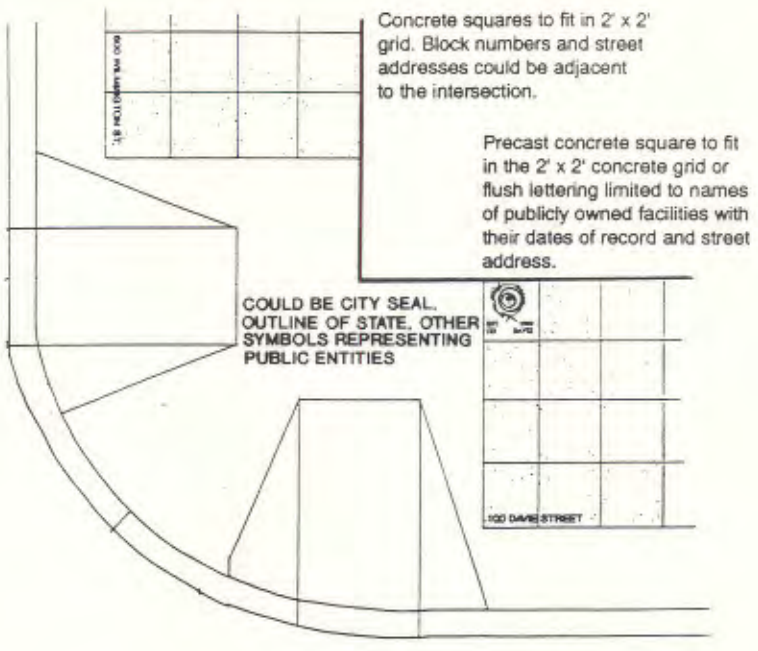
LEVEL 5

Special paving could be used for Jones Street which is designated as a ceremonial street in the State Government Center Master Plan. The three blocks in front of the Legislature Building, the Archives and the State Office Building should have an expanded sidewalk treatment. The recommendation is to have a four foot unit paver band with tree grates and tree guards and a minimum of a ten foot concrete paved area in the 2' x 2' grid. This could be bordered by a twelve inch high two foot wide concrete sitting ledge at the edge of the pavement. In addition, the tree spacing would be closer at 20' on center and more formal with the selection of a smaller special tree used only on ceremonial streets.

LEVEL 6

The sixth level of paving is an existing pattern used in the Blount Street Historic District and along the axial streets of Hillsborough Street and New Bern Avenue. Unit pavers are laid the entire width of the walk in a running bond pattern with a 4' - 6' planting strip between the sidewalk and street. The width of the walk would vary depending on the right-of-way width.

SIDEWALK GRAPHICS

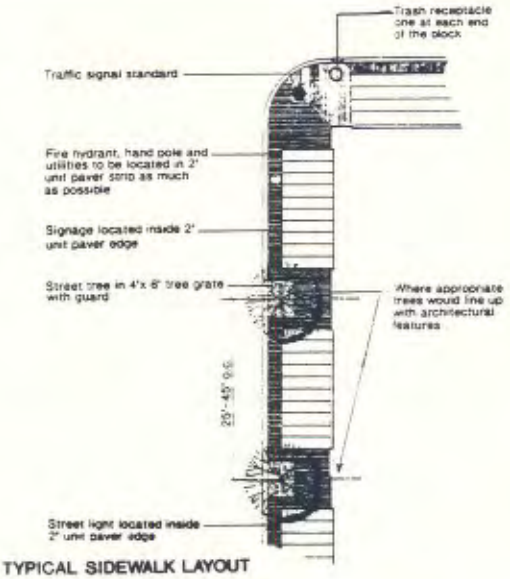


In the 1930's contractors installing "new" concrete walks were proud of their work and often stamped their well crafted work with their company name. As a gesture to the past, and to provide interest in the sidewalk surface, publicly owned facilities should be allowed to install pavement graphics that state their name, date of establishment and address. Sidewalk paving could contain the city seal, references to the state, or other appropriate graphics. Privately owned businesses and building names would not be allowed in the sidewalk pavement unless the present zoning text is changed.

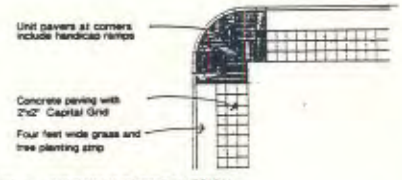
Pavement graphics should fit within the 2' x 2' module and may be of materials that add richness to the sidewalk surface, such as granite or bronze. The block number and street name could be installed at intersections to aid pedestrians in directions.

Existing historical markers and any existing special paving such as glass blocks or tiles should be preserved.

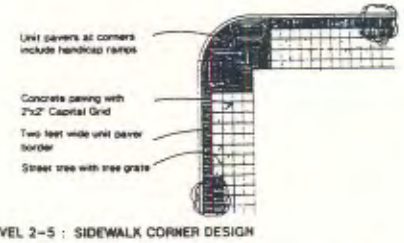
LOCATION OF SIDEWALK OBJECTS



TYPICAL SIDEWALK LAYOUT

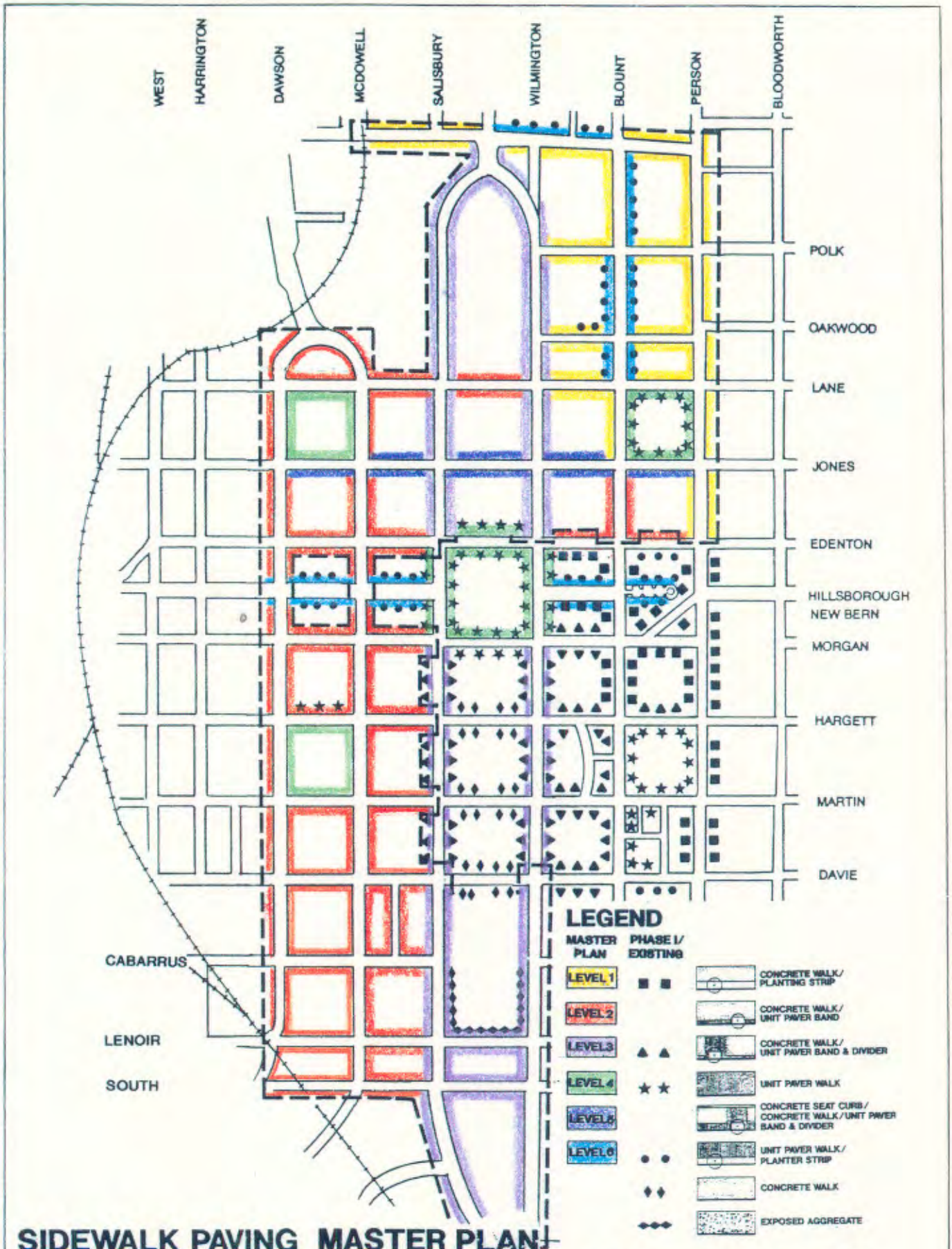


LEVEL 1 : SIDEWALK CORNER DESIGN



LEVEL 2-5 : SIDEWALK CORNER DESIGN

The basic structure recommended for the downtown sidewalk design is a continuous two foot unit paver border where the pavement abuts the curb backed up by a 2' x 2' grid of scored concrete. All intersections whether the sidewalk extends to the curb or not should be of unit pavers. The placement of lights, signs, trash receptacles, mail boxes, paper racks, etc. should be either within the two foot unit pavers strip or immediately behind it. Sidewalk objects should be placed in a way which would not interfere with truck loading and parking. In any event, the two foot unit pavers strip should be a continuous paving element with the hope that other elements should occur either within it or outside of it, but never partly over it.



SIDEWALK PAVING MASTER PLAN

DOWNTOWN STREETSCAPE MASTER PLAN

RALEIGH, N.C.

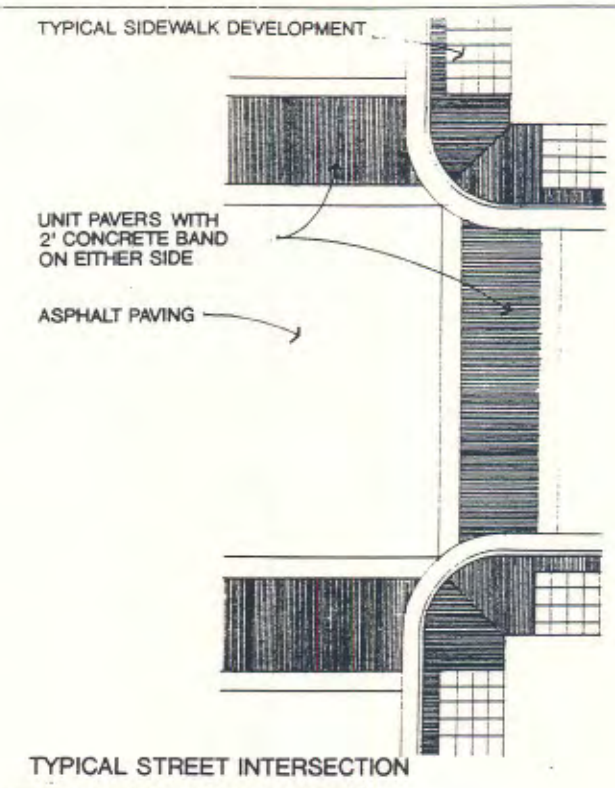
HunterReynoldsJewell, P.A.

CROSSWALKS

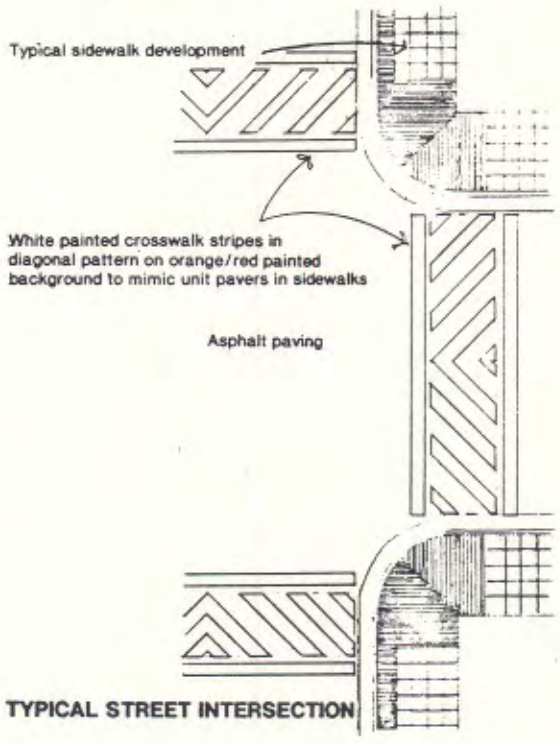
As outlined in the Guide to Downtown Urban Design, downtown Raleigh should be promoted as a pedestrian domain. In order to achieve this goal, the downtown streetscape should provide distinctive crosswalks at the street intersections which provide more importance and safety to pedestrian movement. The crosswalks should be unique to downtown, occur at all intersections, continue the appearance of the sidewalk crossing the street, be safe and attractive for pedestrians, and not create safety problems for the automobile.

Two options have been considered. The first option would be to use unit pavers in the crosswalks. Careful attention to proper paver design and installation can eliminate many problems with normal street maintenance. This type of treatment is used quite often in many cities and is present in Raleigh in isolated instances. Another option would be to use a distinctive painted crosswalk marking unique to downtown. The painted marking should be a 45 degree white reflective diagonal marking for added visibility in accordance with the Manual on Uniform Traffic Control Devices on a background that mimics the coloring of the unit pavers surrounding the crosswalk. This color would be a dark red orange. The markings are within DOT standards. In special situations to help call attention to the major axis in the downtown, diagonals on two way streets could change direction at the street center line.

Although the crosswalks options would require more maintenance than the standard markings now used, it is the opinion of the consultant that the crosswalks would contribute significantly to the streetscape improvement plan. It is noted that the Raleigh Department of Transportation and Street Maintenance Division both object to these proposals on issues of safety, cost, cost of maintenance and special treatment. Whether or not to include such crosswalks is recommended to be left to additional consideration during construction plan review.



PEDESTRIAN CROSSWALK



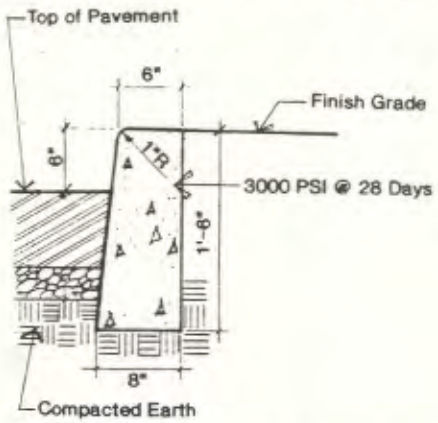
PEDESTRIAN CROSSWALK

CURBING

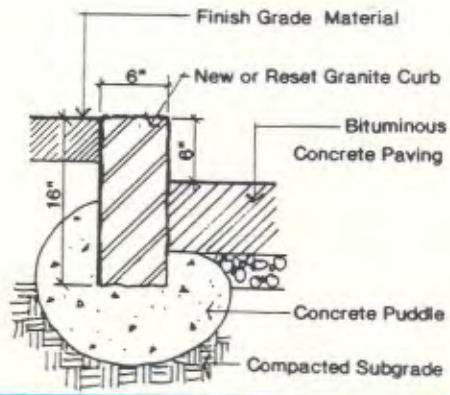
Curbing is aesthetically and functionally significant at the streetscape level since it can either unify or interrupt the relationship of the other materials. Granite curbing is the most desirable curbing. It is handsome and long lasting. In order to establish continuity, the recommendation is to add new granite to a block if over 50% of the block face already has granite curbing existing. A possible exception to the rule concerns Burke Square which should become all granite and Caswell Square which should become all granite curb when reclaimed by the state.

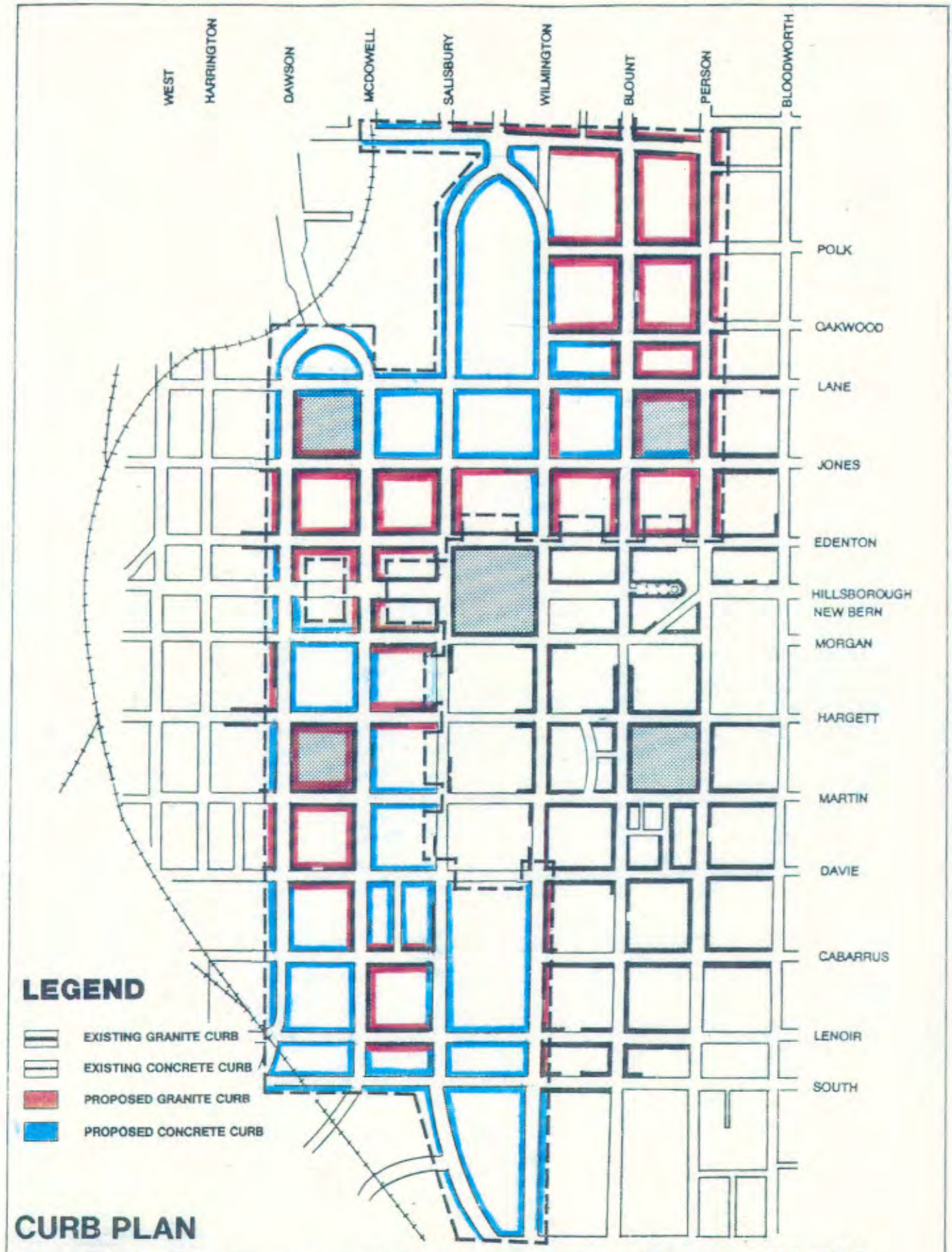
If a block face is less than 50% granite curb, when the granite curb stops at an interruption, such as a drive, it is reasonable to make a switch in materials at this point. We recommend a straight curb with no gutter. This will allow installation of a higher curb that can take more resurfacing against it. While the Parkway Curb is recommended, it could be subject to availability of local construction methods and a combination concrete curb and gutter may be an alternative. The design recommendation for curbing calls for establishment of order and continuity. Plans for improving curbing would be based on the inventory of existing curbing.

CONCRETE PARKWAY CURB



GRANITE CURB





CURB PLAN

DOWNTOWN STREETSCAPE MASTER PLAN

RALEIGH, N.C.

HunterReynoldsJewell, P.A.

STREET TREE MASTER PLAN

The plan for street tree planting is to continue the use of tree species which already line the major vehicular routes. These are the trees which were put in by the city or installed during earlier improvements. The plan would create a distinction of plant type that would correspond to special treatment of sidewalks, lights, and underground utilities.

Magnolia Grandiflora has been chosen as the special tree to line Jones Street to distinguish it as a ceremonial street. With guidance from the Urban Forester, a cultivar like Magnolia Grandiflora 'Smith Fogle' will be selected. This is a handsome evergreen street tree with jade green leaves and a dense oval shape.

In addition to the ceremonial tree, four new tree selections will be introduced. These are Chinese Lacebark Elm, English Oak, Red Oak, and Zelkova.

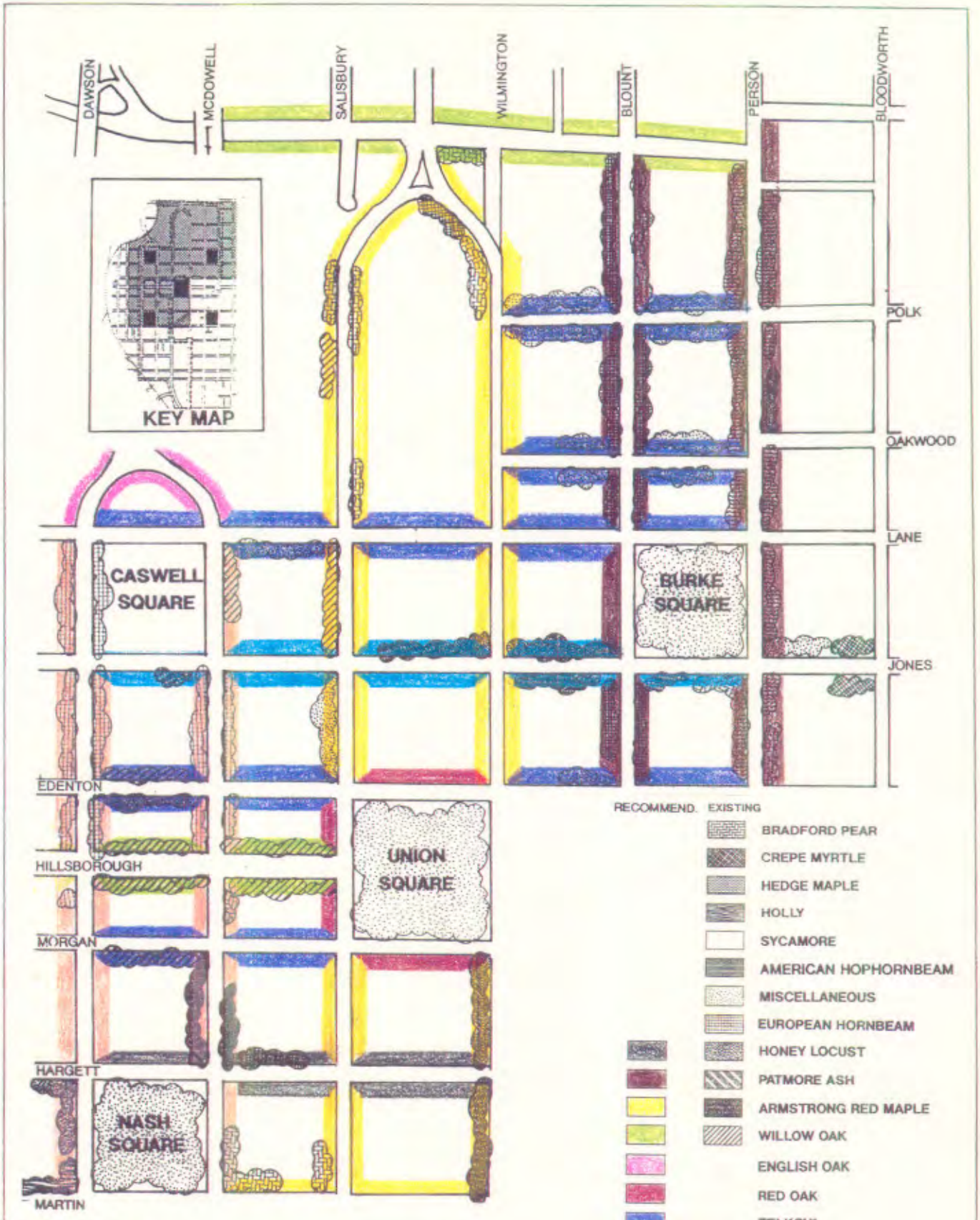
The Chinese Lacebark Elm (Ulmus parvifolia) is a graceful, round headed tree which grows 40' to 50' in height with an equal spread. This elm would be used on Dawson and McDowell Streets.

The English Oak (Quercus robur 'Fastigata') has an upright, columnar form with a height of 50' to 60'. Its canopy spreads 10'-15'. It would be used at the northern gateway at Dawson and McDowell.

Red oaks (Quercus rubra) reach a height of 60' to 75' with a spread of 40' to 50'. This tree grows fast and is pollution tolerant. It would be used on Edenton, Morgan, Salisbury, and Wilmington Streets around the Capitol but only on the side opposite the Square.

Zelkova (Zelkova serrata 'Green Vase') is a vase shaped tree with a medium growth rate. It can reach 50' to 80' in height with an equal spread. It would be used on Polk, North, Lane, Edenton, and Morgan Streets.

In areas where understory trees are appropriate the use of the state flower (Flowering Dogwood, Cornus florida) is encouraged. Where groupings of evergreens are appropriate at gateways or other areas, the use of the state tree (Loblolly Pine, Pinus taeda) is recommended.



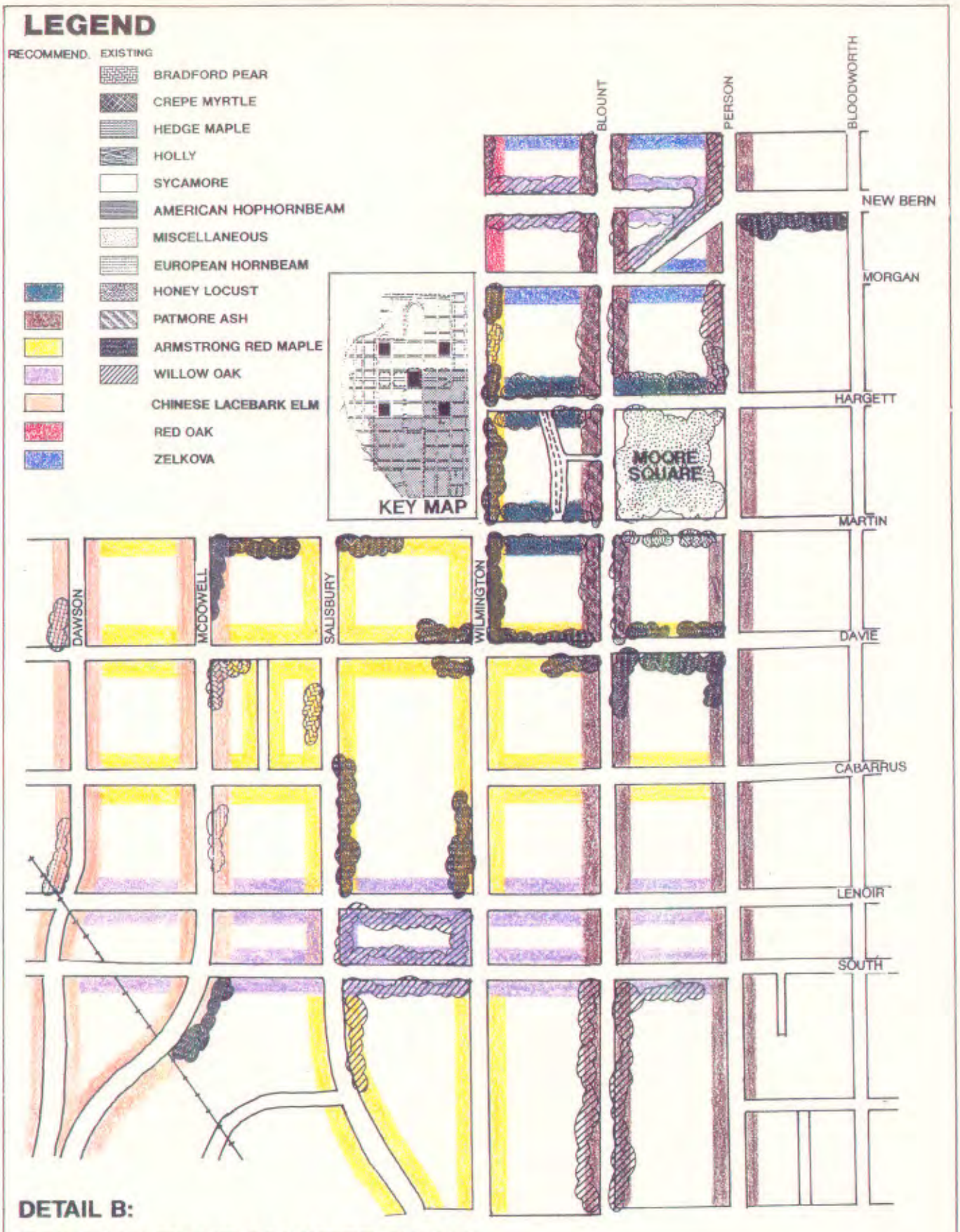
DETAIL A:

STREET TREE MASTER PLAN

DOWNTOWN STREETSCAPE MASTER PLAN

RALEIGH, N.C.

HunterReynoldsJewell, P.A.



DETAIL B:

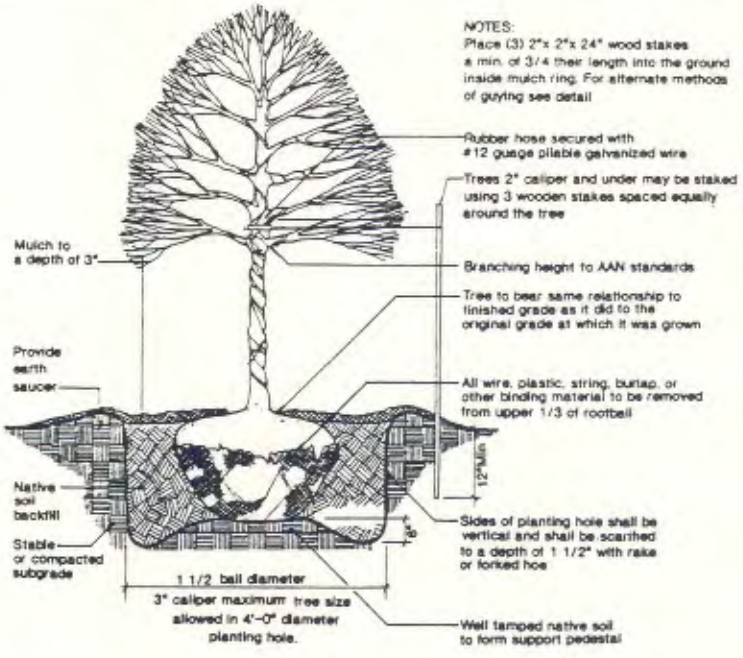
STREET TREE MASTER PLAN

DOWNTOWN STREETSCAPE MASTER PLAN PHASE II

RALEIGH, N.C.

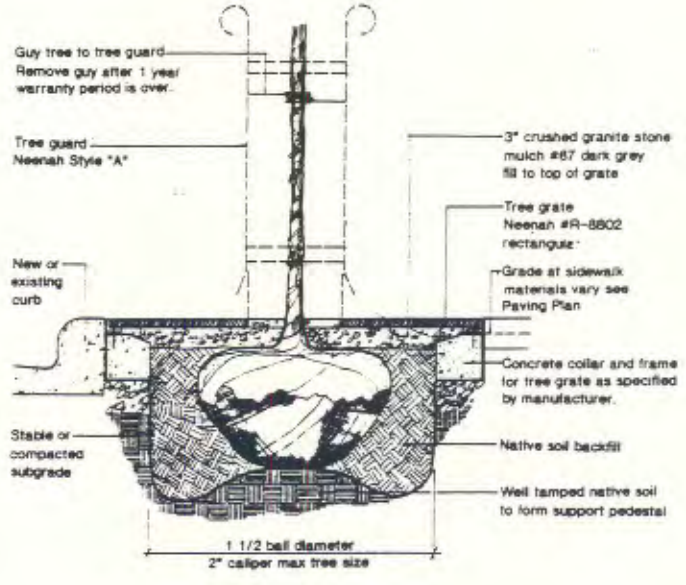
HunterReynoldsJewell, P.A.

STREET TREE PLANTING DETAILS

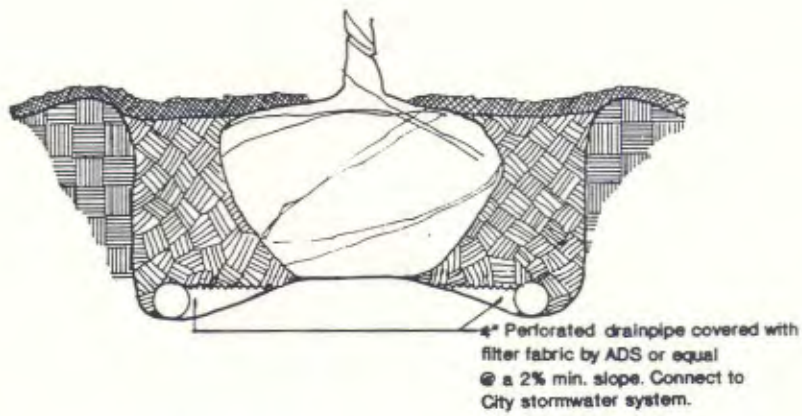


TREE PLANTING

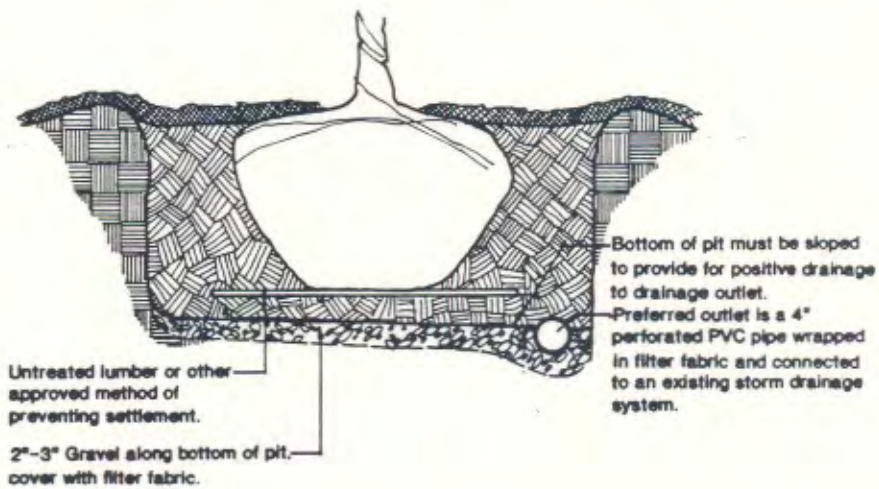
Refer to the Policies and Standards Governing Activities Which Impact City Trees.



TREE GRATE



DRAINAGE : ALTERNATIVE 'A'



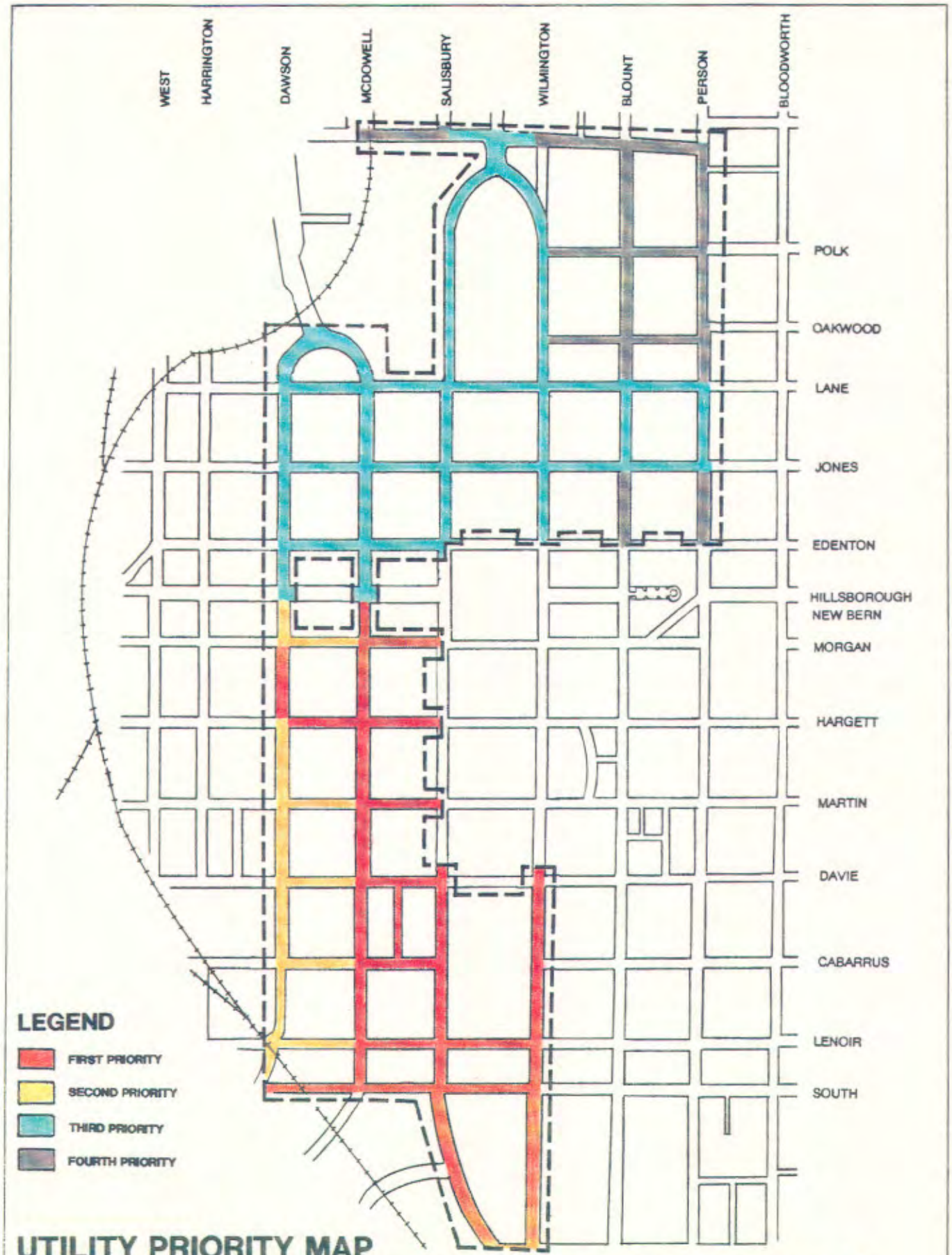
DRAINAGE : ALTERNATIVE 'B'

UNDERGROUND UTILITIES

Putting utilities underground is one of the most visible means of improvement to the aesthetic aspects of a streetscape. It is also one of the most expensive and difficult improvements to do. Varying conditions influence the level of difficulty involved in burying the cables. For example, an easy system to put underground is one where secondary electric service for street lights is on one side of the street. Also, blocks that have large single users are easier to put underground because the utility systems are consolidated. Conversely, streets with small multiple users, generally residential, with multiple service crossings and a great number of large existing trees are the most difficult to consolidate and install underground.

The recommendation would be for all the utilities in the downtown area to be placed underground. Priorities have been established for installing the utilities underground. These priorities are based on proximity to areas already underground, degree of difficulty to install underground and visual need. These priorities correspond to other levels of treatment recommended for the downtown.

Installation of underground utilities is the first step in sidewalk improvements. Any other improvements such as new paving, lighting, street trees, etc. should not occur until the utilities have been placed underground.



UTILITY PRIORITY MAP
DOWNTOWN STREETSCAPE MASTER PLAN
RALEIGH, N.C.

HunterReynoldsJewell, P.A.

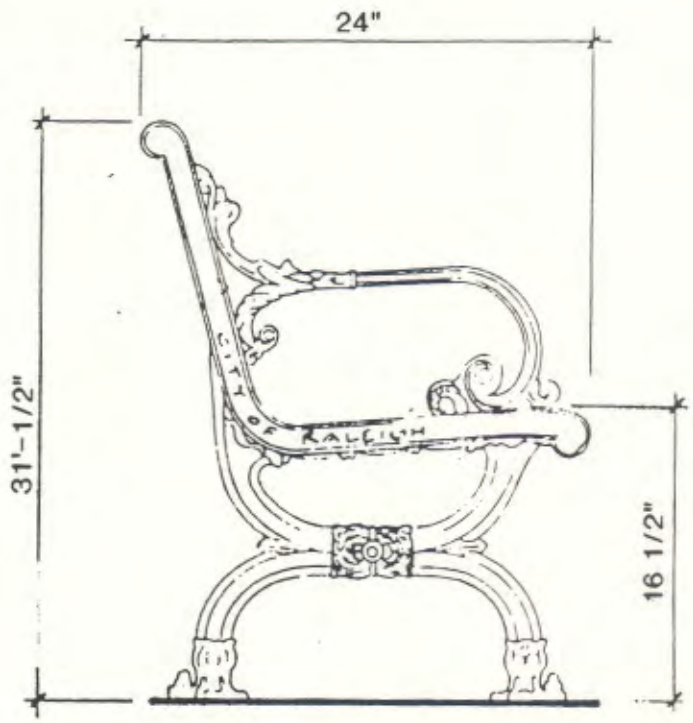
LIGHTING

Throughout the majority of the downtown area the continuation of the cobra head fixture on a steel pole is recommended where the undergrounding of utilities occurs. Capital light fixtures are recommended for the interior of Nash Square so that it will match Moore and Burke Squares. Caswell Square should have the Capital light fixture when it is reclaimed by the state.

This study recommends the use of the Raleigh light fixture on the three blocks of Blount Street from Peace Street to Lane Street. An historic style light is necessary to contribute to the character of this historic district. Again, the addition of any new lights would only follow the undergrounding of utilities.

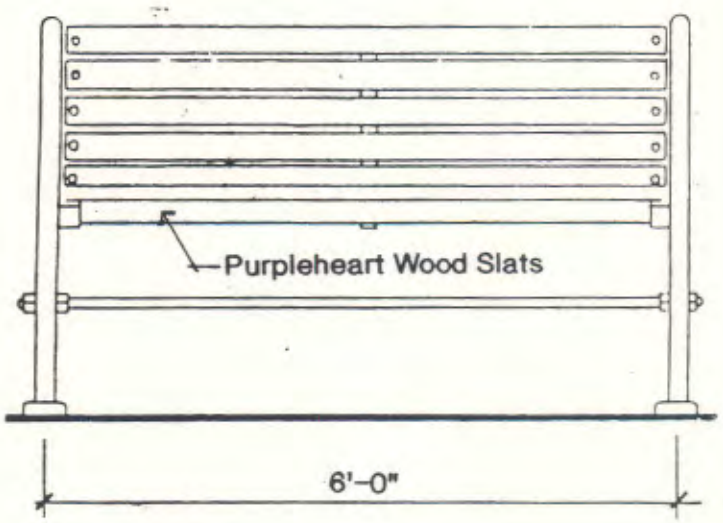
Historic Bench
Model No. B-75

Manufactured by:
Bench Manufacturing Co.
P.O. Box 158
Concord, MA. 01742
(617) 371-3080



Side Elevation

"City of Raleigh" is to be cast into each support as shown in the detail. The historic bench is recommended for use in Nash Square. The bench is now being used in Moore Square and surrounding areas.

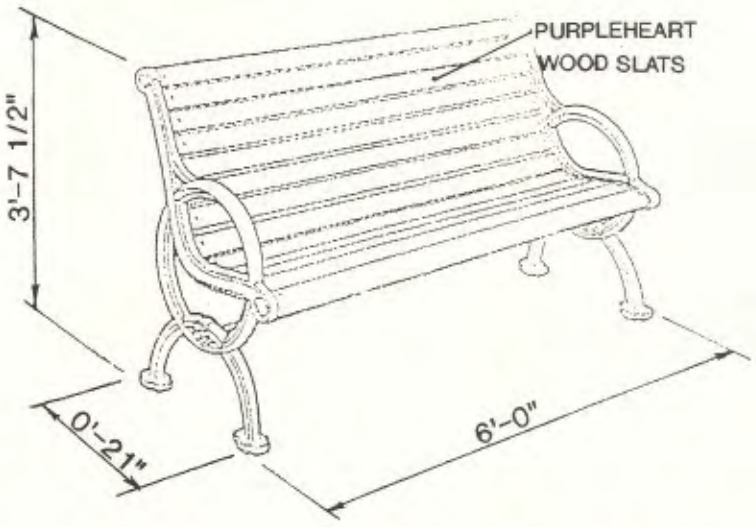


Rear Elevation

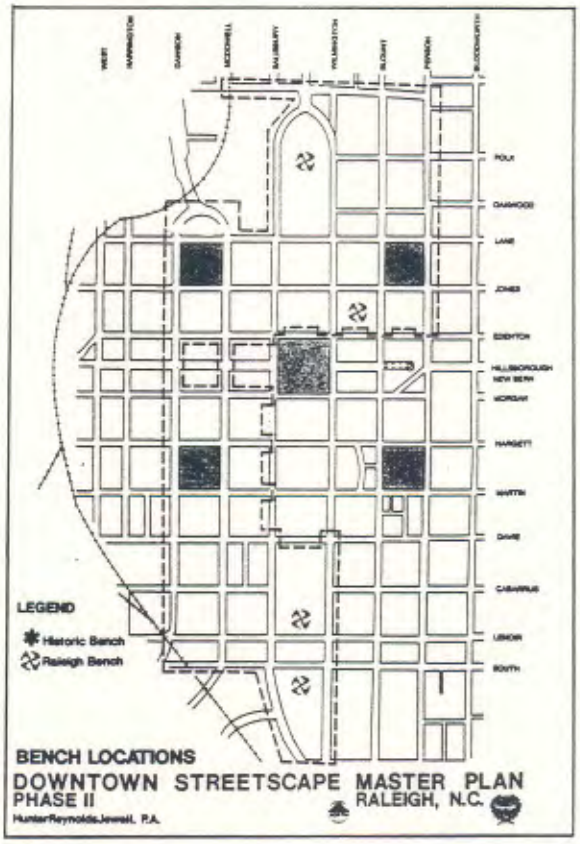
Raleigh Bench

Model No. B-20

Manufactured by:
Bench Manufacturing Co.
P.O. Box 158
Concord, MA. 01742
(617)371-3080

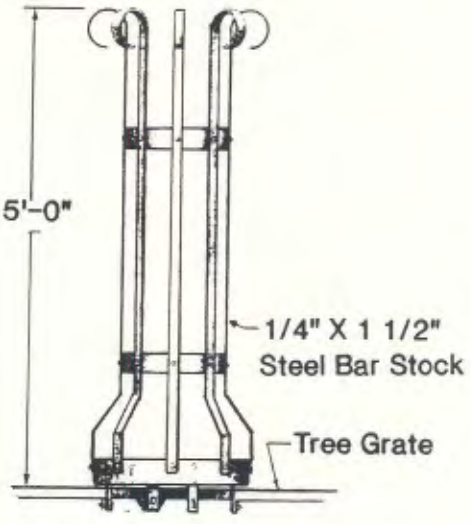


These benches are recommended to be used in areas other than the five original Squares. Suggested locations are shown in the map below.



Neenah Fabricated Tree Guard Style E

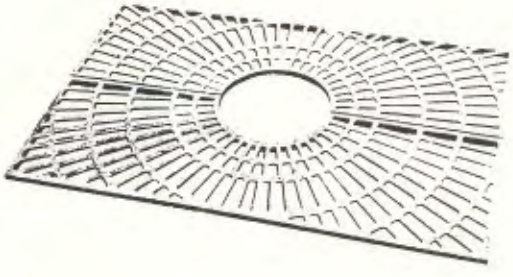
Manufactured by:
Neenah Foundry Co.
Box 729
2121 Brooks Avenue
Neenah, Wisconsin
(414) 725-7000



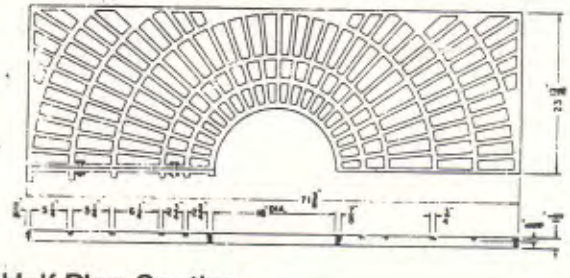
STYLE E

Neenah Tree Grate R-8802 180 Rectangular

Manufactured by:
Neenah Foundry Co.
Box 729
2121 Brooks Avenue
Neenah, Wisconsin 54956
(414) 725-7000



Two sections required for complete tree grate. Tree opening is expandable. Available with cast iron angle frame, if required. Weight per set – 245 pounds.

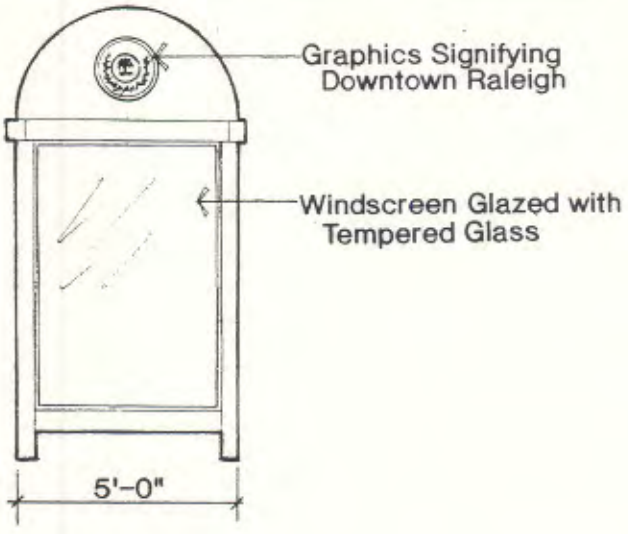


Half Plan Section

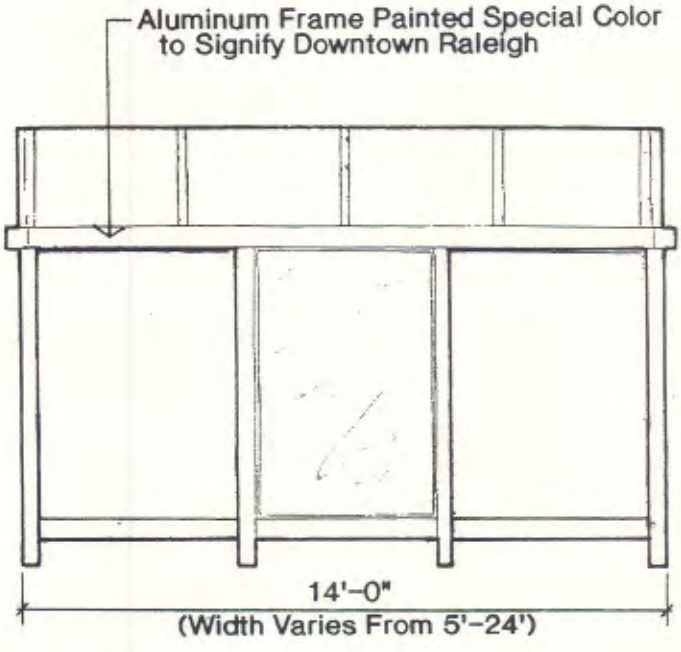
Vaulted Bus Shelter

Model No. AF-SV14

Manufactured by:
Alu-Fab Corp.
660 Commerce Dr.
Reed City, Michigan 49677
(616) 832-3745



Side Elevation



Front Elevation

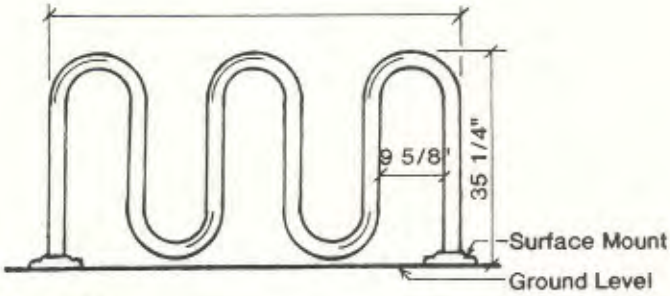
BUS SHELTERS

Bus shelters are not only essential structures for the bus system and its riders, but also a design opportunity for image building in the downtown area. The bus shelter illustrated features an arched roofline which relates to the

architecture of the Capitol. Along with the symbolism of the architecture, a sign on the shelter associated with Raleigh could strengthen the downtown image. To signify downtown, each bus shelter could be painted a special color used only in the downtown area. These shelters could be phased in as the existing shelters need to be replaced.

Bike Rack
Model No. RB 07

Manufactured by:
Brandir International, Inc.
200 Park Avenue Suite 303E
New York,N.Y. 10166
(212)505-6500



Elevation

BIKE RACKS

Bike rack is available with a surface flange mount or an inground anchor mount. Standard lengths come for 5 to 11 bikes. Units are made from schedule 40 steel pipe, hot-dipped galvanized after fabrication. Unit is also available in Schedale 40 TO304 stainless steel, satin finish (optional and extra). Bike rack to be used in locations where space is available for multiple bike storage, such as around the Civic Center or at entrances to major public buildings.

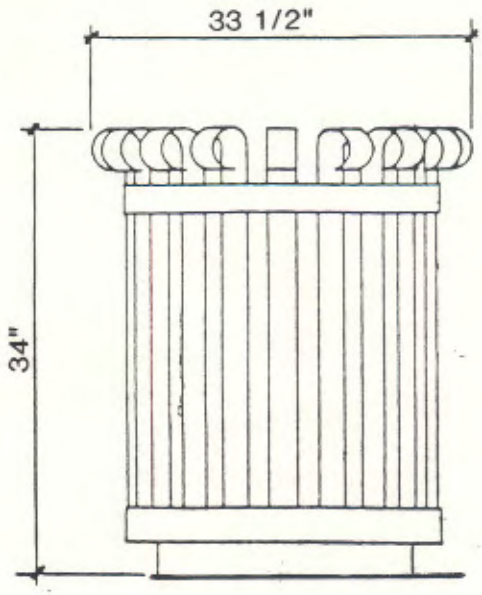
Commuter bike storage space is recommended in all parking decks. This will allow the commuters more safety and shelter.

On smaller side street locations where there is limited room for bikes, tree guards would serve as devices on which to lock bikes. This could be noted in pamphlets or on directories showing bike route locations.

Trash Receptacle

Model No. S-21

Manufactured by:
Victor Stanley, Inc.
P.O. Box 144
Brick House Rd.
Dunkirk, Maryland 20754
(301) 855-8300



Surface mounted with standard fiberglass lid.
32 gallon, high density. Plastic liner included.

GATEWAYS AND DISTRICT MAKING

Raleigh as the capital is a much visited city and should make a good impression on visitors as well as inhabitants. The highway system is the primary means of travel to downtown. Major roadways which enter downtown should be designated with special Downtown Raleigh/Capitol District graphics incorporated into the standard highway sign system. These signs might feature a special logo as an overall unifying identity.

In order to help define the downtown area, it is recommended that a series of gateways could be created for downtown Raleigh. The Gateways map shows the the locations. Two bridge gateways have been identified. These bridges should be enhanced with cladding to emphasize entering downtown. Two gateways at major intersections have been selected as downtown entry points and should be emphasized with special landscaping. Finally, a system of signage gateways should delineate the boundaries of downtown. These gateways would mark the passage into downtown with special signs which would continue to be be used throughout the downtown. The special signs could create a public information system to provide directions for pedestrians and drivers.

Conceptual sketches and suggestions are shown to represent how the gateways might work. The ideas are not meant to be considered as final design recommendations but as preliminary concepts. Some of the ideas may have the potential for funding from private sources.

Downtown has three sets of North/South arteries which have a perceived purpose.

1. Vehicular Artery
   Dawson/McDowell

   This pair is the major vehicular artery into downtown with connections to the beltline and Capital Boulevard. The pair lends itself toward definition of entrance and place.

2. Secondary Artery
   Wilmington/Salisbury

   This pair is the vehicular and pedestrian promenade around the core of downtown.

3. Tertiary Artery
Person/Blount

This pair represents the least densely developed entry to downtown. It connects directly to the southern beltline, Hammond Road, Atlantic Avenue, and Capital Boulevard. The pair provides links with the colleges and universities in the area and also represents growing areas which need developmental emphasis.

BRIDGE GATEWAYS (A)

Transition from the major arteries to downtown is made across an edge defined by a railroad overpass. There exists on both sides of the Dawson/McDowell a pair of existing railroad bridges which are natural gateways into downtown. The opportunity to emphasize the bridges through landscaping and facade improvements such as cleaning, painting, or recladding with materials such as limestone/precast concrete will begin to set the tone for the overall image master plan.

1. Downtown Gateway - North

An old existing railroad bridge marks the northern edge of downtown. It is where the density of downtown begins and where the density of the streetscape elements will begin. This bridge will define a portal that communicates a "sense of entrance." The bridge treatment should occur on both sides of the bridge since it is two way traffic. Once transition is made into downtown one is greeted by a major element to be determined.

Cladding shown is to illustate concept only.

2. Downtown Gateway on the South

Saunders Street into downtown offers the best vista of the Raleigh skyline. A new railroad bridge marks the edge of downtown. The parkway landscaping of the road can be enhanced to increase the drama of the entrance experience. The bridge cladding and rail treatment could occur on both sides so a portal can be seen from downtown even though it is a one way portal.

GATEWAYS WITH ENHANCED LANDSCAPING (B)

The Wilmington/Salisbury pair are the portals into the visitor promenade around the major buildings in the city. This pair serves as an important pedestrian connection from the museums, the Capitol, the mall, and the Civic Center. This route links government, business, tourists attractions, and entertainment. Special attention should be given to the landscaping at these portal. Plant materials should be used to designate these gateways as major entries to downtown. These gateways should have the public information elements on poles or on traffic signal installations.

1. Gateway at Salisbury/Wilmington and Peace on the North

With the powerful presence of the State Government Complex on the north, a gateway is needed to mark the approach to the ceremonial street.

2. Gateway at Wilmington and Smithfield on the South.

This gateway is similar in some respects to the McDowell approach in to downtown since it also provides a good vista of the skyline. Once it passes over the railroad bridge toward downtown there is a triangular island where this gateway is located.

SIGNAGE GATEWAYS (C)

Important approaches into downtown are made via Person heading north, Blount heading south, Edenton heading west, and Hillsborough heading east. These approaches are edge definers of the downtown area. The public information element should occur at these gateways and continue at designated intersections into downtown.

1. Gateway at Blount & Peace

   Since Blount is a South bound arterial approach into downtown, a gateway at its intersection with Peace is recommended. Peace is also a major East/West connector.

2. Gateway at Edenton & East

   Since Edenton is a westbound arterial appoach into downtown, a gateway at its intersection with East is recommended where the edge of downtown begins.

3. Gateway at Person & Smithfield

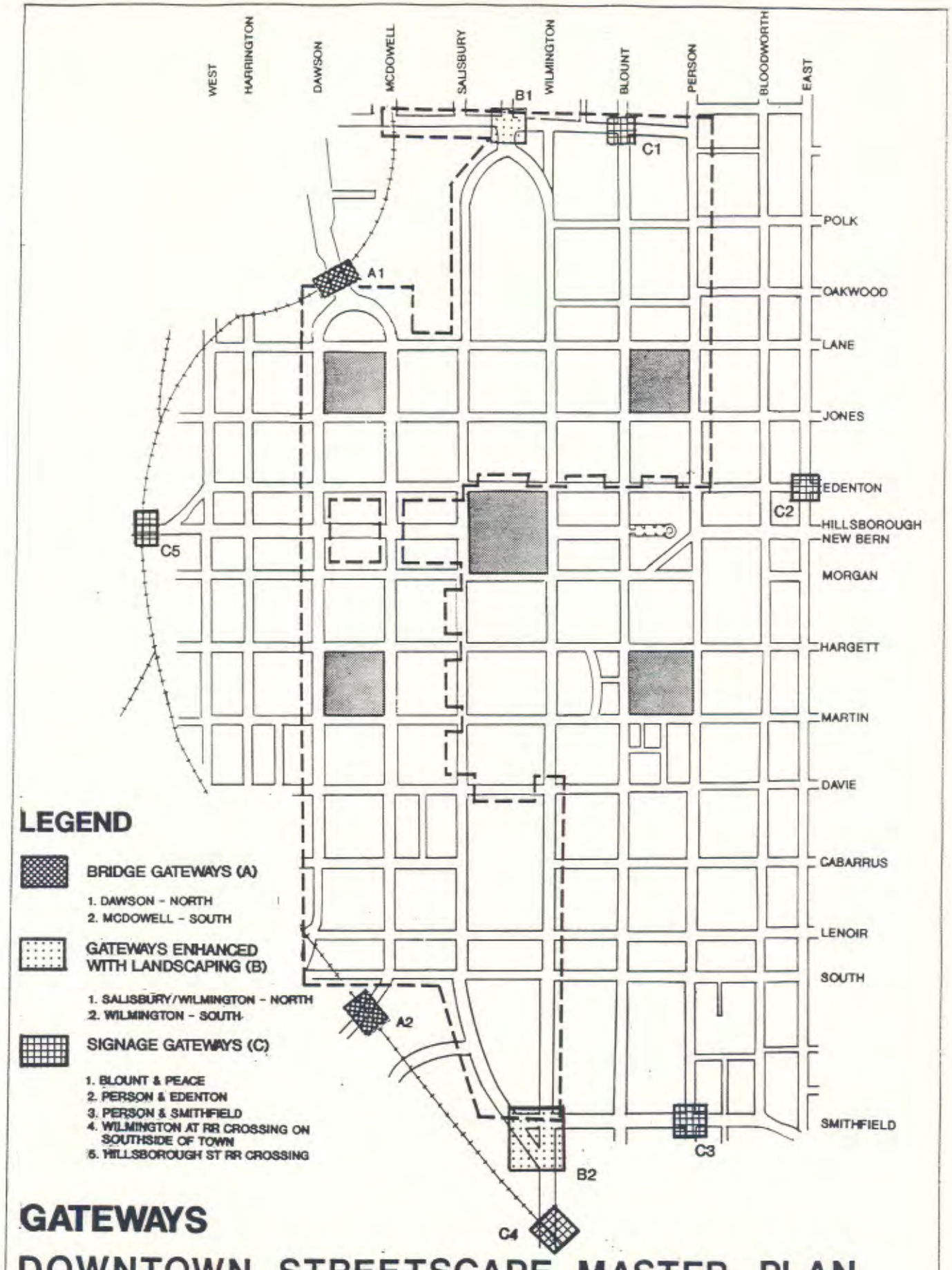
   Since Smithfield marks the entry to downtown, it is the appropriate location for a gateway emphasizing the southern boundary.

4. Gateway at Wilmington at RR Crossing on Southside of town

   This is an important gateway since it is at the crest of a hill with a view toward downtown.

5. Gateway at Hillsborough at RR Crossing

   Downtown begins to be defined near this bridge. The axis of the capital is powerful and can be enhanced with enhancement of the bridge here.



GATEWAYS

DOWNTOWN STREETSCAPE MASTER PLAN

RALEIGH, N.C.

HunterReynoldsJewell, P.A.

SPECIAL DISTRICTS

Raleigh has several special districts in the downtown area which can be enhanced or developed. These are in addition to the places that are already unique to the downtown such as Fayetteville Street Mall, State Capitol, City Market, Civic Center, Memorial Auditorium, Moore and Nash Squares, and the Governor's Mansion.

The ideas expressed are meant to show possibilities for creation of special places that add a unique flavor to downtown. Private funds may be used to support the development of these ideas.

The following districts can be enhanced or developed in downtown.

MOORE SQUARE DISTRICT

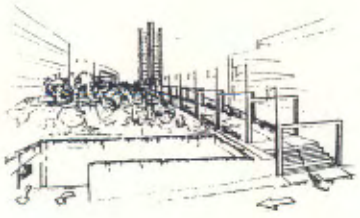
The identity of Moore Square area could be strengthened by graphics integrated at the ground plane, recessed historical plaques in paving, and a more festive graphic guidelines for store facades.

GOVERNORS' WALK

A walkway could be used to create a special pedestrian experience by embedding dedicatory plaques in the walk which would feature each governor and his contribution to the state. A possible location for this is in the block between the Governor's Mansion and Capitol Square where the proposed new Visitor Center will be built.

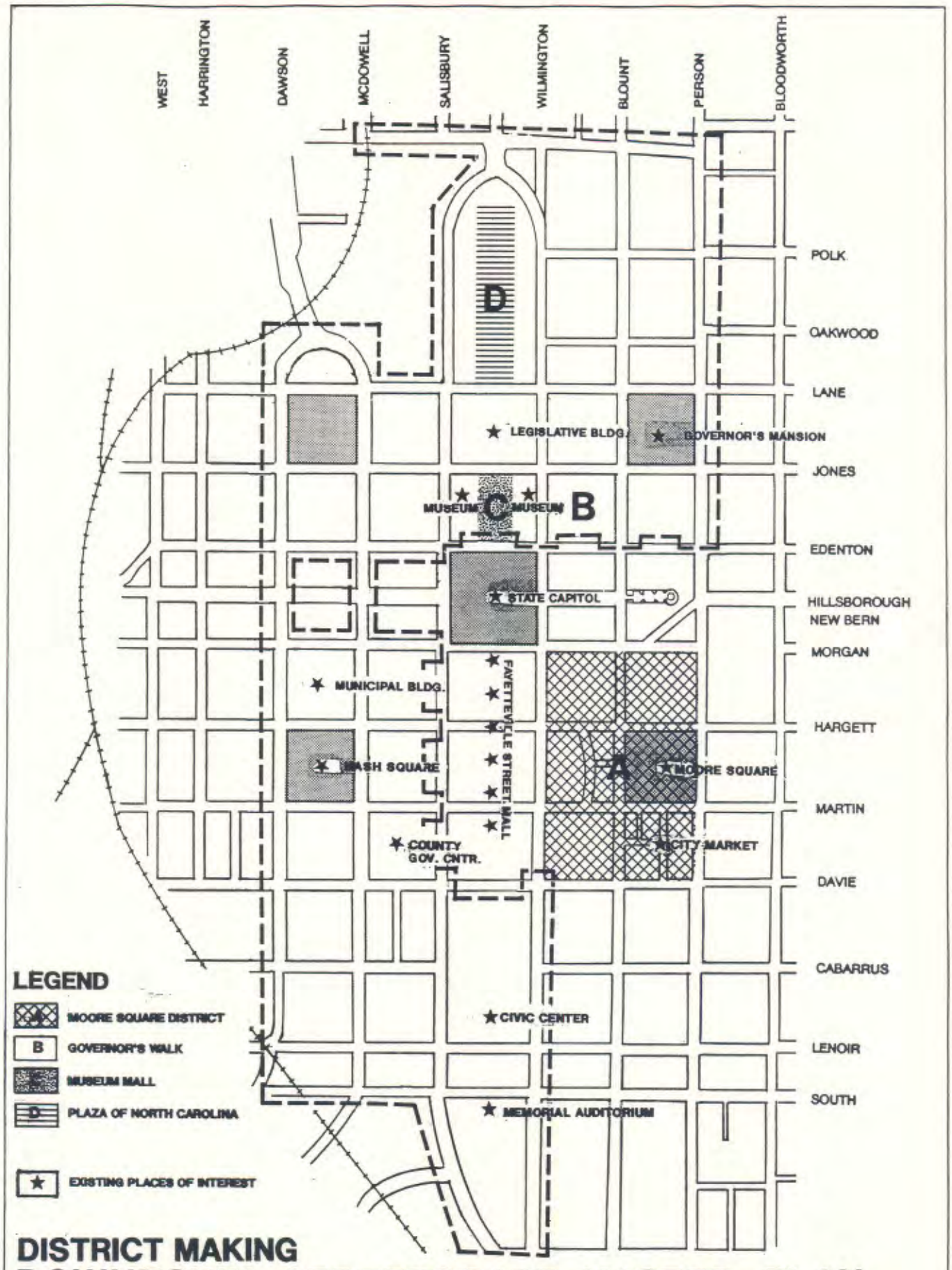
MUSEUM MALL

The area located on the axis between the Capitol and the Legislature Building which serves as a mall to the museums will become an important ceremonial passage way and should have special gateways.



PLAZA OF NORTH CAROLINA

For the State Government Mall, the proposal is to make the existing lawns over the parking decks a public plaza featuring the history of North Carolina cities, flags, and geography. The plaza would be a hub of pedestrian activity.



DISTRICT MAKING
DOWNTOWN STREETSCAPE MASTER PLAN
PHASE II
RALEIGH, N.C.

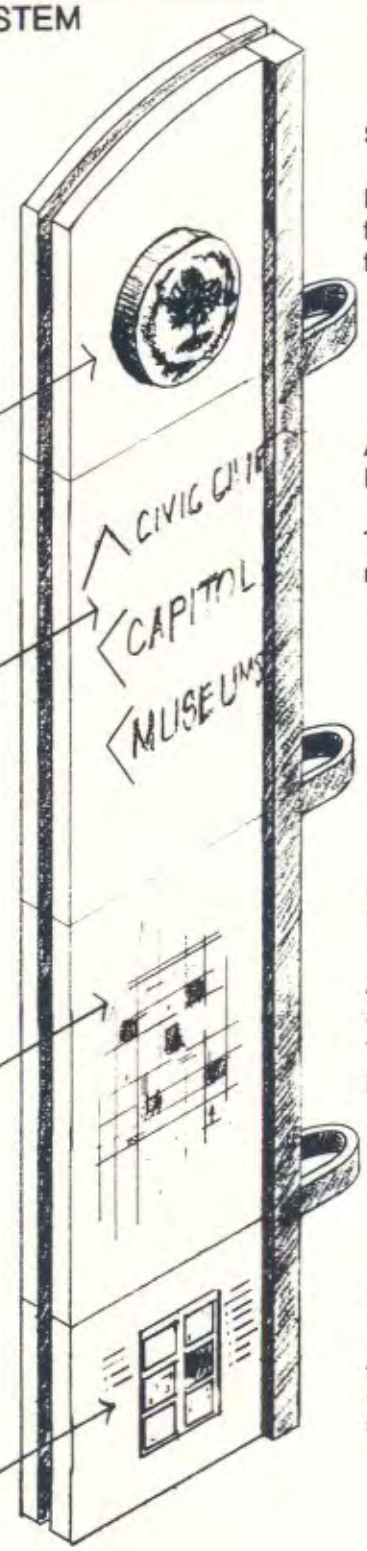
HunterReynoldsJewell, P.A.

SIGNAGE AND PUBLIC GRAPHICS

The basic public information element should be located on identified street corners in the downtown area. The concept is to have a directory integrated with the traffic signal structure on street corners to provide information for pedestrians and for drivers seeking various downtown sites. Bus stop designation and announcements of downtown events would also be appropriate information to display.

The directories will contain basic information for effective vehicular and pedestrian circulation as well as being a graphically unifying feature for downtown. Directories should also function to promote special events. For example, during Artsplosure or similar festivals, special panels of the signage system could designate dates and times for activities. Also, each area or district could have graphics specific to that area.

DOWNTOWN INFORMATION SYSTEM



SIGNAGE PANELS

Panels are made to be read from both directions. Material for panels could be porcelain.

CITY SEAL

The Raleigh City Seal cast in bronze.

AUTOMOBILE INFORMATION PANEL

This information would direct motorists to major landmarks.

CIVIC CENTER

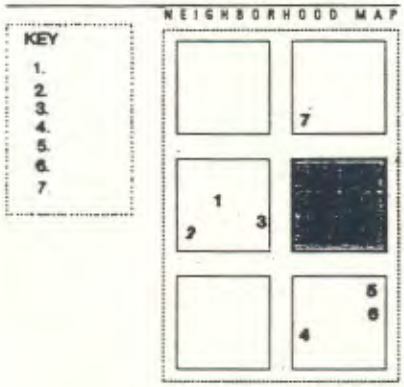
CAPITOL

MUSEUMS

DOWNTOWN AREA MAP

PEDESTRIAN DOWNTOWN MAP

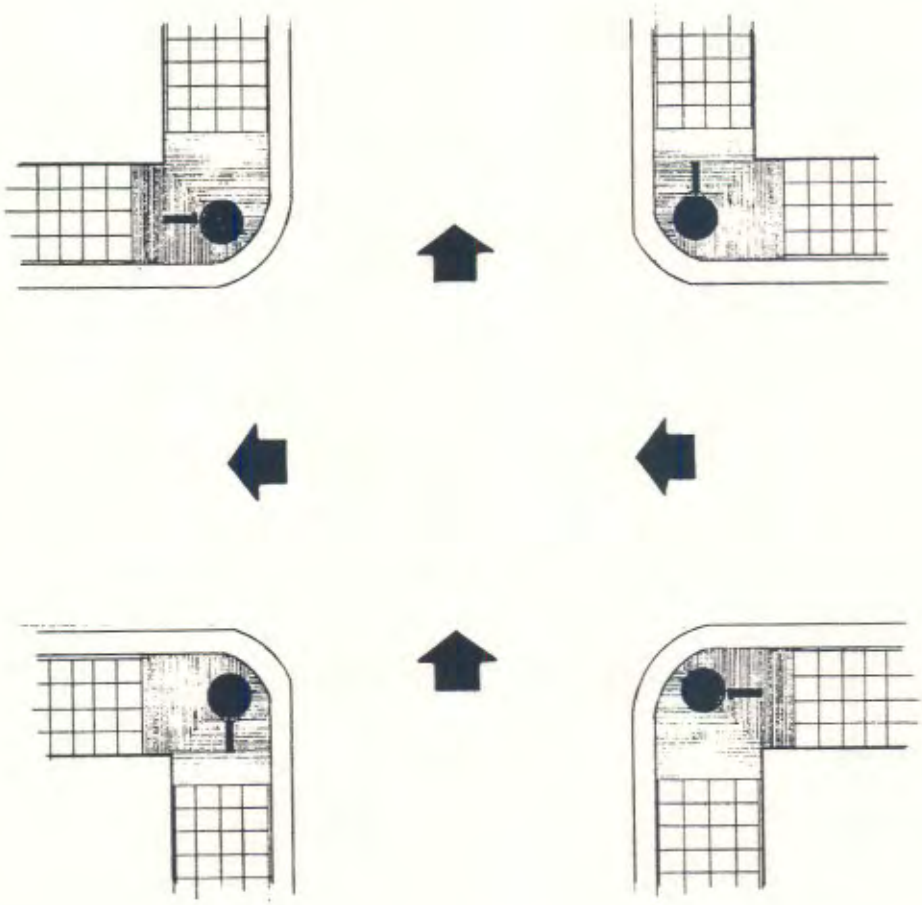
A map of the entire downtown area shows your location and the locations of the main points of interest.



AREA MAP/DIRECTORY

An enlargement of a certain number of blocks is shown showing publicly owned facilities

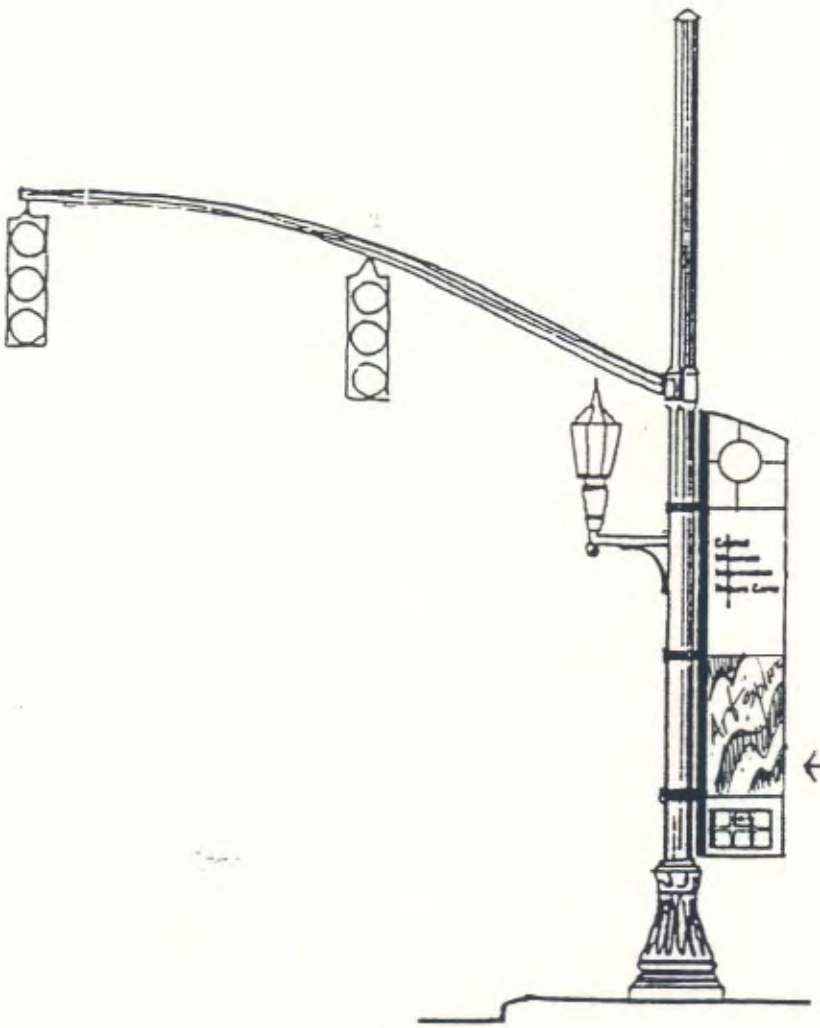
LOCATION OF DIRECTORIES ON STREET CORNERS



TYPICAL INTERSECTION

DIRECTORY LOCATION/ORIENTATION

The downtown information directory will be attached to poles at designated intersections. Orientation of the directory follows the standard street sign convention which is to face the driver on the near right corner and on the far left corner. The diagram above shows how the directories would occur at an intersection of one way streets.



ADDITIVE PANEL

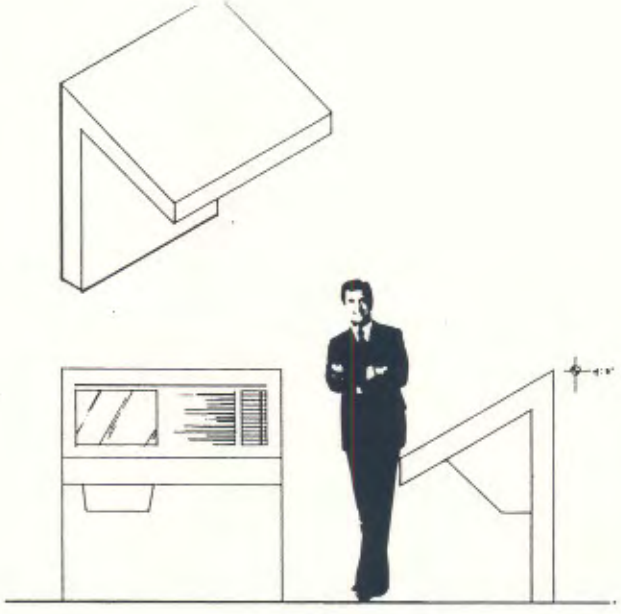
TO SHOW EVENT

AND DIRECTION

This panel could be used to provide information about publicly sponsored downtown events. Since the Events Panel would only be needed periodically, it could be installed in a slot normally used for one of the other downtown information panels.

BUSINESS, ACTIVITIES DIRECTORY

An important component for promoting downtown business and activities could be a computer directory located in major public buildings such as the Civic Center, Municipal Building, the Capitol, Museums, and the Legislature Building. Such a computer system is the only feasible way to list restaurants, shops and other businesses as requested by downtown Raleigh Development Corp.



PLANNING CONSIDERATIONS

- ☐ PEDESTRIAN ACTIVITY PLANNING
- ☐ VEHICULAR CIRCULATION RECOMMENDATIONS
- ☐ IMPLEMENTATION AND COSTS

PEDESTRIAN ACTIVITY PLANNING

The description of pedestrian activity in the analysis section shows that Raleigh has a thriving and diverse culture downtown. Indeed, with two major new office buildings under construction and others in the planning stage, Raleigh's downtown is on the upswing. However, there are several areas where improvement can be made in the pedestrian spaces downtown.

SIDEWALK WIDTH

The right of way of all Raleigh streets is 66' with the exception of Hillsborough Street which has a width of 99'. There is a right of way for sidewalks of 11'. In reality the width could range from 9'-12'. This is too narrow. It does not allow for very much flexibility in location of trees or other street elements. From William Whyte's pedestrian studies, he concludes that generally, sidewalks widths in a downtown area should be a minimum of 15' and a maximum of 25'. This allows street furniture, street trees in a variety of locations, benches and sitting areas while accommodating pedestrian traffic flow. It also allows room for pedestrians to stop and talk without disrupting traffic. Therefore, it is a positive contribution to the pedestrian and street life of a city block.

CIVIC CENTER/MEMORIAL AUDITORIUM AREA

This area has recently been the target of various alternatives as to the expansion of the Civic Center. The location of the Civic Center expansion is beyond the scope of this study, however, there are some observations and opportunities to consider where ever the final expansion occurs. With expansion either to the east or west, a stronger pedestrian axis in an east west direction can be made. This will connect residential neighborhoods and the train station to the Fayetteville Street Mall. Also, when the expansion occurs, a strong pedestrian link to Memorial Auditorium should occur to help this facility gain more exposure.

MIDBLOCK CONNECTIONS TO MALL

Good examples of successful midblock connections from the east to Fayetteville Street Mall are the Exchange Plaza and the Market Plaza. Any available opportunities for similar connections from the west should be encouraged.

VEHICULAR CIRCULATION RECOMMENDATIONS

Bicycles

Bike routes are significant in planning streetscape improvements since the city wants to encourage alternate means of transportation in the downtown area particularly. There will be a major bike route along the Western Boulevard extension providing access to downtown.

The downtown area streetscape could be more bike friendly with signs noting streets as established bike routes. It is suggested that wherever space permits, bike routes have an extra two feet added to the outside lane preferably not next to parked cars.

Planning for bike parking is an important factor in the streetscape improvement plan. Street furnishings should include bike racks for parking by shoppers and others stopping for short periods of time. Commuters need to have secure, covered storage facilities including lockers. The storage facilities could be located in parking decks or in other specified areas.

IMPLEMENTATION AND COSTS

This is a master plan cost estimate and is based on general assumptions which come from historical information and general knowledge about costs for similar improvements. It is assumed that further design development will occur and greater accuracy in estimating costs can be achieved. Some items as built in Part I have specific costs and give us historical figures for use in our estimate. However, as with any streetscape improvements dealing with underground items and demolition of work from previous generations, there are unknowns one cannot anticipate in the cost estimate. This cost estimate has allowed for some degree of contingency and has been adjusted for inflation.

The following costs for the streetscape improvements called for in the Master Plan are based on current costs for similar materials and labor.

MASTER PLAN IMPLEMENTATION

Costs for the Master Plan consist of an estimated amount for each block face in the project area. The project area is divided into Part II and Part III. Part II is additionally subdivided into phases based on definitive scheduling by calendar year from 1992 to 1994. The final phase of Part II has not been scheduled yet. Part III improvements which will be a coordinated effort between the city and the state governments has a projected budget but does not have a timetable for implementation.

The dollar amount for each block face is based on either the ultimate level of treatment described in the Sidewalk Paving section of the Master Plan or an amount for initial renovation which will lead to the ultimate level. Each block face is listed with its assigned level. Items of costs built into the total figure for each block consist of: demolition; paving--concrete and unit paver sidewalks, and corners; patching; curbing--concrete and granite (new and reset); grass; trees; street furniture; secondary electric and traffic signal cable undergrounding; signal poles, mast arms, and conduit, and surveying. Cost information on the signs for the public information system is provided per unit in another section.

Items of cost for which no reliable data exists to use at the master plan level include underground installation of primary electric and telephone utilities. Costs for installing utilities underground vary significantly based on whether only lighting is involved or lighting and telephone, secondary, and primary electric as well. Some blocks in the project area already have existing or proposed underground service funded by Carolina Power & Light.

PART II: Phases A, B, C, and D

Part II consists of four phases: Phase A (1992), Phase B (1993), Phase C (1994), and Phase D (no funding, no schedule).

Phase A

Each block face listed in Phase A scheduled for improvement in 1992 will be renovated to the ultimate level called for in the Master Plan. This area is depicted in the Phasing Map which shows its relationship to the Fayetteville Street Mall, the Municipal Building, the new county government building. The estimated costs for Phase A are shown on page 78.

Phase B

This phase includes eight block faces which will be improved during 1993. These streets should be improved to the ultimate level designated in the Master Plan. Phase B links the first two blocks of Hillsborough Street running west of the Capitol south to Phase A. Costs for the improvements in this phase are given on page 79.

Phase C

Phase C is an unstable area in the sense that land uses are still being defined and may be greatly affected by the planning involving general downtown planning. For this area the Master Plan calls for interim improvements which would work toward reaching the ultimate level of treatment for these streets. Certain block faces

which should be completely renovated now have been identified. Other block faces which need attention but could wait to be fully renovated are shown with funds which could be used for sidewalk repair, adding street trees, upgrading corners which need handicap ramps, installation of traffic signal poles, and general upgrading during the evolution of the final plan for the area. Estimated costs for Phase D are shown on page 80.

Phase D (No funding, no schedule)

Phase D comprises an area along Dawson Street south of Hillsborough as shown on the Phasing Map. This portion of Part II has not been funded and there are no plans for undergrounding utilites yet. The assumption is that improvements to the streetscape here would begin only when undergrounding occurs.

Costs have been estimated for improving Phase D. Since no timetable has been established the amount is based on 1990 dollars and could be adjusted when the timing is firm. The amount is given as a lump sum for reference on page 82.

PART III

Part III improvements must be a joint effort between the city and the state governments. The Master Plan calls for streetscape improvements which will be consistent with the renovation implemented in the earlier phases of Part II.

Estimated costs have been projected based on current dollar values and are shown as lump sums. The city will fund streetscape improvement on all non-state owned frontage. In blocks of state owned frontage, the state must pay for street trees, curbing, paving, site furniture, and demolition. The city costs on state owned frontage are for surveying, traffic signals, and design. These costs are shown on page 82.

Part II: Phase A 1992

Address		Level	Block Face	
200 S. McDowell	E	2	$60,030	
	W	4	$68,828	
				$128,858
300 S. McDowell	E	2	County improvements	
	W	2	$59,541	
				$59,541
200 W. Hargett	N	2	Existing	
	S	4	$68,828	
				$68,828
100 W. Hargett	N	2	$61,991	
	S	2	$61,991	
				$123,982
100 W. Martin	N	4	$69,316	
	S	2	County improvements	
				$69,316
400 S. Salisbury	E	3	$66,382	
	W	3	$67,103	
				$133,485
				$584,010

Subtotal	$584,010
Design Fee	$46,721
	$630,731
Adjusted for inflation 4% per year	$655,960

NOTE: 400 S. Salisbury will actually precede Phase A

Part II: Phase B 1993

Address		Level	Block Face	
00 McDowell	E	2	$33,454	
	W	2	$33,332	
				$66,786
100 S. McDowell	E	2	$60,030	
	W	2	$69,805	
				$129,835
100 S. Dawson	E	2	$60,030	
	W	2	$85,175	
				$145,205
100 W. Morgan	N	2	$59,541	
	S	2	$59,542	
				$119,083
				$460,909

Subtotal	$460,909
Design Fee	$36,872
	$497,781
Adjusted for inflation 4% per year	$538,400

Part II: Phase C 1994

Address		Level	Block Face	
400 S. McDowell	E	2	$60,030	
	W	2	$59,541	
				$119,571
500 S. McDowell	E	2	$59,541	
	W	2	$60,030	
				$119,571
600 S. McDowell	E	2	$33,948	
	W	2	$33,948	
				$67,896
500 S. Salisbury	E	3	$76,158	
	W	3	$67,103	
				$143,261
600 S. Salisbury	E	3	$47,898	
	W	3	$37,162	
				$85,060
700 S. Salisbury	E	*	$49,795	
	W	*	$40,020	
				$89,815
800 S. Salisbury	E	*	$59,800	
	W	*	$59,800	
				$119,600
400 S. Wilmington	E	3	$75,670	
	W	3	$65,895	
				$141,565
500 S. Wilmington	E	3	$67,103	
	W	3	$76,158	
				$143,261
600 S. Wilmington	E	*	$38,870	
	W	*	$29,095	
				$67,965
700 S. Wilmington	E	*	$40,020	
	W	*	$40,020	
				$80,040
800 S. Wilmington	E	*	$158,700	
	W	*	$54,050	
				$212,750
100 W. Davie	N	County improvements		
	S	2	$69,805	
				$69,805
Gale St.	E	2	$53,935	
	W	2	$53,935	
				$107,870
100 W. Cabarrus	N	*	$49,795	
	S	*	$40,020	
				$89,815

Part II: Phase C 1994

Address		Level	Block Face	
100 W. Lenoir	N	*	$40,020	
	S	*	$49,795	
				$89,815
00 Lenoir	N	*	$40,020	
	S	*	$40,020	
				$80,040
100 W. South	N	*	$40,020	
	S	*	$40,020	
				$80,040
00 South	N	*	$40,020	
	S	*	$40,020	
				$80,040
				$1,987,781

Subtotal	$1,987,781
Design Fee	$159,022
	$2,146,803
Adjusted for inflation 4% per year	$2,414,862

*Indicates blocks which are transitional in land use and where CP&L has agreed to install utilities underground. Budgeted amount for improvements to include upgrade to Level 1 as a maximum improvement. Level 1 improvements to include new street trees, traffic signal poles, handicap ramps, and new curb or resetting of existing curb if necessary and either patching of existing sidewalks or new 6' sidewalks.

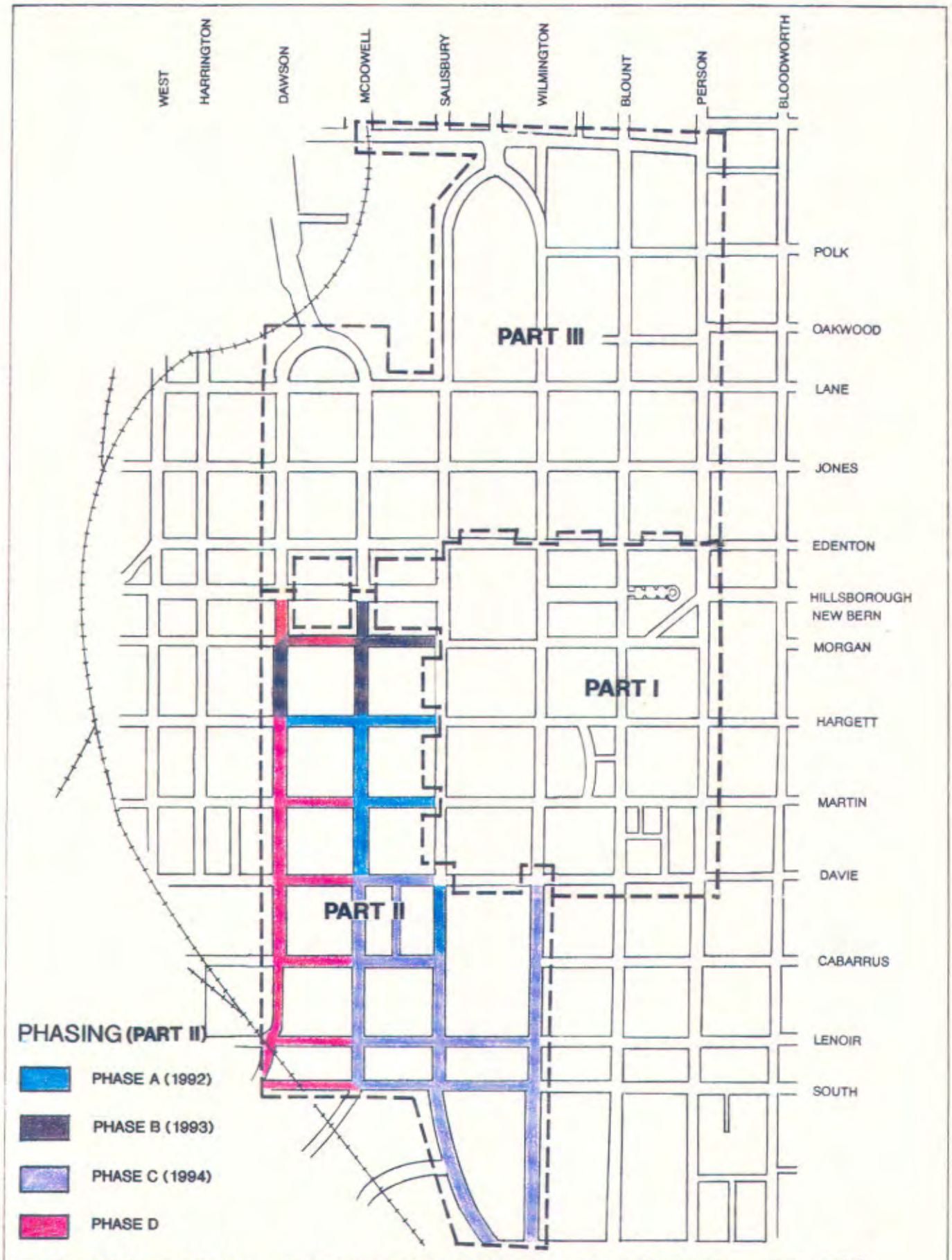
TOTAL COSTS PART II AND PART III

Part II:

	City	
Phase A	$655,960	
Phase B	$538,400	
Phase C	$2,414,862	
Phase D	not funded	$1,599,970 est. cost
Total	$3,609,222	

Part III:

City	State
$1,743,830	$3,309,478



DOWNTOWN STREETSCAPE MASTER PLAN

RALEIGH, N.C.

HunterReynoldsJewell, P.A.

PUBLIC INFORMATION SYSTEM

Costs to fabricate the signs for the public information system are estimated at $5800 per unit including installation.

At least two units should be placed at each specified gateway. Other intersections within the project area which should have the signs will be identified.

CONCLUSION

The Raleigh Downtown Streetscape Master Plan Parts II and III provide a guide for strengthening the character of downtown with improvements at the streetscape level. The Master Plan establishes a system for renovating the streetscape to maintain order through patterns which work to unify downtown. As downtown grows and reorganizes to meet the needs of the future, the Master Plan can be an important tool in keeping the streetscape coherent and consistently adapting to the changes.

It is important to point out that the guidelines set out in the Master Plan are meant to work with each stage of development in the city's future. The plan has drawn on the heritage of Raleigh for inspiration and is geared to the growth of the future.

The guidelines proposed for streetscape improvement are flexible and allow for changes to occur in the downtown make-up without disrupting the overall pattern and uniqueness of the streetscape improvements. One of most important recommendations of this study is to encourage a greater sidewalk width in future development. This will allow greater use of the street system and provide needed space for pedestrians

The Master Plan suggests which areas should be improved to the ultimate level and provides a guide for working on areas which are unstable in the sense that future plans are being considered but not firm yet. These areas need to be given attention and renovation should occur which would eventually lead to the ultimate level of improvement for such streets.

Downtown Raleigh is in a period of intense development and change which is reflected in the evolution of the streetscape. The Master Plan can provide the framework needed to direct the planned improvements successfully as the city grows.